

2024 ANNUAL GROUNDWATER QUALITY REPORT

**FOR THE
RURAL IOWA SANITARY LANDFILL
42-SDP-1-72P
ELDORA, IOWA**

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

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Certification

Prepared by: 

Date: 1-17-25

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 the tables to meet the IDNR format requirements included in Special Provision 3.k. of the Revised Permit, dated October 31, 2023 (Doc #108137).

1.2 Report Priority

No priority is requested for review of this document.

The prediction limit for arsenic (89.3 ug/L) and cobalt (12.4 ug/L) are utilized as the Site-Specific GWPS, in lieu of the Chapter 137 Statewide Standard of 10.0 ug/L and 2.1 ug/L, respectively, since the background concentration of arsenic and cobalt naturally exist at these concentrations that exceed the Statewide Standard. The Site-Specific GWPS are approved by the IDNR (Doc #103648).

This report concludes that detection, assessment, and corrective action monitoring should continue in accordance with the approved HMSF in accordance with rule.

1.3 Period of Report Coverage

Water quality data evaluation is based on a running compilation of data beginning April 21, 2016. Statistical evaluations herein are based on the most recent water quality data collected April 2, 2024 and October 10, 2024.

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 Rural Iowa Sanitary Landfill is located in the W½ of the NE¼ of Section 25, T88N, R21W and the S½ of the NW¼ of Section 25, T88N, R21W, Hardin County, Iowa. The site encompasses approximately 165 acres. The facility is situated approximately 1 mile east of Highway 65, midway between Eldora and Iowa Falls, Iowa. The facility operates under the Iowa Department of Natural Resources (IDNR) Permit Number 42-SDP-1-72P.

Landfill Layout

The site is situated in the uplands above the Beaver Creek valley to the north.

The facility includes a closed landfill and RCRA Subtitle D Expansion Areas designated Trench 1, Trench 2, and Trench 3. Trench 1-3 are actively receiving waste from the planning area.

Applicable Rules

Iowa Administrative Code (IAC) 567-113 is applicable to the operating portion of the site. The closed landfill is also regulated under (IAC) 567-113 in accordance with the approved variance.

1.6 Summary of Hydrologic Monitoring System Plan (HMSP)

The HMSP sampling performed in 2024 conforms to Special Provision 3 of the Revised Permit, dated October 31, 2023 (Doc #108137). Water monitoring points and the gas monitoring network are illustrated on Figure 1. Water Contour Maps are included as Figures 2 and 3.

The current HMSP is summarized in Table 1. The HMSP Implementation Schedule for 2025 is itemized in Table 2.

The HMSP includes twenty (20) monitoring wells, three (3) groundwater underdrains, a discharge tile from the Corrective Action system, and a confirmation sample from the Passive Engineered Conveyance System (PECS). MW-36, MW-37, MW-39, MW-40, and MW-47 are the designated background wells for the facility. The Site Plan and the approved monitoring network is illustrated on Figure 1.

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 and illustrates the annual high and low water level range across the site. Historic water elevation data is included in the Table 4A. Water Contour Maps (Figures 2 & 3) dated October, 2024 are included with this report. The Water Contour Maps illustrates the water surfaces in the two (2) formations of interest at this site. The Water Table Contour Map (Figure 2) illustrates the water table surface and the effects of the groundwater diversion system in Trench 1, Trench 2, and Trench 3. The Potentiometric Surface Map (Figure 3) illustrates the head surface on the deep sand layer aquifer below the site. Review of the 2024 data does not indicate excessive variability compared to historic water elevation data.

Well Depth & Sedimentation

Well depth measurements were made in October, 2024. Review of the well depth data included on Table 4 indicate that well sedimentation is estimated to be less than one (1) foot at all site monitoring wells.

Well Recharge Rates & Chemistry

The measured horizontal hydraulic conductivity testing results (2011) for each site monitoring well is included on Table 4. Horizontal hydraulic conductivities ranged between 10^{-2} cm/sec and 10^{-7} cm/sec.

Field recovery data recorded on April 2, 2024 (Table 4) indicates that the monitoring wells recover to at least 90% recovery within 24 hours after purging. The exceptions are at MW-37, MW-39, and MW-40 where greater than 24 hours is required for the wells to recover. Well recovery information (2024) 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 table and the water surfaces across the site, the conclusions of the well recharge evaluation, and the existing water elevation database, it appears that the semi-annual water elevation data is sufficient to adequately monitor the hydrologic condition of the site. Therefore, it appears that the integrity of monitoring wells is intact, that the wells are appropriately located to detect impact from the fill, and that no changes in monitoring system are recommended.

Section 2.0 Reporting Period Monitoring Activities

A summary of the planned upcoming sample collection events at each well is included on Table 2. A comprehensive summary of all sampling episodes to date is included in the Table 2A.

Field sampling data related to April 2, 2024 and October 10, 2024, sampling episodes are included on the field forms (IDNR Form 542-1322) in Appendix A.

A comprehensive summary of Analytical Data for the episodes between April 8, 2008 and October 10, 2024 is included in Table 9.

2.1 Current Detection Monitoring Activities

Background wells are MW-36, MW-37, MW-39, MW-40, and MW-47. Downgradient detection monitoring wells for the RCRA Subtitle D Expansion Area (Trench 1 through Trench 3) are MW-48A, MW-49A, MW-50, MW-51, GU-1, GU-2, and GU-3. Downgradient detection monitoring wells for the Closed Landfill are MW-7 (downgradient the leachate tanks), MW-7A, MW-7B, MW-9, MW-13R, MW-14, MW-29, MW-31R, MW-33, MW-35R, and MW-211.

2.2 Current Assessment Monitoring Activities

Active Area - Assessment monitoring for the full Appendix II list has been performed at MW-48A (4 episodes) and MW-49A (5 episodes), with the most recent Full Appendix II completed in April 2020 in accordance with IAC 567-113.10(6). As illustrated on Table 2, Full Appendix II sample collection at MW-48A and MW-49A is scheduled for April, 2025.

Based on the results of assessment monitoring, monitoring was modified at MW-48A and MW-49A to include Appendix I plus all Appendix II compounds detected per 113.10(6)d.2. The IDNR letter dated October 3, 2017 (Doc #90422) allows the frequency of the on-going bis (2-ethylhexyl)phthalate and dichlorodifluoromethane testing to be reduced from semi-annually to one time per five (5) years to coincide with the full Appendix II sample collection frequency.

Permit Special Provision X.3.h. of the Revised Permit, dated October 31, 2023 (Doc #108137) approves an alternate five-year frequency for the required annual Appendix II assessment monitoring at all wells that have two (2) rounds of full Appendix II monitoring completed.

Closed Area - Assessment monitoring consisting of four (4) episodes of full Appendix II sampling is completed at MW-7, MW-13R, MW-14, MW-31R, MW-35/MW-35R, and MW-211. Assessment monitoring consisting of three (3) episodes of full Appendix II sampling is completed at MW-9.

2.3 Current Corrective Action Activities

The Closed Landfill was retrofitted with a leachate collection toe drain system on the north, east, and west sides of the fill in 1995. This corrective action addresses detected impacts at MW-31R and MW-49A. Additional groundwater study was completed at MW-49A and was reported on January 29, 2024. Based on the additional groundwater study, wells adjacent to the closed landfill (MW-49A and MW-31R) are impacted by landfill gas. Therefore, the 1995 leachate

collection toe drain system was modified and grated manhole covers were installed to passively vent landfill gas.

The Assessment of Corrective Measures (ACM) Report related to MW-13R (on the south side of the Original Landfill) was submitted to IDNR on June 21, 2017, with supplements submitted September 7, 2017 and November 6, 2017. The ACM was approved in Special Provision XI.6 of Permit dated December 4, 2017 (Doc #91024). Installation of the ACM related to MW-13R was completed in September, 2018.

MW-14 should be incorporated into the existing 2018 corrective action as MW-14 exhibits impacts similar to MW-13R, is located in a similar position to the south boundary as MW-13R, and the mechanisms of fate, migration, and attenuation at MW-14 are similar to MW-13R. The VOC plume at MW-14 was previously delineated (Doc # 4800).

The 1995 Corrective Action (leachate toe drain) and the 2018 Corrective Action (groundwater cut-off trench) will be augmented with landfill gas vents (additional source control) as allowed in IAC 113.10(9)"b" and/or "c" and as approved by IDNR September 16, 2024 (Doc # 110883). The construction materials are purchased and are stored on-site. The vents will be installed as ground and weather conditions allow in 2025. Corrective action gas monitoring at the future vents will be initiated upon completion of the vents.

Corrective action monitoring points (CAMP) are designated as ACM Tile 1 (tile line discharge from the ACM system), PECS-1 (discharge from the Passive Engineered Conveyance System), and MW-13R and MW-14 (Point of Compliance Corrective Action Monitoring Wells, located 50 feet from the waste boundary) for the south side system.

The limits of arsenic impact in the vicinity of MW-7 were delineated and were reported to IDNR June 7, 2013. Step-Out Corrective Action Monitoring Wells MW-7A and MW-7B were installed near the plume edge in the vicinity of MW-7.

Corrective action monitoring points (CAMP) are designated as MW-7A (step-out point of compliance), MW-7B (step-out point of compliance), and MW-7 (original point of compliance located 50 feet from the waste boundary) for the leachate storage facility in the northwest portion of the closed landfill.

There are no Corrective Actions in place or required in the RCRA Subtitle D Expansion Areas.

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 Rural Iowa Sanitary Landfill, First Semi-Annual Monitoring Event in 2024, dated May, 2024 (both the Closed Area and the Operating Area) is included in Appendix B.1. The Groundwater Statistics Report for the Rural Iowa Sanitary Landfill, Second Semi-Annual Monitoring Event in 2024, dated November, 2024 (both the Closed Area and the Operating Area) is included in Appendix B.2.

The Analytical Reports for the laboratory testing from April 2, 2024, and October 10, 2024 sampling episodes are included in Appendix C.

QUALITY ASSURANCE/QUALITY CONTROL

A blind duplicate sample was collected at MW-33 during the April 2, 2024, sampling episode. A blind duplicate was collected at MW-40 during the October 10, 2024, sampling episode.

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

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

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

The results of the blind duplicate and the monitoring well results (both April 2, 2024 and October 10, 2024) were within the limits established and indicate that the data quality is acceptable without restriction.

BACKGROUND DATA VALIDATION

On July 10, 2014, an unnumbered Permit Amendment and Memo was issued by the IDNR regarding turbidity (Doc # 80693). A TSS and Field Turbidity Evaluation Report was prepared and submitted on February 24, 2015 (Doc# 82542), and was approved by IDNR in Amendment #7, dated August 17, 2015 (Doc #84071).

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

Upgradient Data, Table 1, Attachment B, to the November 2024 Statistical Evaluation Reports (Both Operating and Closed Facility Reports in Appendix B.2) includes a summary of the background data. The water quality results tagged with an asterisk are statistical outliers and are excluded from the background data.

The site prediction limits established in the November 2024 Statistical Evaluation Report (Appendix D.2) are based on the validated background data.

The calculated Site Prediction Limits are summarized in Table 5.

SITE SPECIFIC GWPS

Table 5 includes the comparison of the site prediction limits to the published IAC 567, Chapter 137 Statewide Standard. The instances where the Prediction Limit exceeds the published IAC 567, Chapter 137 Statewide Standard are highlighted in yellow in Table 5.

The following Site-Specific GWPS were approved by the IDNR in the Letters dated April 17, 2020 (Doc #97535), June 15, 2021 (Doc #100682), and July 18, 2022 (Doc #103648) and have not changed since July 18, 2022.

<u>Compound</u>	<u>Site-Specific GWPS</u>
Arsenic	89.3 ug/L
Cobalt	12.4 ug/L

The Site-Specific GWPS are not to be set lower than the Site Prediction Limit calculated from the site background data.

For all other compounds the published IAC 567, Chapter 137 Statewide Standard are utilized as the GWPS. The Site-Specific GWPS are included in Tables 7, 8, and 10.

STATISTICALLY SIGNIFICANT INCREASE (SSI) EVALUATION

The detected concentration of each compound is compared to the site prediction limit for each respective compound. In detection monitoring wells, a detected concentration for a compound that is in excess of the calculated site prediction limit is recorded as a Statistically Significant Increase (SSI).

In 2024 there were no new SSI recorded at any detection monitoring well.

In assessment monitoring wells and/or Corrective Action monitoring wells, the exceedances are not required to be reported as SSI. A running summary over time of the recorded exceedances of the prediction limit is included in Appendix E.

Table 6 is a summary of all compounds at site monitoring wells that have exceeded a *current* prediction limit in 2024. Table 7 includes brown highlighted values that signify detected concentrations that exceeded the prediction limits (SSI) over time.

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

ASSESSMENT MONITORING SUMMARY

Assessment monitoring is required to be repeated annually per IAC 567-113.10(6)b. However, a five (5) year full Appendix II sampling frequency is approved Special Provision 3.h. of the Permit, dated November 29, 2022 (Doc #104699) for all site Point of Compliance Monitoring Wells where at least two (2) full Appendix II samples have been collected.

Based on the results to date, detection of bis (2-ethylhexyl) phthalate and dichlorodifluoromethane occurs as isolated events. The IDNR letter dated October 3, 2017 (Doc #90422) allows the frequency of the on-going bis (2-ethylhexyl)phthalate and dichlorodifluoromethane testing to be reduced from semi-annually to one time per five (5) years to coincide with the full Appendix II sample collection frequency.

The summary of assessment monitoring detections to date is presented in Appendix F. The full Appendix II sampling episodes are highlighted in green in the tables in Appendix F and are listed on Table 2.

STATISTICALLY SIGNIFICANT LEVEL (SSL) EVALUATION

The compounds with detections that exceed site prediction limits (see summary in Table 1 & Table 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 newly identified SSL require the plume of impact to be defined in the horizontal and vertical directions and require completion of an Assessment of Corrective Measures (ACM). A corrective measure is eventually considered complete when the 95% UCL falls below the GWPS.

The SSL Evaluation is based on data for each downgradient monitoring well. 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. The 95% UCL evaluation is presented in Table 8.

The 95% LCL values at assessment/corrective action monitoring wells are below the applicable Site Specific GWPS or Statewide Standards published in IAC 567, Chapter 137, *except where highlighted in yellow* in Table 7.

The 95% UCL values at assessment/corrective action monitoring wells are below the applicable Site Specific GWPS or Statewide Standards published in IAC 567, Chapter 137, *except where highlighted in green* in Table 8.

Based on the findings to date, the following SSL have been identified and persist (Tables 7, 8, and 10):

SSL at MW-49A – Cobalt & Vinyl Chloride
SSL at MW-7 – Arsenic
SSL at MW-13R – Arsenic
SSL at MW-14 – Cobalt
SSL at MW-31R – Cobalt

The wells with the SSL (MW-49A, MW-7, MW-13R, MW-14, and MW-31R) are placed in Corrective Action Monitoring System.

ASSESSMENT OF CORRECTIVE MEASURES/CORRECTIVE ACTIONS

A Site Remedial Action System was installed at the Closed Landfill in 1995 (See map in Appendix G) and addresses the SSL at MW-49A and MW-31R. An Evaluation of the Site Remedial Action System is also included in Appendix G.

The report of horizontal and vertical delineation of arsenic impact in the vicinity of MW-7 was submitted to IDNR in June, 2013 (see Appendix F) and approved in Special Provision X.3.e of the Permit, dated December 4, 2017 (Doc# 91024). On-going Monitoring of the arsenic impacts is performed at Point of Compliance Corrective Action Monitoring Well MW-7 and at Step-Out Corrective Action Monitoring Wells MW-7A and MW-7B, as reported below.

The Assessment of Corrective Measures (ACM) Report related to MW-13R was submitted to IDNR on June 21, 2017, with supplements submitted September 7, 2017 and November 6, 2017. The ACM was approved in Special Provision XI.6 of the December 4, 2017 Permit (Doc #91024).

Installation of the ACM related to MW-13R was completed in September, 2018. The Construction Certification Report was submitted November 21, 2018 (Doc #93781). The corrective action monitoring points are designated as ACM Tile 1 (tile line discharge from the ACM system), PECS-1 (discharge from the Passive Engineered Conveyance System), and MW-13R (Point of Compliance Corrective Action Monitoring Well, located 50 feet from the waste boundary). MW-14 was incorporated into the corrective action monitoring system south of the ACM Tile Line 1 in 2023. Additional source control in the form of gas vents in the landfill will be completed in 2025 to accelerate decline in the detected VOC and inorganics at MW-13R and MW-14.

CORRECTIVE ACTION MONITORING & EVALUATIONS

Corrective Action Monitoring is on-going at MW-7, MW-7A, MW-7B, MW-13R, MW-31R, ACM Tile 1, and PECS-1 in accordance with Permit Provision X.3 (Doc #104699). Corrective Action Monitoring at MW-49A and MW-14 is also included. Summary tables of water quality findings at each well are included in Table 10.

The Confidence Interval of Corrective Action Monitoring points are utilized to determine the success of the Corrective Measures at MW-49A, MW-7, MW-13R, MW-31R, and MW-14. A Corrective Action is complete when the 95% UCL value is below the GWPS for a minimum of three (3) years at all points within the plume, including the point of compliance well.

The 95% UCL evaluation is presented in Table 8. The green highlights in Table 8 and Table 10 indicate the 95% UCL values that exceed the GWPS. The highlighted values indicate that the 95% UCL continues to exceed the GWPS at MW-49A, MW-7, MW-13R, MW-14, and MW-31R. The previous cobalt SSL and benzene SSL at MW-13R has diminished such that the 95% UCL has decreased below the GWPS for the past three (3) years or more.

Table 10 represents a summary of the recorded SSI and SSL over time. Table 11 includes the evaluation of the corrective action trends over time.

Evaluation of Corrective Action Monitoring near MW-49A

The calculated Confidence Intervals for MW-49A are included in Table 10.

Review of the data for Point of Compliance Corrective Action Monitoring Well MW-49A indicates that cobalt and vinyl chloride concentrations are elevated over the past three (3) years. The 95% LCL and 95% UCL values remain above the GWPS. It is recommended that the cobalt and vinyl chloride trends at MW-49A continue to be monitored in 2025 following the installation of the grated manhole covers and passive venting of the 1995 leachate collection toe drain completed in 2024.

Evaluation of Corrective Action Monitoring near MW-7

The calculated Confidence Intervals for the Step Out Corrective Action Monitoring Wells MW-7, MW-7A, and MW-7B are included in Table 10.

Review of the data for Point of Compliance Corrective Action Monitoring Well MW-7 indicates that arsenic concentrations between April, 2016 and October, 2024 generally demonstrate a cyclic trend. The variation in concentration is significant and the confidence interval becomes large. The 95% LCL values decreased to zero at times based on the large confidence interval. The 95% UCL value remains above the GWPS throughout 2024. Based on the data collected to date, MW-7 remains in the Corrective Action Monitoring Plan (CAMP). It is recommended that the trend continue to be monitored in 2025.

Review of the data for Step Out Corrective Action Monitoring Well MW-7A indicates that arsenic concentrations have all been reported well below the site prediction limit. The 95% LCL values and the 95% UCL values have not exceeded the site prediction limit or the GWPS.

Review of the data for Step Out Corrective Action Monitoring Well MW-7B indicates that arsenic concentrations generally demonstrate a cyclic trend. The 95% LCL value has remained below the GWPS since October, 2016. Based on the data collected to date, it appears that the 95% UCL at MW-7B continues to demonstrate a cyclic trend above and below the GWPS. It is recommended that the trend continue to be monitored in 2025.

Evaluation of Corrective Action Monitoring near MW-13R & MW-14

The calculated Confidence Intervals for MW-13R & MW-14 are included in Table 10.

Review of the data for Point of Compliance Corrective Action Monitoring Well MW-13R indicates large concentration swings in arsenic coupled with generally decreasing concentrations in cobalt and benzene. The 95% LCL values for cobalt and benzene at MW-13R have remained below the GWPS since 2018. The 95% LCL values for arsenic at MW-13R fell below the GWPS from 2018-2021, then exceeded the GWPS in 2022, and have again dropped below the GWPS in 2023/2024. The 95% UCL value remains above the GWPS for arsenic at MW-13R.

The 95% UCL for cobalt and benzene at MW-13R have decreased below the GWPS (since 2022). The 95% LCL values for benzene at MW-13R fell below the GWPS in 2018. The 95% UCL values for benzene at MW-13R fell below the GWPS in 2021, then exceeded the GWPS in 2023, and have been below the GWPS in 2024.

The 95% LCL and the 95% UCL for cobalt at MW-14 both slightly exceed the GWPS in 2023. Only the 95% UCL for cobalt exceeds the GWPS at MW-14 in 2024.

Based on the data collected to date, it appears that the 95% UCL for arsenic, cobalt, and benzene at MW-13R and the cobalt at MW-14 may continue to diminish with time. Additional source control in the form of gas vents in the landfill will be completed in 2025 to accelerate decline in the detected VOC and inorganics at MW-13R and MW-14. It is recommended that the trends at MW-13R and MW-14 continue to be monitored in 2025.

Testing of water collected from ACM Tile 1 indicates that the water collection cut-off tile successfully captures impacted water (Appendix H). The PEC-1 water quality indicates that the Passive Engineered Conveyance Structure successfully treats the captured water and no discharge of impacted water occurs (Appendix H).

Evaluation of Corrective Action Monitoring near MW-31R

The calculated Confidence Intervals for MW-31R are included in Table 10.

Review of the data for Point of Compliance Corrective Action Monitoring Well MW-31R indicates that cobalt concentrations are relatively static. The 95% LCL and 95% UCL values remained above the GWPS throughout 2024. It is recommended that the cobalt trend at MW-31R continue to be monitored in 2025.

Review of the Confidence Interval data (see Tables 7, Table 8, and Table 10) indicates that point of compliance wells MW-49A, MW-7, MW-13R, MW-14, and MW-31R, need to remain in the Corrective Action Monitoring System, as do step out wells MW-7A and MW-7B, the ACM Tile 1 monitoring point, and the PECS-1 monitoring point.

Section 4.0 Leachate Collection System Performance Evaluation

Leachate accumulating in the underground leachate storage tanks continues to be transported to the Alden Wastewater Treatment Facility and the Des Moines Metropolitan Wastewater Reclamation Authority (WRA) for treatment and disposal. The Treatment Agreement between Alden and RIWMA and the Discharge Permit with the Des Moines WRA are included in Appendix I.1.

Based on records provided by the City of Alden and the Des Moines WRA, 916,884 gallons of leachate were collected and transported to the Alden Treatment Facility and 270,585 gallons were collected and transported to the Des Moines WRA between January 1, 2024 and December 31, 2024 (Appendix I.2). An unmetered fraction of this volume originates in Trenches 1, 2, and 3, while the balance originates from the toe drain leachate collection system installed in the Closed Original Landfill as a corrective action. The most recent leachate analyses are included in Appendix I.3.

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 LCP lines were cleaned in June and August of 2023. The next cleaning is tentatively scheduled for 2026.

Leachate System Modifications

The three original single walled leachate storage tanks (total storage capacity of approximately 22,000 gallons) were replaced with two 25,000 gallon capacity dual walled leachate storage tanks in 2015. The tanks are equipped with a monitoring/alarm system. The monitoring system notifies staff of high leachate levels in the tanks so leachate pumping/hauling can commence to reduce the possibility of a tank overtopping. Documentation on the completion of the leachate tank installation was approved by IDNR in Permit Amendment #8 dated October 23, 2015.

Leachate System Performance

Operating Landfill - Leachate head monitoring points LPZ-101 and LPZ-102 are located at the low end of the Trench 1 and Trench 2 Subtitle D compliant disposal areas, respectively. Leachate head monitoring point LPZ-301 was installed in Trench 3 during the Trench 3 Expansion project. Leachate head monitoring points in the Operating Landfill were measured monthly in 2024 – the data is presented in Table 12A. A map of leachate monitoring points is included in Appendix I.

The leachate head monitoring points in the operating landfill were recorded as having less than 12” of leachate head on the liner during each measurement in 2024 with the exception of the April measurement at LPZ-102 (1.40’ – or a 4.8” exceedance) and the December measurement at LPZ-102 (1.30’ – or a 3.6” exceedance). The slight exceedances are considered temporary and are typically not persistent. The levels in LPZ-101 and LPZ-301 were below 1’ during all measurement episodes. The 2024 measurements are considered to demonstrate that the leachate collection system is performing as desired and that the head on the liner meets the 12-inch, or less requirement.

A request was filed with IDNR on October 12, 2022 (Doc # 104276) requesting that leachate head monitoring points LPZ-201 and LPZ-202 be removed from monitoring requirements in Trench 1 and Trench 2. IDNR approved the request on May 29, 2024 (Doc #110154).

Closed Original Landfill – Leachate head monitoring points in the Closed Original Landfill were measured quarterly in 2024 – the data is presented in Table 12B. Leachate head measurements are required quarterly in Special Provision XI.12c of the Revised Permit, dated October 31, 2023 (Doc #108137).

The data for the leachate wells in the Closed Original Landfill shows that leachate elevations have remained relatively consistent in 2024. The interpretation is made that the LCS (illustrated on the Figure in Appendix G) is effective in controlling the leachate head in the closed landfill. Quarterly measurements of LW-1, LW-2, LW-5, LW-6, LW-8, LW-10, and LW-12 will continue in 2025.

Our records indicate that LW-3, LW-4, LW-7, LW-9, and LW-11 were destroyed at the site through the course of time. Sufficient leachate head piezometers (7 of the original 12) remain to monitor the leachate surface in the Closed Fill Area.

Groundwater Separation

Special Provision X.4.f of the SDP Permit dated February 3, 2012 requires semi-annual monitoring of liquid levels in the Groundwater Diversion Layer Monitoring Points GPZ-1 and GPZ-2 to document separation between the solid waste base and the water table in the Trench 1 and Trench 2. Groundwater piezometer points GPZ-203 and GPZ-302 are located at the low end of Trench 2 and Trench 3, respectively, and are also utilized to document groundwater separation below the liner (Table 12C).

Groundwater head measurements in Groundwater Diversion Layer Monitoring Points GPZ-1 and GPZ-2 are summarized as:

Date/Location	Trench 1 GPZ-1	Trench 2 GPZ-2
4/2/2024	0	0
10/10/2023	0	0

Groundwater elevation measurement below the liner in Trench 2 and Trench 3 are included on Table 12C.

Based on the available groundwater head data, separation is maintained between the base of the solid waste and the groundwater surface in Trenches 1, 2, and 3.

Section 5.0 Gas Monitoring

Explosive gas monitoring per 113.9(2) and the approved GMSP was conducted quarterly during the last reporting period (2024).

Monitoring points include the seven (7) subsurface gas probes, the structures on site, three (3) passive gas vents located in the solid waste, and the cleanouts incorporated into the ACM. The ACM piping along the south edge of waste along the Original Landfill was added to the GMSP in order to evaluate the performance of the venting that occurs from the cut-off trench and tile. The cleanouts are located at the east end, in the

middle, and at the manhole at the west end of the line. Figure 1 in the body of the report illustrates the locations of gas monitoring Points. Table 13 includes the results of the quarterly monitoring.

Explosive gas concentrations are recorded as percent lower explosive limit (% LEL) and were undetected or detected below action levels at all subsurface monitoring points during the monitoring episodes, except at GP-6 (located near MW-14). It is noted that subsurface gas probe GP-6 (located near MW-14) had measurable gas concentrations in January, April, and October of 2024. Further, the recorded gas concentration on January 25, 2024 exceeded the 100% Lower Explosive Limit. The response pursuant IAC 567, Chapter 113.9(2)"c"(3) was the submittal of the gas study near MW-14 on January 29, 2024 (Doc # 108997) and the installation of the passive gas vents along the south side of the Closed landfill (tentatively scheduled in the spring of 2025).

The vents in the waste (GP-8, GP-9, and GP-10) and the vents on the ACM piping (GP-11, GP-12, and GP-13) demonstrate the passive release of gas. A Summary table of gas monitoring is as Table 13.

Section 6.0 Recommendations

It is recommended that the Site-Specific GWPS for arsenic (89.3 ug/L) and Cobalt (12.4 ug/L) continue to be utilized as approved in accordance with the Unified Guidance.

It is recommended that detection, assessment, and corrective action monitoring continue semi-annually in accordance with the approved HMSF and Table 1 and Table 2.

It is recommended that Corrective Action Monitoring at MW-49A, MW-13R, MW-14, ACM Tile 1, PECS-1, MW-31R, MW-7, MW-7A, and MW-7B continue on a semi-annual basis.

Gas monitoring will be initiated in the passive vents when constructed in 2025 along the south side of the Closed Landfill.

Figures

- GP-1 TELEPHONE PEDESTAL
- GP-2 POWER POLE DROP CONDUIT
- GP-3 GAS PROBE
- GP-4 GAS PROBE
- GP-5 GAS PROBE
- GP-6 GAS PROBE
- GP-7 GAS PROBE
- GP-8 WEST GAS VENT
- GP-9 MIDDLE GAS VENT
- GP-10 EAST GAS VENT
- GP-11 ACM WEST CLEANOUT/MANHOLE
- GP-12 ACM MIDDLE CLEANOUT
- GP-13 ACM EAST CLEANOUT
- ACM TILE-1 ACM TILE OUTLET
- PECS-1 SEDIMENT BASIN DISCHARGE



0 200 400
AERIAL DATE: JUNE 27, 2018

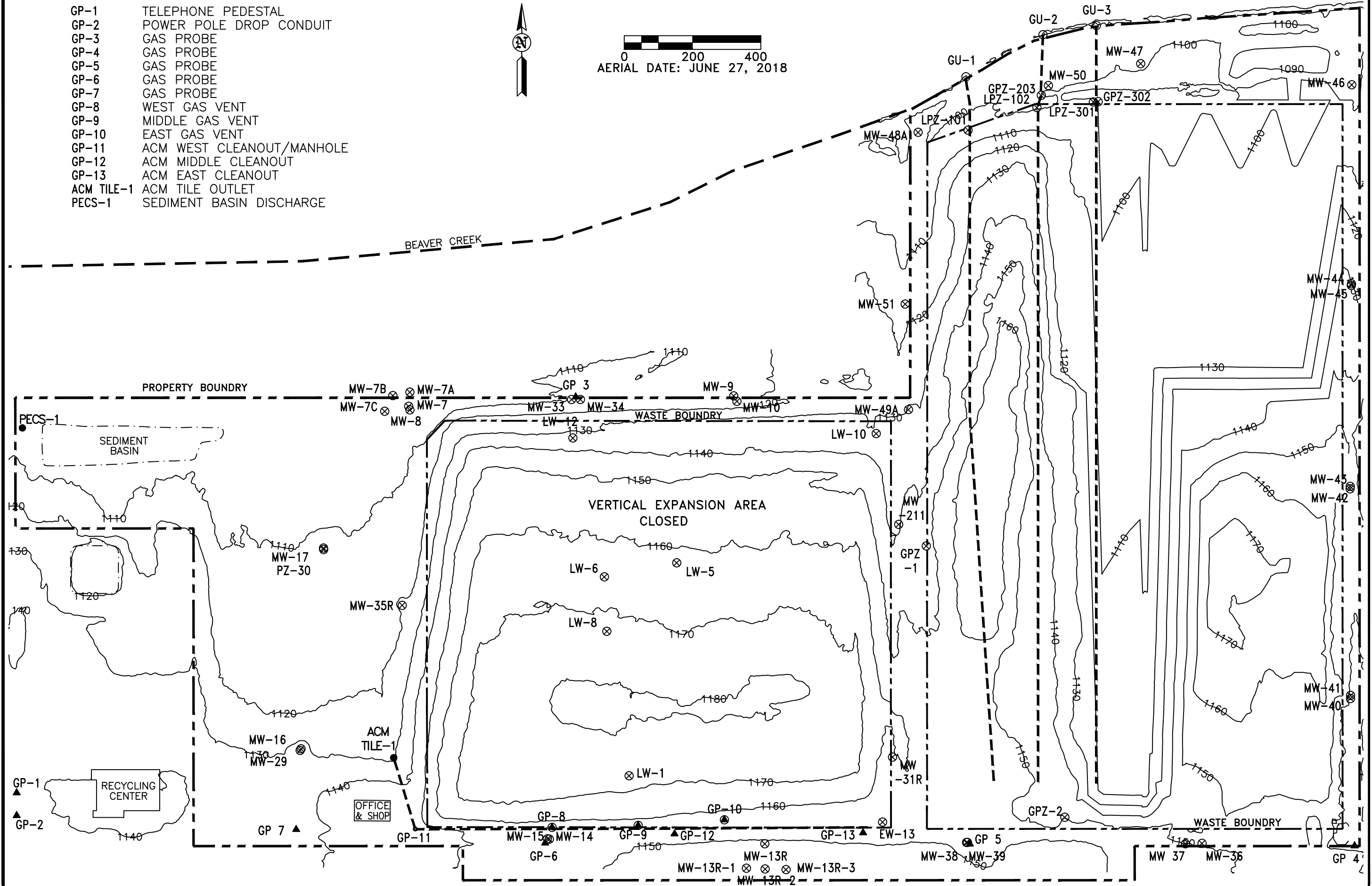
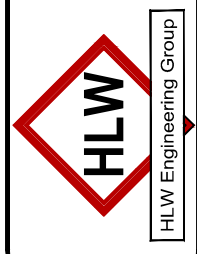


FIGURE: 1

REVISION	NO.	DATE
DRAWN	DRA	PROJECT NO. 6006
		DATE 12-18-24

**SITE PLAN AND
GAS MONITORING SYSTEM PLAN**
RURAL IOWA SANITARY LANDFILL
ELDORA, IOWA

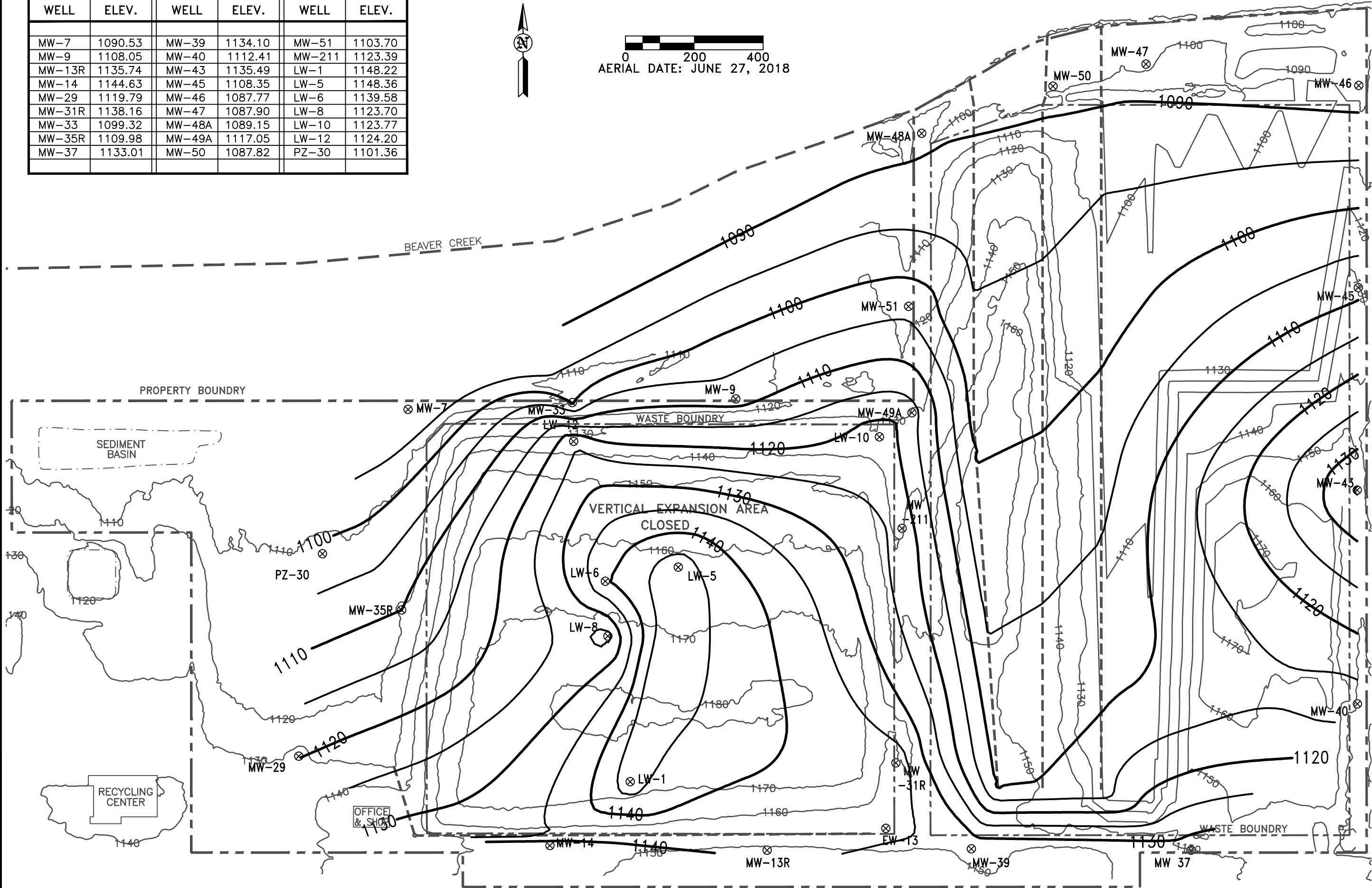
HLW Engineering Group
204 West Broad Street, P.O. Box 314
Story City, Iowa 50248
Phone: (515) 733-4144
FAX: (515) 733-4146



WATER ELEVATION, OCTOBER 10, 2024					
WELL	ELEV.	WELL	ELEV.	WELL	ELEV.
MW-7	1090.53	MW-39	1134.10	MW-51	1103.70
MW-9	1108.05	MW-40	1112.41	MW-211	1123.39
MW-13R	1135.74	MW-43	1135.49	LW-1	1148.22
MW-14	1144.63	MW-45	1108.35	LW-5	1148.36
MW-29	1119.79	MW-46	1087.77	LW-6	1139.58
MW-31R	1138.16	MW-47	1087.90	LW-8	1123.70
MW-33	1099.32	MW-48A	1089.15	LW-10	1123.77
MW-35R	1109.98	MW-49A	1117.05	LW-12	1124.20
MW-37	1133.01	MW-50	1087.82	PZ-30	1101.36



0 200 400
AERIAL DATE: JUNE 27, 2018



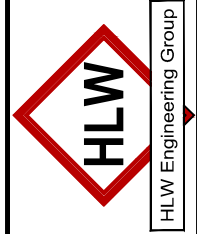
REVISION		NO.	DATE
DRAWN		PROJECT NO.	DATE
DRA		6006	12-18-24

FIGURE: 2

**GROUNDWATER CONTOURS
WATER TABLE**

**RURAL IOWA SANITARY LANDFILL
ELDORA, IOWA**

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



WATER ELEVATION, OCT 10, 2024			
WELL	ELEV.	WELL	ELEV.
MW 8	1092.90	MW 41	1112.57
MW 10	1107.79	MW 42	1111.84
MW 15	1134.34	MW 44	<1117.18
MW 16	1120.64	MW 46	1087.17
MW 17	1099.13	MW 47	1087.90
MW 34	1098.92	MW 48A	1089.15
MW 36	1118.18	MW 50	1087.82
MW 38	1121.95		

TABLE NOTE:
THE ELEVATION FOR MW-44 IS
THE BOTTOM OF A DRY WELL.



0 200 400
AERIAL DATE: JUNE 27, 2018

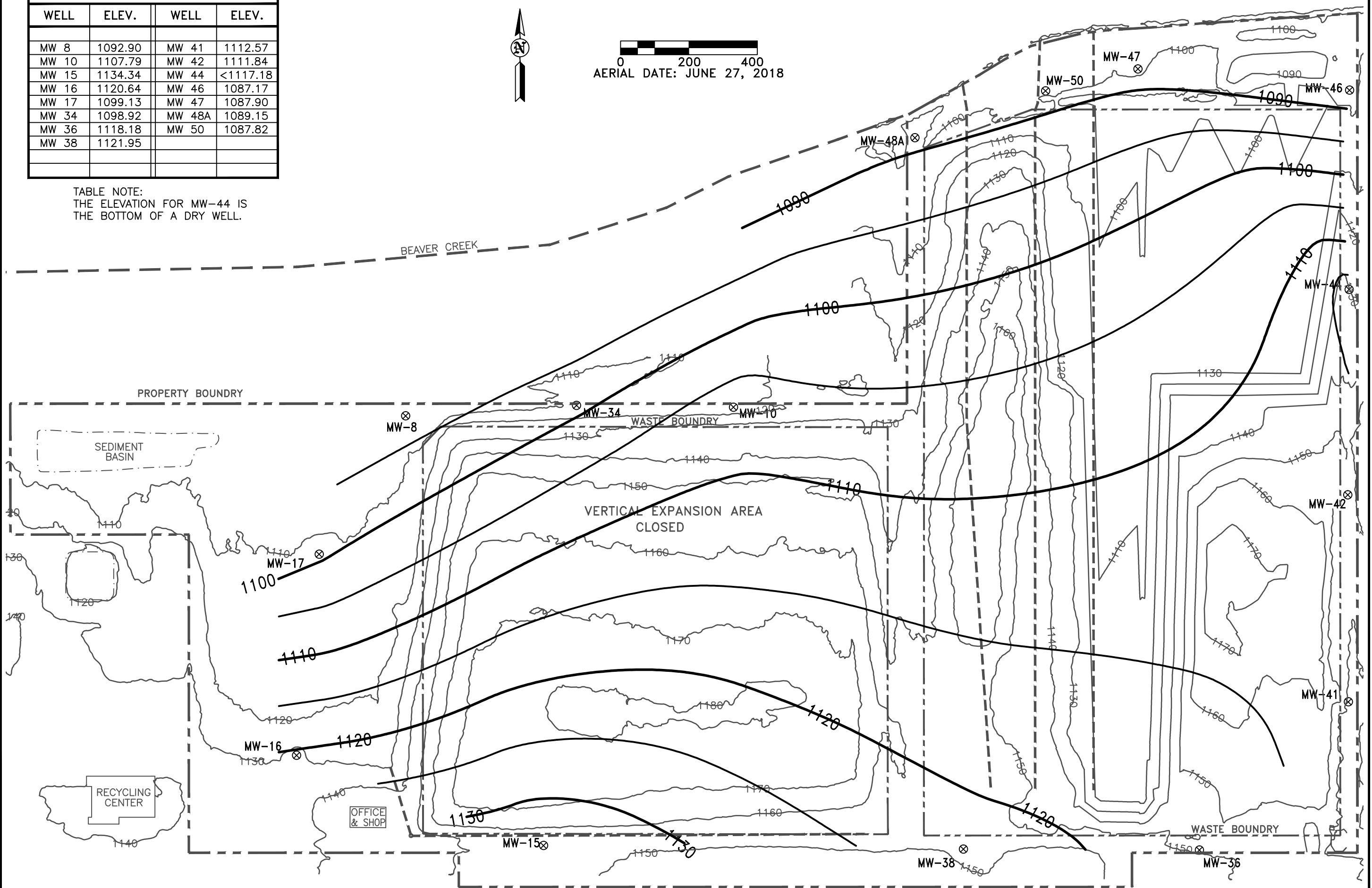
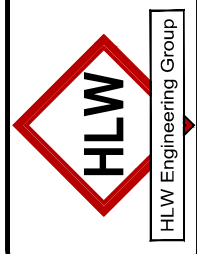


FIGURE: 3		NO.	DATE
REVISION	DRAWN	PROJECT NO.	DATE
	DRA	6006	12-18-24

**GROUNDWATER CONTOURS
UPPER AQUIFER SAND LAYER**
RURAL IOWA SANITARY LANDFILL
ELDORA, IOWA

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



Tables

(in IDNR Format)

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- Table 6 – Summary of Detections
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- Table 9 – Analytical Data Summary
- Table 10 – Historic SSI and SSL
- Table 11 – Corrective Action Trend Analysis
- Table 12A – Leachate Levels – RCRA Trenches 1-3
- Table 12B – Leachate Levels – Original Landfill
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Table 1 – Monitoring Program Summary

Table 1
Monitoring Program Summary
Annual Water Quality Report
Rural Iowa Sanitary Landfill
Permit No. 42-SDP-01-72P

Monitoring Well	Formation	Current Monitoring Program	Change for next sampling event	Historic - Constituents w/ SSI	2024 - Constituents w/ SSI	2024 Constituents w/ SSL	Total # of Samples in each monitoring program since April 21, 2016		
							Detection	Assessment	Corrective Action
MW-36 (up)	Glacial Till	Background	NC	None	None	None	19	0	0
MW-37 (up)	Glacial Till	Background	NC	None	None	None	23	0	0
MW-39 (up)	Glacial Till	Background	NC	None	None	None	23	0	0
MW-40 (up)	Glacial Till	Background	NC	None	None	None	23	0	0
MW-47 (up)	Alluvium	Background	NC	None	None	None	22	0	0
MW-48A	Alluvium	Assessment - POC	NC	arsenic	None	None	0	18	0
MW-49A	Glacial Till	CAMP	NC	cobalt, copper, nickel, benzene, chloroethane, cis-1,2-dichloroethene, vinyl chloride	cobalt, nickel, benzene, chloroethane, cis-1,2-dichloroethene, vinyl chloride	Cobalt, Vinyl Chloride	0	18	0
MW-50	Alluvium	Detection - POC	NC	None	None	None	18	0	0
MW-51	Glacial Till	Detection - POC	NC	None	None	None	18	0	0
GU-1	Glacial Till	Detection - POC	NC	None	None	None	8	0	0
GU-2	Glacial Till	Detection - POC	NC	None	None	None	8	0	0
GU-3	Glacial Till	Detection - POC	NC	None	None	None	17	0	0
MW-7	Alluvium	CAMP	NC	arsenic, cobalt, 1,1-dichloroethane, benzene, bis(2ethylhexyl)phthalate, chloroethane, cis-1,2-dichloroethene, vinyl chloride	arsenic, chloroethane	arsenic	0	0	18
MW-7A	Alluvium	CAMP	NC	None	None	None	0	0	18
MW-7B	Alluvium	CAMP	NC	None	arsenic	arsenic	0	0	18
MW-9	Glacial Till	Assessment - POC	NC	arsenic, cobalt, nickel, 1,1-dichloroethane, benzene, chloroethane	None	None	0	18	0
MW-13R	Glacial Till	CAMP	NC	arsenic, barium, cobalt, nickel, 1,4-dichlorobenzene, benzene, bis(2-ethylhexyl)phthalate, chlorobenzene, cis-1,2-dichloroethene, toluene, vinyl chloride	arsenic, 1,4-dichlorobenzene, benzene, chlorobenzene	arsenic	0	0	18
MW-14	Glacial Till	CAMP	NC	arsenic, barium, cobalt, nickel, 1,1-dichloroethane, 1,4-dichlorobenzene, benzene, bis(2-ethylhexyl)phthalate, chloroethane, cis-1,2-dichloroethene	arsenic, cobalt, 1,4-dichlorobenzene, benzene, chloroethane	Cobalt	0	18	0
MW-29	Glacial Till	Detection - POC	NC	None	None	None	18	0	0
MW-31R	Glacial Till	CAMP	NC	barium, cobalt, nickel, 1,1-dichloroethane, 1,4-dichlorobenzene, benzene, chlorobenzene, chloroethane, cis-1,2-dichloroethene, trans-1,2-dichloroethene, vinyl chloride	cobalt, nickel, 1,1-dichloroethane, 1,4-dichlorobenzene, benzene, chlorobenzene, chloroethane, cis-1,2-dichloroethene, trans-1,2-dichloroethene	Cobalt	0	18	0
MW-33	Glacial Till	Detection - POC	NC	None	None	None	18	0	0
MW-35R	Glacial Till	Assessment - POC	NC	barium, cobalt, nickel, 1,1-dichloroethane, benzene, chloroethane, cis-1,2-dichloroethene, vinyl chloride	chloroethane	None	0	17	0
MW-211	Glacial Till	Assessment - POC	NC	arsenic, cobalt, nickel, 1,1-dichloroethane, benzene, chlorobenzene, chloroethane, cis-1,2-dichloroethene	cobalt, nickel, benzene, chlorobenzene	None	0	18	0
Tile ACM-1	Glacial Till	CAMP	NC	Detected: arsenic, cobalt, 1,1-dichloroethane, 1,4-dichlorobenzene, benzene, chlorobenzene, chloroethane, cis-1,2-dichloroethene, ethylbenzene, toluene, vinyl chloride	Detected: arsenic, cobalt, 1,1-dichloroethane, chlorobenzene, chloroethane	Greater than GWPS: None	0	0	8
PECS-1	surface	CAMP	NC	None	None	None	0	0	8
Field Duplicate	QA/QC	QA/QC	NC	None	None	None	18	0	0

CAMP = Corrective Action Monitoring Point
POC = Point of Compliance Well
SOW = Step Out Well (113.10(6))"g"(1)"2")

Table 2 – Monitoring Program Implementation Schedule

Table 2
Monitoring Program Implementation Schedule
Annual Water Quality Report
Rural Iowa Sanitary Landfill
Permit No. 42-SDP-01-72P

Monitoring Well	Recent Sampling Dates and Constituents	Upcoming Sampling Dates and Constituents		Full Appendix II Sample Dates	
		April 2025	October 2025	Previously Collected	Next Event
MW-36 (up)		Appendix I	Appendix I		N/A
MW-37 (up)		Appendix I	Appendix I		N/A
MW-39 (up)	See following pages	Appendix I	Appendix I		N/A
MW-40 (up)		Appendix I	Appendix I		N/A
MW-47 (up)		Appendix I	Appendix I		N/A
MW-48A		Appendix II	Appendix I	2/23/10, 4/12/10, 4/1/15, 4/22/20	Apr-25
MW-49A		Appendix II	Appendix I	6/22/09, 2/23/10, 4/12/10, 4/1/15, 4/22/20	Apr-25
MW-50		Appendix I	Appendix I		
MW-51		Appendix I	Appendix I		
GU-1		Appendix I	Appendix I		
GU-2		Appendix I	Appendix I		
GU-3		Appendix I	Appendix I		
MW-7		Appendix I	Appendix I	4/20/12, 10/17/12, 10/16/17, 10/17/2022	Oct-27
MW-7A		arsenic	arsenic		
MW-7B		arsenic	arsenic		
MW-9		Appendix I	Appendix I	4/24/18, 4/15/19, 4/2/24	Apr-29
MW-13R		Appendix I	Appendix I	4/20/12, 10/17/12, 10/16/17, 10/17/2022	Oct-27
MW-14		Appendix I	Appendix I	4/20/12, 10/17/12, 10/16/17, 10/17/2022	Oct-27
MW-29		Appendix I	Appendix I		
MW-31R		Appendix I	Appendix I	4/3/13, 10/9/13, 10/25/18, 10/27/2023	Oct-28
MW-33		Appendix I	Appendix I		
MW-35R		Appendix I	Appendix I	4/20/12, 10/17/12, 10/16/17, 10/17/2022	Oct-27
MW-211		Appendix I	Appendix I	4/20/12, 10/17/12, 10/16/17, 10/17/2022	Oct-27
Tile ACM-1		Appendix I	Appendix I		
PECS-1		Appendix I-VOC	Appendix I-VOC		
Field Duplicate		Appendix I	Appendix I		

⁽¹⁾ add bis(2-ethylhexyl)phthalate

Table 2A – Summary of Hydrologic Monitoring (to date)

Table 2A - Itemized Summary of Hydrologic Monitoring (to date)

WELL	4/8/08	6/13/08	8/23/08	10/2/08	12/23/08
MW-37(b)	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW-39(b)	---	---	---	---	---
MW-40(b)	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW-47(b)	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW-48A	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW-49A	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW-50	---	---	---	---	---
MW-51	---	---	---	---	---
GU-1	Dry	Dry	Dry	Dry	Dry
GU-2	Appendix I	Appendix I	Dry	Dry	Dry
MW-7	---	---	---	---	---
MW-9	---	---	---	---	---
MW-13R	---	---	---	---	---
MW-14	---	---	---	---	---
MW-29	---	---	---	---	---
MW-33	---	---	---	---	---
MW-35	---	---	---	---	---
MW-211	---	---	---	---	---

WELL	4/3/09	6/22/09	8/24/09	10/9/09	2/23/10
MW-37(b)	Appendix I	---	---	Appendix I	Zinc
MW-39 (b)	---	---	---	---	---
MW-40 (b)	Appendix I	---	---	Appendix I	Thallium
MW-47(b)	Appendix I	---	---	Appendix I	Appendix II
MW-48A	Appendix I	---	---	Appendix I	Appendix II
MW-49A	Appendix I	Appendix II	---	Appendix I	Appendix II
MW-50	---	---	---	---	---
MW-51	---	---	---	---	---
GU-1	Dry	Dry	Appendix I	Dry	---
GU-2	Dry	---	Dry	Dry	---
MW-7	---	---	---	---	---
MW-9	---	---	---	---	---
MW-13R	---	---	---	---	---
MW-14	---	---	---	---	---
MW-29	---	---	---	---	---
MW-33	---	---	---	---	---
MW-35	---	---	---	---	---
MW-211	---	---	---	---	---
Duplicate	At MW-37	---	---	At MW-7	---

WELL	4/12/10	10/14/10	1/13/11	4/8/11	6/27/11
MW-37(b)	Appendix I	Appendix I	---	Appendix I	---
MW-39(b)	---	Appendix I	---	Appendix I	Appendix I
MW-40 (b)	Appendix I	Appendix I	---	Appendix I	---
MW-47(b)	Appendix II	Appendix I*	---	Appendix I*	---
MW-48A	Appendix II	Appendix I*	---	Appendix I*	---
MW-49A	Appendix II	Appendix I*	---	Appendix I*	---
MW-50		Installed 11-2011	Appendix I	Appendix I	Appendix I
MW-51		Installed 11-2011	Appendix I	Appendix I	Appendix I
GU-1	Submerged	Dry	---	Submerged	---
GU-2	Dry	Dry	---	Dry	---
MW-7	---	Appendix I	---	Appendix I	---
MW-9	---	Appendix I	---	Appendix I	---
MW-13R		Installed 11-2011	Appendix I	Appendix I	---
MW-14	---	Appendix I	---	Appendix I	---
MW-29	---	Appendix I	---	Appendix I	---
MW-33	---	Appendix I	---	Appendix I	---
MW-35	---	Appendix I	---	Appendix I	---
MW-211	---	Appendix I	---	Appendix I	---
Duplicate	At MW-48A	---	At MW-50	At MW-211	At MW-39

WELL	8/24/11	10/18/11	4/20/12	10/17/12	4/3/13
MW-37 (b)	---	Appendix I	Appendix I	Appendix I	Appendix I
MW-39 (b)	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW-40 (b)	---	Appendix I	Appendix I	Appendix I	Appendix I
MW-47(b)	---	Appendix I*	Appendix I*	Appendix I*	Appendix I*
MW-48A	---	Appendix I*	Appendix I*	Appendix I*	Appendix I*
MW-49A	---	Appendix I*	Appendix I*	Appendix I*	Appendix I*
MW-50	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW-51	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
GU-1	---	Appendix I	Appendix I	Appendix I	Dry
GU-2	---	Dry	Appendix I	Appendix I	Dry
MW-7	---	Appendix I	Appendix II	Appendix II	Appendix I ^(1,2)
MW-9	---	Appendix I	Appendix I	Appendix I	Appendix I
MW-13R	---	Appendix I	Appendix II	Appendix II	Appendix I ⁽¹⁾
MW-14	---	Appendix I	Appendix II	Appendix II	Appendix I*
MW-29	---	Appendix I	Appendix I	Appendix I	Appendix I
MW-31R	---	---	Appendix I	Appendix I	Appendix II
MW-33	---	Appendix I	Appendix I	Appendix I	Appendix I
MW-35	---	Appendix I	Appendix II	Appendix II	Appendix I*
MW-211	---	Appendix I	Appendix II	Appendix II	Appendix I*
Duplicate		At MW-13R	At MW31R	At MW48A	At MW7

WELL	10/9/13	4/16/14	10/23/14	1/8/15	4/1/15
MW-37 (b)	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW-39 (b)	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW-40 (b)	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW-47(b)	Appendix I*	Appendix I*	Appendix I*	---	Appendix II
MW-48A	Appendix I*	Appendix I*	Appendix I*	---	Appendix II
MW-49A	Appendix I*	Appendix I*	Appendix I*	---	Appendix II
MW-50	Appendix I	Appendix I	Appendix I	---	Appendix I
MW-51	Appendix I	Appendix I	Appendix I	(R) - barium	Appendix I
GU-1	Dry	Dry	Dry	---	Dry

GU-2	Dry	Dry	Dry	---	Dry
MW-7	Appendix I ^(1,2)	Appendix I ^(1,2)	Appendix I ^(1,2)	---	Appendix I ^(1,2)
MW-7A	Arsenic	Arsenic	Arsenic	---	broken
MW-7B	Arsenic	Arsenic	Arsenic	---	Arsenic
MW-9	Appendix I	Appendix I	Appendix I	---	Appendix I
MW-13R	Appendix I ⁽¹⁾	Appendix I ⁽¹⁾	Appendix I ⁽¹⁾	---	Appendix I ⁽¹⁾
MW-14	Appendix I*	Appendix I*	Appendix I*	---	Appendix I*
MW-29	Appendix I	Appendix I	Appendix I	---	Appendix I
MW-31R	Appendix II	Appendix I ^(1,2)	Appendix I ^(1,2)	---	Appendix I ^(1,2)
MW-33	Appendix I	Appendix I	Appendix I	---	Appendix I
MW-35	Appendix I*	Appendix I*	Appendix I*	---	Appendix I*
MW-211	Appendix I*	Appendix I*	Appendix I*	---	Appendix I*
Duplicate	At MW33		At MW50		At MW14

WELL	7/8/15	11/5/15
MW-37 (b)	Appendix I	Appendix I
MW-39 (b)	Appendix I	Appendix I
MW-40 (b)	Appendix I	Appendix I
MW-47(b)	Appendix I	Appendix I
MW-48A	---	Appendix I ⁽¹⁾
MW-49A	---	Appendix I ⁽²⁾
MW-50	---	Appendix I
MW-51	---	Appendix I
GU-1	---	Dry
GU-2	---	Dry
GU-3		Appendix I
MW-7	---	Appendix I ^(1,2)
MW-7A	---	Arsenic
MW-7B	---	Arsenic
MW-9	---	Appendix I
MW-13R	---	Appendix I ⁽¹⁾
MW-14	---	Appendix I*
MW-29	---	Appendix I
MW-31R	---	Appendix I ^(1,2)
MW-33	---	Appendix I
MW-35	Appendix I	broken
MW-36	Appendix I	---
MW-211	---	Appendix I*
Duplicate	---	At MW31R

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

(1) = bis(2ethylhexyl) phthalate

(2) = dichlorodifluoromethane

WELL	4/21/16	10/17/16	1/9/17	4/21/17	7/13/17
MW-36 (b)	Appendix I	Appendix I		Appendix I	
MW-37 (b)	Appendix I	Appendix I		Appendix I	
MW-39 (b)	Appendix I	Appendix I		Appendix I	
MW-40 (b)	Appendix I	Appendix I		Appendix I	
MW-47 (b)	Appendix I	Appendix I		Appendix I	
MW-48A	Appendix I ⁽¹⁾	Appendix I ⁽¹⁾		Appendix I ⁽¹⁾	
MW-49A	Appendix I ⁽²⁾	Appendix I ⁽²⁾	(R) -As + Ba	Appendix I ⁽²⁾	
MW-50	Appendix I	Appendix I		Appendix I	
MW-51	Appendix I	Appendix I		Appendix I	(R) – Ba
GU-1	Dry	Dry		Dry	
GU-2	Dry	Dry		Dry	
GU-3	Appendix I	Appendix I		Appendix I	
MW-7	Appendix I ^(1,2)	Appendix I ^(1,2)		Appendix I ^(1,2)	
MW-7A	Arsenic	Arsenic		Arsenic	
MW-7B	Arsenic	Arsenic	Arsenic	Arsenic	
MW-9	Appendix I	Appendix I		Appendix I	
MW-13R	Appendix I ⁽¹⁾	Appendix I ⁽¹⁾		Appendix I ⁽¹⁾	
MW-14	Appendix I*	Appendix I*	(R) – Co	Appendix I*	(R) - Ni
MW-29	Appendix I	Appendix I		Appendix I	
MW-31R	Appendix I ^(1,2)	Appendix I ^(1,2)		Appendix I ^(1,2)	
MW-33	Appendix I	Appendix I		Appendix I	
MW-35R	---	Appendix I	(R) – Ba + Ni	Appendix I	
MW-211	Appendix I*	Appendix I*		Appendix I*	
Duplicate	At MW-14	At MW-37		At MW-9	
WELL	10/16/17	1/12/18	4/24/18	7/5/18	10/25/18
MW-36 (b)	Appendix I		Appendix I		Appendix I
MW-37 (b)	Appendix I		Appendix I		Appendix I
MW-39 (b)	Appendix I		Appendix I		Appendix I
MW-40 (b)	Appendix I		Appendix I		Appendix I
MW-47 (b)	Appendix I		Appendix I		Appendix I
MW-48A	Appendix I ⁽¹⁾		Appendix I		Appendix I
MW-49A	Appendix I ⁽²⁾		Appendix I		Appendix I
MW-50	Appendix I	(R) – Cu	Appendix I	(R) – Ba	Appendix I
MW-51	Appendix I		Appendix I	(R) – Ni	Appendix I
GU-1	Dry		Dry		Dry
GU-2	Dry		Dry		Dry
GU-3	Appendix I		Appendix I	(R) – Zn	Appendix I
MW-7	Appendix II		Appendix I		Appendix I
MW-7A	Arsenic		Arsenic		Arsenic
MW-7B	Arsenic		Arsenic		Arsenic
MW-9	Appendix I		Appendix II		Appendix I
MW-13R	Appendix II		Appendix I ⁽³⁾		Appendix I ⁽³⁾
MW-14	Appendix II	(R) – Ba + Co	Appendix I		Appendix I
MW-29	Appendix I		Appendix I	(R) – Cu, Zn	Appendix I
MW-31R	Appendix I		Appendix I		Appendix II
MW-33	Appendix I		Appendix I		Appendix I
MW-35R	Appendix II		Appendix I		Appendix I
MW-211	Appendix II		Appendix I		Appendix I
Duplicate	At MW-14		At MW-9		At MW-31R

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

(1) = bis(2ethylhexyl) phthalate

(R) – X = Resample of specific compound

(2) = dichlorodifluoromethane

(3) = (3+4)methyl phenol

WELL	4/15/2019	10/7/2019	4/22/2020	7/10/2020	10/1/2020
MW-36 (b)	Appendix I	Appendix I	Appendix I		Appendix I
MW-37 (b)	Appendix I	Appendix I	Appendix I		Appendix I
MW-39 (b)	Appendix I	Appendix I	Appendix I		Appendix I
MW-40 (b)	Appendix I	Appendix I	Appendix I		Appendix I
MW-47 (b)	Appendix I	Appendix I	Appendix I		Appendix I
MW-48A	Appendix I	Appendix I	Appendix II		Appendix I
MW-49A	Appendix I	Appendix I	Appendix II		Appendix I
MW-50	Appendix I	Appendix I	Appendix I		Appendix I
MW-51	Appendix I	Appendix I	Appendix I	(R) - Ba	Appendix I
GU-1	Dry	Dry	Dry		Dry
GU-2	Dry	Dry	Dry		Dry
GU-3	Appendix I	Appendix I	Appendix I		Appendix I
MW-7	Appendix I	Appendix I	Appendix I		Appendix I
MW-7A	Arsenic	Arsenic	Arsenic		Arsenic
MW-7B	Arsenic	Arsenic	Arsenic		Arsenic
MW-9	Appendix II	Appendix I	Appendix I		Appendix I
MW-13R	Appendix I ⁽³⁾	Appendix I ⁽³⁾	Appendix I ⁽³⁾		Appendix I ⁽³⁾
MW-14	Appendix I	Appendix I	Appendix I		Appendix I
MW-29	Appendix I	Appendix I	Appendix I		Appendix I
MW-31R	Appendix I	Appendix I	Appendix I		Appendix I
MW-33	Appendix I	Appendix I	Appendix I		Appendix I
MW-35R	Appendix I	Appendix I	Appendix I		Appendix I
MW-211	Appendix I	Appendix I	Appendix I		Appendix I
Tile ACM-1	Appendix I	Appendix I	Appendix I		Dry
PECS-1	App I VOC	App I VOC	Dry		Dry
Duplicate	At MW-33	At MW-35R	At MW-40		At MW-7B

(1) = bis(2ethylhexyl) phthalate

(R) – X = Resample of specific compound

(2) = dichlorodifluoromethane

(3) = (3+4)methyl phenol

WELL	4/8/2021	7/1/2021	10/29/2021	1/27/2022	4/25/2022	10/17/2022
MW-36 (b)	Appendix I		Appendix I		Appendix I	Appendix I
MW-37 (b)	Appendix I		Appendix I		Appendix I	Appendix I
MW-39 (b)	Appendix I		Appendix I		Appendix I	Appendix I
MW-40 (b)	Appendix I		Appendix I		Appendix I	Appendix I
MW-47 (b)	Appendix I		Appendix I		Appendix I	Appendix I
MW-48A	Appendix I		Appendix I		Appendix I	Appendix I
MW-49A	Appendix I		Appendix I		Appendix I	Appendix I
MW-50	Appendix I		Appendix I		Appendix I	Appendix I
MW-51	Appendix I		Appendix I	(R) - Zn	Appendix I	Appendix I
GU-1	Dry		Dry		Dry	Dry
GU-2	Dry		Dry		Dry	Dry
GU-3	Appendix I	(R) - acetone	Appendix I		Underdrain Study	Underdrain Study
MW-7	Appendix I		Appendix I		Appendix I	Appendix II
MW-7A	Arsenic		Arsenic		Arsenic	Arsenic
MW-7B	Arsenic		Arsenic		Arsenic	Arsenic
MW-9	Appendix I		Appendix I		Appendix I	Appendix I
MW-13R	Appendix I ⁽³⁾		Appendix I ⁽³⁾		Appendix I ⁽³⁾	Appendix II
MW-14	Appendix I		Appendix I		Appendix I	Appendix II
MW-29	Appendix I		Appendix I		Appendix I	Appendix I
MW-31R	Appendix I		Appendix I		Appendix I	Appendix I
MW-33	Appendix I		Appendix I		Appendix I	Appendix I
MW-35R	Appendix I		Appendix I		Appendix I	Appendix II
MW-211	Appendix I		Appendix I		Appendix I	Appendix II
Tile ACM-1	Dry		Appendix I		Appendix I	Dry
PECS-1	App I VOC		App I VOC		App I VOC	Dry
Duplicate	At MW-33		At MW-50		At MW-39	At MW-31R

(1) = bis(2ethylhexyl) phthalate

(R) - X = Resample of specific compound

(2) = dichlorodifluoromethane

(3) = (3+4)methyl phenol

WELL	1/5/2023	4/10/2023	10/27/2023	4/2/2024	10/10/2024
MW-36 (b)		Appendix I	Appendix I	Appendix I	Appendix I
MW-37 (b)		Appendix I	Appendix I	Appendix I	Appendix I
MW-39 (b)		Appendix I	Appendix I	Appendix I	Appendix I
MW-40 (b)		Appendix I	Appendix I	Appendix I	Appendix I
MW-47 (b)		Appendix I	Appendix I	Appendix I	Appendix I
MW-48A		Appendix I	Appendix I	Appendix I	Appendix I
MW-49A		Appendix I	Appendix I ⁽³⁾	Appendix I	Appendix I
MW-50		Appendix I	Appendix I	Appendix I	Appendix I
MW-51		Appendix I	Appendix I	Appendix I	Appendix I
GU-1		Dry	Dry	Dry	Dry
GU-2		Dry	Dry	Dry	Dry
GU-3		Appendix I	Appendix I	Appendix I	Appendix I
MW-7	(R) bis(2ethylhexyl) phthalate	Appendix I	Appendix I	Appendix I	Appendix I
MW-7A		Arsenic	Arsenic	Arsenic	Arsenic
MW-7B		Arsenic	Arsenic	Arsenic	Arsenic
MW-9		Appendix I	Appendix I	Appendix II	Appendix I
MW-13R	(R) bis(2ethylhexyl) phthalate	Appendix I	Appendix I ⁽³⁾	Appendix I	Appendix I
MW-14	(R) bis(2ethylhexyl) phthalate	Appendix I	Appendix I	Appendix I	Appendix I
MW-29		Appendix I	Appendix I	Appendix I	Appendix I
MW-31R		Appendix I	Appendix II⁽³⁾	Appendix I	Appendix I
MW-33		Appendix I	Appendix I	Appendix I	Appendix I
MW-35R	(R) bis(2ethylhexyl) phthalate	Appendix I ⁽¹⁾	Appendix I ⁽¹⁾	Appendix I	Appendix I
MW-211		Appendix I	Appendix I ⁽³⁾	Appendix I	Appendix I
Tile ACM-1		Appendix I	Dry	Appendix I	Dry
PECS-1		App I VOC	Dry	Appendix I	Dry
Duplicate		At MW-51	At MW-211	App. I Metals	App. I Metals

(1) = bis(2ethylhexyl) phthalate

(R) – X = Resample of specific compound

(2) = dichlorodifluoromethane

(3) = (dissolved methane, ethane, ethene)

Table 3 – Monitoring Well Maintenance Performance Reevaluation Schedule

Table 3
Monitoring Well Maintenance and Performance Reevaluation Schedule
Annual Water Quality Report
Rural Iowa Sanitary Landfill
Permit No. 42-SDP-01-72P

Compliance with:	Monitoring Calendar Years									
	1998	2003	2008	2009	2010	2011	2012	2013	2014	2015
567 IAC 113.10(2)"f"(1) high and low water levels (biennial)	X	X	X		X		X		X	
567 IAC 113.10(2)"f"(2) changes in the hydrologic setting and flow paths(historic = 1 per 5 years; current = biennial)	X	X	X		X		X		X	
567 IAC 113.10(2)"f"(3) well depths (annual)	X	X	X	X	X	X	X	X	X	X
567 IAC 113.10(2)"f"(4) well recharge rates and chemistry (biennial)	X	X			X		X		X	
Waste separation from ground water 113.6(2)"1"				2X	2X	2X	2X	2X	2X	2X

Compliance with:	Monitoring Calendar Years									
	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
567 IAC 113.10(2)"f"(1) high and low water levels (biennial)	X		X		X		X		X	
567 IAC 113.10(2)"f"(2) changes in the hydrologic setting and flow paths(historic = 1 per 5 years; current = biennial)	X		X		X		X		X	
567 IAC 113.10(2)"f"(3) well depths (annual)	X	X	X	X	X	X	X	X	X	P
567 IAC 113.10(2)"f"(4) well recharge rates and chemistry (biennial)	X		X		X		X		X	
Waste separation from ground water 113.6(2)"1"	2X	2X	2X	2X	2X	2X	2X	2X	2X	2P

X = completed

P = Planned

Table 4 – Monitoring Well Maintenance Performance Reevaluation Summary

Table 4
Monitoring Well Maintenance and Performance Summary
Annual Water Quality Report
Rural Iowa Sanitary Landfill
Permit No. 42-SDP-01-72P

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	
					4/2/2024	10/10/2024			4/2/2024	Change
MW-36	1151.02	1089.84	71.18	Groundwater Level (ft)	34.84	32.84	-0.22	0.0000245 January, 2001	Full recovery in <24 hour	None percieved
				Groundwater Elevation (Ft MSL)	1116.18	1118.18				
				Measured Well Depth (ft)	71.4	71.4				
				Submerged (+) or Exposed screen (-)	26.34	28.34				
MW-37	1151.38	1141.78	29.35	Groundwater Level (ft)	20.54	18.27	0.05	0.00000681 October, 2011	>90% recovery in >24 hour	None percieved
				Groundwater Elevation (Ft MSL)	1130.84	1133.11				
				Measured Well Depth (ft)	29.3	29.3				
				Submerged (+) or Exposed screen (-)	-10.94	-8.67				
MW-39	1153.09	1126.79	36.6	Groundwater Level (ft)	22.33	18.99	-0.2	0.00000115 October, 2011	>90% recovery in >24 hour	None percieved
				Groundwater Elevation (Ft MSL)	1130.76	1134.1				
				Measured Well Depth (ft)	36.8	36.8				
				Submerged (+) or Exposed screen (-)	3.97	7.31				
MW-40	1137.89	1119.89	37.55	Groundwater Level (ft)	27.13	25.48	0.25	0.000000517 October, 2011	>90% recovery in >24 hour	None percieved
				Groundwater Elevation (Ft MSL)	1110.76	1112.41				
				Measured Well Depth (ft)	37.3	37.3				
				Submerged (+) or Exposed screen (-)	-9.13	-7.48				
MW-47	1099.82	1090.32	18.75	Groundwater Level (ft)	10.69	11.92	0.05	0.0109 October, 2011	Full recovery in <24 hour	None percieved
				Groundwater Elevation (Ft MSL)	1089.13	1087.9				
				Measured Well Depth (ft)	18.7	18.7				
				Submerged (+) or Exposed screen (-)	-1.19	-2.42				
MW-48A	1101.03	1090.53	20.1	Groundwater Level (ft)	11.62	11.88	0	0.000895 October, 2011	Full recovery in <24 hour	None percieved
				Groundwater Elevation (Ft MSL)	1089.41	1089.15				
				Measured Well Depth (ft)	20.1	20.1				
				Submerged (+) or Exposed screen (-)	-1.12	-1.38				
MW-49A	1132.5	1117	24.55	Groundwater Level (ft)	14.5	15.45	-0.05	0.000172 October, 2011	Full recovery in <24 hour	None percieved
				Groundwater Elevation (Ft MSL)	1118	1117.05				
				Measured Well Depth (ft)	24.6	24.6				
				Submerged (+) or Exposed screen (-)	1	0.05				
MW-50	1100.39	1082.94	22.6	Groundwater Level (ft)	11.46	12.57	0	0.000145 October, 2011	Full recovery in <24 hour	None percieved
				Groundwater Elevation (Ft MSL)	1088.93	1087.82				
				Measured Well Depth (ft)	22.6	22.6				
				Submerged (+) or Exposed screen (-)	5.99	4.88				
MW-51	1116.53	1094.51	32.2	Groundwater Level (ft)	12.3	12.83	0	0.0000193 October, 2011	Full recovery in <24 hour	None percieved
				Groundwater Elevation (Ft MSL)	1104.23	1103.7				
				Measured Well Depth (ft)	32.2	32.2				
				Submerged (+) or Exposed screen (-)	9.72	9.19				
MW-7	1109.64	1089.64	25.3	Groundwater Level (ft)	18.45	19.11	0	0.00189 October, 2011	Full recovery in <24 hour	None percieved
				Groundwater Elevation (Ft MSL)	1091.19	1090.53				
				Measured Well Depth (ft)	25.3	25.3				
				Submerged (+) or Exposed screen (-)	1.55	0.89				
MW-7A	1105.29	1092.39	22.9	Groundwater Level (ft)	14.21	14.81	0.1	Not Measured	Full recovery in <24 hour	None percieved
				Groundwater Elevation (Ft MSL)	1091.08	1090.48				
				Measured Well Depth (ft)	22.8	22.8				
				Submerged (+) or Exposed screen (-)	-1.31	-1.91				
MW-7B	1105.23	1092.33	22.65	Groundwater Level (ft)	14.34	15.04	0	Not Measured	Full recovery in <24 hour	None percieved
				Groundwater Elevation (Ft MSL)	1090.89	1090.19				
				Measured Well Depth (ft)	22.65	22.65				
				Submerged (+) or Exposed screen (-)	-1.44	-2.14				
MW-9	1119.77	1106.77	17.45	Groundwater Level (ft)	4.77	11.72	-0.05	0.0000308 October, 2011	Full recovery in <24 hour	None percieved
				Groundwater Elevation (Ft MSL)	1115	1108.05				
				Measured Well Depth (ft)	17.5	17.5				
				Submerged (+) or Exposed screen (-)	8.23	1.28				
MW-13R	1147.71	1135.72	22.1	Groundwater Level (ft)	10.83	11.97	0	0.0000259 October, 2011	Full recovery in <24 hour	None percieved
				Groundwater Elevation (Ft MSL)	1136.88	1135.74				
				Measured Well Depth (ft)	22.1	22.1				
				Submerged (+) or Exposed screen (-)	1.16	0.02				
MW-14	1155.28	1145.28	15	Groundwater Level (ft)	10.69	10.65	0	0.0000536 October, 2011	Full recovery in <24 hour	None percieved
				Groundwater Elevation (Ft MSL)	1144.59	1144.63				
				Measured Well Depth (ft)	15	15				
				Submerged (+) or Exposed screen (-)	-0.69	-0.65				
MW-29	1136.65	1127.42	19.15	Groundwater Level (ft)	8.41	16.87	-0.35	0.00000131 October, 2011	Full recovery in <24 hour	None percieved
				Groundwater Elevation (Ft MSL)	1128.24	1119.78				
				Measured Well Depth (ft)	19.5	19.5				
				Submerged (+) or Exposed screen (-)	0.82	-7.64				
MW-31R	1161.26	1139.22	32	Groundwater Level (ft)	23.74	23.1	0	0.0001 May, 1998	Full recovery in <24 hour	None percieved
				Groundwater Elevation (Ft MSL)	1137.52	1138.16				
				Measured Well Depth (ft)	32	32				
				Submerged (+) or Exposed screen (-)	-1.7	-1.06				
MW-33	1115.86	1103.28	21.75	Groundwater Level (ft)	7.47	16.64	-0.05	0.000253 October, 2011	Full recovery in < 24 hour	None percieved
				Groundwater Elevation (Ft MSL)	1108.39	1099.22				
				Measured Well Depth (ft)	21.8	21.8				
				Submerged (+) or Exposed screen (-)	5.11	-4.06				
MW-35R	1123.59	1113.57	15.05	Groundwater Level (ft)	8.83	13.61	0.05	0.00000288 October, 2011	Full recovery in < 24 hour	None percieved
				Groundwater Elevation (Ft MSL)	1114.76	1109.98				
				Measured Well Depth (ft)	15	15				
				Submerged (+) or Exposed screen (-)	1.19	-3.59				
MW-211	1139.26	1121.73	27.8	Groundwater Level (ft)	15.97	15.87	0	0.0000831 October, 2011	Full recovery in < 24 hour	None percieved
				Groundwater Elevation (Ft MSL)	1123.29	1123.39				
				Measured Well Depth (ft)	27.8	27.8				
				Submerged (+) or Exposed screen (-)	1.56	1.66				

Well	Top PVC	4/2/2024		10/10/2024	
		Depth Water	Water Elevation	Depth Water	Water Elevation
MW 7C	1109.79	18.75	1091.04	19.25	1090.54
MW-8 (dg)	1109.6	16.35	1093.25	16.7	1092.9
MW-10 (dg)	1119.06	10.6	1108.46	11.27	1107.79
MW- 15 (dg)	1155.47	23.04	1132.43	21.13	1134.34
MW- 16 (dg)	1136.75	13.46	1123.29	16.11	1120.64
MW- 17 (dg)	1119.92	13.92	1106	20.79	1099.13
MW- 34 (dg)	1116.04	14.08	1101.96	17.12	1098.92
MW- 38 (up)	1152.97	33.85	1119.12	31.02	1121.95
MW-41	1137.77	26.1	1111.67	25.2	1112.57
MW-42	1149.55	39.28	1110.27	37.71	1111.84
MW-43	1149.95	26.35	1123.6	13.96	1135.99
MW-44	1132.08	13.8	1118.28	14.25	1117.83
MW-45	1132.11	24.15	1107.96	23.76	1108.35
MW-46	1099.87	11.3	1088.57	12.7	1087.17
PZ-30	1120.86	17.36	1103.5	19.5	1101.36
PZ-25	1139.57	5.46	1134.11	7.39	1132.18

dry @ 14.7

Table 4A– Summary of Water Elevations (to date)

RURAL IOWA SANITARY LANDFILL
42-SDP-1-72P

Elevations - Page 1

DATE	MONTHLY WATER ELEVATIONS															
	MW 7	MW 8	MW 9	MW 10	MW 11	MW211	PZ 12	MW 13	MW-13R	MW 14	MW 15	MW 16	MW 17	PZ 18	PZ 19	PZ 20
TOP PVC. ELEV. FT.	1109.64	1109.60	1119.77	1119.06	1139.95	1139.26	1161.78	1145.35	1147.71	1155.28	1155.47	1136.75	1119.92	1107.71	1106.77	1107.79
05/25/1993	1092.40	1095.24	1110.87	1112.10	1133.65		1148.40	1138.57		1140.35	1149.87	1129.49	1112.28	1093.85	1104.09	1094.35
09/03/1993																
09/20/1993	1093.27	1096.20	1110.91	1112.02	1134.14		1147.96	1138.63		1140.00	1149.45	1129.73	1112.86			
10/04/1993	1091.96	1094.98	1109.83	1111.32	1133.67		1147.32	1137.87		1148.28	1139.72	1129.45	1111.99	1093.15	1103.81	1093.77
12/15/1993	1090.64	1094.38	1109.83	1110.56	1133.47		1144.86	1137.09		1145.84	1137.93	1127.95	1110.07	1091.51	1102.33	1092.65
01/11/1994	1090.58	1094.22	1109.55	1110.36	1132.11		1144.28	1136.85		1145.32	1137.47	1127.05	1108.56	1091.31	1101.95	1092.63
04/22/1994	1094.66	1090.98	1110.62	1111.26	1132.80		1143.48	1137.70		1146.18	1137.35	1127.71	1111.36	1091.79	1101.53	1092.94
07/11/1994	1091.96	1095.48	1110.73	1111.86	1133.53		1146.48	1138.55		1148.08	1139.02	1128.55	1111.48	1093.01	1102.87	1093.89
08/11/1994	1090.74	1093.72	1109.22	1110.46	1132.33		1145.51	1137.35		1146.55	1138.37	1128.15	1109.66	1091.52	1102.22	1093.09
09/09/1994	1090.33	1094.43	NT	1110.01	NT		1144.51	1136.93		1145.57	1142.40	NT	NT	1091.20	1101.62	1093.23
10/05/1994	1089.74	1094.42	1108.73	1109.72	1130.67		1143.72	1137.27		1145.24	1137.01	1127.37	1108.90	1091.31	1101.23	1093.31
11/16/1994	1090.64	1094.71	1109.32	1110.56	1131.46		1148.56	1137.36		1146.60	1138.40	1126.96	1108.85	1091.33	1102.03	1092.84
12/09/1994	1090.81	1094.80	1109.87	1110.93	1132.07		1143.47	1137.25		1146.46	1138.38	1129.15	1109.33	1091.48	1102.10	1092.88
01/24/1995	1090.43	1094.54	1109.46	1110.50	1131.24		1143.22	1136.88		1145.77	1137.81	1126.04	1107.94	1091.24	1101.78	1092.75
02/24/1995	1096.26	1094.75	1109.77	1110.32	1133.30		1142.81	1137.49		1147.09	1137.25	1124.68	1106.14	1092.02	1101.55	1093.69
03/16/1995	1091.19	1094.90	1111.08	1111.29	1133.42		1143.56	1138.24		1146.98	1142.35	1124.90	1106.27	1091.94	1101.63	1093.38
04/12/1995	1091.95	1095.30	1113.01	1112.47	1133.85		1144.20	1139.05		1148.88	1138.57	1127.24	1111.12	1093.26	1102.39	1094.19
05/23/1995	1092.37	1096.31	1111.37	1112.54	1134.24		1147.08	1138.89		1148.80	1139.66	1128.36	1111.50	1093.53	1103.19	1094.48
06/13/1995	1092.58	1096.42	1111.06	1112.30	1133.94		1147.36	1138.83		1149.00	1139.75	1128.42	1111.63	1093.79	1103.69	1094.67
07/25/1995	1091.04	1095.35	1109.47	1110.86	1133.52		1146.30	1140.96		1139.00	1148.15	1127.51	1109.74	1091.91	1102.20	1093.22
08/24/1995	1090.60	1094.83	1109.10	1110.21	1132.10		1145.15	1137.12		1142.54	1146.48	1129.02	1108.60	1091.23	1101.75	1091.70
09/27/1995	1090.14	1093.69	1108.77	1109.79	1130.73		1144.00	1136.55		1136.58	1145.20	1128.77	1107.30	1090.76	1100.55	1092.36
10/04/1995	1090.04	1094.35	1108.72	1109.66	1130.45		1143.83	1136.55		1144.83	1144.72	1124.79	1107.77	1090.71	1100.50	1092.29
11/24/1995	1090.04	1094.04	1108.69	1109.50	1130.22		1142.78	1136.94		1144.45	1136.51	1123.13	1105.68	1090.64	1099.92	1092.29
12/22/1995	1090.53	1094.23	1108.74	1109.55	1129.55		1142.46	1136.72		1144.39	1137.32	1121.63	1102.84	1090.88	1100.05	1092.52
02/14/1996	1092.88	1095.08	1111.32	1110.57	1132.45		NT	1138.65		1145.12	1135.86	1118.25	1097.42	1093.21	1100.61	1095.84
03/18/1996	1090.53	1094.22	1110.47	1110.62	1130.45		NT	1137.37		1144.07	1135.89	1117.57	1098.47	1091.13	1101.29	1092.84
04/17/1996	1090.04	1094.22	1110.28	1105.49	1130.43		NT	1137.75		1144.70	1136.30	1120.91	1102.71	1091.01	1100.65	1092.84
05/22/1996	1090.83	1094.91	1110.76	1111.45	1132.65		NT	1137.95		1145.98	1137.07	1124.05	1107.81	1091.56	1101.18	1093.48
06/17/1996	1091.89	1095.45	1111.20	1111.29	1133.51		NT	1138.61		1147.60	1138.54	1124.88	1107.74	1092.68	1102.52	1094.77
07/19/1996	1090.82	1095.12	1109.72	1111.00	1131.63		NT	1137.77		1147.27	1138.54	1122.76	1102.32	1091.46	1102.39	1093.22
08/21/1996	1090.33	1094.59	1110.79	1108.35	1130.08		NT	1136.82		1145.51	1137.30	1122.65	NT	1091.01	1101.42	1092.82
10/10/1996	1089.99	1093.90	1108.52	1109.36	1128.60		NT	1137.05		1144.08	1135.37	1121.50	1103.67	1090.69	1099.82	1092.44
01/03/1997	1090.75	1095.23	1110.80	1109.28	1132.93		NT	1139.18		1146.65	1138.43	1122.58	1103.88	1091.39	1102.36	1093.11
02/04/1997	1090.85	1095.30	1110.82	1109.37	1132.95		NT	1139.31		1146.63	1137.96	1122.56	1103.92	1091.46	1102.32	1093.12
03/18/1997	1090.83	1095.28	1110.80	1109.30	1132.74		NT	1139.29		1146.73	1137.93	1122.52	1103.81	1091.46	1102.32	1093.10
04/10/1997	1092.73	1094.52	1110.80	1109.05	1132.59		NT	1139.32		1145.62	1137.27	1123.70	1103.37	1091.41	1101.77	1093.16
05/23/1997	1096.08	1092.80	1110.21	1107.38	1132.26		NT	1136.70		1145.70	1138.08	1123.55	1102.24	1090.13	1101.09	1092.80
06/30/1997	1096.67	1092.56	1110.36	1107.59	1132.62		NT	1138.86		1148.55	1139.21	1124.63	1109.68	1093.15	1103.21	1095.21
07/16/1997	1096.71	1092.54	1110.31	1107.57	1132.29		NT	1135.82		1148.35	1138.50	1124.63	1109.61	1092.68	1102.15	1095.23
08/01/1997	1094.32	1093.57	1111.12	1108.83	1132.39		NT	1139.30		1145.70	1136.44	1123.50	1103.69	1091.19	1101.54	1093.17
09/04/1997	1091.65	1092.01	1111.12	1105.07	1132.10		NT	1138.81		1144.92	1136.50	1123.50	1100.27	1092.48	1097.65	1092.17
10/07/1997	1089.97	1094.20	1109.92	1107.76	1129.15		NT	1136.68		1144.30	1140.07	1120.15	1102.97	1090.63	1099.47	1092.54
11/10/1997	1090.29	1094.07	1109.79	1107.74	1129.03		NT	1136.62		1143.27	1140.08	1120.72	1103.60	1090.69	1099.46	1092.41
12/29/1997	1089.52	1094.21	1109.85	1107.53	1128.96		NT	1136.49		1143.08	1139.96	1120.52	1103.57	1090.65	1099.58	1091.47
01/06/1998	1090.73	1095.23	1110.81	1109.28	1132.84		NT	1139.18		1146.66	1138.41	1122.58	1103.88	1091.37	1102.33	1093.09
02/18/1998	1090.85	1095.29	1110.87	1109.36	1132.94		NT	1139.21		1146.89	1137.92	1122.55	1103.91	1091.45	1102.26	1093.17
03/24/1998	1090.82	1095.31	1110.84	1109.32	1132.72		NT	1139.26		1146.72	1137.94	1122.51	1103.91	1091.42	1102.22	1093.09
04/28/1998	1091.74	1096.10	1110.82	1112.14	1132.90		NT	1139.00		1147.63	1138.49	1125.15	1108.04	1092.61	1102.87	1094.04
05/12/1998	1096.07	1092.77	1110.18	1107.39	1132.33		NT	1136.71		1145.75	1138.17	1123.52	1102.25	1090.20	1101.10	1092.89
06/09/1998	1096.72	1092.50	1110.33	1107.60	1132.63		NT	1138.89		1148.52	1139.28	1124.59	1109.66	1093.19	1103.36	1095.30
07/15/1998	1096.83	1092.59	1110.27	1107.75	1132.34		NT	1135.84		1148.37	1138.56	1124.64	1109.60	1092.65	1102.24	1095.28
08/17/1998	1091.09	1096.16	1109.06	1110.51	1130.54		NT	1137.66		1137.79	1146.73	1123.13	1102.88	1101.68	1102.35	1093.48
09/24/1998	1090.37	1095.18	1108.46	1109.58	1128.97		NT	1137.07		1136.41	1145.59	1120.64	1097.41	1091.00	1100.64	1092.73
10/13/1998	1090.01	1094.27	1108.16	1108.75	1129.21		NT	1136.21		1143.91	1133.79	1119.71	1096.96	1090.57	1102.87	1092.08
11/20/1998	1089.93	1094.19	1108.21	1108.66	1129.26		NT	1136.19		1143.87	1133.77	1119.69	1096.93	1090.61	1103.76	1092.03
12/17/1998	1089.87	1094.11	1108.16	1108.59	1129.25		NT	1136.18		1143.78</						

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Elevations - Page 2

TOP PVC. ELEV. FT.	MONTHLY WATER ELEVATIONS											MW 35	MW 36	
	PZ 21	PZ 22	PZ 23	PZ 24	PZ 25	PZ 28	MW 29	MW 30	MW 31A	MW 32A	MW 33			MW 34
DATE	1133.00	1138.65	1140.91	1141.46	1139.57	1106.72	1136.78 1136.66(1)	1120.86	1162.14	1162.63	1115.86	1116.04	1124.27	1151.02
													MW-35R 1123.59	
5/25/1993	1126.30	1131.07	1132.54	1136.76	1134.71	1093.70	1132.28	1114.30						
9/3/1993														
9/20/1993					1135.69		1133.90	1114.74	1147.68	1133.81	1105.18	1103.08	1119.69	
10/4/1993	1123.98	1130.22	1131.75	1136.14	1134.51	1098.42	1132.00	1113.21	1147.18	1133.57	1100.66	1101.14	1118.91	
12/15/1993	1122.02	1128.23	1130.08	1134.76	1133.61	1092.16	1131.18	1111.81	1145.16	1131.73	1103.36	1100.72	1118.59	
1/11/1994	1121.46	1127.85	1129.48	1134.16	1132.99	1091.99	1130.38	1111.01	1144.66	1131.37	1099.98	1100.04	1118.37	
4/22/1994	1124.82	1129.77	1129.54	1134.91	1133.95	1092.30	1132.22	1113.78	1144.14	1130.68	1102.44	1102.20	1117.61	
7/11/1994	1125.30	1130.65	1131.89	1136.54	1134.35	1093.24	1132.14	1113.36	1145.46	1132.27	1102.16	1102.44	1116.93	
8/11/1994	1123.51	1129.25	1130.96	1135.13	1134.27	1092.50	1130.93	1110.91	1145.24	1131.87	1099.98	1100.51	1115.85	
9/9/1994	1122.75	1128.82	1130.10	1134.46	1132.62	1092.69	1130.57	1110.47	1144.70	1131.03	1099.46	1099.95	1115.88	
10/5/1994	1122.42	1128.99	1129.85	1134.22	1132.51	1092.68	1130.08	1110.22	1144.04	1130.37	1098.94	1099.44	1115.63	
11/16/1994	1122.28	1128.74	1130.52	1134.96	1132.62	1092.19	1129.66	1110.91	1144.03	1130.80	1100.74	1100.63	1115.21	
12/9/1994	1122.12	1128.99	1130.52	1135.15	1132.77	1092.23	1129.18	1111.25	1143.94	1130.85	1100.72	1100.64	1115.27	
1/24/1995	1121.56	1128.27	1129.85	1134.42	1132.36	1092.11	1129.20	1110.28	1143.83	1130.66	1100.29	1100.76	1114.86	
2/24/1995	1121.20	1129.48	1129.20	1134.34	1133.65	1093.04	1126.70	1109.76	1143.73	1130.17	1100.62	1101.54	1114.30	
3/16/1995	1121.98	1130.00	1129.31	1135.37	1133.47	1092.71	1130.21	1109.80	1144.33	1130.32	1104.85	1102.75	1114.35	
4/12/1995	1125.74	1130.85	1130.96	1136.41	1135.05	1093.57	1133.28	1114.41	1144.74	1131.28	1105.96	1103.54	1117.32	
5/23/1995	1125.92	1130.75	1132.22	1136.93	1134.07	1092.76	1130.98	1113.95	1146.51	1133.09	1102.27	1102.72	1117.09	
6/13/1995	1125.94	1130.74	1132.26	1137.15	1134.55	1093.96	1131.20	1113.83	1146.66	1133.29	1102.71	1103.00	1117.39	
7/25/1995	1123.81	1129.97	1131.29	1136.21	1133.36	1092.57	1130.28	NT	1132.24	1146.60	1100.44	1102.79	1117.02	
8/24/1995	1121.93	1128.60	1134.21	1130.68	1132.25	1092.05	1126.53	NT	1131.11	1145.82	1099.62	1099.80	1116.27	
9/27/1995	1119.59	1127.56	1132.83	1129.11	1131.75	1091.69	1124.90	NT	1130.02	1145.05	1098.60	1099.17	1117.02	
10/4/1995	1119.40	1127.45	1132.73	1128.81	1131.73	1091.65	1128.93	NT	1129.84	1144.93	1096.51	1098.99	1116.97	
11/24/1995	1119.06	1127.62	1133.35	1128.74	1132.17	1091.58	1129.08	NT	1143.74	1129.60	1100.18	1099.52	1115.85	
12/22/1995	1120.25	1127.61	1132.52	1128.79	1132.15	1091.82	1128.18	NT	1142.52	1129.41	1099.97	1099.62	1115.42	
2/14/1996	1120.75	1131.25	1131.63	1127.97	1132.14	1095.16	1124.03	NT	NT	NT	1104.40	1102.16	1114.04	
3/18/1996	1120.20	1129.82	1131.70	1128.21	1132.26	1092.15	1123.53	NT	NT	NT	1103.51	1101.85	1113.95	
4/17/1996	1123.53	1129.82	1133.26	1129.28	1133.03	1092.16	1129.77	NT	NT	NT	1101.15	1100.99	1114.67	
5/22/1996	1125.61	1130.64	1134.76	1130.71	1133.53	1093.63	1130.83	NT	NT	NT	1102.05	1101.65	1115.72	
6/17/1996	1125.13	1131.06	1137.26	1131.86	1134.35	1094.21	1130.31	NT	1144.67	1126.92	1101.92	1101.61	1115.65	
7/19/1996	1122.65	1129.63	1136.24	1131.57	1133.84	1092.60	1129.50	NT	1146.00	1127.25	1101.30	1101.00	1114.04	
8/21/1996	1121.15	1128.08	1134.70	1130.64	1132.90	1092.17	1129.19	NT	1145.38	1126.04	1100.10	1100.01	1114.44	
10/10/1996	1119.80	1128.57	1133.46	1129.16	1132.22	1091.77	1128.96	NT	1143.99	1124.53	1099.18	1099.19	1114.60	
1/3/1997	1124.58	1129.74	1134.77	1131.13	1132.75	1092.51	1128.10	1107.56	1145.41	1126.97	1100.33	1100.76	1115.02	1127.68
2/4/1997	1124.46	1129.74	1134.67	1131.24	1132.75	1093.37	1128.08	1103.70	1145.64	1126.99	1100.30	1100.80	1115.03	1127.64
3/18/1997	1124.46	1129.72	1134.63	1131.23	1132.72	1093.34	1128.04	1103.65	1142.62	1126.99	1100.25	1100.79	1115.01	1126.91
4/10/1997	1124.56	1129.77	1134.60	1131.14	1132.99	1093.10	1128.69	1103.50	1142.53	1126.42	1100.23	1100.74	1114.96	1127.03
5/23/1997	1124.31	1129.62	1134.07	1130.44	1132.68	1093.73	1128.16	1103.23	1142.13	1126.28	1101.24	1100.13	1117.29	1127.17
6/30/1997	1124.79	1130.28	1135.74	1132.01	1133.92	1094.36	1128.58	1108.20	1147.78	1127.55	1101.38	1101.95	1115.46	1128.67
7/16/1997	1124.65	1130.04	1135.92	1132.77	1134.25	1094.35	1128.15	1108.83	1147.86	1128.54	1101.51	1101.98	1115.26	1128.01
8/1/1997	1124.35	1131.09	1134.37	1131.21	1132.98	1093.70	1128.13	1104.32	1142.61	1125.63	1100.63	1100.42	1114.84	1127.48
9/4/1997	1124.35	1129.00	1133.29	1130.44	1132.63	1093.47	1126.56	1104.51	1141.59	1126.11	1098.54	1099.72	1114.02	1126.37
10/7/1997	1116.50	1127.15	1132.31	1127.38	1131.47	1091.82	1122.13	1102.51	1144.29	1124.43	1098.41	1098.64	1114.42	NT
11/10/1997	1116.39	1127.19	1132.24	1127.14	1131.41	1091.89	1122.13	1102.44	1144.19	1124.62	1098.33	1098.52	1114.52	1127.05
12/29/1997	1116.52	1127.04	1131.99	1126.81	1131.43	1092.36	1118.20	1102.28	1144.31	1127.54	1098.60	1098.52	1114.27	1126.91
1/6/1998	1124.56	1129.67	1134.80	1131.17	1132.80	1092.51	1128.09	1107.77	1145.38	1127.01	1100.34	1100.80	1115.01	1127.68
2/18/1998	1124.48	1129.75	1134.60	1131.20	1132.76	1093.36	1128.07	1103.72	1145.64	1128.02	1100.30	1100.78	1115.01	1128.03
3/24/1998	1124.39	1129.66	1134.60	1131.17	1132.64	1093.51	1127.99	1103.62	1142.53	1127.12	1100.23	1100.75	1114.99	1126.92
4/28/1998	1125.65	1131.25	1136.41	1132.48	1133.52	1093.37	1129.93	1111.39	1145.04	1127.18	1101.86	1102.04	1116.07	NT
5/12/1998	1124.39	1129.55	1134.08	1130.34	1132.74	1093.73	1128.17	1103.21	1142.03	1126.26	1101.22	1100.14	1117.37	1127.22
6/9/1998	1124.70	1130.34	1135.73	1132.04	1133.98	1094.32	1128.57	1108.27	1147.83	1127.53	1101.40	1101.94	1115.44	1128.72
7/15/1998	1124.66	1130.00	1135.90	1132.76	1134.17	1094.41	1128.12	1108.82	1147.91	1128.53	1101.44	1101.88	1115.17	1128.00
8/17/1998	1122.19	1129.26	1130.61	1135.15	1133.82	1092.79	1128.12	1104.13	1145.96	1126.46	1099.91	1100.56	1114.25	1126.60
9/24/1998	1118.94	1127.75	1128.67	1133.60	1132.57	1092.05	1127.64	1101.38	1144.50	1124.74	1098.56	1099.35	1113.59	1124.20
10/13/1998	1117.71	1127.56	1127.20	1132.27	1131.94	1091.42	1120.48	1101.35	1141.45	1124.23	1098.35	1098.53	1114.75	1123.38
11/20/1998	1117.69	1127.52	1127.13	1132.23	1131.97	1091.39	1120.37	1101.31	1141.44	1125.07	1098.35	1098.51	1114.77	1133.46
12/17/1998	1117.60	1127.50	1127.19	1132.15	1131.90	1091.32	1120.27	1101.27	1141.38	1125.64	1098.33	1098.48	1114.74	1133.01
1/21/1999	1117.69	1127.51	1127.27	1132.06	1131.84	1091.26	1120.29	1101.26	1141.43	1125.82	1098.44	1098.53	1114.84	1132.96
2/10/1999	1117.64	1127.46	1127.22	1132.00	1131.88	1091.21	1120.27	1101.20	1141.38	1126.23	1098.40	1098.51	1114.77	1132.85
3/22/1999	1117.77	1126.75	1127.92	1132.30	1132.01	1091.43	1120.57	1101.44	1141.05	1125.63	1098.47	1098.64	1114.81	1132.90
4/9/1999	1117.74	1126.68	1127.00	1132.35	1131.97									

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Top PVC Elevation (1991) Top PVC Elevation (1997) DATE	MONTHLY WATER ELEVATIONS											LPZ-101	LPZ-102	LPZ-201	LPZ-202	GPZ-203	LPZ-301	GPZ-302	GPZ-south	GPZ-west
	LW-13 EW-1	LW 91-1	LW 91-2	LW 91-3	LW 91-4	LW 91-5	LW 91-6	LW 93-7	LW 93-8	LW 93-9	LW 93-10									
	1151.03	1160.71	1150.84	1160.15	1148.44	1143.36	1144.11	1160.63	1151.05	1150.64	1139.23	1133.96	1131.69							
		1170.52												7.20	8.50					
						1162.00														
5/25/1993		1153.51	1144.44	1142.80	1132.44	1132.66	1134.41													
9/3/1993		1153.81	1144.59	1143.70	1135.09	1134.16	1135.96	1146.88	1139.25	1143.24	1125.23	1123.26	1116.39							
9/20/1993		1153.81	1143.84	1143.75	1135.14	1137.56	1136.71	1146.63	1142.35	1143.64	1128.73	1123.36	1116.39							
10/4/1993		1153.51	1142.24	1143.95	1136.44	1132.76	1136.31	1146.33	1142.15	1143.34	1127.93	1123.16	1116.19							
12/15/1993		1153.11	1140.44	1144.15	1136.34	1132.16	1136.41	1145.93	1141.75	1143.24	1128.83	1122.66	1116.29							
1/11/1994		1152.81	1140.04	1143.95	1136.24	1132.26	1135.41	1145.83	1141.55	1142.64	1128.73	1122.06	1116.19							
4/22/1994		1152.51	1142.04	1143.65	1134.64	1132.36	1135.31	1145.83	1141.25	1141.84	1128.23	1122.86	1116.69							
7/11/1994		1152.91	1142.74	1143.45	1135.94	1133.96	1134.81	1145.33	1141.45	1141.94	1128.93	1122.86	1116.29							
8/11/1994		1152.91	1141.21	1143.64	1136.16	1133.23	1134.42	1145.33	1141.38	1142.25	1128.41	1122.96	1115.59							
9/9/1994		1152.76	1140.28	1143.64	1136.02	1133.11	1134.41	1145.43	1141.43	1142.14	1127.03	1122.92	1116.38							
10/5/1994		1152.51	1139.84	1143.15	1135.54	1132.36	1134.11	1145.33	1141.15	1141.64	1125.93	1122.46	1116.29							
11/16/1994		1152.55	1139.72	1143.46	1136.30	1132.80	1134.40	1145.43	1141.18	1141.73	1125.78	1122.44	1116.44							
12/9/1994		1152.54	1139.66	1143.46	1136.36	1132.77	1134.40	1145.43	1141.06	1141.65	1125.64	1122.26	1116.60							
1/24/1995		1152.57	1139.64	1143.34	1136.43	1134.15	1134.58	1145.62	1140.85	1141.42	1125.54	1122.05	1116.29							
2/24/1995		1152.42	1141.26	1143.25	NT	1132.76	1134.54	NT	1140.81	1141.21	1125.65	1121.89	1116.31							
3/16/1995		1152.39	1141.49	1143.20	NT	1132.74	1134.53	NT	1140.62	NT	1126.71	1121.87	1116.36							
4/12/1995		1152.61	1143.54	1143.15	NT	1135.36	1134.61	1145.93	1140.85	1141.64	1127.33	1123.56	1116.69							
5/23/1995		1153.04	1143.99	1143.30	NT	1135.77	1137.20	1145.94	1141.17	1142.54	1128.02	1123.68	1116.69							
6/13/1995		1153.04	1143.73	1143.43	NT	1136.05	1136.83	1145.92	1141.19	1142.92	1128.92	1123.96	1117.02							
7/25/1995		1152.92	1141.24	1143.75	1142.38	1135.72	1135.41	1147.93	1141.30	1143.15	1129.54	1123.94	1116.59							
8/24/1995		1152.78	1141.31	1143.84	1141.42	1135.25	1134.56	1145.95	1141.26	1142.97	1129.38	1123.76	1116.60							
9/27/1995		1152.66	1140.38	1144.15	1140.91	1134.71	1134.54	1145.95	1141.18	1143.64	1129.04	1124.74	1116.69							
10/4/1995		1152.71	1140.24	1143.95	1140.84	1134.66	1134.61	1146.03	1141.05	1142.59	1128.23	1123.46	1116.69							
11/24/1995		1152.38	1139.55	1143.80	1136.40	1134.63	1134.53	1145.93	1140.95	1141.99	1125.54	1122.63	1116.67							
12/22/1995		1152.22	1139.10	1143.63	1135.72	1134.25	1134.52	1145.98	1140.80	1141.66	1125.02	1122.21	Frozen							
2/14/1996		1152.01	1141.69	1143.27	1135.23	1134.66	1134.48	1145.97	1140.56	Frozen	Frozen	1122.16	Frozen							
3/18/1996		1151.96	1140.67	1143.19	1135.16	1134.89	1131.58	1144.40	1140.37	Frozen	Frozen	1121.93	Frozen							
4/17/1996		1161.92	1140.66	1143.21	1134.73	1135.22	1151.40	1151.90	1150.16	1140.93	1126.00	1121.87	1126.54							
5/22/1996		1161.90	1141.51	1142.92	1134.29	1135.27	1144.70	1152.82	1140.87	1140.99	1125.83	1122.07	1126.42							
6/17/1996		1162.33	1142.54	1142.94	1136.31	1135.33	1144.18	1152.80	1141.16	1141.30	1126.49	1122.24	1126.73							
7/19/1996		1162.47	1141.76	1142.95	1136.92	1135.33	1144.23	1152.80	1141.23	1142.13	1125.89	1122.60	1127.07							
8/21/1996		1162.33	1140.74	1143.17	1136.84	1143.36	1144.19	NT	NT	1142.61	1125.16	1122.60	1127.53							
10/10/1996		NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT							
1/3/1997	1133.38	1153.36	1142.99	1143.48	1136.80	1135.33	1137.06	1145.77	1141.19	Frozen	Frozen	1121.65	1117.83							
2/4/1997	1133.49	1162.71	1142.98	1143.40	1136.79	1135.30	1137.94	1145.77	1141.28	Frozen	Frozen	1121.57	1117.89							
3/18/1997	1133.45	1162.67	1143.00	1143.37	1136.44	1135.24	1137.92	1145.80	1141.09	Frozen	Frozen	1121.45	1117.88							
4/10/1997	1133.41	1163.18	1142.82	1143.50	1135.38	1134.91	1139.87	1147.89	1142.04	1143.55	1125.18	1120.91	1117.69							
5/23/1997	1131.35	1162.94	1141.80	1143.92	1135.55	1135.27	1143.57	1146.56	1140.58	1142.02	1123.94	1121.93	1116.75							
6/30/1997	1131.67	1153.19	1142.79	1143.79	1136.91	1133.00	1136.72	1146.32	1141.75	1144.46	1125.99	1121.85	1117.85							
7/16/1997	1141.40	1152.46	1142.75	1143.92	1136.86	1132.13	1136.94	1146.18	1141.74	1144.44	1125.99	1121.41	1118.16							
8/1/1997	1134.80	1162.94	1142.84	1143.92	1136.91	1134.67	1141.62	1148.23	1141.09	1142.99	1125.18	1121.87	1117.66							
9/4/1997	1132.48	1162.49	1141.85	1143.59	1134.19	1134.30	1140.28	1147.60	1139.45	1141.28	1122.91	1120.42	1116.43							
10/7/1997	NT	1153.48	1140.75	1144.15	1136.44	NT	1136.89	1145.52	1141.90	1144.59	1124.23	1122.93	NT							
11/10/1997	1132.64	1153.40	1140.81	1144.09	1136.35	1133.33	1137.84	1145.41	1142.08	1144.55	1124.21	1122.90	1118.30							
12/29/1997	1131.93	1153.20	1139.82	1145.17	1136.41	1133.10	1138.57	1145.29	1141.79	1144.43	1123.61	1122.88	1117.72							
1/6/1998	1133.39	1152.97	1142.92	1143.50	1136.78	1135.30	1137.02	1145.84	1141.17	NT	NT	1121.63	1117.85							
2/18/1998	1133.42	1162.64	1143.00	1143.40	1136.82	1135.32	1138.03	1145.82	1141.34	NT	NT	1121.56	1117.85							
3/24/1998	1134.03	1162.62	1143.18	1143.32	1136.43	1135.15	1136.92	1145.64	1140.99	NT	NT	1121.35	1117.87							
4/28/1998	NT	1152.92	1144.04	1143.25	NT	NT	1136.53	1145.94	1141.60	1145.04	1127.13	1123.96	NT							
5/12/1998	1131.35	1163.01	1141.71	1143.94	1135.64	1135.33	1143.62	1146.63	1140.60	1142.04	1124.02	1121.83	1116.64							
6/9/1998	1131.71	1153.16	1142.75	1143.83	1136.94	1133.03	1137.02	1146.24	1141.75	1144.45	1126.01	1121.86	1117.86							
7/15/1998	1141.40	1152.39	1142.74	1144.02	1136.85	1132.13	1137.03	1146.23	1141.79	1144.45	1126.03	1121.46	1118.24							
8/17/1998	1139.76	1152.84	1141.73	1144.57	1135.16	1134.75	1136.98	1149.06	1142.13	1143.97	1125.73	1124.40	1117.65							
9/24/1998	1138.90	1149																		

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Elevations - Page 4

	MW-37	MW-38	MW-39	MW-40	MW-41	MW-42	MW-43	MW-44	MW-45	MW-46	MW-47	MW-48A	MW-49A	MW-50	MW-51	
Top PVC Elevation	1151.28	1152.97	1153.09	1137.89	1137.77	1149.55	1149.45	1132.08	1132.11	1099.87	1099.82	1099.61	1120.02	0.00	0.00	
Top PVC Elevation (modified)												1101.03	1132.50	1100.39	1116.53	
DATE																
1/3/2001	1131.72	1127.42	1135.70	1120.72	1116.22	1115.39	1128.25	1112.57	1116.70	1086.51	1087.86	1089.03	1113.14			
2/20/2001	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			
3/9/2001	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			
4/19/2001	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			
5/9/2001	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			
6/8/2001	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			
7/19/2001	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			
8/12/2001	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			
9/4/2001	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			
10/15/2001	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			
11/2/2001	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			
12/4/2001	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			
1/4/2002	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			
2/23/2002	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			
3/11/2002	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			
4/4/2002	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			
5/23/2002	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			
6/5/2002	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			
7/5/2002	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			
8/5/2002	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			
9/5/2002	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			
10/17/2002	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			
11/19/2002	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			
12/16/2002	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			
1/31/2003	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			
2/25/2003	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			
3/12/2003	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			
4/14/2003	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			
5/28/2003	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			
6/4/2003	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT			
7/14/2003	NT	1131.27	1142.09	NT	NT	NT	NT	NT	NT	NT	NT	broken	Removed			
8/12/2003	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	broken	Removed			
9/16/2003	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	broken	Removed			
10/7/2003	NT	1126.92	1136.66	NT	NT	NT	NT	NT	NT	NT	NT	1088.82	Removed			
1/9/2004	NT	1127.58	1137.66	NT	NT	NT	NT	NT	NT	NT	NT	1089.22	Removed			
4/12/2004	NT	1130.22	1140.00	NT	NT	NT	NT	NT	NT	NT	NT	1089.60	Removed			
10/14/2004	NT	1127.92	1137.09	NT	NT	NT	NT	NT	NT	NT	NT	1090.68	1116.70			
4/15/2005	1142.41	1129.33	1139.38	1129.87	1119.52	1118.27	1141.97	1119.72	1115.45	1088.86	1090.19	1090.95	1117.49			
7/12/2005	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	1091.08	1116.95			
10/10/2005	1134.24	1126.64	1136.36	1118.38	1115.71	1114.92	1133.11	1116.89	1112.26	Dry	1087.74	1089.70	1115.92			
4/11/2006	1142.28	1129.82	1140.64	1129.96	1119.89	1118.54	1142.77	1120.24	1115.86	1088.14	1089.33	1090.75	1118.09			
4/12/2010	1144.08	1126.97	1138.59	1128.89	1119.17	1118.05	1144.35	1123.23	1116.31	1088.77	1089.62	1090.23	1118.60			
4/20/2007	1144.48	1131.52	1142.44	1131.58	1121.65	1120.71	1145.03	1124.64	1118.17	1089.81	1090.38	1091.33	1119.35			
10/3/2007	1141.68	1130.12	1140.29	1128.84	1120.02	1119.11	1142.85	1120.68	1116.31	1088.37	1089.37	1090.53	1118.30			
4/7/2008	1141.57	1126.43	1138.83	1127.08	1118.82	1117.54	1141.95	1118.89	1115.04	1088.90	1089.65	1090.43	1119.05			
10/1/2008	1139.98	1123.42	1135.69	1124.09	1116.37	1115.35	1137.95	1118.28	1113.36	Dry	1088.07	1088.88	1116.35			
12/23/2008	1140.58	NT	NT	1126.54	NT	NT	NT	NT	NT	Dry	1088.72	1090.05	1117.10			
4/3/2009	1141.46	1125.87	1137.17	1127.79	1118.07	1117.05	1143.80	1119.28	1114.86	1087.89	1089.12	1089.80	1118.20			
10/9/2009	1142.88	1127.57	1140.24	1125.64	1118.37	1117.29	1142.90	1118.50	1114.71	1087.82	1089.00	1089.93	1118.25			
4/12/2010	1144.08	1126.97	1138.59	1128.89	1119.17	1118.05	1144.35	1123.23	1116.31	1088.77	1089.62	1090.23	1118.60			
10/14/2010	1141.33	1126.97	1138.59	1126.09	1118.17	1117.15	1140.60	1118.83	1114.81	1087.67	1088.77	1089.53	1117.55	1089.18	1106.98	
4/7/2011	1140.23	1125.92	1136.99	1127.74	1117.67	1116.55	1142.15	1118.93	1114.31	1087.57	1088.77	1089.68	1117.70	1089.74	1107.63	
10/17/2011	1136.03	1124.02	1135.79	1122.99	1114.77	1114.05	1136.55	1117.38	1112.31	Dry	1088.57	1088.88	1116.10	1089.29	1104.33	
4/18/2012	1139.08	1125.62	1137.34	1128.69	1117.37	1116.25	1142.65	1119.23	1114.16	1088.57	1090.92	1090.78	1119.25	1090.84	1107.28	
10/16/2012	1121.93	1121.47	1134.49	1116.89	1111.47	1111.25	1128.55	1116.48	1110.21	1088.27	1089.52	1089.73	1113.60	1089.89	1102.73	
4/2/2013	1126.43	1120.47	1133.59	1113.79	1111.02	1110.60	1124.65	1120.13	1109.81	1088.37	1089.07	1089.68	1113.95	1090.09	1102.78	
10/8/2013	1134.79	1123.53	1135.52	1119.78	1114.52	1113.94	1136.05	1119.23	1112.53	1087.27	1088.11	1088.83	1117.43	1088.79	1104.08	
4/15/2014	1129.23	1121.22	1133.94	1115.66	1112.62	1112.15	1132.75	1117.48	1111.18	1087.97	1089.10	1089.71	1119.60	1090.29	1104.41	
10/23/2014	1140.78	1126.57	1138.84	1125.34	1118.37	1117.35	1141.40	1120.58	1115.51	1089.07	1089.52	1090.73	1119.20	1089.79	1108.38	
3/31/2015	1141.08	1126.32	1138.14	1128.85	1118.17	1117.00	1142.23	1119.04	1114.81	1088.07	1089.07	1089.53	1119.25	1090.09	1107.68	
11/5/2015	1139.68	1124.87	1133.94	1125.61	1118.12	1116.95	1140.27	1119.58	1114.91	1087.82	1088.92	1089.58	1118.50	1088.54	1108.10	
4/21/2016	1140.88	1125.72	1137.34	1128.29	1119.22	1118.05	1142.80	1121.16	1116.21	1088.19	1088.94	1089.68	1119.50	1088.60	1108.72	
10/17/2016	1139.48	1126.61	1136.83	1125.16	1117.82	1116.75	1140.38	1118.73	1114.66	1087.66	1088.70	1089.53	1118.50	1088.51	1108.45	
4/21/2017	1142.18	1125.79	1138.19	1132.06	1119.47	1118.42	1144.49	1123.03	1116.56	1088.03	1088.99	1089.89	1120.45	1089.04	1109.46	
10/16/2017	1135.48	1122.33	1134.28	1119.14	1116.61	1115.75	1140.33	1118.82	1114.02	1087.68	1088.52	1089.96	1119.08	1088.75	1107.73	
4/24/2018	1143.56	1124.72	1137.35	1133.09	1118.81	1117.65	1145.09	1119.52	1115.51	1088.25	1089.06	1090.02	1120.21	1089.04	1108.53	
10/25/2018	1143.55	1127.06	1139.54	1132.23	1120.72	1119.71	1144.20	1124.58	1118.01	1089.43	1089.55	1090.28	1119.72	1089.25	1109.65	
4/15/2019	1142.92	1125.16	1137.65	1133.75	1119.17	1118.01	1143.60	1121.66	1116.15	1088.62	1089.07	1090.37	1120.78	1089.14	1109.01	
10/7/2019	1144.73	1123.58	1136.06	1125.68	1118.85	1118.04	1145.13	1123.58	1116.59	1089.79	1090.14	1091.13	1120.55	1090.20	1109.13	
4/22/2020	1142.10	1126.37	1138.86	1132.06	1119.31	1118.44	1144.02	1121.24	1116.06	1088.09	1088.64	1089.68	1119.72	1088.89	1109.15	
10/1/2020	1133.77	1121.47	1133.49	1116.84	1114.05	1112.06	1135.49	1117.18	1108.32	1086.41	1087.72	1088.72	1117.53	1087.91	1104.59	
4/8/2021	1141.01	1121.72	1133.42	1119.89	1116.48	1114.34	1142.38	1118.13	1110.61	1087.02	1088.12	1089.02	1119.61	1088.45	1107.08	
10/29/2021	1130.30	1120.10	1131.19	1112.06	1113.82	1112.03	1131.58	1117.38	1108.83	1087.55	1089.05	1090.18	1119.56	1089.33	1105.22	
4/25/2022	1144.24	1123.74	1134.93	1132.27	1117.98	1115.65	1145.51	1121.06	1112.31	1088.68	1089.38	1090.43	1120.59	1089.39	1107.55	
10/17/2022	1130.91	1120.78	1131.87	1114.94	1114.03	1111.92	1136.19	1117.38	1108.26	1086.95	1087.84	1088.93	1117.12	1087.81	1104.82	
4/10/2023	1140.36	1122.32	1134.37	1127.71	1116.98	1114.58	1142.65	1120.								

MONTHLY WATER ELEVATIONS
MW-7A MW-7B MW-7C

Top PVC Elevation 1105.29 1105.23 1109.79
Top PVC Elevation (modified)
DATE

1/3/2001			
2/20/2001			
3/9/2001			
4/19/2001			
5/9/2001			
6/8/2001			
7/19/2001			
8/12/2001			
9/4/2001			
10/15/2001			
11/2/2001			
12/4/2001			
1/4/2002			
2/23/2002			
3/11/2002			
4/4/2002			
5/23/2002			
6/5/2002			
7/5/2002			
8/5/2002			
9/5/2002			
10/17/2002			
11/19/2002			
12/16/2002			
1/31/2003			
2/25/2003			
3/12/2003			
4/14/2003			
5/28/2003			
6/4/2003			
7/14/2003			
8/12/2003			
9/16/2003			
10/7/2003			
1/9/2004			
4/12/2004			
10/14/2004			
4/15/2005			
7/12/2005			
10/10/2005			
4/11/2006			
10/10/2006			
4/20/2007			
10/3/2007			
4/7/2008			
10/1/2008			
12/23/2008			
4/3/2009			
10/9/2009			
4/12/2010			
10/14/2010			
4/7/2011			
10/17/2011			
4/18/2012			
10/16/2012			
4/2/2013	1091.39	1092.08	1091.74
10/8/2013	1089.99	1090.15	1090.24
4/15/2014	1091.44	1091.85	1091.99
10/23/2014	1091.89	1091.63	1092.29
3/31/2015	1091.33	1091.53	1091.69
11/5/2015	1091.19	1091.03	1091.14
4/21/2016	1091.54	1091.38	1090.87
10/17/2016	1091.14	1090.90	1090.99
4/21/2017	1092.34	1092.36	1092.59
10/16/2017	1091.57	1091.46	1091.69
4/24/2018	1092.14	1092.03	1092.31
10/25/2018	1092.62	1092.41	1092.57
4/15/2019	1092.98	1092.90	1093.09
10/7/2019	1094.36	1094.39	1094.66
4/22/2020	1091.81	1091.69	1091.72
10/1/2020	1089.83	1089.58	1089.73
4/8/2021	1090.94	1090.71	1090.91
10/29/2021	1091.30	1091.43	1091.63
4/25/2022	1093.45	1093.51	1093.70
10/17/2022	1090.34	1090.15	1090.27
4/10/2023	1092.26	1092.12	1092.31
10/27/2023	1090.28	1090.03	1090.14
4/2/2024	1091.08	1090.89	1091.04
10/10/2024	1090.48	1090.19	1090.54

Table 5 – Background and GWPS Summary

Table 6 – Summary of Detections

Table 6
Summary of Well/Detected Constituent Pairs that Exceed the Prediction Limit
Annual Water Quality Report
Rural Iowa Sanitary Landfill
Permit No. 42-SDP-01-72P

Well	Compound	Date	Result (ug/L)	Prediction Limit (ug/L)	Monitoring Program
MW 49A	Cobalt	4/2/2024	19.9	12.4	Assessment Monitoring
MW 49A	Nickel	4/2/2024	49.4	31.6	Assessment Monitoring
MW 49A	Nickel	10/10/2024	45.6	31.6	Assessment Monitoring
MW 49A	Benzene	4/2/2024	2.8	1.0	Assessment Monitoring
MW 49A	Benzene	10/10/2024	2.4	1.0	Assessment Monitoring
MW 49A	chloroethane	4/2/2024	3.5	1.0	Assessment Monitoring
MW 49A	chloroethane	10/10/2024	2.4	1.0	Assessment Monitoring
MW 49A	cis-1,2-dichloroethene	4/2/2024	3.6	1.0	Assessment Monitoring
MW 49A	cis-1,2-dichloroethene	10/10/2024	1.8	1.0	Assessment Monitoring
MW 49A	vinyl chloride	4/2/2024	2.9	1.0	Assessment Monitoring
MW 49A	vinyl chloride	10/10/2024	1.8	1.0	Assessment Monitoring
MW 7	Arsenic	4/2/2024	167.0	89.3	Corrective Action
MW 7	Arsenic	10/10/2024	215.0	89.3	Corrective Action
MW 7	chloroethane	10/10/2024	1.7	1.0	Corrective Action
MW 7B	Arsenic	10/10/2024	673.0	89.3	Corrective Action
MW 13R	Arsenic	10/10/2024	192.0	89.3	Corrective Action
MW 13R	1,4-DCB	4/2/2024	1.1	1.0	Corrective Action
MW 13R	1,4-DCB	10/10/2024	1.8	1.0	Corrective Action
MW 13R	Benzene	4/2/2024	2.1	1.0	Corrective Action
MW 13R	Benzene	10/10/2024	2.8	1.0	Corrective Action
MW 13R	chlorobenzene	4/2/2024	36.7	1.0	Corrective Action
MW 13R	chlorobenzene	10/10/2024	43.4	1.0	Corrective Action
MW 14	Arsenic	10/10/2024	91.9	89.3	Assessment Monitoring
MW 14	Cobalt	4/2/2024	20.8	12.4	Assessment Monitoring
MW 14	1,4-DCB	4/2/2024	3.6	1.0	Assessment Monitoring
MW 14	1,4-DCB	10/10/2024	3.3	1.0	Assessment Monitoring
MW 14	Benzene	4/2/2024	2.6	1.0	Assessment Monitoring
MW 14	Benzene	10/10/2024	1.6	1.0	Assessment Monitoring
MW 14	chloroethane	4/2/2024	1.9	1.0	Assessment Monitoring
MW 211	Cobalt	4/2/2024	12.5	12.4	Assessment Monitoring
MW 211	Cobalt	10/10/2024	12.9	12.4	Assessment Monitoring
MW 211	Nickel	10/10/2024	33.0	31.6	Assessment Monitoring
MW 211	benzene	10/10/2024	1.2	1.0	Assessment Monitoring
MW 211	chlorobenzene	4/2/2024	4.4	1.0	Assessment Monitoring
MW 211	chlorobenzene	10/10/2024	4.7	1.0	Assessment Monitoring
MW 31R	Cobalt	4/2/2024	20.6	12.4	Corrective Action
MW 31R	Cobalt	10/10/2024	14.6	12.4	Corrective Action
MW 31R	Nickel	4/2/2024	34.2	31.6	Corrective Action
MW 31R	1,1-dichloroethane	4/2/2024	3.3	1.0	Corrective Action
MW 31R	1,1-dichloroethane	10/10/2024	3.1	1.0	Corrective Action
MW 31R	1,4-DCB	4/2/2024	14.5	1.0	Corrective Action
MW 31R	1,4-DCB	10/10/2024	16.6	1.0	Corrective Action
MW 31R	Benzene	4/2/2024	2.1	1.0	Corrective Action
MW 31R	Benzene	10/10/2024	2.3	1.0	Corrective Action
MW 31R	chlorobenzene	4/2/2024	21.0	1.0	Corrective Action
MW 31R	chlorobenzene	10/10/2024	21.6	1.0	Corrective Action
MW 31R	chloroethane	4/2/2024	3.5	1.0	Corrective Action
MW 31R	chloroethane	10/10/2024	2.6	1.0	Corrective Action
MW 31R	Cis-1,2DCE	4/2/2024	19.9	1.0	Corrective Action
MW 31R	Cis-1,2DCE	10/10/2024	16.0	1.0	Corrective Action
MW 31R	trans-1,2DCE	4/2/2024	2.5	1.0	Corrective Action
MW 31R	trans-1,2DCE	10/10/2024	1.8	1.0	Corrective Action
MW-35R	chloroethane	4/2/2024	2.1	1.0	Assessment Monitoring

Table 7 – Summary of Ongoing and Newly Identified SSI

Table 7
Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
Rural Iowa Sanitary Landfill
Permit No.42-SDP-01-72P

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW 7	Arsenic	4/21/2016	146	89.3	96.291	89.3	4/21/2016	NA	4/24/2018
MW 7	Arsenic	10/17/2016	165	89.3	108.91	89.3	4/21/2016	NA	4/24/2018
MW 7	Arsenic	4/21/2017	197	89.3	144.223	89.3	4/21/2016	NA	4/24/2018
MW 7	Arsenic	10/16/2017	115	89.3	115.327	89.3	4/21/2016	NA	4/24/2018
MW 7	Arsenic	4/24/2018	<4.0	89.3	19.242	89.3	4/21/2016	NA	4/24/2018
MW 7	Arsenic	10/25/2018	36.6	89.3	0.000	89.3	4/21/2016	NA	4/24/2018
MW 7	Arsenic	4/15/2019	457	89.3	0.000	89.3	4/21/2016	NA	4/24/2018
MW 7	Arsenic	10/7/2019	33.5	89.3	0.000	89.3	4/21/2016	NA	4/24/2018
MW 7	Arsenic	4/22/2020	88.8	89.3	0.000	89.3	4/21/2016	NA	4/24/2018
MW 7	Arsenic	10/1/2020	306	89.3	0.000	89.3	4/21/2016	NA	4/24/2018
MW 7	Arsenic	4/8/2021	181	89.3	12.165	89.3	4/21/2016	NA	4/24/2018
MW 7	Arsenic	10/29/2021	117	89.3	59.603	89.3	4/21/2016	NA	4/24/2018
MW 7	Arsenic	4/25/2022	104	89.3	68.369	89.3	4/21/2016	NA	4/24/2018
MW 7	Arsenic	10/17/2022	255	89.3	82.814	89.3	4/21/2016	NA	4/24/2018
MW 7	Arsenic	4/10/2023	158	89.3	78.130	89.3	4/21/2016	NA	4/24/2018
MW 7	Arsenic	10/27/2023	275	89.3	102.888	89.3	4/21/2016	NA	4/24/2018
MW 7	Arsenic	4/2/2024	167	89.3	143.347	89.3	4/21/2016	NA	4/24/2018
MW 7	Arsenic	10/10/2024	215	89.3	140.599	89.3	4/21/2016	NA	4/24/2018

Table 7
Summary of Ongoing & Newly Identified SSI
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Permit No.42-SDP-01-72P

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW 7	Cobalt	4/21/2016	1	34.1	1.103	34.1	NA	NA	4/24/2018
MW 7	Cobalt	10/17/2016	3.5	34.1	1.336	34.1	NA	NA	4/24/2018
MW 7	Cobalt	4/21/2017	1.5	34.1	0.505	34.1	NA	NA	4/24/2018
MW 7	Cobalt	10/16/2017	0.8	12.4	0.247	12.4	NA	NA	4/24/2018
MW 7	Cobalt	4/24/2018	<0.8	12.4	0.604	12.4	NA	NA	4/24/2018
MW 7	Cobalt	10/25/2018	<0.8	12.4	0.907	12.4	NA	NA	4/24/2018
MW 7	Cobalt	4/15/2019	8.9	12.4	0.000	12.4	NA	NA	4/24/2018
MW 7	Cobalt	10/7/2019	0.8	12.4	0.000	12.4	NA	NA	4/24/2018
MW 7	Cobalt	4/22/2020	2.1	12.4	0.000	12.4	NA	NA	4/24/2018
MW 7	Cobalt	10/1/2020	4.3	7.8	0.000	12.4	NA	NA	4/24/2018
MW 7	Cobalt	4/8/2021	4.2	7.8	0.848	12.4	NA	NA	4/24/2018
MW 7	Cobalt	10/29/2021	1.6	7.8	1.402	12.4	NA	NA	4/24/2018
MW 7	Cobalt	4/25/2022	1.4	12.4	1.004	12.4	NA	NA	4/24/2018
MW 7	Cobalt	10/17/2022	4.8	12.4	0.940	12.4	NA	NA	4/24/2018
MW 7	Cobalt	4/10/2023	0.6	12.4	0.000	12.4	NA	NA	4/24/2018
MW 7	Cobalt	10/27/2023	3.9	12.4	0.328	12.4	NA	NA	4/24/2018
MW 7	Cobalt	4/2/2024	0.7	12.4	0.000	12.4	NA	NA	4/24/2018
MW 7	Cobalt	10/10/2024	3.8	12.4	0.076	12.4	NA	NA	4/24/2018

Table 7
Summary of Ongoing & Newly Identified SSI
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KEY:	SSI	SSL LCL>GWPS
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Note: The absence of shading indicates that the condition does not exist.

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW 7	Copper	4/21/2016	<4.0	13.9	---	1,300.00	NA	NA	4/24/2018
MW 7	Copper	10/17/2016	<4.0	13.9	---	1,300.00	NA	NA	4/24/2018
MW 7	Copper	4/21/2017	<4.0	13.9	---	1,300.00	NA	NA	4/24/2018
MW 7	Copper	10/16/2017	<4.0	13.9	---	1,300.00	NA	NA	4/24/2018
MW 7	Copper	4/24/2018	10.1	13.9	0.000	1,300.00	NA	NA	4/24/2018
MW 7	Copper	10/25/2018	7.5	13.9	0.616	1,300.00	NA	NA	4/24/2018
MW 7	Copper	4/15/2019	<4.0	13.9	0.616	1,300.00	NA	NA	4/24/2018
MW 7	Copper	10/7/2019	<4.0	13.9	0.616	1,300.00	NA	NA	4/24/2018
MW 7	Copper	4/22/2020	<4.0	13.7	0.140	1,300.00	NA	NA	4/24/2018
MW 7	Copper	10/1/2020	<4.0	13.7	2.000	1,300.00	NA	NA	4/24/2018
MW 7	Copper	4/8/2021	<4.0	13.7	2.000	1,300.00	NA	NA	4/24/2018
MW 7	Copper	10/29/2021	<4.0	13.7	2.000	1,300.00	NA	NA	4/24/2018
MW 7	Copper	4/25/2022	<4.0	13.7	2.000	1,300.00	NA	NA	4/24/2018
MW 7	Copper	10/17/2022	<4.0	13.7	2.000	1,300.00	NA	NA	4/24/2018
MW 7	Copper	4/10/2023	<4.0	13.7	2.000	1,300.00	NA	NA	4/24/2018
MW 7	Copper	10/27/2023	<4.0	13.7	2.000	1,300.00	NA	NA	4/24/2018
MW 7	Copper	4/2/2024	<4.0	13.7	2.000	1,300.00	NA	NA	4/24/2018
MW 7	Copper	10/10/2024	<4.0	13.7	2.000	1,300.00	NA	NA	4/24/2018

Table 7
Summary of Ongoing & Newly Identified SSI
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KEY:	SSI	SSL LCL>GWPS
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Note: The absence of shading indicates that the condition does not exist.

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW 7	1,1-dichloroethane	4/21/2016	<1.0	1.0	0.500	140	4/21/2016	NA	4/24/2018
MW 7	1,1-dichloroethane	10/17/2016	1.7	1.0	0.094	140	4/21/2016	NA	4/24/2018
MW 7	1,1-dichloroethane	4/21/2017	<1.0	1.0	0.094	140	4/21/2016	NA	4/24/2018
MW 7	1,1-dichloroethane	10/16/2017	<1.0	1.0	0.094	140	4/21/2016	NA	4/24/2018
MW 7	1,1-dichloroethane	4/24/2018	<1.0	1.0	0.094	140	4/21/2016	NA	4/24/2018
MW 7	1,1-dichloroethane	10/25/2018	<1.0	1.0	0.500	140	4/21/2016	NA	4/24/2018
MW 7	1,1-dichloroethane	4/15/2019	2.9	1.0	0.000	140	4/21/2016	NA	4/24/2018
MW 7	1,1-dichloroethane	10/7/2019	<1.0	1.0	0.000	140	4/21/2016	NA	4/24/2018
MW 7	1,1-dichloroethane	4/22/2020	1.7	1.0	0.049	140	4/21/2016	NA	4/24/2018
MW 7	1,1-dichloroethane	10/1/2020	<1.0	1.0	0.049	140	4/21/2016	NA	4/24/2018
MW 7	1,1-dichloroethane	4/8/2021	1.2	1.0	0.287	140	4/21/2016	NA	4/24/2018
MW 7	1,1-dichloroethane	10/29/2021	<1.0	1.0	0.287	140	4/21/2016	NA	4/24/2018
MW 7	1,1-dichloroethane	4/25/2022	1.0	1.0	0.381	140	4/21/2016	NA	4/24/2018
MW 7	1,1-dichloroethane	10/17/2022	<1.0	1.0	0.381	140	4/21/2016	NA	4/24/2018
MW 7	1,1-dichloroethane	4/10/2023	<1.0	1.0	0.331	140	4/21/2016	NA	4/24/2018
MW 7	1,1-dichloroethane	10/27/2023	<1.0	1.0	0.331	140	4/21/2016	NA	4/24/2018
MW 7	1,1-dichloroethane	4/2/2024	<1.0	1.0	0.500	140	4/21/2016	NA	4/24/2018
MW 7	1,1-dichloroethane	10/10/2024	<1.0	1.0	0.500	140	4/21/2016	NA	4/24/2018

Table 7
Summary of Ongoing & Newly Identified SSI
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KEY:	SSI	SSL LCL>GWPS
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Note: The absence of shading indicates that the condition does not exist.

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW 7	benzene	4/21/2016	<1.0	1.0	---	5	4/25/2022	NA	4/24/2018
MW 7	benzene	10/17/2016	<1.0	1.0	---	5	4/25/2022	NA	4/24/2018
MW 7	benzene	4/21/2017	<1.0	1.0	---	5	4/25/2022	NA	4/24/2018
MW 7	benzene	10/16/2017	<1.0	1.0	---	5	4/25/2022	NA	4/24/2018
MW 7	benzene	4/24/2018	<1.0	1.0	---	5	4/25/2022	NA	4/24/2018
MW 7	benzene	10/25/2018	<1.0	1.0	---	5	4/25/2022	NA	4/24/2018
MW 7	benzene	4/15/2019	<1.0	1.0	---	5	4/25/2022	NA	4/24/2018
MW 7	benzene	10/7/2019	<1.0	1.0	---	5	4/25/2022	NA	4/24/2018
MW 7	benzene	4/22/2020	<1.0	1.0	---	5	4/25/2022	NA	4/24/2018
MW 7	benzene	10/1/2020	<1.0	1.0	---	5	4/25/2022	NA	4/24/2018
MW 7	benzene	4/8/2021	<1.0	1.0	---	5	4/25/2022	NA	4/24/2018
MW 7	benzene	10/29/2021	<1.0	1.0	---	5	4/25/2022	NA	4/24/2018
MW 7	benzene	4/25/2022	1.4	1.0	0.196	5	4/25/2022	NA	4/24/2018
MW 7	benzene	10/17/2022	<1.0	1.0	0.196	5	4/25/2022	NA	4/24/2018
MW 7	benzene	4/10/2023	<1.0	1.0	0.196	5	4/25/2022	NA	4/24/2018
MW 7	benzene	10/27/2023	<1.0	1.0	0.196	5	4/25/2022	NA	4/24/2018
MW 7	benzene	4/2/2024	<1.0	1.0	0.500	5	4/25/2022	NA	4/24/2018
MW 7	benzene	10/10/2024	<1.0	1.0	0.500	5	4/25/2022	NA	4/24/2018

Table 7
Summary of Ongoing & Newly Identified SSI
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Permit No.42-SDP-01-72P

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW 7	bis(2-ethylhexyl)phthalate	4/21/2016	NT	6.0	---	6	10/17/2022	NA	4/24/2018
MW 7	bis(2-ethylhexyl)phthalate	10/17/2016	NT	6.0	---	6	10/17/2022	NA	4/24/2018
MW 7	bis(2-ethylhexyl)phthalate	4/21/2017	NT	6.0	---	6	10/17/2022	NA	4/24/2018
MW 7	bis(2-ethylhexyl)phthalate	10/16/2017	<6.0	6.0	---	6	10/17/2022	NA	4/24/2018
MW 7	bis(2-ethylhexyl)phthalate	4/24/2018	NT	6.0	---	6	10/17/2022	NA	4/24/2018
MW 7	bis(2-ethylhexyl)phthalate	10/25/2018	NT	6.0	---	6	10/17/2022	NA	4/24/2018
MW 7	bis(2-ethylhexyl)phthalate	4/15/2019	NT	6.0	---	6	10/17/2022	NA	4/24/2018
MW 7	bis(2-ethylhexyl)phthalate	10/7/2019	NT	6.0	---	6	10/17/2022	NA	4/24/2018
MW 7	bis(2-ethylhexyl)phthalate	4/22/2020	NT	6.0	---	6	10/17/2022	NA	4/24/2018
MW 7	bis(2-ethylhexyl)phthalate	10/1/2020	NT	6.0	---	6	10/17/2022	NA	4/24/2018
MW 7	bis(2-ethylhexyl)phthalate	4/8/2021	NT	6.0	---	6	10/17/2022	NA	4/24/2018
MW 7	bis(2-ethylhexyl)phthalate	10/29/2021	NT	6.0	---	6	10/17/2022	NA	4/24/2018
MW 7	bis(2-ethylhexyl)phthalate	4/25/2022	NT	6.0	---	6	10/17/2022	NA	4/24/2018
MW 7	bis(2-ethylhexyl)phthalate	10/17/2022	9.0	6.0	3.647	6	10/17/2022	NA	4/24/2018
MW 7	bis(2-ethylhexyl)phthalate	4/10/2023	NT	6.0	---	6	10/17/2022	NA	4/24/2018
MW 7	bis(2-ethylhexyl)phthalate	10/27/2023	NT	6.0	---	6	10/17/2022	NA	4/24/2018
MW 7	bis(2-ethylhexyl)phthalate	4/2/2024	NT	6.0	---	6	10/17/2022	NA	4/24/2018
MW 7	bis(2-ethylhexyl)phthalate	10/10/2024	NT	6.0	---	6	10/17/2022	NA	4/24/2018

Table 7
Summary of Ongoing & Newly Identified SSI
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KEY:	SSI	SSL LCL>GWPS
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Note: The absence of shading indicates that the condition does not exist.

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW 7	chloroethane	4/21/2016	1.0	1.0	0.000	2,800.00	10/17/2016	NA	4/24/2018
MW 7	chloroethane	10/17/2016	13.5	1.0	0.000	2,800.00	10/17/2016	NA	4/24/2018
MW 7	chloroethane	4/21/2017	3.9	1.0	0.000	2,800.00	10/17/2016	NA	4/24/2018
MW 7	chloroethane	10/16/2017	4.4	1.0	0.000	2,800.00	10/17/2016	NA	4/24/2018
MW 7	chloroethane	4/24/2018	<1.0	1.0	0.000	2,800.00	10/17/2016	NA	4/24/2018
MW 7	chloroethane	10/25/2018	<1.0	1.0	0.000	2,800.00	10/17/2016	NA	4/24/2018
MW 7	chloroethane	4/15/2019	8.0	1.0	0.000	2,800.00	10/17/2016	NA	4/24/2018
MW 7	chloroethane	10/7/2019	<1.0	1.0	0.000	2,800.00	10/17/2016	NA	4/24/2018
MW 7	chloroethane	4/22/2020	5.1	1.0	0.000	2,800.00	10/17/2016	NA	4/24/2018
MW 7	chloroethane	10/1/2020	3.7	1.0	0.660	2,800.00	10/17/2016	NA	4/24/2018
MW 7	chloroethane	4/8/2021	6.8	1.0	0.884	2,800.00	10/17/2016	NA	4/24/2018
MW 7	chloroethane	10/29/2021	<1.0	1.0	0.884	2,800.00	10/17/2016	NA	4/24/2018
MW 7	chloroethane	4/25/2022	6.5	1.0	0.921	2,800.00	10/17/2016	NA	4/24/2018
MW 7	chloroethane	10/17/2022	2.6	1.0	0.490	2,800.00	10/17/2016	NA	4/24/2018
MW 7	chloroethane	4/10/2023	3.8	1.0	0.405	2,800.00	10/17/2016	NA	4/24/2018
MW 7	chloroethane	10/27/2023	1.6	1.0	1.135	2,800.00	10/17/2016	NA	4/24/2018
MW 7	chloroethane	4/2/2024	<1.0	1.0	0.469	2,800.00	10/17/2016	NA	4/24/2018
MW 7	chloroethane	10/10/2024	1.7	1.0	0.279	2,800.00	10/17/2016	NA	4/24/2018

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW 7	Cis-1,2DCE	4/21/2016	<1.0	1.0	0.500	70	NA	NA	4/24/2018
MW 7	Cis-1,2DCE	10/17/2016	1.0	1.0	0.331	70	NA	NA	4/24/2018
MW 7	Cis-1,2DCE	4/21/2017	<1.0	1.0	0.331	70	NA	NA	4/24/2018
MW 7	Cis-1,2DCE	10/16/2017	<1.0	1.0	0.331	70	NA	NA	4/24/2018
MW 7	Cis-1,2DCE	4/24/2018	<1.0	1.0	0.331	70	NA	NA	4/24/2018
MW 7	Cis-1,2DCE	10/25/2018	<1.0	1.0	0.500	70	NA	NA	4/24/2018
MW 7	Cis-1,2DCE	4/15/2019	<1.0	1.0	0.500	70	NA	NA	4/24/2018
MW 7	Cis-1,2DCE	10/7/2019	<1.0	1.0	0.500	70	NA	NA	4/24/2018
MW 7	Cis-1,2DCE	4/22/2020	<1.0	1.0	0.500	70	NA	NA	4/24/2018
MW 7	Cis-1,2DCE	10/1/2020	<1.0	1.0	0.500	70	NA	NA	4/24/2018
MW 7	Cis-1,2DCE	4/8/2021	<1.0	1.0	0.500	70	NA	NA	4/24/2018
MW 7	Cis-1,2DCE	10/29/2021	<1.0	1.0	0.500	70	NA	NA	4/24/2018
MW 7	Cis-1,2DCE	4/25/2022	<1.0	1.0	0.500	70	NA	NA	4/24/2018
MW 7	Cis-1,2DCE	10/17/2022	<1.0	1.0	0.500	70	NA	NA	4/24/2018
MW 7	Cis-1,2DCE	4/10/2023	<1.0	1.0	0.500	70	NA	NA	4/24/2018
MW 7	Cis-1,2DCE	10/27/2023	<1.0	1.0	0.500	70	NA	NA	4/24/2018
MW 7	Cis-1,2DCE	4/2/2024	<1.0	1.0	0.500	70	NA	NA	4/24/2018
MW 7	Cis-1,2DCE	10/10/2024	<1.0	1.0	0.500	70	NA	NA	4/24/2018

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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 7	Vinyl Chloride	4/21/2016	<1.0	1.0	0.500	2	10/17/2016	NA	4/24/2018
MW 7	Vinyl Chloride	10/17/2016	1.9	1.0	0.027	2	10/17/2016	NA	4/24/2018
MW 7	Vinyl Chloride	4/21/2017	<1.0	1.0	0.027	2	10/17/2016	NA	4/24/2018
MW 7	Vinyl Chloride	10/16/2017	<1.0	1.0	0.027	2	10/17/2016	NA	4/24/2018
MW 7	Vinyl Chloride	4/24/2018	<1.0	1.0	0.027	2	10/17/2016	NA	4/24/2018
MW 7	Vinyl Chloride	10/25/2018	<1.0	1.0	0.500	2	10/17/2016	NA	4/24/2018
MW 7	Vinyl Chloride	4/15/2019	<1.0	1.0	0.500	2	10/17/2016	NA	4/24/2018
MW 7	Vinyl Chloride	10/7/2019	<1.0	1.0	0.500	2	10/17/2016	NA	4/24/2018
MW 7	Vinyl Chloride	4/22/2020	<1.0	1.0	0.500	2	10/17/2016	NA	4/24/2018
MW 7	Vinyl Chloride	10/1/2020	<1.0	1.0	0.500	2	10/17/2016	NA	4/24/2018
MW 7	Vinyl Chloride	4/8/2021	<1.0	1.0	0.500	2	10/17/2016	NA	4/24/2018
MW 7	Vinyl Chloride	10/29/2021	<1.0	1.0	0.500	2	10/17/2016	NA	4/24/2018
MW 7	Vinyl Chloride	4/25/2022	<1.0	1.0	0.500	2	10/17/2016	NA	4/24/2018
MW 7	Vinyl Chloride	10/17/2022	<1.0	1.0	0.500	2	10/17/2016	NA	4/24/2018
MW 7	Vinyl Chloride	4/10/2023	<1.0	1.0	0.500	2	10/17/2016	NA	4/24/2018
MW 7	Vinyl Chloride	10/27/2023	<1.0	1.0	0.500	2	10/17/2016	NA	4/24/2018
MW 7	Vinyl Chloride	4/2/2024	<1.0	1.0	0.500	2	10/17/2016	NA	4/24/2018
MW 7	Vinyl Chloride	10/10/2024	<1.0	1.0	0.500	2	10/17/2016	NA	4/24/2018

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.

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Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI	Resamples Due	5th Background Sample
							Initial Exceedance		
MW 9	Arsenic	4/21/2016	<4.0	89.3	---	89.3	4/22/2020	NA	4/24/2018
MW 9	Arsenic	10/17/2016	12.3	89.3	---	89.3	4/22/2020	NA	4/24/2018
MW 9	Arsenic	4/21/2017	<4.0	89.3	---	89.3	4/22/2020	NA	4/24/2018
MW 9	Arsenic	10/16/2017	<4.0	89.3	0.115	89.3	4/22/2020	NA	4/24/2018
MW 9	Arsenic	4/24/2018	<4.0	89.3	0.115	89.3	4/22/2020	NA	4/24/2018
MW 9	Arsenic	10/25/2018	<4.0	89.3	2.000	89.3	4/22/2020	NA	4/24/2018
MW 9	Arsenic	4/15/2019	6.1	89.3	1.250	89.3	4/22/2020	NA	4/24/2018
MW 9	Arsenic	10/7/2019	6.6	89.3	1.993	89.3	4/22/2020	NA	4/24/2018
MW 9	Arsenic	4/22/2020	39.8	89.3	0.000	89.3	4/22/2020	NA	4/24/2018
MW 9	Arsenic	10/1/2020	19	89.3	4.203	89.3	4/22/2020	NA	4/24/2018
MW 9	Arsenic	4/8/2021	13.8	89.3	7.442	89.3	4/22/2020	NA	4/24/2018
MW 9	Arsenic	10/29/2021	5.2	89.3	6.709	89.3	4/22/2020	NA	4/24/2018
MW 9	Arsenic	4/25/2022	<4.0	89.3	3.246	89.3	4/22/2020	NA	4/24/2018
MW 9	Arsenic	10/17/2022	45.3	89.3	0.000	89.3	4/22/2020	NA	4/24/2018
MW 9	Arsenic	4/10/2023	82.4	89.3	0.000	89.3	4/22/2020	NA	4/24/2018
MW 9	Arsenic	10/27/2023	106.0	89.3	5.479	89.3	4/22/2020	NA	4/24/2018
MW 9	Arsenic	4/2/2024	<4.0	89.3	5.479	89.3	4/22/2020	NA	4/24/2018
MW 9	Arsenic	10/10/2024	14.3	89.3	0.000	89.3	4/22/2020	NA	4/24/2018

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI	Resamples Due	5th Background Sample
							Initial Exceedance		
MW 9	Cobalt	4/21/2016	<0.8	34.1	---	34.1	4/22/2020	NA	4/24/2018
MW 9	Cobalt	10/17/2016	12	34.1	---	34.1	4/22/2020	NA	4/24/2018
MW 9	Cobalt	4/21/2017	<0.8	34.1	---	34.1	4/22/2020	NA	4/24/2018
MW 9	Cobalt	10/16/2017	7.8	12.4	---	12.4	4/22/2020	NA	4/24/2018
MW 9	Cobalt	4/24/2018	2.4	12.4	---	12.4	4/22/2020	NA	4/24/2018
MW 9	Cobalt	10/25/2018	<0.8	12.4	---	12.4	4/22/2020	NA	4/24/2018
MW 9	Cobalt	4/15/2019	11.3	12.4	---	12.4	4/22/2020	NA	4/24/2018
MW 9	Cobalt	10/7/2019	10.4	12.4	---	12.4	4/22/2020	NA	4/24/2018
MW 9	Cobalt	4/22/2020	16.9	12.4	1.675	12.4	4/22/2020	NA	4/24/2018
MW 9	Cobalt	10/1/2020	10.2	7.8	8.472	12.4	4/22/2020	NA	4/24/2018
MW 9	Cobalt	4/8/2021	8.6	7.8	7.205	12.4	4/22/2020	NA	4/24/2018
MW 9	Cobalt	10/29/2021	7.1	7.8	5.615	12.4	4/22/2020	NA	4/24/2018
MW 9	Cobalt	4/25/2022	0.6	7.8	1.671	12.4	4/22/2020	NA	4/24/2018
MW 9	Cobalt	10/17/2022	9.5	12.4	1.717	12.4	4/22/2020	NA	4/24/2018
MW 9	Cobalt	4/10/2023	9.1	12.4	1.729	12.4	4/22/2020	NA	4/24/2018
MW 9	Cobalt	10/27/2023	9.6	12.4	2.018	12.4	4/22/2020	NA	4/24/2018
MW 9	Cobalt	4/2/2024	<0.4	12.4	1.851	12.4	4/22/2020	NA	4/24/2018
MW 9	Cobalt	10/10/2024	6.6	12.4	1.454	12.4	4/22/2020	NA	4/24/2018

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Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI	Resamples Due	5th Background Sample
							Initial Exceedance		
MW 9	Nickel	4/21/2016	4.3	31.6	---	100	10/1/2020	NA	4/24/2018
MW 9	Nickel	10/17/2016	16.1	31.6	---	100	10/1/2020	NA	4/24/2018
MW 9	Nickel	4/21/2017	7.7	31.6	---	100	10/1/2020	NA	4/24/2018
MW 9	Nickel	10/16/2017	12.3	31.6	---	100	10/1/2020	NA	4/24/2018
MW 9	Nickel	4/24/2018	11.3	31.6	---	100	10/1/2020	NA	4/24/2018
MW 9	Nickel	10/25/2018	5.9	31.6	---	100	10/1/2020	NA	4/24/2018
MW 9	Nickel	4/15/2019	12.6	31.6	---	100	10/1/2020	NA	4/24/2018
MW 9	Nickel	10/7/2019	22.6	31.6	---	100	10/1/2020	NA	4/24/2018
MW 9	Nickel	4/22/2020	20.4	31.6	6.393	100	10/1/2020	NA	4/24/2018
MW 9	Nickel	10/1/2020	22.3	20.5	13.963	100	10/1/2020	NA	4/24/2018
MW 9	Nickel	4/8/2021	18.6	20.5	18.788	100	10/1/2020	NA	4/24/2018
MW 9	Nickel	10/29/2021	15.1	20.5	15.495	100	10/1/2020	NA	4/24/2018
MW 9	Nickel	4/25/2022	6.2	22.1	7.443	100	10/1/2020	NA	4/24/2018
MW 9	Nickel	10/17/2022	16.1	22.1	7.643	100	10/1/2020	NA	4/24/2018
MW 9	Nickel	4/10/2023	15.3	22.1	7.682	100	10/1/2020	NA	4/24/2018
MW 9	Nickel	10/27/2023	19.6	31.6	7.579	100	10/1/2020	NA	4/24/2018
MW 9	Nickel	4/2/2024	19.7	31.6	14.965	100	10/1/2020	NA	4/24/2018
MW 9	Nickel	10/10/2024	16.1	31.6	14.965	100	10/1/2020	NA	4/24/2018

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Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI		Resamples Due	5th Background Sample
							Initial Exceedance			
MW 9	1,1-dichloroethane	4/21/2016	<1.0	1.0	0.500	140	10/16/2017		NA	4/24/2018
MW 9	1,1-dichloroethane	10/17/2016	<1.0	1.0	0.500	140	10/16/2017		NA	4/24/2018
MW 9	1,1-dichloroethane	4/21/2017	<1.0	1.0	0.500	140	10/16/2017		NA	4/24/2018
MW 9	1,1-dichloroethane	10/16/2017	1.2	1.0	0.263	140	10/16/2017		NA	4/24/2018
MW 9	1,1-dichloroethane	4/24/2018	<1.0	1.0	0.263	140	10/16/2017		NA	4/24/2018
MW 9	1,1-dichloroethane	10/25/2018	<1.0	1.0	0.263	140	10/16/2017		NA	4/24/2018
MW 9	1,1-dichloroethane	4/15/2019	<1.0	1.0	0.263	140	10/16/2017		NA	4/24/2018
MW 9	1,1-dichloroethane	10/7/2019	<1.0	1.0	0.500	140	10/16/2017		NA	4/24/2018
MW 9	1,1-dichloroethane	4/22/2020	<1.0	1.0	0.500	140	10/16/2017		NA	4/24/2018
MW 9	1,1-dichloroethane	10/1/2020	<1.0	1.0	0.500	140	10/16/2017		NA	4/24/2018
MW 9	1,1-dichloroethane	4/8/2021	<1.0	1.0	0.500	140	10/16/2017		NA	4/24/2018
MW 9	1,1-dichloroethane	10/29/2021	<1.0	1.0	0.500	140	10/16/2017		NA	4/24/2018
MW 9	1,1-dichloroethane	4/25/2022	<1.0	1.0	0.500	140	10/16/2017		NA	4/24/2018
MW 9	1,1-dichloroethane	10/17/2022	<1.0	1.0	0.500	140	10/16/2017		NA	4/24/2018
MW 9	1,1-dichloroethane	4/10/2023	<1.0	1.0	0.500	140	10/16/2017		NA	4/24/2018
MW 9	1,1-dichloroethane	10/27/2023	1.2	1.0	0.263	140	10/16/2017		NA	4/24/2018
MW 9	1,1-dichloroethane	4/2/2024	<1.0	1.0	0.263	140	10/16/2017		NA	4/24/2018
MW 9	1,1-dichloroethane	10/10/2024	<1.0	1.0	0.263	140	10/16/2017		NA	4/24/2018

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Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI	Resamples Due	5th Background Sample
							Initial Exceedance		
MW 9	benzene	4/21/2016	<1.0	1.0	0.500	5	4/25/2022	NA	4/24/2018
MW 9	benzene	10/17/2016	<1.0	1.0	0.500	5	4/25/2022	NA	4/24/2018
MW 9	benzene	4/21/2017	<1.0	1.0	0.500	5	4/25/2022	NA	4/24/2018
MW 9	benzene	10/16/2017	<1.0	1.0	0.500	5	4/25/2022	NA	4/24/2018
MW 9	benzene	4/24/2018	<1.0	1.0	0.500	5	4/25/2022	NA	4/24/2018
MW 9	benzene	10/25/2018	<1.0	1.0	0.500	5	4/25/2022	NA	4/24/2018
MW 9	benzene	4/15/2019	<1.0	1.0	0.500	5	4/25/2022	NA	4/24/2018
MW 9	benzene	10/7/2019	<1.0	1.0	0.500	5	4/25/2022	NA	4/24/2018
MW 9	benzene	4/22/2020	<1.0	1.0	0.500	5	4/25/2022	NA	4/24/2018
MW 9	benzene	10/1/2020	<1.0	1.0	0.500	5	4/25/2022	NA	4/24/2018
MW 9	benzene	4/8/2021	<1.0	1.0	0.500	5	4/25/2022	NA	4/24/2018
MW 9	benzene	10/29/2021	<1.0	1.0	0.500	5	4/25/2022	NA	4/24/2018
MW 9	benzene	4/25/2022	<1.0	1.0	0.500	5	4/25/2022	NA	4/24/2018
MW 9	benzene	10/17/2022	1.0	1.0	0.331	5	4/25/2022	NA	4/24/2018
MW 9	benzene	4/10/2023	<1.0	1.0	0.331	5	4/25/2022	NA	4/24/2018
MW 9	benzene	10/27/2023	<1.0	1.0	0.331	5	4/25/2022	NA	4/24/2018
MW 9	benzene	4/2/2024	<1.0	1.0	0.331	5	4/25/2022	NA	4/24/2018
MW 9	benzene	10/10/2024	<1.0	1.0	0.500	5	4/25/2022	NA	4/24/2018

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Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI	Resamples Due	5th Background Sample
							Initial Exceedance		
MW 9	chloroethane	4/21/2016	<1.0	1.0	0.500	2,800.00	10/16/2017	NA	4/24/2018
MW 9	chloroethane	10/17/2016	1.0	1.0	0.331	2,800.00	10/16/2017	NA	4/24/2018
MW 9	chloroethane	4/21/2017	<1.0	1.0	0.331	2,800.00	10/16/2017	NA	4/24/2018
MW 9	chloroethane	10/16/2017	2.0	1.0	0.168	2,800.00	10/16/2017	NA	4/24/2018
MW 9	chloroethane	4/24/2018	<1.0	1.0	0.168	2,800.00	10/16/2017	NA	4/24/2018
MW 9	chloroethane	10/25/2018	<1.0	1.0	0.000	2,800.00	10/16/2017	NA	4/24/2018
MW 9	chloroethane	4/15/2019	<1.0	1.0	0.000	2,800.00	10/16/2017	NA	4/24/2018
MW 9	chloroethane	10/7/2019	2.0	1.0	0.000	2,800.00	10/16/2017	NA	4/24/2018
MW 9	chloroethane	4/22/2020	<1.0	1.0	0.000	2,800.00	10/16/2017	NA	4/24/2018
MW 9	chloroethane	10/1/2020	1.2	1.0	0.210	2,800.00	10/16/2017	NA	4/24/2018
MW 9	chloroethane	4/8/2021	<1.0	1.0	0.210	2,800.00	10/16/2017	NA	4/24/2018
MW 9	chloroethane	10/29/2021	<1.0	1.0	0.263	2,800.00	10/16/2017	NA	4/24/2018
MW 9	chloroethane	4/25/2022	<1.0	1.0	0.263	2,800.00	10/16/2017	NA	4/24/2018
MW 9	chloroethane	10/17/2022	<1.0	1.0	0.500	2,800.00	10/16/2017	NA	4/24/2018
MW 9	chloroethane	4/10/2023	<1.0	1.0	0.500	2,800.00	10/16/2017	NA	4/24/2018
MW 9	chloroethane	10/27/2023	<1.0	1.0	0.500	2,800.00	10/16/2017	NA	4/24/2018
MW 9	chloroethane	4/2/2024	<1.0	1.0	0.500	2,800.00	10/16/2017	NA	4/24/2018
MW 9	chloroethane	10/10/2024	<1.0	1.0	0.500	2,800.00	10/16/2017	NA	4/24/2018

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI	Resamples Due	5th Background Sample
							Initial Exceedance		
MW 13R	Arsenic	4/21/2016	299	89.3	10.575	89.3	4/21/2016	NA	4/24/2018
MW 13R	Arsenic	10/17/2016	143	89.3	31.337	89.3	4/21/2016	NA	4/24/2018
MW 13R	Arsenic	4/21/2017	156	89.3	50.209	89.3	4/21/2016	NA	4/24/2018
MW 13R	Arsenic	10/16/2017	179	89.3	110.261	89.3	4/21/2016	NA	4/24/2018
MW 13R	Arsenic	4/24/2018	105	89.3	109.312	89.3	4/21/2016	NA	4/24/2018
MW 13R	Arsenic	10/25/2018	75.3	89.3	73.283	89.3	4/21/2016	NA	4/24/2018
MW 13R	Arsenic	4/15/2019	145	89.3	72.680	89.3	4/21/2016	NA	4/24/2018
MW 13R	Arsenic	10/7/2019	72.2	89.3	59.593	89.3	4/21/2016	NA	4/24/2018
MW 13R	Arsenic	4/22/2020	506	89.3	0.000	89.3	4/21/2016	NA	4/24/2018
MW 13R	Arsenic	10/1/2020	140	89.3	0.000	89.3	4/21/2016	NA	4/24/2018
MW 13R	Arsenic	4/8/2021	118	89.3	0.000	89.3	4/21/2016	NA	4/24/2018
MW 13R	Arsenic	10/29/2021	161	89.3	14.806	89.3	4/21/2016	NA	4/24/2018
MW 13R	Arsenic	4/25/2022	252	89.3	98.529	89.3	4/21/2016	NA	4/24/2018
MW 13R	Arsenic	10/17/2022	124	89.3	91.020	89.3	4/21/2016	NA	4/24/2018
MW 13R	Arsenic	4/10/2023	193	89.3	118.701	89.3	4/21/2016	NA	4/24/2018
MW 13R	Arsenic	10/27/2023	82.7	89.3	74.926	89.3	4/21/2016	NA	4/24/2018
MW 13R	Arsenic	4/2/2024	88.7	89.3	62.513	89.3	4/21/2016	NA	4/24/2018
MW 13R	Arsenic	10/10/2024	192	89.3	66.510	89.3	4/21/2016	NA	4/24/2018

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Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI	Resamples Due	5th Background Sample
							Initial Exceedance		
MW 13R	Barium	4/21/2016	1230	571.7	808.143	2,000.00	4/21/2016	NA	4/24/2018
MW 13R	Barium	10/17/2016	1020	571.7	790.802	2,000.00	4/21/2016	NA	4/24/2018
MW 13R	Barium	4/21/2017	1010	571.7	771.321	2,000.00	4/21/2016	NA	4/24/2018
MW 13R	Barium	10/16/2017	1030	571.7	948.617	2,000.00	4/21/2016	NA	4/24/2018
MW 13R	Barium	4/24/2018	1000	571.7	999.814	2,000.00	4/21/2016	NA	4/24/2018
MW 13R	Barium	10/25/2018	597	571.7	663.947	2,000.00	4/21/2016	NA	4/24/2018
MW 13R	Barium	4/15/2019	1030	1019.2	664.909	2,000.00	4/21/2016	NA	4/24/2018
MW 13R	Barium	10/7/2019	888	608.7	646.405	2,000.00	4/21/2016	NA	4/24/2018
MW 13R	Barium	4/22/2020	1720	602.3	498.541	2,000.00	4/21/2016	NA	4/24/2018
MW 13R	Barium	10/1/2020	679	595.6	548.935	2,000.00	4/21/2016	NA	4/24/2018
MW 13R	Barium	4/8/2021	871	636.93	494.338	2,000.00	4/21/2016	NA	4/24/2018
MW 13R	Barium	10/29/2021	801	1880.00	459.200	2,000.00	4/21/2016	NA	4/24/2018
MW 13R	Barium	4/25/2022	942	1880.00	691.413	2,000.00	4/21/2016	NA	4/24/2018
MW 13R	Barium	10/17/2022	761	1880.00	749.536	2,000.00	4/21/2016	NA	4/24/2018
MW 13R	Barium	4/10/2023	821	1880.00	739.578	2,000.00	4/21/2016	NA	4/24/2018
MW 13R	Barium	10/27/2023	839	1880.00	752.190	2,000.00	4/21/2016	NA	4/24/2018
MW 13R	Barium	4/2/2024	837	1880.00	771.489	2,000.00	4/21/2016	NA	4/24/2018
MW 13R	Barium	10/10/2024	575	1880.00	656.353	2,000.00	4/21/2016	NA	4/24/2018

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Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI	Resamples Due	5th Background Sample
							Initial Exceedance		
MW 13R	Cobalt	4/21/2016	20	34.1	8.131	34.1	10/16/2017	NA	4/24/2018
MW 13R	Cobalt	10/17/2016	16.3	34.1	8.519	34.1	10/16/2017	NA	4/24/2018
MW 13R	Cobalt	4/21/2017	15.6	34.1	8.175	34.1	10/16/2017	NA	4/24/2018
MW 13R	Cobalt	10/16/2017	14.7	12.4	13.912	12.4	10/16/2017	NA	4/24/2018
MW 13R	Cobalt	4/24/2018	14.9	12.4	14.519	12.4	10/16/2017	NA	4/24/2018
MW 13R	Cobalt	10/25/2018	5.6	12.4	7.114	12.4	10/16/2017	NA	4/24/2018
MW 13R	Cobalt	4/15/2019	13.5	12.4	6.968	12.4	10/16/2017	NA	4/24/2018
MW 13R	Cobalt	10/7/2019	10.4	12.4	6.253	12.4	10/16/2017	NA	4/24/2018
MW 13R	Cobalt	4/22/2020	18.7	12.4	5.584	12.4	10/16/2017	NA	4/24/2018
MW 13R	Cobalt	10/1/2020	8.5	7.8	7.534	12.4	10/16/2017	NA	4/24/2018
MW 13R	Cobalt	4/8/2021	9.3	7.8	6.179	12.4	10/16/2017	NA	4/24/2018
MW 13R	Cobalt	10/29/2021	6.9	7.8	4.583	12.4	10/16/2017	NA	4/24/2018
MW 13R	Cobalt	4/25/2022	8.5	12.4	7.116	12.4	10/16/2017	NA	4/24/2018
MW 13R	Cobalt	10/17/2022	8.8	12.4	7.155	12.4	10/16/2017	NA	4/24/2018
MW 13R	Cobalt	4/10/2023	4.3	12.4	4.702	12.4	10/16/2017	NA	4/24/2018
MW 13R	Cobalt	10/27/2023	9.0	12.4	5.012	12.4	10/16/2017	NA	4/24/2018
MW 13R	Cobalt	4/2/2024	4.6	12.4	3.684	12.4	10/16/2017	NA	4/24/2018
MW 13R	Cobalt	10/10/2024	3.6	12.4	2.490	12.4	10/16/2017	NA	4/24/2018

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Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI	Resamples Due	5th Background Sample
							Initial Exceedance		
MW 13R	Nickel	4/21/2016	50.1	31.6	18.067	100	4/21/2016	NA	4/24/2018
MW 13R	Nickel	10/17/2016	49.3	31.6	21.642	100	4/21/2016	NA	4/24/2018
MW 13R	Nickel	4/21/2017	40	31.6	20.625	100	4/21/2016	NA	4/24/2018
MW 13R	Nickel	10/16/2017	29.3	31.6	30.729	100	4/21/2016	NA	4/24/2018
MW 13R	Nickel	4/24/2018	31.9	31.6	27.016	100	4/21/2016	NA	4/24/2018
MW 13R	Nickel	10/25/2018	14.7	31.6	16.564	100	4/21/2016	NA	4/24/2018
MW 13R	Nickel	4/15/2019	28.4	31.6	16.986	100	4/21/2016	NA	4/24/2018
MW 13R	Nickel	10/7/2019	24.0	31.6	16.000	100	4/21/2016	NA	4/24/2018
MW 13R	Nickel	4/22/2020	40.4	31.6	14.320	100	4/21/2016	NA	4/24/2018
MW 13R	Nickel	10/1/2020	22.2	20.5	19.114	100	4/21/2016	NA	4/24/2018
MW 13R	Nickel	4/8/2021	16.6	20.5	13.776	100	4/21/2016	NA	4/24/2018
MW 13R	Nickel	10/29/2021	13.6	20.5	9.075	100	4/21/2016	NA	4/24/2018
MW 13R	Nickel	4/25/2022	13.4	22.1	11.623	100	4/21/2016	NA	4/24/2018
MW 13R	Nickel	10/17/2022	17.0	22.1	12.899	100	4/21/2016	NA	4/24/2018
MW 13R	Nickel	4/10/2023	10.6	22.1	10.568	100	4/21/2016	NA	4/24/2018
MW 13R	Nickel	10/27/2023	20.1	31.6	10.395	100	4/21/2016	NA	4/24/2018
MW 13R	Nickel	4/2/2024	9.8	31.6	8.500	100	4/21/2016	NA	4/24/2018
MW 13R	Nickel	10/10/2024	9.5	31.6	6.515	100	4/21/2016	NA	4/24/2018

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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 13R	1,4-DCB	4/21/2016	1.1	1.0	0.393	75	4/21/2016	NA	4/24/2018
MW 13R	1,4-DCB	10/17/2016	1.3	1.0	0.593	75	4/21/2016	NA	4/24/2018
MW 13R	1,4-DCB	4/21/2017	1.2	1.0	1.062	75	4/21/2016	NA	4/24/2018
MW 13R	1,4-DCB	10/16/2017	1.2	1.0	1.104	75	4/21/2016	NA	4/24/2018
MW 13R	1,4-DCB	4/24/2018	1.1	1.0	1.104	75	4/21/2016	NA	4/24/2018
MW 13R	1,4-DCB	10/25/2018	2	1.0	0.882	75	4/21/2016	NA	4/24/2018
MW 13R	1,4-DCB	4/15/2019	1.2	1.0	0.882	75	4/21/2016	NA	4/24/2018
MW 13R	1,4-DCB	10/7/2019	<1.0	1.0	0.475	75	4/21/2016	NA	4/24/2018
MW 13R	1,4-DCB	4/22/2020	1.1	1.0	0.475	75	4/21/2016	NA	4/24/2018
MW 13R	1,4-DCB	10/1/2020	1.3	1.0	0.602	75	4/21/2016	NA	4/24/2018
MW 13R	1,4-DCB	4/8/2021	1	1.0	0.575	75	4/21/2016	NA	4/24/2018
MW 13R	1,4-DCB	10/29/2021	1.4	1.0	0.985	75	4/21/2016	NA	4/24/2018
MW 13R	1,4-DCB	4/25/2022	1.2	1.0	1.024	75	4/21/2016	NA	4/24/2018
MW 13R	1,4-DCB	10/17/2022	1.4	1.0	1.025	75	4/21/2016	NA	4/24/2018
MW 13R	1,4-DCB	4/10/2023	1.6	1.0	1.208	75	4/21/2016	NA	4/24/2018
MW 13R	1,4-DCB	10/27/2023	1.0	1.0	0.996	75	4/21/2016	NA	4/24/2018
MW 13R	1,4-DCB	4/2/2024	1.1	1.0	0.951	75	4/21/2016	NA	4/24/2018
MW 13R	1,4-DCB	10/10/2024	1.8	1.0	0.921	75	4/21/2016	NA	4/24/2018

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Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI	Resamples Due	5th Background Sample
							Initial Exceedance		
MW 13R	Benzene	4/21/2016	7.1	1.0	3.147	5	4/21/2016	NA	4/24/2018
MW 13R	Benzene	10/17/2016	7.4	1.0	6.350	5	4/21/2016	NA	4/24/2018
MW 13R	Benzene	4/21/2017	6	1.0	6.185	5	4/21/2016	NA	4/24/2018
MW 13R	Benzene	10/16/2017	5	1.0	5.085	5	4/21/2016	NA	4/24/2018
MW 13R	Benzene	4/24/2018	5	1.0	4.514	5	4/21/2016	NA	4/24/2018
MW 13R	Benzene	10/25/2018	5	1.0	4.662	5	4/21/2016	NA	4/24/2018
MW 13R	Benzene	4/15/2019	4.9	1.0	4.916	5	4/21/2016	NA	4/24/2018
MW 13R	Benzene	10/7/2019	2.5	1.0	2.898	5	4/21/2016	NA	4/24/2018
MW 13R	Benzene	4/22/2020	4.6	1.0	2.863	5	4/21/2016	NA	4/24/2018
MW 13R	Benzene	10/1/2020	4.2	1.0	2.789	5	4/21/2016	NA	4/24/2018
MW 13R	Benzene	4/8/2021	3.6	1.0	2.650	5	4/21/2016	NA	4/24/2018
MW 13R	Benzene	10/29/2021	4.0	1.0	3.610	5	4/21/2016	NA	4/24/2018
MW 13R	Benzene	4/25/2022	4.9	1.0	3.535	5	4/21/2016	NA	4/24/2018
MW 13R	Benzene	10/17/2022	2.6	1.0	2.653	5	4/21/2016	NA	4/24/2018
MW 13R	Benzene	4/10/2023	5.1	1.0	2.811	5	4/21/2016	NA	4/24/2018
MW 13R	Benzene	10/27/2023	1.1	1.0	1.166	5	4/21/2016	NA	4/24/2018
MW 13R	Benzene	4/2/2024	2.1	1.0	0.723	5	4/21/2016	NA	4/24/2018
MW 13R	Benzene	10/10/2024	2.8	1.0	0.776	5	4/21/2016	NA	4/24/2018

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Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI		5th Background Sample
							Initial Exceedance	Resamples Due	
MW 13R	Bis(2-ethylhexyl)phthalate	4/21/2016	<10.0	6.0	5.000	6	10/16/2017	NA	4/24/2018
MW 13R	Bis(2-ethylhexyl)phthalate	10/17/2016	<10.0	6.0	5.000	6	10/16/2017	NA	4/24/2018
MW 13R	Bis(2-ethylhexyl)phthalate	4/21/2017	<10.0	6.0	5.000	6	10/16/2017	NA	4/24/2018
MW 13R	Bis(2-ethylhexyl)phthalate	10/16/2017	16	6.0	1.280	6	10/16/2017	NA	4/24/2018
MW 13R	Bis(2-ethylhexyl)phthalate	4/24/2018	<6.0	6.0	1.280	6	10/16/2017	NA	4/24/2018
MW 13R	Bis(2-ethylhexyl)phthalate	10/25/2018	<6.0	6.0	1.280	6	10/16/2017	NA	4/24/2018
MW 13R	Bis(2-ethylhexyl)phthalate	4/15/2019	---	6.0	1.280	6	10/16/2017	NA	4/24/2018
MW 13R	Bis(2-ethylhexyl)phthalate	10/7/2019	---	6.0	1.280	6	10/16/2017	NA	4/24/2018
MW 13R	Bis(2-ethylhexyl)phthalate	4/22/2020	---	6.0	1.280	6	10/16/2017	NA	4/24/2018
MW 13R	Bis(2-ethylhexyl)phthalate	10/1/2020	---	6.0	1.280	6	10/16/2017	NA	4/24/2018
MW 13R	Bis(2-ethylhexyl)phthalate	4/8/2021	---	6.0	1.280	6	10/16/2017	NA	4/24/2018
MW 13R	Bis(2-ethylhexyl)phthalate	10/29/2021	---	6.0	1.280	6	10/16/2017	NA	4/24/2018
MW 13R	Bis(2-ethylhexyl)phthalate	4/25/2022	---	6.0	1.280	6	10/16/2017	NA	4/24/2018
MW 13R	Bis(2-ethylhexyl)phthalate	10/17/2022	7.0	6.0	2.072	6	10/16/2017	NA	4/24/2018
MW 13R	Bis(2-ethylhexyl)phthalate	4/10/2023	---	6.0	2.072	6	10/16/2017	NA	4/24/2018
MW 13R	Bis(2-ethylhexyl)phthalate	10/27/2023	---	6.0	2.072	6	10/16/2017	NA	4/24/2018
MW 13R	Bis(2-ethylhexyl)phthalate	4/2/2024	---	6.0	2.072	6	10/16/2017	NA	4/24/2018
MW 13R	Bis(2-ethylhexyl)phthalate	10/10/2024	---	6.0	2.072	6	10/16/2017	NA	4/24/2018

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Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI	Resamples Due	5th Background Sample
							Initial Exceedance		
MW 13R	chlorobenzene	4/21/2016	23.2	1.0	15.420	100	4/21/2016	NA	4/24/2018
MW 13R	chlorobenzene	10/17/2016	29.9	1.0	22.832	100	4/21/2016	NA	4/24/2018
MW 13R	chlorobenzene	4/21/2017	26.4	1.0	23.532	100	4/21/2016	NA	4/24/2018
MW 13R	chlorobenzene	10/16/2017	27.9	1.0	23.528	100	4/21/2016	NA	4/24/2018
MW 13R	chlorobenzene	4/24/2018	30.4	1.0	26.476	100	4/21/2016	NA	4/24/2018
MW 13R	chlorobenzene	10/25/2018	27.8	1.0	26.168	100	4/21/2016	NA	4/24/2018
MW 13R	chlorobenzene	4/15/2019	29.1	1.0	27.366	100	4/21/2016	NA	4/24/2018
MW 13R	chlorobenzene	10/7/2019	29.7	1.0	27.953	100	4/21/2016	NA	4/24/2018
MW 13R	chlorobenzene	4/22/2020	27.7	1.0	27.417	100	4/21/2016	NA	4/24/2018
MW 13R	chlorobenzene	10/1/2020	35.0	1.0	26.617	100	4/21/2016	NA	4/24/2018
MW 13R	chlorobenzene	4/8/2021	34.1	1.0	27.515	100	4/21/2016	NA	4/24/2018
MW 13R	chlorobenzene	10/29/2021	37.5	1.0	28.655	100	4/21/2016	NA	4/24/2018
MW 13R	chlorobenzene	4/25/2022	37.2	1.0	33.983	100	4/21/2016	NA	4/24/2018
MW 13R	chlorobenzene	10/17/2022	38.1	1.0	34.627	100	4/21/2016	NA	4/24/2018
MW 13R	chlorobenzene	4/10/2023	43.9	1.0	35.489	100	4/21/2016	NA	4/24/2018
MW 13R	chlorobenzene	10/27/2023	26.8	1.0	28.130	100	4/21/2016	NA	4/24/2018
MW 13R	chlorobenzene	4/2/2024	36.7	1.0	28.019	100	4/21/2016	NA	4/24/2018
MW 13R	chlorobenzene	10/10/2024	43.4	1.0	28.321	100	4/21/2016	NA	4/24/2018

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI		
							Initial Exceedance	Resamples Due	5th Background Sample
MW 13R	Cis-1,2DCE	4/21/2016	<1.0	1.0	0.575	70	10/17/2016	NA	4/24/2018
MW 13R	Cis-1,2DCE	10/17/2016	1.1	1.0	0.575	70	10/17/2016	NA	4/24/2018
MW 13R	Cis-1,2DCE	4/21/2017	<1.0	1.0	0.365	70	10/17/2016	NA	4/24/2018
MW 13R	Cis-1,2DCE	10/16/2017	1.1	1.0	0.393	70	10/17/2016	NA	4/24/2018
MW 13R	Cis-1,2DCE	4/24/2018	<1.0	1.0	0.393	70	10/17/2016	NA	4/24/2018
MW 13R	Cis-1,2DCE	10/25/2018	<1.0	1.0	0.297	70	10/17/2016	NA	4/24/2018
MW 13R	Cis-1,2DCE	4/15/2019	<1.0	1.0	0.297	70	10/17/2016	NA	4/24/2018
MW 13R	Cis-1,2DCE	10/7/2019	<1.0	1.0	0.500	70	10/17/2016	NA	4/24/2018
MW 13R	Cis-1,2DCE	4/22/2020	<1.0	1.0	0.500	70	10/17/2016	NA	4/24/2018
MW 13R	Cis-1,2DCE	10/1/2020	<1.0	1.0	0.500	70	10/17/2016	NA	4/24/2018
MW 13R	Cis-1,2DCE	4/8/2021	<1.0	1.0	0.500	70	10/17/2016	NA	4/24/2018
MW 13R	Cis-1,2DCE	10/29/2021	<1.0	1.0	0.500	70	10/17/2016	NA	4/24/2018
MW 13R	Cis-1,2DCE	4/25/2022	<1.0	1.0	0.500	70	10/17/2016	NA	4/24/2018
MW 13R	Cis-1,2DCE	10/17/2022	1.4	1.0	0.196	70	10/17/2016	NA	4/24/2018
MW 13R	Cis-1,2DCE	4/10/2023	<1.0	1.0	0.196	70	10/17/2016	NA	4/24/2018
MW 13R	Cis-1,2DCE	10/27/2023	1.0	1.0	0.196	70	10/17/2016	NA	4/24/2018
MW 13R	Cis-1,2DCE	4/2/2024	<1.0	1.0	0.337	70	10/17/2016	NA	4/24/2018
MW 13R	Cis-1,2DCE	10/10/2024	<1.0	1.0	0.331	70	10/17/2016	NA	4/24/2018

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Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI	Resamples Due	5th Background Sample
							Initial Exceedance		
MW 13R	toluene	4/21/2016	<1.0	1.0	0.297	1,000.00	10/16/2017	NA	4/24/2018
MW 13R	toluene	10/17/2016	<1.0	1.0	0.297	1,000.00	10/16/2017	NA	4/24/2018
MW 13R	toluene	4/21/2017	<1.0	1.0	0.297	1,000.00	10/16/2017	NA	4/24/2018
MW 13R	toluene	10/16/2017	1.2	1.0	0.263	1,000.00	10/16/2017	NA	4/24/2018
MW 13R	toluene	4/24/2018	<1.0	1.0	0.263	1,000.00	10/16/2017	NA	4/24/2018
MW 13R	toluene	10/25/2018	<1.0	1.0	0.263	1,000.00	10/16/2017	NA	4/24/2018
MW 13R	toluene	4/15/2019	<1.0	1.0	0.263	1,000.00	10/16/2017	NA	4/24/2018
MW 13R	toluene	10/7/2019	<1.0	1.0	0.500	1,000.00	10/16/2017	NA	4/24/2018
MW 13R	toluene	4/22/2020	<1.0	1.0	0.500	1,000.00	10/16/2017	NA	4/24/2018
MW 13R	toluene	10/1/2020	<1.0	1.0	0.500	1,000.00	10/16/2017	NA	4/24/2018
MW 13R	toluene	4/8/2021	<1.0	1.0	0.500	1,000.00	10/16/2017	NA	4/24/2018
MW 13R	toluene	10/29/2021	<1.0	1.0	0.500	1,000.00	10/16/2017	NA	4/24/2018
MW 13R	toluene	4/25/2022	<1.0	1.0	0.500	1,000.00	10/16/2017	NA	4/24/2018
MW 13R	toluene	10/17/2022	<1.0	1.0	0.500	1,000.00	10/16/2017	NA	4/24/2018
MW 13R	toluene	4/10/2023	<1.0	1.0	0.500	1,000.00	10/16/2017	NA	4/24/2018
MW 13R	toluene	10/27/2023	<1.0	1.0	0.500	1,000.00	10/16/2017	NA	4/24/2018
MW 13R	toluene	4/2/2024	<1.0	1.0	0.500	1,000.00	10/16/2017	NA	4/24/2018
MW 13R	toluene	10/10/2024	<1.0	1.0	0.500	1,000.00	10/16/2017	NA	4/24/2018

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW 13R	Vinyl Chloride	4/21/2016	<1.0	1.0	0.033	2	NA	NA	4/24/2018
MW 13R	Vinyl Chloride	10/17/2016	<1.0	1.0	0.000	2	NA	NA	4/24/2018
MW 13R	Vinyl Chloride	4/21/2017	<1.0	1.0	0.162	2	NA	NA	4/24/2018
MW 13R	Vinyl Chloride	10/17/2016	<1.0	1.0	0.500	2	NA	NA	4/24/2018
MW 13R	Vinyl Chloride	4/24/2018	<1.0	1.0	0.500	2	NA	NA	4/24/2018
MW 13R	Vinyl Chloride	10/25/2018	<1.0	1.0	0.500	2	NA	NA	4/24/2018
MW 13R	Vinyl Chloride	4/15/2019	<1.0	1.0	0.500	2	NA	NA	4/24/2018
MW 13R	Vinyl Chloride	10/7/2019	<1.0	1.0	0.500	2	NA	NA	4/24/2018
MW 13R	Vinyl Chloride	4/22/2020	<1.0	1.0	0.500	2	NA	NA	4/24/2018
MW 13R	Vinyl Chloride	10/1/2020	<1.0	1.0	0.500	2	NA	NA	4/24/2018
MW 13R	Vinyl Chloride	4/8/2021	<1.0	1.0	0.500	2	NA	NA	4/24/2018
MW 13R	Vinyl Chloride	10/29/2021	<1.0	1.0	0.500	2	NA	NA	4/24/2018
MW 13R	Vinyl Chloride	4/25/2022	<1.0	1.0	0.500	2	NA	NA	4/24/2018
MW 13R	Vinyl Chloride	10/17/2022	<1.0	1.0	0.500	2	NA	NA	4/24/2018
MW 13R	Vinyl Chloride	4/10/2023	<1.0	1.0	0.500	2	NA	NA	4/24/2018
MW 13R	Vinyl Chloride	10/27/2023	<1.0	1.0	0.500	2	NA	NA	4/24/2018
MW 13R	Vinyl Chloride	4/2/2024	<1.0	1.0	0.500	2	NA	NA	4/24/2018
MW 13R	Vinyl Chloride	10/10/2024	<1.0	1.0	0.500	2	NA	NA	4/24/2018

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.

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Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI		5th Background Sample
							Initial Exceedance	Resamples Due	
MW 14	Arsenic	4/21/2016	<4	89.3	2.000	89.3	10/10/2024	NA	4/24/2018
MW 14	Arsenic	10/17/2016	<4	89.3	2.000	89.3	10/10/2024	NA	4/24/2018
MW 14	Arsenic	4/21/2017	<4	89.3	2.000	89.3	10/10/2024	NA	4/24/2018
MW 14	Arsenic	10/16/2017	14.8	89.3	0.000	89.3	10/10/2024	NA	4/24/2018
MW 14	Arsenic	4/24/2018	<4	89.3	0.000	89.3	10/10/2024	NA	4/24/2018
MW 14	Arsenic	10/25/2018	<4	89.3	0.000	89.3	10/10/2024	NA	4/24/2018
MW 14	Arsenic	4/15/2019	<4	89.3	0.000	89.3	10/10/2024	NA	4/24/2018
MW 14	Arsenic	10/7/2019	<4	89.3	2.000	89.3	10/10/2024	NA	4/24/2018
MW 14	Arsenic	4/22/2020	<4	89.3	2.000	89.3	10/10/2024	NA	4/24/2018
MW 14	Arsenic	10/1/2020	6.7	89.3	0.411	89.3	10/10/2024	NA	4/24/2018
MW 14	Arsenic	4/8/2021	8.0	89.3	0.988	89.3	10/10/2024	NA	4/24/2018
MW 14	Arsenic	10/29/2021	44.3	89.3	0.000	89.3	10/10/2024	NA	4/24/2018
MW 14	Arsenic	4/25/2022	4.3	89.3	0.000	89.3	10/10/2024	NA	4/24/2018
MW 14	Arsenic	10/17/2022	65.4	89.3	0.000	89.3	10/10/2024	NA	4/24/2018
MW 14	Arsenic	4/10/2023	66.8	89.3	10.918	89.3	10/10/2024	NA	4/24/2018
MW 14	Arsenic	10/27/2023	71.4	89.3	14.467	89.3	10/10/2024	NA	4/24/2018
MW 14	Arsenic	4/2/2024	46.1	89.3	49.273	89.3	10/10/2024	NA	4/24/2018
MW 14	Arsenic	10/10/2024	91.9	89.3	46.945	89.3	10/10/2024	NA	4/24/2018

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI	Resamples Due	5th Background Sample
							Initial Exceedance		
MW 14	Barium	4/21/2016	575	571.69	606.816	2,000.00	4/21/2016	NA	4/24/2018
MW 14	Barium	10/17/2016	592	571.69	547.635	2,000.00	4/21/2016	NA	4/24/2018
MW 14	Barium	4/21/2017	587	571.69	522.011	2,000.00	4/21/2016	NA	4/24/2018
MW 14	Barium	10/16/2017	818	571.69	505.510	2,000.00	4/21/2016	NA	4/24/2018
MW 14	Barium	4/24/2018	647	571.69	574.708	2,000.00	4/21/2016	NA	4/24/2018
MW 14	Barium	10/25/2018	547	571.69	547.154	2,000.00	4/21/2016	NA	4/24/2018
MW 14	Barium	4/15/2019	707	1019.23	562.977	2,000.00	4/21/2016	NA	4/24/2018
MW 14	Barium	10/7/2019	658	608.7165	560.811	2,000.00	4/21/2016	NA	4/24/2018
MW 14	Barium	4/22/2020	558	602.3	525.979	2,000.00	4/21/2016	NA	4/24/2018
MW 14	Barium	10/1/2020	638	595.6	567.292	2,000.00	4/21/2016	NA	4/24/2018
MW 14	Barium	4/8/2021	649	636.93	571.757	2,000.00	4/21/2016	NA	4/24/2018
MW 14	Barium	10/29/2021	674	1880.00	570.760	2,000.00	4/21/2016	NA	4/24/2018
MW 14	Barium	4/25/2022	503	1880.00	525.632	2,000.00	4/21/2016	NA	4/24/2018
MW 14	Barium	10/17/2022	588	1880.00	513.965	2,000.00	4/21/2016	NA	4/24/2018
MW 14	Barium	4/10/2023	719	1880.00	508.531	2,000.00	4/21/2016	NA	4/24/2018
MW 14	Barium	10/27/2023	665	1880.00	508.127	2,000.00	4/21/2016	NA	4/24/2018
MW 14	Barium	4/2/2024	812	1880.00	585.216	2,000.00	4/21/2016	NA	4/24/2018
MW 14	Barium	10/10/2024	575	1880.00	556.342	2,000.00	4/21/2016	NA	4/24/2018

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Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI	Resamples Due	5th Background Sample
							Initial Exceedance		
MW 14	Cobalt	4/21/2016	1.4	34.1	0.000	34.1	10/16/2017	NA	4/24/2018
MW 14	Cobalt	10/17/2016	16.3	34.1	0.000	34.1	10/16/2017	NA	4/24/2018
MW 14	Cobalt	4/21/2017	7.7	34.1	0.000	34.1	10/16/2017	NA	4/24/2018
MW 14	Cobalt	10/16/2017	16.0	12.4	3.781	12.4	10/16/2017	NA	4/24/2018
MW 14	Cobalt	4/24/2018	16.9	12.4	7.889	12.4	10/16/2017	NA	4/24/2018
MW 14	Cobalt	10/25/2018	4.2	12.4	5.234	12.4	10/16/2017	NA	4/24/2018
MW 14	Cobalt	4/15/2019	27.3	12.4	3.416	12.4	10/16/2017	NA	4/24/2018
MW 14	Cobalt	10/7/2019	10.0	12.4	2.918	12.4	10/16/2017	NA	4/24/2018
MW 14	Cobalt	4/22/2020	6.9	12.4	0.000	12.4	10/16/2017	NA	4/24/2018
MW 14	Cobalt	10/1/2020	11.5	7.8	3.197	12.4	10/16/2017	NA	4/24/2018
MW 14	Cobalt	4/8/2021	21.2	7.8	5.141	12.4	10/16/2017	NA	4/24/2018
MW 14	Cobalt	10/29/2021	14.4	7.8	6.453	12.4	10/16/2017	NA	4/24/2018
MW 14	Cobalt	4/25/2022	13.1	12.4	10.029	12.4	10/16/2017	NA	4/24/2018
MW 14	Cobalt	10/17/2022	13.1	12.4	10.884	12.4	10/16/2017	NA	4/24/2018
MW 14	Cobalt	4/10/2023	14.8	12.4	12.813	12.4	10/16/2017	NA	4/24/2018
MW 14	Cobalt	10/27/2023	16.4	12.4	12.486	12.4	10/16/2017	NA	4/24/2018
MW 14	Cobalt	4/2/2024	20.8	12.4	12.389	12.4	10/16/2017	NA	4/24/2018
MW 14	Cobalt	10/10/2024	9.9	12.4	10.182	12.4	10/16/2017	NA	4/24/2018

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Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI	Resamples Due	5th Background Sample
							Initial Exceedance		
MW 14	Nickel	4/21/2016	43.6	31.6	24.761	100	4/21/2016	NA	4/24/2018
MW 14	Nickel	10/17/2016	24.7	31.6	21.308	100	4/21/2016	NA	4/24/2018
MW 14	Nickel	4/21/2017	33.0	31.6	20.899	100	4/21/2016	NA	4/24/2018
MW 14	Nickel	10/16/2017	19.3	31.6	19.096	100	4/21/2016	NA	4/24/2018
MW 14	Nickel	4/24/2018	22.1	31.6	18.093	100	4/21/2016	NA	4/24/2018
MW 14	Nickel	10/25/2018	19.5	31.6	18.081	100	4/21/2016	NA	4/24/2018
MW 14	Nickel	4/15/2019	31.2	31.6	16.441	100	4/21/2016	NA	4/24/2018
MW 14	Nickel	10/7/2019	14.0	31.6	13.257	100	4/21/2016	NA	4/24/2018
MW 14	Nickel	4/22/2020	23.4	31.6	13.520	100	4/21/2016	NA	4/24/2018
MW 14	Nickel	10/1/2020	10.3	20.5	8.632	100	4/21/2016	NA	4/24/2018
MW 14	Nickel	4/8/2021	22.7	20.5	9.980	100	4/21/2016	NA	4/24/2018
MW 14	Nickel	10/29/2021	18.1	20.5	11.535	100	4/21/2016	NA	4/24/2018
MW 14	Nickel	4/25/2022	19.1	22.1	11.408	100	4/21/2016	NA	4/24/2018
MW 14	Nickel	10/17/2022	16.4	22.1	15.945	100	4/21/2016	NA	4/24/2018
MW 14	Nickel	4/10/2023	19.2	22.1	16.672	100	4/21/2016	NA	4/24/2018
MW 14	Nickel	10/27/2023	22.8	31.6	16.268	100	4/21/2016	NA	4/24/2018
MW 14	Nickel	4/2/2024	30.8	31.6	14.957	100	4/21/2016	NA	4/24/2018
MW 14	Nickel	10/10/2024	7.7	31.6	8.835	100	4/21/2016	NA	4/24/2018

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Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI	Resamples Due	5th Background Sample
							Initial Exceedance		
MW 14	1,1-dichloroethane	4/21/2016	1.3	1	1.213	140	4/21/2016	NA	4/24/2018
MW 14	1,1-dichloroethane	10/17/2016	2.5	1	1.342	140	4/21/2016	NA	4/24/2018
MW 14	1,1-dichloroethane	4/21/2017	<1.0	1	0.557	140	4/21/2016	NA	4/24/2018
MW 14	1,1-dichloroethane	10/16/2017	<1.0	1	0.088	140	4/21/2016	NA	4/24/2018
MW 14	1,1-dichloroethane	4/24/2018	<1.0	1	0.000	140	4/21/2016	NA	4/24/2018
MW 14	1,1-dichloroethane	10/25/2018	<1.0	1	0.500	140	4/21/2016	NA	4/24/2018
MW 14	1,1-dichloroethane	4/15/2019	<1.0	1	0.500	140	4/21/2016	NA	4/24/2018
MW 14	1,1-dichloroethane	10/7/2019	<1.0	1	0.500	140	4/21/2016	NA	4/24/2018
MW 14	1,1-dichloroethane	4/22/2020	<1.0	1	0.500	140	4/21/2016	NA	4/24/2018
MW 14	1,1-dichloroethane	10/1/2020	3.9	1	0.000	140	4/21/2016	NA	4/24/2018
MW 14	1,1-dichloroethane	4/8/2021	2.4	1	0.000	140	4/21/2016	NA	4/24/2018
MW 14	1,1-dichloroethane	10/29/2021	1.8	1	0.491	140	4/21/2016	NA	4/24/2018
MW 14	1,1-dichloroethane	4/25/2022	<1.0	1	0.491	140	4/21/2016	NA	4/24/2018
MW 14	1,1-dichloroethane	10/17/2022	<1.0	1	0.176	140	4/21/2016	NA	4/24/2018
MW 14	1,1-dichloroethane	4/10/2023	<1.0	1	0.060	140	4/21/2016	NA	4/24/2018
MW 14	1,1-dichloroethane	10/27/2023	<1.0	1	5.000	140	4/21/2016	NA	4/24/2018
MW 14	1,1-dichloroethane	4/2/2024	<1.0	1	5.000	140	4/21/2016	NA	4/24/2018
MW 14	1,1-dichloroethane	10/10/2024	<1.0	1	5.000	140	4/21/2016	NA	4/24/2018

Table 7
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Annual Water Quality Report
Rural Iowa Sanitary Landfill
Permit No.42-SDP-01-72P

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI		
							Initial Exceedance	Resamples Due	5th Background Sample
MW 14	1,4-DCB	4/21/2016	<1.0	1	0.412	75	10/16/2017	NA	4/24/2018
MW 14	1,4-DCB	10/17/2016	1.0	1	0.355	75	10/16/2017	NA	4/24/2018
MW 14	1,4-DCB	4/21/2017	<1.0	1	0.138	75	10/16/2017	NA	4/24/2018
MW 14	1,4-DCB	10/16/2017	1.6	1	0.285	75	10/16/2017	NA	4/24/2018
MW 14	1,4-DCB	4/24/2018	<1.0	1	0.285	75	10/16/2017	NA	4/24/2018
MW 14	1,4-DCB	10/25/2018	<1.0	1	0.128	75	10/16/2017	NA	4/24/2018
MW 14	1,4-DCB	4/15/2019	<1.0	1	0.128	75	10/16/2017	NA	4/24/2018
MW 14	1,4-DCB	10/7/2019	<1.0	1	0.500	75	10/16/2017	NA	4/24/2018
MW 14	1,4-DCB	4/22/2020	<1.0	1	0.500	75	10/16/2017	NA	4/24/2018
MW 14	1,4-DCB	10/1/2020	1.8	1	0.060	75	10/16/2017	NA	4/24/2018
MW 14	1,4-DCB	4/8/2021	1.9	1	0.257	75	10/16/2017	NA	4/24/2018
MW 14	1,4-DCB	10/29/2021	3.2	1	0.553	75	10/16/2017	NA	4/24/2018
MW 14	1,4-DCB	4/25/2022	1.7	1	1.321	75	10/16/2017	NA	4/24/2018
MW 14	1,4-DCB	10/17/2022	2.4	1	1.514	75	10/16/2017	NA	4/24/2018
MW 14	1,4-DCB	4/10/2023	1.8	1	1.464	75	10/16/2017	NA	4/24/2018
MW 14	1,4-DCB	10/27/2023	2.4	1	1.631	75	10/16/2017	NA	4/24/2018
MW 14	1,4-DCB	4/2/2024	3.6	1	1.662	75	10/16/2017	NA	4/24/2018
MW 14	1,4-DCB	10/10/2024	3.3	1	1.803	75	10/16/2017	NA	4/24/2018

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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 14	Benzene	4/21/2016	<1.0	1	0.331	5	10/16/2017	NA	4/24/2018
MW 14	Benzene	10/17/2016	<1.0	1	0.500	5	10/16/2017	NA	4/24/2018
MW 14	Benzene	4/21/2017	<1.0	1	0.500	5	10/16/2017	NA	4/24/2018
MW 14	Benzene	10/16/2017	2.5	1	0.000	5	10/16/2017	NA	4/24/2018
MW 14	Benzene	4/24/2018	<1.0	1	0.000	5	10/16/2017	NA	4/24/2018
MW 14	Benzene	10/25/2018	<1.0	1	0.000	5	10/16/2017	NA	4/24/2018
MW 14	Benzene	4/15/2019	1.9	1	0.160	5	10/16/2017	NA	4/24/2018
MW 14	Benzene	10/7/2019	<1.0	1	0.027	5	10/16/2017	NA	4/24/2018
MW 14	Benzene	4/22/2020	<1.0	1	0.027	5	10/16/2017	NA	4/24/2018
MW 14	Benzene	10/1/2020	<1.0	1	0.027	5	10/16/2017	NA	4/24/2018
MW 14	Benzene	4/8/2021	<1.0	1	0.500	5	10/16/2017	NA	4/24/2018
MW 14	Benzene	10/29/2021	2.0	1	0.000	5	10/16/2017	NA	4/24/2018
MW 14	Benzene	4/25/2022	<1.0	1	0.000	5	10/16/2017	NA	4/24/2018
MW 14	Benzene	10/17/2022	1.4	1	0.236	5	10/16/2017	NA	4/24/2018
MW 14	Benzene	4/10/2023	1.1	1	0.515	5	10/16/2017	NA	4/24/2018
MW 14	Benzene	10/27/2023	1.2	1	0.594	5	10/16/2017	NA	4/24/2018
MW 14	Benzene	4/2/2024	2.6	1	0.758	5	10/16/2017	NA	4/24/2018
MW 14	Benzene	10/10/2024	1.6	1	0.819	5	10/16/2017	NA	4/24/2018

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Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI	Resamples Due	5th Background Sample
							Initial Exceedance		
MW 14	Bis(2-ethylhexyl)phthalate	4/21/2016	<10.0	6	---	6	10/16/2017	NA	4/24/2018
MW 14	Bis(2-ethylhexyl)phthalate	10/17/2016	<10.0	6	---	6	10/16/2017	NA	4/24/2018
MW 14	Bis(2-ethylhexyl)phthalate	4/21/2017	<10.0	6	---	6	10/16/2017	NA	4/24/2018
MW 14	Bis(2-ethylhexyl)phthalate	10/16/2017	18.0	6	---	6	10/16/2017	NA	4/24/2018
MW 14	Bis(2-ethylhexyl)phthalate	4/24/2018	<6.0	6	---	6	10/16/2017	NA	4/24/2018
MW 14	Bis(2-ethylhexyl)phthalate	10/25/2018	<6.0	6	---	6	10/16/2017	NA	4/24/2018
MW 14	Bis(2-ethylhexyl)phthalate	4/15/2019	---	6	---	6	10/16/2017	NA	4/24/2018
MW 14	Bis(2-ethylhexyl)phthalate	10/7/2019	---	6	---	6	10/16/2017	NA	4/24/2018
MW 14	Bis(2-ethylhexyl)phthalate	4/22/2020	---	6	---	6	10/16/2017	NA	4/24/2018
MW 14	Bis(2-ethylhexyl)phthalate	10/1/2020	---	6	---	6	10/16/2017	NA	4/24/2018
MW 14	Bis(2-ethylhexyl)phthalate	4/8/2021	---	6	---	6	10/16/2017	NA	4/24/2018
MW 14	Bis(2-ethylhexyl)phthalate	10/29/2021	---	6	---	6	10/16/2017	NA	4/24/2018
MW 14	Bis(2-ethylhexyl)phthalate	4/25/2022	---	6	---	6	10/16/2017	NA	4/24/2018
MW 14	Bis(2-ethylhexyl)phthalate	10/17/2022	11.0	6	2.490	6	10/16/2017	NA	4/24/2018
MW 14	Bis(2-ethylhexyl)phthalate	4/10/2023	---	6	---	6	10/16/2017	NA	4/24/2018
MW 14	Bis(2-ethylhexyl)phthalate	10/27/2023	---	6	---	6	10/16/2017	NA	4/24/2018
MW 14	Bis(2-ethylhexyl)phthalate	4/2/2024	---	6	---	6	10/16/2017	NA	4/24/2018
MW 14	Bis(2-ethylhexyl)phthalate	10/10/2024	---	6	---	6	10/16/2017	NA	4/24/2018

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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 14	chloroethane	4/21/2016	<1.0	1	0.500	2800	10/7/2019	NA	4/24/2018
MW 14	chloroethane	10/17/2016	<1.0	1	0.500	2800	10/7/2019	NA	4/24/2018
MW 14	chloroethane	4/21/2017	<1.0	1	0.500	2800	10/7/2019	NA	4/24/2018
MW 14	chloroethane	10/16/2017	<1.0	1	0.500	2800	10/7/2019	NA	4/24/2018
MW 14	chloroethane	4/24/2018	<1.0	1	0.500	2800	10/7/2019	NA	4/24/2018
MW 14	chloroethane	10/25/2018	<1.0	1	0.500	2800	10/7/2019	NA	4/24/2018
MW 14	chloroethane	4/15/2019	<1.0	1	0.500	2800	10/7/2019	NA	4/24/2018
MW 14	chloroethane	10/7/2019	1.0	1	0.410	2800	10/7/2019	NA	4/24/2018
MW 14	chloroethane	4/22/2020	<1.0	1	0.410	2800	10/7/2019	NA	4/24/2018
MW 14	chloroethane	10/1/2020	2.7	1	0.168	2800	10/7/2019	NA	4/24/2018
MW 14	chloroethane	4/8/2021	1.0	1	0.168	2800	10/7/2019	NA	4/24/2018
MW 14	chloroethane	10/29/2021	2.4	1	0.396	2800	10/7/2019	NA	4/24/2018
MW 14	chloroethane	4/25/2022	<1.0	1	0.396	2800	10/7/2019	NA	4/24/2018
MW 14	chloroethane	10/17/2022	1.3	1	0.354	2800	10/7/2019	NA	4/24/2018
MW 14	chloroethane	4/10/2023	1.2	1	1.426	2800	10/7/2019	NA	4/24/2018
MW 14	chloroethane	10/27/2023	1.8	1	0.570	2800	10/7/2019	NA	4/24/2018
MW 14	chloroethane	4/2/2024	1.9	1	1.137	2800	10/7/2019	NA	4/24/2018
MW 14	chloroethane	10/10/2024	<1.0	1	0.591	2800	10/7/2019	NA	4/24/2018

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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 14	Cis-1,2DCE	4/21/2016	<1.0	1	0.273	70	10/17/2016	NA	4/24/2018
MW 14	Cis-1,2DCE	10/17/2016	1.8	1	0.267	70	10/17/2016	NA	4/24/2018
MW 14	Cis-1,2DCE	4/21/2017	<1.0	1	0.267	70	10/17/2016	NA	4/24/2018
MW 14	Cis-1,2DCE	10/16/2017	<1.0	1	0.060	70	10/17/2016	NA	4/24/2018
MW 14	Cis-1,2DCE	4/24/2018	<1.0	1	0.060	70	10/17/2016	NA	4/24/2018
MW 14	Cis-1,2DCE	10/25/2018	<1.0	1	0.500	70	10/17/2016	NA	4/24/2018
MW 14	Cis-1,2DCE	4/15/2019	<1.0	1	0.500	70	10/17/2016	NA	4/24/2018
MW 14	Cis-1,2DCE	10/7/2019	<1.0	1	0.500	70	10/17/2016	NA	4/24/2018
MW 14	Cis-1,2DCE	4/22/2020	<1.0	1	0.500	70	10/17/2016	NA	4/24/2018
MW 14	Cis-1,2DCE	10/1/2020	<1.0	1	0.500	70	10/17/2016	NA	4/24/2018
MW 14	Cis-1,2DCE	4/8/2021	<1.0	1	0.500	70	10/17/2016	NA	4/24/2018
MW 14	Cis-1,2DCE	10/29/2021	<1.0	1	0.500	70	10/17/2016	NA	4/24/2018
MW 14	Cis-1,2DCE	4/25/2022	<1.0	1	0.500	70	10/17/2016	NA	4/24/2018
MW 14	Cis-1,2DCE	10/17/2022	<1.0	1	0.500	70	10/17/2016	NA	4/24/2018
MW 14	Cis-1,2DCE	4/10/2023	<1.0	1	0.500	70	10/17/2016	NA	4/24/2018
MW 14	Cis-1,2DCE	10/27/2023	<1.0	1	0.500	70	10/17/2016	NA	4/24/2018
MW 14	Cis-1,2DCE	4/2/2024	<1.0	1	0.500	70	10/17/2016	NA	4/24/2018
MW 14	Cis-1,2DCE	10/10/2024	<1.0	1	0.500	70	10/17/2016	NA	4/24/2018

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.

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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 31R	Arsenic	4/21/2016	<4.0	89.3	0.208	89.3	NA	NA	4/24/2018
MW 31R	Arsenic	10/17/2016	5.6	89.3	1.095	89.3	NA	NA	4/24/2018
MW 31R	Arsenic	4/21/2017	6.7	89.3	2.608	89.3	NA	NA	4/24/2018
MW 31R	Arsenic	10/16/2017	6.9	89.3	2.626	89.3	NA	NA	4/24/2018
MW 31R	Arsenic	4/24/2018	20.2	89.3	1.706	89.3	NA	NA	4/24/2018
MW 31R	Arsenic	10/25/2018	9.6	89.3	3.355	89.3	NA	NA	4/24/2018
MW 31R	Arsenic	4/15/2019	29.1	89.3	4.450	89.3	NA	NA	4/24/2018
MW 31R	Arsenic	10/7/2019	16.5	89.3	9.295	89.3	NA	NA	4/24/2018
MW 31R	Arsenic	4/22/2020	40.3	89.3	7.872	89.3	NA	NA	4/24/2018
MW 31R	Arsenic	10/1/2020	33.8	89.3	18.092	89.3	NA	NA	4/24/2018
MW 31R	Arsenic	4/8/2021	58.1	89.3	16.955	89.3	NA	NA	4/24/2018
MW 31R	Arsenic	10/29/2021	18.3	89.3	18.243	89.3	NA	NA	4/24/2018
MW 31R	Arsenic	4/25/2022	50.1	89.3	19.265	89.3	NA	NA	4/24/2018
MW 31R	Arsenic	10/17/2022	37.6	89.3	20.628	89.3	NA	NA	4/24/2018
MW 31R	Arsenic	4/10/2023	60.7	89.3	20.243	89.3	NA	NA	4/24/2018
MW 31R	Arsenic	10/27/2023	34.4	89.3	31.492	89.3	NA	NA	4/24/2018
MW 31R	Arsenic	4/2/2024	37.8	89.3	28.333	89.3	NA	NA	4/24/2018
MW 31R	Arsenic	10/10/2024	22.7	89.3	20.188	89.3	NA	NA	4/24/2018

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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 31R	Barium	4/21/2016	1360	571.69	1098.134	2,000.00	4/21/2016	NA	4/24/2018
MW 31R	Barium	10/17/2016	1050	571.69	1056.055	2,000.00	4/21/2016	NA	4/24/2018
MW 31R	Barium	4/21/2017	1350	571.69	1067.924	2,000.00	4/21/2016	NA	4/24/2018
MW 31R	Barium	10/16/2017	1190	571.69	1064.255	2,000.00	4/21/2016	NA	4/24/2018
MW 31R	Barium	4/24/2018	1500	571.69	1043.124	2,000.00	4/21/2016	NA	4/24/2018
MW 31R	Barium	10/25/2018	981	571.69	993.674	2,000.00	4/21/2016	NA	4/24/2018
MW 31R	Barium	4/15/2019	1560	1019.23	988.327	2,000.00	4/21/2016	NA	4/24/2018
MW 31R	Barium	10/7/2019	1380	608.7165	1048.849	2,000.00	4/21/2016	NA	4/24/2018
MW 31R	Barium	4/22/2020	1710	602.3	1037.377	2,000.00	4/21/2016	NA	4/24/2018
MW 31R	Barium	10/1/2020	1660	595.6	1406.129	2,000.00	4/21/2016	NA	4/24/2018
MW 31R	Barium	4/8/2021	615	636.93	746.664	2,000.00	4/21/2016	NA	4/24/2018
MW 31R	Barium	10/29/2021	1190	1880.00	694.393	2,000.00	4/21/2016	NA	4/24/2018
MW 31R	Barium	4/25/2022	1470	1880.00	698.025	2,000.00	4/21/2016	NA	4/24/2018
MW 31R	Barium	10/17/2022	1220	1880.00	698.347	2,000.00	4/21/2016	NA	4/24/2018
MW 31R	Barium	4/10/2023	1450	1880.00	1158.458	2,000.00	4/21/2016	NA	4/24/2018
MW 31R	Barium	10/27/2023	1190	1880.00	1158.458	2,000.00	4/21/2016	NA	4/24/2018
MW 31R	Barium	4/2/2024	1810	1880.00	1080.748	2,000.00	4/21/2016	NA	4/24/2018
MW 31R	Barium	10/10/2024	1010	1880.00	1064.209	2,000.00	4/21/2016	NA	4/24/2018

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MW 31R	Cobalt	4/21/2016	12.2	34.1	9.102	34.1	4/24/2018	NA	4/24/2018
MW 31R	Cobalt	10/17/2016	12.6	34.1	11.138	34.1	4/24/2018	NA	4/24/2018
MW 31R	Cobalt	4/21/2017	12.5	34.1	11.775	34.1	4/24/2018	NA	4/24/2018
MW 31R	Cobalt	10/16/2017	11.5	12.4	11.616	12.4	4/24/2018	NA	4/24/2018
MW 31R	Cobalt	4/24/2018	15.8	12.4	10.904	12.4	4/24/2018	NA	4/24/2018
MW 31R	Cobalt	10/25/2018	13.3	12.4	11.114	12.4	4/24/2018	NA	4/24/2018
MW 31R	Cobalt	4/15/2019	17.7	12.4	11.365	12.4	4/24/2018	NA	4/24/2018
MW 31R	Cobalt	10/7/2019	15.0	12.4	13.301	12.4	4/24/2018	NA	4/24/2018
MW 31R	Cobalt	4/22/2020	19.7	12.4	13.088	12.4	4/24/2018	NA	4/24/2018
MW 31R	Cobalt	10/1/2020	17.5	7.8	15.210	12.4	4/24/2018	NA	4/24/2018
MW 31R	Cobalt	4/8/2021	25.9	7.8	14.039	12.4	4/24/2018	NA	4/24/2018
MW 31R	Cobalt	10/29/2021	15.0	7.8	14.039	12.4	4/24/2018	NA	4/24/2018
MW 31R	Cobalt	4/25/2022	17.0	12.4	13.177	12.4	4/24/2018	NA	4/24/2018
MW 31R	Cobalt	10/17/2022	16.2	12.4	12.661	12.4	4/24/2018	NA	4/24/2018
MW 31R	Cobalt	4/10/2023	18.3	12.4	14.994	12.4	4/24/2018	NA	4/24/2018
MW 31R	Cobalt	10/27/2023	17.6	12.4	16.226	12.4	4/24/2018	NA	4/24/2018
MW 31R	Cobalt	4/2/2024	20.6	12.4	16.014	12.4	4/24/2018	NA	4/24/2018
MW 31R	Cobalt	10/10/2024	14.6	12.4	14.864	12.4	4/24/2018	NA	4/24/2018

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MW 31R	Nickel	4/21/2016	22.2	31.6	18.067	100	4/15/2019	NA	4/24/2018
MW 31R	Nickel	10/17/2016	18.8	31.6	21.642	100	4/15/2019	NA	4/24/2018
MW 31R	Nickel	4/21/2017	23.9	31.6	20.625	100	4/15/2019	NA	4/24/2018
MW 31R	Nickel	10/16/2017	23.6	31.6	19.376	100	4/15/2019	NA	4/24/2018
MW 31R	Nickel	4/24/2018	29.5	31.6	18.802	100	4/15/2019	NA	4/24/2018
MW 31R	Nickel	10/25/2018	19.9	31.6	19.568	100	4/15/2019	NA	4/24/2018
MW 31R	Nickel	4/15/2019	31.9	31.6	19.788	100	4/15/2019	NA	4/24/2018
MW 31R	Nickel	10/7/2019	24.7	31.6	20.240	100	4/15/2019	NA	4/24/2018
MW 31R	Nickel	4/22/2020	37.3	31.6	19.405	100	4/15/2019	NA	4/24/2018
MW 31R	Nickel	10/1/2020	34.1	20.5	25.709	100	4/15/2019	NA	4/24/2018
MW 31R	Nickel	4/8/2021	52.1	20.5	23.676	100	4/15/2019	NA	4/24/2018
MW 31R	Nickel	10/29/2021	24.1	20.5	23.269	100	4/15/2019	NA	4/24/2018
MW 31R	Nickel	4/25/2022	30.9	22.1	21.242	100	4/15/2019	NA	4/24/2018
MW 31R	Nickel	10/17/2022	25.0	22.1	17.652	100	4/15/2019	NA	4/24/2018
MW 31R	Nickel	4/10/2023	34.7	22.1	22.767	100	4/15/2019	NA	4/24/2018
MW 31R	Nickel	10/27/2023	30.3	31.6	25.530	100	4/15/2019	NA	4/24/2018
MW 31R	Nickel	4/2/2024	34.2	31.6	25.772	100	4/15/2019	NA	4/24/2018
MW 31R	Nickel	10/10/2024	22.7	31.6	23.954	100	4/15/2019	NA	4/24/2018

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW 31R	1,1-dichloroethane	4/21/2016	1.9	1.0	2.262	140	4/21/2016	NA	4/24/2018
MW 31R	1,1-dichloroethane	10/17/2016	2.0	1.0	1.297	140	4/21/2016	NA	4/24/2018
MW 31R	1,1-dichloroethane	4/21/2017	2.0	1.0	1.041	140	4/21/2016	NA	4/24/2018
MW 31R	1,1-dichloroethane	10/16/2017	1.7	1.0	1.734	140	4/21/2016	NA	4/24/2018
MW 31R	1,1-dichloroethane	4/24/2018	2.9	1.0	1.539	140	4/21/2016	NA	4/24/2018
MW 31R	1,1-dichloroethane	10/25/2018	<1.0	1.0	0.609	140	4/21/2016	NA	4/24/2018
MW 31R	1,1-dichloroethane	4/15/2019	2.6	1.0	0.657	140	4/21/2016	NA	4/24/2018
MW 31R	1,1-dichloroethane	10/7/2019	1.4	1.0	0.545	140	4/21/2016	NA	4/24/2018
MW 31R	1,1-dichloroethane	4/22/2020	2.9	1.0	0.545	140	4/21/2016	NA	4/24/2018
MW 31R	1,1-dichloroethane	10/1/2020	2.9	1.0	1.610	140	4/21/2016	NA	4/24/2018
MW 31R	1,1-dichloroethane	4/8/2021	2.8	1.0	1.636	140	4/21/2016	NA	4/24/2018
MW 31R	1,1-dichloroethane	10/29/2021	2.9	1.0	2.816	140	4/21/2016	NA	4/24/2018
MW 31R	1,1-dichloroethane	4/25/2022	2.9	1.0	2.816	140	4/21/2016	NA	4/24/2018
MW 31R	1,1-dichloroethane	10/17/2022	3.1	1.0	2.777	140	4/21/2016	NA	4/24/2018
MW 31R	1,1-dichloroethane	4/10/2023	2.8	1.0	2.777	140	4/21/2016	NA	4/24/2018
MW 31R	1,1-dichloroethane	10/27/2023	2.9	1.0	2.777	140	4/21/2016	NA	4/24/2018
MW 31R	1,1-dichloroethane	4/2/2024	3.3	1.0	2.764	140	4/21/2016	NA	4/24/2018
MW 31R	1,1-dichloroethane	10/10/2024	3.1	1.0	2.764	140	4/21/2016	NA	4/24/2018

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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 31R	1,4-DCB	4/21/2016	5.5	1.0	0.000	75	4/21/2016	NA	4/24/2018
MW 31R	1,4-DCB	10/17/2016	7.8	1.0	0.573	75	4/21/2016	NA	4/24/2018
MW 31R	1,4-DCB	4/21/2017	6.9	1.0	3.493	75	4/21/2016	NA	4/24/2018
MW 31R	1,4-DCB	10/16/2017	6	1.0	5.356	75	4/21/2016	NA	4/24/2018
MW 31R	1,4-DCB	4/24/2018	11.3	1.0	5.272	75	4/21/2016	NA	4/24/2018
MW 31R	1,4-DCB	10/25/2018	9.5	1.0	5.574	75	4/21/2016	NA	4/24/2018
MW 31R	1,4-DCB	4/15/2019	15.6	1.0	5.902	75	4/21/2016	NA	4/24/2018
MW 31R	1,4-DCB	10/7/2019	16.6	1.0	9.255	75	4/21/2016	NA	4/24/2018
MW 31R	1,4-DCB	4/22/2020	16.8	1.0	10.559	75	4/21/2016	NA	4/24/2018
MW 31R	1,4-DCB	10/1/2020	15.1	1.0	15.072	75	4/21/2016	NA	4/24/2018
MW 31R	1,4-DCB	4/8/2021	15.2	1.0	14.867	75	4/21/2016	NA	4/24/2018
MW 31R	1,4-DCB	10/29/2021	17.7	1.0	14.709	75	4/21/2016	NA	4/24/2018
MW 31R	1,4-DCB	4/25/2022	17.8	1.0	14.683	75	4/21/2016	NA	4/24/2018
MW 31R	1,4-DCB	10/17/2022	17.7	1.0	15.609	75	4/21/2016	NA	4/24/2018
MW 31R	1,4-DCB	4/10/2023	21.6	1.0	16.425	75	4/21/2016	NA	4/24/2018
MW 31R	1,4-DCB	10/27/2023	15.4	1.0	15.104	75	4/21/2016	NA	4/24/2018
MW 31R	1,4-DCB	4/2/2024	14.5	1.0	13.574	75	4/21/2016	NA	4/24/2018
MW 31R	1,4-DCB	10/10/2024	16.6	1.0	13.297	75	4/21/2016	NA	4/24/2018

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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 31R	Benzene	4/21/2016	3.1	1.0	1.785	5	4/21/2016	NA	4/24/2018
MW 31R	Benzene	10/17/2016	3.2	1.0	2.042	5	4/21/2016	NA	4/24/2018
MW 31R	Benzene	4/21/2017	2.6	1.0	2.437	5	4/21/2016	NA	4/24/2018
MW 31R	Benzene	10/16/2017	2.6	1.0	2.498	5	4/21/2016	NA	4/24/2018
MW 31R	Benzene	4/24/2018	2.9	1.0	2.487	5	4/21/2016	NA	4/24/2018
MW 31R	Benzene	10/25/2018	<1.0	1.0	0.845	5	4/21/2016	NA	4/24/2018
MW 31R	Benzene	4/15/2019	2.3	1.0	0.807	5	4/21/2016	NA	4/24/2018
MW 31R	Benzene	10/7/2019	<1.0	1.0	0.095	5	4/21/2016	NA	4/24/2018
MW 31R	Benzene	4/22/2020	2.0	1.0	0.195	5	4/21/2016	NA	4/24/2018
MW 31R	Benzene	10/1/2020	1.7	1.0	0.697	5	4/21/2016	NA	4/24/2018
MW 31R	Benzene	4/8/2021	1.9	1.0	0.708	5	4/21/2016	NA	4/24/2018
MW 31R	Benzene	10/29/2021	2.3	1.0	1.681	5	4/21/2016	NA	4/24/2018
MW 31R	Benzene	4/25/2022	2.5	1.0	1.670	5	4/21/2016	NA	4/24/2018
MW 31R	Benzene	10/17/2022	1.8	1.0	1.736	5	4/21/2016	NA	4/24/2018
MW 31R	Benzene	4/10/2023	1.9	1.0	1.736	5	4/21/2016	NA	4/24/2018
MW 31R	Benzene	10/27/2023	1.4	1.0	1.356	5	4/21/2016	NA	4/24/2018
MW 31R	Benzene	4/2/2024	2.1	1.0	1.454	5	4/21/2016	NA	4/24/2018
MW 31R	Benzene	10/10/2024	2.3	1.0	1.471	5	4/21/2016	NA	4/24/2018

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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 31R	chlorobenzene	4/21/2016	5	1.0	0.056	100	4/21/2016	NA	4/24/2018
MW 31R	chlorobenzene	10/17/2016	7.2	1.0	1.060	100	4/21/2016	NA	4/24/2018
MW 31R	chlorobenzene	4/21/2017	6.4	1.0	3.235	100	4/21/2016	NA	4/24/2018
MW 31R	chlorobenzene	10/16/2017	7.9	1.0	5.161	100	4/21/2016	NA	4/24/2018
MW 31R	chlorobenzene	4/24/2018	12	1.0	5.442	100	4/21/2016	NA	4/24/2018
MW 31R	chlorobenzene	10/25/2018	10.5	1.0	6.235	100	4/21/2016	NA	4/24/2018
MW 31R	chlorobenzene	4/15/2019	13.8	1.0	8.114	100	4/21/2016	NA	4/24/2018
MW 31R	chlorobenzene	10/7/2019	13.3	1.0	10.663	100	4/21/2016	NA	4/24/2018
MW 31R	chlorobenzene	4/22/2020	15.0	1.0	10.909	100	4/21/2016	NA	4/24/2018
MW 31R	chlorobenzene	10/1/2020	13.8	1.0	13.125	100	4/21/2016	NA	4/24/2018
MW 31R	chlorobenzene	4/8/2021	15.6	1.0	13.179	100	4/21/2016	NA	4/24/2018
MW 31R	chlorobenzene	10/29/2021	17.4	1.0	13.686	100	4/21/2016	NA	4/24/2018
MW 31R	chlorobenzene	4/25/2022	18.6	1.0	13.880	100	4/21/2016	NA	4/24/2018
MW 31R	chlorobenzene	10/17/2022	19.8	1.0	15.743	100	4/21/2016	NA	4/24/2018
MW 31R	chlorobenzene	4/10/2023	25.0	1.0	16.263	100	4/21/2016	NA	4/24/2018
MW 31R	chlorobenzene	10/27/2023	18.6	1.0	16.909	100	4/21/2016	NA	4/24/2018
MW 31R	chlorobenzene	4/2/2024	21.0	1.0	17.832	100	4/21/2016	NA	4/24/2018
MW 31R	chlorobenzene	10/10/2024	21.6	1.0	18.569	100	4/21/2016	NA	4/24/2018

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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 31R	chloroethane	4/21/2016	2.8	1.0	0.882	2,800.00	4/21/2016	NA	4/24/2018
MW 31R	chloroethane	10/17/2016	3.7	1.0	0.880	2,800.00	4/21/2016	NA	4/24/2018
MW 31R	chloroethane	4/21/2017	3.4	1.0	2.856	2,800.00	4/21/2016	NA	4/24/2018
MW 31R	chloroethane	10/16/2017	<1.0	1.0	0.895	2,800.00	4/21/2016	NA	4/24/2018
MW 31R	chloroethane	4/24/2018	4.8	1.0	0.942	2,800.00	4/21/2016	NA	4/24/2018
MW 31R	chloroethane	10/25/2018	3.4	1.0	0.898	2,800.00	4/21/2016	NA	4/24/2018
MW 31R	chloroethane	4/15/2019	3.3	1.0	0.881	2,800.00	4/21/2016	NA	4/24/2018
MW 31R	chloroethane	10/7/2019	3.4	1.0	2.880	2,800.00	4/21/2016	NA	4/24/2018
MW 31R	chloroethane	4/22/2020	3.4	1.0	3.316	2,800.00	4/21/2016	NA	4/24/2018
MW 31R	chloroethane	10/1/2020	2.9	1.0	2.970	2,800.00	4/21/2016	NA	4/24/2018
MW 31R	chloroethane	4/8/2021	3.0	1.0	2.866	2,800.00	4/21/2016	NA	4/24/2018
MW 31R	chloroethane	10/29/2021	2.9	1.0	2.770	2,800.00	4/21/2016	NA	4/24/2018
MW 31R	chloroethane	4/25/2022	3.7	1.0	2.671	2,800.00	4/21/2016	NA	4/24/2018
MW 31R	chloroethane	10/17/2022	3.3	1.0	2.802	2,800.00	4/21/2016	NA	4/24/2018
MW 31R	chloroethane	4/10/2023	3.6	1.0	2.952	2,800.00	4/21/2016	NA	4/24/2018
MW 31R	chloroethane	10/27/2023	3.4	1.0	3.285	2,800.00	4/21/2016	NA	4/24/2018
MW 31R	chloroethane	4/2/2024	3.5	1.0	3.298	2,800.00	4/21/2016	NA	4/24/2018
MW 31R	chloroethane	10/10/2024	2.6	1.0	2.737	2,800.00	4/21/2016	NA	4/24/2018

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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 31R	Cis-1,2DCE	4/21/2016	59.7	1.0	60.491	70	4/21/2016	NA	4/24/2018
MW 31R	Cis-1,2DCE	10/17/2016	45.9	1.0	41.179	70	4/21/2016	NA	4/24/2018
MW 31R	Cis-1,2DCE	4/21/2017	39.4	1.0	35.077	70	4/21/2016	NA	4/24/2018
MW 31R	Cis-1,2DCE	10/16/2017	38.6	1.0	34.415	70	4/21/2016	NA	4/24/2018
MW 31R	Cis-1,2DCE	4/24/2018	39.1	1.0	36.693	70	4/21/2016	NA	4/24/2018
MW 31R	Cis-1,2DCE	10/25/2018	26.5	1.0	28.518	70	4/21/2016	NA	4/24/2018
MW 31R	Cis-1,2DCE	4/15/2019	26.5	1.0	24.284	70	4/21/2016	NA	4/24/2018
MW 31R	Cis-1,2DCE	10/7/2019	25.9	1.0	21.964	70	4/21/2016	NA	4/24/2018
MW 31R	Cis-1,2DCE	4/22/2020	20.7	1.0	21.590	70	4/21/2016	NA	4/24/2018
MW 31R	Cis-1,2DCE	10/1/2020	34.1	1.0	20.307	70	4/21/2016	NA	4/24/2018
MW 31R	Cis-1,2DCE	4/8/2021	23.3	1.0	19.175	70	4/21/2016	NA	4/24/2018
MW 31R	Cis-1,2DCE	10/29/2021	18.1	1.0	15.783	70	4/21/2016	NA	4/24/2018
MW 31R	Cis-1,2DCE	4/25/2022	24	1.0	17.006	70	4/21/2016	NA	4/24/2018
MW 31R	Cis-1,2DCE	10/17/2022	22.4	1.0	18.834	70	4/21/2016	NA	4/24/2018
MW 31R	Cis-1,2DCE	4/10/2023	11.1	1.0	12.118	70	4/21/2016	NA	4/24/2018
MW 31R	Cis-1,2DCE	10/27/2023	17.4	1.0	11.892	70	4/21/2016	NA	4/24/2018
MW 31R	Cis-1,2DCE	4/2/2024	19.9	1.0	11.994	70	4/21/2016	NA	4/24/2018
MW 31R	Cis-1,2DCE	10/10/2024	16.0	1.0	11.744	70	4/21/2016	NA	4/24/2018

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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 31R	trans-1,2DCE	4/21/2016	3.7	1.0	3.901	100	4/21/2016	NA	4/24/2018
MW 31R	trans-1,2DCE	10/17/2016	3.7	1.0	3.166	100	4/21/2016	NA	4/24/2018
MW 31R	trans-1,2DCE	4/21/2017	3.5	1.0	2.559	100	4/21/2016	NA	4/24/2018
MW 31R	trans-1,2DCE	10/16/2017	3.8	1.0	3.527	100	4/21/2016	NA	4/24/2018
MW 31R	trans-1,2DCE	4/24/2018	3.9	1.0	3.524	100	4/21/2016	NA	4/24/2018
MW 31R	trans-1,2DCE	10/25/2018	<1.0	1.0	1.013	100	4/21/2016	NA	4/24/2018
MW 31R	trans-1,2DCE	4/15/2019	2.7	1.0	0.867	100	4/21/2016	NA	4/24/2018
MW 31R	trans-1,2DCE	10/7/2019	1.8	1.0	0.536	100	4/21/2016	NA	4/24/2018
MW 31R	trans-1,2DCE	4/22/2020	2.9	1.0	0.689	100	4/21/2016	NA	4/24/2018
MW 31R	trans-1,2DCE	10/1/2020	3.7	1.0	1.857	100	4/21/2016	NA	4/24/2018
MW 31R	trans-1,2DCE	4/8/2021	2.1	1.0	1.621	100	4/21/2016	NA	4/24/2018
MW 31R	trans-1,2DCE	10/29/2021	2.6	1.0	2.037	100	4/21/2016	NA	4/24/2018
MW 31R	trans-1,2DCE	4/25/2022	2.4	1.0	1.879	100	4/21/2016	NA	4/24/2018
MW 31R	trans-1,2DCE	10/17/2022	2.6	1.0	2.147	100	4/21/2016	NA	4/24/2018
MW 31R	trans-1,2DCE	4/10/2023	1.6	1.0	1.740	100	4/21/2016	NA	4/24/2018
MW 31R	trans-1,2DCE	10/27/2023	2.3	1.0	1.713	100	4/21/2016	NA	4/24/2018
MW 31R	trans-1,2DCE	4/2/2024	2.5	1.0	1.720	100	4/21/2016	NA	4/24/2018
MW 31R	trans-1,2DCE	10/10/2024	1.8	1.0	1.556	100	4/21/2016	NA	4/24/2018

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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 31R	Vinyl Chloride	4/21/2016	2.3	1.0	1.825	2	4/21/2016	NA	4/24/2018
MW 31R	Vinyl Chloride	10/17/2016	2	1.0	1.954	2	4/21/2016	NA	4/24/2018
MW 31R	Vinyl Chloride	4/21/2017	1.1	1.0	1.256	2	4/21/2016	NA	4/24/2018
MW 31R	Vinyl Chloride	10/16/2017	<1.0	1.0	0.503	2	4/21/2016	NA	4/24/2018
MW 31R	Vinyl Chloride	4/24/2018	1.3	1.0	0.498	2	4/21/2016	NA	4/24/2018
MW 31R	Vinyl Chloride	10/25/2018	<1.0	1.0	0.365	2	4/21/2016	NA	4/24/2018
MW 31R	Vinyl Chloride	4/15/2019	<1.0	1.0	0.229	2	4/21/2016	NA	4/24/2018
MW 31R	Vinyl Chloride	10/7/2019	<1.0	1.0	0.229	2	4/21/2016	NA	4/24/2018
MW 31R	Vinyl Chloride	4/22/2020	<1.0	1.0	0.500	2	4/21/2016	NA	4/24/2018
MW 31R	Vinyl Chloride	10/1/2020	<1.0	1.0	0.500	2	4/21/2016	NA	4/24/2018
MW 31R	Vinyl Chloride	4/8/2021	<1.0	1.0	0.500	2	4/21/2016	NA	4/24/2018
MW 31R	Vinyl Chloride	10/29/2021	<1.0	1.0	0.500	2	4/21/2016	NA	4/24/2018
MW 31R	Vinyl Chloride	4/25/2022	<1.0	1.0	0.500	2	4/21/2016	NA	4/24/2018
MW 31R	Vinyl Chloride	10/17/2022	<1.0	1.0	0.500	2	4/21/2016	NA	4/24/2018
MW 31R	Vinyl Chloride	4/10/2023	<1.0	1.0	0.500	2	4/21/2016	NA	4/24/2018
MW 31R	Vinyl Chloride	10/27/2023	<1.0	1.0	0.500	2	4/21/2016	NA	4/24/2018
MW 31R	Vinyl Chloride	4/2/2024	<1.0	1.0	0.500	2	4/21/2016	NA	4/24/2018
MW 31R	Vinyl Chloride	10/10/2024	<1.0	1.0	0.500	2	4/21/2016	NA	4/24/2018

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-35	Barium	4/21/2016	---	571.69	---	2,000.00	4/21/2016	NA	4/24/2018
MW-35	Barium	10/17/2016	1090	571.69	57.701	2,000.00	4/21/2016	NA	4/24/2018
MW-35	Barium	4/21/2017	1170	571.69	327.423	2,000.00	4/21/2016	NA	4/24/2018
MW-35	Barium	10/16/2017	1290	571.69	1068.357	2,000.00	4/21/2016	NA	4/24/2018
MW-35	Barium	4/24/2018	1180	571.69	1111.929	2,000.00	4/21/2016	NA	4/24/2018
MW-35	Barium	10/25/2018	1120	571.69	1105.722	2,000.00	4/21/2016	NA	4/24/2018
MW-35	Barium	4/15/2019	1060	1019.23	1047.098	2,000.00	4/21/2016	NA	4/24/2018
MW-35	Barium	10/7/2019	1180	608.7165	1067.427	2,000.00	4/21/2016	NA	4/24/2018
MW-35	Barium	4/22/2020	1130	602.3	1064.575	2,000.00	4/21/2016	NA	4/24/2018
MW-35R	Barium	10/1/2020	1300	595.6	---	2,000.00	4/21/2016	NA	4/24/2018
MW-35R	Barium	4/8/2021	1290	636.93	---	2,000.00	4/21/2016	NA	4/24/2018
MW-35R	Barium	10/29/2021	1370	1880.00	---	2,000.00	4/21/2016	NA	4/24/2018
MW-35R	Barium	4/25/2022	1150	1880.00	1169.105	2,000.00	4/21/2016	NA	4/24/2018
MW-35R	Barium	10/17/2022	1420	1880.00	1168.859	2,000.00	4/21/2016	NA	4/24/2018
MW-35R	Barium	4/10/2023	1100	1880.00	1073.517	2,000.00	4/21/2016	NA	4/24/2018
MW-35R	Barium	10/27/2023	1890	1880.00	964.472	2,000.00	4/21/2016	NA	4/24/2018
MW-35R	Barium	4/2/2024	1590	1880.00	1111.884	2,000.00	4/21/2016	NA	4/24/2018
MW-35R	Barium	10/10/2024	Dry	1880.00	1111.884	2,000.00	4/21/2016	NA	4/24/2018

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KEY:	SSI	SSL LCL>GWPS
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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-35	Cobalt	4/21/2016	---	34.1	---	34.1	4/8/2021	NA	4/24/2018
MW-35	Cobalt	10/17/2016	---	34.1	---	34.1	4/8/2021	NA	4/24/2018
MW-35	Cobalt	4/21/2017	---	34.1	---	34.1	4/8/2021	NA	4/24/2018
MW-35	Cobalt	10/16/2017	---	12.4	---	12.4	4/8/2021	NA	4/24/2018
MW-35	Cobalt	4/24/2018	---	12.4	---	12.4	4/8/2021	NA	4/24/2018
MW-35	Cobalt	10/25/2018	---	12.4	---	12.4	4/8/2021	NA	4/24/2018
MW-35	Cobalt	4/15/2019	---	12.4	---	12.4	4/8/2021	NA	4/24/2018
MW-35	Cobalt	10/7/2019	---	12.4	---	12.4	4/8/2021	NA	4/24/2018
MW-35	Cobalt	4/22/2020	---	12.4	---	12.4	4/8/2021	NA	4/24/2018
MW-35R	Cobalt	10/1/2020	7.2	7.8	---	12.4	4/8/2021	NA	4/24/2018
MW-35R	Cobalt	4/8/2021	9.4	7.8	---	12.4	4/8/2021	NA	4/24/2018
MW-35R	Cobalt	10/29/2021	8.3	7.8	---	12.4	4/8/2021	NA	4/24/2018
MW-35R	Cobalt	4/25/2022	5.9	12.4	5.937	12.4	4/8/2021	NA	4/24/2018
MW-35R	Cobalt	10/17/2022	7.9	12.4	6.156	12.4	4/8/2021	NA	4/24/2018
MW-35R	Cobalt	4/10/2023	5.7	12.4	5.373	12.4	4/8/2021	NA	4/24/2018
MW-35R	Cobalt	10/27/2023	10.7	12.4	4.817	12.4	4/8/2021	NA	4/24/2018
MW-35R	Cobalt	4/2/2024	8.9	12.4	5.848	12.4	4/8/2021	NA	4/24/2018
MW-35R	Cobalt	10/10/2024	Dry	12.4	5.848	12.4	4/8/2021	NA	4/24/2018

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-35	Nickel	4/21/2016	---	31.6	---	100	4/24/2018	NA	4/24/2018
MW-35	Nickel	10/17/2016	36.8	31.6	0.000	100	4/24/2018	NA	4/24/2018
MW-35	Nickel	4/21/2017	48.0	31.6	11.092	100	4/24/2018	NA	4/24/2018
MW-35	Nickel	10/16/2017	49.9	31.6	38.545	100	4/24/2018	NA	4/24/2018
MW-35	Nickel	4/24/2018	45.0	31.6	44.841	100	4/24/2018	NA	4/24/2018
MW-35	Nickel	10/25/2018	38.7	31.6	39.635	100	4/24/2018	NA	4/24/2018
MW-35	Nickel	4/15/2019	34.6	31.6	34.100	100	4/24/2018	NA	4/24/2018
MW-35	Nickel	10/7/2019	38.4	31.6	34.107	100	4/24/2018	NA	4/24/2018
MW-35	Nickel	4/22/2020	35.0	31.6	34.117	100	4/24/2018	NA	4/24/2018
MW-35R	Nickel	10/1/2020	38.6	20.5	34.117	100	4/24/2018	NA	4/24/2018
MW-35R	Nickel	4/8/2021	34.0	20.5	---	100	4/24/2018	NA	4/24/2018
MW-35R	Nickel	10/29/2021	25.1	20.5	---	100	4/24/2018	NA	4/24/2018
MW-35R	Nickel	4/25/2022	26.4	22.1	23.501	100	4/24/2018	NA	4/24/2018
MW-35R	Nickel	10/17/2022	23.0	22.1	21.488	100	4/24/2018	NA	4/24/2018
MW-35R	Nickel	4/10/2023	26.0	22.1	23.340	100	4/24/2018	NA	4/24/2018
MW-35R	Nickel	10/27/2023	21.3	31.6	21.300	100	4/24/2018	NA	4/24/2018
MW-35R	Nickel	4/2/2024	25.6	31.6	21.358	100	4/24/2018	NA	4/24/2018
MW-35R	Nickel	10/10/2024	Dry	31.6	21.358	100	4/24/2018	NA	4/24/2018

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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-35	1,1-dichloroethane	4/21/2016	---	1	---	140	4/21/2016	NA	4/24/2018
MW-35	1,1-dichloroethane	10/17/2016	10.8	1	0.000	140	4/21/2016	NA	4/24/2018
MW-35	1,1-dichloroethane	4/21/2017	9.8	1	0.175	140	4/21/2016	NA	4/24/2018
MW-35	1,1-dichloroethane	10/16/2017	9.8	1	3.535	140	4/21/2016	NA	4/24/2018
MW-35	1,1-dichloroethane	4/24/2018	12	1	9.370	140	4/21/2016	NA	4/24/2018
MW-35	1,1-dichloroethane	10/25/2018	5.5	1	6.073	140	4/21/2016	NA	4/24/2018
MW-35	1,1-dichloroethane	4/15/2019	5.7	1	4.498	140	4/21/2016	NA	4/24/2018
MW-35	1,1-dichloroethane	10/7/2019	5.7	1	3.479	140	4/21/2016	NA	4/24/2018
MW-35	1,1-dichloroethane	4/22/2020	5.0	1	5.086	140	4/21/2016	NA	4/24/2018
MW-35R	1,1-dichloroethane	10/1/2020	5.1	1	---	140	4/21/2016	NA	4/24/2018
MW-35R	1,1-dichloroethane	4/8/2021	4.9	1	---	140	4/21/2016	NA	4/24/2018
MW-35R	1,1-dichloroethane	10/29/2021	1.4	1	---	140	4/21/2016	NA	4/24/2018
MW-35R	1,1-dichloroethane	4/25/2022	2.0	1	1.088	140	4/21/2016	NA	4/24/2018
MW-35R	1,1-dichloroethane	10/17/2022	<1	1	0.000	140	4/21/2016	NA	4/24/2018
MW-35R	1,1-dichloroethane	4/10/2023	3.1	1	0.467	140	4/21/2016	NA	4/24/2018
MW-35R	1,1-dichloroethane	10/27/2023	<1	1	0.036	140	4/21/2016	NA	4/24/2018
MW-35R	1,1-dichloroethane	4/2/2024	<1	1	0.000	140	4/21/2016	NA	4/24/2018
MW-35R	1,1-dichloroethane	10/10/2024	Dry	1	0.000	140	4/21/2016	NA	4/24/2018

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-35	Benzene	4/21/2016	---	1	---	5	4/21/2016	NA	4/24/2018
MW-35	Benzene	10/17/2016	1.1	1	0.297	5	4/21/2016	NA	4/24/2018
MW-35	Benzene	4/21/2017	<1.0	1	0.297	5	4/21/2016	NA	4/24/2018
MW-35	Benzene	10/16/2017	1.3	1	0.365	5	4/21/2016	NA	4/24/2018
MW-35	Benzene	4/24/2018	1.4	1	0.601	5	4/21/2016	NA	4/24/2018
MW-35	Benzene	10/25/2018	<1.0	1	0.346	5	4/21/2016	NA	4/24/2018
MW-35	Benzene	4/15/2019	<1.0	1	0.346	5	4/21/2016	NA	4/24/2018
MW-35	Benzene	10/7/2019	<1.0	1	0.196	5	4/21/2016	NA	4/24/2018
MW-35	Benzene	4/22/2020	<1.0	1	0.500	5	4/21/2016	NA	4/24/2018
MW-35R	Benzene	10/1/2020	<1.0	1	0.500	5	4/21/2016	NA	4/24/2018
MW-35R	Benzene	4/8/2021	<1.0	1	0.500	5	4/21/2016	NA	4/24/2018
MW-35R	Benzene	10/29/2021	<1.0	1	0.500	5	4/21/2016	NA	4/24/2018
MW-35R	Benzene	4/25/2022	<1.0	1	0.500	5	4/21/2016	NA	4/24/2018
MW-35R	Benzene	10/17/2022	<1.0	1	0.500	5	4/21/2016	NA	4/24/2018
MW-35R	Benzene	4/10/2023	<1.0	1	0.500	5	4/21/2016	NA	4/24/2018
MW-35R	Benzene	10/27/2023	<1.0	1	0.500	5	4/21/2016	NA	4/24/2018
MW-35R	Benzene	4/2/2024	<1.0	1	0.500	5	4/21/2016	NA	4/24/2018
MW-35R	Benzene	10/10/2024	Dry	1	0.500	5	4/21/2016	NA	4/24/2018

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KEY:	SSI	SSL LCL>GWPS
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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-35R	Bis(2-ethylhexyl)phthalate	10/17/2022	78	6	---	6	4/21/2016	NA	4/24/2018
MW-35R	Bis(2-ethylhexyl)phthalate	1/5/2023	79	6	---	6	4/21/2016	NA	4/24/2018
MW-35R	Bis(2-ethylhexyl)phthalate	4/10/2023	6	6	---	6	4/21/2016	NA	4/24/2018
MW-35R	Bis(2-ethylhexyl)phthalate	10/27/2023	15	6	0.000	6	4/21/2016	NA	4/24/2018
MW-35R	Bis(2-ethylhexyl)phthalate	4/2/2024	---	6	0.000	6	4/21/2016	NA	4/24/2018
MW-35R	Bis(2-ethylhexyl)phthalate	10/10/2024	Dry	6	0.000	6	4/21/2016	NA	4/24/2018

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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-35	chloroethane	4/21/2016	---	1	---	2,800.00	4/21/2016	NA	4/24/2018
MW-35	chloroethane	10/17/2016	28.2	1	0.000	2,800.00	4/21/2016	NA	4/24/2018
MW-35	chloroethane	4/21/2017	21.8	1	0.000	2,800.00	4/21/2016	NA	4/24/2018
MW-35	chloroethane	10/16/2017	16.7	1	2.871	2,800.00	4/21/2016	NA	4/24/2018
MW-35	chloroethane	4/24/2018	28.9	1	17.118	2,800.00	4/21/2016	NA	4/24/2018
MW-35	chloroethane	10/25/2018	<1.0	1	2.778	2,800.00	4/21/2016	NA	4/24/2018
MW-35	chloroethane	4/15/2019	11.2	1	0.424	2,800.00	4/21/2016	NA	4/24/2018
MW-35	chloroethane	10/7/2019	16.8	1	0.441	2,800.00	4/21/2016	NA	4/24/2018
MW-35	chloroethane	4/22/2020	10.2	1	1.710	2,800.00	4/21/2016	NA	4/24/2018
MW-35R	chloroethane	10/1/2020	19.2	1	---	2,800.00	4/21/2016	NA	4/24/2018
MW-35R	chloroethane	4/8/2021	11.7	1	---	2,800.00	4/21/2016	NA	4/24/2018
MW-35R	chloroethane	10/29/2021	2.3	1	---	2,800.00	4/21/2016	NA	4/24/2018
MW-35R	chloroethane	4/25/2022	5.8	1	1.047	2,800.00	4/21/2016	NA	4/24/2018
MW-35R	chloroethane	10/17/2022	2.2	1	0.254	2,800.00	4/21/2016	NA	4/24/2018
MW-35R	chloroethane	4/10/2023	2.7	1	1.234	2,800.00	4/21/2016	NA	4/24/2018
MW-35R	chloroethane	10/27/2023	1.4	1	0.760	2,800.00	4/21/2016	NA	4/24/2018
MW-35R	chloroethane	4/2/2024	2.1	1	1.470	2,800.00	4/21/2016	NA	4/24/2018
MW-35R	chloroethane	10/10/2024	Dry	1	1.470	2,800.00	4/21/2016	NA	4/24/2018

Table 7
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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-35	Cis-1,2DCE	4/21/2016	---	1	---	70	4/21/2016	NA	4/24/2018
MW-35	Cis-1,2DCE	10/17/2016	9.3	1	0.000	70	4/21/2016	NA	4/24/2018
MW-35	Cis-1,2DCE	4/21/2017	6.4	1	0.000	70	4/21/2016	NA	4/24/2018
MW-35	Cis-1,2DCE	10/16/2017	9.7	1	1.480	70	4/21/2016	NA	4/24/2018
MW-35	Cis-1,2DCE	4/24/2018	13.9	1	6.191	70	4/21/2016	NA	4/24/2018
MW-35	Cis-1,2DCE	10/25/2018	4.8	1	3.968	70	4/21/2016	NA	4/24/2018
MW-35	Cis-1,2DCE	4/15/2019	5.1	1	3.303	70	4/21/2016	NA	4/24/2018
MW-35	Cis-1,2DCE	10/7/2019	4.7	1	1.808	70	4/21/2016	NA	4/24/2018
MW-35	Cis-1,2DCE	4/22/2020	3.2	1	3.450	70	4/21/2016	NA	4/24/2018
MW-35R	Cis-1,2DCE	10/1/2020	4.3	1	---	70	4/21/2016	NA	4/24/2018
MW-35R	Cis-1,2DCE	4/8/2021	4	1	---	70	4/21/2016	NA	4/24/2018
MW-35R	Cis-1,2DCE	10/29/2021	1.3	1	---	70	4/21/2016	NA	4/24/2018
MW-35R	Cis-1,2DCE	4/25/2022	1.6	1	0.955	70	4/21/2016	NA	4/24/2018
MW-35R	Cis-1,2DCE	10/17/2022	<1	1	0.078	70	4/21/2016	NA	4/24/2018
MW-35R	Cis-1,2DCE	4/10/2023	1.6	1	0.314	70	4/21/2016	NA	4/24/2018
MW-35R	Cis-1,2DCE	10/27/2023	<1	1	0.128	70	4/21/2016	NA	4/24/2018
MW-35R	Cis-1,2DCE	4/2/2024	<1	1	0.500	70	4/21/2016	NA	4/24/2018
MW-35R	Cis-1,2DCE	10/10/2024	Dry	1	0.500	70	4/21/2016	NA	4/24/2018

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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-35	Vinyl Chloride	4/21/2016	---	1	---	2	4/21/2016	NA	4/24/2018
MW-35	Vinyl Chloride	10/17/2016	1.8	1	0.060	2	4/21/2016	NA	4/24/2018
MW-35	Vinyl Chloride	4/21/2017	1.2	1	0.262	2	4/21/2016	NA	4/24/2018
MW-35	Vinyl Chloride	10/16/2017	<1.0	1	0.262	2	4/21/2016	NA	4/24/2018
MW-35	Vinyl Chloride	4/24/2018	2.1	1	0.568	2	4/21/2016	NA	4/24/2018
MW-35	Vinyl Chloride	10/25/2018	<1.0	1	0.182	2	4/21/2016	NA	4/24/2018
MW-35	Vinyl Chloride	4/15/2019	<1.0	1	0.000	2	4/21/2016	NA	4/24/2018
MW-35	Vinyl Chloride	10/7/2019	<1.0	1	0.000	2	4/21/2016	NA	4/24/2018
MW-35	Vinyl Chloride	4/22/2020	<1.0	1	0.500	2	4/21/2016	NA	4/24/2018
MW-35R	Vinyl Chloride	10/1/2020	1.1	1	---	2	4/21/2016	NA	4/24/2018
MW-35R	Vinyl Chloride	4/8/2021	<1.0	1	---	2	4/21/2016	NA	4/24/2018
MW-35R	Vinyl Chloride	10/29/2021	<1.0	1	---	2	4/21/2016	NA	4/24/2018
MW-35R	Vinyl Chloride	4/25/2022	<1.0	1	0.297	2	4/21/2016	NA	4/24/2018
MW-35R	Vinyl Chloride	10/17/2022	<1.0	1	0.500	2	4/21/2016	NA	4/24/2018
MW-35R	Vinyl Chloride	4/10/2023	<1.0	1	0.500	2	4/21/2016	NA	4/24/2018
MW-35R	Vinyl Chloride	10/27/2023	<1.0	1	0.500	2	4/21/2016	NA	4/24/2018
MW-35R	Vinyl Chloride	4/2/2024	<1.0	1	0.500	2	4/21/2016	NA	4/24/2018
MW-35R	Vinyl Chloride	10/10/2024	Dry	1	0.500	2	4/21/2016	NA	4/24/2018

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW 211	Arsenic	4/21/2016	33.3	89.3	13.060	89.3	NA	NA	4/24/2018
MW 211	Arsenic	10/17/2016	18	89.3	14.910	89.3	NA	NA	4/24/2018
MW 211	Arsenic	4/21/2017	48.7	89.3	19.350	89.3	NA	NA	4/24/2018
MW 211	Arsenic	10/16/2017	51.7	89.3	19.648	89.3	NA	NA	4/24/2018
MW 211	Arsenic	4/24/2018	21	89.3	13.901	89.3	NA	NA	4/24/2018
MW 211	Arsenic	10/25/2018	11.8	89.3	9.880	89.3	NA	NA	4/24/2018
MW 211	Arsenic	4/15/2019	52.8	89.3	9.570	89.3	NA	NA	4/24/2018
MW 211	Arsenic	10/7/2019	103	89.3	0.000	89.3	NA	NA	4/24/2018
MW 211	Arsenic	4/22/2020	197	89.3	0.000	89.3	NA	NA	4/24/2018
MW 211	Arsenic	10/1/2020	26.3	89.3	6.310	89.3	NA	NA	4/24/2018
MW 211	Arsenic	4/8/2021	50.8	89.3	5.365	89.3	NA	NA	4/24/2018
MW 211	Arsenic	10/29/2021	31.7	89.3	0.000	89.3	NA	NA	4/24/2018
MW 211	Arsenic	4/25/2022	138	89.3	0.602	89.3	NA	NA	4/24/2018
MW 211	Arsenic	10/17/2022	67.5	89.3	17.459	89.3	NA	NA	4/24/2018
MW 211	Arsenic	4/10/2023	104	89.3	31.324	89.3	NA	NA	4/24/2018
MW 211	Arsenic	10/27/2023	77.3	89.3	59.577	89.3	NA	NA	4/24/2018
MW 211	Arsenic	4/2/2024	18.6	89.3	24.888	89.3	NA	NA	4/24/2018
MW 211	Arsenic	10/10/2024	61.7	89.3	23.340	89.3	NA	NA	4/24/2018

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI	Resamples Due	5th Background Sample
							Initial Exceedance		
MW 211	Cobalt	4/21/2016	10.8	34.1	10.377	34.1	10/16/2017	NA	4/24/2018
MW 211	Cobalt	10/17/2016	12.9	34.1	9.298	34.1	10/16/2017	NA	4/24/2018
MW 211	Cobalt	4/21/2017	10.3	34.1	8.041	34.1	10/16/2017	NA	4/24/2018
MW 211	Cobalt	10/16/2017	16.4	12.4	9.339	12.4	10/16/2017	NA	4/24/2018
MW 211	Cobalt	4/24/2018	13.3	12.4	10.248	12.4	10/16/2017	NA	4/24/2018
MW 211	Cobalt	10/25/2018	10.3	12.4	9.145	12.4	10/16/2017	NA	4/24/2018
MW 211	Cobalt	4/15/2019	17	12.4	10.612	12.4	10/16/2017	NA	4/24/2018
MW 211	Cobalt	10/7/2019	14.9	12.4	10.553	12.4	10/16/2017	NA	4/24/2018
MW 211	Cobalt	4/22/2020	13.3	12.4	10.553	12.4	10/16/2017	NA	4/24/2018
MW 211	Cobalt	10/1/2020	10.3	7.8	10.553	12.4	10/16/2017	NA	4/24/2018
MW 211	Cobalt	4/8/2021	11.5	7.8	10.124	12.4	10/16/2017	NA	4/24/2018
MW 211	Cobalt	10/29/2021	13.6	7.8	10.344	12.4	10/16/2017	NA	4/24/2018
MW 211	Cobalt	4/25/2022	12.8	12.4	10.341	12.4	10/16/2017	NA	4/24/2018
MW 211	Cobalt	10/17/2022	13.3	12.4	11.709	12.4	10/16/2017	NA	4/24/2018
MW 211	Cobalt	4/10/2023	11.3	12.4	11.548	12.4	10/16/2017	NA	4/24/2018
MW 211	Cobalt	10/27/2023	10.7	12.4	10.583	12.4	10/16/2017	NA	4/24/2018
MW 211	Cobalt	4/2/2024	12.5	12.4	10.573	12.4	10/16/2017	NA	4/24/2018
MW 211	Cobalt	10/10/2024	12.9	12.4	10.645	12.4	10/16/2017	NA	4/24/2018

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW 211	Nickel	4/21/2016	39.7	31.6	33.815	100	4/21/2016	NA	4/24/2018
MW 211	Nickel	10/17/2016	37.5	31.6	34.934	100	4/21/2016	NA	4/24/2018
MW 211	Nickel	4/21/2017	34.9	31.6	33.910	100	4/21/2016	NA	4/24/2018
MW 211	Nickel	10/16/2017	35.3	31.6	34.242	100	4/21/2016	NA	4/24/2018
MW 211	Nickel	4/24/2018	35.8	31.6	34.529	100	4/21/2016	NA	4/24/2018
MW 211	Nickel	10/25/2018	33.8	31.6	33.950	100	4/21/2016	NA	4/24/2018
MW 211	Nickel	4/15/2019	43.6	31.6	31.950	100	4/21/2016	NA	4/24/2018
MW 211	Nickel	10/7/2019	26.9	31.6	26.942	100	4/21/2016	NA	4/24/2018
MW 211	Nickel	4/22/2020	38.3	31.6	27.327	100	4/21/2016	NA	4/24/2018
MW 211	Nickel	10/1/2020	30.5	20.5	25.955	100	4/21/2016	NA	4/24/2018
MW 211	Nickel	4/8/2021	28.7	20.5	25.195	100	4/21/2016	NA	4/24/2018
MW 211	Nickel	10/29/2021	44.3	20.5	26.954	100	4/21/2016	NA	4/24/2018
MW 211	Nickel	4/25/2022	28.1	22.1	23.880	100	4/21/2016	NA	4/24/2018
MW 211	Nickel	10/17/2022	28.5	22.1	23.063	100	4/21/2016	NA	4/24/2018
MW 211	Nickel	4/10/2023	27.2	22.1	22.378	100	4/21/2016	NA	4/24/2018
MW 211	Nickel	10/27/2023	30.5	31.6	26.936	100	4/21/2016	NA	4/24/2018
MW 211	Nickel	4/2/2024	30.0	31.6	27.288	100	4/21/2016	NA	4/24/2018
MW 211	Nickel	10/10/2024	33.0	31.6	27.378	100	4/21/2016	NA	4/24/2018

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI		
							Initial Exceedance	Resamples Due	5th Background Sample
MW 211	1,1-dichloroethane	4/21/2016	<1.0	1	0.500	140	10/17/2016	NA	4/24/2018
MW 211	1,1-dichloroethane	10/17/2016	2	1	0.000	140	10/17/2016	NA	4/24/2018
MW 211	1,1-dichloroethane	4/21/2017	1.2	1	0.210	140	10/17/2016	NA	4/24/2018
MW 211	1,1-dichloroethane	10/16/2017	1.4	1	0.548	140	10/17/2016	NA	4/24/2018
MW 211	1,1-dichloroethane	4/24/2018	1.0	1	0.892	140	10/17/2016	NA	4/24/2018
MW 211	1,1-dichloroethane	10/25/2018	<1.0	1	0.571	140	10/17/2016	NA	4/24/2018
MW 211	1,1-dichloroethane	4/15/2019	<1.0	1	0.337	140	10/17/2016	NA	4/24/2018
MW 211	1,1-dichloroethane	10/7/2019	<1.0	1	0.331	140	10/17/2016	NA	4/24/2018
MW 211	1,1-dichloroethane	4/22/2020	<1.0	1	0.500	140	10/17/2016	NA	4/24/2018
MW 211	1,1-dichloroethane	10/1/2020	<1.0	1	0.500	140	10/17/2016	NA	4/24/2018
MW 211	1,1-dichloroethane	4/8/2021	<1.0	1	0.500	140	10/17/2016	NA	4/24/2018
MW 211	1,1-dichloroethane	10/29/2021	<1.0	1	0.500	140	10/17/2016	NA	4/24/2018
MW 211	1,1-dichloroethane	4/25/2022	<1.0	1	0.500	140	10/17/2016	NA	4/24/2018
MW 211	1,1-dichloroethane	10/17/2022	<1.0	1	0.500	140	10/17/2016	NA	4/24/2018
MW 211	1,1-dichloroethane	4/10/2023	<1.0	1	0.500	140	10/17/2016	NA	4/24/2018
MW 211	1,1-dichloroethane	10/27/2023	<1.0	1	0.500	140	10/17/2016	NA	4/24/2018
MW 211	1,1-dichloroethane	4/2/2024	<1.0	1	0.500	140	10/17/2016	NA	4/24/2018
MW 211	1,1-dichloroethane	10/10/2024	<1.0	1	0.500	140	10/17/2016	NA	4/24/2018

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI	Resamples Due	5th Background Sample
							Initial Exceedance		
MW 211	Benzene	4/21/2016	<1.0	1	0.000	5	4/21/2017	NA	4/24/2018
MW 211	Benzene	10/17/2016	<1.0	1	0.500	5	4/21/2017	NA	4/24/2018
MW 211	Benzene	4/21/2017	1.5	1	0.162	5	4/21/2017	NA	4/24/2018
MW 211	Benzene	10/16/2017	<1.0	1	0.162	5	4/21/2017	NA	4/24/2018
MW 211	Benzene	4/24/2018	1.6	1	0.310	5	4/21/2017	NA	4/24/2018
MW 211	Benzene	10/25/2018	<1.0	1	0.310	5	4/21/2017	NA	4/24/2018
MW 211	Benzene	4/15/2019	1.0	1	0.285	5	4/21/2017	NA	4/24/2018
MW 211	Benzene	10/7/2019	<1.0	1	0.285	5	4/21/2017	NA	4/24/2018
MW 211	Benzene	4/22/2020	<1.0	1	0.331	5	4/21/2017	NA	4/24/2018
MW 211	Benzene	10/1/2020	<1.0	1	0.331	5	4/21/2017	NA	4/24/2018
MW 211	Benzene	4/8/2021	1.5	1	0.162	5	4/21/2017	NA	4/24/2018
MW 211	Benzene	10/29/2021	<1.0	1	0.162	5	4/21/2017	NA	4/24/2018
MW 211	Benzene	4/25/2022	1.5	1	0.321	5	4/21/2017	NA	4/24/2018
MW 211	Benzene	10/17/2022	<1.0	1	0.321	5	4/21/2017	NA	4/24/2018
MW 211	Benzene	4/10/2023	<1.0	1	0.162	5	4/21/2017	NA	4/24/2018
MW 211	Benzene	10/27/2023	<1.0	1	0.162	5	4/21/2017	NA	4/24/2018
MW 211	Benzene	4/2/2024	<1.0	1	0.500	5	4/21/2017	NA	4/24/2018
MW 211	Benzene	10/10/2024	1.2	1	0.263	5	4/21/2017	NA	4/24/2018

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI		
							Initial Exceedance	Resamples Due	5th Background Sample
MW 211	chlorobenzene	4/21/2016	8.1	1	7.350	100	4/21/2016	NA	4/24/2018
MW 211	chlorobenzene	10/17/2016	8.8	1	7.261	100	4/21/2016	NA	4/24/2018
MW 211	chlorobenzene	4/21/2017	8.3	1	7.642	100	4/21/2016	NA	4/24/2018
MW 211	chlorobenzene	10/16/2017	8.2	1	7.984	100	4/21/2016	NA	4/24/2018
MW 211	chlorobenzene	4/24/2018	8.7	1	8.154	100	4/21/2016	NA	4/24/2018
MW 211	chlorobenzene	10/25/2018	6.2	1	6.531	100	4/21/2016	NA	4/24/2018
MW 211	chlorobenzene	4/15/2019	7.5	1	6.374	100	4/21/2016	NA	4/24/2018
MW 211	chlorobenzene	10/7/2019	5.9	1	5.561	100	4/21/2016	NA	4/24/2018
MW 211	chlorobenzene	4/22/2020	6.1	1	5.569	100	4/21/2016	NA	4/24/2018
MW 211	chlorobenzene	10/1/2020	5.2	1	5.041	100	4/21/2016	NA	4/24/2018
MW 211	chlorobenzene	4/8/2021	5.3	1	5.104	100	4/21/2016	NA	4/24/2018
MW 211	chlorobenzene	10/29/2021	5.6	1	5.075	100	4/21/2016	NA	4/24/2018
MW 211	chlorobenzene	4/25/2022	5.0	1	4.981	100	4/21/2016	NA	4/24/2018
MW 211	chlorobenzene	10/17/2022	5.2	1	4.981	100	4/21/2016	NA	4/24/2018
MW 211	chlorobenzene	4/10/2023	4.1	1	4.229	100	4/21/2016	NA	4/24/2018
MW 211	chlorobenzene	10/27/2023	1.7	1	2.111	100	4/21/2016	NA	4/24/2018
MW 211	chlorobenzene	4/2/2024	4.4	1	2.078	100	4/21/2016	NA	4/24/2018
MW 211	chlorobenzene	10/10/2024	4.7	1	2.111	100	4/21/2016	NA	4/24/2018

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Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI	Resamples Due	5th Background Sample
							Initial Exceedance		
MW 211	chloroethane	4/21/2016	1.2	1	0.620	2,800.00	4/21/2016	NA	4/24/2018
MW 211	chloroethane	10/17/2016	2.7	1	0.370	2,800.00	4/21/2016	NA	4/24/2018
MW 211	chloroethane	4/21/2017	2.1	1	1.044	2,800.00	4/21/2016	NA	4/24/2018
MW 211	chloroethane	10/16/2017	2.4	1	1.338	2,800.00	4/21/2016	NA	4/24/2018
MW 211	chloroethane	4/24/2018	2.3	1	2.081	2,800.00	4/21/2016	NA	4/24/2018
MW 211	chloroethane	10/25/2018	<1.0	1	0.776	2,800.00	4/21/2016	NA	4/24/2018
MW 211	chloroethane	4/15/2019	<1.0	1	0.168	2,800.00	4/21/2016	NA	4/24/2018
MW 211	chloroethane	10/7/2019	<1.0	1	0.000	2,800.00	4/21/2016	NA	4/24/2018
MW 211	chloroethane	4/22/2020	<1.0	1	0.500	2,800.00	4/21/2016	NA	4/24/2018
MW 211	chloroethane	10/1/2020	<1.0	1	0.500	2,800.00	4/21/2016	NA	4/24/2018
MW 211	chloroethane	4/8/2021	<1.0	1	0.500	2,800.00	4/21/2016	NA	4/24/2018
MW 211	chloroethane	10/29/2021	<1.0	1	0.500	2,800.00	4/21/2016	NA	4/24/2018
MW 211	chloroethane	4/25/2022	<1.0	1	0.500	2,800.00	4/21/2016	NA	4/24/2018
MW 211	chloroethane	10/17/2022	<1.0	1	0.500	2,800.00	4/21/2016	NA	4/24/2018
MW 211	chloroethane	4/10/2023	<1.0	1	0.500	2,800.00	4/21/2016	NA	4/24/2018
MW 211	chloroethane	10/27/2023	<1.0	1	0.500	2,800.00	4/21/2016	NA	4/24/2018
MW 211	chloroethane	4/2/2024	<1.0	1	0.500	2,800.00	4/21/2016	NA	4/24/2018
MW 211	chloroethane	10/10/2024	<1.0	1	0.500	2,800.00	4/21/2016	NA	4/24/2018

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KEY:	SSI	SSL LCL>GWPS
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Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI	Resamples Due	5th Background Sample
							Initial Exceedance		
MW 211	Cis-1,2DCE	4/21/2016	1.9	1	1.137	70	4/21/2016	NA	4/24/2018
MW 211	Cis-1,2DCE	10/17/2016	3.9	1	1.178	70	4/21/2016	NA	4/24/2018
MW 211	Cis-1,2DCE	4/21/2017	1.6	1	1.079	70	4/21/2016	NA	4/24/2018
MW 211	Cis-1,2DCE	10/16/2017	2.1	1	1.155	70	4/21/2016	NA	4/24/2018
MW 211	Cis-1,2DCE	4/24/2018	1	1	0.679	70	4/21/2016	NA	4/24/2018
MW 211	Cis-1,2DCE	10/25/2018	<1.0	1	0.479	70	4/21/2016	NA	4/24/2018
MW 211	Cis-1,2DCE	4/15/2019	<1.0	1	0.138	70	4/21/2016	NA	4/24/2018
MW 211	Cis-1,2DCE	10/7/2019	<1.0	1	0.331	70	4/21/2016	NA	4/24/2018
MW 211	Cis-1,2DCE	4/22/2020	<1.0	1	0.500	70	4/21/2016	NA	4/24/2018
MW 211	Cis-1,2DCE	10/1/2020	<1.0	1	0.500	70	4/21/2016	NA	4/24/2018
MW 211	Cis-1,2DCE	4/8/2021	<1.0	1	0.500	70	4/21/2016	NA	4/24/2018
MW 211	Cis-1,2DCE	10/29/2021	<1.0	1	0.500	70	4/21/2016	NA	4/24/2018
MW 211	Cis-1,2DCE	4/25/2022	<1.0	1	0.500	70	4/21/2016	NA	4/24/2018
MW 211	Cis-1,2DCE	10/17/2022	<1.0	1	0.500	70	4/21/2016	NA	4/24/2018
MW 211	Cis-1,2DCE	4/10/2023	<1.0	1	0.500	70	4/21/2016	NA	4/24/2018
MW 211	Cis-1,2DCE	10/27/2023	<1.0	1	0.500	70	4/21/2016	NA	4/24/2018
MW 211	Cis-1,2DCE	4/2/2024	<1.0	1	0.500	70	4/21/2016	NA	4/24/2018
MW 211	Cis-1,2DCE	10/10/2024	<1.0	1	0.500	70	4/21/2016	NA	4/24/2018

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.

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Permit No.42-SDP-01-72P

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)
MW-48A	Arsenic	4/21/2016	34.6	89.3	0.000	89.3
MW-48A	Arsenic	10/17/2016	33.1	89.3	31.709	89.3
MW-48A	Arsenic	4/21/2017	26	89.3	26.983	89.3
MW-48A	Arsenic	10/16/2017	22	89.3	21.928	89.3
MW-48A	Arsenic	4/24/2018	132	89.3	0.000	89.3
MW-48A	Arsenic	10/25/2018	19.3	89.3	0.000	89.3
MW-48A	Arsenic	4/15/2019	25.5	89.3	0.000	89.3
MW-48A	Arsenic	10/7/2019	61.6	89.3	0.000	89.3
MW-48A	Arsenic	4/22/2020	19.6	89.3	7.685	89.3
MW-48A	Arsenic	10/1/2020	42.2	89.3	15.041	89.3
MW-48A	Arsenic	4/8/2021	35.8	89.3	19.369	89.3
MW-48A	Arsenic	10/29/2021	12.2	89.3	11.074	89.3
MW-48A	Arsenic	4/25/2022	45.1	89.3	16.262	89.3
MW-48A	Arsenic	10/17/2022	170	89.3	0.000	89.3
MW-48A	Arsenic	4/10/2023	122	89.3	2.872	89.3
MW-48A	Arsenic	10/27/2023	26	89.3	11.769	89.3
MW-48A	Arsenic	4/2/2024	17.1	89.3	0.000	89.3
MW-48A	Arsenic	10/10/2024	18.3	89.3	0.000	89.3
MW-48A	Cobalt	4/21/2016	2.2	34.1	2.281	34.1
MW-48A	Cobalt	10/17/2016	2.1	34.1	2.001	34.1
MW-48A	Cobalt	4/21/2017	2.2	34.1	1.882	34.1
MW-48A	Cobalt	10/16/2017	1.8	12.4	1.852	12.4
MW-48A	Cobalt	4/24/2018	1.8	12.4	1.733	12.4
MW-48A	Cobalt	10/25/2018	2.4	12.4	1.697	12.4
MW-48A	Cobalt	4/15/2019	2.4	12.4	1.693	12.4
MW-48A	Cobalt	10/7/2019	2.8	12.4	1.865	12.4
MW-48A	Cobalt	4/22/2020	1.7	12.4	1.787	12.4
MW-48A	Cobalt	10/1/2020	1.0	7.8	1.042	12.4
MW-48A	Cobalt	4/8/2021	1.0	7.8	0.625	12.4
MW-48A	Cobalt	10/29/2021	1.0	7.8	0.763	12.4
MW-48A	Cobalt	4/25/2022	0.6	12.4	0.655	12.4
MW-48A	Cobalt	10/17/2022	2.2	12.4	0.385	12.4
MW-48A	Cobalt	4/10/2023	1.3	12.4	0.475	12.4
MW-48A	Cobalt	10/27/2023	1.0	12.4	0.475	12.4
MW-48A	Cobalt	4/2/2024	0.9	12.4	0.654	12.4
MW-48A	Cobalt	10/10/2024	0.6	12.4	0.610	12.4
MW-48A	Selenium	4/21/2016	<4	4.9	---	50.0
MW-48A	Selenium	10/17/2016	<4	4.9	---	50.0
MW-48A	Selenium	4/21/2017	<4	4.9	---	50.0
MW-48A	Selenium	10/16/2017	<4	4.9	---	50.0
MW-48A	Selenium	4/24/2018	<4	4.9	---	50.0
MW-48A	Selenium	10/25/2018	<4	4.9	---	50.0
MW-48A	Selenium	4/15/2019	<4	4.9	---	50.0
MW-48A	Selenium	10/7/2019	<4	4.9	---	50.0
MW-48A	Selenium	4/22/2020	<4	4.9	---	50.0
MW-48A	Selenium	10/1/2020	<4	4.9	---	50.0
MW-48A	Selenium	4/8/2021	<4	4.9	---	50.0
MW-48A	Selenium	10/29/2021	<4	4.9	---	50.0
MW-48A	Selenium	4/25/2022	5.4	4.9	0.850	50.0
MW-48A	Selenium	10/17/2022	<4	4.9	0.850	50.0
MW-48A	Selenium	4/10/2023	<4	4.9	0.850	50.0
MW-48A	Selenium	10/27/2023	<4	4.9	0.850	50.0
MW-48A	Selenium	4/2/2024	<4	4.9	2.000	50.0
MW-48A	Selenium	10/10/2024	<4	4.9	2.000	50.0

* = documented false positive

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
Rural Iowa Sanitary Landfill
Permit No.42-SDP-01-72P

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)
MW 49A	Barium	4/21/2016	478	571.69	433.867	2,000.00
MW 49A	Barium	10/17/2016	707	571.69	419.777	2,000.00
MW 49A	Barium	4/21/2017	465	571.69	394.145	2,000.00
MW 49A	Barium	10/16/2017	373	571.69	338.303	2,000.00
MW 49A	Barium	4/24/2018	704	571.69	339.219	2,000.00
MW 49A	Barium	10/25/2018	453	571.69	330.78	2,000.00
MW 49A	Barium	4/15/2019	668	1019.2	359.371	2,000.00
MW 49A	Barium	10/7/2019	393	608.72	372.755	2,000.00
MW 49A	Barium	4/22/2020	676	602.29	375.916	2,000.00
MW 49A	Barium	10/1/2020	531	595.60	409.691	2,000.00
MW 49A	Barium	4/8/2021	583	636.93	406.731	2,000.00
MW 49A	Barium	10/29/2021	346	1880.00	370.559	2,000.00
MW 49A	Barium	4/25/2022	748	1880.00	357.226	2,000.00
MW 49A	Barium	10/17/2022	656	1880.00	375.916	2,000.00
MW 49A	Barium	4/10/2023	686	1880.00	453.5748	2,000.00
MW 49A	Barium	10/27/2023	609	1880.00	624.3349	2,000.00
MW 49A	Barium	4/2/2024	626	1880.00	614.853	2,000.00
MW 49A	Barium	10/10/2024	616	1880.00	603.767	2,000.00

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Permit No.42-SDP-01-72P

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)
MW 49A	Cobalt	4/21/2016	14.5	34.1	12.096	34.1
MW 49A	Cobalt	10/17/2016	1.1	34.1	3.187	34.1
MW 49A	Cobalt	4/21/2017	14.9	34.1	3.321	34.1
MW 49A	Cobalt	10/16/2017	5.9	12.4	1.15	12.4
MW 49A	Cobalt	4/24/2018	24.5	12.4	0	12.4
MW 49A	Cobalt	10/25/2018	7.3	12.4	3.107	12.4
MW 49A	Cobalt	4/15/2019	18	12.4	3.476	12.4
MW 49A	Cobalt	10/7/2019	2.7	12.4	1.445	12.4
MW 49A	Cobalt	4/22/2020	19.1	12.4	2.297	12.4
MW 49A	Cobalt	10/1/2020	16.8	7.8	5.103	12.4
MW 49A	Cobalt	4/8/2021	21.0	7.8	5.122	12.4
MW 49A	Cobalt	10/29/2021	2.6	7.8	5.039	12.4
MW 49A	Cobalt	4/25/2022	16.5	12.4	4.794	12.4
MW 49A	Cobalt	10/17/2022	20.3	12.4	5.025	12.4
MW 49A	Cobalt	4/10/2023	20.6	12.4	5.031	12.4
MW 49A	Cobalt	10/27/2023	20.5	12.4	17.137	12.4
MW 49A	Cobalt	4/2/2024	19.9	12.4	19.961	12.4
MW 49A	Cobalt	10/10/2024	10.2	12.4	11.829	12.4

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)
MW 49A	Copper	4/21/2016	4.9	13.7	---	1300
MW 49A	Copper	10/17/2016	<4	13.7	---	1300
MW 49A	Copper	4/21/2017	<4	13.7	---	1300
MW 49A	Copper	10/16/2017	<4	13.7	---	1300
MW 49A	Copper	4/24/2018	<4	13.7	---	1300
MW 49A	Copper	10/25/2018	5.9	13.7	---	1300
MW 49A	Copper	4/15/2019	<4	13.7	---	1300
MW 49A	Copper	10/7/2019	<4	13.7	---	1300
MW 49A	Copper	4/22/2020	4.7	13.7	---	1300
MW 49A	Copper	10/1/2020	4	13.7	---	1300
MW 49A	Copper	4/8/2021	<4	13.7	---	1300
MW 49A	Copper	10/29/2021	7	13.7	---	1300
MW 49A	Copper	4/25/2022	6.6	13.7	---	1300
MW 49A	Copper	10/17/2022	13.9	13.7	1.604	1300
MW 49A	Copper	4/10/2023	39.5	13.7	0.000	1300
MW 49A	Copper	10/27/2023	5.4	13.7	0.000	1300
MW 49A	Copper	4/2/2024	5.3	11.3	0.000	1300
MW 49A	Copper	10/10/2024	<4	11.3	0.000	1300

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)
MW 49A	Nickel	4/21/2016	38.5	31.6	---	100
MW 49A	Nickel	10/17/2016	<4.0	31.6	---	100
MW 49A	Nickel	4/21/2017	37.6	31.6	7.606	100
MW 49A	Nickel	10/16/2017	13.3	31.6	1.499	100
MW 49A	Nickel	4/24/2018	61.9	31.6	0.000	100
MW 49A	Nickel	10/25/2018	9.3	31.6	1.859	100
MW 49A	Nickel	4/15/2019	41.9	31.6	2.339	100
MW 49A	Nickel	10/7/2019	7.4	31.6	0.000	100
MW 49A	Nickel	4/22/2020	49.6	31.6	1.367	100
MW 49A	Nickel	10/1/2020	46.9	20.5	13.362	100
MW 49A	Nickel	4/8/2021	48.9	20.5	14.009	100
MW 49A	Nickel	10/29/2021	7.3	20.5	13.926	100
MW 49A	Nickel	4/25/2022	50.7	22.1	13.954	100
MW 49A	Nickel	10/17/2022	54.3	22.1	14.287	100
MW 49A	Nickel	4/10/2023	55.4	22.1	14.670	100
MW 49A	Nickel	10/27/2023	50.5	31.6	49.789	100
MW 49A	Nickel	4/2/2024	49.4	31.6	48.989	100
MW 49A	Nickel	10/10/2024	45.6	31.6	46.728	100

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)
MW 49A	Acetone	4/21/2016	<10	10	---	6300
MW 49A	Acetone	10/17/2016	<10	10	---	6300
MW 49A	Acetone	4/21/2017	<10	10	---	6300
MW 49A	Acetone	10/16/2017	<10	10	---	6300
MW 49A	Acetone	4/24/2018	<10	10	---	6300
MW 49A	Acetone	10/25/2018	<10	10	---	6300
MW 49A	Acetone	4/15/2019	<10	10	---	6300
MW 49A	Acetone	10/7/2019	<10	10	---	6300
MW 49A	Acetone	4/22/2020	<10	10	---	6300
MW 49A	Acetone	10/1/2020	<10	10	---	6300
MW 49A	Acetone	4/8/2021	<10	10	---	6300
MW 49A	Acetone	10/29/2021	281.0	10	0.000	6300
MW 49A	Acetone	4/25/2022	23.8	10	0.000	6300
MW 49A	Acetone	10/17/2022	<10	10	0.000	6300
MW 49A	Acetone	4/10/2023	<10	10	0.000	6300
MW 49A	Acetone	10/27/2023	<10	10	0.000	6300
MW 49A	Acetone	4/2/2024	<10	10	5.000	6300
MW 49A	Acetone	10/10/2024	<10	10	5.000	6300

Table 7
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KEY:	SSI	SSL LCL>GWPS
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Note: The absence of shading indicates that the condition does not exist.

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)
MW 49A	Benzene	4/21/2016	3.4	1	2.411	5
MW 49A	Benzene	10/17/2016	2.7	1	2.296	5
MW 49A	Benzene	4/21/2017	1.6	1	1.311	5
MW 49A	Benzene	10/16/2017	4.0	1	1.713	5
MW 49A	Benzene	4/24/2018	3.4	1	1.713	5
MW 49A	Benzene	10/25/2018	4.0	1	1.914	5
MW 49A	Benzene	4/15/2019	3.2	1	3.165	5
MW 49A	Benzene	10/7/2019	1.6	1	1.845	5
MW 49A	Benzene	4/22/2020	2.4	1	1.585	5
MW 49A	Benzene	10/1/2020	2.9	1	1.702	5
MW 49A	Benzene	4/8/2021	3.4	1	1.672	5
MW 49A	Benzene	10/29/2021	7.0	1	1.466	5
MW 49A	Benzene	4/25/2022	5.9	1	2.485	5
MW 49A	Benzene	10/17/2022	5.8	1	3.740	5
MW 49A	Benzene	4/10/2023	4.2	1	4.369	5
MW 49A	Benzene	10/27/2023	3.4	1	3.380	5
MW 49A	Benzene	4/2/2024	2.8	1	2.521	5
MW 49A	Benzene	10/10/2024	2.4	1	2.279	5

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Rural Iowa Sanitary Landfill
Permit No.42-SDP-01-72P

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)
MW 49A	chloroethane	4/21/2016	1.7	1	0.000	2,800.00
MW 49A	chloroethane	10/17/2016	1.8	1	0.000	2,800.00
MW 49A	chloroethane	4/21/2017	2.0	1	1.698	2,800.00
MW 49A	chloroethane	10/16/2017	3.0	1	1.423	2,800.00
MW 49A	chloroethane	4/24/2018	3.3	1	1.659	2,800.00
MW 49A	chloroethane	10/25/2018	1.1	1	1.172	2,800.00
MW 49A	chloroethane	4/15/2019	1.9	1	1.132	2,800.00
MW 49A	chloroethane	10/7/2019	<1.0	1	0.275	2,800.00
MW 49A	chloroethane	4/22/2020	2.0	1	0.541	2,800.00
MW 49A	chloroethane	10/1/2020	2.7	1	0.691	2,800.00
MW 49A	chloroethane	4/8/2021	5.7	1	0.154	2,800.00
MW 49A	chloroethane	10/29/2021	6.3	1	1.657	2,800.00
MW 49A	chloroethane	4/25/2022	5.4	1	3.149	2,800.00
MW 49A	chloroethane	10/17/2022	4.9	1	4.887	2,800.00
MW 49A	chloroethane	4/10/2023	3.5	1	3.649	2,800.00
MW 49A	chloroethane	10/27/2023	3.0	1	2.866	2,800.00
MW 49A	chloroethane	4/2/2024	3.5	1	2.763	2,800.00
MW 49A	chloroethane	10/10/2024	2.4	1	2.485	2,800.00

Table 7
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Permit No.42-SDP-01-72P

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)
MW 49A	cis-1,2-dichloroethene	4/21/2016	<1.0	1	0.500	70
MW 49A	cis-1,2-dichloroethene	10/17/2016	<1.0	1	0.500	70
MW 49A	cis-1,2-dichloroethene	4/21/2017	<1.0	1	0.500	70
MW 49A	cis-1,2-dichloroethene	10/16/2017	<1.0	1	0.500	70
MW 49A	cis-1,2-dichloroethene	4/24/2018	<1.0	1	0.500	70
MW 49A	cis-1,2-dichloroethene	10/25/2018	<1.0	1	0.500	70
MW 49A	cis-1,2-dichloroethene	4/15/2019	<1.0	1	0.500	70
MW 49A	cis-1,2-dichloroethene	10/7/2019	<1.0	1	0.500	70
MW 49A	cis-1,2-dichloroethene	4/22/2020	<1.0	1	0.500	70
MW 49A	cis-1,2-dichloroethene	10/1/2020	1.2	1	0.263	70
MW 49A	cis-1,2-dichloroethene	4/8/2021	3.9	1	0.000	70
MW 49A	cis-1,2-dichloroethene	10/29/2021	8	1	0.000	70
MW 49A	cis-1,2-dichloroethene	4/25/2022	6.4	1	1.376	70
MW 49A	cis-1,2-dichloroethene	10/17/2022	3.4	1	2.883	70
MW 49A	cis-1,2-dichloroethene	4/10/2023	1.4	1	1.316	70
MW 49A	cis-1,2-dichloroethene	10/27/2023	2.7	1	0.983	70
MW 49A	cis-1,2-dichloroethene	4/2/2024	3.6	1	1.605	70
MW 49A	cis-1,2-dichloroethene	10/10/2024	1.8	1	1.221	70

Table 7
Summary of Ongoing & Newly Identified SSI
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Rural Iowa Sanitary Landfill
Permit No.42-SDP-01-72P

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)
MW 49A	vinyl chloride	4/21/2016	<1.0	1	0.31	2
MW 49A	vinyl chloride	10/17/2016	<1.0	1	0.162	2
MW 49A	vinyl chloride	4/21/2017	<1.0	1	0.5	2
MW 49A	vinyl chloride	10/16/2017	1.3	1	0.229	2
MW 49A	vinyl chloride	4/24/2018	1.1	1	0.365	2
MW 49A	vinyl chloride	10/25/2018	<1.0	1	0.365	2
MW 49A	vinyl chloride	4/15/2019	<1.0	1	0.365	2
MW 49A	vinyl chloride	10/7/2019	<1.0	1	0.297	2
MW 49A	vinyl chloride	4/22/2020	<1.0	1	0.500	2
MW 49A	vinyl chloride	10/1/2020	<1.0	1	0.500	2
MW 49A	vinyl chloride	4/8/2021	3.2	1	0.000	2
MW 49A	vinyl chloride	10/29/2021	5	1	0.000	2
MW 49A	vinyl chloride	4/25/2022	3.9	1	0.897	2
MW 49A	vinyl chloride	10/17/2022	2.7	1	2.528	2
MW 49A	vinyl chloride	4/10/2023	1.6	1	1.569	2
MW 49A	vinyl chloride	10/27/2023	1.4	1	1.045	2
MW 49A	vinyl chloride	4/2/2024	2.9	1	1.257	2
MW 49A	vinyl chloride	10/10/2024	1.8	1	1.137	2

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

Table 8 - Summary of Ongoing and Newly Identified SSL

Table 8
Summary of Ongoing & Newly Identified SSL
Annual Water Quality Report
Rural Iowa Sanitary Landfill
Permit No.42-SDP-01-72P

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	95% UCL (ug/L)	GWPS Limit (ug/L)	SSL Initial Exceedance	Compliance Date 1st Occurrence	Compliance Date Most Recent	Compliance Date Duration (years)
MW 7	Arsenic	4/21/2016	146	288.709	89.3	4/21/2016	NA	NA	NA
MW 7	Arsenic	10/17/2016	165	210.090	89.3	4/21/2016	NA	NA	NA
MW 7	Arsenic	4/21/2017	197	217.277	89.3	4/21/2016	NA	NA	NA
MW 7	Arsenic	10/16/2017	115	196.173	89.3	4/21/2016	NA	NA	NA
MW 7	Arsenic	4/24/2018	<4.0	220.258	89.3	4/21/2016	NA	NA	NA
MW 7	Arsenic	10/25/2018	36.6	189.853	89.3	4/21/2016	NA	NA	NA
MW 7	Arsenic	4/15/2019	457	397.711	89.3	4/21/2016	NA	NA	NA
MW 7	Arsenic	10/7/2019	33.5	387.585	89.3	4/21/2016	NA	NA	NA
MW 7	Arsenic	4/22/2020	88.8	393.471	89.3	4/21/2016	NA	NA	NA
MW 7	Arsenic	10/1/2020	306	452.183	89.3	4/21/2016	NA	NA	NA
MW 7	Arsenic	4/8/2021	181	292.485	89.3	4/21/2016	NA	NA	NA
MW 7	Arsenic	10/29/2021	117	286.797	89.3	4/21/2016	NA	NA	NA
MW 7	Arsenic	4/25/2022	104	285.631	89.3	4/21/2016	NA	NA	NA
MW 7	Arsenic	10/17/2022	255	245.686	89.3	4/21/2016	NA	NA	NA
MW 7	Arsenic	4/10/2023	158	238.870	89.3	4/21/2016	NA	NA	NA
MW 7	Arsenic	10/27/2023	275	293.112	89.3	4/21/2016	NA	NA	NA
MW 7	Arsenic	4/2/2024	167	284.153	89.3	4/21/2016	NA	NA	NA
MW 7	Arsenic	10/10/2024	215	266.901	89.3	4/21/2016	NA	NA	NA

Table 8
Summary of Ongoing & Newly Identified SSL
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Rural Iowa Sanitary Landfill
Permit No.42-SDP-01-72P

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	95% UCL (ug/L)	GWPS Limit (ug/L)	SSL Initial Exceedance	Compliance Date	Compliance Date	Compliance Date
							1st Occurrence	Most Recent	Duration (years)
MW 13R	Arsenic	4/21/2016	299	265.775	89.3	10/16/2017	NA	NA	NA
MW 13R	Arsenic	10/17/2016	143	273.513	89.3	10/16/2017	NA	NA	NA
MW 13R	Arsenic	4/21/2017	156	280.641	89.3	10/16/2017	NA	NA	NA
MW 13R	Arsenic	10/16/2017	179	278.239	89.3	10/16/2017	NA	NA	NA
MW 13R	Arsenic	4/24/2018	105	182.188	89.3	10/16/2017	NA	NA	NA
MW 13R	Arsenic	10/25/2018	75.3	184.367	89.3	10/16/2017	NA	NA	NA
MW 13R	Arsenic	4/15/2019	145	179.470	89.3	10/16/2017	NA	NA	NA
MW 13R	Arsenic	10/7/2019	72.2	139.157	89.3	10/16/2017	NA	NA	NA
MW 13R	Arsenic	4/22/2020	506	443.113	89.3	10/16/2017	NA	NA	NA
MW 13R	Arsenic	10/1/2020	140	446.700	89.3	10/16/2017	NA	NA	NA
MW 13R	Arsenic	4/8/2021	118	444.274	89.3	10/16/2017	NA	NA	NA
MW 13R	Arsenic	10/29/2021	161	447.694	89.3	10/16/2017	NA	NA	NA
MW 13R	Arsenic	4/25/2022	252	236.971	89.3	10/16/2017	NA	NA	NA
MW 13R	Arsenic	10/17/2022	124	236.480	89.3	10/16/2017	NA	NA	NA
MW 13R	Arsenic	4/10/2023	193	246.299	89.3	10/16/2017	NA	NA	NA
MW 13R	Arsenic	10/27/2023	82.7	250.924	89.3	10/16/2017	NA	NA	NA
MW 13R	Arsenic	4/2/2024	88.7	181.687	89.3	10/16/2017	NA	NA	NA
MW 13R	Arsenic	10/10/2024	192	211.690	89.3	10/16/2017	NA	NA	NA

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	95% UCL (ug/L)	GWPS Limit (ug/L)	SSL Initial Exceedance	Compliance Date	Compliance Date	Compliance Date
							1st Occurrence	Most Recent	Duration (years)
MW 13R	Cobalt	4/21/2016	20	22.869	34.1	10/16/2017	NA	NA	NA
MW 13R	Cobalt	10/17/2016	16.3	23.231	34.1	10/16/2017	NA	NA	NA
MW 13R	Cobalt	4/21/2017	15.6	21.225	34.1	10/16/2017	NA	NA	NA
MW 13R	Cobalt	10/16/2017	14.7	19.388	12.4	10/16/2017	NA	NA	NA
MW 13R	Cobalt	4/24/2018	14.9	16.231	12.4	10/16/2017	NA	NA	NA
MW 13R	Cobalt	10/25/2018	5.6	18.286	12.4	10/16/2017	NA	NA	NA
MW 13R	Cobalt	4/15/2019	13.5	17.382	12.4	10/16/2017	NA	NA	NA
MW 13R	Cobalt	10/7/2019	10.4	15.947	12.4	10/16/2017	NA	NA	NA
MW 13R	Cobalt	4/22/2020	18.7	18.516	12.4	10/16/2017	NA	NA	NA
MW 13R	Cobalt	10/1/2020	8.5	18.016	12.4	10/16/2017	NA	NA	NA
MW 13R	Cobalt	4/8/2021	9.3	17.271	12.4	10/16/2017	NA	NA	NA
MW 13R	Cobalt	10/29/2021	6.9	17.117	12.4	10/16/2017	NA	NA	NA
MW 13R	Cobalt	4/25/2022	8.5	9.484	12.4	10/16/2017	4/25/2022	4/25/2022	0.0
MW 13R	Cobalt	10/17/2022	8.8	9.595	12.4	10/16/2017	4/25/2022	10/17/2022	0.5
MW 13R	Cobalt	4/10/2023	4.3	9.548	12.4	10/16/2017	4/25/2022	4/10/2023	1.0
MW 13R	Cobalt	10/27/2023	9.0	10.288	12.4	10/16/2017	4/25/2022	10/27/2023	1.5
MW 13R	Cobalt	4/2/2024	4.6	9.702	12.4	10/16/2017	4/25/2022	4/2/2024	2.0
MW 13R	Cobalt	10/10/2024	3.6	8.260	12.4	10/16/2017	4/25/2022	10/10/2024	2.5

Table 8
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KEY:	SSI	SSL LCL>GWPS	SSL UCL>GWPS
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Note: The absence of shading indicates that the condition does not exist.

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	95% UCL (ug/L)	GWPS Limit (ug/L)	SSL Initial Exceedance	Compliance Date	Compliance Date	Compliance Date
							1st Occurrence	Most Recent	Duration (years)
MW 13R	Benzene	4/21/2016	7.1	8.353	5	10/17/2016	NA	NA	NA
MW 13R	Benzene	10/17/2016	7.4	7.600	5	10/17/2016	NA	NA	NA
MW 13R	Benzene	4/21/2017	6	7.665	5	10/17/2016	NA	NA	NA
MW 13R	Benzene	10/16/2017	5	7.665	5	10/17/2016	NA	NA	NA
MW 13R	Benzene	4/24/2018	5	7.186	5	10/17/2016	NA	NA	NA
MW 13R	Benzene	10/25/2018	5	5.838	5	10/17/2016	NA	NA	NA
MW 13R	Benzene	4/15/2019	4.9	5.034	5	10/17/2016	NA	NA	NA
MW 13R	Benzene	10/7/2019	2.5	5.802	5	10/17/2016	NA	NA	NA
MW 13R	Benzene	4/22/2020	4.6	5.637	5	10/17/2016	NA	NA	NA
MW 13R	Benzene	10/1/2020	4.2	5.311	5	10/17/2016	NA	NA	NA
MW 13R	Benzene	4/8/2021	3.6	4.800	5	10/17/2016	4/8/2021	4/8/2021	0.0
MW 13R	Benzene	10/29/2021	4.0	4.590	5	10/17/2016	4/8/2021	10/29/2021	0.5
MW 13R	Benzene	4/25/2022	4.9	4.815	5	10/17/2016	4/8/2021	4/25/2022	1.0
MW 13R	Benzene	10/17/2022	2.6	4.897	5	10/17/2016	4/8/2021	10/17/2022	1.5
MW 13R	Benzene	4/10/2023	5.1	5.489	5	10/17/2016	4/8/2021	4/10/2023	2.0
MW 13R	Benzene	10/27/2023	1.1	5.684	5	10/17/2016	4/8/2021	10/27/2023	2.5
MW 13R	Benzene	4/2/2024	2.1	4.727	5	10/17/2016	4/8/2021	4/2/2024	3.0
MW 13R	Benzene	10/10/2024	2.8	4.774	5	10/17/2016	4/8/2021	10/10/2024	3.5

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	95% UCL (ug/L)	GWPS Limit (ug/L)	SSL Initial Exceedance	Compliance Date	Compliance Date	Compliance Date
							1st Occurrence	Most Recent	Duration (years)
MW 14	Cobalt	4/21/2016	1.4	48.560	34.1	NA	NA	NA	NA
MW 14	Cobalt	10/17/2016	16.3	46.577	34.1	NA	NA	NA	NA
MW 14	Cobalt	4/21/2017	7.7	14.999	34.1	NA	NA	NA	NA
MW 14	Cobalt	10/16/2017	16.0	18.219	12.4	NA	NA	NA	NA
MW 14	Cobalt	4/24/2018	16.9	18.011	12.4	NA	NA	NA	NA
MW 14	Cobalt	10/25/2018	4.2	18.916	12.4	NA	NA	NA	NA
MW 14	Cobalt	4/15/2019	27.3	26.384	12.4	NA	NA	NA	NA
MW 14	Cobalt	10/7/2019	10.0	26.282	12.4	NA	NA	NA	NA
MW 14	Cobalt	4/22/2020	6.9	24.341	12.4	NA	NA	NA	NA
MW 14	Cobalt	10/1/2020	11.5	24.653	12.4	NA	NA	NA	NA
MW 14	Cobalt	4/8/2021	21.2	19.659	12.4	NA	NA	NA	NA
MW 14	Cobalt	10/29/2021	14.4	20.547	12.4	NA	NA	NA	NA
MW 14	Cobalt	4/25/2022	13.1	20.071	12.4	NA	NA	NA	NA
MW 14	Cobalt	10/17/2022	13.1	20.016	12.4	NA	NA	NA	NA
MW 14	Cobalt	4/10/2023	14.8	14.887	12.4	NA	NA	NA	NA
MW 14	Cobalt	10/27/2023	16.4	16.214	12.4	NA	NA	NA	NA
MW 14	Cobalt	4/2/2024	20.8	20.161	12.4	NA	NA	NA	NA
MW 14	Cobalt	10/10/2024	9.9	20.768	12.4	NA	NA	NA	NA

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	95% UCL (ug/L)	GWPS Limit (ug/L)	SSL Initial Exceedance	Compliance Date 1st Occurrence	Compliance Date Most Recent	Compliance Date Duration (years)
MW 31R	Cobalt	4/21/2016	12.2	12.748	34.1	10/7/2019	NA	NA	NA
MW 31R	Cobalt	10/17/2016	12.6	12.662	34.1	10/7/2019	NA	NA	NA
MW 31R	Cobalt	4/21/2017	12.5	12.725	34.1	10/7/2019	NA	NA	NA
MW 31R	Cobalt	10/16/2017	11.5	12.784	12.4	10/7/2019	NA	NA	NA
MW 31R	Cobalt	4/24/2018	15.8	15.296	12.4	10/7/2019	NA	NA	NA
MW 31R	Cobalt	10/25/2018	13.3	15.436	12.4	10/7/2019	NA	NA	NA
MW 31R	Cobalt	4/15/2019	17.7	17.785	12.4	10/7/2019	NA	NA	NA
MW 31R	Cobalt	10/7/2019	15.0	17.599	12.4	10/7/2019	NA	NA	NA
MW 31R	Cobalt	4/22/2020	19.7	19.762	12.4	10/7/2019	NA	NA	NA
MW 31R	Cobalt	10/1/2020	17.5	19.740	12.4	10/7/2019	NA	NA	NA
MW 31R	Cobalt	4/8/2021	25.9	25.011	12.4	10/7/2019	NA	NA	NA
MW 31R	Cobalt	10/29/2021	15.0	25.011	12.4	10/7/2019	NA	NA	NA
MW 31R	Cobalt	4/25/2022	17.0	24.523	12.4	10/7/2019	NA	NA	NA
MW 31R	Cobalt	10/17/2022	16.2	24.389	12.4	10/7/2019	NA	NA	NA
MW 31R	Cobalt	4/10/2023	18.3	18.256	12.4	10/7/2019	NA	NA	NA
MW 31R	Cobalt	10/27/2023	17.6	18.234	12.4	10/7/2019	NA	NA	NA
MW 31R	Cobalt	4/2/2024	20.6	20.336	12.4	10/7/2019	NA	NA	NA
MW 31R	Cobalt	10/10/2024	14.6	20.686	12.4	10/7/2019	NA	NA	NA

Table 8
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KEY:	SSI	SSL LCL>GWPS	SSL UCL>GWPS
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Monitoring Well	Compound	Sample Date	Each Result (ug/L)	95% UCL (ug/L)	GWPS Limit (ug/L)	SSL Initial Exceedance	Compliance Date 1st Occurrence	Compliance Date Most Recent	Compliance Date Duration (years)
MW 49A	Cobalt	4/21/2016	14.5	15.404	34.1	None	NA	NA	NA
MW 49A	Cobalt	10/17/2016	1.1	18.863	34.1	None	NA	NA	NA
MW 49A	Cobalt	4/21/2017	14.9	19.529	34.1	None	NA	NA	NA
MW 49A	Cobalt	10/16/2017	5.9	17.05	12.4	None	NA	NA	NA
MW 49A	Cobalt	4/24/2018	24.5	23.749	12.4	None	NA	NA	NA
MW 49A	Cobalt	10/25/2018	7.3	23.193	12.4	None	NA	NA	NA
MW 49A	Cobalt	4/15/2019	18	24.347	12.4	None	NA	NA	NA
MW 49A	Cobalt	10/7/2019	2.7	24.805	12.4	None	NA	NA	NA
MW 49A	Cobalt	4/22/2020	19.1	21.253	12.4	None	NA	NA	NA
MW 49A	Cobalt	10/1/2020	16.8	23.197	12.4	None	NA	NA	NA
MW 49A	Cobalt	4/8/2021	21.0	24.678	12.4	None	NA	NA	NA
MW 49A	Cobalt	10/29/2021	2.6	24.711	12.4	None	NA	NA	NA
MW 49A	Cobalt	4/25/2022	16.5	23.656	12.4	None	NA	NA	NA
MW 49A	Cobalt	10/17/2022	20.3	25.175	12.4	None	NA	NA	NA
MW 49A	Cobalt	4/10/2023	20.6	24.969	12.4	None	NA	NA	NA
MW 49A	Cobalt	10/27/2023	20.5	21.813	12.4	None	NA	NA	NA
MW 49A	Cobalt	4/2/2024	19.9	20.689	12.4	None	NA	NA	NA
MW 49A	Cobalt	10/10/2024	10.2	23.711	12.4	None	NA	NA	NA

Table 8
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KEY:	SSI	SSL LCL>GWPS	SSL UCL>GWPS
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Note: The absence of shading indicates that the condition does not exist.

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	95% UCL (ug/L)	GWPS Limit (ug/L)	SSL Initial Exceedance	Compliance Date 1st Occurrence	Compliance Date Most Recent	Compliance Date Duration (years)
MW 49A	vinyl chloride	4/21/2016	<1.0	1.74	2	None	NA	NA	NA
MW 49A	vinyl chloride	10/17/2016	<1.0	1.336	2	None	NA	NA	NA
MW 49A	vinyl chloride	4/21/2017	<1.0	0.5	2	None	NA	NA	NA
MW 49A	vinyl chloride	10/16/2017	1.3	1.171	2	None	NA	NA	NA
MW 49A	vinyl chloride	4/24/2018	1.1	1.335	2	None	NA	NA	NA
MW 49A	vinyl chloride	10/25/2018	<1.0	1.335	2	None	NA	NA	NA
MW 49A	vinyl chloride	4/15/2019	<1.0	1.335	2	None	NA	NA	NA
MW 49A	vinyl chloride	10/7/2019	<1.0	1.003	2	None	NA	NA	NA
MW 49A	vinyl chloride	4/22/2020	<1.0	0.500	2	None	NA	NA	NA
MW 49A	vinyl chloride	10/1/2020	<1.0	0.500	2	None	NA	NA	NA
MW 49A	vinyl chloride	4/8/2021	3.2	2.763	2	None	NA	NA	NA
MW 49A	vinyl chloride	10/29/2021	5	4.893	2	None	NA	NA	NA
MW 49A	vinyl chloride	4/25/2022	3.9	5.403	2	None	NA	NA	NA
MW 49A	vinyl chloride	10/17/2022	2.7	4.872	2	None	NA	NA	NA
MW 49A	vinyl chloride	4/10/2023	1.6	5.031	2	None	NA	NA	NA
MW 49A	vinyl chloride	10/27/2023	1.4	3.755	2	None	NA	NA	NA
MW 49A	vinyl chloride	4/2/2024	2.9	3.043	2	None	NA	NA	NA
MW 49A	vinyl chloride	10/10/2024	1.8	2.713	2	None	NA	NA	NA

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

Table 9 – Analytical Data Summary

Table 9

Analytical Data Summary for GU-3

Constituents	Units	11/5/2015	4/21/2016	10/17/2016	4/21/2017	10/16/2017	4/24/2018	7/12/2018	10/25/2018
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	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Aluminum, total	ug/L								
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	14.1	7.8	10.1	6.1	9.4	8.1	9.1	9.1
Barium, total	ug/L	216	161	203	169	220	209	218	218
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	.8	1.2	<8	<8	<8	<8	<8	<8
Copper, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<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	<4	<4	<4	<4	<4	<20	<4	<4
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	<4	<4
Solids, total suspended	mg/L								
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	<4
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	<20.0	<8.0	<8.0	<8.0	29.8	<20.0	<20.0

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

Table 9

Analytical Data Summary for GU-3

Constituents	4/15/2019	10/7/2019	4/22/2020	10/2/2020	4/8/2021	7/1/2021	10/29/2021	4/25/2022	4/10/2023
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	<5	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5		<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5		<5	<5	<5
Acetone	<10.0	<10.0	<10.0	<10.0	15.8	<10.0	<10.0	<10.0	<10.0
Acrylonitrile	<5	<5	<5	<5	<5		<5	<5	<5
Aluminum, total								51	
Antimony, total	<2	<2	<2	<2	<2		<2	<2	<2
Arsenic, total	6.2	8.4	7.2	7.6	5.4		7.2	6.1	7.8
Barium, total	200	199	191	198	181		207		199
Benzene	<1	<1	<1	<1	<1		<1	<1	<1
Beryllium, total	<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
Bromoform	<1	<1	<1	<1	<1		<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1		<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8	<.8		<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1		<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1		<1	<1	<1
Chloride								83.4	
Chlorobenzene	<1	<1	<1	<1	<1		<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1		<1	<1	<1
Chloroform	<1	<1	<1	<1	<1		<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1		<1	<1	<1
Chromium, total	<8	<8	<8	<8	<8		<8	<8	<8
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1		<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1		<1	<1	<1
Cobalt, total	<.8	<.8	.5	<.4	.4		<.4	<.4	.4
Copper, total	<4	<4	<4	<4	<4		<4	<4	<4
Dibromochloromethane	<1	<1	<1	<1	<1		<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1		<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1		<1	<1	<1
Fluoride								.2	
Iron, total								12000	
Lead, total	<4	<4	<4	<4	<4		<4	<4	<4
Lithium, total								61	
Manganese, total								1120	
Methyl iodide	<1	<1	<1	<1	<1		<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5		<5	<5	<5
Molybdenum, total								<4	
Nickel, total	<4	<4	<4	<4	<4		<4	<4	<4
Nitrogen, ammonia								.87	
Nitrogen, kjeldahl, total								1.18	
Nitrogen, Nitrate+Nitrite								.16	
Selenium, total	<4	<4	<4	<4	<4		<4	<4	<4
Silica, dissolved								27.1	
Silver, total	<4	<4	<4	<4	<4		<4	<4	<4
Solids, total suspended								29	
Styrene	<1	<1	<1	<1	<1		<1	<1	<1
Sulfate								183	
Tetrachloroethylene	<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
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1		<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1		<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5		<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1		<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1		<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20		<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5		<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1		<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2		<2	<2	<2
Zinc, total	<8.0	<8.0	<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 GU-3

Constituents	10/27/2023	4/2/2024	10/10/2024
1,1,1,2-tetrachloroethane	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1
1,1-dichloroethane	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5
1,2-dibromoethane	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1
1,2-dichloroethane	<1	<1	<1
1,2-dichloropropane	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1
2-butanone (mek)	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5
Acetone	<10.0	<10.0	<10.0
Acrylonitrile	<5	<5	<5
Aluminum, total			
Antimony, total	<2	<2	<2
Arsenic, total	6.5	6.3	7.4
Barium, total	213	201	184
Benzene	<1	<1	<1
Beryllium, total	<4	<4	<4
Bod (5 day)			
Boron, total			
Bromochloromethane	<1	<1	<1
Bromodichloromethane	<1	<1	<1
Bromoform	<1	<1	<1
Bromomethane	<1	<1	<1
Cadmium, total	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1
Carbon tetrachloride	<1	<1	<1
Chloride			
Chlorobenzene	<1	<1	<1
Chloroethane	<1	<1	<1
Chloroform	<1	<1	<1
Chloromethane	<1	<1	<1
Chromium, total	<8	<8	<8
Cis-1,2-dichloroethylene	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1
Cobalt, total	<.4	<.4	.8
Copper, total	<4	<4	<4
Dibromochloromethane	<1	<1	<1
Dibromomethane	<1	<1	<1
Ethylbenzene	<1	<1	<1
Fluoride			
Iron, total			
Lead, total	<4	<4	<4
Lithium, total			
Manganese, total			
Methyl iodide	<1	<1	<1
Methylene chloride	<5	<5	<5
Molybdenum, total			
Nickel, total	<4	<4	<4
Nitrogen, ammonia			
Nitrogen, kjeldahl, total			
Nitrogen, Nitrate+Nitrite			
Selenium, total	<4	<4	<4
Silica, dissolved			
Silver, total	<4	<4	<4
Solids, total suspended			
Styrene	<1	<1	<1
Sulfate			
Tetrachloroethylene	<1	<1	<1
Thallium, total	<2	<2	<2
Toluene	<1	<1	<1
Trans-1,2-dichloroethylene	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5
Trichloroethylene	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1
Vanadium, total	<20	<20	<20
Vinyl acetate	<5	<5	<5
Vinyl chloride	<1	<1	<1
Xylenes, total	<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-13R

Constituents	Units	10/23/2014	4/1/2015	11/5/2015	4/21/2016	10/17/2016	4/21/2017	10/16/2017	4/24/2018
(3 4)-methylphenol	ug/L							12	<10
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene	ug/L							<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	ug/L							<8	<8
1,2,4-trichlorobenzene	ug/L							<1	<1
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
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	<1.0	1.1	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-dinitrobenzene	ug/L							<8	<8
1,3,5-trinitrobenzene	ug/L							<8	<8
1,3-dichlorobenzene	ug/L							<1	<1
1,3-dichloropropane	ug/L							<1	<1
1,3-dinitrobenzene	ug/L							<8	<8
1,4-dichlorobenzene	ug/L	<1.0	<1.0	1.1	1.1	1.3	1.2	1.2	1.1
1,4-naphthoquinone	ug/L							<8	<8
1,4-phenylenediamine	ug/L							<8	<8
1-naphthylamine	ug/L							<8	<8
2,2-dichloropropane	ug/L							<1	<1
2,3,4,6-tetrachlorophenol	ug/L							<8	<8
2,4,5-t	ug/L							<5	<5
2,4,5-tp (silvex)	ug/L							<5	<5
2,4,5-trichlorophenol	ug/L							<8	<8
2,4,6-trichlorophenol	ug/L							<8	<8
2,4-d	ug/L							<2	<2
2,4-dichlorophenol	ug/L							<8	<8
2,4-dimethylphenol	ug/L							<8	<8
2,4-dinitrophenol	ug/L							<8	<8
2,4-dinitrotoluene	ug/L							<8	<8
2,6-dichlorophenol	ug/L							<8	<8
2,6-dinitrotoluene	ug/L							<8	<8
2-acetylaminofluorene	ug/L							<8	<8
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
2-chloronaphthalene	ug/L							<8	<8
2-chlorophenol	ug/L							<8	<8
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene	ug/L							<8	<8
2-methylphenol	ug/L							<8	<8
2-naphthylamine	ug/L							<8	<8
2-nitroaniline	ug/L							<8	<8
2-nitrophenol	ug/L							<8	<8
3,3'-dichlorobenzidine	ug/L							<8	<8
3,3'-dimethylbenzidine	ug/L							<8	<8
3-methylcholanthrene	ug/L							<8	<8
3-nitroaniline	ug/L							<8	<8
4,4'-ddd	ug/L							<.05	<.05
4,4'-dde	ug/L							<.05	<.05
4,4'-ddt	ug/L							<.05	<.05
4,6-dinitro-2-methylphenol	ug/L							<8	<8
4-aminobiphenyl	ug/L							<8	<8
4-bromophenyl phenyl ether	ug/L							<8	<8
4-chloro-3-methylphenol	ug/L							<8	<8
4-chloroaniline	ug/L							<8	<8
4-chlorophenyl phenyl ether	ug/L							<8	<8
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline	ug/L							<8	<8
4-nitrophenol	ug/L							<8	<8
5-nitro-o-toluidine	ug/L							<8	<8
7,12-dimethylbenz(a)anthracene	ug/L							<8	<8
Acenaphthene	ug/L							<8	<8
Acenaphthylene	ug/L							<8	<8
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Acetonitrile	ug/L							<10	<10
Acetophenone	ug/L							<8	<8
Acrolein	ug/L							<10	<10
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin	ug/L							<.05	<.05
Allyl chloride	ug/L							<1	<1
Alpha-bhc	ug/L							<.05	<.05
Anthracene	ug/L							<8	<8

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

Table 9

Analytical Data Summary for MW-13R

Constituents	10/25/2018	4/15/2019	10/7/2019	4/22/2020	10/2/2020	4/8/2021	10/29/2021	4/25/2022	10/17/2022
(3 4)-methylphenol	<10	<10	<10	<10	<10	<10	<10	<10	<8
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene									<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene									<8
1,2,4-trichlorobenzene									<1
1,2-dibromo-3-chloropropane	<1	<1	<1	<5	<5	<5	<5	<5	<1
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-dinitrobenzene									<8
1,3,5-trinitrobenzene									<8
1,3-dichlorobenzene									<1
1,3-dichloropropane									<1
1,3-dinitrobenzene									<8
1,4-dichlorobenzene	2.0	1.2	<1.0	1.1	1.3	1.0	1.4	1.2	1.4
1,4-naphthoquinone									<8
1,4-phenylenediamine									<8
1-naphthylamine									<8
2,2-dichloropropane									<1
2,3,4,6-tetrachlorophenol									<8
2,4,5-t									<5
2,4,5-tp (silvex)									<5
2,4,5-trichlorophenol									<8
2,4,6-trichlorophenol									<8
2,4-d									<2
2,4-dichlorophenol									<8
2,4-dimethylphenol									<8
2,4-dinitrophenol									<8
2,4-dinitrotoluene									<8
2,6-dichlorophenol									<8
2,6-dinitrotoluene									<8
2-acetylaminofluorene									<8
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<5	<10	<5
2-chloronaphthalene									<8
2-chlorophenol									<8
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene									<8
2-methylphenol									<8
2-naphthylamine									<8
2-nitroaniline									<8
2-nitrophenol									<8
3,3'-dichlorobenzidine									<8
3,3'-dimethylbenzidine									<8
3-methylcholanthrene									<8
3-nitroaniline									<8
4,4'-ddd									<.05
4,4'-dde									<.05
4,4'-ddt									<.05
4,6-dinitro-2-methylphenol									<8
4-aminobiphenyl									<8
4-bromophenyl phenyl ether									<8
4-chloro-3-methylphenol									<8
4-chloroaniline									<8
4-chlorophenyl phenyl ether									<8
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline									<8
4-nitrophenol									<8
5-nitro-o-toluidine									<8
7,12-dimethylbenz(a)anthracene									<8
Acenaphthene									<8
Acenaphthylene									<8
Acetone	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acetonitrile									<10
Acetophenone									<8
Acrolein									<10
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin									<.05
Allyl chloride									<1
Alpha-bhc									<.05
Anthracene									<8

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

Table 9

Analytical Data Summary for MW-13R

Constituents	1/5/2023	4/10/2023	10/27/2023	4/2/2024	10/10/2024
(3 4)-methylphenol					
1,1,1,2-tetrachloroethane		<1	<1	<1	<1
1,1,1-trichloroethane		<1	<1	<1	<1
1,1,2,2-tetrachloroethane		<1	<1	<1	<1
1,1,2-trichloroethane		<1	<1	<1	<1
1,1-dichloroethane		<1	<1	<1	<1
1,1-dichloroethylene		<1	<1	<1	<1
1,1-dichloropropene					
1,2,3-trichloropropane		<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene					
1,2,4-trichlorobenzene					
1,2-dibromo-3-chloropropane		<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		<1.0	<1.0	<1.0	<1.0
1,2-dinitrobenzene					
1,3,5-trinitrobenzene					
1,3-dichlorobenzene					
1,3-dichloropropane					
1,3-dinitrobenzene					
1,4-dichlorobenzene		1.6	1.0	1.1	1.8
1,4-naphthoquinone					
1,4-phenylenediamine					
1-naphthylamine					
2,2-dichloropropane					
2,3,4,6-tetrachlorophenol					
2,4,5-t					
2,4,5-tp (silvex)					
2,4,5-trichlorophenol					
2,4,6-trichlorophenol					
2,4-d					
2,4-dichlorophenol					
2,4-dimethylphenol					
2,4-dinitrophenol					
2,4-dinitrotoluene					
2,6-dichlorophenol					
2,6-dinitrotoluene					
2-acetylaminofluorene					
2-butanone (mek)		<10	<10	<10	<10
2-chloronaphthalene					
2-chlorophenol					
2-hexanone (mbk)		<5	<5	<5	<5
2-methylnaphthalene					
2-methylphenol					
2-naphthylamine					
2-nitroaniline					
2-nitrophenol					
3,3'-dichlorobenzidine					
3,3'-dimethylbenzidine					
3-methylcholanthrene					
3-nitroaniline					
4,4'-ddd					
4,4'-dde					
4,4'-ddt					
4,6-dinitro-2-methylphenol					
4-aminobiphenyl					
4-bromophenyl phenyl ether					
4-chloro-3-methylphenol					
4-chloroaniline					
4-chlorophenyl phenyl ether					
4-methyl-2-pentanone (mibk)		<5	<5	<5	<5
4-nitroaniline					
4-nitrophenol					
5-nitro-o-toluidine					
7,12-dimethylbenz(a)anthracene					
Acenaphthene					
Acenaphthylene					
Acetone		<10	<10	<10	<10
Acetonitrile					
Acetophenone					
Acrolein					
Acrylonitrile		<5	<5	<5	<5
Aldrin					
Allyl chloride					
Alpha-bhc					
Anthracene					

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

Table 9

Analytical Data Summary for MW-13R

Constituents	Units	10/23/2014	4/1/2015	11/5/2015	4/21/2016	10/17/2016	4/21/2017	10/16/2017	4/24/2018
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	86.0	104.0	63.7	299.0	143.0	156.0	179.0	105.0
Azobenzene	ug/L							<.8	
Barium, total	ug/L	1090	1180	750	1230	1020	1010	1030	1000
Benzene	ug/L	2.5	6.2	7.2	7.1	7.4	6.0	5.0	5.0
Benzo(a)anthracene	ug/L							<.8	
Benzo(a)pyrene	ug/L							<.8	
Benzo(b)fluoranthene	ug/L							<.8	
Benzo(g,h,i)perylene	ug/L							<.8	
Benzo(k)fluoranthene	ug/L							<.8	
Benzyl alcohol	ug/L							<.8	
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<.4	<4
Beta-bhc	ug/L							<.05	
Bis (2-chloroethoxy) methane	ug/L							<.8	
Bis(2-chloroethyl) ether	ug/L							<.8	
Bis(2-chloroisopropyl) ether	ug/L							<.8	
Bis(2-ethylhexyl) phthalate	ug/L	<10	<10	<10	<10	<10	<6	16	
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	14.4	24.8	30.3	23.2	29.9	26.4	27.9	30.4
Chlorobenzilate	ug/L							<.8	
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene	ug/L							<.1	
Chromium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Chrysene	ug/L							<.8	
Cis-1,2-dichloroethylene	ug/L	1.1	1.0	1.3	<1.0	1.1	<1.0	1.1	<1.0
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	14.8	20.3	6.9	20.0	16.3	15.6	14.7	14.9
Copper, total	ug/L	<4	<4	<4	<4	<4	<4	<.4	<4
Cyanide, total	mg/L							<.005	
Delta-bhc	ug/L							<.05	
Diallate	ug/L							<.8	
Dibenzo(a,h)anthracene	ug/L							<.8	
Dibenzofuran	ug/L							<.8	
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L							<.1	
Dieldrin	ug/L							<.05	
Diethyl phthalate	ug/L							<.8	
Dimethoate	ug/L							<.4	
Dimethylphthalate	ug/L							<.8	
Di-n-butyl phthalate	ug/L							<.8	
Di-n-octyl phthalate	ug/L							<.8	
Dinoseb	ug/L							<.5	
Diphenylamine	ug/L							<.8	
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-13R

Constituents	10/25/2018	4/15/2019	10/7/2019	4/22/2020	10/2/2020	4/8/2021	10/29/2021	4/25/2022	10/17/2022
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016									<.1
Arochlor 1221									<.2
Arochlor 1232									<.2
Arochlor 1242									<.2
Arochlor 1248									<.2
Arochlor 1254									<.1
Arochlor 1260									<.1
Arsenic, total	75.3	145.0	72.2	506.0	140.0	118.0	161.0	252.0	124.0
Azobenzene									<8
Barium, total	597	1030	888	1720	679	871	801	942	761
Benzene	5.0	4.9	2.5	4.6	4.2	3.6	4.0	4.9	2.6
Benzo(a)anthracene									<8
Benzo(a)pyrene									<8
Benzo(b)fluoranthene									<8
Benzo(g,h,i)perylene									<8
Benzo(k)fluoranthene									<8
Benzyl alcohol									<8
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Beta-bhc									<.05
Bis (2-chloroethoxy) methane									<8
Bis(2-chloroethyl) ether									<8
Bis(2-chloroisopropyl) ether									<8
Bis(2-ethylhexyl) phthalate									7
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate									<8
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane									<.1
Chlorobenzene	27.8	29.1	29.7	27.7	35.0	34.1	37.6	37.2	38.1
Chlorobenzilate									<8
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene									<1
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene									<8
Cis-1,2-dichloroethylene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.4
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	5.6	13.5	10.4	18.7	8.5	9.3	6.9	8.5	8.8
Copper, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Cyanide, total									<.005
Delta-bhc									<.05
Diallate									<8
Dibenzo(a,h)anthracene									<8
Dibenzofuran									<8
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane									<1
Dieldrin									<.05
Diethyl phthalate									<8
Dimethoate									<.4
Dimethylphthalate									<8
Di-n-butyl phthalate									<8
Di-n-octyl phthalate									<8
Dinoseb									<.5
Diphenylamine									<8
Disulfoton									<.4
Endosulfan i									<.05
Endosulfan ii									<.05
Endosulfan sulfate									<.05
Endrin									<.05
Endrin aldehyde									<.05
Ethyl methacrylate									<10
Ethyl methanesulfonate									<8
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Famphur									<.4
Fluoranthene									<8
Fluorene									<8
Gamma-bhc (lindane)									<.05
Heptachlor									<.05
Heptachlor epoxide									<.05
Hexachlorobenzene									<.05

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

Table 9

Analytical Data Summary for MW-13R

Constituents	1/5/2023	4/10/2023	10/27/2023	4/2/2024	10/10/2024
Antimony, total		<2	<2	<2	<2
Arochlor 1016					
Arochlor 1221					
Arochlor 1232					
Arochlor 1242					
Arochlor 1248					
Arochlor 1254					
Arochlor 1260					
Arsenic, total		193.0	82.7	88.7	192.0
Azobenzene					
Barium, total		821	839	837	575
Benzene		5.1	1.1	2.1	2.8
Benzo(a)anthracene					
Benzo(a)pyrene					
Benzo(b)fluoranthene					
Benzo(g,h,i)perylene					
Benzo(k)fluoranthene					
Benzyl alcohol					
Beryllium, total		<4	<4	<4	<4
Beta-bhc					
Bis (2-chloroethoxy) methane					
Bis(2-chloroethyl) ether					
Bis(2-chloroisopropyl) ether					
Bis(2-ethylhexyl) phthalate	<6				
Bromochloromethane		<1	<1	<1	<1
Bromodichloromethane		<1	<1	<1	<1
Bromoform		<1	<1	<1	<1
Bromomethane		<1	<1	<1	<1
Butyl benzyl phthalate					
Cadmium, total		<.8	<.8	<.8	<.8
Carbon disulfide		<1	<1	<1	<1
Carbon tetrachloride		<1	<1	<1	<1
Chlordane					
Chlorobenzene		43.9	26.8	36.7	43.4
Chlorobenzilate					
Chloroethane		<1	<1	<1	<1
Chloroform		<1	<1	<1	<1
Chloromethane		<1	<1	<1	<1
Chloroprene					
Chromium, total		<8	<8	<8	<8
Chrysene					
Cis-1,2-dichloroethylene		<1.0	1.0	<1.0	<1.0
Cis-1,3-dichloropropene		<1	<1	<1	<1
Cobalt, total		4.3	9.0	4.6	3.6
Copper, total		<4	<4	<4	<4
Cyanide, total					
Delta-bhc					
Diallate					
Dibenzo(a,h)anthracene					
Dibenzofuran					
Dibromochloromethane		<1	<1	<1	<1
Dibromomethane		<1	<1	<1	<1
Dichlorodifluoromethane					
Dieldrin					
Diethyl phthalate					
Dimethoate					
Dimethylphthalate					
Di-n-butyl phthalate					
Di-n-octyl phthalate					
Dinoseb					
Diphenylamine					
Disulfoton					
Endosulfan i					
Endosulfan ii					
Endosulfan sulfate					
Endrin					
Endrin aldehyde					
Ethyl methacrylate					
Ethyl methanesulfonate					
Ethylbenzene		<1	<1	<1	<1
Famphur					
Fluoranthene					
Fluorene					
Gamma-bhc (lindane)					
Heptachlor					
Heptachlor epoxide					
Hexachlorobenzene					

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

Table 9

Analytical Data Summary for MW-13R

Constituents	Units	10/23/2014	4/1/2015	11/5/2015	4/21/2016	10/17/2016	4/21/2017	10/16/2017	4/24/2018
Hexachlorobutadiene	ug/L							<8	
Hexachlorocyclopentadiene	ug/L							<8	
Hexachloroethane	ug/L							<8	
Hexachloropropene	ug/L							<8	
Indeno(1,2,3-cd)pyrene	ug/L							<8	
Isobutanol	ug/L							<1000	
Isodrin	ug/L							<8	
Isophorone	ug/L							<8	
Isosafrole	ug/L							<8	
Kepone	ug/L							<8	
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
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	31.3	46.0	16.6	50.1	49.3	40.0	29.3	31.9
Nitrobenzene	ug/L							<8	
N-nitrosodiethylamine	ug/L							<8	
N-nitrosodimethylamine	ug/L							<8	
N-nitrosodi-n-butylamine	ug/L							<8	
N-nitroso-di-n-propylamine	ug/L							<8	
N-nitrosodiphenylamine	ug/L							<8	
N-nitrosomethylethylamine	ug/L							<8	
N-nitrosopiperidine	ug/L							<8	
N-nitrosopyrrolidine	ug/L							<8	
O,o,o-triethyl phosphorothioate	ug/L							<.4	
O-toluidine	ug/L							<8	
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	193	101						
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total	mg/L							<.1	
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Thionazin	ug/L							<.4	
Tin, total	ug/L							<20	
Toluene	ug/L	<1.0	<1.0	1.1	<1.0	<1.0	<1.0	1.2	<1.0
Toxaphene	ug/L							<.2	
Trans-1,2-dichloroethylene	ug/L	1.0	<1.0	1.4	<1.0	<1.0	<1.0	<1.0	<1.0
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	2.0	4.8	1.5	<1.0	<1.0	<1.0	<1.0	<1.0
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<20.0	<8.0	14.0	<20.0	<8.0	<8.0	<8.0	<8.0

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

Table 9

Analytical Data Summary for MW-13R

Constituents	10/25/2018	4/15/2019	10/7/2019	4/22/2020	10/2/2020	4/8/2021	10/29/2021	4/25/2022	10/17/2022
Hexachlorobutadiene									<8
Hexachlorocyclopentadiene									<8
Hexachloroethane									<8
Hexachloropropene									<8
Indeno(1,2,3-cd)pyrene									<8
Isobutanol									<1000
Isodrin									<8
Isophorone									<8
Isosafrole									<8
Kepone									<8
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Mercury, total									<5
Methacrylonitrile									<1
Methapyrilene									<8
Methoxychlor									<.05
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<2
Methyl methacrylate									<1
Methyl methanesulfonate									<8
Methyl parathion									<.4
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene									<8
Nickel, total	14.7	28.4	24.0	40.4	22.2	16.6	13.6	13.4	17.0
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
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total									<.1
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<2	<2	<2	<2	<2	<2	<2	<2
Thionazin									<.4
Tin, total									<20
Toluene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Toxaphene									<.2
Trans-1,2-dichloroethylene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<20.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-13R

Constituents	1/5/2023	4/10/2023	10/27/2023	4/2/2024	10/10/2024
Hexachlorobutadiene					
Hexachlorocyclopentadiene					
Hexachloroethane					
Hexachloropropene					
Indeno(1,2,3-cd)pyrene					
Isobutanol					
Isodrin					
Isophorone					
Isosafrole					
Kepon					
Lead, total		<4	<4	<4	<4
Mercury, total					
Methacrylonitrile					
Methapyrilene					
Methoxychlor					
Methyl iodide		<1	<1	<1	<1
Methyl methacrylate					
Methyl methanesulfonate					
Methyl parathion					
Methylene chloride		<5	<5	<5	<5
Naphthalene					
Nickel, total		10.6	20.1	9.8	9.5
Nitrobenzene					
N-nitrosodiethylamine					
N-nitrosodimethylamine					
N-nitrosodi-n-butylamine					
N-nitroso-di-n-propylamine					
N-nitrosodiphenylamine					
N-nitrosomethylethylamine					
N-nitrosopiperidine					
N-nitrosopyrrolidine					
O,o,o-triethyl phosphorothioate					
O-toluidine					
Parathion					
P-dimethylaminoazobenzene					
Pentachlorobenzene					
Pentachloronitrobenzene (pcnb)					
Pentachlorophenol					
Phenacetin					
Phenanthrene					
Phenol					
Phorate					
Pronamide					
Propionitrile					
Pyrene					
Safrole					
Selenium, total		<4	<4	<4	<4
Silver, total		<4	<4	<4	<4
Solids, total suspended					
Styrene		<1	<1	<1	<1
Sulfide, total					
Tetrachloroethylene		<1	<1	<1	<1
Thallium, total		<2	<2	<2	<2
Thionazin					
Tin, total					
Toluene		<1.0	<1.0	<1.0	<1.0
Toxaphene					
Trans-1,2-dichloroethylene		<1.0	<1.0	<1.0	<1.0
Trans-1,3-dichloropropene		<1	<1	<1	<1
Trans-1,4-dichloro-2-butene		<5	<5	<5	<5
Trichloroethylene		<1	<1	<1	<1
Trichlorofluoromethane		<1	<1	<1	<1
Vanadium, total		<20	<20	<20	<20
Vinyl acetate		<5	<5	<5	<5
Vinyl chloride		<1.0	<1.0	<1.0	<1.0
Xylenes, total		<2	<2	<2	<2
Zinc, total		<20.0	24.3	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-14

Constituents	Units	10/23/2014	4/1/2015	11/5/2015	4/21/2016	10/17/2016	1/9/2017	4/21/2017	7/12/2017
(3 4)-methylphenol	ug/L								
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1		<1	
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1		<1	
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1		<1	
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1		<1	
1,1-dichloroethane	ug/L	1.5	1.8	2.3	1.3	2.5		<1.0	
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1		<1	
1,1-dichloropropene	ug/L								
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1		<1	
1,2,4,5-tetrachlorobenzene	ug/L								
1,2,4-trichlorobenzene	ug/L								
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1		<1	
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1		<1	
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1		<1	
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1		<1	
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1		<1	
1,2-dinitrobenzene	ug/L								
1,3,5-trinitrobenzene	ug/L								
1,3-dichlorobenzene	ug/L								
1,3-dichloropropane	ug/L								
1,3-dinitrobenzene	ug/L								
1,4-dichlorobenzene	ug/L	2.6	1.0	2.1	<1.0	1.0		<1.0	
1,4-naphthoquinone	ug/L								
1,4-phenylenediamine	ug/L								
1-naphthylamine	ug/L								
2,2-dichloropropane	ug/L								
2,3,4,6-tetrachlorophenol	ug/L								
2,4,5-t	ug/L								
2,4,5-tp (silvex)	ug/L								
2,4,5-trichlorophenol	ug/L								
2,4,6-trichlorophenol	ug/L								
2,4-d	ug/L								
2,4-dichlorophenol	ug/L								
2,4-dimethylphenol	ug/L								
2,4-dinitrophenol	ug/L								
2,4-dinitrotoluene	ug/L								
2,6-dichlorophenol	ug/L								
2,6-dinitrotoluene	ug/L								
2-acetylaminofluorene	ug/L								
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5		<5	
2-chloronaphthalene	ug/L								
2-chlorophenol	ug/L								
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5		<5	
2-methylnaphthalene	ug/L								
2-methylphenol	ug/L								
2-naphthylamine	ug/L								
2-nitroaniline	ug/L								
2-nitrophenol	ug/L								
3,3'-dichlorobenzidine	ug/L								
3,3'-dimethylbenzidine	ug/L								
3-methylcholanthrene	ug/L								
3-nitroaniline	ug/L								
4,4'-ddd	ug/L								
4,4'-dde	ug/L								
4,4'-ddt	ug/L								
4,6-dinitro-2-methylphenol	ug/L								
4-aminobiphenyl	ug/L								
4-bromophenyl phenyl ether	ug/L								
4-chloro-3-methylphenol	ug/L								
4-chloroaniline	ug/L								
4-chlorophenyl phenyl ether	ug/L								
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5		<5	
4-nitroaniline	ug/L								
4-nitrophenol	ug/L								
5-nitro-o-toluidine	ug/L								
7,12-dimethylbenz(a)anthracene	ug/L								
Acenaphthene	ug/L								
Acenaphthylene	ug/L								
Acetone	ug/L	<10	<10	<10	<10	<10		<10	
Acetonitrile	ug/L								
Acetophenone	ug/L								
Acrolein	ug/L								
Acrylonitrile	ug/L	<5	<5	<5	<5	<5		<5	
Aldrin	ug/L								
Allyl chloride	ug/L								
Alpha-bhc	ug/L								
Anthracene	ug/L								

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

Table 9

Analytical Data Summary for MW-14

Constituents	10/16/2017	1/12/2018	4/24/2018	10/25/2018	4/15/2019	10/7/2019	4/22/2020	10/2/2020	4/8/2021
(3 4)-methylphenol	<8								
1,1,1,2-tetrachloroethane	<1		<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1		<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1		<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1		<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	3.9	2.4
1,1-dichloroethylene	<1		<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene	<1								
1,2,3-trichloropropane	<1		<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	<8								
1,2,4-trichlorobenzene	<1								
1,2-dibromo-3-chloropropane	<1		<1	<1	<1	<1	<5	<5	<5
1,2-dibromoethane	<1		<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1		<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1		<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1		<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene	<8								
1,3,5-trinitrobenzene	<8								
1,3-dichlorobenzene	<1								
1,3-dichloropropane	<1								
1,3-dinitrobenzene	<8								
1,4-dichlorobenzene	1.6		<1.0	<1.0	<1.0	<1.0	<1.0	1.8	1.9
1,4-naphthoquinone	<8								
1,4-phenylenediamine	<8								
1-naphthylamine	<8								
2,2-dichloropropane	<1								
2,3,4,6-tetrachlorophenol	<8								
2,4,5-t	<5								
2,4,5-tp (silvex)	<5								
2,4,5-trichlorophenol	<8								
2,4,6-trichlorophenol	<8								
2,4-d	<2								
2,4-dichlorophenol	<8								
2,4-dimethylphenol	<8								
2,4-dinitrophenol	<8								
2,4-dinitrotoluene	<8								
2,6-dichlorophenol	<8								
2,6-dinitrotoluene	<8								
2-acetylaminofluorene	<8								
2-butanone (mek)	<5		<5	<5	<5	<5	<5	<5	<5
2-chloronaphthalene	<8								
2-chlorophenol	<8								
2-hexanone (mbk)	<5		<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene	<8								
2-methylphenol	<8								
2-naphthylamine	<8								
2-nitroaniline	<8								
2-nitrophenol	<8								
3,3'-dichlorobenzidine	<8								
3,3'-dimethylbenzidine	<8								
3-methylcholanthrene	<8								
3-nitroaniline	<8								
4,4'-ddd	<.05								
4,4'-dde	<.05								
4,4'-ddt	<.05								
4,6-dinitro-2-methylphenol	<8								
4-aminobiphenyl	<8								
4-bromophenyl phenyl ether	<8								
4-chloro-3-methylphenol	<8								
4-chloroaniline	<8								
4-chlorophenyl phenyl ether	<8								
4-methyl-2-pentanone (mibk)	<5		<5	<5	<5	<5	<5	<5	<5
4-nitroaniline	<8								
4-nitrophenol	<8								
5-nitro-o-toluidine	<8								
7,12-dimethylbenz(a)anthracene	<8								
Acenaphthene	<8								
Acenaphthylene	<8								
Acetone	<10		<10	<10	<10	<10	<10	<10	<10
Acetonitrile	<10								
Acetophenone	<8								
Acrolein	<10								
Acrylonitrile	<5		<5	<5	<5	<5	<5	<5	<5
Aldrin	<.05								
Allyl chloride	<1								
Alpha-bhc	<.05								
Anthracene	<8								

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

Table 9

Analytical Data Summary for MW-14

Constituents	10/29/2021	4/25/2022	10/17/2022	1/5/2023	4/10/2023	10/27/2023	4/2/2024	10/10/2024
(3,4)-methylphenol			<8					
1,1,1,2-tetrachloroethane	<1	<1	<1		<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1		<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1		<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1		<1	<1	<1	<1
1,1-dichloroethane	1.8	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0
1,1-dichloroethylene	<1	<1	<1		<1	<1	<1	<1
1,1-dichloropropene			<1					
1,2,3-trichloropropane	<1	<1	<1		<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene			<8					
1,2,4-trichlorobenzene			<1					
1,2-dibromo-3-chloropropane	<5	<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					
1,3,5-trinitrobenzene			<8					
1,3-dichlorobenzene			<1					
1,3-dichloropropane			<1					
1,3-dinitrobenzene			<8					
1,4-dichlorobenzene	3.2	1.7	2.4		1.8	2.4	3.6	3.3
1,4-naphthoquinone			<8					
1,4-phenylenediamine			<8					
1-naphthylamine			<8					
2,2-dichloropropane			<1					
2,3,4,6-tetrachlorophenol			<8					
2,4,5-t			<5					
2,4,5-tp (silvex)			<5					
2,4,5-trichlorophenol			<8					
2,4,6-trichlorophenol			<8					
2,4-d			<2					
2,4-dichlorophenol			<8					
2,4-dimethylphenol			<8					
2,4-dinitrophenol			<8					
2,4-dinitrotoluene			<8					
2,6-dichlorophenol			<8					
2,6-dinitrotoluene			<8					
2-acetylaminofluorene			<8					
2-butanone (mek)	<5	<10	<5		<10	<10	<10	<10
2-chloronaphthalene			<8					
2-chlorophenol			<8					
2-hexanone (mbk)	<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
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
Acetonitrile			<10					
Acetophenone			<8					
Acrolein			<10					
Acrylonitrile	<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-14

Constituents	Units	10/23/2014	4/1/2015	11/5/2015	4/21/2016	10/17/2016	1/9/2017	4/21/2017	7/12/2017
Antimony, total	ug/L	<2	<2	<2	<2	<2		<2	
Arochlor 1016	ug/L								
Arochlor 1221	ug/L								
Arochlor 1232	ug/L								
Arochlor 1242	ug/L								
Arochlor 1248	ug/L								
Arochlor 1254	ug/L								
Arochlor 1260	ug/L								
Arsenic, total	ug/L	8.0	<4.0	14.7	<4.0	<4.0		<4.0	
Azobenzene	ug/L								
Barium, total	ug/L	841	791	769	575	592		587	
Benzene	ug/L	1.0	<1.0	<1.0	<1.0	<1.0		<1.0	
Benzo(a)anthracene	ug/L								
Benzo(a)pyrene	ug/L								
Benzo(b)fluoranthene	ug/L								
Benzo(g,h,i)perylene	ug/L								
Benzo(k)fluoranthene	ug/L								
Benzyl alcohol	ug/L								
Beryllium, total	ug/L	<4	<4	<4	<4	<4		<4	
Beta-bhc	ug/L								
Bis (2-chloroethoxy) methane	ug/L								
Bis(2-chloroethyl) ether	ug/L								
Bis(2-chloroisopropyl) ether	ug/L								
Bis(2-ethylhexyl) phthalate	ug/L								
Bromochloromethane	ug/L	<1	<1	<1	<1	<1		<1	
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1		<1	
Bromoform	ug/L	<1	<1	<1	<1	<1		<1	
Bromomethane	ug/L	<1	<1	<1	<1	<1		<1	
Butyl benzyl phthalate	ug/L								
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8		<.8	
Carbon disulfide	ug/L	<1	<1	<1	<1	<1		<1	
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1		<1	
Chlordane	ug/L								
Chlorobenzene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	
Chlorobenzilate	ug/L								
Chloroethane	ug/L	2.5	<1.0	1.4	<1.0	<1.0		<1.0	
Chloroform	ug/L	<1	<1	<1	<1	<1		<1	
Chloromethane	ug/L	<1	<1	<1	<1	<1		<1	
Chloroprene	ug/L								
Chromium, total	ug/L	<8	<8	<8	<8	<8		<8	
Chrysene	ug/L								
Cis-1,2-dichloroethylene	ug/L	1.3	<1.0	1.8	<1.0	1.8		<1.0	
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1		<1	
Cobalt, total	ug/L	25.7	51.2	18.7	1.4	16.3	4.0	7.7	
Copper, total	ug/L	<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	
Dibromomethane	ug/L	<1	<1	<1	<1	<1		<1	
Dichlorodifluoromethane	ug/L								
Dieldrin	ug/L								
Diethyl phthalate	ug/L								
Dimethoate	ug/L								
Dimethylphthalate	ug/L								
Di-n-butyl phthalate	ug/L								
Di-n-octyl phthalate	ug/L								
Dinoseb	ug/L								
Diphenylamine	ug/L								
Disulfoton	ug/L								
Endosulfan i	ug/L								
Endosulfan ii	ug/L								
Endosulfan sulfate	ug/L								
Endrin	ug/L								
Endrin aldehyde	ug/L								
Ethyl methacrylate	ug/L								
Ethyl methanesulfonate	ug/L								
Ethylbenzene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	
Famphur	ug/L								
Fluoranthene	ug/L								
Fluorene	ug/L								
Gamma-bhc (lindane)	ug/L								
Heptachlor	ug/L								
Heptachlor epoxide	ug/L								
Hexachlorobenzene	ug/L								

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

Table 9

Analytical Data Summary for MW-14

Constituents	10/16/2017	1/12/2018	4/24/2018	10/25/2018	4/15/2019	10/7/2019	4/22/2020	10/2/2020	4/8/2021
Antimony, total	<2		<2	<2	<2	<2	<2	<2	<2
Arochlor 1016	<1								
Arochlor 1221	<2								
Arochlor 1232	<2								
Arochlor 1242	<2								
Arochlor 1248	<2								
Arochlor 1254	<1								
Arochlor 1260	<1								
Arsenic, total	14.8		<4.0	<4.0	<4.0	<4.0	<4.0	6.7	8.0
Azobenzene	<8								
Barium, total	818	712	647	547	707	658	558	638	649
Benzene	2.5		<1.0	<1.0	1.9	<1.0	<1.0	<1.0	<1.0
Benzo(a)anthracene	<8								
Benzo(a)pyrene	<8								
Benzo(b)fluoranthene	<8								
Benzo(g,h,i)perylene	<8								
Benzo(k)fluoranthene	<8								
Benzyl alcohol	<8								
Beryllium, total	<4		<4	<4	<4	<4	<4	<4	<4
Beta-bhc	<.05								
Bis (2-chloroethoxy) methane	<8								
Bis(2-chloroethyl) ether	<8								
Bis(2-chloroisopropyl) ether	<8								
Bis(2-ethylhexyl) phthalate	18								
Bromochloromethane	<1		<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1		<1	<1	<1	<1	<1	<1	<1
Bromoform	<1		<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1		<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate	<8								
Cadmium, total	<.8		<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1		<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1		<1	<1	<1	<1	<1	<1	<1
Chlordane	<1								
Chlorobenzene	<1.0		<1.0	1.3	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzilate	<8								
Chloroethane	<1.0		<1.0	<1.0	1.0	1.0	<1.0	2.7	1.0
Chloroform	<1		<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1		<1	<1	<1	<1	<1	<1	<1
Chloroprene	<1								
Chromium, total	<8		<8	<8	<8	<8	<8	<8	<8
Chrysene	<8								
Cis-1,2-dichloroethylene	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cis-1,3-dichloropropene	<1		<1	<1	<1	<1	<1	<1	<1
Cobalt, total	16.0	11.2	16.9	4.2	27.3	10.0	6.9	11.5	21.2
Copper, total	<4		<4	<4	<4	<4	<4	<4	<4
Cyanide, total	<.005								
Delta-bhc	<.05								
Diallate	<8								
Dibenzo(a,h)anthracene	<8								
Dibenzofuran	<8								
Dibromochloromethane	<1		<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1		<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	<1								
Dieldrin	<.05								
Diethyl phthalate	<8								
Dimethoate	<.4								
Dimethylphthalate	<8								
Di-n-butyl phthalate	<8								
Di-n-octyl phthalate	<8								
Dinoseb	<.5								
Diphenylamine	<8								
Disulfoton	<.4								
Endosulfan i	<.05								
Endosulfan ii	<.05								
Endosulfan sulfate	<.05								
Endrin	<.05								
Endrin aldehyde	<.05								
Ethyl methacrylate	<10								
Ethyl methanesulfonate	<8								
Ethylbenzene	<1.0		<1.0	<1.0	1.1	<1.0	<1.0	<1.0	<1.0
Famphur	<.4								
Fluoranthene	<8								
Fluorene	<8								
Gamma-bhc (lindane)	<.05								
Heptachlor	<.05								
Heptachlor epoxide	<.05								
Hexachlorobenzene	<.05								

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

Table 9

Analytical Data Summary for MW-14

Constituents	10/29/2021	4/25/2022	10/17/2022	1/5/2023	4/10/2023	10/27/2023	4/2/2024	10/10/2024
Antimony, total	<2	<2	<2		<2	<2	<2	<2
Arochlor 1016			<.1					
Arochlor 1221			<.2					
Arochlor 1232			<.2					
Arochlor 1242			<.2					
Arochlor 1248			<.2					
Arochlor 1254			<.1					
Arochlor 1260			<.1					
Arsenic, total	44.3	4.3	65.4		66.8	71.4	46.1	91.9
Azobenzene			<8					
Barium, total	674	503	588		719	665	812	575
Benzene	2.0	<1.0	1.4		1.1	1.2	2.6	1.6
Benzo(a)anthracene			<8					
Benzo(a)pyrene			<8					
Benzo(b)fluoranthene			<8					
Benzo(g,h,i)perylene			<8					
Benzo(k)fluoranthene			<8					
Benzyl alcohol			<8					
Beryllium, total	<4	<4	<4		<4	<4	<4	<4
Beta-bhc			<.05					
Bis (2-chloroethoxy) methane			<8					
Bis(2-chloroethyl) ether			<8					
Bis(2-chloroisopropyl) ether			<8					
Bis(2-ethylhexyl) phthalate			11	<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					
Cadmium, total	<.8	<.8	<.8		<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1		<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1		<1	<1	<1	<1
Chlordane			<.1					
Chlorobenzene	<1.0	<1.0	<1.0		<1.0	<1.0	1.2	1.0
Chlorobenzilate			<8					
Chloroethane	2.4	<1.0	1.3		1.2	1.8	1.9	<1.0
Chloroform	<1	<1	<1		<1	<1	<1	<1
Chloromethane	<1	<1	<1		<1	<1	<1	<1
Chloroprene			<1					
Chromium, total	<8	<8	<8		<8	<8	<8	<8
Chrysene			<8					
Cis-1,2-dichloroethylene	<1.0	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0
Cis-1,3-dichloropropene	<1	<1	<1		<1	<1	<1	<1
Cobalt, total	14.4	13.1	13.1		14.8	16.4	20.8	9.9
Copper, total	<4	<4	<4		<4	<4	<4	<4
Cyanide, total			<.005					
Delta-bhc			<.05					
Diallate			<8					
Dibenzo(a,h)anthracene			<8					
Dibenzofuran			<8					
Dibromochloromethane	<1	<1	<1		<1	<1	<1	<1
Dibromomethane	<1	<1	<1		<1	<1	<1	<1
Dichlorodifluoromethane			<1					
Dieldrin			<.05					
Diethyl phthalate			<8					
Dimethoate			<.4					
Dimethylphthalate			<8					
Di-n-butyl phthalate			<8					
Di-n-octyl phthalate			<8					
Dinoseb			<.5					
Diphenylamine			<8					
Disulfoton			<.4					
Endosulfan i			<.05					
Endosulfan ii			<.05					
Endosulfan sulfate			<.05					
Endrin			<.05					
Endrin aldehyde			<.05					
Ethyl methacrylate			<10					
Ethyl methanesulfonate			<8					
Ethylbenzene	<1.0	<1.0	<1.0		<1.0	<1.0	<1.0	<1.0
Famphur			<.4					
Fluoranthene			<8					
Fluorene			<8					
Gamma-bhc (lindane)			<.05					
Heptachlor			<.05					
Heptachlor epoxide			<.05					
Hexachlorobenzene			<.05					

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

Table 9

Analytical Data Summary for MW-14

Constituents	Units	10/23/2014	4/1/2015	11/5/2015	4/21/2016	10/17/2016	1/9/2017	4/21/2017	7/12/2017
Hexachlorobutadiene	ug/L								
Hexachlorocyclopentadiene	ug/L								
Hexachloroethane	ug/L								
Hexachloropropene	ug/L								
Indeno(1,2,3-cd)pyrene	ug/L								
Isobutanol	ug/L								
Isodrin	ug/L								
Isophorone	ug/L								
Isosafrole	ug/L								
Kepone	ug/L								
Lead, total	ug/L	<4	<4	<4	<4	<4		<4	
Mercury, total	ug/L								
Methacrylonitrile	ug/L								
Methapyrilene	ug/L								
Methoxychlor	ug/L								
Methyl iodide	ug/L	<1	<1	<1	<1	<1		<1	
Methyl methacrylate	ug/L								
Methyl methanesulfonate	ug/L								
Methyl parathion	ug/L								
Methylene chloride	ug/L	<5	<5	<5	<5	<5		<5	
Naphthalene	ug/L								
Nickel, total	ug/L	32.1	36.0	24.6	43.6	24.7		33.0	25.9
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	
Silver, total	ug/L	<4	<4	<4	<4	<4		<4	
Solids, total suspended	mg/L	37	58						
Styrene	ug/L	<1	<1	<1	<1	<1		<1	
Sulfide, total	mg/L								
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1		<1	
Thallium, total	ug/L	<4	<4	<4	<4	<4		<4	
Thionazin	ug/L								
Tin, total	ug/L								
Toluene	ug/L	<1	<1	<1	<1	<1		<1	
Toxaphene	ug/L								
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1		<1	
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1		<1	
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5		<5	
Trichloroethylene	ug/L	<1	<1	<1	<1	<1		<1	
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1		<1	
Vanadium, total	ug/L	<20	<20	<20	<20	<20		<20	
Vinyl acetate	ug/L	<5	<5	<5	<5	<5		<5	
Vinyl chloride	ug/L	<1	<1	<1	<1	<1		<1	
Xylenes, total	ug/L	<2	<2	<2	<2	<2		<2	
Zinc, total	ug/L	<20.0	11.6	14.8	<20.0	<8.0		<8.0	

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

Table 9

Analytical Data Summary for MW-14

Constituents	10/16/2017	1/12/2018	4/24/2018	10/25/2018	4/15/2019	10/7/2019	4/22/2020	10/2/2020	4/8/2021
Hexachlorobutadiene	<8								
Hexachlorocyclopentadiene	<8								
Hexachloroethane	<8								
Hexachloropropene	<8								
Indeno(1,2,3-cd)pyrene	<8								
Isobutanol	<1000								
Isodrin	<8								
Isophorone	<8								
Isosafrole	<8								
Kepone	<8								
Lead, total	<4		<4	<4	<4	<4	<4	<4	<4
Mercury, total	<5								
Methacrylonitrile	<1								
Methapyrilene	<8								
Methoxychlor	<.05								
Methyl iodide	<1		<1	<1	<1	<1	<1	<1	<1
Methyl methacrylate	<1								
Methyl methanesulfonate	<8								
Methyl parathion	<4								
Methylene chloride	<5		<5	<5	<5	<5	<5	<5	<5
Naphthalene	<8								
Nickel, total	19.3		22.1	19.5	31.2	14.0	23.4	10.3	22.7
Nitrobenzene	<8								
N-nitrosodiethylamine	<8								
N-nitrosodimethylamine	<8								
N-nitrosodi-n-butylamine	<8								
N-nitroso-di-n-propylamine	<8								
N-nitrosodiphenylamine	<8								
N-nitrosomethylethylamine	<8								
N-nitrosopiperidine	<8								
N-nitrosopyrrolidine	<8								
O,o,o-triethyl phosphorothioate	<4								
O-toluidine	<8								
Parathion	<4								
P-dimethylaminoazobenzene	<8								
Pentachlorobenzene	<8								
Pentachloronitrobenzene (pcnb)	<8								
Pentachlorophenol	<8								
Phenacetin	<8								
Phenanthrene	<8								
Phenol	<8								
Phorate	<4								
Pronamide	<8								
Propionitrile	<10								
Pyrene	<8								
Safrole	<8								
Selenium, total	<4		<4	<4	<4	<4	<4	<4	<4
Silver, total	<4		<4	<4	<4	<4	<4	<4	<4
Solids, total suspended									
Styrene	<1		<1	<1	<1	<1	<1	<1	<1
Sulfide, total	<1								
Tetrachloroethylene	<1		<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4		<4	<4	<2	<2	<2	<2	<2
Thionazin	<4								
Tin, total	<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		<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5		<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1		<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2		<2	<2	<2	<2	<2	<2	<2
Zinc, total	<8.0		<8.0	<20.0	<8.0	<8.0	<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	10/29/2021	4/25/2022	10/17/2022	1/5/2023	4/10/2023	10/27/2023	4/2/2024	10/10/2024
Hexachlorobutadiene			<8					
Hexachlorocyclopentadiene			<8					
Hexachloroethane			<8					
Hexachloropropene			<8					
Indeno(1,2,3-cd)pyrene			<8					
Isobutanol			<1000					
Isodrin			<8					
Isophorone			<8					
Isosafrole			<8					
Kepone			<8					
Lead, total	<4	<4	<4		<4	<4	<4	<4
Mercury, total			<.5					
Methacrylonitrile			<1					
Methapyrilene			<8					
Methoxychlor			<.05					
Methyl iodide	<1	<1	<2		<1	<1	<1	<1
Methyl methacrylate			<1					
Methyl methanesulfonate			<8					
Methyl parathion			<.4					
Methylene chloride	<5	<5	<5		<5	<5	<5	<5
Naphthalene			<8					
Nickel, total	18.1	19.1	16.4		19.2	22.8	30.8	7.7
Nitrobenzene			<8					
N-nitrosodiethylamine			<8					
N-nitrosodimethylamine			<8					
N-nitrosodi-n-butylamine			<8					
N-nitroso-di-n-propylamine			<8					
N-nitrosodiphenylamine			<8					
N-nitrosomethylethylamine			<8					
N-nitrosopiperidine			<8					
N-nitrosopyrrolidine			<8					
O,o,o-triethyl phosphorothioate			<.4					
O-toluidine			<8					
Parathion			<.4					
P-dimethylaminoazobenzene			<8					
Pentachlorobenzene			<8					
Pentachloronitrobenzene (pcnb)			<8					
Pentachlorophenol			<8					
Phenacetin			<8					
Phenanthrene			<8					
Phenol			<8					
Phorate			<.4					
Pronamide			<8					
Propionitrile			<10					
Pyrene			<8					
Safrole			<8					
Selenium, total	<4	<4	<4		<4	<4	<4	<4
Silver, total	<4	<4	<4		<4	<4	<4	<4
Solids, total suspended								
Styrene	<1	<1	<1		<1	<1	<1	<1
Sulfide, total			<.1					
Tetrachloroethylene	<1	<1	<1		<1	<1	<1	<1
Thallium, total	<2	<2	<2		<2	<2	<2	<2
Thionazin			<.4					
Tin, total			<20					
Toluene	<1	<1	<1		<1	<1	<1	<1
Toxaphene			<.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	<20
Vinyl acetate	<5	<5	<5		<5	<5	<5	<5
Vinyl chloride	<1	<1	<1		<1	<1	<1	<1
Xylenes, total	<2	<2	<2		<2	<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0		<20.0	23.8	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-211

Constituents	Units	10/23/2014	4/1/2015	11/5/2015	4/21/2016	10/17/2016	4/21/2017	10/16/2017	4/24/2018
(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	<1.0	<1.0	<1.0	<1.0	2.0	1.2	1.4	1.0
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene	ug/L							<1	
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	ug/L							<8	
1,2,4-trichlorobenzene	ug/L							<1	
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene	ug/L							<8	
1,3,5-trinitrobenzene	ug/L							<8	
1,3-dichlorobenzene	ug/L							<1	
1,3-dichloropropane	ug/L							<1	
1,3-dinitrobenzene	ug/L							<8	
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone	ug/L							<8	
1,4-phenylenediamine	ug/L							<8	
1-naphthylamine	ug/L							<8	
2,2-dichloropropane	ug/L							<1	
2,3,4,6-tetrachlorophenol	ug/L							<8	
2,4,5-t	ug/L							<.5	
2,4,5-tp (silvex)	ug/L							<.5	
2,4,5-trichlorophenol	ug/L							<8	
2,4,6-trichlorophenol	ug/L							<8	
2,4-d	ug/L							<2	
2,4-dichlorophenol	ug/L							<8	
2,4-dimethylphenol	ug/L							<8	
2,4-dinitrophenol	ug/L							<8	
2,4-dinitrotoluene	ug/L							<8	
2,6-dichlorophenol	ug/L							<8	
2,6-dinitrotoluene	ug/L							<8	
2-acetylaminofluorene	ug/L							<8	
2-butanone (mek)	ug/L	<5	<5	<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-211

Constituents	10/25/2018	4/15/2019	10/7/2019	4/22/2020	10/2/2020	4/8/2021	10/29/2021	4/25/2022	10/17/2022
(3,4)-methylphenol									<8
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene									<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene									<8
1,2,4-trichlorobenzene									<1
1,2-dibromo-3-chloropropane	<1	<1	<1	<5	<5	<5	<5	<5	<1
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene									<8
1,3,5-trinitrobenzene									<8
1,3-dichlorobenzene									<1
1,3-dichloropropane									<1
1,3-dinitrobenzene									<8
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone									<8
1,4-phenylenediamine									<8
1-naphthylamine									<8
2,2-dichloropropane									<1
2,3,4,6-tetrachlorophenol									<8
2,4,5-t									<5
2,4,5-tp (silvex)									<5
2,4,5-trichlorophenol									<8
2,4,6-trichlorophenol									<8
2,4-d									<2
2,4-dichlorophenol									<8
2,4-dimethylphenol									<8
2,4-dinitrophenol									<8
2,4-dinitrotoluene									<8
2,6-dichlorophenol									<8
2,6-dinitrotoluene									<8
2-acetylaminofluorene									<8
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<5	<10	<5
2-chloronaphthalene									<8
2-chlorophenol									<8
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene									<8
2-methylphenol									<8
2-naphthylamine									<8
2-nitroaniline									<8
2-nitrophenol									<8
3,3'-dichlorobenzidine									<8
3,3'-dimethylbenzidine									<8
3-methylcholanthrene									<8
3-nitroaniline									<8
4,4'-ddd									<.05
4,4'-dde									<.05
4,4'-ddt									<.05
4,6-dinitro-2-methylphenol									<8
4-aminobiphenyl									<8
4-bromophenyl phenyl ether									<8
4-chloro-3-methylphenol									<8
4-chloroaniline									<8
4-chlorophenyl phenyl ether									<8
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline									<8
4-nitrophenol									<8
5-nitro-o-toluidine									<8
7,12-dimethylbenz(a)anthracene									<8
Acenaphthene									<8
Acenaphthylene									<8
Acetone	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acetonitrile									<10
Acetophenone									<8
Acrolein									<10
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin									<.05
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-211

Constituents	4/10/2023	10/27/2023	4/2/2024	10/10/2024
(3 4)-methylphenol				
1,1,1,2-tetrachloroethane	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1
1,1-dichloroethane	<1.0	<1.0	<1.0	<1.0
1,1-dichloroethylene	<1	<1	<1	<1
1,1-dichloropropene				
1,2,3-trichloropropane	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene				
1,2,4-trichlorobenzene				
1,2-dibromo-3-chloropropane	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1
1,2-dinitrobenzene				
1,3,5-trinitrobenzene				
1,3-dichlorobenzene				
1,3-dichloropropane				
1,3-dinitrobenzene				
1,4-dichlorobenzene	<1	<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
2-chloronaphthalene				
2-chlorophenol				
2-hexanone (mbk)	<5	<5	<5	<5
2-methylnaphthalene				
2-methylphenol				
2-naphthylamine				
2-nitroaniline				
2-nitrophenol				
3,3'-dichlorobenzidine				
3,3'-dimethylbenzidine				
3-methylcholanthrene				
3-nitroaniline				
4,4'-ddd				
4,4'-dde				
4,4'-ddt				
4,6-dinitro-2-methylphenol				
4-aminobiphenyl				
4-bromophenyl phenyl ether				
4-chloro-3-methylphenol				
4-chloroaniline				
4-chlorophenyl phenyl ether				
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5
4-nitroaniline				
4-nitrophenol				
5-nitro-o-toluidine				
7,12-dimethylbenz(a)anthracene				
Acenaphthene				
Acenaphthylene				
Acetone	<10	<10	<10	<10
Acetonitrile				
Acetophenone				
Acrolein				
Acrylonitrile	<5	<5	<5	<5
Aldrin				
Allyl chloride				
Alpha-bhc				
Anthracene				

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

Table 9

Analytical Data Summary for MW-211

Constituents	Units	10/23/2014	4/1/2015	11/5/2015	4/21/2016	10/17/2016	4/21/2017	10/16/2017	4/24/2018
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	15.0	18.2	37.0	33.3	18.0	48.7	51.7	21.0
Azobenzene	ug/L							<.8	
Barium, total	ug/L	331	352	420	340	331	348	403	322
Benzene	ug/L	2.8	<1.0	<1.0	<1.0	<1.0	1.5	<1.0	1.6
Benzo(a)anthracene	ug/L							<.8	
Benzo(a)pyrene	ug/L							<.8	
Benzo(b)fluoranthene	ug/L							<.8	
Benzo(g,h,i)perylene	ug/L							<.8	
Benzo(k)fluoranthene	ug/L							<.8	
Benzyl alcohol	ug/L							<.8	
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Beta-bhc	ug/L							<.05	
Bis (2-chloroethoxy) methane	ug/L							<.8	
Bis(2-chloroethyl) ether	ug/L							<.8	
Bis(2-chloroisopropyl) ether	ug/L							<.8	
Bis(2-ethylhexyl) phthalate	ug/L							<.6	
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate	ug/L							<.8	
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane	ug/L							<.1	
Chlorobenzene	ug/L	10.6	7.6	10.5	8.1	8.8	8.3	8.2	8.7
Chlorobenzilate	ug/L							<.8	
Chloroethane	ug/L	1.3	<1.0	1.4	1.2	2.7	2.1	2.4	2.3
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	1.8	1.9	1.9	3.9	1.6	2.1	1.0
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	18.6	13.1	20.6	10.8	12.9	10.3	16.4	13.3
Copper, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Cyanide, total	mg/L							<.005	
Delta-bhc	ug/L							<.05	
Diallate	ug/L							<.8	
Dibenzo(a,h)anthracene	ug/L							<.8	
Dibenzofuran	ug/L							<.8	
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L							<.1	
Dieldrin	ug/L							<.05	
Diethyl phthalate	ug/L							<.8	
Dimethoate	ug/L							<.4	
Dimethylphthalate	ug/L							<.8	
Di-n-butyl phthalate	ug/L							<.8	
Di-n-octyl phthalate	ug/L							<.8	
Dinoseb	ug/L							<.5	
Diphenylamine	ug/L							<.8	
Disulfoton	ug/L							<.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-211

Constituents	10/25/2018	4/15/2019	10/7/2019	4/22/2020	10/2/2020	4/8/2021	10/29/2021	4/25/2022	10/17/2022
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016									<.1
Arochlor 1221									<.2
Arochlor 1232									<.2
Arochlor 1242									<.2
Arochlor 1248									<.2
Arochlor 1254									<.1
Arochlor 1260									<.1
Arsenic, total	11.8	52.8	103.0	197.0	26.3	50.8	31.7	138.0	67.5
Azobenzene									<8
Barium, total	241	473	385	494	249	367	335	467	257
Benzene	<1.0	1.0	<1.0	<1.0	<1.0	1.5	<1.0	1.5	<1.0
Benzo(a)anthracene									<8
Benzo(a)pyrene									<8
Benzo(b)fluoranthene									<8
Benzo(g,h,i)perylene									<8
Benzo(k)fluoranthene									<8
Benzyl alcohol									<8
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Beta-bhc									<.05
Bis (2-chloroethoxy) methane									<8
Bis(2-chloroethyl) ether									<8
Bis(2-chloroisopropyl) ether									<8
Bis(2-ethylhexyl) phthalate									<6
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate									<8
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane									<.1
Chlorobenzene	6.2	7.5	5.9	6.1	5.2	5.3	5.6	5.0	5.2
Chlorobenzilate									<8
Chloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene									<1
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene									<8
Cis-1,2-dichloroethylene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	10.3	17.0	14.9	13.3	10.3	11.5	13.6	12.8	13.3
Copper, total	<4.0	<4.0	<4.0	4.5	<4.0	<4.0	<4.0	<4.0	<4.0
Cyanide, total									<.005
Delta-bhc									<.05
Diallate									<8
Dibenzo(a,h)anthracene									<8
Dibenzofuran									<8
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane									<1
Dieldrin									<.05
Diethyl phthalate									<8
Dimethoate									<.4
Dimethylphthalate									<8
Di-n-butyl phthalate									<8
Di-n-octyl phthalate									<8
Dinoseb									<.5
Diphenylamine									<8
Disulfoton									<.4
Endosulfan i									<.05
Endosulfan ii									<.05
Endosulfan sulfate									<.05
Endrin									<.05
Endrin aldehyde									<.05
Ethyl methacrylate									<10
Ethyl methanesulfonate									<8
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Famphur									<.4
Fluoranthene									<8
Fluorene									<8
Gamma-bhc (lindane)									<.05
Heptachlor									<.05
Heptachlor epoxide									<.05
Hexachlorobenzene									<.05

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

Table 9

Analytical Data Summary for MW-211

Constituents	4/10/2023	10/27/2023	4/2/2024	10/10/2024
Antimony, total	<2	<2	<2	<2
Arochlor 1016				
Arochlor 1221				
Arochlor 1232				
Arochlor 1242				
Arochlor 1248				
Arochlor 1254				
Arochlor 1260				
Arsenic, total	104.0	77.3	18.6	61.7
Azobenzene				
Barium, total	306	250	306	339
Benzene	<1.0	<1.0	<1.0	1.2
Benzo(a)anthracene				
Benzo(a)pyrene				
Benzo(b)fluoranthene				
Benzo(g,h,i)perylene				
Benzo(k)fluoranthene				
Benzyl alcohol				
Beryllium, total	<4	<4	<4	<4
Beta-bhc				
Bis (2-chloroethoxy) methane				
Bis(2-chloroethyl) ether				
Bis(2-chloroisopropyl) ether				
Bis(2-ethylhexyl) phthalate				
Bromochloromethane	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1
Butyl benzyl phthalate				
Cadmium, total	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1
Chlordane				
Chlorobenzene	4.1	1.7	4.4	4.7
Chlorobenzilate				
Chloroethane	<1.0	<1.0	<1.0	<1.0
Chloroform	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1
Chloroprene				
Chromium, total	<8	<8	<8	<8
Chrysene				
Cis-1,2-dichloroethylene	<1.0	<1.0	<1.0	<1.0
Cis-1,3-dichloropropene	<1	<1	<1	<1
Cobalt, total	11.3	10.7	12.5	12.9
Copper, total	<4.0	<4.0	<4.0	<4.0
Cyanide, total				
Delta-bhc				
Diallate				
Dibenzo(a,h)anthracene				
Dibenzofuran				
Dibromochloromethane	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1
Dichlorodifluoromethane				
Dieldrin				
Diethyl phthalate				
Dimethoate				
Dimethylphthalate				
Di-n-butyl phthalate				
Di-n-octyl phthalate				
Dinoseb				
Diphenylamine				
Disulfoton				
Endosulfan i				
Endosulfan ii				
Endosulfan sulfate				
Endrin				
Endrin aldehyde				
Ethyl methacrylate				
Ethyl methanesulfonate				
Ethylbenzene	<1	<1	<1	<1
Famphur				
Fluoranthene				
Fluorene				
Gamma-bhc (lindane)				
Heptachlor				
Heptachlor epoxide				
Hexachlorobenzene				

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

Table 9

Analytical Data Summary for MW-211

Constituents	Units	10/23/2014	4/1/2015	11/5/2015	4/21/2016	10/17/2016	4/21/2017	10/16/2017	4/24/2018
Hexachlorobutadiene	ug/L							<8	
Hexachlorocyclopentadiene	ug/L							<8	
Hexachloroethane	ug/L							<8	
Hexachloropropene	ug/L							<8	
Indeno(1,2,3-cd)pyrene	ug/L							<8	
Isobutanol	ug/L							<1000	
Isodrin	ug/L							<8	
Isophorone	ug/L							<8	
Isosafrole	ug/L							<8	
Kepone	ug/L							<8	
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
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	35.1	41.3	34.7	39.7	37.5	34.9	35.3	35.8
Nitrobenzene	ug/L							<8	
N-nitrosodiethylamine	ug/L							<8	
N-nitrosodimethylamine	ug/L							<8	
N-nitrosodi-n-butylamine	ug/L							<8	
N-nitroso-di-n-propylamine	ug/L							<8	
N-nitrosodiphenylamine	ug/L							<8	
N-nitrosomethylethylamine	ug/L							<8	
N-nitrosopiperidine	ug/L							<8	
N-nitrosopyrrolidine	ug/L							<8	
O,o,o-triethyl phosphorothioate	ug/L							<.4	
O-toluidine	ug/L							<8	
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	142	92						
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total	mg/L							<.1	
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Thionazin	ug/L							<.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	<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	<20.0	<8.0	10.2	22.2	<8.0	<8.0	<8.0	<8.0

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

Table 9

Analytical Data Summary for MW-211

Constituents	10/25/2018	4/15/2019	10/7/2019	4/22/2020	10/2/2020	4/8/2021	10/29/2021	4/25/2022	10/17/2022
Hexachlorobutadiene									<8
Hexachlorocyclopentadiene									<8
Hexachloroethane									<8
Hexachloropropene									<8
Indeno(1,2,3-cd)pyrene									<8
Isobutanol									<1000
Isodrin									<8
Isophorone									<8
Isosafrole									<8
Kepone									<8
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Mercury, total									<5
Methacrylonitrile									<1
Methapyrilene									<8
Methoxychlor									<.05
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<2
Methyl methacrylate									<1
Methyl methanesulfonate									<8
Methyl parathion									<.4
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene									<8
Nickel, total	33.8	43.6	26.9	38.3	30.5	28.7	44.3	28.1	28.5
Nitrobenzene									<8
N-nitrosodiethylamine									<8
N-nitrosodimethylamine									<8
N-nitrosodi-n-butylamine									<8
N-nitroso-di-n-propylamine									<8
N-nitrosodiphenylamine									<8
N-nitrosomethylethylamine									<8
N-nitrosopiperidine									<8
N-nitrosopyrrolidine									<8
O,o,o-triethyl phosphorothioate									<.4
O-toluidine									<8
Parathion									<.4
P-dimethylaminoazobenzene									<8
Pentachlorobenzene									<8
Pentachloronitrobenzene (pcnb)									<8
Pentachlorophenol									<8
Phenacetin									<8
Phenanthrene									<8
Phenol									<8
Phorate									<.4
Pronamide									<8
Propionitrile									<10
Pyrene									<8
Safrole									<8
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total									<.1
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<2	<2	<2	<2	<2	<2	<2	<2
Thionazin									<.4
Tin, total									<20
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene									<.2
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<20.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-211

Constituents	4/10/2023	10/27/2023	4/2/2024	10/10/2024
Hexachlorobutadiene				
Hexachlorocyclopentadiene				
Hexachloroethane				
Hexachloropropene				
Indeno(1,2,3-cd)pyrene				
Isobutanol				
Isodrin				
Isophorone				
Isosafrole				
Kepona				
Lead, total	<4	<4	<4	<4
Mercury, total				
Methacrylonitrile				
Methapyrilene				
Methoxychlor				
Methyl iodide	<1	<1	<1	<1
Methyl methacrylate				
Methyl methanesulfonate				
Methyl parathion				
Methylene chloride	<5	<5	<5	<5
Naphthalene				
Nickel, total	27.2	30.5	30.0	33.0
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
Silver, total	<4	<4	<4	<4
Solids, total suspended				
Styrene	<1	<1	<1	<1
Sulfide, total				
Tetrachloroethylene	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2
Thionazin				
Tin, total				
Toluene	<1	<1	<1	<1
Toxaphene				
Trans-1,2-dichloroethylene	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2
Zinc, total	<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-29

Constituents	Units	10/23/2014	4/1/2015	11/5/2015	4/21/2016	10/17/2016	4/21/2017	10/16/2017	4/24/2018
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	ug/L	104.0	90.0	118.0	99.8	122.0	88.4	87.5	91.6
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8
Copper, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	75.5
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Selenium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended	mg/L	170	37						
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
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	<20.0	<8.0	<8.0	<20.0	<8.0	8.7	<8.0	48.7

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

Table 9

Analytical Data Summary for MW-29

Constituents	7/5/2018	10/25/2018	4/15/2019	10/7/2019	4/22/2020	10/2/2020	4/8/2021	10/29/2021	4/25/2022
1,1,1,2-tetrachloroethane		<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane		<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane		<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane		<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane		<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene		<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane		<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane		<1	<1	<1	<5	<5	<5	<5	<5
1,2-dibromoethane		<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene		<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane		<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane		<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene		<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)		<5	<5	<5	<5	<5	<5	<5	<10
2-hexanone (mbk)		<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)		<5	<5	<5	<5	<5	<5	<5	<5
Acetone		<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile		<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total		<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total		<4	<4	<4	<4	<4	<4	<4	<4
Barium, total		116.0	91.1	109.0	87.2	118.0	71.1	94.7	77.7
Benzene		<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total		<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane		<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane		<1	<1	<1	<1	<1	<1	<1	<1
Bromoform		<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane		<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total		<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide		<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride		<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene		<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane		<1	<1	<1	<1	<1	<1	<1	<1
Chloroform		<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane		<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total		<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene		<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene		<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total		<.8	<.8	<.8	<.4	<.4	<.4	<.4	<.4
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane		<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane		<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene		<1	<1	<1	<1	<1	<1	<1	<1
Lead, total		<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide		<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride		<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total		<4	<4	<4	<4	<4	<4	<4	<4
Selenium, total		<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Silver, total		<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended									
Styrene		<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene		<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total		<4	<2	<2	<2	<2	<2	<2	<2
Toluene		<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene		<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene		<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene		<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene		<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane		<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total		<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate		<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride		<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total		<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-29

Constituents	10/17/2022	4/10/2023	4/2/2024	10/10/2024
1,1,1,2-tetrachloroethane	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1
2-butanone (mek)	<10	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5
Acetone	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2
Arsenic, total	<4	<4	<4	<4
Barium, total	108.0	75.9	62.2	97.7
Benzene	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4
Bromochloromethane	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8
Cis-1,2-dichloroethylene	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1
Cobalt, total	.8	<.4	<.4	<.4
Copper, total	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4
Methyl iodide	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5
Nickel, total	<4	<4	<4	<4
Selenium, total	4.3	<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	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-31R

Constituents	Units	10/23/2014	4/1/2015	11/5/2015	4/21/2016	10/17/2016	4/21/2017	10/16/2017	4/24/2018
(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	4.4	5.8	4.7	1.9	2.0	2.0	1.7	2.9
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	<1.0	<1.0	3.2	5.5	7.8	6.9	6.0	11.3
1,4-naphthoquinone	ug/L								
1,4-phenylenediamine	ug/L								
1-naphthylamine	ug/L								
2,2-dichloropropane	ug/L								
2,3,4,6-tetrachlorophenol	ug/L								
2,4,5-t	ug/L								
2,4,5-tp (silvex)	ug/L								
2,4,5-trichlorophenol	ug/L								
2,4,6-trichlorophenol	ug/L								
2,4-d	ug/L								
2,4-dichlorophenol	ug/L								
2,4-dimethylphenol	ug/L								
2,4-dinitrophenol	ug/L								
2,4-dinitrotoluene	ug/L								
2,6-dichlorophenol	ug/L								
2,6-dinitrotoluene	ug/L								
2-acetylaminofluorene	ug/L								
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
2-chloronaphthalene	ug/L								
2-chlorophenol	ug/L								
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene	ug/L								
2-methylphenol	ug/L								
2-naphthylamine	ug/L								
2-nitroaniline	ug/L								
2-nitrophenol	ug/L								
3,3'-dichlorobenzidine	ug/L								
3,3'-dimethylbenzidine	ug/L								
3-methylcholanthrene	ug/L								
3-nitroaniline	ug/L								
4,4'-ddd	ug/L								
4,4'-dde	ug/L								
4,4'-ddt	ug/L								
4,6-dinitro-2-methylphenol	ug/L								
4-aminobiphenyl	ug/L								
4-bromophenyl phenyl ether	ug/L								
4-chloro-3-methylphenol	ug/L								
4-chloroaniline	ug/L								
4-chlorophenyl phenyl ether	ug/L								
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline	ug/L								
4-nitrophenol	ug/L								
5-nitro-o-toluidine	ug/L								
7,12-dimethylbenz(a)anthracene	ug/L								
Acenaphthene	ug/L								
Acenaphthylene	ug/L								
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Acetonitrile	ug/L								
Acetophenone	ug/L								
Acrolein	ug/L								
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin	ug/L								
Allyl chloride	ug/L								
Alpha-bhc	ug/L								
Anthracene	ug/L								

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

Table 9

Analytical Data Summary for MW-31R

Constituents	10/25/2018	4/15/2019	10/7/2019	4/22/2020	10/2/2020	4/8/2021	10/29/2021	4/25/2022	10/17/2022
(3 4)-methylphenol	<8								
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1.0	2.6	1.4	2.9	2.9	2.8	2.9	2.9	3.1
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene	<1								
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	<8								
1,2,4-trichlorobenzene	<1								
1,2-dibromo-3-chloropropane	<1	<1	<1	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene	<8								
1,3,5-trinitrobenzene	<8								
1,3-dichlorobenzene	<1								
1,3-dichloropropane	<1								
1,3-dinitrobenzene	<8								
1,4-dichlorobenzene	9.5	15.6	16.6	16.8	15.1	15.2	17.7	17.8	17.7
1,4-naphthoquinone	<8								
1,4-phenylenediamine	<8								
1-naphthylamine	<8								
2,2-dichloropropane	<1								
2,3,4,6-tetrachlorophenol	<8								
2,4,5-t	<5								
2,4,5-tp (silvex)	<5								
2,4,5-trichlorophenol	<8								
2,4,6-trichlorophenol	<8								
2,4-d	<2								
2,4-dichlorophenol	<8								
2,4-dimethylphenol	<8								
2,4-dinitrophenol	<8								
2,4-dinitrotoluene	<8								
2,6-dichlorophenol	<8								
2,6-dinitrotoluene	<8								
2-acetylaminofluorene	<8								
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<5	<10	<10
2-chloronaphthalene	<8								
2-chlorophenol	<8								
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene	<8								
2-methylphenol	<8								
2-naphthylamine	<8								
2-nitroaniline	<8								
2-nitrophenol	<8								
3,3'-dichlorobenzidine	<8								
3,3'-dimethylbenzidine	<8								
3-methylcholanthrene	<8								
3-nitroaniline	<8								
4,4'-ddd	<.05								
4,4'-dde	<.05								
4,4'-ddt	<.05								
4,6-dinitro-2-methylphenol	<8								
4-aminobiphenyl	<8								
4-bromophenyl phenyl ether	<8								
4-chloro-3-methylphenol	<8								
4-chloroaniline	<8								
4-chlorophenyl phenyl ether	<8								
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline	<8								
4-nitrophenol	<8								
5-nitro-o-toluidine	<8								
7,12-dimethylbenz(a)anthracene	<8								
Acenaphthene	<8								
Acenaphthylene	<8								
Acetone	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acetonitrile	<10								
Acetophenone	<8								
Acrolein	<10								
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin	<.05								
Allyl chloride	<1								
Alpha-bhc	<.05								
Anthracene	<8								

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

Table 9

Analytical Data Summary for MW-31R

Constituents	4/10/2023	10/27/2023	4/2/2024	10/10/2024
(3 4)-methylphenol		<8		
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	2.8	2.9	3.3	3.1
1,1-dichloroethylene	<1	<1	<1	<1
1,1-dichloropropene		<1		
1,2,3-trichloropropane	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene		<8		
1,2,4-trichlorobenzene		<1		
1,2-dibromo-3-chloropropane	<5	<1	<5	<5
1,2-dibromoethane	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1
1,2-dinitrobenzene		<8		
1,3,5-trinitrobenzene		<8		
1,3-dichlorobenzene		<1		
1,3-dichloropropane		<1		
1,3-dinitrobenzene		<8		
1,4-dichlorobenzene	21.6	15.4	14.5	16.6
1,4-naphthoquinone		<8		
1,4-phenylenediamine		<8		
1-naphthylamine		<8		
2,2-dichloropropane		<1		
2,3,4,6-tetrachlorophenol		<8		
2,4,5-t		<.5		
2,4,5-tp (silvex)		<.5		
2,4,5-trichlorophenol		<8		
2,4,6-trichlorophenol		<8		
2,4-d		<2		
2,4-dichlorophenol		<8		
2,4-dimethylphenol		<8		
2,4-dinitrophenol		<8		
2,4-dinitrotoluene		<8		
2,6-dichlorophenol		<8		
2,6-dinitrotoluene		<8		
2-acetylaminofluorene		<8		
2-butanone (mek)	<10	<5	<10	<10
2-chloronaphthalene		<8		
2-chlorophenol		<8		
2-hexanone (mbk)	<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
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
Acetonitrile		<10		
Acetophenone		<8		
Acrolein		<10		
Acrylonitrile	<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-31R

Constituents	Units	10/23/2014	4/1/2015	11/5/2015	4/21/2016	10/17/2016	4/21/2017	10/16/2017	4/24/2018
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	7.3	<4.0	5.6	6.7	6.9	20.2
Azobenzene	ug/L								
Barium, total	ug/L	1110	1210	1200	1360	1050	1350	1190	1500
Benzene	ug/L	2.0	2.0	2.5	3.1	3.2	2.6	2.6	2.9
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	64	<10	<10	<10	<10	<6		
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate	ug/L								
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	<1.0	1.2	3.0	5.0	7.2	6.4	7.9	12.0
Chlorobenzilate	ug/L								
Chloroethane	ug/L	3.9	<1.0	4.1	2.8	3.7	3.4	<1.0	4.8
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	116.0	110.0	80.2	59.7	45.9	39.4	38.6	39.1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	8.7	11.1	11.7	12.2	12.6	12.5	11.5	15.8
Copper, total	ug/L	<4.0	6.8	<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	1.2	<1.0	<1.0	<1.0	<2.0	<1.0		
Dieldrin	ug/L								
Diethyl phthalate	ug/L								
Dimethoate	ug/L								
Dimethylphthalate	ug/L								
Di-n-butyl phthalate	ug/L								
Di-n-octyl phthalate	ug/L								
Dinoseb	ug/L								
Diphenylamine	ug/L								
Disulfoton	ug/L								
Endosulfan i	ug/L								
Endosulfan ii	ug/L								
Endosulfan sulfate	ug/L								
Endrin	ug/L								
Endrin aldehyde	ug/L								
Ethyl methacrylate	ug/L								
Ethyl methanesulfonate	ug/L								
Ethylbenzene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Famphur	ug/L								
Fluoranthene	ug/L								
Fluorene	ug/L								
Gamma-bhc (lindane)	ug/L								
Heptachlor	ug/L								
Heptachlor epoxide	ug/L								
Hexachlorobenzene	ug/L								

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

Table 9

Analytical Data Summary for MW-31R

Constituents	10/25/2018	4/15/2019	10/7/2019	4/22/2020	10/2/2020	4/8/2021	10/29/2021	4/25/2022	10/17/2022
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016	<.1								
Arochlor 1221	<.2								
Arochlor 1232	<.2								
Arochlor 1242	<.2								
Arochlor 1248	<.2								
Arochlor 1254	<.1								
Arochlor 1260	<.1								
Arsenic, total	9.6	29.1	16.5	40.3	33.8	58.1	18.3	50.1	37.6
Azobenzene	<8								
Barium, total	981	1560	1380	1710	1660	615	1190	1470	1220
Benzene	<1.0	2.3	<1.0	2.0	1.7	1.9	2.3	2.5	1.8
Benzo(a)anthracene	<8								
Benzo(a)pyrene	<8								
Benzo(b)fluoranthene	<8								
Benzo(g,h,i)perylene	<8								
Benzo(k)fluoranthene	<8								
Benzyl alcohol	<8								
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Beta-bhc	<.05								
Bis (2-chloroethoxy) methane	<8								
Bis(2-chloroethyl) ether	<8								
Bis(2-chloroisopropyl) ether	<8								
Bis(2-ethylhexyl) phthalate	<6								
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate	<8								
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane	<.1								
Chlorobenzene	10.5	13.8	13.3	15.0	13.8	15.6	17.4	18.6	19.8
Chlorobenzilate	<8								
Chloroethane	3.4	3.3	3.4	3.4	2.9	3.0	2.9	3.7	3.3
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene	<1								
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene	<8								
Cis-1,2-dichloroethylene	26.5	26.5	25.9	20.7	34.1	23.3	18.1	24.0	22.4
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	13.3	17.7	15.0	19.7	17.5	25.9	15.0	17.0	16.2
Copper, total	4.7	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Cyanide, total	<.005								
Delta-bhc	<.05								
Diallate	<8								
Dibenzo(a,h)anthracene	<8								
Dibenzofuran	<8								
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	<1.0								
Dieldrin	<.05								
Diethyl phthalate	<8								
Dimethoate	<.4								
Dimethylphthalate	<8								
Di-n-butyl phthalate	<8								
Di-n-octyl phthalate	<8								
Dinoseb	<.5								
Diphenylamine	<8								
Disulfoton	<.4								
Endosulfan i	<.05								
Endosulfan ii	<.05								
Endosulfan sulfate	<.05								
Endrin	<.05								
Endrin aldehyde	<.05								
Ethyl methacrylate	<10								
Ethyl methanesulfonate	<8								
Ethylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Famphur	<.4								
Fluoranthene	<8								
Fluorene	<8								
Gamma-bhc (lindane)	<.05								
Heptachlor	<.05								
Heptachlor epoxide	<.05								
Hexachlorobenzene	<.05								

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

Table 9

Analytical Data Summary for MW-31R

Constituents	4/10/2023	10/27/2023	4/2/2024	10/10/2024
Antimony, total	<2	<2	<2	<2
Arochlor 1016		<.2		
Arochlor 1221		<.2		
Arochlor 1232		<.2		
Arochlor 1242		<.2		
Arochlor 1248		<.2		
Arochlor 1254		<.2		
Arochlor 1260		<.2		
Arsenic, total	60.7	34.4	37.8	22.7
Azobenzene		<8		
Barium, total	1450	1190	1810	1010
Benzene	1.9	1.4	2.1	2.3
Benzo(a)anthracene		<8		
Benzo(a)pyrene		<8		
Benzo(b)fluoranthene		<8		
Benzo(g,h,i)perylene		<8		
Benzo(k)fluoranthene		<8		
Benzyl alcohol		<8		
Beryllium, total	<4	<4	<4	<4
Beta-bhc		<.05		
Bis (2-chloroethoxy) methane		<8		
Bis(2-chloroethyl) ether		<8		
Bis(2-chloroisopropyl) ether		<8		
Bis(2-ethylhexyl) phthalate		9	<6	
Bromochloromethane	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1
Butyl benzyl phthalate		<8		
Cadmium, total	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1
Chlordane		<.1		
Chlorobenzene	25.0	18.6	21.0	26.1
Chlorobenzilate		<8		
Chloroethane	3.6	3.4	3.5	2.6
Chloroform	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1
Chloroprene		<1		
Chromium, total	<8	<8	<8	<8
Chrysene		<8		
Cis-1,2-dichloroethylene	11.1	17.4	19.9	16.0
Cis-1,3-dichloropropene	<1	<1	<1	<1
Cobalt, total	18.3	17.6	20.6	14.6
Copper, total	<4.0	<4.0	<4.0	<4.0
Cyanide, total		<.005		
Delta-bhc		<.05		
Diallate		<8		
Dibenzo(a,h)anthracene		<8		
Dibenzofuran		<8		
Dibromochloromethane	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1
Dichlorodifluoromethane		<1.0		
Dieldrin		<.05		
Diethyl phthalate		<8		
Dimethoate		<.4		
Dimethylphthalate		<8		
Di-n-butyl phthalate		<8		
Di-n-octyl phthalate		<8		
Dinoseb		<.5		
Diphenylamine		<8		
Disulfoton		2.9		
Endosulfan i		<.05		
Endosulfan ii		<.05		
Endosulfan sulfate		<.05		
Endrin		<.05		
Endrin aldehyde		<.05		
Ethyl methacrylate		<10		
Ethyl methanesulfonate		<8		
Ethylbenzene	<1.0	<1.0	1.0	2.8
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-31R

Constituents	Units	10/23/2014	4/1/2015	11/5/2015	4/21/2016	10/17/2016	4/21/2017	10/16/2017	4/24/2018
Hexachlorobutadiene	ug/L								
Hexachlorocyclopentadiene	ug/L								
Hexachloroethane	ug/L								
Hexachloropropene	ug/L								
Indeno(1,2,3-cd)pyrene	ug/L								
Isobutanol	ug/L								
Isodrin	ug/L								
Isophorone	ug/L								
Isosafrole	ug/L								
Kepone	ug/L								
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Mercury, total	ug/L								
Methacrylonitrile	ug/L								
Methapyrilene	ug/L								
Methoxychlor	ug/L								
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Methyl methacrylate	ug/L								
Methyl methanesulfonate	ug/L								
Methyl parathion	ug/L								
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene	ug/L								
Nickel, total	ug/L	21.4	19.3	20.6	22.2	18.8	23.9	23.6	29.5
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	534	40						
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total	mg/L								
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Thionazin	ug/L								
Tin, total	ug/L								
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene	ug/L								
Trans-1,2-dichloroethylene	ug/L	9.2	6.5	6.8	3.7	3.7	3.5	3.8	3.9
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	4.0	2.7	2.2	2.3	2.0	1.1	<1.0	1.3
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<20.0	<8.0	<8.0	23.9	<8.0	<8.0	<8.0	<8.0

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

Table 9

Analytical Data Summary for MW-31R

Constituents	10/25/2018	4/15/2019	10/7/2019	4/22/2020	10/2/2020	4/8/2021	10/29/2021	4/25/2022	10/17/2022
Hexachlorobutadiene	<8								
Hexachlorocyclopentadiene	<8								
Hexachloroethane	<8								
Hexachloropropene	<8								
Indeno(1,2,3-cd)pyrene	<8								
Isobutanol	<1000								
Isodrin	<8								
Isophorone	<8								
Isosafrole	<8								
Kepone	<8								
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Mercury, total	<5								
Methacrylonitrile	<1								
Methapyrilene	<8								
Methoxychlor	<.05								
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl methacrylate	<1								
Methyl methanesulfonate	<8								
Methyl parathion	<4								
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene	<8								
Nickel, total	19.9	31.9	24.7	37.3	34.1	52.1	24.1	30.9	25.0
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
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total	<1								
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<2	<2	<2	<2	<2	<2	<2	<2
Thionazin	<4								
Tin, total	<20								
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene	<2								
Trans-1,2-dichloroethylene	<1.0	2.7	1.8	2.9	3.7	2.1	2.6	2.4	2.6
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<20.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-31R

Constituents	4/10/2023	10/27/2023	4/2/2024	10/10/2024
Hexachlorobutadiene		<8		
Hexachlorocyclopentadiene		<8		
Hexachloroethane		<8		
Hexachloropropene		<8		
Indeno(1,2,3-cd)pyrene		<8		
Isobutanol		<1000		
Isodrin		<8		
Isophorone		<8		
Isosafrole		<8		
Kepone		<8		
Lead, total	<4		<4	<4
Mercury, total		<.5		
Methacrylonitrile		<1		
Methapyrilene		<8		
Methoxychlor		<.05		
Methyl iodide	<1	<2	<1	<1
Methyl methacrylate		<1		
Methyl methanesulfonate		<8		
Methyl parathion		<.4		
Methylene chloride	<5	<5	<5	<5
Naphthalene		<8		
Nickel, total	34.7	30.3	34.2	22.7
Nitrobenzene		<8		
N-nitrosodiethylamine		<8		
N-nitrosodimethylamine		<8		
N-nitrosodi-n-butylamine		<8		
N-nitroso-di-n-propylamine		<8		
N-nitrosodiphenylamine		<8		
N-nitrosomethylethylamine		<8		
N-nitrosopiperidine		<8		
N-nitrosopyrrolidine		<8		
O,o,o-triethyl phosphorothioate		<.4		
O-toluidine		<8		
Parathion		<.4		
P-dimethylaminoazobenzene		<8		
Pentachlorobenzene		<8		
Pentachloronitrobenzene (pcnb)		<8		
Pentachlorophenol		<8		
Phenacetin		<8		
Phenanthrene		<8		
Phenol		<8		
Phorate		<.4		
Pronamide		<8		
Propionitrile		<10		
Pyrene		<8		
Safrole		<8		
Selenium, total	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4
Solids, total suspended				
Styrene	<1	<1	<1	<1
Sulfide, total		<.1		
Tetrachloroethylene	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2
Thionazin		<.4		
Tin, total		<20		
Toluene	<1	<1	<1	<1
Toxaphene		<.2		
Trans-1,2-dichloroethylene	1.6	2.3	2.5	1.8
Trans-1,3-dichloropropene	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5
Vinyl chloride	<1.0	<1.0	<1.0	<1.0
Xylenes, total	<2	<2	<2	<2
Zinc, total	<20.0	41.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-33

Constituents	Units	10/23/2014	4/1/2015	11/5/2015	4/21/2016	10/17/2016	4/21/2017	10/16/2017	4/24/2018
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	ug/L	123.0	146.0	268.0	196.0	216.0	127.0	151.0	119.0
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8
Copper, total	ug/L	<4	<4	<4	7	<4	<4	<4	<4
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	<4.0	<4.0	5.2	4.8	<4.0	<4.0	<4.0	<20.0
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended	mg/L	128	2						
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
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	<20.0	<8.0	36.5	27.7	<8.0	<8.0	<8.0	<8.0

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

Table 9

Analytical Data Summary for MW-33

Constituents	10/25/2018	4/15/2019	10/7/2019	4/22/2020	10/1/2020	4/8/2021	10/29/2021	4/25/2022	10/17/2022
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<1	<1	<1	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<5	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	196.0	133.0	123.0	188.0	226.0	157.0	91.2	106.0	214.0
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<8	<8	<8	<4	<4	<4	<4	.4	1.3
Copper, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	<4.0	<4.0	<4.0	4.4	4.2	<4.0	<4.0	<4.0	<4.0
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<2	<2	<2	<2	<2	<2	<2	<2
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<20.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-33

Constituents	4/10/2023	10/27/2023	4/2/2024	10/10/2024
1,1,1,2-tetrachloroethane	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1
2-butanone (mek)	<10	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5
Acetone	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2
Arsenic, total	<4	<4	<4	<4
Barium, total	130.0	237.0	105.0	239.0
Benzene	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4
Bromochloromethane	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8
Cis-1,2-dichloroethylene	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1
Cobalt, total	<.4	<.4	<.4	<.4
Copper, total	<4	<4	<4	<4
Dibromochloromethane	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4
Methyl iodide	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5
Nickel, total	<4.0	<4.0	<4.0	<4.0
Selenium, total	<4	<4	<4	<4
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	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-35

Constituents	Units	10/23/2014	4/1/2015	7/8/2015	10/17/2016	1/9/2017	4/21/2017	10/16/2017	4/24/2018
(3 4)-methylphenol	ug/L							<11	
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1		<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1		<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1		<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1		<1	<1	<1
1,1-dichloroethane	ug/L	1.0	1.2	2.3	10.8		9.8	9.8	12.0
1,1-dichloroethylene	ug/L	<1	<1	<1	<1		<1	<1	<1
1,1-dichloropropene	ug/L							<1	
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1		<1	<1	<1
1,2,4,5-tetrachlorobenzene	ug/L							<11	
1,2,4-trichlorobenzene	ug/L							<1	
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1		<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1		<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1		<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1		<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1		<1	<1	<1
1,2-dinitrobenzene	ug/L							<11	
1,3,5-trinitrobenzene	ug/L							<11	
1,3-dichlorobenzene	ug/L							<1	
1,3-dichloropropane	ug/L							<1	
1,3-dinitrobenzene	ug/L							<11	
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1		<1	<1	<1
1,4-naphthoquinone	ug/L							<11	
1,4-phenylenediamine	ug/L							<11	
1-naphthylamine	ug/L							<11	
2,2-dichloropropane	ug/L							<1	
2,3,4,6-tetrachlorophenol	ug/L							<11	
2,4,5-t	ug/L							<5	
2,4,5-tp (silvex)	ug/L							<5	
2,4,5-trichlorophenol	ug/L							<11	
2,4,6-trichlorophenol	ug/L							<11	
2,4-d	ug/L							<2	
2,4-dichlorophenol	ug/L							<11	
2,4-dimethylphenol	ug/L							<11	
2,4-dinitrophenol	ug/L							<11	
2,4-dinitrotoluene	ug/L							<11	
2,6-dichlorophenol	ug/L							<11	
2,6-dinitrotoluene	ug/L							<11	
2-acetylaminofluorene	ug/L							<11	
2-butanone (mek)	ug/L	<5	<5	<5	<5		<5	<5	<5
2-chloronaphthalene	ug/L							<11	
2-chlorophenol	ug/L							<11	
2-hexanone (mbk)	ug/L	<5	<5	<5	<5		<5	<5	<5
2-methylnaphthalene	ug/L							<11	
2-methylphenol	ug/L							<11	
2-naphthylamine	ug/L							<11	
2-nitroaniline	ug/L							<11	
2-nitrophenol	ug/L							<11	
3,3'-dichlorobenzidine	ug/L							<11	
3,3'-dimethylbenzidine	ug/L							<11	
3-methylcholanthrene	ug/L							<11	
3-nitroaniline	ug/L							<11	
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							<11	
4-aminobiphenyl	ug/L							<11	
4-bromophenyl phenyl ether	ug/L							<11	
4-chloro-3-methylphenol	ug/L							<11	
4-chloroaniline	ug/L							<11	
4-chlorophenyl phenyl ether	ug/L							<11	
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5		<5	<5	<5
4-nitroaniline	ug/L							<11	
4-nitrophenol	ug/L							<11	
5-nitro-o-toluidine	ug/L							<11	
7,12-dimethylbenz(a)anthracene	ug/L							<11	
Acenaphthene	ug/L							<11	
Acenaphthylene	ug/L							<11	
Acetone	ug/L	<10	<10	<10	<10		<10	<10	<10
Acetonitrile	ug/L							<10	
Acetophenone	ug/L							<11	
Acrolein	ug/L							<10	
Acrylonitrile	ug/L	<5	<5	<5	<5		<5	<5	<5
Aldrin	ug/L							<.05	
Allyl chloride	ug/L							<1	
Alpha-bhc	ug/L							<.05	
Anthracene	ug/L							<11	

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

Table 9

Analytical Data Summary for MW-35

Constituents	10/25/2018	4/15/2019	10/7/2019	4/22/2020
(3 4)-methylphenol				
1,1,1,2-tetrachloroethane	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1
1,1-dichloroethane	5.5	5.7	5.7	5.0
1,1-dichloroethylene	<1	<1	<1	<1
1,1-dichloropropene				
1,2,3-trichloropropane	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene				
1,2,4-trichlorobenzene				
1,2-dibromo-3-chloropropane	<1	<1	<1	<5
1,2-dibromoethane	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1
1,2-dinitrobenzene				
1,3,5-trinitrobenzene				
1,3-dichlorobenzene				
1,3-dichloropropane				
1,3-dinitrobenzene				
1,4-dichlorobenzene	<1	<1	<1	<1
1,4-naphthoquinone				
1,4-phenylenediamine				
1-naphthylamine				
2,2-dichloropropane				
2,3,4,6-tetrachlorophenol				
2,4,5-t				
2,4,5-tp (silvex)				
2,4,5-trichlorophenol				
2,4,6-trichlorophenol				
2,4-d				
2,4-dichlorophenol				
2,4-dimethylphenol				
2,4-dinitrophenol				
2,4-dinitrotoluene				
2,6-dichlorophenol				
2,6-dinitrotoluene				
2-acetylaminofluorene				
2-butanone (mek)	<5	<5	<5	<5
2-chloronaphthalene				
2-chlorophenol				
2-hexanone (mbk)	<5	<5	<5	<5
2-methylnaphthalene				
2-methylphenol				
2-naphthylamine				
2-nitroaniline				
2-nitrophenol				
3,3'-dichlorobenzidine				
3,3'-dimethylbenzidine				
3-methylcholanthrene				
3-nitroaniline				
4,4'-ddd				
4,4'-dde				
4,4'-ddt				
4,6-dinitro-2-methylphenol				
4-aminobiphenyl				
4-bromophenyl phenyl ether				
4-chloro-3-methylphenol				
4-chloroaniline				
4-chlorophenyl phenyl ether				
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5
4-nitroaniline				
4-nitrophenol				
5-nitro-o-toluidine				
7,12-dimethylbenz(a)anthracene				
Acenaphthene				
Acenaphthylene				
Acetone	<10	<10	<10	<10
Acetonitrile				
Acetophenone				
Acrolein				
Acrylonitrile	<5	<5	<5	<5
Aldrin				
Allyl chloride				
Alpha-bhc				
Anthracene				

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

Table 9

Analytical Data Summary for MW-35

Constituents	Units	10/23/2014	4/1/2015	7/8/2015	10/17/2016	1/9/2017	4/21/2017	10/16/2017	4/24/2018
Antimony, total	ug/L	<2	<2	<2	<2		<2	<2	<2
Arochlor 1016	ug/L							<.1	
Arochlor 1221	ug/L							<.2	
Arochlor 1232	ug/L							<.2	
Arochlor 1242	ug/L							<.2	
Arochlor 1248	ug/L							<.2	
Arochlor 1254	ug/L							<.1	
Arochlor 1260	ug/L							<.1	
Arsenic, total	ug/L	<4	<4	<4	<4		<4	<4	<4
Azobenzene	ug/L							<11	
Barium, total	ug/L	518	331	174	1090	1130	1170	1290	1180
Benzene	ug/L	<1.0	<1.0	<1.0	1.1		<1.0	1.3	1.4
Benzo(a)anthracene	ug/L							<11	
Benzo(a)pyrene	ug/L							<11	
Benzo(b)fluoranthene	ug/L							<11	
Benzo(g,h,i)perylene	ug/L							<11	
Benzo(k)fluoranthene	ug/L							<11	
Benzyl alcohol	ug/L							<11	
Beryllium, total	ug/L	<4	<4	<4	<4		<4	<4	<4
Beta-bhc	ug/L							<.05	
Bis (2-chloroethoxy) methane	ug/L							<11	
Bis(2-chloroethyl) ether	ug/L							<11	
Bis(2-chloroisopropyl) ether	ug/L							<11	
Bis(2-ethylhexyl) phthalate	ug/L							<8	
Bromochloromethane	ug/L	<1	<1	<1	<1		<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1		<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1		<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1		<1	<1	<1
Butyl benzyl phthalate	ug/L							<11	
Cadmium, total	ug/L	<.8	<.8	<.8	<.8		<.8	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1		<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1		<1	<1	<1
Chlordane	ug/L							<.1	
Chlorobenzene	ug/L	<1	<1	<1	<1		<1	<1	<1
Chlorobenzilate	ug/L							<11	
Chloroethane	ug/L	<1.0	<1.0	<1.0	28.2		21.8	16.7	28.9
Chloroform	ug/L	<1	<1	<1	<1		<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1		<1	<1	<1
Chloroprene	ug/L							<1	
Chromium, total	ug/L	<8	<8	<8	<8		<8	<8	<8
Chrysene	ug/L							<11	
Cis-1,2-dichloroethylene	ug/L	<1.0	<1.0	<1.0	9.3		6.4	9.7	13.9
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1		<1	<1	<1
Cobalt, total	ug/L	<.8	<.8	<.8	3.6		5.3	4.7	6.1
Copper, total	ug/L	<4.0	<4.0	<4.0	<4.0		<4.0	<4.0	<4.0
Cyanide, total	mg/L							<.005	
Delta-bhc	ug/L							<.05	
Diallate	ug/L							<11	
Dibenzo(a,h)anthracene	ug/L							<11	
Dibenzofuran	ug/L							<11	
Dibromochloromethane	ug/L	<1	<1	<1	<1		<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1		<1	<1	<1
Dichlorodifluoromethane	ug/L							<1	
Dieldrin	ug/L							<.05	
Diethyl phthalate	ug/L							<11	
Dimethoate	ug/L							<.4	
Dimethylphthalate	ug/L							<11	
Di-n-butyl phthalate	ug/L							<11	
Di-n-octyl phthalate	ug/L							<11	
Dinoseb	ug/L							<.5	
Diphenylamine	ug/L							<11	
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							<11	
Ethylbenzene	ug/L	<1	<1	<1	<1		<1	<1	<1
Famphur	ug/L							<.4	
Fluoranthene	ug/L							<11	
Fluorene	ug/L							<11	
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-35

Constituents	10/25/2018	4/15/2019	10/7/2019	4/22/2020
Antimony, total	<2	<2	<2	<2
Arochlor 1016				
Arochlor 1221				
Arochlor 1232				
Arochlor 1242				
Arochlor 1248				
Arochlor 1254				
Arochlor 1260				
Arsenic, total	<4	<4	<4	<4
Azobenzene				
Barium, total	1120	1060	1180	1130
Benzene	<1.0	<1.0	<1.0	<1.0
Benzo(a)anthracene				
Benzo(a)pyrene				
Benzo(b)fluoranthene				
Benzo(g,h,i)perylene				
Benzo(k)fluoranthene				
Benzyl alcohol				
Beryllium, total	<4	<4	<4	<4
Beta-bhc				
Bis (2-chloroethoxy) methane				
Bis(2-chloroethyl) ether				
Bis(2-chloroisopropyl) ether				
Bis(2-ethylhexyl) phthalate				
Bromochloromethane	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1
Butyl benzyl phthalate				
Cadmium, total	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1
Chlordane				
Chlorobenzene	<1	<1	<1	<1
Chlorobenzilate				
Chloroethane	<1.0	11.2	16.8	10.2
Chloroform	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1
Chloroprene				
Chromium, total	<8	<8	<8	<8
Chrysene				
Cis-1,2-dichloroethylene	4.8	5.1	4.7	3.2
Cis-1,3-dichloropropene	<1	<1	<1	<1
Cobalt, total	4.6	5.1	3.9	7.3
Copper, total	5.7	<4.0	<4.0	<4.0
Cyanide, total				
Delta-bhc				
Diallate				
Dibenzo(a,h)anthracene				
Dibenzofuran				
Dibromochloromethane	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1
Dichlorodifluoromethane				
Dieldrin				
Diethyl phthalate				
Dimethoate				
Dimethylphthalate				
Di-n-butyl phthalate				
Di-n-octyl phthalate				
Dinoseb				
Diphenylamine				
Disulfoton				
Endosulfan i				
Endosulfan ii				
Endosulfan sulfate				
Endrin				
Endrin aldehyde				
Ethyl methacrylate				
Ethyl methanesulfonate				
Ethylbenzene	<1	<1	<1	<1
Famphur				
Fluoranthene				
Fluorene				
Gamma-bhc (lindane)				
Heptachlor				
Heptachlor epoxide				
Hexachlorobenzene				

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

Table 9

Analytical Data Summary for MW-35

Constituents	Units	10/23/2014	4/1/2015	7/8/2015	10/17/2016	1/9/2017	4/21/2017	10/16/2017	4/24/2018
Hexachlorobutadiene	ug/L							<11	
Hexachlorocyclopentadiene	ug/L							<11	
Hexachloroethane	ug/L							<11	
Hexachloropropene	ug/L							<11	
Indeno(1,2,3-cd)pyrene	ug/L							<11	
Isobutanol	ug/L							<1000	
Isodrin	ug/L							<11	
Isophorone	ug/L							<11	
Isosafrole	ug/L							<11	
Kepone	ug/L							<11	
Lead, total	ug/L	<4	<4	<4	<4		<4	<4	<4
Mercury, total	ug/L							<.5	
Methacrylonitrile	ug/L							<1	
Methapyrilene	ug/L							<11	
Methoxychlor	ug/L							<.05	
Methyl iodide	ug/L	<1	<1	<1	<1		<1	<1	<1
Methyl methacrylate	ug/L							<1	
Methyl methanesulfonate	ug/L							<11	
Methyl parathion	ug/L							<.4	
Methylene chloride	ug/L	<5	<5	<5	<5		<5	<5	<5
Naphthalene	ug/L							<11	
Nickel, total	ug/L	<4.0	6.4	6.0	36.8	53.8	48.0	49.9	45.0
Nitrobenzene	ug/L							<11	
N-nitrosodiethylamine	ug/L							<11	
N-nitrosodimethylamine	ug/L							<11	
N-nitrosodi-n-butylamine	ug/L							<11	
N-nitroso-di-n-propylamine	ug/L							<11	
N-nitrosodiphenylamine	ug/L							<11	
N-nitrosomethylethylamine	ug/L							<11	
N-nitrosopiperidine	ug/L							<11	
N-nitrosopyrrolidine	ug/L							<11	
O,o,o-triethyl phosphorothioate	ug/L							<.4	
O-toluidine	ug/L							<11	
Parathion	ug/L							<.4	
P-dimethylaminoazobenzene	ug/L							<11	
Pentachlorobenzene	ug/L							<11	
Pentachloronitrobenzene (pcnb)	ug/L							<11	
Pentachlorophenol	ug/L							<11	
Phenacetin	ug/L							<11	
Phenanthrene	ug/L							<11	
Phenol	ug/L							<11	
Phorate	ug/L							<.4	
Pronamide	ug/L							<11	
Propionitrile	ug/L							<10	
Pyrene	ug/L							<11	
Safrole	ug/L							<11	
Selenium, total	ug/L	<4.0	5.1	<4.0	<4.0		<4.0	<4.0	<4.0
Silver, total	ug/L	<4	<4	<4	<4		<4	<4	<4
Solids, total suspended	mg/L	46	59						
Styrene	ug/L	<1	<1	<1	<1		<1	<1	<1
Sulfide, total	mg/L							<.1	
Tetrachloroethylene	ug/L	<1	<1	<1	<1		<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4		<4	<4	<4
Thionazin	ug/L							<.4	
Tin, total	ug/L							<20	
Toluene	ug/L	<1	<1	<1	<1		<1	<1	<1
Toxaphene	ug/L							<.2	
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1		<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1		<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5		<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1		<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1		<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20		<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5		<5	<5	<5
Vinyl chloride	ug/L	<1.0	<1.0	<1.0	1.8		1.2	<1.0	2.1
Xylenes, total	ug/L	<2	<2	<2	<2		<2	<2	<2
Zinc, total	ug/L	<20.0	<8.0	<8.0	<8.0		<8.0	<8.0	<8.0

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

Table 9

Analytical Data Summary for MW-35

Constituents	10/25/2018	4/15/2019	10/7/2019	4/22/2020
Hexachlorobutadiene				
Hexachlorocyclopentadiene				
Hexachloroethane				
Hexachloropropene				
Indeno(1,2,3-cd)pyrene				
Isobutanol				
Isodrin				
Isophorone				
Isosafrole				
Kepona				
Lead, total	<4	<4	<4	<4
Mercury, total				
Methacrylonitrile				
Methapyrilene				
Methoxychlor				
Methyl iodide	<1	<1	<1	<1
Methyl methacrylate				
Methyl methanesulfonate				
Methyl parathion				
Methylene chloride	<5	<5	<5	<5
Naphthalene				
Nickel, total	38.7	34.6	38.4	35.0
Nitrobenzene				
N-nitrosodiethylamine				
N-nitrosodimethylamine				
N-nitrosodi-n-butylamine				
N-nitroso-di-n-propylamine				
N-nitrosodiphenylamine				
N-nitrosomethylethylamine				
N-nitrosopiperidine				
N-nitrosopyrrolidine				
O,o,o-triethyl phosphorothioate				
O-toluidine				
Parathion				
P-dimethylaminoazobenzene				
Pentachlorobenzene				
Pentachloronitrobenzene (pcnb)				
Pentachlorophenol				
Phenacetin				
Phenanthrene				
Phenol				
Phorate				
Pronamide				
Propionitrile				
Pyrene				
Safrole				
Selenium, total	<4.0	<4.0	<4.0	<4.0
Silver, total	<4	<4	<4	<4
Solids, total suspended				
Styrene	<1	<1	<1	<1
Sulfide, total				
Tetrachloroethylene	<1	<1	<1	<1
Thallium, total	<4	<2	<2	<2
Thionazin				
Tin, total				
Toluene	<1	<1	<1	<1
Toxaphene				
Trans-1,2-dichloroethylene	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5
Vinyl chloride	<1.0	<1.0	<1.0	<1.0
Xylenes, total	<2	<2	<2	<2
Zinc, total	<20.0	15.6	<8.0	<20.0

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

Table 9

Analytical Data Summary for MW-35R

Constituents	Units	10/1/2020	4/8/2021	10/29/2021	4/25/2022	10/17/2022	1/5/2023	4/10/2023	10/27/2023
(3 4)-methylphenol	ug/L					<8			
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1		<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1		<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1		<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1		<1	<1
1,1-dichloroethane	ug/L	5.1	4.9	1.4	2.0	<1.0		3.1	<1.0
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1		<1	<1
1,1-dichloropropene	ug/L					<1			
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1		<1	<1
1,2,4,5-tetrachlorobenzene	ug/L					<8			
1,2,4-trichlorobenzene	ug/L					<1			
1,2-dibromo-3-chloropropane	ug/L	<5	<5	<5	<5	<1		<5	<5
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1		<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1		<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1		<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1		<1	<1
1,2-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
1,4-naphthoquinone	ug/L					<8			
1,4-phenylenediamine	ug/L					<8			
1-naphthylamine	ug/L					<8			
2,2-dichloropropane	ug/L					<1			
2,3,4,6-tetrachlorophenol	ug/L					<8			
2,4,5-t	ug/L					<.5			
2,4,5-tp (silvex)	ug/L					<.5			
2,4,5-trichlorophenol	ug/L					<8			
2,4,6-trichlorophenol	ug/L					<8			
2,4-d	ug/L					<2			
2,4-dichlorophenol	ug/L					<8			
2,4-dimethylphenol	ug/L					<8			
2,4-dinitrophenol	ug/L					<8			
2,4-dinitrotoluene	ug/L					<8			
2,6-dichlorophenol	ug/L					<8			
2,6-dinitrotoluene	ug/L					<8			
2-acetylaminofluorene	ug/L					<8			
2-butanone (mek)	ug/L	<5	<5	<5	<10	<5		<10	<10
2-chloronaphthalene	ug/L					<8			
2-chlorophenol	ug/L					<8			
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5		<5	<5
2-methylnaphthalene	ug/L					<8			
2-methylphenol	ug/L					<8			
2-naphthylamine	ug/L					<8			
2-nitroaniline	ug/L					<8			
2-nitrophenol	ug/L					<8			
3,3'-dichlorobenzidine	ug/L					<8			
3,3'-dimethylbenzidine	ug/L					<8			
3-methylcholanthrene	ug/L					<8			
3-nitroaniline	ug/L					<8			
4,4'-ddd	ug/L					<.05			
4,4'-dde	ug/L					<.05			
4,4'-ddt	ug/L					<.05			
4,6-dinitro-2-methylphenol	ug/L					<8			
4-aminobiphenyl	ug/L					<8			
4-bromophenyl phenyl ether	ug/L					<8			
4-chloro-3-methylphenol	ug/L					<8			
4-chloroaniline	ug/L					<8			
4-chlorophenyl phenyl ether	ug/L					<8			
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5		<5	<5
4-nitroaniline	ug/L					<8			
4-nitrophenol	ug/L					<8			
5-nitro-o-toluidine	ug/L					<8			
7,12-dimethylbenz(a)anthracene	ug/L					<8			
Acenaphthene	ug/L					<8			
Acenaphthylene	ug/L					<8			
Acetone	ug/L	<10	<10	<10	<10	<10		<10	<10
Acetonitrile	ug/L					<10			
Acetophenone	ug/L					<8			
Acrolein	ug/L					<10			
Acrylonitrile	ug/L	<5	<5	<5	<5	<5		<5	<5
Aldrin	ug/L					<.05			
Allyl chloride	ug/L					<1			
Alpha-bhc	ug/L					<.05			
Anthracene	ug/L					<8			

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

Table 9

Analytical Data Summary for MW-35R

Constituents	4/2/2024
(3 4)-methylphenol	
1,1,1,2-tetrachloroethane	<1
1,1,1-trichloroethane	<1
1,1,2,2-tetrachloroethane	<1
1,1,2-trichloroethane	<1
1,1-dichloroethane	<1.0
1,1-dichloroethylene	<1
1,1-dichloropropene	
1,2,3-trichloropropane	<1
1,2,4,5-tetrachlorobenzene	
1,2,4-trichlorobenzene	
1,2-dibromo-3-chloropropane	<5
1,2-dibromoethane	<1
1,2-dichlorobenzene	<1
1,2-dichloroethane	<1
1,2-dichloropropane	<1
1,2-dinitrobenzene	
1,3,5-trinitrobenzene	
1,3-dichlorobenzene	
1,3-dichloropropane	
1,3-dinitrobenzene	
1,4-dichlorobenzene	<1
1,4-naphthoquinone	
1,4-phenylenediamine	
1-naphthylamine	
2,2-dichloropropane	
2,3,4,6-tetrachlorophenol	
2,4,5-t	
2,4,5-tp (silvex)	
2,4,5-trichlorophenol	
2,4,6-trichlorophenol	
2,4-d	
2,4-dichlorophenol	
2,4-dimethylphenol	
2,4-dinitrophenol	
2,4-dinitrotoluene	
2,6-dichlorophenol	
2,6-dinitrotoluene	
2-acetylaminofluorene	
2-butanone (mek)	<10
2-chloronaphthalene	
2-chlorophenol	
2-hexanone (mbk)	<5
2-methylnaphthalene	
2-methylphenol	
2-naphthylamine	
2-nitroaniline	
2-nitrophenol	
3,3'-dichlorobenzidine	
3,3'-dimethylbenzidine	
3-methylcholanthrene	
3-nitroaniline	
4,4'-ddd	
4,4'-dde	
4,4'-ddt	
4,6-dinitro-2-methylphenol	
4-aminobiphenyl	
4-bromophenyl phenyl ether	
4-chloro-3-methylphenol	
4-chloroaniline	
4-chlorophenyl phenyl ether	
4-methyl-2-pentanone (mibk)	<5
4-nitroaniline	
4-nitrophenol	
5-nitro-o-toluidine	
7,12-dimethylbenz(a)anthracene	
Acenaphthene	
Acenaphthylene	
Acetone	<10
Acetonitrile	
Acetophenone	
Acrolein	
Acrylonitrile	<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-35R

Constituents	Units	10/1/2020	4/8/2021	10/29/2021	4/25/2022	10/17/2022	1/5/2023	4/10/2023	10/27/2023
Antimony, total	ug/L	<2	<2	<2	<2	<2		<2	<2
Arochlor 1016	ug/L					<.1			
Arochlor 1221	ug/L					<.2			
Arochlor 1232	ug/L					<.2			
Arochlor 1242	ug/L					<.2			
Arochlor 1248	ug/L					<.2			
Arochlor 1254	ug/L					<.1			
Arochlor 1260	ug/L					<.1			
Arsenic, total	ug/L	4.1	<4.0	11.1	<4.0	27.2		<4.0	72.6
Azobenzene	ug/L					<8			
Barium, total	ug/L	1300	1290	1370	1150	1420		1100	1890
Benzene	ug/L	<1	<1	<1	<1	<1		<1	<1
Benzo(a)anthracene	ug/L					<8			
Benzo(a)pyrene	ug/L					<8			
Benzo(b)fluoranthene	ug/L					<8			
Benzo(g,h,i)perylene	ug/L					<8			
Benzo(k)fluoranthene	ug/L					<8			
Benzyl alcohol	ug/L					<8			
Beryllium, total	ug/L	<4	<4	<4	<4	<4		<4	<4
Beta-bhc	ug/L					<.05			
Bis (2-chloroethoxy) methane	ug/L					<8			
Bis(2-chloroethyl) ether	ug/L					<8			
Bis(2-chloroisopropyl) ether	ug/L					<8			
Bis(2-ethylhexyl) phthalate	ug/L					78	79	6	15
Bromochloromethane	ug/L	<1	<1	<1	<1	<1		<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1		<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1		<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1		<1	<1
Butyl benzyl phthalate	ug/L					<8			
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8		<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1		<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1		<1	<1
Chlordane	ug/L					<.1			
Chlorobenzene	ug/L	<1	<1	<1	<1	<1		<1	<1
Chlorobenzilate	ug/L					<8			
Chloroethane	ug/L	19.2	11.7	2.3	5.8	2.2		2.7	1.4
Chloroform	ug/L	<1	<1	<1	<1	<1		<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1		<1	<1
Chloroprene	ug/L					<1			
Chromium, total	ug/L	<8	<8	<8	<8	<8		<8	<8
Chrysene	ug/L					<8			
Cis-1,2-dichloroethylene	ug/L	4.3	4.0	1.3	1.6	<1.0		<1.0	<1.0
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1		<1	<1
Cobalt, total	ug/L	7.2	9.4	8.3	5.9	7.9		5.7	10.7
Copper, total	ug/L	<4	<4	<4	<4	<4		<4	<4
Cyanide, total	mg/L					<.005			
Delta-bhc	ug/L					<.05			
Diallate	ug/L					<8			
Dibenzo(a,h)anthracene	ug/L					<8			
Dibenzofuran	ug/L					<8			
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1		<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1		<1	<1
Dichlorodifluoromethane	ug/L					<1			
Dieldrin	ug/L					<.05			
Diethyl phthalate	ug/L					<8			
Dimethoate	ug/L					<.4			
Dimethylphthalate	ug/L					<8			
Di-n-butyl phthalate	ug/L					<8			
Di-n-octyl phthalate	ug/L					<8			
Dinoseb	ug/L					<.5			
Diphenylamine	ug/L					<8			
Disulfoton	ug/L					<.4			
Endosulfan i	ug/L					<.05			
Endosulfan ii	ug/L					<.05			
Endosulfan sulfate	ug/L					<.05			
Endrin	ug/L					<.05			
Endrin aldehyde	ug/L					<.05			
Ethyl methacrylate	ug/L					<10			
Ethyl methanesulfonate	ug/L					<8			
Ethylbenzene	ug/L	<1	<1	<1	<1	<1		<1	<1
Famphur	ug/L					<.4			
Fluoranthene	ug/L					<8			
Fluorene	ug/L					<8			
Gamma-bhc (lindane)	ug/L					<.05			
Heptachlor	ug/L					<.05			
Heptachlor epoxide	ug/L					<.05			
Hexachlorobenzene	ug/L					<.05			

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

Table 9

Analytical Data Summary for MW-35R

Constituents	4/2/2024
Antimony, total	<2
Arochlor 1016	
Arochlor 1221	
Arochlor 1232	
Arochlor 1242	
Arochlor 1248	
Arochlor 1254	
Arochlor 1260	
Arsenic, total	18.4
Azobenzene	
Barium, total	1590
Benzene	<1
Benzo(a)anthracene	
Benzo(a)pyrene	
Benzo(b)fluoranthene	
Benzo(g,h,i)perylene	
Benzo(k)fluoranthene	
Benzyl alcohol	
Beryllium, total	<4
Beta-bhc	
Bis (2-chloroethoxy) methane	
Bis(2-chloroethyl) ether	
Bis(2-chloroisopropyl) ether	
Bis(2-ethylhexyl) phthalate	<6
Bromochloromethane	<1
Bromodichloromethane	<1
Bromoform	<1
Bromomethane	<1
Butyl benzyl phthalate	
Cadmium, total	<.8
Carbon disulfide	<1
Carbon tetrachloride	<1
Chlordane	
Chlorobenzene	<1
Chlorobenzilate	
Chloroethane	2.1
Chloroform	<1
Chloromethane	<1
Chloroprene	
Chromium, total	<8
Chrysene	
Cis-1,2-dichloroethylene	<1.0
Cis-1,3-dichloropropene	<1
Cobalt, total	8.9
Copper, total	<4
Cyanide, total	
Delta-bhc	
Diallate	
Dibenzo(a,h)anthracene	
Dibenzofuran	
Dibromochloromethane	<1
Dibromomethane	<1
Dichlorodifluoromethane	
Dieldrin	
Diethyl phthalate	
Dimethoate	
Dimethylphthalate	
Di-n-butyl phthalate	
Di-n-octyl phthalate	
Dinoseb	
Diphenylamine	
Disulfoton	
Endosulfan i	
Endosulfan ii	
Endosulfan sulfate	
Endrin	
Endrin aldehyde	
Ethyl methacrylate	
Ethyl methanesulfonate	
Ethylbenzene	<1
Famphur	
Fluoranthene	
Fluorene	
Gamma-bhc (lindane)	
Heptachlor	
Heptachlor epoxide	
Hexachlorobenzene	

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

Table 9

Analytical Data Summary for MW-35R

Constituents	Units	10/1/2020	4/8/2021	10/29/2021	4/25/2022	10/17/2022	1/5/2023	4/10/2023	10/27/2023
Hexachlorobutadiene	ug/L					<8			
Hexachlorocyclopentadiene	ug/L					<8			
Hexachloroethane	ug/L					<8			
Hexachloropropene	ug/L					<8			
Indeno(1,2,3-cd)pyrene	ug/L					<8			
Isobutanol	ug/L					<1000			
Isodrin	ug/L					<8			
Isophorone	ug/L					<8			
Isosafrole	ug/L					<8			
Kepone	ug/L					<8			
Lead, total	ug/L	<4	<4	<4	<4	<4		<4	<4
Mercury, total	ug/L					<.5			
Methacrylonitrile	ug/L					<1			
Methapyrilene	ug/L					<8			
Methoxychlor	ug/L					<.05			
Methyl iodide	ug/L	<1	<1	<1	<1	<2		<1	<1
Methyl methacrylate	ug/L					<1			
Methyl methanesulfonate	ug/L					<8			
Methyl parathion	ug/L					<.4			
Methylene chloride	ug/L	<5	<5	<5	<5	<5		<5	<5
Naphthalene	ug/L					<8			
Nickel, total	ug/L	38.6	34.0	25.1	26.4	23.0		26.0	21.3
Nitrobenzene	ug/L					<8			
N-nitrosodiethylamine	ug/L					<8			
N-nitrosodimethylamine	ug/L					<8			
N-nitrosodi-n-butylamine	ug/L					<8			
N-nitroso-di-n-propylamine	ug/L					<8			
N-nitrosodiphenylamine	ug/L					<8			
N-nitrosomethylethylamine	ug/L					<8			
N-nitrosopiperidine	ug/L					<8			
N-nitrosopyrrolidine	ug/L					<8			
O,o,o-triethyl phosphorothioate	ug/L					<.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
Silver, total	ug/L	<4	<4	<4	<4	<4		<4	<4
Styrene	ug/L	<1	<1	<1	<1	<1		<1	<1
Sulfide, total	mg/L					<.3			
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1		<1	<1
Thallium, total	ug/L	<2	<2	<2	<2	<2		<2	<2
Thionazin	ug/L					<.4			
Tin, total	ug/L					<20			
Toluene	ug/L	<1	<1	<1	<1	<1		<1	<1
Toxaphene	ug/L					<.2			
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1		<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1		<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5		<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1		<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1		<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20		<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5		<5	<5
Vinyl chloride	ug/L	1.1	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0
Xylenes, total	ug/L	<2	<2	<2	<2	<2		<2	<2
Zinc, total	ug/L	<20.0	<20.0	<20.0	<20.0	<20.0		<20.0	57.7

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

Table 9

Analytical Data Summary for MW-35R

Constituents	4/2/2024
Hexachlorobutadiene	
Hexachlorocyclopentadiene	
Hexachloroethane	
Hexachloropropene	
Indeno(1,2,3-cd)pyrene	
Isobutanol	
Isodrin	
Isophorone	
Isosafrole	
Kepone	
Lead, total	<4
Mercury, total	
Methacrylonitrile	
Methapyrilene	
Methoxychlor	
Methyl iodide	<1
Methyl methacrylate	
Methyl methanesulfonate	
Methyl parathion	
Methylene chloride	<5
Naphthalene	
Nickel, total	25.6
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
Silver, total	<4
Styrene	<1
Sulfide, total	
Tetrachloroethylene	<1
Thallium, total	<2
Thionazin	
Tin, total	
Toluene	<1
Toxaphene	
Trans-1,2-dichloroethylene	<1
Trans-1,3-dichloropropene	<1
Trans-1,4-dichloro-2-butene	<5
Trichloroethylene	<1
Trichlorofluoromethane	<1
Vanadium, total	<20
Vinyl acetate	<5
Vinyl chloride	<1.0
Xylenes, total	<2
Zinc, total	22.3

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

Table 9

Analytical Data Summary for MW-36

Constituents	Units	7/8/2015	4/21/2016	10/17/2016	4/21/2017	10/16/2017	4/24/2018	10/25/2018	4/15/2019
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	ug/L	366	184	162	158	233	230	184	174
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	ug/L	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	34.1	2.4	.8	2.1	2.0	3.9	.8	<.8
Copper, total	ug/L	6.7	<4.0	<4.0	<4.0	<4.0	4.4	<4.0	<4.0
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	4.2	<4.0	<4.0
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	15.8	<4.0	<4.0	5.0	4.0	9.1	<4.0	<4.0
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<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	<20.0	<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	13.1	<20.0	<8.0	9.0	<8.0	10.8	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-36

Constituents	10/7/2019	4/22/2020	10/2/2020	4/8/2021	10/29/2021	4/25/2022	10/17/2022	4/10/2023	10/27/2023
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	<5	<5	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<5	<5	<5	<5	<5	<10	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	235	348	176	173	203	267	219	260	258
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	<8.0	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
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	1.3	7.8	.4	<.4	.7	4.7	2.4	1.4	1.3
Copper, total	<4.0	11.3	<4.0	<4.0	<4.0	6.8	<4.0	<4.0	<4.0
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	<4.0	4.3	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	<4.0	19.6	<4.0	<4.0	<4.0	11.1	<4.0	<4.0	<4.0
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
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	<20.0	<20.0	<20.0	<20.0	<20.0
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<8.0	26.8	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-36

Constituents	4/2/2024	10/10/2024
1,1,1,2-tetrachloroethane	<1	<1
1,1,1-trichloroethane	<1	<1
1,1,2,2-tetrachloroethane	<1	<1
1,1,2-trichloroethane	<1	<1
1,1-dichloroethane	<1	<1
1,1-dichloroethylene	<1	<1
1,2,3-trichloropropane	<1	<1
1,2-dibromo-3-chloropropane	<5	<5
1,2-dibromoethane	<1	<1
1,2-dichlorobenzene	<1	<1
1,2-dichloroethane	<1	<1
1,2-dichloropropane	<1	<1
1,4-dichlorobenzene	<1	<1
2-butanone (mek)	<10	<10
2-hexanone (mbk)	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5
Acetone	<10	<10
Acrylonitrile	<5	<5
Antimony, total	<2	<2
Arsenic, total	<4	4
Barium, total	200	329
Benzene	<1	<1
Beryllium, total	<4	<4
Bromochloromethane	<1	<1
Bromodichloromethane	<1	<1
Bromoform	<1	<1
Bromomethane	<1	<1
Cadmium, total	<.8	<.8
Carbon disulfide	<1	<1
Carbon tetrachloride	<1	<1
Chlorobenzene	<1	<1
Chloroethane	<1	<1
Chloroform	<1	<1
Chloromethane	<1	<1
Chromium, total	<8.0	13.6
Cis-1,2-dichloroethylene	<1	<1
Cis-1,3-dichloropropene	<1	<1
Cobalt, total	<.4	7.6
Copper, total	<4.0	19.2
Dibromochloromethane	<1	<1
Dibromomethane	<1	<1
Ethylbenzene	<1	<1
Lead, total	<4.0	4.4
Methyl iodide	<1	<1
Methylene chloride	<5	<5
Nickel, total	<4.0	21.5
Selenium, total	<4	<4
Silver, total	<4	<4
Styrene	<1	<1
Tetrachloroethylene	<1	<1
Thallium, total	<2	<2
Toluene	<1	<1
Trans-1,2-dichloroethylene	<1	<1
Trans-1,3-dichloropropene	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5
Trichloroethylene	<1	<1
Trichlorofluoromethane	<1	<1
Vanadium, total	<20.0	22.4
Vinyl acetate	<5	<5
Vinyl chloride	<1	<1
Xylenes, total	<2	<2
Zinc, total	<20.0	38.0

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

Table 9

Analytical Data Summary for MW-37

Constituents	Units	10/23/2014	1/8/2015	4/1/2015	7/8/2015	11/5/2015	4/21/2016	10/17/2016	4/21/2017	10/16/2017
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	18.6
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	216.0	169.0	185.0	141.0	175.0	143.0	154.0	163.0	178.0
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L	<8	<8	<8	<8	<8	<8	<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	20.3	<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	<8	<8	<8	<8	<8	<8	<8
Copper, total	ug/L	4.1	<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	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	22.7	<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	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Selenium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended	mg/L	31	<2	<2	<2	<2	<2	<2	<2	<2
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<20.0	14.5	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0

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

Table 9

Analytical Data Summary for MW-37

Constituents	4/24/2018	10/25/2018	4/15/2019	10/7/2019	4/22/2020	10/2/2020	4/8/2021	10/29/2021	4/25/2022
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<1	<1	<1	<1	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<5	<5	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	<10.0	<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	<4.0	<4.0	<4.0	<4.0	<4.0
Barium, total	142.0	91.5	82.0	102.0	78.1	87.9	51.5	71.0	57.0
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	<8.0	<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
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Copper, total	<4.0	13.7	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Selenium, total	8.9	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<4	<2	<2	<2	<2	<2	<2	<2
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<8.0	<20.0	<20.0	<8.0	<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-37

Constituents	10/17/2022	4/10/2023	10/27/2023	4/2/2024	10/10/2024
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1
2-butanone (mek)	<10	<10	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5
Acetone	<10.0	<10.0	<10.0	<10.0	<10.0
Acrylonitrile	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2
Arsenic, total	<4.0	<4.0	11.6	<4.0	<4.0
Barium, total	75.8	31.4	107.0	51.9	67.6
Benzene	<1	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4	<4
Bromochloromethane	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1
Chromium, total	<8.0	<8.0	<8.0	<8.0	<8.0
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1
Cobalt, total	2.2	<.4	9.6	.6	4.4
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1
Lead, total	<4.0	<4.0	<4.0	<4.0	<4.0
Methyl iodide	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5
Nickel, total	<4.0	<4.0	13.9	<4.0	18.7
Selenium, total	<4.0	<4.0	<4.0	<4.0	<4.0
Silver, total	<4	<4	<4	<4	<4
Solids, total suspended					
Styrene	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2
Toluene	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	22.2	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-39

Constituents	Units	10/23/2014	1/8/2015	4/1/2015	7/8/2015	11/5/2015	4/21/2016	10/17/2016	4/21/2017	10/16/2017
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	11
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	287	309	272	249	383	266	257	253	268
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	29.6	<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	<8	<8	3.3	<8	<8	<8	<8
Copper, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	<4.0	20.5	<4.0	<4.0	7.0	<4.0	<4.0	<4.0	<4.0
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended	mg/L	10	<2	<2	<2	<2	<2	<2	<2	<2
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<20.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	25.8	<8.0

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

Table 9

Analytical Data Summary for MW-39

Constituents	4/24/2018	10/25/2018	4/15/2019	10/7/2019	4/22/2020	10/2/2020	4/8/2021	10/29/2021	4/25/2022
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<1	<1	<1	<1	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<5	<5	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	273	248	251	264	323	222	230	255	232
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	<8.0	<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
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.8	<.8	<.8	<.8	<.4	<.4	<.4	<.4	<.4
Copper, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<4	<2	<2	<2	<2	<2	<2	<2
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<8.0	<20.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-39

Constituents	10/17/2022	4/10/2023	10/27/2023	4/2/2024	10/10/2024
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1
2-butanone (mek)	<10	<10	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2
Arsenic, total	<4	<4	<4	<4	<4
Barium, total	239	238	225	254	253
Benzene	<1	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4	<4
Bromochloromethane	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1
Chromium, total	<8.0	<8.0	<8.0	<8.0	<8.0
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1
Cobalt, total	1.5	<.4	<.4	<.4	<.4
Copper, total	<4	<4	<4	126	<4
Dibromochloromethane	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4	<4
Methyl iodide	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5
Nickel, total	<4.0	<4.0	<4.0	<4.0	<4.0
Selenium, total	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4
Solids, total suspended					
Styrene	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2
Toluene	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-40

Constituents	Units	10/23/2014	1/8/2015	3/31/2015	7/8/2015	11/5/2015	4/21/2016	10/17/2016	4/21/2017
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Barium, total	ug/L	65.4	85.3	96.6	71.0	89.1	74.0	83.2	82.9
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Copper, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Selenium, total	ug/L	4.6	4.8	4.9	<4.0	<4.0	<4.0	<4.0	<4.0
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended	mg/L	657		3					
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
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	<20.0	<8.0	12.8	<8.0	<8.0	<8.0	<8.0	<8.0

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

Table 9

Analytical Data Summary for MW-40

Constituents	10/16/2017	4/24/2018	10/25/2018	4/15/2019	10/7/2019	4/22/2020	10/2/2020	4/8/2021	10/29/2021
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<1	<1	<1	<1	<1	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	4.3
Barium, total	45.4	39.7	56.3	35.7	50.7	47.5	47.8	83.4	72.2
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	.9
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.8	<.8	<.8	<.8	<.8	<.4	<.4	<.4	4.5
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	5.1
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	5.0	31.9
Selenium, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<4	<4	<2	<2	<2	<2	<2	<2
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<8.0	<8.0	<20.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-40

Constituents	4/25/2022	10/17/2022	4/10/2023	10/27/2023	4/2/2024	10/10/2024
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<10	<10	<10	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2	<2
Arsenic, total	<4.0	8.1	5.9	5.3	<4.0	4.3
Barium, total	27.9	103.0	42.8	46.9	36.4	34.2
Benzene	<1	<1	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4	<4	<4
Bromochloromethane	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1
Cobalt, total	5.6	8.3	10.2	4.7	.5	5.8
Copper, total	<4.0	<4.0	<4.0	<4.0	8.5	<4.0
Dibromochloromethane	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4	<4	<4
Methyl iodide	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5
Nickel, total	18.3	22.1	16.7	17.0	16.8	15.4
Selenium, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Silver, total	<4	<4	<4	<4	<4	<4
Solids, total suspended						
Styrene	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2	<2
Toluene	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-47

Constituents	Units	10/23/2014	3/31/2015	7/8/2015	11/5/2015	4/21/2016	10/17/2016	4/21/2017	10/16/2017
(3,4)-methylphenol	ug/L		<8						
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene	ug/L		<1						
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	ug/L		<8						
1,2,4-trichlorobenzene	ug/L		<1						
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene	ug/L		<8						
1,3,5-trinitrobenzene	ug/L		<8						
1,3-dichlorobenzene	ug/L		<1						
1,3-dichloropropane	ug/L		<1						
1,3-dinitrobenzene	ug/L		<8						
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone	ug/L		<8						
1,4-phenylenediamine	ug/L		<8						
1-naphthylamine	ug/L		<8						
2,2-dichloropropane	ug/L		<1						
2,3,4,6-tetrachlorophenol	ug/L		<8						
2,4,5-t	ug/L		<.5						
2,4,5-tp (silvex)	ug/L		<.5						
2,4,5-trichlorophenol	ug/L		<8						
2,4,6-trichlorophenol	ug/L		<8						
2,4-d	ug/L		<2						
2,4-dichlorophenol	ug/L		<8						
2,4-dimethylphenol	ug/L		<8						
2,4-dinitrophenol	ug/L		<8						
2,4-dinitrotoluene	ug/L		<8						
2,6-dichlorophenol	ug/L		<8						
2,6-dinitrotoluene	ug/L		<8						
2-acetylaminofluorene	ug/L		<8						
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
2-chloronaphthalene	ug/L		<8						
2-chlorophenol	ug/L		<8						
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene	ug/L		<8						
2-methylphenol	ug/L		<8						
2-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-47

Constituents	4/24/2018	10/25/2018	4/15/2019	10/7/2019	4/22/2020	10/1/2020	4/8/2021	10/29/2021	4/25/2022
(3 4)-methylphenol									
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene									
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene									
1,2,4-trichlorobenzene									
1,2-dibromo-3-chloropropane	<1	<1	<1	<1	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene									
1,3,5-trinitrobenzene									
1,3-dichlorobenzene									
1,3-dichloropropane									
1,3-dinitrobenzene									
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone									
1,4-phenylenediamine									
1-naphthylamine									
2,2-dichloropropane									
2,3,4,6-tetrachlorophenol									
2,4,5-t									
2,4,5-tp (silvex)									
2,4,5-trichlorophenol									
2,4,6-trichlorophenol									
2,4-d									
2,4-dichlorophenol									
2,4-dimethylphenol									
2,4-dinitrophenol									
2,4-dinitrotoluene									
2,6-dichlorophenol									
2,6-dinitrotoluene									
2-acetylaminofluorene									
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<5	<5	<10
2-chloronaphthalene									
2-chlorophenol									
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene									
2-methylphenol									
2-naphthylamine									
2-nitroaniline									
2-nitrophenol									
3,3'-dichlorobenzidine									
3,3'-dimethylbenzidine									
3-methylcholanthrene									
3-nitroaniline									
4,4'-ddd									
4,4'-dde									
4,4'-ddt									
4,6-dinitro-2-methylphenol									
4-aminobiphenyl									
4-bromophenyl phenyl ether									
4-chloro-3-methylphenol									
4-chloroaniline									
4-chlorophenyl phenyl ether									
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline									
4-nitrophenol									
5-nitro-o-toluidine									
7,12-dimethylbenz(a)anthracene									
Acenaphthene									
Acenaphthylene									
Acetone	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acetonitrile									
Acetophenone									
Acrolein									
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin									
Allyl chloride									
Alpha-bhc									
Anthracene									

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

Table 9

Analytical Data Summary for MW-47

Constituents	10/17/2022	4/10/2023	10/27/2023	4/2/2024	10/10/2024
(3 4)-methylphenol					
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1
1,1-dichloropropene					
1,2,3-trichloropropane	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene					
1,2,4-trichlorobenzene					
1,2-dibromo-3-chloropropane	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1
1,2-dinitrobenzene					
1,3,5-trinitrobenzene					
1,3-dichlorobenzene					
1,3-dichloropropane					
1,3-dinitrobenzene					
1,4-dichlorobenzene	<1	<1	<1	<1	<1
1,4-naphthoquinone					
1,4-phenylenediamine					
1-naphthylamine					
2,2-dichloropropane					
2,3,4,6-tetrachlorophenol					
2,4,5-t					
2,4,5-tp (silvex)					
2,4,5-trichlorophenol					
2,4,6-trichlorophenol					
2,4-d					
2,4-dichlorophenol					
2,4-dimethylphenol					
2,4-dinitrophenol					
2,4-dinitrotoluene					
2,6-dichlorophenol					
2,6-dinitrotoluene					
2-acetylaminofluorene					
2-butanone (mek)	<10	<10	<10	<10	<10
2-chloronaphthalene					
2-chlorophenol					
2-hexanone (mbk)	<5	<5	<5	<5	<5
2-methylnaphthalene					
2-methylphenol					
2-naphthylamine					
2-nitroaniline					
2-nitrophenol					
3,3'-dichlorobenzidine					
3,3'-dimethylbenzidine					
3-methylcholanthrene					
3-nitroaniline					
4,4'-ddd					
4,4'-dde					
4,4'-ddt					
4,6-dinitro-2-methylphenol					
4-aminobiphenyl					
4-bromophenyl phenyl ether					
4-chloro-3-methylphenol					
4-chloroaniline					
4-chlorophenyl phenyl ether					
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5
4-nitroaniline					
4-nitrophenol					
5-nitro-o-toluidine					
7,12-dimethylbenz(a)anthracene					
Acenaphthene					
Acenaphthylene					
Acetone	<10	<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-47

Constituents	Units	10/23/2014	3/31/2015	7/8/2015	11/5/2015	4/21/2016	10/17/2016	4/21/2017	10/16/2017
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016	ug/L		<.1						
Arochlor 1221	ug/L		<.2						
Arochlor 1232	ug/L		<.2						
Arochlor 1242	ug/L		<.2						
Arochlor 1248	ug/L		<.2						
Arochlor 1254	ug/L		<.1						
Arochlor 1260	ug/L		<.1						
Arsenic, total	ug/L	40.0	153.0	165.0	89.3	1730.0	18.5	860.0	720.0
Azobenzene	ug/L		<8						
Barium, total	ug/L	392	678	630	525	3520	443	1690	1550
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	<.05	<4	<4	<4	<4	<4	<4
Beta-bhc	ug/L		<.05						
Bis (2-chloroethoxy) methane	ug/L		<8						
Bis(2-chloroethyl) ether	ug/L		<8						
Bis(2-chloroisopropyl) ether	ug/L		<8						
Bis(2-ethylhexyl) phthalate	ug/L		<8						
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate	ug/L		<8						
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane	ug/L		<.1						
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate	ug/L		<8						
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene	ug/L		<1						
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene	ug/L		<8						
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	.8	1.0	1.5	1.2	4.2	12.4	1.9	1.5
Copper, total	ug/L	<4.0	<4.0	<4.0	<4.0	4.6	<4.0	<4.0	4.9
Cyanide, total	mg/L		<.005						
Delta-bhc	ug/L		<.05						
Diallate	ug/L		<8						
Dibenzo(a,h)anthracene	ug/L		<8						
Dibenzofuran	ug/L		<8						
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L		<1						
Dieldrin	ug/L		<.05						
Diethyl phthalate	ug/L		<8						
Dimethoate	ug/L		<.4						
Dimethylphthalate	ug/L		<8						
Di-n-butyl phthalate	ug/L		<8						
Di-n-octyl phthalate	ug/L		<8						
Dinoseb	ug/L		<.5						
Diphenylamine	ug/L		<8						
Disulfoton	ug/L		<.4						
Endosulfan i	ug/L		<.05						
Endosulfan ii	ug/L		<.05						
Endosulfan sulfate	ug/L		<.05						
Endrin	ug/L		<.05						
Endrin aldehyde	ug/L		<.05						
Ethyl methacrylate	ug/L		<10						
Ethyl methanesulfonate	ug/L		<8						
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
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-47

Constituents	4/24/2018	10/25/2018	4/15/2019	10/7/2019	4/22/2020	10/1/2020	4/8/2021	10/29/2021	4/25/2022
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016									
Arochlor 1221									
Arochlor 1232									
Arochlor 1242									
Arochlor 1248									
Arochlor 1254									
Arochlor 1260									
Arsenic, total	700.0	84.0	277.0	41.0	844.0	79.7	236.0	50.4	246.0
Azobenzene									
Barium, total	1750	310	743	497	1880	435	876	407	565
Benzene	<1	<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	<4
Beta-bhc									
Bis (2-chloroethoxy) methane									
Bis(2-chloroethyl) ether									
Bis(2-chloroisopropyl) ether									
Bis(2-ethylhexyl) phthalate									
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate									
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane									
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate									
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene									
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene									
Cis-1,2-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	1.5	<.8	.9	<.8	1.9	.9	1.2	.7	.7
Copper, total	<4.0	<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	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane									
Dieldrin									
Diethyl phthalate									
Dimethoate									
Dimethylphthalate									
Di-n-butyl phthalate									
Di-n-octyl phthalate									
Dinoseb									
Diphenylamine									
Disulfoton									
Endosulfan i									
Endosulfan ii									
Endosulfan sulfate									
Endrin									
Endrin aldehyde									
Ethyl methacrylate									
Ethyl methanesulfonate									
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Famphur									
Fluoranthene									
Fluorene									
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-47

Constituents	10/17/2022	4/10/2023	10/27/2023	4/2/2024	10/10/2024
Antimony, total	<2	<2	<2	<2	<2
Arochlor 1016					
Arochlor 1221					
Arochlor 1232					
Arochlor 1242					
Arochlor 1248					
Arochlor 1254					
Arochlor 1260					
Arsenic, total	291.0	271.0	50.2	182.0	88.3
Azobenzene					
Barium, total	852	713	486	570	426
Benzene	<1	<1	<1	<1	<1
Benzo(a)anthracene					
Benzo(a)pyrene					
Benzo(b)fluoranthene					
Benzo(g,h,i)perylene					
Benzo(k)fluoranthene					
Benzyl alcohol					
Beryllium, total	<4	<4	<4	<4	<4
Beta-bhc					
Bis (2-chloroethoxy) methane					
Bis(2-chloroethyl) ether					
Bis(2-chloroisopropyl) ether					
Bis(2-ethylhexyl) phthalate					
Bromochloromethane	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1
Butyl benzyl phthalate					
Cadmium, total	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1
Chlordane					
Chlorobenzene	<1	<1	<1	<1	<1
Chlorobenzilate					
Chloroethane	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1
Chloroprene					
Chromium, total	<8	<8	<8	<8	<8
Chrysene					
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1
Cobalt, total	3.8	1.8	2.3	1.8	.8
Copper, total	<4.0	<4.0	<4.0	4.4	<4.0
Cyanide, total					
Delta-bhc					
Diallate					
Dibenzo(a,h)anthracene					
Dibenzofuran					
Dibromochloromethane	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1
Dichlorodifluoromethane					
Dieldrin					
Diethyl phthalate					
Dimethoate					
Dimethylphthalate					
Di-n-butyl phthalate					
Di-n-octyl phthalate					
Dinoseb					
Diphenylamine					
Disulfoton					
Endosulfan i					
Endosulfan ii					
Endosulfan sulfate					
Endrin					
Endrin aldehyde					
Ethyl methacrylate					
Ethyl methanesulfonate					
Ethylbenzene	<1	<1	<1	<1	<1
Famphur					
Fluoranthene					
Fluorene					
Gamma-bhc (lindane)					
Heptachlor					
Heptachlor epoxide					
Hexachlorobenzene					

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

Table 9

Analytical Data Summary for MW-47

Constituents	Units	10/23/2014	3/31/2015	7/8/2015	11/5/2015	4/21/2016	10/17/2016	4/21/2017	10/16/2017
Hexachlorobutadiene	ug/L		<.8						
Hexachlorocyclopentadiene	ug/L		<.8						
Hexachloroethane	ug/L		<.8						
Hexachloropropene	ug/L		<.8						
Indeno(1,2,3-cd)pyrene	ug/L		<.8						
Isobutanol	ug/L		<1000						
Isodrin	ug/L		<.8						
Isophorone	ug/L		<.8						
Isosafrole	ug/L		<.8						
Kepone	ug/L		<.8						
Lead, total	ug/L	<4	<.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	9.2	31.6	4.0	5.9
Nitrobenzene	ug/L		<.8						
N-nitrosodiethylamine	ug/L		<.8						
N-nitrosodimethylamine	ug/L		<.8						
N-nitrosodi-n-butylamine	ug/L		<.8						
N-nitroso-di-n-propylamine	ug/L		<.8						
N-nitrosodiphenylamine	ug/L		<.8						
N-nitrosomethylethylamine	ug/L		<.8						
N-nitrosopiperidine	ug/L		<.8						
N-nitrosopyrrolidine	ug/L		<.8						
O,o,o-triethyl phosphorothioate	ug/L		<.4						
O-toluidine	ug/L		<.8						
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	349	92						
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total	mg/L		.23						
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		<.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	<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	<20.0	<8.0	<8.0	<8.0	12.0	<8.0	<8.0	<8.0

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

Table 9

Analytical Data Summary for MW-47

Constituents	4/24/2018	10/25/2018	4/15/2019	10/7/2019	4/22/2020	10/1/2020	4/8/2021	10/29/2021	4/25/2022
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	<4
Mercury, total									
Methacrylonitrile									
Methapyrilene									
Methoxychlor									
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl methacrylate									
Methyl methanesulfonate									
Methyl parathion									
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene									
Nickel, total	15.8	<4.0	<4.0	<4.0	4.7	<4.0	<4.0	<4.0	<4.0
Nitrobenzene									
N-nitrosodiethylamine									
N-nitrosodimethylamine									
N-nitrosodi-n-butylamine									
N-nitroso-di-n-propylamine									
N-nitrosodiphenylamine									
N-nitrosomethylethylamine									
N-nitrosopiperidine									
N-nitrosopyrrolidine									
O,o,o-triethyl phosphorothioate									
O-toluidine									
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	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total									
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<4	<2	<2	<2	<2	<2	<2	<2
Thionazin									
Tin, total									
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene									
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<8.0	<20.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-47

Constituents	10/17/2022	4/10/2023	10/27/2023	4/2/2024	10/10/2024
Hexachlorobutadiene					
Hexachlorocyclopentadiene					
Hexachloroethane					
Hexachloropropene					
Indeno(1,2,3-cd)pyrene					
Isobutanol					
Isodrin					
Isophorone					
Isosafrole					
Kepona					
Lead, total	<4	<4	<4	<4	<4
Mercury, total					
Methacrylonitrile					
Methapyrilene					
Methoxychlor					
Methyl iodide	<1	<1	<1	<1	<1
Methyl methacrylate					
Methyl methanesulfonate					
Methyl parathion					
Methylene chloride	<5	<5	<5	<5	<5
Naphthalene					
Nickel, total	<4.0	<4.0	11.7	8.0	<4.0
Nitrobenzene					
N-nitrosodiethylamine					
N-nitrosodimethylamine					
N-nitrosodi-n-butylamine					
N-nitroso-di-n-propylamine					
N-nitrosodiphenylamine					
N-nitrosomethylethylamine					
N-nitrosopiperidine					
N-nitrosopyrrolidine					
O,o,o-triethyl phosphorothioate					
O-toluidine					
Parathion					
P-dimethylaminoazobenzene					
Pentachlorobenzene					
Pentachloronitrobenzene (pcnb)					
Pentachlorophenol					
Phenacetin					
Phenanthrene					
Phenol					
Phorate					
Pronamide					
Propionitrile					
Pyrene					
Safrole					
Selenium, total	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4
Solids, total suspended					
Styrene	<1	<1	<1	<1	<1
Sulfide, total					
Tetrachloroethylene	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2
Thionazin					
Tin, total					
Toluene	<1	<1	<1	<1	<1
Toxaphene					
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	25.9	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-48A

Constituents	Units	10/23/2014	3/31/2015	11/5/2015	4/21/2016	10/17/2016	4/21/2017	10/16/2017	4/24/2018
(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						
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	ug/L		<8						
1,2,4-trichlorobenzene	ug/L		<1						
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene	ug/L		<8						
1,3,5-trinitrobenzene	ug/L		<8						
1,3-dichlorobenzene	ug/L		<1						
1,3-dichloropropane	ug/L		<1						
1,3-dinitrobenzene	ug/L		<8						
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone	ug/L		<8						
1,4-phenylenediamine	ug/L		<8						
1-naphthylamine	ug/L		<8						
2,2-dichloropropane	ug/L		<1						
2,3,4,6-tetrachlorophenol	ug/L		<8						
2,4,5-t	ug/L		<.5						
2,4,5-tp (silvex)	ug/L		<.5						
2,4,5-trichlorophenol	ug/L		<8						
2,4,6-trichlorophenol	ug/L		<8						
2,4-d	ug/L		<2						
2,4-dichlorophenol	ug/L		<8						
2,4-dimethylphenol	ug/L		<8						
2,4-dinitrophenol	ug/L		<8						
2,4-dinitrotoluene	ug/L		<8						
2,6-dichlorophenol	ug/L		<8						
2,6-dinitrotoluene	ug/L		<8						
2-acetylaminofluorene	ug/L		<8						
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
2-chloronaphthalene	ug/L		<8						
2-chlorophenol	ug/L		<8						
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene	ug/L		<8						
2-methylphenol	ug/L		<8						
2-naphthylamine	ug/L		<8						
2-nitroaniline	ug/L		<8						
2-nitrophenol	ug/L		<8						
3,3'-dichlorobenzidine	ug/L		<8						
3,3'-dimethylbenzidine	ug/L		<8						
3-methylcholanthrene	ug/L		<8						
3-nitroaniline	ug/L		<8						
4,4'-ddd	ug/L		<.05						
4,4'-dde	ug/L		<.05						
4,4'-ddt	ug/L		<.05						
4,6-dinitro-2-methylphenol	ug/L		<8						
4-aminobiphenyl	ug/L		<8						
4-bromophenyl phenyl ether	ug/L		<8						
4-chloro-3-methylphenol	ug/L		<8						
4-chloroaniline	ug/L		<8						
4-chlorophenyl phenyl ether	ug/L		<8						
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline	ug/L		<8						
4-nitrophenol	ug/L		<8						
5-nitro-o-toluidine	ug/L		<8						
7,12-dimethylbenz(a)anthracene	ug/L		<8						
Acenaphthene	ug/L		<8						
Acenaphthylene	ug/L		<8						
Acetone	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	16.3	<10.0
Acetonitrile	ug/L		<10						
Acetophenone	ug/L		<8						
Acrolein	ug/L		<10						
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin	ug/L		<.05						
Allyl chloride	ug/L		<1						
Alpha-bhc	ug/L		<.05						
Anthracene	ug/L		<8						

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

Table 9

Analytical Data Summary for MW-48A

Constituents	10/25/2018	4/15/2019	10/7/2019	4/23/2020	10/1/2020	4/8/2021	10/29/2021	4/25/2022	10/17/2022
(3,4)-methylphenol				Δδ					
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	ΔΔ	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	ΔΔ	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	ΔΔ	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	ΔΔ	<1	<1	<1	<1	<1
1,1-dichloropropene				ΔΔ					
1,2,3-trichloropropane	<1	<1	<1	ΔΔ	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene				Δδ					
1,2,4-trichlorobenzene				ΔΔ					
1,2-dibromo-3-chloropropane	<1	<1	<1	ΔΔ	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	ΔΔ	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	ΔΔ	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	ΔΔ	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	ΔΔ	<1	<1	<1	<1	<1
1,2-dinitrobenzene				Δδ					
1,3,5-trinitrobenzene				Δδ					
1,3-dichlorobenzene				ΔΔ					
1,3-dichloropropane				ΔΔ					
1,3-dinitrobenzene				Δδ					
1,4-dichlorobenzene	<1	<1	<1	ΔΔ	<1	<1	<1	<1	<1
1,4-naphthoquinone				Δδ					
1,4-phenylenediamine				Δδ					
1-naphthylamine				Δδ					
2,2-dichloropropane				ΔΔ					
2,3,4,6-tetrachlorophenol				Δδ					
2,4,5-t				Δδ					
2,4,5-tp (silvex)				Δδ					
2,4,5-trichlorophenol				Δδ					
2,4,6-trichlorophenol				Δδ					
2,4-d				Δδ					
2,4-dichlorophenol				Δδ					
2,4-dimethylphenol				Δδ					
2,4-dinitrophenol				Δδ					
2,4-dinitrotoluene				Δδ					
2,6-dichlorophenol				Δδ					
2,6-dinitrotoluene				Δδ					
2-acetylaminofluorene				Δδ					
2-butanone (mek)	<5	<5	<5	Δδ	<5	<5	<5	<10	<10
2-chloronaphthalene				Δδ					
2-chlorophenol				Δδ					
2-hexanone (mbk)	<5	<5	<5	Δδ	<5	<5	<5	<5	<5
2-methylnaphthalene				Δδ					
2-methylphenol				Δδ					
2-naphthylamine				Δδ					
2-nitroaniline				Δδ					
2-nitrophenol				Δδ					
3,3'-dichlorobenzidine				Δδ					
3,3'-dimethylbenzidine				Δδ					
3-methylcholanthrene				Δδ					
3-nitroaniline				Δδ					
4,4'-ddd				Δδ					
4,4'-dde				Δδ					
4,4'-ddt				Δδ					
4,6-dinitro-2-methylphenol				Δδ					
4-aminobiphenyl				Δδ					
4-bromophenyl phenyl ether				Δδ					
4-chloro-3-methylphenol				Δδ					
4-chloroaniline				Δδ					
4-chlorophenyl phenyl ether				Δδ					
4-methyl-2-pentanone (mibk)	<5	<5	<5	Δδ	<5	<5	<5	<5	<5
4-nitroaniline				Δδ					
4-nitrophenol				Δδ					
5-nitro-o-toluidine				Δδ					
7,12-dimethylbenz(a)anthracene				Δδ					
Acenaphthene				Δδ					
Acenaphthylene				Δδ					
Acetone	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acetonitrile				<10					
Acetophenone				Δδ					
Acrolein				<10					
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin				Δδ					
Allyl chloride				Δδ					
Alpha-bhc				Δδ					
Anthracene				Δδ					

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

Table 9

Analytical Data Summary for MW-48A

Constituents	4/10/2023	10/27/2023	4/2/2024	10/10/2024
(3 4)-methylphenol				
1,1,1,2-tetrachloroethane	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1
1,1-dichloropropene				
1,2,3-trichloropropane	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene				
1,2,4-trichlorobenzene				
1,2-dibromo-3-chloropropane	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1
1,2-dinitrobenzene				
1,3,5-trinitrobenzene				
1,3-dichlorobenzene				
1,3-dichloropropane				
1,3-dinitrobenzene				
1,4-dichlorobenzene	<1	<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
2-chloronaphthalene				
2-chlorophenol				
2-hexanone (mbk)	<5	<5	<5	<5
2-methylnaphthalene				
2-methylphenol				
2-naphthylamine				
2-nitroaniline				
2-nitrophenol				
3,3'-dichlorobenzidine				
3,3'-dimethylbenzidine				
3-methylcholanthrene				
3-nitroaniline				
4,4'-ddd				
4,4'-dde				
4,4'-ddt				
4,6-dinitro-2-methylphenol				
4-aminobiphenyl				
4-bromophenyl phenyl ether				
4-chloro-3-methylphenol				
4-chloroaniline				
4-chlorophenyl phenyl ether				
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5
4-nitroaniline				
4-nitrophenol				
5-nitro-o-toluidine				
7,12-dimethylbenz(a)anthracene				
Acenaphthene				
Acenaphthylene				
Acetone	<10.0	<10.0	<10.0	<10.0
Acetonitrile				
Acetophenone				
Acrolein				
Acrylonitrile	<5	<5	<5	<5
Aldrin				
Allyl chloride				
Alpha-bhc				
Anthracene				

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

Table 9

Analytical Data Summary for MW-48A

Constituents	Units	10/23/2014	3/31/2015	11/5/2015	4/21/2016	10/17/2016	4/21/2017	10/16/2017	4/24/2018
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	202.0	32.6	38.0	34.6	33.1	26.0	22.0	132.0
Azobenzene	ug/L		<8						
Barium, total	ug/L	404	209	215	177	192	188	158	498
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Benzo(a)anthracene	ug/L		<8						
Benzo(a)pyrene	ug/L		<8						
Benzo(b)fluoranthene	ug/L		<8						
Benzo(g,h,i)perylene	ug/L		<8						
Benzo(k)fluoranthene	ug/L		<8						
Benzyl alcohol	ug/L		<8						
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Beta-bhc	ug/L		<.05						
Bis (2-chloroethoxy) methane	ug/L		<8						
Bis(2-chloroethyl) ether	ug/L		<8						
Bis(2-chloroisopropyl) ether	ug/L		<8						
Bis(2-ethylhexyl) phthalate	ug/L		17	<10	<10	<10	<6	<6	
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate	ug/L		<8						
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane	ug/L		<.1						
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate	ug/L		<8						
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene	ug/L		<1						
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene	ug/L		<8						
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	3.0	2.7	3.0	2.2	2.1	2.2	1.8	1.8
Copper, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Cyanide, total	mg/L		<.005						
Delta-bhc	ug/L		<.05						
Diallate	ug/L		<8						
Dibenzo(a,h)anthracene	ug/L		<8						
Dibenzofuran	ug/L		<8						
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L		<1						
Dieldrin	ug/L		<.05						
Diethyl phthalate	ug/L		<8						
Dimethoate	ug/L		<.4						
Dimethylphthalate	ug/L		<8						
Di-n-butyl phthalate	ug/L		<8						
Di-n-octyl phthalate	ug/L		<8						
Dinoseb	ug/L		<.5						
Diphenylamine	ug/L		<8						
Disulfoton	ug/L		<.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-48A

Constituents	10/25/2018	4/15/2019	10/7/2019	4/23/2020	10/1/2020	4/8/2021	10/29/2021	4/25/2022	10/17/2022
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016				<.1					
Arochlor 1221				<.2					
Arochlor 1232				<.2					
Arochlor 1242				<.2					
Arochlor 1248				<.2					
Arochlor 1254				<.1					
Arochlor 1260				<.1					
Arsenic, total	19.3	25.5	61.6	19.6	42.2	35.8	12.2	45.1	170.0
Azobenzene				<.8					
Barium, total	131	166	269	191	310	344	181	460	1060
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Benzo(a)anthracene				<.8					
Benzo(a)pyrene				<.8					
Benzo(b)fluoranthene				<.8					
Benzo(g,h,i)perylene				<.8					
Benzo(k)fluoranthene				<.8					
Benzyl alcohol				<.8					
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Beta-bhc				<.05					
Bis (2-chloroethoxy) methane				<.8					
Bis(2-chloroethyl) ether				<.8					
Bis(2-chloroisopropyl) ether				<.8					
Bis(2-ethylhexyl) phthalate				<.6					
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate				<.8					
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane				<.1					
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate				<.8					
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene				<1					
Chromium, total	<8	<8	<8	<.8	<8	<8	<8	<8	<8
Chrysene				<.8					
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	2.4	2.4	2.8	1.7	1.0	1.0	1.0	.6	2.2
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	4.1
Cyanide, total				<.005					
Delta-bhc				<.05					
Diallate				<.8					
Dibenzo(a,h)anthracene				<.8					
Dibenzofuran				<.8					
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane				<1					
Dieldrin				<.05					
Diethyl phthalate				<.8					
Dimethoate				<.4					
Dimethylphthalate				<.8					
Di-n-butyl phthalate				<.8					
Di-n-octyl phthalate				<.8					
Dinoseb				<.5					
Diphenylamine				<.8					
Disulfoton				<.4					
Endosulfan i				<.05					
Endosulfan ii				<.05					
Endosulfan sulfate				<.05					
Endrin				<.05					
Endrin aldehyde				<.05					
Ethyl methacrylate				<10					
Ethyl methanesulfonate				<.8					
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Famphur				<.4					
Fluoranthene				<.8					
Fluorene				<.8					
Gamma-bhc (lindane)				<.05					
Heptachlor				<.05					
Heptachlor epoxide				<.05					
Hexachlorobenzene				<.05					

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

Table 9

Analytical Data Summary for MW-48A

Constituents	4/10/2023	10/27/2023	4/2/2024	10/10/2024
Antimony, total	<2	<2	<2	<2
Arochlor 1016				
Arochlor 1221				
Arochlor 1232				
Arochlor 1242				
Arochlor 1248				
Arochlor 1254				
Arochlor 1260				
Arsenic, total	122.0	26.0	17.1	18.3
Azobenzene				
Barium, total	1090	208	217	205
Benzene	<1	<1	<1	<1
Benzo(a)anthracene				
Benzo(a)pyrene				
Benzo(b)fluoranthene				
Benzo(g,h,i)perylene				
Benzo(k)fluoranthene				
Benzyl alcohol				
Beryllium, total	<4	<4	<4	<4
Beta-bhc				
Bis (2-chloroethoxy) methane				
Bis(2-chloroethyl) ether				
Bis(2-chloroisopropyl) ether				
Bis(2-ethylhexyl) phthalate				
Bromochloromethane	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1
Butyl benzyl phthalate				
Cadmium, total	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1
Chlordane				
Chlorobenzene	<1	<1	<1	<1
Chlorobenzilate				
Chloroethane	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1
Chloroprene				
Chromium, total	<8	<8	<8	<8
Chrysene				
Cis-1,2-dichloroethylene	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1
Cobalt, total	1.3	1.0	.9	.6
Copper, total	4.6	<4.0	<4.0	<4.0
Cyanide, total				
Delta-bhc				
Diallate				
Dibenzo(a,h)anthracene				
Dibenzofuran				
Dibromochloromethane	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1
Dichlorodifluoromethane				
Dieldrin				
Diethyl phthalate				
Dimethoate				
Dimethylphthalate				
Di-n-butyl phthalate				
Di-n-octyl phthalate				
Dinoseb				
Diphenylamine				
Disulfoton				
Endosulfan i				
Endosulfan ii				
Endosulfan sulfate				
Endrin				
Endrin aldehyde				
Ethyl methacrylate				
Ethyl methanesulfonate				
Ethylbenzene	<1	<1	<1	<1
Famphur				
Fluoranthene				
Fluorene				
Gamma-bhc (lindane)				
Heptachlor				
Heptachlor epoxide				
Hexachlorobenzene				

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

Table 9

Analytical Data Summary for MW-48A

Constituents	Units	10/23/2014	3/31/2015	11/5/2015	4/21/2016	10/17/2016	4/21/2017	10/16/2017	4/24/2018
Hexachlorobutadiene	ug/L		<8						
Hexachlorocyclopentadiene	ug/L		<8						
Hexachloroethane	ug/L		<8						
Hexachloropropene	ug/L		<8						
Indeno(1,2,3-cd)pyrene	ug/L		<8						
Isobutanol	ug/L		<1000						
Isodrin	ug/L		<8						
Isophorone	ug/L		<8						
Isosafrole	ug/L		<8						
Kepone	ug/L		<8						
Lead, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Mercury, total	ug/L		<.5						
Methacrylonitrile	ug/L		<1						
Methapyrilene	ug/L		<8						
Methoxychlor	ug/L		<.05						
Methyl iodide	ug/L	<1	<1	<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	8.5	8.9	7.6	5.9	5.7	5.5	4.4	<4.0
Nitrobenzene	ug/L		<8						
N-nitrosodiethylamine	ug/L		<8						
N-nitrosodimethylamine	ug/L		<8						
N-nitrosodi-n-butylamine	ug/L		<8						
N-nitroso-di-n-propylamine	ug/L		<8						
N-nitrosodiphenylamine	ug/L		<8						
N-nitrosomethylethylamine	ug/L		<8						
N-nitrosopiperidine	ug/L		<8						
N-nitrosopyrrolidine	ug/L		<8						
O,o,o-triethyl phosphorothioate	ug/L		<.4						
O-toluidine	ug/L		<8						
Parathion	ug/L		<.4						
P-dimethylaminoazobenzene	ug/L		<8						
Pentachlorobenzene	ug/L		<8						
Pentachloronitrobenzene (pcnb)	ug/L		<8						
Pentachlorophenol	ug/L		<8						
Phenacetin	ug/L		<8						
Phenanthrene	ug/L		<8						
Phenol	ug/L		<8						
Phorate	ug/L		<.4						
Pronamide	ug/L		<8						
Propionitrile	ug/L		<10						
Pyrene	ug/L		<8						
Safrole	ug/L		<8						
Selenium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended	mg/L	517	64						
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total	mg/L		<.1						
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Thionazin	ug/L		<.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	<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	<20	<8	<8	<20	<8	<8	<8	<8

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

Table 9

Analytical Data Summary for MW-48A

Constituents	10/25/2018	4/15/2019	10/7/2019	4/23/2020	10/1/2020	4/8/2021	10/29/2021	4/25/2022	10/17/2022
Hexachlorobutadiene				<8					
Hexachlorocyclopentadiene				<8					
Hexachloroethane				<8					
Hexachloropropene				<8					
Indeno(1,2,3-cd)pyrene				<8					
Isobutanol				<1000					
Isodrin				<8					
Isophorone				<8					
Isosafrole				<8					
Kepone				<8					
Lead, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Mercury, total				<5					
Methacrylonitrile				<1					
Methapyrilene				<8					
Methoxychlor				<.05					
Methyl iodide	<1	<1	<1	<2	<1	<1	<1	<1	<1
Methyl methacrylate				<1					
Methyl methanesulfonate				<8					
Methyl parathion				<4					
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene				<8					
Nickel, total	4.6	4.4	6.3	4.9	4.2	<4.0	<4.0	<4.0	4.6
Nitrobenzene				<8					
N-nitrosodiethylamine				<8					
N-nitrosodimethylamine				<8					
N-nitrosodi-n-butylamine				<8					
N-nitroso-di-n-propylamine				<8					
N-nitrosodiphenylamine				<8					
N-nitrosomethylethylamine				<8					
N-nitrosopiperidine				<8					
N-nitrosopyrrolidine				<8					
O,o,o-triethyl phosphorothioate				<4					
O-toluidine				<8					
Parathion				<4					
P-dimethylaminoazobenzene				<8					
Pentachlorobenzene				<8					
Pentachloronitrobenzene (pcnb)				<8					
Pentachlorophenol				<8					
Phenacetin				<8					
Phenanthrene				<8					
Phenol				<8					
Phorate				<4					
Pronamide				<8					
Propionitrile				<10					
Pyrene				<8					
Safrole				<8					
Selenium, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	5.4	<4.0
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total				<1					
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<2	<2	<2	<2	<2	<2	<2	<2
Thionazin				<4					
Tin, total				<20					
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene				<2					
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<20	<8	<8	<20	<20	<20	<20	<20	<20

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

Table 9

Analytical Data Summary for MW-48A

Constituents	4/10/2023	10/27/2023	4/2/2024	10/10/2024
Hexachlorobutadiene				
Hexachlorocyclopentadiene				
Hexachloroethane				
Hexachloropropene				
Indeno(1,2,3-cd)pyrene				
Isobutanol				
Isodrin				
Isophorone				
Isosafrole				
Kepon				
Lead, total	10.7	<4.0	<4.0	<4.0
Mercury, total				
Methacrylonitrile				
Methacrylene				
Methoxychlor				
Methyl iodide	<1	<1	<1	<1
Methyl methacrylate				
Methyl methanesulfonate				
Methyl parathion				
Methylene chloride	<5	<5	<5	<5
Naphthalene				
Nickel, total	5.1	<4.0	<4.0	<4.0
Nitrobenzene				
N-nitrosodiethylamine				
N-nitrosodimethylamine				
N-nitrosodi-n-butylamine				
N-nitroso-di-n-propylamine				
N-nitrosodiphenylamine				
N-nitrosomethylethylamine				
N-nitrosopiperidine				
N-nitrosopyrrolidine				
O,o,o-triethyl phosphorothioate				
O-toluidine				
Parathion				
P-dimethylaminoazobenzene				
Pentachlorobenzene				
Pentachloronitrobenzene (pcnb)				
Pentachlorophenol				
Phenacetin				
Phenanthrene				
Phenol				
Phorate				
Pronamide				
Propionitrile				
Pyrene				
Safrole				
Selenium, total	<4.0	<4.0	<4.0	<4.0
Silver, total	<4	<4	<4	<4
Solids, total suspended				
Styrene	<1	<1	<1	<1
Sulfide, total				
Tetrachloroethylene	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2
Thionazin				
Tin, total				
Toluene	<1	<1	<1	<1
Toxaphene				
Trans-1,2-dichloroethylene	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2
Zinc, total	<20	<20	<20	<20

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

Table 9

Analytical Data Summary for MW-49A

Constituents	Units	10/23/2014	3/31/2015	11/5/2015	4/21/2016	10/17/2016	1/9/2017	4/21/2017	10/16/2017
(3 4)-methylphenol	ug/L		<8						
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene	ug/L		<1						
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1		<1	<1
1,2,4,5-tetrachlorobenzene	ug/L		<8						
1,2,4-trichlorobenzene	ug/L		<1						
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene	ug/L		<8						
1,3,5-trinitrobenzene	ug/L		<8						
1,3-dichlorobenzene	ug/L		<1						
1,3-dichloropropane	ug/L		<1						
1,3-dinitrobenzene	ug/L		<8						
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone	ug/L		<8						
1,4-phenylenediamine	ug/L		<8						
1-naphthylamine	ug/L		<8						
2,2-dichloropropane	ug/L		<1						
2,3,4,6-tetrachlorophenol	ug/L		<8						
2,4,5-t	ug/L		<.5						
2,4,5-tp (silvex)	ug/L		<.5						
2,4,5-trichlorophenol	ug/L		<8						
2,4,6-trichlorophenol	ug/L		<8						
2,4-d	ug/L		<2						
2,4-dichlorophenol	ug/L		<8						
2,4-dimethylphenol	ug/L		<8						
2,4-dinitrophenol	ug/L		<8						
2,4-dinitrotoluene	ug/L		<8						
2,6-dichlorophenol	ug/L		<8						
2,6-dinitrotoluene	ug/L		<8						
2-acetylaminofluorene	ug/L		<8						
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
2-chloronaphthalene	ug/L		<8						
2-chlorophenol	ug/L		<8						
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene	ug/L		<8						
2-methylphenol	ug/L		<8						
2-naphthylamine	ug/L		<8						
2-nitroaniline	ug/L		<8						
2-nitrophenol	ug/L		<8						
3,3'-dichlorobenzidine	ug/L		<8						
3,3'-dimethylbenzidine	ug/L		<8						
3-methylcholanthrene	ug/L		<8						
3-nitroaniline	ug/L		<8						
4,4'-ddd	ug/L		<.05						
4,4'-dde	ug/L		<.05						
4,4'-ddt	ug/L		<.05						
4,6-dinitro-2-methylphenol	ug/L		<8						
4-aminobiphenyl	ug/L		<8						
4-bromophenyl phenyl ether	ug/L		<8						
4-chloro-3-methylphenol	ug/L		<8						
4-chloroaniline	ug/L		<8						
4-chlorophenyl phenyl ether	ug/L		<8						
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline	ug/L		<8						
4-nitrophenol	ug/L		<8						
5-nitro-o-toluidine	ug/L		<8						
7,12-dimethylbenz(a)anthracene	ug/L		<8						
Acenaphthene	ug/L		<8						
Acenaphthylene	ug/L		<8						
Acetone	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acetonitrile	ug/L		<10						
Acetophenone	ug/L		<8						
Acrolein	ug/L		<10						
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin	ug/L		<.05						
Allyl chloride	ug/L		<1						
Alpha-bhc	ug/L		<.05						
Anthracene	ug/L		<8						

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

Table 9

Analytical Data Summary for MW-49A

Constituents	4/24/2018	10/25/2018	4/15/2019	10/7/2019	4/23/2020	10/1/2020	4/8/2021	10/29/2021	4/25/2022
(3 4)-methylphenol					<8				
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene					<1				
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene					<8				
1,2,4-trichlorobenzene					<1				
1,2-dibromo-3-chloropropane	<1	<1	<1	<1	<1	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene					<8				
1,3,5-trinitrobenzene					<8				
1,3-dichlorobenzene					<1				
1,3-dichloropropane					<1				
1,3-dinitrobenzene					<8				
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone					<8				
1,4-phenylenediamine					<8				
1-naphthylamine					<8				
2,2-dichloropropane					<1				
2,3,4,6-tetrachlorophenol					<8				
2,4,5-t					<.5				
2,4,5-tp (silvex)					<.5				
2,4,5-trichlorophenol					<8				
2,4,6-trichlorophenol					<8				
2,4-d					<2				
2,4-dichlorophenol					<8				
2,4-dimethylphenol					<8				
2,4-dinitrophenol					<8				
2,4-dinitrotoluene					<8				
2,6-dichlorophenol					<8				
2,6-dinitrotoluene					<8				
2-acetylaminofluorene					<8				
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<5	<5	<10
2-chloronaphthalene					<8				
2-chlorophenol					<8				
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene					<8				
2-methylphenol					<8				
2-naphthylamine					<8				
2-nitroaniline					<8				
2-nitrophenol					<8				
3,3'-dichlorobenzidine					<8				
3,3'-dimethylbenzidine					<8				
3-methylcholanthrene					<8				
3-nitroaniline					<8				
4,4'-ddd					<.05				
4,4'-dde					<.05				
4,4'-ddt					<.05				
4,6-dinitro-2-methylphenol					<8				
4-aminobiphenyl					<8				
4-bromophenyl phenyl ether					<8				
4-chloro-3-methylphenol					<8				
4-chloroaniline					<8				
4-chlorophenyl phenyl ether					<8				
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline					<8				
4-nitrophenol					<8				
5-nitro-o-toluidine					<8				
7,12-dimethylbenz(a)anthracene					<8				
Acenaphthene					<8				
Acenaphthylene					<8				
Acetone	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	281.0	23.8
Acetonitrile					<10				
Acetophenone					<8				
Acrolein					<10				
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin					<.05				
Allyl chloride					<1				
Alpha-bhc					<.05				
Anthracene					<8				

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

Table 9

Analytical Data Summary for MW-49A

Constituents	10/17/2022	4/10/2023	10/27/2023	4/2/2024	10/10/2024
(3 4)-methylphenol					
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1
1,1-dichloropropene					
1,2,3-trichloropropane	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene					
1,2,4-trichlorobenzene					
1,2-dibromo-3-chloropropane	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1
1,2-dinitrobenzene					
1,3,5-trinitrobenzene					
1,3-dichlorobenzene					
1,3-dichloropropane					
1,3-dinitrobenzene					
1,4-dichlorobenzene	<1	<1	<1	<1	<1
1,4-naphthoquinone					
1,4-phenylenediamine					
1-naphthylamine					
2,2-dichloropropane					
2,3,4,6-tetrachlorophenol					
2,4,5-t					
2,4,5-tp (silvex)					
2,4,5-trichlorophenol					
2,4,6-trichlorophenol					
2,4-d					
2,4-dichlorophenol					
2,4-dimethylphenol					
2,4-dinitrophenol					
2,4-dinitrotoluene					
2,6-dichlorophenol					
2,6-dinitrotoluene					
2-acetylaminofluorene					
2-butanone (mek)	<10	<10	<10	<10	<10
2-chloronaphthalene					
2-chlorophenol					
2-hexanone (mbk)	<5	<5	<5	<5	<5
2-methylnaphthalene					
2-methylphenol					
2-naphthylamine					
2-nitroaniline					
2-nitrophenol					
3,3'-dichlorobenzidine					
3,3'-dimethylbenzidine					
3-methylcholanthrene					
3-nitroaniline					
4,4'-ddd					
4,4'-dde					
4,4'-ddt					
4,6-dinitro-2-methylphenol					
4-aminobiphenyl					
4-bromophenyl phenyl ether					
4-chloro-3-methylphenol					
4-chloroaniline					
4-chlorophenyl phenyl ether					
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5
4-nitroaniline					
4-nitrophenol					
5-nitro-o-toluidine					
7,12-dimethylbenz(a)anthracene					
Acenaphthene					
Acenaphthylene					
Acetone	<10.0	<10.0	<10.0	<10.0	<10.0
Acetonitrile					
Acetophenone					
Acrolein					
Acrylonitrile	<5	<5	<5	<5	<5
Aldrin					
Allyl chloride					
Alpha-bhc					
Anthracene					

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

Table 9

Analytical Data Summary for MW-49A

Constituents	Units	10/23/2014	3/31/2015	11/5/2015	4/21/2016	10/17/2016	1/9/2017	4/21/2017	10/16/2017
Antimony, total	ug/L	<2	<2	<2	<2	<2		<2	<2
Arochlor 1016	ug/L		<.1						
Arochlor 1221	ug/L		<.2						
Arochlor 1232	ug/L		<.2						
Arochlor 1242	ug/L		<.2						
Arochlor 1248	ug/L		<.2						
Arochlor 1254	ug/L		<.1						
Arochlor 1260	ug/L		<.1						
Arsenic, total	ug/L	10.3	9.5	12.9	39.4	225.0	13.0	12.5	14.8
Azobenzene	ug/L		<8						
Barium, total	ug/L	580	625	447	478	707	477	465	373
Benzene	ug/L	2.9	3.5	5.7	3.4	2.7		1.6	4.0
Benzo(a)anthracene	ug/L		<8						
Benzo(a)pyrene	ug/L		<8						
Benzo(b)fluoranthene	ug/L		<8						
Benzo(g,h,i)perylene	ug/L		<8						
Benzo(k)fluoranthene	ug/L		<8						
Benzyl alcohol	ug/L		<8						
Beryllium, total	ug/L	<4	<4	<4	<4	<4		<4	<4
Beta-bhc	ug/L		<.05						
Bis (2-chloroethoxy) methane	ug/L		<8						
Bis(2-chloroethyl) ether	ug/L		<8						
Bis(2-chloroisopropyl) ether	ug/L		<8						
Bis(2-ethylhexyl) phthalate	ug/L		<8						
Bromochloromethane	ug/L	<1	<1	<1	<1	<1		<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1		<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1		<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1		<1	<1
Butyl benzyl phthalate	ug/L		<8						
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8		<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1		<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1		<1	<1
Chlordane	ug/L		<.1						
Chlorobenzene	ug/L	<1	<1	<1	<1	<1		<1	<1
Chlorobenzilate	ug/L		<8						
Chloroethane	ug/L	2.9	10.5	1.9	1.7	1.8		2.0	3.0
Chloroform	ug/L	<1	<1	<1	<1	<1		<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1		<1	<1
Chloroprene	ug/L		<1						
Chromium, total	ug/L	<8	<8	<8	<8	<8		<8	<8
Chrysene	ug/L		<8						
Cis-1,2-dichloroethylene	ug/L	<1.0	<1.0	1.1	<1.0	<1.0		<1.0	<1.0
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1		<1	<1
Cobalt, total	ug/L	12.0	13.3	15.2	14.5	1.1		14.9	5.9
Copper, total	ug/L	4.8	<4.0	4.3	4.9	<4.0		<4.0	<4.0
Cyanide, total	mg/L		<.005						
Delta-bhc	ug/L		<.05						
Diallate	ug/L		<8						
Dibenzo(a,h)anthracene	ug/L		<8						
Dibenzofuran	ug/L		<8						
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1		<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1		<1	<1
Dichlorodifluoromethane	ug/L		1.1	<1.0	<1.0	<2.0		<1.0	<1.0
Dieldrin	ug/L		<.05						
Diethyl phthalate	ug/L		<8						
Dimethoate	ug/L		<.4						
Dimethylphthalate	ug/L		<8						
Di-n-butyl phthalate	ug/L		<8						
Di-n-octyl phthalate	ug/L		<8						
Dinoseb	ug/L		<.5						
Diphenylamine	ug/L		<8						
Disulfoton	ug/L		<.4						
Endosulfan i	ug/L		<.05						
Endosulfan ii	ug/L		<.05						
Endosulfan sulfate	ug/L		<.05						
Endrin	ug/L		<.05						
Endrin aldehyde	ug/L		<.05						
Ethyl methacrylate	ug/L		<10						
Ethyl methanesulfonate	ug/L		<8						
Ethylbenzene	ug/L	<1	<1	<1	<1	<1		<1	<1
Famphur	ug/L		<.4						
Fluoranthene	ug/L		<8						
Fluorene	ug/L		<8						
Gamma-bhc (lindane)	ug/L		<.05						
Heptachlor	ug/L		<.05						
Heptachlor epoxide	ug/L		<.05						
Hexachlorobenzene	ug/L		<.05						

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

Table 9

Analytical Data Summary for MW-49A

Constituents	4/24/2018	10/25/2018	4/15/2019	10/7/2019	4/23/2020	10/1/2020	4/8/2021	10/29/2021	4/25/2022
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016					<.1				
Arochlor 1221					<.2				
Arochlor 1232					<.2				
Arochlor 1242					<.2				
Arochlor 1248					<.2				
Arochlor 1254					<.1				
Arochlor 1260					<.1				
Arsenic, total	16.8	35.2	27.8	55.8	39.1	27.8	24.7	18.0	14.6
Azobenzene					<8				
Barium, total	704	453	668	393	676	531	583	346	748
Benzene	3.4	4.0	3.2	1.6	2.4	2.9	3.4	7.0	5.9
Benzo(a)anthracene					<8				
Benzo(a)pyrene					<8				
Benzo(b)fluoranthene					<8				
Benzo(g,h,i)perylene					<8				
Benzo(k)fluoranthene					<8				
Benzyl alcohol					<8				
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Beta-bhc					<.05				
Bis (2-chloroethoxy) methane					<8				
Bis(2-chloroethyl) ether					<8				
Bis(2-chloroisopropyl) ether					<8				
Bis(2-ethylhexyl) phthalate					<6				
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate					<8				
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane					<.1				
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate					<8				
Chloroethane	3.3	1.1	1.9	<1.0	2.0	2.7	5.7	6.3	5.4
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene					<1				
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene					<8				
Cis-1,2-dichloroethylene	<1.0	<1.0	<1.0	<1.0	<1.0	1.2	3.9	8.0	6.4
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	24.5	7.3	18.0	2.7	19.1	16.8	21.0	2.6	16.5
Copper, total	<4.0	5.9	<4.0	<4.0	4.7	4.0	<4.0	7.0	6.6
Cyanide, total					<.005				
Delta-bhc					<.05				
Diallate					<8				
Dibenzo(a,h)anthracene					<8				
Dibenzofuran					<8				
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane					<1.0				
Dieldrin					<.05				
Diethyl phthalate					<8				
Dimethoate					<.4				
Dimethylphthalate					<8				
Di-n-butyl phthalate					<8				
Di-n-octyl phthalate					<8				
Dinoseb					<.5				
Diphenylamine					<8				
Disulfoton					<.4				
Endosulfan i					<.05				
Endosulfan ii					<.05				
Endosulfan sulfate					<.05				
Endrin					<.05				
Endrin aldehyde					<.05				
Ethyl methacrylate					<10				
Ethyl methanesulfonate					<8				
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Famphur					<.4				
Fluoranthene					<8				
Fluorene					<8				
Gamma-bhc (lindane)					<.05				
Heptachlor					<.05				
Heptachlor epoxide					<.05				
Hexachlorobenzene					<.05				

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

Table 9

Analytical Data Summary for MW-49A

Constituents	10/17/2022	4/10/2023	10/27/2023	4/2/2024	10/10/2024
Antimony, total	<2	<2	<2	<2	<2
Arochlor 1016					
Arochlor 1221					
Arochlor 1232					
Arochlor 1242					
Arochlor 1248					
Arochlor 1254					
Arochlor 1260					
Arsenic, total	46.0	74.9	42.8	29.9	50.5
Azobenzene					
Barium, total	656	686	609	626	616
Benzene	5.8	4.2	3.4	2.8	2.4
Benzo(a)anthracene					
Benzo(a)pyrene					
Benzo(b)fluoranthene					
Benzo(g,h,i)perylene					
Benzo(k)fluoranthene					
Benzyl alcohol					
Beryllium, total	<4	<4	<4	<4	<4
Beta-bhc					
Bis (2-chloroethoxy) methane					
Bis(2-chloroethyl) ether					
Bis(2-chloroisopropyl) ether					
Bis(2-ethylhexyl) phthalate					
Bromochloromethane	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1
Butyl benzyl phthalate					
Cadmium, total	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1
Chlordane					
Chlorobenzene	<1	<1	<1	<1	<1
Chlorobenzilate					
Chloroethane	4.9	3.5	3.0	3.5	2.4
Chloroform	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1
Chloroprene					
Chromium, total	<8	<8	<8	<8	<8
Chrysene					
Cis-1,2-dichloroethylene	3.4	1.4	2.7	3.6	1.8
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1
Cobalt, total	20.3	20.6	20.5	19.9	10.2
Copper, total	13.9	39.5	5.4	5.3	<4.0
Cyanide, total					
Delta-bhc					
Diallate					
Dibenzo(a,h)anthracene					
Dibenzofuran					
Dibromochloromethane	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1
Dichlorodifluoromethane					
Dieldrin					
Diethyl phthalate					
Dimethoate					
Dimethylphthalate					
Di-n-butyl phthalate					
Di-n-octyl phthalate					
Dinoseb					
Diphenylamine					
Disulfoton					
Endosulfan i					
Endosulfan ii					
Endosulfan sulfate					
Endrin					
Endrin aldehyde					
Ethyl methacrylate					
Ethyl methanesulfonate					
Ethylbenzene	<1	<1	<1	<1	<1
Famphur					
Fluoranthene					
Fluorene					
Gamma-bhc (lindane)					
Heptachlor					
Heptachlor epoxide					
Hexachlorobenzene					

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

Table 9

Analytical Data Summary for MW-49A

Constituents	Units	10/23/2014	3/31/2015	11/5/2015	4/21/2016	10/17/2016	1/9/2017	4/21/2017	10/16/2017
Hexachlorobutadiene	ug/L		<8						
Hexachlorocyclopentadiene	ug/L		<8						
Hexachloroethane	ug/L		<8						
Hexachloropropene	ug/L		<8						
Indeno(1,2,3-cd)pyrene	ug/L		<8						
Isobutanol	ug/L		<1000						
Isodrin	ug/L		<8						
Isophorone	ug/L		<8						
Isosafrole	ug/L		<8						
Kepone	ug/L		<8						
Lead, total	ug/L	<4	<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
Methyl methacrylate	ug/L		<1						
Methyl methanesulfonate	ug/L		<8						
Methyl parathion	ug/L		<.4						
Methylene chloride	ug/L	<5	<5	<5	<5	<5		<5	<5
Naphthalene	ug/L		<8						
Nickel, total	ug/L	32.2	32.8	35.1	38.5	<4.0		37.6	13.3
Nitrobenzene	ug/L		<8						
N-nitrosodiethylamine	ug/L		<8						
N-nitrosodimethylamine	ug/L		<8						
N-nitrosodi-n-butylamine	ug/L		<8						
N-nitroso-di-n-propylamine	ug/L		<8						
N-nitrosodiphenylamine	ug/L		<8						
N-nitrosomethylethylamine	ug/L		<8						
N-nitrosopiperidine	ug/L		<8						
N-nitrosopyrrolidine	ug/L		<8						
O,o,o-triethyl phosphorothioate	ug/L		<.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
Silver, total	ug/L	<4	<4	<4	<4	<4		<4	<4
Solids, total suspended	mg/L	706	72						
Styrene	ug/L	<1	<1	<1	<1	<1		<1	<1
Sulfide, total	mg/L		<.1						
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1		<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<4		<4	<4
Thionazin	ug/L		<.4						
Tin, total	ug/L		<20						
Toluene	ug/L	<1	<1	<1	<1	<1		<1	<1
Toxaphene	ug/L		<.2						
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1		<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1		<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5		<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1		<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1		<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20		<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5		<5	<5
Vinyl chloride	ug/L	1.6	1.5	<1.0	<1.0	<1.0		<1.0	1.3
Xylenes, total	ug/L	<2	<2	<2	<2	<2		<2	<2
Zinc, total	ug/L	<20.0	<8.0	<8.0	<20.0	<8.0		<8.0	<8.0

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

Table 9

Analytical Data Summary for MW-49A

Constituents	4/24/2018	10/25/2018	4/15/2019	10/7/2019	4/23/2020	10/1/2020	4/8/2021	10/29/2021	4/25/2022
Hexachlorobutadiene					<8				
Hexachlorocyclopentadiene					<8				
Hexachloroethane					<8				
Hexachloropropene					<8				
Indeno(1,2,3-cd)pyrene					<8				
Isobutanol					<1000				
Isodrin					<8				
Isophorone					<8				
Isosafrole					<8				
Kepona					<8				
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Mercury, total					<.5				
Methacrylonitrile					<1				
Methapyrilene					<8				
Methoxychlor					<.05				
Methyl iodide	<1	<1	<1	<1	<2	<1	<1	<1	<1
Methyl methacrylate					<1				
Methyl methanesulfonate					<8				
Methyl parathion					<.4				
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene					<8				
Nickel, total	61.9	9.3	41.9	7.4	49.6	46.9	48.9	7.3	50.7
Nitrobenzene					<8				
N-nitrosodiethylamine					<8				
N-nitrosodimethylamine					<8				
N-nitrosodi-n-butylamine					<8				
N-nitroso-di-n-propylamine					<8				
N-nitrosodiphenylamine					<8				
N-nitrosomethylethylamine					<8				
N-nitrosopiperidine					<8				
N-nitrosopyrrolidine					<8				
O,o,o-triethyl phosphorothioate					<.4				
O-toluidine					<8				
Parathion					<.4				
P-dimethylaminoazobenzene					<8				
Pentachlorobenzene					<8				
Pentachloronitrobenzene (pcnb)					<8				
Pentachlorophenol					<8				
Phenacetin					<8				
Phenanthrene					<8				
Phenol					<8				
Phorate					<.4				
Pronamide					<8				
Propionitrile					<10				
Pyrene					<8				
Safrole					<8				
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total					<.1				
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<4	<2	<2	<2	<2	<2	<2	<2
Thionazin					<.4				
Tin, total					<20				
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene					<.2				
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	1.1	<1.0	<1.0	<1.0	<1.0	<1.0	3.2	5.0	3.9
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<8.0	<20.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-49A

Constituents	10/17/2022	4/10/2023	10/27/2023	4/2/2024	10/10/2024
Hexachlorobutadiene					
Hexachlorocyclopentadiene					
Hexachloroethane					
Hexachloropropene					
Indeno(1,2,3-cd)pyrene					
Isobutanol					
Isodrin					
Isophorone					
Isosafrole					
Kepone					
Lead, total	<4	<4	<4	<4	<4
Mercury, total					
Methacrylonitrile					
Methapyrilene					
Methoxychlor					
Methyl iodide	<1	<1	<1	<1	<1
Methyl methacrylate					
Methyl methanesulfonate					
Methyl parathion					
Methylene chloride	<5	<5	<5	<5	<5
Naphthalene					
Nickel, total	54.3	55.4	50.5	49.4	45.6
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
Silver, total	<4	<4	<4	<4	<4
Solids, total suspended					
Styrene	<1	<1	<1	<1	<1
Sulfide, total					
Tetrachloroethylene	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2
Thionazin					
Tin, total					
Toluene	<1	<1	<1	<1	<1
Toxaphene					
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5
Vinyl chloride	2.7	1.6	1.4	2.9	1.8
Xylenes, total	<2	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	22.2	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-50

Constituents	Units	10/23/2014	4/1/2015	11/5/2015	4/21/2016	10/17/2016	4/21/2017	10/16/2017	1/12/2018
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<2	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<2	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<2	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<2	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<2	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<2	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<2	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<2	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<2	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<2	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<2	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<2	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<2	<1	<1	<1
2-butanone (mek)	ug/L	<5	<5	<5	<5	<10	<5	<5	<5
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<10	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<10	<5	<5	<5
Acetone	ug/L	<10	<10	<10	<10	<20	<10	<10	<10
Acrylonitrile	ug/L	<5	<5	<5	<5	<10	<5	<5	<5
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	ug/L	443	519	461	526	372	453	340	
Benzene	ug/L	<1	<1	<1	<1	<2	<1	<1	<1
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	ug/L	<1	<1	<1	<1	<2	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<2	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<2	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<2	<1	<1	<1
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<2	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<2	<1	<1	<1
Chlorobenzene	ug/L	<1	<1	<1	<1	<2	<1	<1	<1
Chloroethane	ug/L	<1	<1	<1	<1	<2	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<2	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<2	<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	<2	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<2	<1	<1	<1
Cobalt, total	ug/L	<.8	1.0	<.8	.9	<.8	.8	<.8	<.8
Copper, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	8.7	<4.0
Dibromochloromethane	ug/L	<1	<1	<1	<1	<2	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<2	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<2	<1	<1	<1
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	ug/L	<1	<1	<1	<1	<2	<1	<1	<1
Methylene chloride	ug/L	<5	<5	<5	<5	<10	<5	<5	<5
Nickel, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended	mg/L	214	35						
Styrene	ug/L	<1	<1	<1	<1	<2	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<2	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Toluene	ug/L	<1	<1	<1	<1	<2	<1	<1	<1
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<2	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<2	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<10	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<2	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<2	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<10	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<2	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<4	<2	<2	<2
Zinc, total	ug/L	<20.0	10.2	<8.0	<20.0	<8.0	<8.0	<8.0	<8.0

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

Table 9

Analytical Data Summary for MW-50

Constituents	4/24/2018	7/5/2018	10/25/2018	4/15/2019	10/7/2019	4/22/2020	10/1/2020	4/8/2021	10/29/2021
1,1,1,2-tetrachloroethane	<1		<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1		<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1		<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1		<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1		<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1		<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1		<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<1		<1	<1	<1	<5	<5	<5	<5
1,2-dibromoethane	<1		<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1		<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1		<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1		<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1		<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<5		<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	<5		<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5		<5	<5	<5	<5	<5	<5	<5
Acetone	<10		<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5		<5	<5	<5	<5	<5	<5	<5
Antimony, total	<2		<2	<2	<2	<2	<2	<2	<2
Arsenic, total	<4		<4	<4	<4	<4	<4	<4	<4
Barium, total	396		263	408	247	448	263	385	312
Benzene	<1		<1	<1	<1	<1	<1	<1	<1
Beryllium, total	<4		<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	<1		<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1		<1	<1	<1	<1	<1	<1	<1
Bromoform	<1		<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1		<1	<1	<1	<1	<1	<1	<1
Cadmium, total	<.8		<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1		<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1		<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	<1		<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1		<1	<1	<1	<1	<1	<1	<1
Chloroform	<1		<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1		<1	<1	<1	<1	<1	<1	<1
Chromium, total	<8		<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	<1		<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1		<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.8		<.8	<.8	<.8	<.4	<.4	<.4	<.4
Copper, total	<4.0		<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	<1	<1	<1	<1	<1	<1
Methylene chloride	<5		<5	<5	<5	<5	<5	<5	<5
Nickel, total	38.3	<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	<4		<4	<2	<2	<2	<2	<2	<2
Toluene	<1		<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	<1		<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1		<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5		<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1		<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1		<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20		<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5		<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1		<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2		<2	<2	<2	<2	<2	<2	<2
Zinc, total	<8.0		<20.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-50

Constituents	4/25/2022	10/17/2022	4/10/2023	10/27/2023	4/2/2024	10/10/2024
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<10	<10	<10	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2	<2
Arsenic, total	<4	<4	<4	<4	<4	<4
Barium, total	392	513	525	310	685	253
Benzene	<1	<1	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4	<4	<4
Bromochloromethane	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1
Cobalt, total	.4	1.5	1.2	<.4	<.4	<.4
Copper, total	<4.0	<4.0	<4.0	<4.0	5.2	<4.0
Dibromochloromethane	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4	<4	<4
Methyl iodide	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5
Nickel, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Selenium, total	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4
Solids, total suspended						
Styrene	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2	<2
Toluene	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-51

Constituents	Units	10/23/2014	1/8/2015	4/1/2015	11/5/2015	4/21/2016	10/17/2016	4/21/2017	7/12/2017
1,1,1,2-tetrachloroethane	ug/L	<1		<1	<1	<1	<1	<1	
1,1,1-trichloroethane	ug/L	<1		<1	<1	<1	<1	<1	
1,1,2,2-tetrachloroethane	ug/L	<1		<1	<1	<1	<1	<1	
1,1,2-trichloroethane	ug/L	<1		<1	<1	<1	<1	<1	
1,1-dichloroethane	ug/L	<1		<1	<1	<1	<1	<1	
1,1-dichloroethylene	ug/L	<1		<1	<1	<1	<1	<1	
1,2,3-trichloropropane	ug/L	<1		<1	<1	<1	<1	<1	
1,2-dibromo-3-chloropropane	ug/L	<1		<1	<1	<1	<1	<1	
1,2-dibromoethane	ug/L	<1		<1	<1	<1	<1	<1	
1,2-dichlorobenzene	ug/L	<1		<1	<1	<1	<1	<1	
1,2-dichloroethane	ug/L	<1		<1	<1	<1	<1	<1	
1,2-dichloropropane	ug/L	<1		<1	<1	<1	<1	<1	
1,4-dichlorobenzene	ug/L	<1		<1	<1	<1	<1	<1	
2-butanone (mek)	ug/L	<5		<5	<5	<5	<5	<5	
2-hexanone (mbk)	ug/L	<5		<5	<5	<5	<5	<5	
4-methyl-2-pentanone (mibk)	ug/L	<5		<5	<5	<5	<5	<5	
Acetone	ug/L	<10		<10	<10	<10	<10	<10	
Acrylonitrile	ug/L	<5		<5	<5	<5	<5	<5	
Antimony, total	ug/L	<2		<2	<2	<2	<2	<2	
Arsenic, total	ug/L	<4		<4	<4	<4	<4	<4	
Barium, total	ug/L	460	495	520	477	744	358	774	348
Benzene	ug/L	<1		<1	<1	<1	<1	<1	
Beryllium, total	ug/L	<4		<4	<4	<4	<4	<4	
Bromochloromethane	ug/L	<1		<1	<1	<1	<1	<1	
Bromodichloromethane	ug/L	<1		<1	<1	<1	<1	<1	
Bromoform	ug/L	<1		<1	<1	<1	<1	<1	
Bromomethane	ug/L	<1		<1	<1	<1	<1	<1	
Cadmium, total	ug/L	<.8		<.8	<.8	<.8	<.8	<.8	
Carbon disulfide	ug/L	<1		<1	<1	<1	<1	<1	
Carbon tetrachloride	ug/L	<1		<1	<1	<1	<1	<1	
Chlorobenzene	ug/L	<1		<1	<1	<1	<1	<1	
Chloroethane	ug/L	<1		<1	<1	<1	<1	<1	
Chloroform	ug/L	<1		<1	<1	<1	<1	<1	
Chloromethane	ug/L	<1		<1	<1	<1	<1	<1	
Chromium, total	ug/L	<8		<8	<8	<8	<8	<8	
Cis-1,2-dichloroethylene	ug/L	<1		<1	<1	<1	<1	<1	
Cis-1,3-dichloropropene	ug/L	<1		<1	<1	<1	<1	<1	
Cobalt, total	ug/L	<.8		<.8	<.8	<.8	<.8	<.8	
Copper, total	ug/L	<4.0		<4.0	<4.0	<4.0	<4.0	<4.0	
Dibromochloromethane	ug/L	<1		<1	<1	<1	<1	<1	
Dibromomethane	ug/L	<1		<1	<1	<1	<1	<1	
Ethylbenzene	ug/L	<1		<1	<1	<1	<1	<1	
Lead, total	ug/L	<4		<4	<4	<4	<4	<4	
Methyl iodide	ug/L	<1		<1	<1	<1	<1	<1	
Methylene chloride	ug/L	<5		<5	<5	<5	<5	<5	
Nickel, total	ug/L	<4		<4	<4	<4	<4	<4	
Selenium, total	ug/L	<4		<4	<4	<4	<4	<4	
Silver, total	ug/L	<4		<4	<4	<4	<4	<4	
Solids, total suspended	mg/L	478		56					
Styrene	ug/L	<1		<1	<1	<1	<1	<1	
Tetrachloroethylene	ug/L	<1		<1	<1	<1	<1	<1	
Thallium, total	ug/L	<4		<4	<4	<4	<4	<4	
Toluene	ug/L	<1		<1	<1	<1	<1	<1	
Trans-1,2-dichloroethylene	ug/L	<1		<1	<1	<1	<1	<1	
Trans-1,3-dichloropropene	ug/L	<1		<1	<1	<1	<1	<1	
Trans-1,4-dichloro-2-butene	ug/L	<5		<5	<5	<5	<5	<5	
Trichloroethylene	ug/L	<1		<1	<1	<1	<1	<1	
Trichlorofluoromethane	ug/L	<1		<1	<1	<1	<1	<1	
Vanadium, total	ug/L	<20		<20	<20	<20	<20	<20	
Vinyl acetate	ug/L	<5		<5	<5	<5	<5	<5	
Vinyl chloride	ug/L	<1		<1	<1	<1	<1	<1	
Xylenes, total	ug/L	<2		<2	<2	<2	<2	<2	
Zinc, total	ug/L	<20.0		<8.0	<8.0	<20.0	<8.0	<8.0	

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

Table 9

Analytical Data Summary for MW-51

Constituents	10/16/2017	4/24/2018	7/5/2018	10/25/2018	4/15/2019	10/7/2019	4/22/2020	7/10/2020	10/1/2020
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		<1	<1	<1	<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		<5
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	371	646	402	304	412	408	626	393	354
Benzene	<1	<1		<1	<1	<1	<1		<1
Beryllium, total	<4	<4		<4	<4	<4	<4		<4
Bromochloromethane	<1	<1		<1	<1	<1	<1		<1
Bromodichloromethane	<1	<1		<1	<1	<1	<1		<1
Bromoform	<1	<1		<1	<1	<1	<1		<1
Bromomethane	<1	<1		<1	<1	<1	<1		<1
Cadmium, total	<.8	<.8		<.8	<.8	<.8	<.8		<.8
Carbon disulfide	<1	<1		<1	<1	<1	<1		<1
Carbon tetrachloride	<1	<1		<1	<1	<1	<1		<1
Chlorobenzene	<1	<1		<1	<1	<1	<1		<1
Chloroethane	<1	<1		<1	<1	<1	<1		<1
Chloroform	<1	<1		<1	<1	<1	<1		<1
Chloromethane	<1	<1		<1	<1	<1	<1		<1
Chromium, total	<8	<8		<8	<8	<8	<8		<8
Cis-1,2-dichloroethylene	<1	<1		<1	<1	<1	<1		<1
Cis-1,3-dichloropropene	<1	<1		<1	<1	<1	<1		<1
Cobalt, total	<.8	<.8		<.8	<.8	<.8	<.4		<.4
Copper, total	<4.0	<4.0		5.7	<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		<1	<1	<1	<1		<1
Methylene chloride	<5	<5		<5	<5	<5	<5		<5
Nickel, total	<4	<4		<4	<4	<4	<4		<4
Selenium, total	<4	<4		<4	<4	<4	<4		<4
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	<4	<4		<4	<2	<2	<2		<2
Toluene	<1	<1		<1	<1	<1	<1		<1
Trans-1,2-dichloroethylene	<1	<1		<1	<1	<1	<1		<1
Trans-1,3-dichloropropene	<1	<1		<1	<1	<1	<1		<1
Trans-1,4-dichloro-2-butene	<5	<5		<5	<5	<5	<5		<5
Trichloroethylene	<1	<1		<1	<1	<1	<1		<1
Trichlorofluoromethane	<1	<1		<1	<1	<1	<1		<1
Vanadium, total	<20	<20		<20	<20	<20	<20		<20
Vinyl acetate	<5	<5		<5	<5	<5	<5		<5
Vinyl chloride	<1	<1		<1	<1	<1	<1		<1
Xylenes, total	<2	<2		<2	<2	<2	<2		<2
Zinc, total	<8.0	<8.0		<20.0	<8.0	<8.0	<20.0		<20.0

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

Table 9

Analytical Data Summary for MW-51

Constituents	4/8/2021	10/29/2021	1/27/2022	4/25/2022	10/17/2022	4/10/2023	10/27/2023	4/2/2024	10/10/2024
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<5	<5	<10	<10	<10	<10	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	555	497	446	397	720	396	459	436	436
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.4	<.4	<.4	1.2	<.4	<.4	<.4	<.4	<.4
Copper, total	<4.0	7.5	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<20.0	39.3	<20.0	<20.0	<20.0	<20.0	22.9	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-7

Constituents	Units	10/23/2014	4/1/2015	11/5/2015	4/21/2016	10/17/2016	4/21/2017	10/16/2017	4/24/2018
(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	<1.0	<1.0	<1.0	<1.0	1.7	<1.0	<1.0	<1.0
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene	ug/L							<1	
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	ug/L							<8	
1,2,4-trichlorobenzene	ug/L							<1	
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene	ug/L							<8	
1,3,5-trinitrobenzene	ug/L							<8	
1,3-dichlorobenzene	ug/L							<1	
1,3-dichloropropane	ug/L							<1	
1,3-dinitrobenzene	ug/L							<8	
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone	ug/L							<8	
1,4-phenylenediamine	ug/L							<8	
1-naphthylamine	ug/L							<8	
2,2-dichloropropane	ug/L							<1	
2,3,4,6-tetrachlorophenol	ug/L							<8	
2,4,5-t	ug/L							<.5	
2,4,5-tp (silvex)	ug/L							<.5	
2,4,5-trichlorophenol	ug/L							<8	
2,4,6-trichlorophenol	ug/L							<8	
2,4-d	ug/L							<2	
2,4-dichlorophenol	ug/L							<8	
2,4-dimethylphenol	ug/L							<8	
2,4-dinitrophenol	ug/L							<8	
2,4-dinitrotoluene	ug/L							<8	
2,6-dichlorophenol	ug/L							<8	
2,6-dinitrotoluene	ug/L							<8	
2-acetylaminofluorene	ug/L							<8	
2-butanone (mek)	ug/L	<5	<5	<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-7

Constituents	10/25/2018	4/15/2019	10/7/2019	4/22/2020	10/1/2020	4/8/2021	10/29/2021	4/25/2022	10/17/2022
(3,4)-methylphenol									<8
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1.0	2.9	<1.0	1.7	<1.0	1.2	<1.0	1.0	<1.0
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene									<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene									<8
1,2,4-trichlorobenzene									<1
1,2-dibromo-3-chloropropane	<1	<1	<1	<5	<5	<5	<5	<5	<1
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene									<8
1,3,5-trinitrobenzene									<8
1,3-dichlorobenzene									<1
1,3-dichloropropane									<1
1,3-dinitrobenzene									<8
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone									<8
1,4-phenylenediamine									<8
1-naphthylamine									<8
2,2-dichloropropane									<1
2,3,4,6-tetrachlorophenol									<8
2,4,5-t									<5
2,4,5-tp (silvex)									<5
2,4,5-trichlorophenol									<8
2,4,6-trichlorophenol									<8
2,4-d									<2
2,4-dichlorophenol									<8
2,4-dimethylphenol									<8
2,4-dinitrophenol									<8
2,4-dinitrotoluene									<8
2,6-dichlorophenol									<8
2,6-dinitrotoluene									<8
2-acetylaminofluorene									<8
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<5	<10	<5
2-chloronaphthalene									<8
2-chlorophenol									<8
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene									<8
2-methylphenol									<8
2-naphthylamine									<8
2-nitroaniline									<8
2-nitrophenol									<8
3,3'-dichlorobenzidine									<8
3,3'-dimethylbenzidine									<8
3-methylcholanthrene									<8
3-nitroaniline									<8
4,4'-ddd									<.05
4,4'-dde									<.05
4,4'-ddt									<.05
4,6-dinitro-2-methylphenol									<8
4-aminobiphenyl									<8
4-bromophenyl phenyl ether									<8
4-chloro-3-methylphenol									<8
4-chloroaniline									<8
4-chlorophenyl phenyl ether									<8
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline									<8
4-nitrophenol									<8
5-nitro-o-toluidine									<8
7,12-dimethylbenz(a)anthracene									<8
Acenaphthene									<8
Acenaphthylene									<8
Acetone	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acetonitrile									<10
Acetophenone									<8
Acrolein									<10
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin									<.05
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-7

Constituents	1/5/2023	4/10/2023	10/27/2023	4/2/2024	10/10/2024
(3 4)-methylphenol					
1,1,1,2-tetrachloroethane		<1	<1	<1	<1
1,1,1-trichloroethane		<1	<1	<1	<1
1,1,2,2-tetrachloroethane		<1	<1	<1	<1
1,1,2-trichloroethane		<1	<1	<1	<1
1,1-dichloroethane		<1.0	<1.0	<1.0	<1.0
1,1-dichloroethylene		<1	<1	<1	<1
1,1-dichloropropene					
1,2,3-trichloropropane		<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene					
1,2,4-trichlorobenzene					
1,2-dibromo-3-chloropropane		<5	<5	<5	<5
1,2-dibromoethane		<1	<1	<1	<1
1,2-dichlorobenzene		<1	<1	<1	<1
1,2-dichloroethane		<1	<1	<1	<1
1,2-dichloropropane		<1	<1	<1	<1
1,2-dinitrobenzene					
1,3,5-trinitrobenzene					
1,3-dichlorobenzene					
1,3-dichloropropane					
1,3-dinitrobenzene					
1,4-dichlorobenzene		<1	<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
2-chloronaphthalene					
2-chlorophenol					
2-hexanone (mbk)		<5	<5	<5	<5
2-methylnaphthalene					
2-methylphenol					
2-naphthylamine					
2-nitroaniline					
2-nitrophenol					
3,3'-dichlorobenzidine					
3,3'-dimethylbenzidine					
3-methylcholanthrene					
3-nitroaniline					
4,4'-ddd					
4,4'-dde					
4,4'-ddt					
4,6-dinitro-2-methylphenol					
4-aminobiphenyl					
4-bromophenyl phenyl ether					
4-chloro-3-methylphenol					
4-chloroaniline					
4-chlorophenyl phenyl ether					
4-methyl-2-pentanone (mibk)		<5	<5	<5	<5
4-nitroaniline					
4-nitrophenol					
5-nitro-o-toluidine					
7,12-dimethylbenz(a)anthracene					
Acenaphthene					
Acenaphthylene					
Acetone		<10	<10	<10	<10
Acetonitrile					
Acetophenone					
Acrolein					
Acrylonitrile		<5	<5	<5	<5
Aldrin					
Allyl chloride					
Alpha-bhc					
Anthracene					

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

Table 9

Analytical Data Summary for MW-7

Constituents	Units	10/23/2014	4/1/2015	11/5/2015	4/21/2016	10/17/2016	4/21/2017	10/16/2017	4/24/2018
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	297.0	112.0	215.0	146.0	165.0	197.0	115.0	<4.0
Azobenzene	ug/L							<.8	
Barium, total	ug/L	607	395	469	261	372	461	291	241
Benzene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(a)anthracene	ug/L							<.8	
Benzo(a)pyrene	ug/L							<.8	
Benzo(b)fluoranthene	ug/L							<.8	
Benzo(g,h,i)perylene	ug/L							<.8	
Benzo(k)fluoranthene	ug/L							<.8	
Benzyl alcohol	ug/L							<.8	
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Beta-bhc	ug/L							<.05	
Bis (2-chloroethoxy) methane	ug/L							<.8	
Bis(2-chloroethyl) ether	ug/L							<.8	
Bis(2-chloroisopropyl) ether	ug/L							<.8	
Bis(2-ethylhexyl) phthalate	ug/L	<10	<10	<10	<10	<10	<6	<6	
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate	ug/L							<.8	
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane	ug/L							<.1	
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate	ug/L							<.8	
Chloroethane	ug/L	2.0	<1.0	4.4	1.0	13.5	3.9	4.4	<1.0
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene	ug/L							<.1	
Chromium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Chrysene	ug/L							<.8	
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	10.5	5.9	5.3	1.0	3.5	1.5	.8	<.8
Copper, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	10.1
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	<1	<1	<1	<2	<1	<1	
Dieldrin	ug/L							<.05	
Diethyl phthalate	ug/L							<.8	
Dimethoate	ug/L							<.4	
Dimethylphthalate	ug/L							<.8	
Di-n-butyl phthalate	ug/L							<.8	
Di-n-octyl phthalate	ug/L							<.8	
Dinoseb	ug/L							<.5	
Diphenylamine	ug/L							<.8	
Disulfoton	ug/L							<.4	
Endosulfan i	ug/L							<.05	
Endosulfan ii	ug/L							<.05	
Endosulfan sulfate	ug/L							<.05	
Endrin	ug/L							<.05	
Endrin aldehyde	ug/L							<.05	
Ethyl methacrylate	ug/L							<10	
Ethyl methanesulfonate	ug/L							<.8	
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
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-7

Constituents	10/25/2018	4/15/2019	10/7/2019	4/22/2020	10/1/2020	4/8/2021	10/29/2021	4/25/2022	10/17/2022
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016									<.1
Arochlor 1221									<.2
Arochlor 1232									<.2
Arochlor 1242									<.2
Arochlor 1248									<.2
Arochlor 1254									<.1
Arochlor 1260									<.1
Arsenic, total	36.6	457.0	33.5	88.8	306.0	181.0	117.0	104.0	255.0
Azobenzene									<8
Barium, total	243	523	281	336	372	341	456	377	339
Benzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.4	<1.0
Benzo(a)anthracene									<8
Benzo(a)pyrene									<8
Benzo(b)fluoranthene									<8
Benzo(g,h,i)perylene									<8
Benzo(k)fluoranthene									<8
Benzyl alcohol									<8
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Beta-bhc									<.05
Bis (2-chloroethoxy) methane									<8
Bis(2-chloroethyl) ether									<8
Bis(2-chloroisopropyl) ether									<8
Bis(2-ethylhexyl) phthalate									9
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate									<8
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane									<.1
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate									<8
Chloroethane	<1.0	8.0	<1.0	5.1	3.7	6.8	<1.0	6.5	2.6
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene									<1
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene									<8
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.8	8.9	.8	2.1	4.3	4.2	1.6	1.4	4.8
Copper, total	7.5	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Cyanide, total									<.005
Delta-bhc									<.05
Diallate									<8
Dibenzo(a,h)anthracene									<8
Dibenzofuran									<8
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane									<1
Dieldrin									<.05
Diethyl phthalate									<8
Dimethoate									<.4
Dimethylphthalate									<8
Di-n-butyl phthalate									<8
Di-n-octyl phthalate									<8
Dinoseb									<.5
Diphenylamine									<8
Disulfoton									<.4
Endosulfan i									<.05
Endosulfan ii									<.05
Endosulfan sulfate									<.05
Endrin									<.05
Endrin aldehyde									<.05
Ethyl methacrylate									<10
Ethyl methanesulfonate									<8
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Famphur									<.4
Fluoranthene									<8
Fluorene									<8
Gamma-bhc (lindane)									<.05
Heptachlor									<.05
Heptachlor epoxide									<.05
Hexachlorobenzene									<.05

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

Table 9

Analytical Data Summary for MW-7

Constituents	1/5/2023	4/10/2023	10/27/2023	4/2/2024	10/10/2024
Antimony, total		<2	<2	<2	<2
Arochlor 1016					
Arochlor 1221					
Arochlor 1232					
Arochlor 1242					
Arochlor 1248					
Arochlor 1254					
Arochlor 1260					
Arsenic, total		158.0	275.0	167.0	215.0
Azobenzene					
Barium, total		352	321	375	343
Benzene		<1.0	<1.0	<1.0	<1.0
Benzo(a)anthracene					
Benzo(a)pyrene					
Benzo(b)fluoranthene					
Benzo(g,h,i)perylene					
Benzo(k)fluoranthene					
Benzyl alcohol					
Beryllium, total		<4	<4	<4	<4
Beta-bhc					
Bis (2-chloroethoxy) methane					
Bis(2-chloroethyl) ether					
Bis(2-chloroisopropyl) ether					
Bis(2-ethylhexyl) phthalate	<6				
Bromochloromethane		<1	<1	<1	<1
Bromodichloromethane		<1	<1	<1	<1
Bromoform		<1	<1	<1	<1
Bromomethane		<1	<1	<1	<1
Butyl benzyl phthalate					
Cadmium, total		<.8	<.8	<.8	<.8
Carbon disulfide		<1	<1	<1	<1
Carbon tetrachloride		<1	<1	<1	<1
Chlordane					
Chlorobenzene		<1	<1	<1	<1
Chlorobenzilate					
Chloroethane		3.8	1.6	<1.0	1.7
Chloroform		<1	<1	<1	<1
Chloromethane		<1	<1	<1	<1
Chloroprene					
Chromium, total		<8	<8	<8	<8
Chrysene					
Cis-1,2-dichloroethylene		<1	<1	<1	<1
Cis-1,3-dichloropropene		<1	<1	<1	<1
Cobalt, total		.6	3.9	.7	3.8
Copper, total		<4.0	<4.0	<4.0	<4.0
Cyanide, total					
Delta-bhc					
Diallate					
Dibenzo(a,h)anthracene					
Dibenzofuran					
Dibromochloromethane		<1	<1	<1	<1
Dibromomethane		<1	<1	<1	<1
Dichlorodifluoromethane					
Dieldrin					
Diethyl phthalate					
Dimethoate					
Dimethylphthalate					
Di-n-butyl phthalate					
Di-n-octyl phthalate					
Dinoseb					
Diphenylamine					
Disulfoton					
Endosulfan i					
Endosulfan ii					
Endosulfan sulfate					
Endrin					
Endrin aldehyde					
Ethyl methacrylate					
Ethyl methanesulfonate					
Ethylbenzene		<1	<1	<1	<1
Famphur					
Fluoranthene					
Fluorene					
Gamma-bhc (lindane)					
Heptachlor					
Heptachlor epoxide					
Hexachlorobenzene					

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

Table 9

Analytical Data Summary for MW-7

Constituents	Units	10/23/2014	4/1/2015	11/5/2015	4/21/2016	10/17/2016	4/21/2017	10/16/2017	4/24/2018
Hexachlorobutadiene	ug/L							<8	
Hexachlorocyclopentadiene	ug/L							<8	
Hexachloroethane	ug/L							<8	
Hexachloropropene	ug/L							<8	
Indeno(1,2,3-cd)pyrene	ug/L							<8	
Isobutanol	ug/L							<1000	
Isodrin	ug/L							<8	
Isophorone	ug/L							<8	
Isosafrole	ug/L							<8	
Kepone	ug/L							<8	
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
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	17.4	8.3	8.2	<4.0	4.7	<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	57	73						
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total	mg/L							<.1	
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Thionazin	ug/L							<.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	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1.0	<1.0	<1.0	<1.0	1.9	<1.0	<1.0	<1.0
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<20	<8	<8	<20	<8	<8	<8	<8

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

Table 9

Analytical Data Summary for MW-7

Constituents	10/25/2018	4/15/2019	10/7/2019	4/22/2020	10/1/2020	4/8/2021	10/29/2021	4/25/2022	10/17/2022
Hexachlorobutadiene									<8
Hexachlorocyclopentadiene									<8
Hexachloroethane									<8
Hexachloropropene									<8
Indeno(1,2,3-cd)pyrene									<8
Isobutanol									<1000
Isodrin									<8
Isophorone									<8
Isosafrole									<8
Kepone									<8
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Mercury, total									<5
Methacrylonitrile									<1
Methapyrilene									<8
Methoxychlor									<.05
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<2
Methyl methacrylate									<1
Methyl methanesulfonate									<8
Methyl parathion									<.4
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene									<8
Nickel, total	<4.0	18.2	<4.0	4.3	8.4	8.0	<4.0	<4.0	5.9
Nitrobenzene									<8
N-nitrosodiethylamine									<8
N-nitrosodimethylamine									<8
N-nitrosodi-n-butylamine									<8
N-nitroso-di-n-propylamine									<8
N-nitrosodiphenylamine									<8
N-nitrosomethylethylamine									<8
N-nitrosopiperidine									<8
N-nitrosopyrrolidine									<8
O,o,o-triethyl phosphorothioate									<.4
O-toluidine									<8
Parathion									<.4
P-dimethylaminoazobenzene									<8
Pentachlorobenzene									<8
Pentachloronitrobenzene (pcnb)									<8
Pentachlorophenol									<8
Phenacetin									<8
Phenanthrene									<8
Phenol									<8
Phorate									<.4
Pronamide									<8
Propionitrile									<10
Pyrene									<8
Safrole									<8
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total									<.1
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<2	<2	<2	<2	<2	<2	<2	<2
Thionazin									<.4
Tin, total									<20
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene									<.2
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<20	<8	<8	<20	<20	<20	<20	<20	<20

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

Table 9

Analytical Data Summary for MW-7

Constituents	1/5/2023	4/10/2023	10/27/2023	4/2/2024	10/10/2024
Hexachlorobutadiene					
Hexachlorocyclopentadiene					
Hexachloroethane					
Hexachloropropene					
Indeno(1,2,3-cd)pyrene					
Isobutanol					
Isodrin					
Isophorone					
Isosafrole					
Kepona					
Lead, total		<4	<4	<4	<4
Mercury, total					
Methacrylonitrile					
Methapyrilene					
Methoxychlor					
Methyl iodide		<1	<1	<1	<1
Methyl methacrylate					
Methyl methanesulfonate					
Methyl parathion					
Methylene chloride		<5	<5	<5	<5
Naphthalene					
Nickel, total		4.7	5.9	<4.0	7.4
Nitrobenzene					
N-nitrosodiethylamine					
N-nitrosodimethylamine					
N-nitrosodi-n-butylamine					
N-nitroso-di-n-propylamine					
N-nitrosodiphenylamine					
N-nitrosomethylethylamine					
N-nitrosopiperidine					
N-nitrosopyrrolidine					
O,o,o-triethyl phosphorothioate					
O-toluidine					
Parathion					
P-dimethylaminoazobenzene					
Pentachlorobenzene					
Pentachloronitrobenzene (pcnb)					
Pentachlorophenol					
Phenacetin					
Phenanthrene					
Phenol					
Phorate					
Pronamide					
Propionitrile					
Pyrene					
Safrole					
Selenium, total		<4	<4	<4	<4
Silver, total		<4	<4	<4	<4
Solids, total suspended					
Styrene		<1	<1	<1	<1
Sulfide, total					
Tetrachloroethylene		<1	<1	<1	<1
Thallium, total		<2	<2	<2	<2
Thionazin					
Tin, total					
Toluene		<1	<1	<1	<1
Toxaphene					
Trans-1,2-dichloroethylene		<1	<1	<1	<1
Trans-1,3-dichloropropene		<1	<1	<1	<1
Trans-1,4-dichloro-2-butene		<5	<5	<5	<5
Trichloroethylene		<1	<1	<1	<1
Trichlorofluoromethane		<1	<1	<1	<1
Vanadium, total		<20	<20	<20	<20
Vinyl acetate		<5	<5	<5	<5
Vinyl chloride		<1.0	<1.0	<1.0	<1.0
Xylenes, total		<2	<2	<2	<2
Zinc, total		<20	<20	<20	<20

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

Table 9

Analytical Data Summary for MW-9

Constituents	Units	10/23/2014	4/1/2015	11/5/2015	4/21/2016	10/17/2016	4/21/2017	10/16/2017	4/24/2018
(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	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.2	<1.0
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene	ug/L								<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	ug/L								<.8
1,2,4-trichlorobenzene	ug/L								<1
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene	ug/L								<.8
1,3,5-trinitrobenzene	ug/L								<.8
1,3-dichlorobenzene	ug/L								<1
1,3-dichloropropane	ug/L								<1
1,3-dinitrobenzene	ug/L								<.8
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone	ug/L								<.8
1,4-phenylenediamine	ug/L								<.8
1-naphthylamine	ug/L								<.8
2,2-dichloropropane	ug/L								<1
2,3,4,6-tetrachlorophenol	ug/L								<.8
2,4,5-t	ug/L								<.5
2,4,5-tp (silvex)	ug/L								<.8
2,4,5-trichlorophenol	ug/L								<.8
2,4,6-trichlorophenol	ug/L								<.8
2,4-d	ug/L								<.2
2,4-dichlorophenol	ug/L								<.8
2,4-dimethylphenol	ug/L								<.8
2,4-dinitrophenol	ug/L								<.8
2,4-dinitrotoluene	ug/L								<.8
2,6-dichlorophenol	ug/L								<.8
2,6-dinitrotoluene	ug/L								<.8
2-acetylaminofluorene	ug/L								<.8
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<.5
2-chloronaphthalene	ug/L								<.8
2-chlorophenol	ug/L								<.8
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<.5
2-methylnaphthalene	ug/L								<.8
2-methylphenol	ug/L								<.8
2-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-9

Constituents	10/25/2018	4/15/2019	10/7/2019	4/22/2020	10/1/2020	4/8/2021	10/29/2021	4/25/2022	10/17/2022
(3 4)-methylphenol		<8							
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene		<1							
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene		<8							
1,2,4-trichlorobenzene		<1							
1,2-dibromo-3-chloropropane	<1	<1	<1	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene		<8							
1,3,5-trinitrobenzene		<8							
1,3-dichlorobenzene		<1							
1,3-dichloropropane		<1							
1,3-dinitrobenzene		<8							
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone		<8							
1,4-phenylenediamine		<8							
1-naphthylamine		<8							
2,2-dichloropropane		<1							
2,3,4,6-tetrachlorophenol		<8							
2,4,5-t		<.5							
2,4,5-tp (silvex)		<.5							
2,4,5-trichlorophenol		<8							
2,4,6-trichlorophenol		<8							
2,4-d		<2							
2,4-dichlorophenol		<8							
2,4-dimethylphenol		<8							
2,4-dinitrophenol		<8							
2,4-dinitrotoluene		<8							
2,6-dichlorophenol		<8							
2,6-dinitrotoluene		<8							
2-acetylaminofluorene		<8							
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<5	<10	<10
2-chloronaphthalene		<8							
2-chlorophenol		<8							
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene		<8							
2-methylphenol		<8							
2-naphthylamine		<8							
2-nitroaniline		<8							
2-nitrophenol		<8							
3,3'-dichlorobenzidine		<8							
3,3'-dimethylbenzidine		<8							
3-methylcholanthrene		<8							
3-nitroaniline		<8							
4,4'-ddd		<.05							
4,4'-dde		<.05							
4,4'-ddt		<.05							
4,6-dinitro-2-methylphenol		<8							
4-aminobiphenyl		<8							
4-bromophenyl phenyl ether		<8							
4-chloro-3-methylphenol		<8							
4-chloroaniline		<8							
4-chlorophenyl phenyl ether		<8							
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline		<8							
4-nitrophenol		<8							
5-nitro-o-toluidine		<8							
7,12-dimethylbenz(a)anthracene		<8							
Acenaphthene		<8							
Acenaphthylene		<8							
Acetone	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acetonitrile		<10							
Acetophenone		<8							
Acrolein		<10							
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin		<.05							
Allyl chloride		<1							
Alpha-bhc		<.05							
Anthracene		<8							

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

Table 9

Analytical Data Summary for MW-9

Constituents	4/10/2023	10/27/2023	4/2/2024	10/10/2024
(3 4)-methylphenol			<8	
1,1,1,2-tetrachloroethane	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1
1,1-dichloroethane	<1.0	1.2	<1.0	<1.0
1,1-dichloroethylene	<1	<1	<1	<1
1,1-dichloropropene			<1	
1,2,3-trichloropropane	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene			<8	
1,2,4-trichlorobenzene			<1	
1,2-dibromo-3-chloropropane	<5	<5	<1	<5
1,2-dibromoethane	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1
1,2-dinitrobenzene			<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
1,4-naphthoquinone			<8	
1,4-phenylenediamine			<8	
1-naphthylamine			<8	
2,2-dichloropropane			<1	
2,3,4,6-tetrachlorophenol			<8	
2,4,5-t			<5	
2,4,5-tp (silvex)			<5	
2,4,5-trichlorophenol			<8	
2,4,6-trichlorophenol			<8	
2,4-d			<2	
2,4-dichlorophenol			<8	
2,4-dimethylphenol			<8	
2,4-dinitrophenol			<8	
2,4-dinitrotoluene			<8	
2,6-dichlorophenol			<8	
2,6-dinitrotoluene			<8	
2-acetylaminofluorene			<8	
2-butanone (mek)	<10	<10	<5	<10
2-chloronaphthalene			<8	
2-chlorophenol			<8	
2-hexanone (mbk)	<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
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
Acetonitrile			<10	
Acetophenone			<8	
Acrolein			<10	
Acrylonitrile	<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-9

Constituents	Units	10/23/2014	4/1/2015	11/5/2015	4/21/2016	10/17/2016	4/21/2017	10/16/2017	4/24/2018
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	5.8	<4.0	12.3	<4.0	<4.0	<4.0
Azobenzene	ug/L								<8
Barium, total	ug/L	142	150	156	118	228	148	246	192
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Benzo(a)anthracene	ug/L								<8
Benzo(a)pyrene	ug/L								<8
Benzo(b)fluoranthene	ug/L								<8
Benzo(g,h,i)perylene	ug/L								<8
Benzo(k)fluoranthene	ug/L								<8
Benzyl alcohol	ug/L								<8
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Beta-bhc	ug/L								<.05
Bis (2-chloroethoxy) methane	ug/L								<8
Bis(2-chloroethyl) ether	ug/L								<8
Bis(2-chloroisopropyl) ether	ug/L								<8
Bis(2-ethylhexyl) phthalate	ug/L								<6
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate	ug/L								<8
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane	ug/L								<.1
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate	ug/L								<8
Chloroethane	ug/L	<1.0	<1.0	<1.0	<1.0	1.0	<1.0	2.0	<1.0
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene	ug/L								<1
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene	ug/L								<8
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	<.8	7.7	3.9	<.8	12.0	<.8	7.8	2.4
Copper, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	4.2	<4.0	<4.0
Cyanide, total	mg/L								<.005
Delta-bhc	ug/L								<.05
Diallate	ug/L								<8
Dibenzo(a,h)anthracene	ug/L								<8
Dibenzofuran	ug/L								<8
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L								<1
Dieldrin	ug/L								<.05
Diethyl phthalate	ug/L								<8
Dimethoate	ug/L								<.4
Dimethylphthalate	ug/L								<8
Di-n-butyl phthalate	ug/L								<8
Di-n-octyl phthalate	ug/L								<8
Dinoseb	ug/L								<.5
Diphenylamine	ug/L								<8
Disulfoton	ug/L								<.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-9

Constituents	10/25/2018	4/15/2019	10/7/2019	4/22/2020	10/1/2020	4/8/2021	10/29/2021	4/25/2022	10/17/2022
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016		<.1							
Arochlor 1221		<.2							
Arochlor 1232		<.2							
Arochlor 1242		<.2							
Arochlor 1248		<.2							
Arochlor 1254		<.1							
Arochlor 1260		<.1							
Arsenic, total	<4.0	6.1	6.6	39.8	19.0	13.8	5.2	<4.0	45.3
Azobenzene		<8							
Barium, total	181	266	414	302	376	258	284	176	287
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	1
Benzo(a)anthracene		<8							
Benzo(a)pyrene		<8							
Benzo(b)fluoranthene		<8							
Benzo(g,h,i)perylene		<8							
Benzo(k)fluoranthene		<8							
Benzyl alcohol		<8							
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Beta-bhc		<.05							
Bis (2-chloroethoxy) methane		<8							
Bis(2-chloroethyl) ether		<8							
Bis(2-chloroisopropyl) ether		<8							
Bis(2-ethylhexyl) phthalate		<6							
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate		<8							
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane		<.1							
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate		<8							
Chloroethane	<1.0	<1.0	2.0	<1.0	1.2	<1.0	<1.0	<1.0	<1.0
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene		<1							
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene		<8							
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.8	11.3	10.4	16.9	10.2	8.6	7.1	.6	9.5
Copper, total	<4.0	<4.0	<4.0	<4.0	6.4	<4.0	<4.0	<4.0	<4.0
Cyanide, total		<.005							
Delta-bhc		<.05							
Diallate		<8							
Dibenzo(a,h)anthracene		<8							
Dibenzofuran		<8							
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane		<1							
Dieldrin		<.05							
Diethyl phthalate		<8							
Dimethoate		<.4							
Dimethylphthalate		<8							
Di-n-butyl phthalate		<8							
Di-n-octyl phthalate		<8							
Dinoseb		<.5							
Diphenylamine		<8							
Disulfoton		<.4							
Endosulfan i		<.05							
Endosulfan ii		<.05							
Endosulfan sulfate		<.05							
Endrin		<.05							
Endrin aldehyde		<.05							
Ethyl methacrylate		<10							
Ethyl methanesulfonate		<8							
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Famphur		<.4							
Fluoranthene		<8							
Fluorene		<8							
Gamma-bhc (lindane)		<.05							
Heptachlor		<.05							
Heptachlor epoxide		<.05							
Hexachlorobenzene		<.05							

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

Table 9

Analytical Data Summary for MW-9

Constituents	4/10/2023	10/27/2023	4/2/2024	10/10/2024
Antimony, total	<2	<2	<2	<2
Arochlor 1016			<.2	
Arochlor 1221			<.2	
Arochlor 1232			<.2	
Arochlor 1242			<.2	
Arochlor 1248			<.2	
Arochlor 1254			<.2	
Arochlor 1260			<.2	
Arsenic, total	82.4	106.0	<4.0	14.3
Azobenzene			<8	
Barium, total	247	332	137	185
Benzene	<1	<1	<1	<1
Benzo(a)anthracene			<8	
Benzo(a)pyrene			<8	
Benzo(b)fluoranthene			<8	
Benzo(g,h,i)perylene			<8	
Benzo(k)fluoranthene			<8	
Benzyl alcohol			<8	
Beryllium, total	<4	<4	<4	<4
Beta-bhc			<.05	
Bis (2-chloroethoxy) methane			<8	
Bis(2-chloroethyl) ether			<8	
Bis(2-chloroisopropyl) ether			<8	
Bis(2-ethylhexyl) phthalate			<6	
Bromochloromethane	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1
Butyl benzyl phthalate			<8	
Cadmium, total	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1
Chlordane			<1	
Chlorobenzene	<1	<1	<1	<1
Chlorobenzilate			<8	
Chloroethane	<1.0	<1.0	<1.0	<1.0
Chloroform	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1
Chloroprene			<1	
Chromium, total	<8	<8	<8	<8
Chrysene			<8	
Cis-1,2-dichloroethylene	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1
Cobalt, total	9.1	9.6	<4	6.6
Copper, total	<4.0	<4.0	<4.0	<4.0
Cyanide, total			<.005	
Delta-bhc			<.05	
Diallate			<8	
Dibenzo(a,h)anthracene			<8	
Dibenzofuran			<8	
Dibromochloromethane	<1	<1	<1	<1
Dibromomethane	<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
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-9

Constituents	Units	10/23/2014	4/1/2015	11/5/2015	4/21/2016	10/17/2016	4/21/2017	10/16/2017	4/24/2018
Hexachlorobutadiene	ug/L								<8
Hexachlorocyclopentadiene	ug/L								<8
Hexachloroethane	ug/L								<8
Hexachloropropene	ug/L								<8
Indeno(1,2,3-cd)pyrene	ug/L								<8
Isobutanol	ug/L								<1000
Isodrin	ug/L								<8
Isophorone	ug/L								<8
Isosafrole	ug/L								<8
Kepone	ug/L								<8
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
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	14.4	16.5	14.6	4.3	16.1	7.7	12.3	11.3
Nitrobenzene	ug/L								<8
N-nitrosodiethylamine	ug/L								<8
N-nitrosodimethylamine	ug/L								<8
N-nitrosodi-n-butylamine	ug/L								<8
N-nitroso-di-n-propylamine	ug/L								<8
N-nitrosodiphenylamine	ug/L								<8
N-nitrosomethylethylamine	ug/L								<8
N-nitrosopiperidine	ug/L								<8
N-nitrosopyrrolidine	ug/L								<8
O,o,o-triethyl phosphorothioate	ug/L								<.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	8	7						
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total	mg/L								<.1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Thionazin	ug/L								<.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	<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	<20	<8	<8	<20	<8	<8	<8	<8

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

Table 9

Analytical Data Summary for MW-9

Constituents	10/25/2018	4/15/2019	10/7/2019	4/22/2020	10/1/2020	4/8/2021	10/29/2021	4/25/2022	10/17/2022
Hexachlorobutadiene		<8							
Hexachlorocyclopentadiene		<8							
Hexachloroethane		<8							
Hexachloropropene		<8							
Indeno(1,2,3-cd)pyrene		<8							
Isobutanol		<1000							
Isodrin		<8							
Isophorone		<8							
Isosafrole		<8							
Kepona		<8							
Lead, total	<4		<4	<4	<4	<4	<4	<4	<4
Mercury, total		<.5							
Methacrylonitrile		<1							
Methapyrilene		<8							
Methoxychlor		<.05							
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl methacrylate		<1							
Methyl methanesulfonate		<8							
Methyl parathion		<.4							
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene		<8							
Nickel, total	5.9	12.6	22.6	20.4	22.3	18.6	15.1	6.2	16.1
Nitrobenzene		<8							
N-nitrosodiethylamine		<8							
N-nitrosodimethylamine		<8							
N-nitrosodi-n-butylamine		<8							
N-nitroso-di-n-propylamine		<8							
N-nitrosodiphenylamine		<8							
N-nitrosomethylethylamine		<8							
N-nitrosopiperidine		<8							
N-nitrosopyrrolidine		<8							
O,o,o-triethyl phosphorothioate		<.4							
O-toluidine		<8							
Parathion		<.4							
P-dimethylaminoazobenzene		<8							
Pentachlorobenzene		<8							
Pentachloronitrobenzene (pcnb)		<8							
Pentachlorophenol		<8							
Phenacetin		<8							
Phenanthrene		<8							
Phenol		<8							
Phorate		<.4							
Pronamide		<8							
Propionitrile		<10							
Pyrene		<8							
Safrole		<8							
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total		<.1							
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<2	<2	<2	<2	<2	<2	<2	<2
Thionazin		<.4							
Tin, total		<20							
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene		<.2							
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<20	<8	<8	<20	<20	<20	<20	<20	<20

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

Table 9

Analytical Data Summary for MW-9

Constituents	4/10/2023	10/27/2023	4/2/2024	10/10/2024
Hexachlorobutadiene			<8	
Hexachlorocyclopentadiene			<8	
Hexachloroethane			<8	
Hexachloropropene			<8	
Indeno(1,2,3-cd)pyrene			<8	
Isobutanol			<1000	
Isodrin			<8	
Isophorone			<8	
Isosafrole			<8	
Kepone			<8	
Lead, total	<4	<4	<4	<4
Mercury, total			<.5	
Methacrylonitrile			<1	
Methapyrilene			<8	
Methoxychlor			<.05	
Methyl iodide	<1	<1	<2	<1
Methyl methacrylate			<1	
Methyl methanesulfonate			<8	
Methyl parathion			<.4	
Methylene chloride	<5	<5	<5	<5
Naphthalene			<8	
Nickel, total	15.3	19.6	19.7	16.1
Nitrobenzene			<8	
N-nitrosodiethylamine			<8	
N-nitrosodimethylamine			<8	
N-nitrosodi-n-butylamine			<8	
N-nitroso-di-n-propylamine			<8	
N-nitrosodiphenylamine			<8	
N-nitrosomethylethylamine			<8	
N-nitrosopiperidine			<8	
N-nitrosopyrrolidine			<8	
O,o,o-triethyl phosphorothioate			<.4	
O-toluidine			<8	
Parathion			<.4	
P-dimethylaminoazobenzene			<8	
Pentachlorobenzene			<8	
Pentachloronitrobenzene (pcnb)			<8	
Pentachlorophenol			<8	
Phenacetin			<8	
Phenanthrene			<8	
Phenol			<8	
Phorate			<.4	
Pronamide			<8	
Propionitrile			<10	
Pyrene			<8	
Safrole			<8	
Selenium, total	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4
Solids, total suspended				
Styrene	<1	<1	<1	<1
Sulfide, total			<.3	
Tetrachloroethylene	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2
Thionazin			<.4	
Tin, total			<20	
Toluene	<1	<1	<1	<1
Toxaphene			<.2	
Trans-1,2-dichloroethylene	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2
Zinc, total	<20	<20	<20	<20

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

Table 10 – Historic SSI and SSL

Table 10
Historic SSI & SSL
Annual Water Quality Report
Rural Iowa Sanitary Landfill
Permit No.42-SDP-01-72P

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	95% LCL (ug/L)	95% UCL (ug/L)	GWPS Limit (ug/L)
MW 7	Arsenic	4/21/2016	146	96.291	288.709	89.3
MW 7	Arsenic	10/17/2016	165	108.91	210.090	89.3
MW 7	Arsenic	4/21/2017	197	144.223	217.277	89.3
MW 7	Arsenic	10/16/2017	115	115.327	196.173	89.3
MW 7	Arsenic	4/24/2018	<4.0	19.242	220.258	89.3
MW 7	Arsenic	10/25/2018	36.6	0.000	189.853	89.3
MW 7	Arsenic	4/15/2019	457	0.000	397.711	89.3
MW 7	Arsenic	10/7/2019	33.5	0.000	387.585	89.3
MW 7	Arsenic	4/22/2020	88.8	0.000	393.471	89.3
MW 7	Arsenic	10/1/2020	306	0.000	452.183	89.3
MW 7	Arsenic	4/8/2021	181	12.165	292.485	89.3
MW 7	Arsenic	10/29/2021	117	59.603	286.797	89.3
MW 7	Arsenic	4/25/2022	104	68.369	285.631	89.3
MW 7	Arsenic	10/17/2022	255	82.814	245.686	89.3
MW 7	Arsenic	4/10/2023	158	78.130	238.870	89.3
MW 7	Arsenic	10/27/2023	275	102.888	293.112	89.3
MW 7	Arsenic	4/2/2024	167	143.347	284.153	89.3
MW 7	Arsenic	10/10/2024	215	140.599	266.901	89.3

Table 10
Historic SSI & SSL
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Rural Iowa Sanitary Landfill
Permit No.42-SDP-01-72P

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	95% LCL (ug/L)	95% UCL (ug/L)	GWPS Limit (ug/L)
MW 7A	Arsenic	4/21/2016	<4.0	1.301	12.699	89.3
MW 7A	Arsenic	10/17/2016	<4.0	0.989	5.911	89.3
MW 7A	Arsenic	4/21/2017	<4.0	2	2	89.3
MW 7A	Arsenic	10/16/2017	<4.0	2	2	89.3
MW 7A	Arsenic	4/24/2018	<4.0	2	2	89.3
MW 7A	Arsenic	10/25/2018	4.4	1.561	3.639	89.3
MW 7A	Arsenic	4/15/2019	4.3	2.000	4.351	89.3
MW 7A	Arsenic	10/7/2019	20.0	0.495	14.855	89.3
MW 7A	Arsenic	4/22/2020	14.2	3.347	18.103	89.3
MW 7A	Arsenic	10/1/2020	13.8	5.225	20.925	89.3
MW 7A	Arsenic	4/8/2021	9.5	10.641	18.109	89.3
MW 7A	Arsenic	10/29/2021	7.9	8.637	14.063	89.3
MW 7A	Arsenic	4/25/2022	4.5	5.581	12.269	89.3
MW 7A	Arsenic	10/17/2022	14.1	5.546	12.454	89.3
MW 7A	Arsenic	4/10/2023	9.1	5.581	12.269	89.3
MW 7A	Arsenic	10/27/2023	11.2	5.546	12.454	89.3
MW 7A	Arsenic	4/2/2024	4.5	6.220	13.225	89.3
MW 7A	Arsenic	10/10/2024	6.7	5.359	10.391	89.3

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

Table 10
Historic SSI & SSL
Annual Water Quality Report
Rural Iowa Sanitary Landfill
Permit No.42-SDP-01-72P

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

Monitoring Well	Compound	Sample Date	Each		GWPS Limit (ug/L)
			Result (ug/L)	95% LCL (ug/L)	
MW 7B	Arsenic	4/21/2016	4,110.00	1,198.03	89.3
MW 7B	Arsenic	10/17/2016	70.8	172.876	89.3
MW 7B	Arsenic	1/9/2017	230	0.000	89.3
MW 7B	Arsenic	4/21/2017	20.4	0.000	89.3
MW 7B	Arsenic	10/16/2017	64.4	19.524	89.3
MW 7B	Arsenic	4/24/2018	43.9	7.176	89.3
MW 7B	Arsenic	10/25/2018	9.1	11.624	89.3
MW 7B	Arsenic	4/15/2019	62.2	22.752	89.3
MW 7B	Arsenic	10/7/2019	81.1	22.511	89.3
MW 7B	Arsenic	4/22/2020	58.6	22.270	89.3
MW 7B	Arsenic	10/1/2020	132	74.025	89.3
MW 7B	Arsenic	4/8/2021	117	68.225	89.3
MW 7B	Arsenic	10/29/2021	39.5	48.085	89.3
MW 7B	Arsenic	4/25/2022	92.8	60.190	89.3
MW 7B	Arsenic	10/17/2022	23.5	30.009	89.3
MW 7B	Arsenic	4/10/2023	77.2	30.036	89.3
MW 7B	Arsenic	10/27/2023	1130	0.000	89.3
MW 7B	Arsenic	4/2/2024	107	0.000	89.3
MW 7B	Arsenic	10/10/2024	673	60.911	89.3

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

Table 10
Historic SSI & SSL
Annual Water Quality Report
Rural Iowa Sanitary Landfill
Permit No.42-SDP-01-72P

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	95% LCL (ug/L)	95% UCL (ug/L)	GWPS Limit (ug/L)
MW 13R	Arsenic	4/21/2016	299	10.575	265.775	89.3
MW 13R	Arsenic	10/17/2016	143	31.337	273.513	89.3
MW 13R	Arsenic	4/21/2017	156	50.209	280.641	89.3
MW 13R	Arsenic	10/16/2017	179	110.261	278.239	89.3
MW 13R	Arsenic	4/24/2018	105	109.312	182.188	89.3
MW 13R	Arsenic	10/25/2018	75.3	73.283	184.367	89.3
MW 13R	Arsenic	4/15/2019	145	72.680	179.470	89.3
MW 13R	Arsenic	10/7/2019	72.2	59.593	139.157	89.3
MW 13R	Arsenic	4/22/2020	506	0.000	443.113	89.3
MW 13R	Arsenic	10/1/2020	140	0.000	446.700	89.3
MW 13R	Arsenic	4/8/2021	118	0.000	444.274	89.3
MW 13R	Arsenic	10/29/2021	161	14.806	447.694	89.3
MW 13R	Arsenic	4/25/2022	252	98.529	236.971	89.3
MW 13R	Arsenic	10/17/2022	124	91.020	236.480	89.3
MW 13R	Arsenic	4/10/2023	193	118.701	246.299	89.3
MW 13R	Arsenic	10/27/2023	82.7	74.926	250.924	89.3
MW 13R	Arsenic	4/2/2024	88.7	62.513	181.687	89.3
MW 13R	Arsenic	10/10/2024	192	66.510	211.690	89.3

Table 10
Historic SSI & SSL
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Rural Iowa Sanitary Landfill
Permit No.42-SDP-01-72P

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	95% LCL (ug/L)	95% UCL (ug/L)	GWPS Limit (ug/L)
MW 13R	Cobalt	4/21/2016	20	8.131	22.869	34.1
MW 13R	Cobalt	10/17/2016	16.3	8.519	23.231	34.1
MW 13R	Cobalt	4/21/2017	15.6	8.175	21.225	34.1
MW 13R	Cobalt	10/16/2017	14.7	13.912	19.388	12.4
MW 13R	Cobalt	4/24/2018	14.9	14.519	16.231	12.4
MW 13R	Cobalt	10/25/2018	5.6	7.114	18.286	12.4
MW 13R	Cobalt	4/15/2019	13.5	6.968	17.382	12.4
MW 13R	Cobalt	10/7/2019	10.4	6.253	15.947	12.4
MW 13R	Cobalt	4/22/2020	18.7	5.584	18.516	12.4
MW 13R	Cobalt	10/1/2020	8.5	7.534	18.016	12.4
MW 13R	Cobalt	4/8/2021	9.3	6.179	17.271	12.4
MW 13R	Cobalt	10/29/2021	6.9	4.583	17.117	12.4
MW 13R	Cobalt	4/25/2022	8.5	7.116	9.484	12.4
MW 13R	Cobalt	10/17/2022	8.8	7.155	9.595	12.4
MW 13R	Cobalt	4/10/2023	4.3	4.702	9.548	12.4
MW 13R	Cobalt	10/27/2023	9.0	5.012	10.288	12.4
MW 13R	Cobalt	4/2/2024	4.6	3.684	9.702	12.4
MW 13R	Cobalt	10/10/2024	3.6	2.490	8.260	12.4

Table 10
Historic SSI & SSL
Annual Water Quality Report
Rural Iowa Sanitary Landfill
Permit No.42-SDP-01-72P

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	95% LCL (ug/L)	95% UCL (ug/L)	GWPS Limit (ug/L)
MW 13R	Benzene	4/21/2016	7.1	3.147	8.353	5
MW 13R	Benzene	10/17/2016	7.4	6.350	7.600	5
MW 13R	Benzene	4/21/2017	6	6.185	7.665	5
MW 13R	Benzene	10/16/2017	5	5.085	7.665	5
MW 13R	Benzene	4/24/2018	5	4.514	7.186	5
MW 13R	Benzene	10/25/2018	5	4.662	5.838	5
MW 13R	Benzene	4/15/2019	4.9	4.916	5.034	5
MW 13R	Benzene	10/7/2019	2.5	2.898	5.802	5
MW 13R	Benzene	4/22/2020	4.6	2.863	5.637	5
MW 13R	Benzene	10/1/2020	4.2	2.789	5.311	5
MW 13R	Benzene	4/8/2021	3.6	2.650	4.800	5
MW 13R	Benzene	10/29/2021	4.0	3.610	4.590	5
MW 13R	Benzene	4/25/2022	4.9	3.535	4.815	5
MW 13R	Benzene	10/17/2022	2.6	2.653	4.897	5
MW 13R	Benzene	4/10/2023	5.1	2.811	5.489	5
MW 13R	Benzene	10/27/2023	1.1	1.166	5.684	5
MW 13R	Benzene	4/2/2024	2.1	0.723	4.727	5
MW 13R	Benzene	10/10/2024	2.8	0.776	4.774	5

Table 10
Historic SSI & SSL
Annual Water Quality Report
Rural Iowa Sanitary Landfill
Permit No.42-SDP-01-72P

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	95% LCL (ug/L)	95% UCL (ug/L)	GWPS Limit (ug/L)
MW 14	Cobalt	4/21/2016	1.4	0.000	48.560	34.1
MW 14	Cobalt	10/17/2016	16.3	0.000	46.577	34.1
MW 14	Cobalt	4/21/2017	7.7	0.000	14.999	34.1
MW 14	Cobalt	10/16/2017	16.0	3.781	18.219	12.4
MW 14	Cobalt	4/24/2018	16.9	7.889	18.011	12.4
MW 14	Cobalt	10/25/2018	4.2	5.234	18.916	12.4
MW 14	Cobalt	4/15/2019	27.3	3.416	26.384	12.4
MW 14	Cobalt	10/7/2019	10.0	2.918	26.282	12.4
MW 14	Cobalt	4/22/2020	6.9	0.000	24.341	12.4
MW 14	Cobalt	10/1/2020	11.5	3.197	24.653	12.4
MW 14	Cobalt	4/8/2021	21.2	5.141	19.659	12.4
MW 14	Cobalt	10/29/2021	14.4	6.453	20.547	12.4
MW 14	Cobalt	4/25/2022	13.1	10.029	20.071	12.4
MW 14	Cobalt	10/17/2022	13.1	10.884	20.016	12.4
MW 14	Cobalt	4/10/2023	14.8	12.813	14.887	12.4
MW 14	Cobalt	10/27/2023	16.4	12.486	16.214	12.4
MW 14	Cobalt	4/2/2024	20.8	12.389	20.161	12.4
MW 14	Cobalt	10/10/2024	9.9	10.182	20.768	12.4

Table 10
Historic SSI & SSL
Annual Water Quality Report
Rural Iowa Sanitary Landfill
Permit No.42-SDP-01-72P

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	95% LCL (ug/L)	95% UCL (ug/L)	GWPS Limit (ug/L)
MW 31R	Cobalt	4/21/2016	12.2	9.102	12.748	34.1
MW 31R	Cobalt	10/17/2016	12.6	11.138	12.662	34.1
MW 31R	Cobalt	4/21/2017	12.5	11.775	12.725	34.1
MW 31R	Cobalt	10/16/2017	11.5	11.616	12.784	12.4
MW 31R	Cobalt	4/24/2018	15.8	10.904	15.296	12.4
MW 31R	Cobalt	10/25/2018	13.3	11.114	15.436	12.4
MW 31R	Cobalt	4/15/2019	17.7	11.365	17.785	12.4
MW 31R	Cobalt	10/7/2019	15.0	13.301	17.599	12.4
MW 31R	Cobalt	4/22/2020	19.7	13.088	19.762	12.4
MW 31R	Cobalt	10/1/2020	17.5	15.210	19.740	12.4
MW 31R	Cobalt	4/8/2021	25.9	14.039	25.011	12.4
MW 31R	Cobalt	10/29/2021	15.0	14.039	25.011	12.4
MW 31R	Cobalt	4/25/2022	17.0	13.177	24.523	12.4
MW 31R	Cobalt	10/17/2022	16.2	12.661	24.389	12.4
MW 31R	Cobalt	4/10/2023	18.3	14.994	18.256	12.4
MW 31R	Cobalt	10/27/2023	17.6	16.226	18.234	12.4
MW 31R	Cobalt	4/2/2024	20.6	16.014	20.336	12.4
MW 31R	Cobalt	10/10/2024	14.6	14.864	20.686	12.4

Table 10
Historic SSI & SSL
Annual Water Quality Report
Rural Iowa Sanitary Landfill
Permit No.42-SDP-01-72P

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	95% LCL (ug/L)	95% UCL (ug/L)	GWPS Limit (ug/L)
MW 49A	Cobalt	4/21/2016	14.5	12.096	15.404	34.1
MW 49A	Cobalt	10/17/2016	1.1	3.187	18.863	34.1
MW 49A	Cobalt	4/21/2017	14.9	3.321	19.529	34.1
MW 49A	Cobalt	10/16/2017	5.9	1.15	17.05	12.4
MW 49A	Cobalt	4/24/2018	24.5	0	23.749	12.4
MW 49A	Cobalt	10/25/2018	7.3	3.107	23.193	12.4
MW 49A	Cobalt	4/15/2019	18	3.476	24.347	12.4
MW 49A	Cobalt	10/7/2019	2.7	1.445	24.805	12.4
MW 49A	Cobalt	4/22/2020	19.1	2.297	21.253	12.4
MW 49A	Cobalt	10/1/2020	16.8	5.103	23.197	12.4
MW 49A	Cobalt	4/8/2021	21.0	5.122	24.678	12.4
MW 49A	Cobalt	10/29/2021	2.6	5.039	24.711	12.4
MW 49A	Cobalt	4/25/2022	16.5	4.794	23.656	12.4
MW 49A	Cobalt	10/17/2022	20.3	5.025	25.175	12.4
MW 49A	Cobalt	4/10/2023	20.6	5.031	24.969	12.4
MW 49A	Cobalt	10/27/2023	20.5	17.137	21.813	12.4
MW 49A	Cobalt	4/2/2024	19.9	19.961	20.689	12.4
MW 49A	Cobalt	10/10/2024	10.2	11.829	23.711	12.4

Table 10
Historic SSI & SSL
Annual Water Quality Report
Rural Iowa Sanitary Landfill
Permit No.42-SDP-01-72P

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	95% LCL (ug/L)	95% UCL (ug/L)	GWPS Limit (ug/L)
MW 49A	vinyl chloride	4/21/2016	<1.0	0.31	1.74	2
MW 49A	vinyl chloride	10/17/2016	<1.0	0.162	1.336	2
MW 49A	vinyl chloride	4/21/2017	<1.0	0.5	0.5	2
MW 49A	vinyl chloride	10/16/2017	1.3	0.229	1.171	2
MW 49A	vinyl chloride	4/24/2018	1.1	0.365	1.335	2
MW 49A	vinyl chloride	10/25/2018	<1.0	0.365	1.335	2
MW 49A	vinyl chloride	4/15/2019	<1.0	0.365	1.335	2
MW 49A	vinyl chloride	10/7/2019	<1.0	0.297	1.003	2
MW 49A	vinyl chloride	4/22/2020	<1.0	0.500	0.500	2
MW 49A	vinyl chloride	10/1/2020	<1.0	0.500	0.500	2
MW 49A	vinyl chloride	4/8/2021	3.2	0.000	2.763	2
MW 49A	vinyl chloride	10/29/2021	5	0.000	4.893	2
MW 49A	vinyl chloride	4/25/2022	3.9	0.897	5.403	2
MW 49A	vinyl chloride	10/17/2022	2.7	2.528	4.872	2
MW 49A	vinyl chloride	4/10/2023	1.6	1.569	5.031	2
MW 49A	vinyl chloride	10/27/2023	1.4	1.045	3.755	2
MW 49A	vinyl chloride	4/2/2024	2.9	1.257	3.043	2
MW 49A	vinyl chloride	10/10/2024	1.8	1.137	2.713	2

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

Table 11 – Corrective Action Trend Analysis

Table 11
Corrective Action Trend Analysis
Annual Water Quality Report
Rural Iowa Sanitary Landfill
Permit No.42-SDP-01-72P

Monitoring Well	Compound	Sample Date	Current Condition	Trend	N	Projected Year to Completion (IAC 113.10(9)"e"
MW 7	Arsenic	4/21/2016	SSL	static	1	Not Required - Completed Remedy
MW 7	Arsenic	10/17/2016	SSL	static	2	Not Required - Completed Remedy
MW 7	Arsenic	4/21/2017	SSL	static	3	Not Required - Completed Remedy
MW 7	Arsenic	10/16/2017	SSL	static	4	Not Required - Completed Remedy
MW 7	Arsenic	4/24/2018	SSL	static	5	Not Required - Completed Remedy
MW 7	Arsenic	10/25/2018	SSL	static	6	Not Required - Completed Remedy
MW 7	Arsenic	4/15/2019	SSL	static	7	Not Required - Completed Remedy
MW 7	Arsenic	10/7/2019	SSL	static	8	Not Required - Completed Remedy
MW 7	Arsenic	4/22/2020	SSL	static	9	Not Required - Completed Remedy
MW 7	Arsenic	10/1/2020	SSL	static	10	Not Required - Completed Remedy
MW 7	Arsenic	4/8/2021	SSL	static	11	Not Required - Completed Remedy
MW 7	Arsenic	10/29/2021	SSL	static	12	Not Required - Completed Remedy
MW 7	Arsenic	4/25/2022	SSL	static	13	Not Required - Completed Remedy
MW 7	Arsenic	10/17/2022	SSL	static	14	Not Required - Completed Remedy
MW 7	Arsenic	4/10/2023	SSL	static	15	Not Required - Completed Remedy
MW 7	Arsenic	10/27/2023	SSL	static	16	Not Required - Completed Remedy
MW 7	Arsenic	4/2/2024	SSL	static	16	Not Required - Completed Remedy
MW 7	Arsenic	10/10/2024	SSL	static	16	Not Required - Completed Remedy

Table 11
Corrective Action Trend Analysis
Annual Water Quality Report
Rural Iowa Sanitary Landfill
Permit No.42-SDP-01-72P

Monitoring Well	Compound	Sample Date	Current Condition	Trend	N	Projected Year to Completion (IAC 113.10(9)"e"
MW 13R	Arsenic	4/21/2016	SSI	N/A	1	2027
MW 13R	Arsenic	10/17/2016	SSI	N/A	2	2027
MW 13R	Arsenic	4/21/2017	SSI	N/A	3	2027
MW 13R	Arsenic	10/16/2017	SSL	decreasing	4	2018 - Remedial Collection is in place
MW 13R	Arsenic	4/24/2018	SSL	decreasing	5	2018 - Remedial Collection is in place
MW 13R	Arsenic	10/25/2018	SSL	decreasing	6	2018 - Remedial Collection is in place
MW 13R	Arsenic	4/15/2019	SSL	decreasing	7	2018 - Remedial Collection is in place
MW 13R	Arsenic	10/7/2019	SSL	decreasing	8	2018 - Remedial Collection is in place
MW 13R	Arsenic	4/22/2020	SSL	increasing	9	2018 - Remedial Collection is in place
MW 13R	Arsenic	10/1/2020	SSL	increasing	10	2018 - Remedial Collection is in place
MW 13R	Arsenic	4/8/2021	SSL	static	11	2018 - Remedial Collection is in place
MW 13R	Arsenic	10/29/2021	SSL	static	12	2018 - Remedial Collection is in place
MW 13R	Arsenic	4/25/2022	SSL	static	13	2018 - Remedial Collection is in place
MW 13R	Arsenic	10/17/2022	SSL	static	14	2018 - Remedial Collection is in place
MW 13R	Arsenic	4/10/2023	SSL	static	15	2018 - Remedial Collection is in place
MW 13R	Arsenic	10/27/2023	SSL	static	16	2018 - Remedial Collection is in place
MW 13R	Arsenic	4/2/2024	SSL	static	17	2018 - Remedial Collection is in place
MW 13R	Arsenic	10/10/2024	SSL	static	18	2018 - Remedial Collection is in place

Table 11
Corrective Action Trend Analysis
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Rural Iowa Sanitary Landfill
Permit No.42-SDP-01-72P

Monitoring Well	Compound	Sample Date	Current Condition	Trend	N	Projected Year to Completion (IAC 113.10(9)"e"
MW 13R	Cobalt	4/21/2016	No-SSI	N/A	1	2025
MW 13R	Cobalt	10/17/2016	No-SSI	N/A	2	2025
MW 13R	Cobalt	4/21/2017	No-SSI	N/A	3	2025
MW 13R	Cobalt	10/16/2017	SSL	decreasing	4	2018 - Remedial Collection is in place
MW 13R	Cobalt	4/24/2018	SSL	decreasing	5	2018 - Remedial Collection is in place
MW 13R	Cobalt	10/25/2018	SSL	decreasing	6	2018 - Remedial Collection is in place
MW 13R	Cobalt	4/15/2019	SSL	decreasing	7	2018 - Remedial Collection is in place
MW 13R	Cobalt	10/7/2019	SSL	decreasing	8	2018 - Remedial Collection is in place
MW 13R	Cobalt	4/22/2020	SSL	static	9	2018 - Remedial Collection is in place
MW 13R	Cobalt	10/1/2020	SSL	static	10	2018 - Remedial Collection is in place
MW 13R	Cobalt	4/8/2021	SSL	decreasing	11	2018 - Remedial Collection is in place
MW 13R	Cobalt	10/29/2021	SSL	decreasing	12	2018 - Remedial Collection is in place
MW 13R	Cobalt	4/25/2022	No-SSI	decreasing	13	2018 - Remedial Collection is in place
MW 13R	Cobalt	10/17/2022	No-SSI	decreasing	14	2018 - Remedial Collection is in place
MW 13R	Cobalt	4/10/2023	No-SSI	decreasing	15	2018 - Remedial Collection is in place
MW 13R	Cobalt	10/27/2023	No-SSI	decreasing	16	2018 - Remedial Collection is in place
MW 13R	Cobalt	4/2/2024	No-SSI	decreasing	16	2018 - Remedial Collection is in place
MW 13R	Cobalt	10/10/2024	No-SSI	decreasing	16	2018 - Remedial Collection is in place

Table 11
Corrective Action Trend Analysis
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Rural Iowa Sanitary Landfill
Permit No.42-SDP-01-72P

Monitoring Well	Compound	Sample Date	Current Condition	Trend	N	Projected Year to Completion (IAC 113.10(9)"e"
MW 13R	Benzene	4/21/2016	SSI	N/A	1	2024
MW 13R	Benzene	10/17/2016	SSL	decreasing	2	2018 - Remedial Collection is in place
MW 13R	Benzene	4/21/2017	SSL	decreasing	3	2018 - Remedial Collection is in place
MW 13R	Benzene	10/16/2017	SSL	decreasing	4	2018 - Remedial Collection is in place
MW 13R	Benzene	4/24/2018	SSL	decreasing	5	2018 - Remedial Collection is in place
MW 13R	Benzene	10/25/2018	SSL	decreasing	6	2018 - Remedial Collection is in place
MW 13R	Benzene	4/15/2019	SSL	decreasing	7	2018 - Remedial Collection is in place
MW 13R	Benzene	10/7/2019	SSL	decreasing	8	2018 - Remedial Collection is in place
MW 13R	Benzene	4/22/2020	SSL	decreasing	9	2018 - Remedial Collection is in place
MW 13R	Benzene	10/1/2020	SSL	decreasing	10	2018 - Remedial Collection is in place
MW 13R	Benzene	4/8/2021	No-SSI	decreasing	11	2018 - Remedial Collection is in place
MW 13R	Benzene	10/29/2021	No-SSI	decreasing	12	2018 - Remedial Collection is in place
MW 13R	Benzene	4/25/2022	No-SSI	decreasing	13	2018 - Remedial Collection is in place
MW 13R	Benzene	10/17/2022	No-SSI	decreasing	14	2018 - Remedial Collection is in place
MW 13R	Benzene	4/10/2023	No-SSI	decreasing	15	2018 - Remedial Collection is in place
MW 13R	Benzene	10/27/2023	No-SSI	decreasing	16	2018 - Remedial Collection is in place
MW 13R	Benzene	4/2/2024	No-SSI	decreasing	17	2018 - Remedial Collection is in place
MW 13R	Benzene	10/10/2024	No-SSI	decreasing	18	2018 - Remedial Collection is in place

Table 11
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Monitoring Well	Compound	Sample Date	Current Condition	Trend	N	Projected Year to Completion (IAC 113.10(9)"e")
MW 14	Cobalt	4/21/2016	No-SSI	N/A	N/A	N/A
MW 14	Cobalt	10/17/2016	No-SSI	N/A	N/A	N/A
MW 14	Cobalt	4/21/2017	No-SSI	N/A	N/A	N/A
MW 14	Cobalt	10/16/2017	SSI	N/A	N/A	N/A
MW 14	Cobalt	4/24/2018	SSI	N/A	N/A	N/A
MW 14	Cobalt	10/25/2018	No-SSI	N/A	N/A	N/A
MW 14	Cobalt	4/15/2019	SSI	N/A	N/A	N/A
MW 14	Cobalt	10/7/2019	No-SSI	N/A	N/A	N/A
MW 14	Cobalt	4/22/2020	No-SSI	N/A	N/A	N/A
MW 14	Cobalt	10/1/2020	SSI	N/A	N/A	N/A
MW 14	Cobalt	4/8/2021	SSI	N/A	N/A	N/A
MW 14	Cobalt	10/29/2021	SSI	N/A	N/A	N/A
MW 14	Cobalt	4/25/2022	SSI	N/A	N/A	N/A
MW 14	Cobalt	10/17/2022	SSI	N/A	N/A	N/A
MW 14	Cobalt	4/10/2023	SSL	N/A	1	2018 - Remedial Collection is in place
MW 14	Cobalt	10/27/2023	SSL	N/A	2	2018 - Remedial Collection is in place
MW 14	Cobalt	4/2/2024	SSL	N/A	3	2018 - Remedial Collection is in place
MW 14	Cobalt	10/10/2024	SSL	N/A	4	2018 - Remedial Collection is in place

Table 11
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Monitoring Well	Compound	Sample Date	Current Condition	Trend	N	Projected Year to Completion (IAC 113.10(9)"e"
MW 31R	Cobalt	4/21/2016	No-SSI	N/A	1	N/A
MW 31R	Cobalt	10/17/2016	No-SSI	N/A	2	N/A
MW 31R	Cobalt	4/21/2017	No-SSI	N/A	3	N/A
MW 31R	Cobalt	10/16/2017	No-SSI	N/A	4	N/A
MW 31R	Cobalt	4/24/2018	SSI	N/A	5	N/A
MW 31R	Cobalt	10/25/2018	SSI	N/A	6	N/A
MW 31R	Cobalt	4/15/2019	SSI	N/A	7	N/A
MW 31R	Cobalt	10/7/2019	SSL	ststic	8	1997 - Remedial Collection is in place
MW 31R	Cobalt	4/22/2020	SSL	ststic	9	1997 - Remedial Collection is in place
MW 31R	Cobalt	10/1/2020	SSL	ststic	10	1997 - Remedial Collection is in place
MW 31R	Cobalt	4/8/2021	SSL	ststic	11	1997 - Remedial Collection is in place
MW 31R	Cobalt	10/29/2021	SSL	ststic	12	1997 - Remedial Collection is in place
MW 31R	Cobalt	4/25/2022	SSL	ststic	13	1997 - Remedial Collection is in place
MW 31R	Cobalt	10/17/2022	SSL	ststic	14	1997 - Remedial Collection is in place
MW 31R	Cobalt	4/10/2023	SSL	ststic	15	1997 - Remedial Collection is in place
MW 31R	Cobalt	10/27/2023	SSL	ststic	16	1997 - Remedial Collection is in place
MW 31R	Cobalt	4/2/2024	SSL	ststic	17	1997 - Remedial Collection is in place
MW 31R	Cobalt	10/10/2024	SSL	ststic	18	1997 - Remedial Collection is in place

Table 11
Corrective Action Trend Analysis
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Monitoring Well	Compound	Sample Date	Current Condition	Trend	N	Projected Year to Completion (IAC 113.10(9)"e"
MW 49A	Cobalt	4/21/2016	No-SSI	N/A	N/A	N/A
MW 49A	Cobalt	10/17/2016	No-SSI	N/A	N/A	N/A
MW 49A	Cobalt	4/21/2017	No-SSI	N/A	N/A	N/A
MW 49A	Cobalt	10/16/2017	No-SSI	N/A	N/A	N/A
MW 49A	Cobalt	4/24/2018	SSI	N/A	N/A	N/A
MW 49A	Cobalt	10/25/2018	No-SSI	N/A	N/A	N/A
MW 49A	Cobalt	4/15/2019	SSI	N/A	N/A	N/A
MW 49A	Cobalt	10/7/2019	No-SSI	N/A	N/A	N/A
MW 49A	Cobalt	4/22/2020	SSI	N/A	N/A	N/A
MW 49A	Cobalt	10/1/2020	SSI	N/A	N/A	N/A
MW 49A	Cobalt	4/8/2021	SSI	N/A	N/A	N/A
MW 49A	Cobalt	10/29/2021	SSI	N/A	N/A	N/A
MW 49A	Cobalt	4/25/2022	SSI	N/A	N/A	N/A
MW 49A	Cobalt	10/17/2022	SSI	N/A	N/A	N/A
MW 49A	Cobalt	4/10/2023	SSI	N/A	N/A	N/A
MW 49A	Cobalt	10/27/2023	SSL	N/A	1	1997 - Remedial Collection is in place
MW 49A	Cobalt	4/2/2024	SSL	N/A	2	1997 - Remedial Collection is in place
MW 49A	Cobalt	10/10/2024	SSL	decreasing	3	1997 - Remedial Collection is in place

Table 11
Corrective Action Trend Analysis
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Rural Iowa Sanitary Landfill
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Monitoring Well	Compound	Sample Date	Current Condition	Trend	N	Projected Year to Completion (IAC 113.10(9)"e"
MW 49A	vinyl chloride	4/21/2016	No-SSI	N/A	N/A	N/A
MW 49A	vinyl chloride	10/17/2016	No-SSI	N/A	N/A	N/A
MW 49A	vinyl chloride	4/21/2017	No-SSI	N/A	N/A	N/A
MW 49A	vinyl chloride	10/16/2017	SSI	N/A	N/A	N/A
MW 49A	vinyl chloride	4/24/2018	SSI	N/A	N/A	N/A
MW 49A	vinyl chloride	10/25/2018	No-SSI	N/A	N/A	N/A
MW 49A	vinyl chloride	4/15/2019	No-SSI	N/A	N/A	N/A
MW 49A	vinyl chloride	10/7/2019	No-SSI	N/A	N/A	N/A
MW 49A	vinyl chloride	4/22/2020	No-SSI	N/A	N/A	N/A
MW 49A	vinyl chloride	10/1/2020	No-SSI	N/A	N/A	N/A
MW 49A	vinyl chloride	4/8/2021	SSI	N/A	N/A	N/A
MW 49A	vinyl chloride	10/29/2021	SSI	N/A	N/A	N/A
MW 49A	vinyl chloride	4/25/2022	SSI	N/A	N/A	N/A
MW 49A	vinyl chloride	10/17/2022	SSL	N/A	1	1997 - Remedial Collection is in place
MW 49A	vinyl chloride	4/10/2023	SSL	decreasing	2	1997 - Remedial Collection is in place
MW 49A	vinyl chloride	10/27/2023	SSL	decreasing	3	1997 - Remedial Collection is in place
MW 49A	vinyl chloride	4/2/2024	SSL	decreasing	4	1997 - Remedial Collection is in place
MW 49A	vinyl chloride	10/10/2024	SSL	decreasing	5	1997 - Remedial Collection is in place

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

Table 12A – Leachate Levels – Active RCRA Trenches

Table 12A
Leachate Depth - Active Landfill
Annual Water Quality Report
Rural Iowa Sanitary Landfill
Permit No.42-SDP-01-72P

Monitoring Point	Description	Total Depth (Feet)	Dates											
			1-25-24 ⁽¹⁾	FEB ⁽²⁾	MAR ⁽²⁾	4-2-24 ⁽¹⁾	MAY ⁽²⁾	JUNE ⁽²⁾	7-11-24 ⁽¹⁾	AUG ⁽²⁾	SEP ⁽²⁾	10-10-24 ⁽¹⁾	NOV ⁽²⁾	12-31-24 ⁽¹⁾
Trench 1 LPZ-101	N. End	7.1	6.90	6.65	6.70	6.60	6.80	6.65	6.71	6.20	6.25	7.00	6.20	6.60
Trench 2 LPZ-102	N. End	8.5	8.45	8.10	8.15	7.10	8.10	8.00	7.90	7.95	7.95	8.48	8.20	7.20
Trench 3 LPZ-301	N. End	8.4	8.40	8.35	8.30	8.40	8.21	8.31	8.30	8.26	8.30	8.35	8.26	8.20

(1) Measurements by HLW.

(2) Measurement by RIWMA.

= LPZ-102 measured 1.40 feet of head on April 10, 2024.

= LPZ-102 measured 1.30 feet of head on December 31, 2024.

Table 12B – Leachate Levels – Original Landfill

Table 12B
Leachate Depth - Closed Landfill
Annual Water Quality Report
Rural Iowa Sanitary Landfill
Permit No.42-SDP-01-72P

Monitoring Point	Dates			
	1/25/2024	4/2/2024	7/11/2024	10/10/2024
LW-1	21.63	21.83	21.95	22.3
LW-2	4.65	3.89	Dry 5.0	2.85
LW-5	14.54	12.2	12.5	13.64
LW-6	26.05	25.95	23.84	24.35
LW-8	frozen	36.6	36.5	36.4
LW-10	16.27	15.89	15.04	15.46
LW-12	18.85	17.9	16.88	17.55

Measurements by HLW.
Quarterly measurements in accordance with Permit
Amendment 2, 10/31/2024 (Doc #108137).

Table 12C – Groundwater Separation Documentation – Active RCRA
Trenches 2 & 3

Table 12C
Groundwater Separation - Active Area
Annual Water Quality Report
Rural Iowa Sanitary Landfill
Permit No.42-SDP-01-72P

Groundwater Underdrain Piezometer

Well		Date of Measurements	
		4/2/2024	10/10/2024
GPZ - 203 (Trench2)	bottom of waste (feet MSL)	1096	1096
	PVC top	1100.49	1100.49
	depth to water	10.6	11.5
	Elevation water in GPZ (feet MSL)	1089.89	1088.99
	Minimum Separation (ft)	6.11	7.01

dry @ 11.9

Groundwater Underdrain Piezometer

Well		Date of Measurements	
		4/2/2024	10/10/2024
GPZ - 302 (Trench 3)	bottom of waste (feet MSL)	1097	1097
	PVC top	1104.43	1104.43
	depth to water	12.3	12.15
	Elevation water in GPZ (feet MSL)	1092.13	1092.28
	Minimum Separation (ft)	4.87	4.72

dry @ 12.3

Table 13 – Gas Monitoring Summary

TABLE 13
EXPLOSIVE GAS MONITORING RESULTS
ANNUAL WATER QUALITY REPORT
RURAL IOWA SANITARY LANDFILL
IDNR PERMIT NO. 42-SDP-1-72P

	1/25/2024	4/2/2024	7/11/2024	10/10/2024
Reference* Location	Combustible % LEL	Combustible % LEL	Combustible % LEL	Combustible % LEL
GP-1 Telephone Pedestal	0	0	0	0
GP-2 Power Pole Drop Conduit	0	0	0	0
GP-3 Subsurface Gas Probe	0	0	0	0
GP-4 Subsurface Gas Probe	0	0	0	0
GP-5 Subsurface Gas Probe	0	0	0	0
GP-6 Subsurface Gas Probe	OL	72.2	0	40.2
GP-7 Subsurface Gas Probe	0	0	0	0
GP-8 Landfill Vent (W)	0	0	0	75.3
GP-9 Landfill Vent (middle)	OL	86.1	OL	OL
GP-10 Landfill Vent (E)	0	4.0	0	0
GP-11 ACM Cleanout Manhole (West)	0	0	0	0
GP-12 ACM Cleanout Middle	OL	5.0	OL	79.2
GP-13 ACM Cleanout East	41.2	0	50.0	0
Perimeter	0	0	0	0
Shop	0	0	0	0

GP = Gas Monitoring Point
OL = Over Limit of 100% LEL

Appendix A

Field Sampling Forms

**RURAL IOWA SANITARY LANDFILL
PERMIT # 42-SDP-1-72P**

4/2/2024

Sampled by: T. Whipple

Weather conditions: : windy, snow/rain 35-40 degrees

IDNR Form 542-1322

Monitoring Well: MW-7 (dg)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1109.64
Well Depth	25.00
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	1109.64
Well Depth	25.30
Top Screen	1089.64
Bottom Screen	1084.64
Bottom Well	1084.64
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	20.00
Top sample	1089.64
Bottom sample	1085.64
Turbidity(NTU)	88.52

Date	Time	Water Level	Water Elevation	Notes
4/2/2024	14:49	18.45	1091.19	

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	88.52
Appendix I	Metals	150	150	88.52
Appendix I	VOC	240	240	88.52
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	BEHP	946		
Supplemental				
Total		400	0	

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

TOC	1109.64	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	25.00	Before purging	4/2/2024	14:49	18.45	1091.19	3	2.8	NO
		After purging				1109.64			
		Top of Screen 1990				1089.64			
						1.55			feet above (+) or below (-) top screen
		Bottom of Well 1990				1084.64			
		Bottom of Well	4/2/2024		25.30	1084.34			
						-0.30			feet sedimentation
		Before Sampling		15:00	20.05	1089.59			
		Recovery		18:32	18.43	1091.21			
		Recovery				1109.64			
		Recovery				1109.64			
		Recovery				1109.64			

IDNR Form 542-1322

Monitoring Well: MW-7A (dg)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1105.29
Well Depth	22.90
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1105.29
Well Depth	22.90
Top Screen	1092.39
Bottom Screen	1082.64
Bottom Well	1082.64
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	17.00
Top sample	1088.29
Bottom sample	1084.29
Turbidity(NTU)	8.52

Date	Time	Water Level	Water Elevation	Notes
4/2/2024	16:27	14.21	1091.08	

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		8.52
Appendix I Metals	150	150		8.52
Appendix I VOC	240	240		8.52
Full Appendix II 10 more containers	5620			
TSS TSS	1000			
Supplemental BEHP	946			
Supplemental				
Total		400	0	

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

TOC	1105.29	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	22.90	Before purging	4/2/2024	16:27	14.21	1091.08	3	2.1	NO
		After purging				1105.29			
		Top of Screen 1990				1092.39			
						-1.31			feet above (+) or below (-) top screen
		Bottom of Well 1990				1082.39			
		Bottom of Well	4/2/2024		22.80	1082.49			
						0.10			feet sedimentation
		Before Sampling		16:37	15.85	1089.44			
		Recovery		18:30	14.22	1091.07			
		Recovery				1105.29			
		Recovery				1105.29			
		Recovery				1105.29			

IDNR Form 542-1322

Monitoring Well: MW-7B (dg) N

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1105.23
Well Depth	22.90
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1105.23
Well Depth	22.65
Top Screen	1092.33
Bottom Screen	1082.33
Bottom Well	1082.33
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	17.00
Top sample	1088.23
Bottom sample	1084.23
Turbidity(NTU)	46.04

Date	Time	Water Level	Water Elevation	Notes
4/2/2024	16:42	14.34	1090.89	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte	Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All Field NTU	10	10		46.04
Appendix I Metals	150	150		46.04
Appendix I VOC	240	240		46.04
Full Appendix II 10 more containers	5620			
TSS TSS	1000			
Supplemental BEHP	946			
Supplemental				
Total		400	0	

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

TOC	1105.23	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	22.90	Before purging	4/2/2024	16:42	14.34	1090.89	3	2.2	No
		After purging				1105.23			
		Top of Screen 1990				1092.33			
						-1.44			feet above (+) or below (-) top screen
		Bottom of Well 1990				1082.33			
		Bottom of Well	4/2/2024		22.65	1082.58			
						0.25			feet sedimentation
		Before Sampling		16:49	14.50	1090.73			
		Recovery				1105.23			
		Recovery				1105.23			
		Recovery				1105.23			
		Recovery				1105.23			

IDNR Form 542-1322

Monitoring Well: MW-7C (dg) W

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1109.79
Well Depth	28.70
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	1109.79
Well Depth	28.40
Top Screen	1091.09
Bottom Screen	1081.09
Bottom Well	1081.09
Sampler Length (ft)	
Sampler Volume (mL)	440.00
Feet cordage	
Top sample	1109.79
Bottom sample	1109.79
Turbidity(NTU)	

Date	Time	Water Level	Water Elevation	Notes
4/2/2024		18.75	1091.04	WL ONLY

ANALYTES, CONTAINERS, AND VOLUMES

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

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

TOC	1109.79	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	28.70	Before purging	4/2/2024		18.75	1091.04			
Capped	YES	After purging				1109.79			
Standing Water	NO	Top of Screen 1990				1091.09			
Litter	NO					-0.05	feet above (+) or below (-) top screen		
Level Tape	Solinst	Bottom of Well 1990				1081.09			
Equipment	Disposable Bailer	Bottom of Well	4/2/2024			1109.79			
						28.70	feet sedimentation		
		Before Sampling				1109.79			
		Recovery				1109.79			
		Recovery				1109.79			
		Recovery				1109.79			
		Recovery				1109.79			

IDNR Form 542-1322

Monitoring Well: MW-8 (dg)

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

GENERAL INFORMATION

TOC	1109.6
Well Depth	45.50
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1109.6
Well Depth	44.60
Top Screen	1069.10
Bottom Screen	1064.10
Bottom Well	1064.10
Sampler Length (ft)	
Sampler Volume (mL)	440.00
Feet cordage	
Top sample	1109.60
Bottom sample	1109.60
Turbidity(NTU)	

Date	Time	Water Level	Water Elevation	Notes
4/2/2024		16.35	1093.25	WL ONLY

ANALYTES, CONTAINERS, AND VOLUMES

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

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

TOC	1109.6	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	45.50	Before purging	4/2/2024		16.35	1093.25			
		After purging				1109.60			
		Top of Screen 1990				1069.10			
						24.15			feet above (+) or below (-) top screen
		Bottom of Well 1990				1064.10			
		Bottom of Well	4/2/2024			1109.60			
						45.50			feet sedimentation
		Before Sampling				1109.60			
		Recovery				1109.60			
		Recovery				1109.60			
		Recovery				1109.60			
		Recovery				1109.60			

IDNR Form 542-1322

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	1119.77
Well Depth	18.00
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	1119.77
Well Depth	17.45
Top Screen	1106.77
Bottom Screen	1101.77
Bottom Well	1101.77
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	12.00
Top sample	1107.77
Bottom sample	1103.77
Turbidity(NTU)	3.33

Date	Time	Water Level	Water Elevation	Notes
4/2/2024	17:02	4.77	1115	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte	Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10	3.33
Appendix I	Metals	150	150	3.33
Appendix I	VOC	240	240	3.33
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	BEHP	946		
Supplemental				
Total		400	0	

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

TOC	1119.77	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	18.00	Before purging	4/2/2024	17:02	4.77	1115.00	7	3.2	
		After purging				1119.77			
		Top of Screen 1990				1106.77			
						8.23			feet above (+) or below (-) top screen
		Bottom of Well 1990				1101.77			
		Bottom of Well	4/2/2024		17.50	1102.27			
						0.50			feet sedimentation
		Before Sampling		17:22	14.95	1104.82			Appendix I Metals
		Recovery		18:26	5.41	1114.36			Appendix II
		Recovery				1119.77			
		Recovery				1119.77			
		Recovery				1119.77			

IDNR Form 542-1322

Monitoring Well: MW-211 (dg)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1139.26
Well Depth	27.53
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	1139.26
Well Depth	27.80
Top Screen	1121.73
Bottom Screen	1111.73
Bottom Well	1111.73
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	22.00
Top sample	1117.26
Bottom sample	1113.26
Turbidity(NTU)	4.05

Date	Time	Water Level	Water Elevation	Notes
4/2/2024	15:43	15.97	1123.29	

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	4.05
Appendix I	Metals	150	150	4.05
Appendix I	VOC	240	240	4.05
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	BEHP	946		
Supplemental				
Total		400	0	

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

TOC	1139.26	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	27.53	Before purging	4/2/2024	15:43	15.97	1123.29	3	1.6	No
		After purging				1139.26			
		Top of Screen 1990				1121.73			
						1.56			feet above (+) or below (-) top screen
		Bottom of Well 1990				1111.73			
		Bottom of Well	4/2/2024		27.80	1111.46			
						-0.27			feet sedimentation
		Before Sampling		15:57	20.05	1119.21			
		Recovery		17:57	16.15	1123.11			
		Recovery				1139.26			
		Recovery				1139.26			
		Recovery				1139.26			

IDNR Form 542-1322

Monitoring Well: MW-13R (dg)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1147.71
Well Depth	21.99
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1147.71
Well Depth	22.10
Top Screen	1135.72
Bottom Screen	1125.72
Bottom Well	1125.72
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	17.00
Top sample	1130.71
Bottom sample	1126.71
Turbidity(NTU)	7.30

Date	Time	Water Level	Water Elevation	Notes
4/2/2024	13:37	10.83	1136.88	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte	Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10	7.30
Appendix I	Metals	150	150	7.30
Appendix I	VOC	240	240	7.30
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	BEHP	946		
Supplemental	(3+4)-methyl phenol			
Total		400	0	

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

TOC	1147.71	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	21.99	Before purging	4/2/2024	13:37	10.83	1136.88	3	1.6	No
		After purging				1147.71			
		Top of Screen 1990				1135.72			
						1.16			feet above (+) or below (-) top screen
		Bottom of Well 1990				1125.72			
		Bottom of Well	4/2/2024		22.10	1125.61			
						-0.11			feet sedimentation
		Before Sampling		13:48	14.70	1133.01			
		Recovery		18:06	10.98	1136.73			
		Recovery				1147.71			
		Recovery				1147.71			
		Recovery				1147.71			

IDNR Form 542-1322

Monitoring Well: MW-14 (dg)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1155.28
Well Depth	15.00
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	1155.28
Well Depth	15.00
Top Screen	1145.28
Bottom Screen	1140.28
Bottom Well	1140.28
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	10.70
Top sample	1144.58
Bottom sample	1140.58
Turbidity(NTU)	3.44

Date	Time	Water Level	Water Elevation	Notes
4/2/2024	13:10	10.69	1144.59	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte	Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All Field NTU	10	10		3.44
Appendix I Metals	150	150		3.44
Appendix I VOC	240	240		3.44
Full Appendix II 10 more containers	5620			
TSS TSS	1000			
Supplemental BEHP	946			
Supplemental				
Total		400	0	

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

TOC	1155.28	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	15.00	Before purging	4/2/2024	13:10	10.69	1144.59	2	2.8	No
		After purging				1155.28			
		Top of Screen 1990				1145.28			
						-0.69			feet above (+) or below (-) top screen
		Bottom of Well 1990				1140.28			
		Bottom of Well	4/2/2024		15.00	1140.28			
						0.00			feet sedimentation
		Before Sampling		13:20	12.61	1142.67			
		Recovery		18:03	10.40	1144.88			
		Recovery				1155.28			
		Recovery				1155.28			
		Recovery				1155.28			

IDNR Form 542-1322

Monitoring Well: MW-29 (dg)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1136.65
Well Depth	19.23
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	1136.65
Well Depth	19.15
Top Screen	1127.42
Bottom Screen	1117.42
Bottom Well	1117.42
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	14.00
Top sample	1122.65
Bottom sample	1118.65
Turbidity(NTU)	4.44

Date	Time	Water Level	Water Elevation	Notes
4/2/2024	13:59	8.41	1128.24	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte	Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10		4.44
Appendix I	Metals	150		4.44
Appendix I	VOC	240		4.44
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	BEHP	946		
Supplemental				
Total		0	0	

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

TOC	1136.65	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	19.23	Before purging	4/2/2024	13:59	8.41	1128.24	3	1.7	No
		After purging				1136.65			
		Top of Screen 1990				1127.42			
						0.82			feet above (+) or below (-) top screen
		Bottom of Well 1990				1117.42			
		Bottom of Well	4/2/2024		19.50	1117.15			
						-0.27			feet sedimentation
		Before Sampling		14:09	11.30	1125.35			
		Recovery		18:35	8.73	1127.92			
		Recovery				1136.65			
		Recovery				1136.65			
		Recovery				1136.65			

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Monitoring Well: MW-33 (dg)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1115.86
Well Depth	22.58
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1115.86
Well Depth	21.75
Top Screen	1103.28
Bottom Screen	1093.28
Bottom Well	1093.28
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	16.00
Top sample	1099.86
Bottom sample	1095.86
Turbidity(NTU)	2.63

Date	Time	Water Level	Water Elevation	Notes
4/2/2024	16:07	7.47	1108.39	

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		2.63
Appendix I Metals	150	150		2.63
Appendix I VOC	240	240		2.63
Full Appendix II 10 more containers	5620			
TSS TSS	1000			
Supplemental BEHP	946			
Supplemental				
Total		400	0	

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

TOC	1115.86	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	22.58	Before purging	4/2/2024	16:07	7.47	1108.39	3	1.2	No
		After purging				1115.86			
		Top of Screen 1990				1103.28			
						5.11			feet above (+) or below (-) top screen
		Bottom of Well 1990				1093.28			
		Bottom of Well	4/2/2024		21.80	1094.06			
						0.78			feet sedimentation
		Before Sampling		16:18	9.12	1106.74			
		Recovery		18:29	7.40	1108.46			
		Recovery				1115.86			
		Recovery				1115.86			
		Recovery				1115.86			

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Monitoring Well: MW-35R (dg)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1123.59
Well Depth	15.05
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1123.59
Well Depth	15.05
Top Screen	1113.57
Bottom Screen	1108.54
Bottom Well	1108.54
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	10.00
Top sample	1113.59
Bottom sample	1109.59
Turbidity(NTU)	17.09

Date	Time	Water Level	Water Elevation	Notes
4/2/2024	14:19	8.83	1114.76	

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		17.09
Appendix I Metals	150	150		17.09
Appendix I VOC	240	240		17.09
Full Appendix II 10 more containers	5620			
TSS TSS	1000			
Supplemental BEHP	946	946		
Supplemental				
Total		1346	0	

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

TOC	1123.59	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	15.05	Before purging	4/2/2024	14:19	8.83	1114.76	2	2.0	Dry
		After purging				1123.59			
		Top of Screen 1990				1113.57			
						1.19			feet above (+) or below (-) top screen
		Bottom of Well 1990				1108.54			
		Bottom of Well	4/2/2024		15.00	1108.59			
						0.05			feet sedimentation
		Before Sampling		14:28	13.70	1109.89			
		Recovery		18:34	8.85	1114.74			
		Recovery				1123.59			
		Recovery				1123.59			
		Recovery				1123.59			

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Monitoring Well: MW-36 (ug)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1151.02
Well Depth	72.00
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	1151.02
Well Depth	71.18
Top Screen	1089.84
Bottom Screen	1079.84
Bottom Well	1079.02
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	65.00
Top sample	1086.02
Bottom sample	1082.02
Turbidity(NTU)	2.79

Date	Time	Water Level	Water Elevation	Notes
4/2/2024	8:38	34.84	1116.18	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte	Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All Field NTU	10	10		2.79
Appendix I Metals	150	150		2.79
Appendix I VOC	240	240		2.79
Full Appendix II 10 more containers	5620			
TSS TSS	1000			
Supplemental BEHP	946			
Supplemental				
Total		400	0	

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

TOC	1151.02	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	72.00	Before purging	4/2/2024	8:38	34.84	1116.18	6	1.0	
		After purging				1151.02			
		Top of Screen 1990				1089.84			
						26.34			feet above (+) or below (-) top screen
		Bottom of Well 1990				1079.84			
		Bottom of Well	4/2/2024		71.40	1079.62			
						-0.22			feet sedimentation
		Before Sampling		8:54	62.21	1088.81			
		Recovery		15:32	34.85	1116.17			
		Recovery				1151.02			
		Recovery				1151.02			
		Recovery				1151.02			

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Monitoring Well: MW-37 (ug)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1151.28
Well Depth	29.50
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1151.28
Well Depth	29.35
Top Screen	1141.78
Bottom Screen	1121.78
Bottom Well	1121.78
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	24.00
Top sample	1127.28
Bottom sample	1123.28
Turbidity(NTU)	2.69

Date	Time	Water Level	Water Elevation	Notes
4/2/2024	8:49	20.54	1130.74	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte	Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All Field NTU	10	10		2.69
Appendix I Metals	150	150		2.69
Appendix I VOC	240	240		2.69
Full Appendix II 10 more containers	5620			
TSS TSS	1000			
Supplemental BEHP	946			
Supplemental				
Total		400	0	

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

TOC	1151.28	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	29.50	Before purging	4/2/2024	8:49	20.54	1130.74	3	2.1	No
		After purging				1151.28			
		Top of Screen 1990				1141.78			
						-11.04			feet above (+) or below (-) top screen
		Bottom of Well 1990				1121.78			
		Bottom of Well	4/2/2024		29.30	1121.98			
						0.20			feet sedimentation
		Before Sampling		8:59	25.10	1126.18			
		Recovery		15:32	23.11	1128.17			
		Recovery				1151.28			
		Recovery				1151.28			
		Recovery				1151.28			

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Monitoring Well: MW-39 (ug)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1153.09
Well Depth	36.30
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	1153.09
Well Depth	36.60
Top Screen	1126.79
Bottom Screen	1116.79
Bottom Well	1116.79
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	33.00
Top sample	1120.09
Bottom sample	1116.09
Turbidity(NTU)	1.96

Date	Time	Water Level	Water Elevation	Notes
4/2/2024	8:10	22.33	1130.76	

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		1.96
Appendix I Metals	150	150		1.96
Appendix I VOC	240	240		1.96
Full Appendix II 10 more containers	5620			
TSS TSS	1000			
Supplemental BEHP	946			
Supplemental				
Total		400	0	

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

TOC	1153.09	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	36.30	Before purging	4/2/2024	8:10	22.33	1130.76	3	1.3	No
		After purging				1153.09			
		Top of Screen 1990				1126.79			
						3.97			feet above (+) or below (-) top screen
		Bottom of Well 1990				1116.79			
		Bottom of Well	4/2/2024		36.80	1116.29			
						-0.50			feet sedimentation
		Before Sampling		8:24	29.10	1123.99			
		Recovery		15:36	25.97	1127.12			
		Recovery				1153.09			
		Recovery				1153.09			
		Recovery				1153.09			

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Monitoring Well: MW-40 (ug)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1137.89
Well Depth	38.00
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	1137.89
Well Depth	37.55
Top Screen	1119.89
Bottom Screen	1099.89
Bottom Well	1099.89
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	32.00
Top sample	1105.89
Bottom sample	1101.89
Turbidity(NTU)	1.69

Date	Time	Water Level	Water Elevation	Notes
4/2/2024	9:12	27.13	1110.76	

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		1.69
Appendix I Metals	150	150		1.69
Appendix I VOC	240	240		1.69
Full Appendix II 10 more containers	5620			
TSS TSS	1000			
Supplemental BEHP	946			
Supplemental				
Total		400	0	

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

TOC	1137.89	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	38.00	Before purging	4/2/2024	9:12	27.13	1110.76	3	1.7	
		After purging				1137.89			
		Top of Screen 1990				1119.89			
						-9.13			feet above (+) or below (-) top screen
		Bottom of Well 1990				1099.89			
		Bottom of Well	4/2/2024		37.30	1100.59			
						0.70			feet sedimentation
		Before Sampling		9:27	30.50	1107.39			
		Recovery		17:29	29.20	1108.69			
		Recovery				1137.89			
		Recovery				1137.89			
		Recovery				1137.89			

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Monitoring Well: MW-47 (dg)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1099.82
Well Depth	19.50
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1099.82
Well Depth	18.75
Top Screen	1090.32
Bottom Screen	1080.32
Bottom Well	1080.32
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	13.00
Top sample	1086.82
Bottom sample	1082.82
Turbidity(NTU)	42.52

Date	Time	Water Level	Water Elevation	Notes
4/2/2024	9:54	10.69	1089.13	

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		42.52
Appendix I Metals	150	150		42.52
Appendix I VOC	240	240		42.52
Full Appendix II 10 more containers	5620			
TSS TSS	1000			
Supplemental BEHP	946			
Supplemental				
Total		400	0	

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

TOC	1099.82	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	19.50	Before purging	4/2/2024	9:54	10.69	1089.13		0.0	no
		After purging				1099.82			
		Top of Screen 1990				1090.32			
						-1.19			feet above (+) or below (-) top screen
		Bottom of Well 1990				1080.32			
		Bottom of Well	4/2/2024		18.70	1081.12			
						0.80			feet sedimentation
		Before Sampling		10:03	12.05	1087.77			
		Recovery		17:33	10.70	1089.12			
		Recovery				1099.82			
		Recovery				1099.82			
		Recovery				1099.82			

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Monitoring Well: MW-48A (dg)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1101.03
Well Depth	20.50
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1101.03
Well Depth	20.10
Top Screen	1090.53
Bottom Screen	1080.53
Bottom Well	1080.53
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	15.00
Top sample	1086.03
Bottom sample	1082.03
Turbidity(NTU)	33.33

Date	Time	Water Level	Water Elevation	Notes
4/2/2024	10:48	11.62	1089.41	

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	33.33
Appendix I	Metals	150	150	33.33
Appendix I	VOC	240	240	33.33
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	BEHP	946		
Supplemental				
Total		400	0	

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

TOC	1101.03	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	20.50	Before purging	4/2/2024	10:48	11.62	1089.41	3	2.1	no
		After purging				1101.03			
		Top of Screen 1990				1090.53			
						-1.12			feet above (+) or below (-) top screen
		Bottom of Well 1990				1080.53			
		Bottom of Well	4/2/2024		20.10	1080.93			
						0.40			feet sedimentation
		Before Sampling		10:59	13.80	1087.23			
		Recovery		17:49	11.61	1089.42			
		Recovery				1101.03			
		Recovery				1101.03			
		Recovery				1101.03			

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Monitoring Well: MW-49A (dg)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1132.5
Well Depth	25.50
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1132.5
Well Depth	24.55
Top Screen	1117.00
Bottom Screen	1107.00
Bottom Well	1007.00
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	19.00
Top sample	1113.50
Bottom sample	1109.50
Turbidity(NTU)	4.31

Date	Time	Water Level	Water Elevation	Notes
4/2/2024	11:28	14.50	1118	

ANALYTES, CONTAINERS, AND VOLUMES

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

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

TOC	1132.5	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	25.50	Before purging	4/2/2024	11:28	14.50	1118.00	3	1.7	NO
		After purging				1132.50			
		Top of Screen 1990				1117.00			
						1.00			feet above (+) or below (-) top screen
		Bottom of Well 1990				1107.00			
		Bottom of Well	4/2/2024		24.60	1107.90			
						0.90			feet sedimentation
		Before Sampling		11:39	16.98	1115.52			
		Recovery		17:53	14.46	1118.04			
		Recovery				1132.50			
		Recovery				1132.50			
		Recovery				1132.50			

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Monitoring Well: MW-50 (dg)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1100.39
Well Depth	22.45
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1100.39
Well Depth	22.60
Top Screen	1082.94
Bottom Screen	1078.11
Bottom Well	1078.11
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	17.00
Top sample	1083.39
Bottom sample	1079.39
Turbidity(NTU)	4.30

Date	Time	Water Level	Water Elevation	Notes
4/2/2024	10:24	11.46	1088.93	

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	4.30
Appendix I	Metals	150	150	4.30
Appendix I	VOC	240	240	4.30
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	BEHP	946		
Supplemental				
Total		400	0	

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

TOC	1100.39	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	22.45	Before purging	4/2/2024	10:24	11.46	1088.93	3	1.7	NO
		After purging				1100.39			
		Top of Screen 1990				1082.94			
						5.99			feet above (+) or below (-) top screen
		Bottom of Well 1990				1078.11			
		Bottom of Well	4/2/2024		22.60	1077.79			
						-0.32			feet sedimentation
		Before Sampling		10:33	19.30	1081.09			
		Recovery		17:35	11.48	1088.91			
		Recovery				1100.39			
		Recovery				1100.39			
		Recovery				1100.39			

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Monitoring Well: MW-51 (ug)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1116.53
Well Depth	32.02
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	1116.53
Well Depth	32.20
Top Screen	1094.51
Bottom Screen	1084.70
Bottom Well	1084.70
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	26.00
Top sample	1090.53
Bottom sample	1086.53
Turbidity(NTU)	91.72

Date	Time	Water Level	Water Elevation	Notes
4/2/2024	11:09	12.3	1104.23	

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	91.72
Appendix I	Metals	150	150	91.72
Appendix I	VOC	240	240	91.72
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	BEHP	946		
Supplemental				
Total		400	0	

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

TOC	1116.53	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	32.02	Before purging	4/2/2024	11:09	12.30	1104.23	3	0.9	NO
		After purging				1116.53			
		Top of Screen 1990				1094.51			
						9.72			feet above (+) or below (-) top screen
		Bottom of Well 1990				1084.70			
		Bottom of Well	4/2/2024		32.20	1084.33			
						-0.37			feet sedimentation
		Before Sampling		11:22	23.70	1092.83			
		Recovery		17:51	12.40	1104.13			
		Recovery				1116.53			
		Recovery				1116.53			
		Recovery				1116.53			

IDNR Form 542-1322

Monitoring Well: MW-31R (dg)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1161.26
Well Depth	32.02
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	1161.26
Well Depth	32.00
Top Screen	1139.22
Bottom Screen	1128.91
Bottom Well	1128.91
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	26.00
Top sample	1135.26
Bottom sample	1131.26
Turbidity(NTU)	3.96

Date	Time	Water Level	Water Elevation	Notes
4/2/2024	15:12	23.74	1137.52	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte	Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All Field NTU	10	10		3.96
Appendix I Metals	150	150		3.96
Appendix I VOC	240	240		3.96
Full Appendix II 10 more containers	5620		5620	
TSS TSS	1000			
Supplemental BEHP	946			
Supplemental				
Total		400	5620	

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

TOC	1161.26	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	32.02	Before purging	4/2/2024	15:12	23.74	1137.52	3	2.2	No
		After purging				1161.26			
		Top of Screen 1990				1139.22			
						-1.70			feet above (+) or below (-) top screen
		Bottom of Well 1990				1128.91			
		Bottom of Well	4/2/2024		32.00	1129.26			
						0.35			feet sedimentation
		Before Sampling		15:26	24.35	1136.91			
		Recovery		18:09	23.79	1137.47			
		Recovery				1161.26			
		Recovery				1161.26			
		Recovery				1161.26			

**RURAL IOWA SANITARY LANDFILL
PERMIT # 42-SDP-1-72P**

4/2/2024

Sampled by: T. Whipple

Weather conditions: : windy, snow/rain 35-40 degrees

IDNR Form 542-1324

Date	Time	Type	Flowing	Quantity	Discolored	Odor	Litter
GU-1		groundwater diversion t	no	submerged	No	No	no
No GU in Oct 2022 per IDNR							Turbidity (NTU)

IDNR Form 542-1324

Date	Time	Type	Flowing	Quantity	Discolored	Odor	Litter
GU-2		groundwater diversion t	no	buried	No	No	no
No GU in Oct 2022 per IDNR							Turbidity (NTU)

IDNR Form 542-1324

Date	Time	Type	Flowing	Quantity	Discolored	Odor	Litter
GU-3	4/2/2024	10:13 groundwater diversion t	yes	250ml/min	No	No	no
No GU in Oct 2022 per IDNR							Turbidity (NTU)
							1.33

IDNR Form 542-1324

Date	Time	Type	Flowing	Quantity	Discolored	Odor	Litter
PECS-1	4/2/2024	14:38 detention outfall	yes	12"x1"x1 ft/sec	No	No	no
							Turbidity (NTU)
							2.15

IDNR Form 542-1324

Date	Time	Type	Flowing	Quantity	Discolored	Odor	Litter
ACM Tile-1	4/2/2024	13:00 groundwater tile	yes	250ml/ 2 min	No	No	no
							Turbidity (NTU)
							2.74

**RURAL IOWA SANITARY LANDFILL
PERMIT # 42-SDP-1-72P**

10/10/2024

Sampled by: T. Whipple

Weather conditions: : sunny, breezy, 50-80 degrees

IDNR Form 542-1322

Monitoring Well: MW-7 (dg)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1109.64
Well Depth	25.00
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	1109.64
Well Depth	25.30
Top Screen	1089.64
Bottom Screen	1084.64
Bottom Well	1084.64
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	20.00
Top sample	1089.64
Bottom sample	1085.64
Turbidity(NTU)	5.68

Date	Time	Water Level	Water Elevation	Notes
10/10/2024	13:55	19.11	1090.53	

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	5.68
Appendix I	Metals	150	150	5.68
Appendix I	VOC	240	240	5.68
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	BEHP	946		
Supplemental				
Total		400	0	

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

TOC	1109.64	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	25.00	Before purging	10/10/2024	13:55	19.11	1090.53		0.0	
		After purging				1109.64			
		Top of Screen 1990				1089.64			
						0.89			feet above (+) or below (-) top screen
		Bottom of Well 1990				1084.64			
		Bottom of Well	10/10/2024		25.30	1084.34			
						-0.30			feet sedimentation
		Before Sampling				1109.64			
		Recovery				1109.64			
		Recovery				1109.64			
		Recovery				1109.64			
		Recovery				1109.64			

IDNR Form 542-1322

Monitoring Well: MW-7A (dg)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1105.29
Well Depth	22.90
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1105.29
Well Depth	22.90
Top Screen	1092.39
Bottom Screen	1082.64
Bottom Well	1082.64
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	17.00
Top sample	1088.29
Bottom sample	1084.29
Turbidity(NTU)	2.26

Date	Time	Water Level	Water Elevation	Notes
10/10/2024	13:35	14.81	1090.48	

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	2.26
Appendix I	Metals	150	150	2.26
Appendix I	VOC	240	240	2.26
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	BEHP	946		
Supplemental				
Total		400	0	

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

TOC	1105.29	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	22.90	Before purging	10/10/2024	13:35	14.81	1090.48		0.0	
		After purging				1105.29			
		Top of Screen 1990				1092.39			
						-1.91			feet above (+) or below (-) top screen
		Bottom of Well 1990				1082.39			
		Bottom of Well	10/10/2024		22.80	1082.49			
						0.10			feet sedimentation
		Before Sampling				1105.29			
		Recovery				1105.29			
		Recovery				1105.29			
		Recovery				1105.29			
		Recovery				1105.29			

IDNR Form 542-1322

Monitoring Well: MW-7B (dg) N

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1105.23
Well Depth	22.90
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1105.23
Well Depth	22.65
Top Screen	1092.33
Bottom Screen	1082.33
Bottom Well	1082.33
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	17.00
Top sample	1088.23
Bottom sample	1084.23
Turbidity(NTU)	597.40

Date	Time	Water Level	Water Elevation	Notes
10/10/2024	13:42	15.04	1090.19	

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		597.40
Appendix I Metals	150	150		597.40
Appendix I VOC	240	240		597.40
Full Appendix II 10 more containers	5620			
TSS TSS	1000			
Supplemental BEHP	946			
Supplemental				
Total		400	0	

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

TOC	1105.23	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	22.90	Before purging	10/10/2024	13:42	15.04	1090.19		0.0	
		After purging				1105.23			
		Top of Screen 1990				1092.33			
						-2.14			feet above (+) or below (-) top screen
		Bottom of Well 1990				1082.33			
		Bottom of Well	10/10/2024		22.65	1082.58			
						0.25			feet sedimentation
		Before Sampling				1105.23			
		Recovery				1105.23			
		Recovery				1105.23			
		Recovery				1105.23			
		Recovery				1105.23			

IDNR Form 542-1322

Monitoring Well: MW-7C (dg) W

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1109.79
Well Depth	28.70
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	1109.79
Well Depth	28.40
Top Screen	1091.09
Bottom Screen	1081.09
Bottom Well	1081.09
Sampler Length (ft)	
Sampler Volume (mL)	440.00
Feet cordage	
Top sample	1109.79
Bottom sample	1109.79
Turbidity(NTU)	

Date	Time	Water Level	Water Elevation	Notes
10/10/2024		19.25	1090.54	WL ONLY

ANALYTES, CONTAINERS, AND VOLUMES

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

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

TOC	1109.79	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	28.70	Before purging	10/10/2024		19.25	1090.54			
Capped	YES	After purging				1109.79			
Standing Water	NO	Top of Screen 1990				1091.09			
Litter	NO					-0.55	feet above (+) or below (-) top screen		
Level Tape	Solinst	Bottom of Well 1990				1081.09			
Equipment	Disposable Bailer	Bottom of Well	10/10/2024			1109.79			
						28.70	feet sedimentation		
		Before Sampling				1109.79			
		Recovery				1109.79			
		Recovery				1109.79			
		Recovery				1109.79			
		Recovery				1109.79			

IDNR Form 542-1322

Monitoring Well: MW-8 (dg)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1109.6
Well Depth	45.50
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1109.6
Well Depth	44.60
Top Screen	1069.10
Bottom Screen	1064.10
Bottom Well	1064.10
Sampler Length (ft)	
Sampler Volume (mL)	440.00
Feet cordage	
Top sample	1109.60
Bottom sample	1109.60
Turbidity(NTU)	

Date	Time	Water Level	Water Elevation	Notes
10/10/2024		16.7	1092.9	WL ONLY

ANALYTES, CONTAINERS, AND VOLUMES

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

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

TOC	Well Depth	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
	45.50	Before purging	10/10/2024		16.70	1092.90			
		After purging				1109.60			
		Top of Screen 1990				1069.10			
						23.80			feet above (+) or below (-) top screen
		Bottom of Well 1990				1064.10			
		Bottom of Well	10/10/2024			1109.60			
						45.50			feet sedimentation
		Before Sampling				1109.60			
		Recovery				1109.60			
		Recovery				1109.60			
		Recovery				1109.60			
		Recovery				1109.60			

IDNR Form 542-1322

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	1119.77
Well Depth	18.00
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	1119.77
Well Depth	17.45
Top Screen	1106.77
Bottom Screen	1101.77
Bottom Well	1101.77
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	12.00
Top sample	1107.77
Bottom sample	1103.77
Turbidity(NTU)	3.33

Date	Time	Water Level	Water Elevation	Notes
10/10/2024	13:01	11.72	1108.05	

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	3.33
Appendix I	Metals	150	150	3.33
Appendix I	VOC	240	240	3.33
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	BEHP	946		
Supplemental				
Total		400	0	

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

TOC	1119.77	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	18.00	Before purging	10/10/2024	13:01	11.72	1108.05		0.0	
		After purging				1119.77			
		Top of Screen 1990				1106.77			
						1.28			feet above (+) or below (-) top screen
		Bottom of Well 1990				1101.77			
		Bottom of Well	10/10/2024		17.50	1102.27			
						0.50			feet sedimentation
		Before Sampling				1119.77			Appendix I Metals
		Recovery				1119.77			Appendix II
		Recovery				1119.77			
		Recovery				1119.77			
		Recovery				1119.77			

IDNR Form 542-1322

Monitoring Well: MW-211 (dg)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1139.26
Well Depth	27.53
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	1139.26
Well Depth	27.80
Top Screen	1121.73
Bottom Screen	1111.73
Bottom Well	1111.73
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	22.00
Top sample	1117.26
Bottom sample	1113.26
Turbidity(NTU)	14.62

Date	Time	Water Level	Water Elevation	Notes
10/10/2024	12:48	15.87	1123.39	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte	Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All Field NTU	10	10		14.62
Appendix I Metals	150	150		14.62
Appendix I VOC	240	240		14.62
Full Appendix II 10 more containers	5620			
TSS TSS	1000			
Supplemental BEHP	946			
Supplemental				
Total		400	0	

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

TOC	1139.26	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	27.53	Before purging	10/10/2024	12:48	15.87	1123.39		0.0	
		After purging				1139.26			
		Top of Screen 1990				1121.73			
						1.66			feet above (+) or below (-) top screen
		Bottom of Well 1990				1111.73			
		Bottom of Well	10/10/2024		27.80	1111.46			
						-0.27			feet sedimentation
		Before Sampling				1139.26			
		Recovery				1139.26			
		Recovery				1139.26			
		Recovery				1139.26			
		Recovery				1139.26			

IDNR Form 542-1322

Monitoring Well: MW-13R (dg)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1147.71
Well Depth	21.99
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1147.71
Well Depth	22.10
Top Screen	1135.72
Bottom Screen	1125.72
Bottom Well	1125.72
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	17.00
Top sample	1130.71
Bottom sample	1126.71
Turbidity(NTU)	3.41

Date	Time	Water Level	Water Elevation	Notes
10/10/2024	9:07	11.97	1135.74	

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	3.41
Appendix I	Metals	150	150	3.41
Appendix I	VOC	240	240	3.41
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	BEHP	946		
Supplemental	(3+4)-methyl phenol			
Total		400	0	

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

TOC	1147.71	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	21.99	Before purging	10/10/2024	9:07	11.97	1135.74		0.0	
		After purging				1147.71			
		Top of Screen 1990				1135.72			
						0.02			feet above (+) or below (-) top screen
		Bottom of Well 1990				1125.72			
		Bottom of Well	10/10/2024		22.10	1125.61			
						-0.11			feet sedimentation
		Before Sampling				1147.71			
		Recovery				1147.71			
		Recovery				1147.71			
		Recovery				1147.71			
		Recovery				1147.71			

IDNR Form 542-1322

Monitoring Well: MW-14 (dg)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1155.28
Well Depth	15.00
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	1155.28
Well Depth	15.00
Top Screen	1145.28
Bottom Screen	1140.28
Bottom Well	1140.28
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	11.00
Top sample	1144.28
Bottom sample	1140.28
Turbidity(NTU)	2.80

Date	Time	Water Level	Water Elevation	Notes
10/10/2024	8:45	10.65	1144.63	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte	Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10	2.80
Appendix I	Metals	150	150	2.80
Appendix I	VOC	240	240	2.80
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	BEHP	946		
Supplemental				
Total		400	0	

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

TOC	1155.28	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	15.00	Before purging	10/10/2024	8:45	10.65	1144.63		0.0	
		After purging				1155.28			
		Top of Screen 1990				1145.28			
						-0.65			feet above (+) or below (-) top screen
		Bottom of Well 1990				1140.28			
		Bottom of Well	10/10/2024		15.00	1140.28			
						0.00			feet sedimentation
		Before Sampling				1155.28			
		Recovery				1155.28			
		Recovery				1155.28			
		Recovery				1155.28			
		Recovery				1155.28			

IDNR Form 542-1322

Monitoring Well: MW-29 (dg)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1136.65
Well Depth	19.23
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	1136.65
Well Depth	19.15
Top Screen	1127.42
Bottom Screen	1117.42
Bottom Well	1117.42
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	16.00
Top sample	1120.65
Bottom sample	1116.65
Turbidity(NTU)	3.01

Date	Time	Water Level	Water Elevation	Notes
10/10/2024	14:15	16.87	1119.78	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte	Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10		3.01
Appendix I	Metals	150		3.01
Appendix I	VOC	240		3.01
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	BEHP	946		
Supplemental				
Total		0	0	

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

TOC	1136.65	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	19.23	Before purging	10/10/2024	14:15	16.87	1119.78		0.0	
		After purging				1136.65			
		Top of Screen 1990				1127.42			
						-7.64			feet above (+) or below (-) top screen
		Bottom of Well 1990				1117.42			
		Bottom of Well	10/10/2024		19.50	1117.15			
						-0.27			feet sedimentation
		Before Sampling				1136.65			
		Recovery				1136.65			
		Recovery				1136.65			
		Recovery				1136.65			
		Recovery				1136.65			

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Monitoring Well: MW-33 (dg)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1115.86
Well Depth	22.58
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1115.86
Well Depth	21.75
Top Screen	1103.28
Bottom Screen	1093.28
Bottom Well	1093.28
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	16.80
Top sample	1099.06
Bottom sample	1095.06
Turbidity(NTU)	2.40

Date	Time	Water Level	Water Elevation	Notes
10/10/2024	13:18	16.64	1099.22	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte	Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10	2.40
Appendix I	Metals	150	150	2.40
Appendix I	VOC	240	240	2.40
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	BEHP	946		
Supplemental				
Total		400	0	

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

TOC	1115.86	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	22.58	Before purging	10/10/2024	13:18	16.64	1099.22		0.0	
		After purging				1115.86			
		Top of Screen 1990				1103.28			
						-4.06			feet above (+) or below (-) top screen
		Bottom of Well 1990				1093.28			
		Bottom of Well	10/10/2024		21.80	1094.06			
						0.78			feet sedimentation
		Before Sampling				1115.86			
		Recovery				1115.86			
		Recovery				1115.86			
		Recovery				1115.86			
		Recovery				1115.86			

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Monitoring Well: MW-35R (dg)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1123.59
Well Depth	15.05
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1123.59
Well Depth	15.05
Top Screen	1113.57
Bottom Screen	1108.54
Bottom Well	1108.54
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	
Top sample	1123.59
Bottom sample	1119.59
Turbidity(NTU)	

Date	Time	Water Level	Water Elevation	Notes
10/10/2024		13.61	1109.98	too dry

ANALYTES, CONTAINERS, AND VOLUMES

Analyte	Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10	0.00
Appendix I	Metals	150	150	0.00
Appendix I	VOC	240	240	0.00
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	BEHP	946	946	
Supplemental				
Total		1346	0	

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

TOC	1123.59	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	15.05	Before purging	10/10/2024	0:00	13.61	1109.98		0.0	
		After purging				1123.59			
		Top of Screen 1990				1113.57			
						-3.59			feet above (+) or below (-) top screen
		Bottom of Well 1990				1108.54			
		Bottom of Well	10/10/2024		15.00	1108.59			
						0.05			feet sedimentation
		Before Sampling				1123.59			
		Recovery				1123.59			
		Recovery				1123.59			
		Recovery				1123.59			
		Recovery				1123.59			

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Monitoring Well: MW-36 (ug)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1151.02
Well Depth	72.00
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	1151.02
Well Depth	71.18
Top Screen	1089.84
Bottom Screen	1079.84
Bottom Well	1079.02
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	65.00
Top sample	1086.02
Bottom sample	1082.02
Turbidity(NTU)	69.31

Date	Time	Water Level	Water Elevation	Notes
10/10/2024	9:45	32.84	1118.18	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte	Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All Field NTU	10	10		69.31
Appendix I Metals	150	150		69.31
Appendix I VOC	240	240		69.31
Full Appendix II 10 more containers	5620			
TSS TSS	1000			
Supplemental BEHP	946			
Supplemental				
Total		400	0	

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

TOC	1151.02	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	72.00	Before purging	10/10/2024	9:45	32.84	1118.18		0.0	
		After purging				1151.02			
		Top of Screen 1990				1089.84			
						28.34			feet above (+) or below (-) top screen
		Bottom of Well 1990				1079.84			
		Bottom of Well	10/10/2024		71.40	1079.62			
						-0.22			feet sedimentation
		Before Sampling				1151.02			
		Recovery				1151.02			
		Recovery				1151.02			
		Recovery				1151.02			
		Recovery				1151.02			

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Monitoring Well: MW-37 (ug)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1151.28
Well Depth	29.50
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1151.28
Well Depth	29.35
Top Screen	1141.78
Bottom Screen	1121.78
Bottom Well	1121.78
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	23.00
Top sample	1128.28
Bottom sample	1124.28
Turbidity(NTU)	4.14

Date	Time	Water Level	Water Elevation	Notes
10/10/2024	9:55	18.27	1133.01	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte	Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10	4.14
Appendix I	Metals	150	150	4.14
Appendix I	VOC	240	240	4.14
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	BEHP	946		
Supplemental				
Total		400	0	

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

TOC	1151.28	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	29.50	Before purging	10/10/2024	9:55	18.27	1133.01		0.0	
		After purging				1151.28			
		Top of Screen 1990				1141.78			
						-8.77			feet above (+) or below (-) top screen
		Bottom of Well 1990				1121.78			
		Bottom of Well	10/10/2024		29.30	1121.98			
						0.20			feet sedimentation
		Before Sampling				1151.28			
		Recovery				1151.28			
		Recovery				1151.28			
		Recovery				1151.28			
		Recovery				1151.28			

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Monitoring Well: MW-39 (ug)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1153.09
Well Depth	36.30
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	1153.09
Well Depth	36.60
Top Screen	1126.79
Bottom Screen	1116.79
Bottom Well	1116.79
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	33.00
Top sample	1120.09
Bottom sample	1116.09
Turbidity(NTU)	2.24

Date	Time	Water Level	Water Elevation	Notes
10/10/2024	9:27	18.99	1134.1	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte	Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All Field NTU	10	10		2.24
Appendix I Metals	150	150		2.24
Appendix I VOC	240	240		2.24
Full Appendix II 10 more containers	5620			
TSS TSS	1000			
Supplemental BEHP	946			
Supplemental				
Total		400	0	

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

TOC	1153.09	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	36.30	Before purging	10/10/2024	9:27	18.99	1134.10		0.0	
		After purging				1153.09			
		Top of Screen 1990				1126.79			
						7.31			feet above (+) or below (-) top screen
		Bottom of Well 1990				1116.79			
		Bottom of Well	10/10/2024		36.80	1116.29			
						-0.50			feet sedimentation
		Before Sampling				1153.09			
		Recovery				1153.09			
		Recovery				1153.09			
		Recovery				1153.09			
		Recovery				1153.09			

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Monitoring Well: MW-40 (ug)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1137.89
Well Depth	38.00
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	1137.89
Well Depth	37.55
Top Screen	1119.89
Bottom Screen	1099.89
Bottom Well	1099.89
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	31.00
Top sample	1106.89
Bottom sample	1102.89
Turbidity(NTU)	4.27

Date	Time	Water Level	Water Elevation	Notes
10/10/2024	10:15	25.48	1112.41	

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	4.27
Appendix I	Metals	150	150	4.27
Appendix I	VOC	240	240	4.27
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	BEHP	946		
Supplemental				
Total		400	0	

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

TOC	1137.89	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	38.00	Before purging	10/10/2024	10:15	25.48	1112.41		0.0	
		After purging				1137.89			
		Top of Screen 1990				1119.89			
						-7.48			feet above (+) or below (-) top screen
		Bottom of Well 1990				1099.89			
		Bottom of Well	10/10/2024		37.30	1100.59			
						0.70			feet sedimentation
		Before Sampling				1137.89			
		Recovery				1137.89			
		Recovery				1137.89			
		Recovery				1137.89			
		Recovery				1137.89			

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Monitoring Well: MW-47 (dg)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1099.82
Well Depth	19.50
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1099.82
Well Depth	18.75
Top Screen	1090.32
Bottom Screen	1080.32
Bottom Well	1080.32
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	13.00
Top sample	1086.82
Bottom sample	1082.82
Turbidity(NTU)	37.81

Date	Time	Water Level	Water Elevation	Notes
10/10/2024	10:45	11.92	1087.9	

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		37.81
Appendix I Metals	150	150		37.81
Appendix I VOC	240	240		37.81
Full Appendix II 10 more containers	5620			
TSS TSS	1000			
Supplemental BEHP	946			
Supplemental				
Total		400	0	

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

TOC	1099.82	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	19.50	Before purging	10/10/2024	10:45	11.92	1087.90		0.0	
		After purging				1099.82			
		Top of Screen 1990				1090.32			
						-2.42			feet above (+) or below (-) top screen
		Bottom of Well 1990				1080.32			
		Bottom of Well	10/10/2024		18.70	1081.12			
						0.80			feet sedimentation
		Before Sampling				1099.82			
		Recovery				1099.82			
		Recovery				1099.82			
		Recovery				1099.82			
		Recovery				1099.82			

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Monitoring Well: MW-48A (dg)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1101.03
Well Depth	20.50
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1101.03
Well Depth	20.10
Top Screen	1090.53
Bottom Screen	1080.53
Bottom Well	1080.53
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	14.00
Top sample	1087.03
Bottom sample	1083.03
Turbidity(NTU)	50.95

Date	Time	Water Level	Water Elevation	Notes
10/10/2024	11:47	11.88	1089.15	

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		50.95
Appendix I Metals	150	150		50.95
Appendix I VOC	240	240		50.95
Full Appendix II 10 more containers	5620			
TSS TSS	1000			
Supplemental BEHP	946			
Supplemental				
Total		400	0	

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

TOC	1101.03	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	20.50	Before purging	10/10/2024	11:47	11.88	1089.15		0.0	
		After purging				1101.03			
		Top of Screen 1990				1090.53			
						-1.38			feet above (+) or below (-) top screen
		Bottom of Well 1990				1080.53			
		Bottom of Well	10/10/2024		20.10	1080.93			
						0.40			feet sedimentation
		Before Sampling				1101.03			
		Recovery				1101.03			
		Recovery				1101.03			
		Recovery				1101.03			
		Recovery				1101.03			

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Monitoring Well: MW-49A (dg)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1132.5
Well Depth	25.50
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1132.5
Well Depth	24.55
Top Screen	1117.00
Bottom Screen	1107.00
Bottom Well	1007.00
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	18.50
Top sample	1114.00
Bottom sample	1110.00
Turbidity(NTU)	2.90

Date	Time	Water Level	Water Elevation	Notes
10/10/2024	12:17	15.45	1117.05	

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		2.90
Appendix I Metals	150	150		2.90
Appendix I VOC	240	240		2.90
Full Appendix II 10 more containers	5620			
TSS TSS	1000			
Supplemental BEHP	946			
Supplemental				
Total		400	0	

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

TOC	Well Depth	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
	25.50	Before purging	10/10/2024	12:17	15.45	1117.05		0.0	
		After purging				1132.50			
		Top of Screen 1990				1117.00			
						0.05			feet above (+) or below (-) top screen
		Bottom of Well 1990				1107.00			
		Bottom of Well	10/10/2024		24.60	1107.90			
						0.90			feet sedimentation
		Before Sampling				1132.50			
		Recovery				1132.50			
		Recovery				1132.50			
		Recovery				1132.50			
		Recovery				1132.50			

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Monitoring Well: MW-50 (dg)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1100.39
Well Depth	22.45
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1100.39
Well Depth	22.60
Top Screen	1082.94
Bottom Screen	1078.11
Bottom Well	1078.11
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	17.00
Top sample	1083.39
Bottom sample	1079.39
Turbidity(NTU)	2.47

Date	Time	Water Level	Water Elevation	Notes
10/10/2024	11:14	12.57	1087.82	

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	2.47
Appendix I	Metals	150	150	2.47
Appendix I	VOC	240	240	2.47
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	BEHP	946		
Supplemental				
Total		400	0	

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

TOC	1100.39	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	22.45	Before purging	10/10/2024	11:14	12.57	1087.82		0.0	
		After purging				1100.39			
		Top of Screen 1990				1082.94			
						4.88			feet above (+) or below (-) top screen
		Bottom of Well 1990				1078.11			
		Bottom of Well	10/10/2024		22.60	1077.79			
						-0.32			feet sedimentation
		Before Sampling				1100.39			
		Recovery				1100.39			
		Recovery				1100.39			
		Recovery				1100.39			
		Recovery				1100.39			

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Monitoring Well: MW-51 (ug)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1116.53
Well Depth	32.02
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	1116.53
Well Depth	32.20
Top Screen	1094.51
Bottom Screen	1084.70
Bottom Well	1084.70
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	26.00
Top sample	1090.53
Bottom sample	1086.53
Turbidity(NTU)	57.97

Date	Time	Water Level	Water Elevation	Notes
10/10/2024	12:06	12.83	1103.7	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte	Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All Field NTU	10	10		57.97
Appendix I Metals	150	150		57.97
Appendix I VOC	240	240		57.97
Full Appendix II 10 more containers	5620			
TSS TSS	1000			
Supplemental BEHP	946			
Supplemental				
Total		400	0	

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

TOC	1116.53	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	32.02	Before purging	10/10/2024	12:06	12.83	1103.70		0.0	
		After purging				1116.53			
		Top of Screen 1990				1094.51			
						9.19			feet above (+) or below (-) top screen
		Bottom of Well 1990				1084.70			
		Bottom of Well	10/10/2024		32.20	1084.33			
						-0.37			feet sedimentation
		Before Sampling				1116.53			
		Recovery				1116.53			
		Recovery				1116.53			
		Recovery				1116.53			
		Recovery				1116.53			

IDNR Form 542-1322

Monitoring Well: MW-31R (dg)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	1161.26
Well Depth	32.02
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	1161.26
Well Depth	32.00
Top Screen	1139.22
Bottom Screen	1128.91
Bottom Well	1128.91
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	26.00
Top sample	1135.26
Bottom sample	1131.26
Turbidity(NTU)	3.10

Date	Time	Water Level	Water Elevation	Notes
10/10/2024	12:35	23.1	1138.16	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte	Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10	3.10
Appendix I	Metals	150	150	3.10
Appendix I	VOC	240	240	3.10
Full Appendix II	10 more containers	5620		
TSS	TSS	1000		
Supplemental	BEHP	946		
Supplemental				
Total		400	0	

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

TOC	1161.26	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	32.02	Before purging	10/10/2024	12:35	23.10	1138.16		0.0	
		After purging				1161.26			
		Top of Screen 1990				1139.22			
						-1.06			feet above (+) or below (-) top screen
		Bottom of Well 1990				1128.91			
		Bottom of Well	10/10/2024		32.00	1129.26			
						0.35			feet sedimentation
		Before Sampling				1161.26			
		Recovery				1161.26			
		Recovery				1161.26			
		Recovery				1161.26			
		Recovery				1161.26			

**RURAL IOWA SANITARY LANDFILL
PERMIT # 42-SDP-1-72P**

10/10/2024

Sampled by: T. Whipple

Weather conditions: : sunny, breezy, 50-80 degrees

IDNR Form 542-1324

Date	Time	Type	Flowing	Quantity	Discolored	Odor	Litter
GU-1		groundwater diversion t	no	submerged	No	No	no
No GU in Oct 2022 per IDNR							Turbidity (NTU)

IDNR Form 542-1324

Date	Time	Type	Flowing	Quantity	Discolored	Odor	Litter
GU-2		groundwater diversion t	no	buried	No	No	no
No GU in Oct 2022 per IDNR							Turbidity (NTU)

IDNR Form 542-1324

Date	Time	Type	Flowing	Quantity	Discolored	Odor	Litter
GU-3	10/10/2024	11:01 groundwater diversion t	yes	40ml/25 sec	No	No	no
No GU in Oct 2022 per IDNR							Turbidity (NTU)
							6.27

IDNR Form 542-1324

Date	Time	Type	Flowing	Quantity	Discolored	Odor	Litter
PECS-1		detention outfall	dry		No	No	no
							Turbidity (NTU)

IDNR Form 542-1324

Date	Time	Type	Flowing	Quantity	Discolored	Odor	Litter
ACM Tile-1		groundwater tile	dry		No	No	no
							Turbidity (NTU)

Appendix B
Statistical Reports

APPENDIX B.1 –Spring Statistical Evaluation

GROUND WATER STATISTICS
FOR THE
RURAL IOWA SANITARY LANDFILL

First Semi-Annual Monitoring Event in 2024

Prepared for:
Rural Iowa Waste Management Association
20488 M Avenue
Eldora, Hardin County, IA

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

May 2024

INTRODUCTION

This report summarizes the results of the statistical analysis used to evaluate the ground water quality data obtained during the first semi-annual monitoring event in 2024 at the Rural Iowa Sanitary Landfill near Eldora in Hardin 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 Rural Iowa Sanitary 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 the Rural Iowa Sanitary Landfill includes sample points MW-36 (upgradient), MW-37 (upgradient), MW-39 (upgradient), MW-40 (upgradient), MW-47 (upgradient), GWD-1, GWD-2, MW-48A, MW-49A, MW-50, and MW-51. 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

Sample points MW-36, MW-37, MW-39, MW-40, MW-47, MW-48A, MW-49A, MW-50, and MW-51 were sampled on April 2, 2024 and analyzed for the constituents required by permit. The ground water data obtained during the first semi-annual monitoring event in 2024 are summarized in Attachment A.

STATISTICAL METHODOLOGIES FOR DETECTION MONITORING

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

Interwell Statistics: Upgradient versus Downgradient Comparisons

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

Results of the Interwell Statistics

The background data used in this statistical analysis includes the ground water data collected from ground water wells MW-36, MW-37, MW-39, MW-40, and MW-47 during the period from October 2014 through the current data. A summary of the background data from monitoring wells MW-36, MW-37, MW-39, MW-40, and MW-47, 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-48A, MW-49A, MW-50, and MW-51 compared to the site prediction limits. Prediction limit exceedances are flagged with asterisks. For the data obtained during the first semi-annual monitoring event in 2024, 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 2024

Well	Trace Metal Detected	Result, µg/L	Prediction Limit, µg/L	Prediction Limit Type	Verified/Awaiting Verification
MW-49A	Cobalt	19.9	12.4000	Nonparametric	Verified
	Nickel	49.4	31.6000	Nonparametric	Verified

The detection frequencies of the parameters in the up and down gradient monitoring wells are summarized in Table 3. Only barium was detected at a frequency greater than or equal to 50% in the upgradient wells so only this metal will be 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 3 standard deviation unit increases over background.

The past verified trace metal exceedance was 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, April 1989 (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% LCL for arsenic at MW-49A (26.065 µg/L) exceeds the GWPS of 10 µg/L.
 The 95% LCL for cobalt at MW-49A (19.961 µg/L) exceeds the GWPS of 2.1 µg/L.
 The 95% LCLs for the remainder of the metals exceedances are below the respective GWPS.

Volatile Organic Compounds

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

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

Well	VOC Detected	Result, µg/L	Reporting Limit, µg/L	Verified/ Awaiting Verification	Groundwater Standard, µg/L
MW-49A	Benzene	2.8	1	Verified	5 ^a
	Chloroethane	3.5	1	Verified	2800 ^b
	<i>cis</i> -1,2-Dichloroethene	3.6	1	Verified	70 ^a
	Vinyl chloride	2.9	1	Verified	2 ^a

a - USEPA MCL

b – Iowa Statewide Standard

Historical VOC detections are summarized in Attachment D. The verified VOC detections were evaluated against the ground water protection standards (GWPS) using confidence limits. The 95% lower confidence limit (LCL) for the mean of the historical data was used to evaluate whether the regulated unit is in compliance with the ground-water protection standards under 40 CFR 264. An exceedance is verified if the LCL is above the Regulatory GWPS.

The 95% LCLs for the verified VOCs at MW-49A are below the respective GWPS.

CONCLUSIONS

This report summarizes the statistical analyses used to evaluate the ground water data obtained during the first semi-annual monitoring event in 2024 at Rural Iowa Sanitary Landfill. Sample points MW-36, MW-37, MW-39, MW-40, MW-47, MW-48A, MW-49A, MW-50, and MW-51 were sampled on April 2, 2024 and analyzed for the parameters required by permit. The ground water data was compared to background using prediction limits (interwell). There are verified site prediction limit exceedances detected for cobalt at MW-49A and nickel at MW-49A. There are verified detections of benzene, chloroethane, *cis*-1,2-dichloroethene, and vinyl chloride at MW-49A. The VOCs detected did not exceed ground water quality standards.

Attachment A

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

Table 1

Analytical Data Summary for 4/2/2024

Constituents	Units	MW-36	MW-37	MW-39	MW-40	MW-47	MW-48A	MW-49A	MW-50	MW-51
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	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	<4.0	<4.0	<4.0	<4.0	182.0	17.1	29.9	<4.0	<4.0
Barium, total	ug/L	200.0	51.9	254.0	36.4	570.0	217.0	626.0	685.0	459.0
Benzene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.8	<1.0	<1.0
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	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.5	<1.0	<1.0
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	3.6	<1.0	<1.0
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	<.4	.6	<.4	.5	1.8	.9	19.9	<.4	<.4
Copper, total	ug/L	<4.0	<4.0	126.0	8.5	4.4	<4.0	5.3	5.2	<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	16.8	8.0	<4.0	49.4	<4.0	<4.0
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.9	<1.0	<1.0
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20

* - 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-36	07/08/2015	ND	2.0000	
Antimony, total	ug/L	MW-36	04/21/2016	ND	2.0000	
Antimony, total	ug/L	MW-36	10/17/2016	ND	2.0000	
Antimony, total	ug/L	MW-36	04/21/2017	ND	2.0000	
Antimony, total	ug/L	MW-36	10/16/2017	ND	2.0000	
Antimony, total	ug/L	MW-36	04/24/2018	ND	2.0000	
Antimony, total	ug/L	MW-36	10/25/2018	ND	2.0000	
Antimony, total	ug/L	MW-36	04/15/2019	ND	2.0000	
Antimony, total	ug/L	MW-36	10/07/2019	ND	2.0000	
Antimony, total	ug/L	MW-36	04/22/2020	ND	2.0000	
Antimony, total	ug/L	MW-36	10/02/2020	ND	2.0000	
Antimony, total	ug/L	MW-36	04/08/2021	ND	2.0000	
Antimony, total	ug/L	MW-36	10/29/2021	ND	2.0000	
Antimony, total	ug/L	MW-36	04/25/2022	ND	2.0000	
Antimony, total	ug/L	MW-36	10/17/2022	ND	2.0000	
Antimony, total	ug/L	MW-36	04/10/2023	ND	2.0000	
Antimony, total	ug/L	MW-36	10/27/2023	ND	2.0000	
Antimony, total	ug/L	MW-36	04/02/2024	ND	2.0000	
Arsenic, total	ug/L	MW-36	07/08/2015	ND	4.0000	
Arsenic, total	ug/L	MW-36	04/21/2016	ND	4.0000	
Arsenic, total	ug/L	MW-36	10/17/2016	ND	4.0000	
Arsenic, total	ug/L	MW-36	04/21/2017	ND	4.0000	
Arsenic, total	ug/L	MW-36	10/16/2017	ND	4.0000	
Arsenic, total	ug/L	MW-36	04/24/2018	ND	4.0000	
Arsenic, total	ug/L	MW-36	10/25/2018	ND	4.0000	
Arsenic, total	ug/L	MW-36	04/15/2019	ND	4.0000	
Arsenic, total	ug/L	MW-36	10/07/2019	ND	4.0000	
Arsenic, total	ug/L	MW-36	04/22/2020	ND	4.0000	
Arsenic, total	ug/L	MW-36	10/02/2020	ND	4.0000	
Arsenic, total	ug/L	MW-36	04/08/2021	ND	4.0000	
Arsenic, total	ug/L	MW-36	10/29/2021	ND	4.0000	
Arsenic, total	ug/L	MW-36	04/25/2022	ND	4.0000	
Arsenic, total	ug/L	MW-36	10/17/2022	ND	4.0000	
Arsenic, total	ug/L	MW-36	04/10/2023	ND	4.0000	
Arsenic, total	ug/L	MW-36	10/27/2023	ND	4.0000	
Arsenic, total	ug/L	MW-36	04/02/2024	ND	4.0000	
Barium, total	ug/L	MW-36	07/08/2015		366.0000	
Barium, total	ug/L	MW-36	04/21/2016		184.0000	
Barium, total	ug/L	MW-36	10/17/2016		162.0000	
Barium, total	ug/L	MW-36	04/21/2017		158.0000	
Barium, total	ug/L	MW-36	10/16/2017		233.0000	
Barium, total	ug/L	MW-36	04/24/2018		230.0000	
Barium, total	ug/L	MW-36	10/25/2018		184.0000	
Barium, total	ug/L	MW-36	04/15/2019		174.0000	
Barium, total	ug/L	MW-36	10/07/2019		235.0000	
Barium, total	ug/L	MW-36	04/22/2020		348.0000	
Barium, total	ug/L	MW-36	10/02/2020		176.0000	
Barium, total	ug/L	MW-36	04/08/2021		173.0000	
Barium, total	ug/L	MW-36	10/29/2021		203.0000	
Barium, total	ug/L	MW-36	04/25/2022		267.0000	
Barium, total	ug/L	MW-36	10/17/2022		219.0000	
Barium, total	ug/L	MW-36	04/10/2023		260.0000	
Barium, total	ug/L	MW-36	10/27/2023		258.0000	
Barium, total	ug/L	MW-36	04/02/2024		200.0000	
Beryllium, total	ug/L	MW-36	07/08/2015	ND	4.0000	
Beryllium, total	ug/L	MW-36	04/21/2016	ND	4.0000	
Beryllium, total	ug/L	MW-36	10/17/2016	ND	4.0000	
Beryllium, total	ug/L	MW-36	04/21/2017	ND	4.0000	
Beryllium, total	ug/L	MW-36	10/16/2017	ND	4.0000	
Beryllium, total	ug/L	MW-36	04/24/2018	ND	4.0000	
Beryllium, total	ug/L	MW-36	10/25/2018	ND	4.0000	
Beryllium, total	ug/L	MW-36	04/15/2019	ND	4.0000	
Beryllium, total	ug/L	MW-36	10/07/2019	ND	4.0000	
Beryllium, total	ug/L	MW-36	04/22/2020	ND	4.0000	
Beryllium, total	ug/L	MW-36	10/02/2020	ND	4.0000	
Beryllium, total	ug/L	MW-36	04/08/2021	ND	4.0000	
Beryllium, total	ug/L	MW-36	10/29/2021	ND	4.0000	
Beryllium, total	ug/L	MW-36	04/25/2022	ND	4.0000	
Beryllium, total	ug/L	MW-36	10/17/2022	ND	4.0000	
Beryllium, total	ug/L	MW-36	04/10/2023	ND	4.0000	
Beryllium, total	ug/L	MW-36	10/27/2023	ND	4.0000	
Beryllium, total	ug/L	MW-36	04/02/2024	ND	4.0000	
Cadmium, total	ug/L	MW-36	07/08/2015	ND	0.8000	
Cadmium, total	ug/L	MW-36	04/21/2016	ND	0.8000	

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Cadmium, total	ug/L	MW-36	10/17/2016	ND	0.8000		
Cadmium, total	ug/L	MW-36	04/21/2017	ND	0.8000		
Cadmium, total	ug/L	MW-36	10/16/2017	ND	0.8000		
Cadmium, total	ug/L	MW-36	04/24/2018	ND	0.8000		
Cadmium, total	ug/L	MW-36	10/25/2018	ND	0.8000		
Cadmium, total	ug/L	MW-36	04/15/2019	ND	0.8000		
Cadmium, total	ug/L	MW-36	10/07/2019	ND	0.8000		
Cadmium, total	ug/L	MW-36	04/22/2020	ND	0.8000		
Cadmium, total	ug/L	MW-36	10/02/2020	ND	0.8000		
Cadmium, total	ug/L	MW-36	04/08/2021	ND	0.8000		
Cadmium, total	ug/L	MW-36	10/29/2021	ND	0.8000		
Cadmium, total	ug/L	MW-36	04/25/2022	ND	0.8000		
Cadmium, total	ug/L	MW-36	10/17/2022	ND	0.8000		
Cadmium, total	ug/L	MW-36	04/10/2023	ND	0.8000		
Cadmium, total	ug/L	MW-36	10/27/2023	ND	0.8000		
Cadmium, total	ug/L	MW-36	04/02/2024	ND	0.8000		
Chromium, total	ug/L	MW-36	07/08/2015	ND	8.0000		
Chromium, total	ug/L	MW-36	04/21/2016	ND	8.0000		
Chromium, total	ug/L	MW-36	10/17/2016	ND	8.0000		
Chromium, total	ug/L	MW-36	04/21/2017	ND	8.0000		
Chromium, total	ug/L	MW-36	10/16/2017	ND	8.0000		
Chromium, total	ug/L	MW-36	04/24/2018	ND	8.0000		
Chromium, total	ug/L	MW-36	10/25/2018	ND	8.0000		
Chromium, total	ug/L	MW-36	04/15/2019	ND	8.0000		
Chromium, total	ug/L	MW-36	10/07/2019	ND	8.0000		
Chromium, total	ug/L	MW-36	04/22/2020		8.0000		
Chromium, total	ug/L	MW-36	10/02/2020	ND	8.0000		
Chromium, total	ug/L	MW-36	04/08/2021	ND	8.0000		
Chromium, total	ug/L	MW-36	10/29/2021	ND	8.0000		
Chromium, total	ug/L	MW-36	04/25/2022	ND	8.0000		
Chromium, total	ug/L	MW-36	10/17/2022	ND	8.0000		
Chromium, total	ug/L	MW-36	04/10/2023	ND	8.0000		
Chromium, total	ug/L	MW-36	10/27/2023	ND	8.0000		
Chromium, total	ug/L	MW-36	04/02/2024	ND	8.0000		
Cobalt, total	ug/L	MW-36	07/08/2015		34.1000		*
Cobalt, total	ug/L	MW-36	04/21/2016		2.4000		
Cobalt, total	ug/L	MW-36	10/17/2016		0.8000		
Cobalt, total	ug/L	MW-36	04/21/2017		2.1000		
Cobalt, total	ug/L	MW-36	10/16/2017		2.0000		
Cobalt, total	ug/L	MW-36	04/24/2018		3.9000		
Cobalt, total	ug/L	MW-36	10/25/2018		0.8000		
Cobalt, total	ug/L	MW-36	04/15/2019	ND	0.8000		
Cobalt, total	ug/L	MW-36	10/07/2019		1.3000		
Cobalt, total	ug/L	MW-36	04/22/2020		7.8000		
Cobalt, total	ug/L	MW-36	10/02/2020		0.4000		
Cobalt, total	ug/L	MW-36	04/08/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-36	10/29/2021		0.7000		
Cobalt, total	ug/L	MW-36	04/25/2022		4.7000		
Cobalt, total	ug/L	MW-36	10/17/2022		2.4000		
Cobalt, total	ug/L	MW-36	04/10/2023		1.4000		
Cobalt, total	ug/L	MW-36	10/27/2023		1.3000		
Cobalt, total	ug/L	MW-36	04/02/2024	ND	0.4000	0.8000	**
Copper, total	ug/L	MW-36	07/08/2015		6.7000		
Copper, total	ug/L	MW-36	04/21/2016	ND	4.0000		
Copper, total	ug/L	MW-36	10/17/2016	ND	4.0000		
Copper, total	ug/L	MW-36	04/21/2017	ND	4.0000		
Copper, total	ug/L	MW-36	10/16/2017	ND	4.0000		
Copper, total	ug/L	MW-36	04/24/2018		4.4000		
Copper, total	ug/L	MW-36	10/25/2018	ND	4.0000		
Copper, total	ug/L	MW-36	04/15/2019	ND	4.0000		
Copper, total	ug/L	MW-36	10/07/2019	ND	4.0000		
Copper, total	ug/L	MW-36	04/22/2020		11.3000		
Copper, total	ug/L	MW-36	10/02/2020	ND	4.0000		
Copper, total	ug/L	MW-36	04/08/2021	ND	4.0000		
Copper, total	ug/L	MW-36	10/29/2021	ND	4.0000		
Copper, total	ug/L	MW-36	04/25/2022		6.8000		
Copper, total	ug/L	MW-36	10/17/2022	ND	4.0000		
Copper, total	ug/L	MW-36	04/10/2023	ND	4.0000		
Copper, total	ug/L	MW-36	10/27/2023	ND	4.0000		
Copper, total	ug/L	MW-36	04/02/2024	ND	4.0000		
Lead, total	ug/L	MW-36	07/08/2015	ND	4.0000		
Lead, total	ug/L	MW-36	04/21/2016	ND	4.0000		
Lead, total	ug/L	MW-36	10/17/2016	ND	4.0000		
Lead, total	ug/L	MW-36	04/21/2017	ND	4.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Lead, total	ug/L	MW-36	10/16/2017	ND	4.0000		
Lead, total	ug/L	MW-36	04/24/2018		4.2000		
Lead, total	ug/L	MW-36	10/25/2018	ND	4.0000		
Lead, total	ug/L	MW-36	04/15/2019	ND	4.0000		
Lead, total	ug/L	MW-36	10/07/2019	ND	4.0000		
Lead, total	ug/L	MW-36	04/22/2020		4.3000		
Lead, total	ug/L	MW-36	10/02/2020	ND	4.0000		
Lead, total	ug/L	MW-36	04/08/2021	ND	4.0000		
Lead, total	ug/L	MW-36	10/29/2021	ND	4.0000		
Lead, total	ug/L	MW-36	04/25/2022	ND	4.0000		
Lead, total	ug/L	MW-36	10/17/2022	ND	4.0000		
Lead, total	ug/L	MW-36	04/10/2023	ND	4.0000		
Lead, total	ug/L	MW-36	10/27/2023	ND	4.0000		
Lead, total	ug/L	MW-36	04/02/2024	ND	4.0000		
Nickel, total	ug/L	MW-36	07/08/2015		15.8000		
Nickel, total	ug/L	MW-36	04/21/2016	ND	4.0000		
Nickel, total	ug/L	MW-36	10/17/2016	ND	4.0000		
Nickel, total	ug/L	MW-36	04/21/2017		5.0000		
Nickel, total	ug/L	MW-36	10/16/2017		4.0000		
Nickel, total	ug/L	MW-36	04/24/2018		9.1000		
Nickel, total	ug/L	MW-36	10/25/2018	ND	4.0000		
Nickel, total	ug/L	MW-36	04/15/2019	ND	4.0000		
Nickel, total	ug/L	MW-36	10/07/2019	ND	4.0000		
Nickel, total	ug/L	MW-36	04/22/2020		19.6000		
Nickel, total	ug/L	MW-36	10/02/2020	ND	4.0000		
Nickel, total	ug/L	MW-36	04/08/2021	ND	4.0000		
Nickel, total	ug/L	MW-36	10/29/2021	ND	4.0000		
Nickel, total	ug/L	MW-36	04/25/2022		11.1000		
Nickel, total	ug/L	MW-36	10/17/2022	ND	4.0000		
Nickel, total	ug/L	MW-36	04/10/2023	ND	4.0000		
Nickel, total	ug/L	MW-36	10/27/2023	ND	4.0000		
Nickel, total	ug/L	MW-36	04/02/2024	ND	4.0000		
Selenium, total	ug/L	MW-36	07/08/2015	ND	4.0000		
Selenium, total	ug/L	MW-36	04/21/2016	ND	4.0000		
Selenium, total	ug/L	MW-36	10/17/2016	ND	4.0000		
Selenium, total	ug/L	MW-36	04/21/2017	ND	4.0000		
Selenium, total	ug/L	MW-36	10/16/2017	ND	4.0000		
Selenium, total	ug/L	MW-36	04/24/2018	ND	4.0000		
Selenium, total	ug/L	MW-36	10/25/2018	ND	4.0000		
Selenium, total	ug/L	MW-36	04/15/2019	ND	4.0000		
Selenium, total	ug/L	MW-36	10/07/2019	ND	4.0000		
Selenium, total	ug/L	MW-36	04/22/2020	ND	4.0000		
Selenium, total	ug/L	MW-36	10/02/2020	ND	4.0000		
Selenium, total	ug/L	MW-36	04/08/2021	ND	4.0000		
Selenium, total	ug/L	MW-36	10/29/2021	ND	4.0000		
Selenium, total	ug/L	MW-36	04/25/2022	ND	4.0000		
Selenium, total	ug/L	MW-36	10/17/2022	ND	4.0000		
Selenium, total	ug/L	MW-36	04/10/2023	ND	4.0000		
Selenium, total	ug/L	MW-36	10/27/2023	ND	4.0000		
Selenium, total	ug/L	MW-36	04/02/2024	ND	4.0000		
Silver, total	ug/L	MW-36	07/08/2015	ND	4.0000		
Silver, total	ug/L	MW-36	04/21/2016	ND	4.0000		
Silver, total	ug/L	MW-36	10/17/2016	ND	4.0000		
Silver, total	ug/L	MW-36	04/21/2017	ND	4.0000		
Silver, total	ug/L	MW-36	10/16/2017	ND	4.0000		
Silver, total	ug/L	MW-36	04/24/2018	ND	4.0000		
Silver, total	ug/L	MW-36	10/25/2018	ND	4.0000		
Silver, total	ug/L	MW-36	04/15/2019	ND	4.0000		
Silver, total	ug/L	MW-36	10/07/2019	ND	4.0000		
Silver, total	ug/L	MW-36	04/22/2020	ND	4.0000		
Silver, total	ug/L	MW-36	10/02/2020	ND	4.0000		
Silver, total	ug/L	MW-36	04/08/2021	ND	4.0000		
Silver, total	ug/L	MW-36	10/29/2021	ND	4.0000		
Silver, total	ug/L	MW-36	04/25/2022	ND	4.0000		
Silver, total	ug/L	MW-36	10/17/2022	ND	4.0000		
Silver, total	ug/L	MW-36	04/10/2023	ND	4.0000		
Silver, total	ug/L	MW-36	10/27/2023	ND	4.0000		
Silver, total	ug/L	MW-36	04/02/2024	ND	4.0000		
Thallium, total	ug/L	MW-36	07/08/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-36	04/21/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-36	10/17/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-36	04/21/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-36	10/16/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-36	04/24/2018	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-36	10/25/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-36	04/15/2019	ND	2.0000		
Thallium, total	ug/L	MW-36	10/07/2019	ND	2.0000		
Thallium, total	ug/L	MW-36	04/22/2020	ND	2.0000		
Thallium, total	ug/L	MW-36	10/02/2020	ND	2.0000		
Thallium, total	ug/L	MW-36	04/08/2021	ND	2.0000		
Thallium, total	ug/L	MW-36	10/29/2021	ND	2.0000		
Thallium, total	ug/L	MW-36	04/25/2022	ND	2.0000		
Thallium, total	ug/L	MW-36	10/17/2022	ND	2.0000		
Thallium, total	ug/L	MW-36	04/10/2023	ND	2.0000		
Thallium, total	ug/L	MW-36	10/27/2023	ND	2.0000		
Thallium, total	ug/L	MW-36	04/02/2024	ND	2.0000		
Vanadium, total	ug/L	MW-36	07/08/2015	ND	20.0000		
Vanadium, total	ug/L	MW-36	04/21/2016	ND	20.0000		
Vanadium, total	ug/L	MW-36	10/17/2016	ND	20.0000		
Vanadium, total	ug/L	MW-36	04/21/2017	ND	20.0000		
Vanadium, total	ug/L	MW-36	10/16/2017	ND	20.0000		
Vanadium, total	ug/L	MW-36	04/24/2018	ND	20.0000		
Vanadium, total	ug/L	MW-36	10/25/2018	ND	20.0000		
Vanadium, total	ug/L	MW-36	04/15/2019	ND	20.0000		
Vanadium, total	ug/L	MW-36	10/07/2019	ND	20.0000		
Vanadium, total	ug/L	MW-36	04/22/2020	ND	20.0000		
Vanadium, total	ug/L	MW-36	10/02/2020	ND	20.0000		
Vanadium, total	ug/L	MW-36	04/08/2021	ND	20.0000		
Vanadium, total	ug/L	MW-36	10/29/2021	ND	20.0000		
Vanadium, total	ug/L	MW-36	04/25/2022	ND	20.0000		
Vanadium, total	ug/L	MW-36	10/17/2022	ND	20.0000		
Vanadium, total	ug/L	MW-36	04/10/2023	ND	20.0000		
Vanadium, total	ug/L	MW-36	10/27/2023	ND	20.0000		
Vanadium, total	ug/L	MW-36	04/02/2024	ND	20.0000		
Zinc, total	ug/L	MW-36	07/08/2015		13.1000		
Zinc, total	ug/L	MW-36	04/21/2016	ND	20.0000		
Zinc, total	ug/L	MW-36	10/17/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-36	04/21/2017		9.0000		
Zinc, total	ug/L	MW-36	10/16/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-36	04/24/2018		10.8000		
Zinc, total	ug/L	MW-36	10/25/2018	ND	20.0000		
Zinc, total	ug/L	MW-36	04/15/2019	ND	20.0000		
Zinc, total	ug/L	MW-36	10/07/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-36	04/22/2020		26.8000		
Zinc, total	ug/L	MW-36	10/02/2020	ND	20.0000		
Zinc, total	ug/L	MW-36	04/08/2021	ND	20.0000		
Zinc, total	ug/L	MW-36	10/29/2021	ND	20.0000		
Zinc, total	ug/L	MW-36	04/25/2022	ND	20.0000		
Zinc, total	ug/L	MW-36	10/17/2022	ND	20.0000		
Zinc, total	ug/L	MW-36	04/10/2023	ND	20.0000		
Zinc, total	ug/L	MW-36	10/27/2023	ND	20.0000		
Zinc, total	ug/L	MW-36	04/02/2024	ND	20.0000		
Antimony, total	ug/L	MW-37	10/23/2014	ND	2.0000		
Antimony, total	ug/L	MW-37	01/08/2015	ND	2.0000		
Antimony, total	ug/L	MW-37	04/01/2015	ND	2.0000		
Antimony, total	ug/L	MW-37	07/08/2015	ND	2.0000		
Antimony, total	ug/L	MW-37	11/05/2015	ND	2.0000		
Antimony, total	ug/L	MW-37	04/21/2016	ND	2.0000		
Antimony, total	ug/L	MW-37	10/17/2016	ND	2.0000		
Antimony, total	ug/L	MW-37	04/21/2017	ND	2.0000		
Antimony, total	ug/L	MW-37	10/16/2017	ND	2.0000		
Antimony, total	ug/L	MW-37	04/24/2018	ND	2.0000		
Antimony, total	ug/L	MW-37	10/25/2018	ND	2.0000		
Antimony, total	ug/L	MW-37	04/15/2019	ND	2.0000		
Antimony, total	ug/L	MW-37	10/07/2019	ND	2.0000		
Antimony, total	ug/L	MW-37	04/22/2020	ND	2.0000		
Antimony, total	ug/L	MW-37	10/02/2020	ND	2.0000		
Antimony, total	ug/L	MW-37	04/08/2021	ND	2.0000		
Antimony, total	ug/L	MW-37	10/29/2021	ND	2.0000		
Antimony, total	ug/L	MW-37	04/25/2022	ND	2.0000		
Antimony, total	ug/L	MW-37	10/17/2022	ND	2.0000		
Antimony, total	ug/L	MW-37	04/10/2023	ND	2.0000		
Antimony, total	ug/L	MW-37	10/27/2023	ND	2.0000		
Antimony, total	ug/L	MW-37	04/02/2024	ND	2.0000		
Arsenic, total	ug/L	MW-37	10/23/2014	ND	4.0000		
Arsenic, total	ug/L	MW-37	01/08/2015	ND	4.0000		
Arsenic, total	ug/L	MW-37	04/01/2015	ND	4.0000		
Arsenic, total	ug/L	MW-37	07/08/2015	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
Arsenic, total	ug/L	MW-37	11/05/2015	ND	4.0000	
Arsenic, total	ug/L	MW-37	04/21/2016	ND	4.0000	
Arsenic, total	ug/L	MW-37	10/17/2016	ND	4.0000	
Arsenic, total	ug/L	MW-37	04/21/2017	ND	4.0000	
Arsenic, total	ug/L	MW-37	10/16/2017	ND	4.0000	
Arsenic, total	ug/L	MW-37	04/24/2018	ND	4.0000	
Arsenic, total	ug/L	MW-37	10/25/2018	ND	4.0000	
Arsenic, total	ug/L	MW-37	04/15/2019	ND	4.0000	
Arsenic, total	ug/L	MW-37	10/07/2019	ND	4.0000	
Arsenic, total	ug/L	MW-37	04/22/2020	ND	4.0000	
Arsenic, total	ug/L	MW-37	10/02/2020	ND	4.0000	
Arsenic, total	ug/L	MW-37	04/08/2021	ND	4.0000	
Arsenic, total	ug/L	MW-37	10/29/2021	ND	4.0000	
Arsenic, total	ug/L	MW-37	04/25/2022	ND	4.0000	
Arsenic, total	ug/L	MW-37	10/17/2022	ND	4.0000	
Arsenic, total	ug/L	MW-37	04/10/2023	ND	4.0000	
Arsenic, total	ug/L	MW-37	10/27/2023		11.6000	
Arsenic, total	ug/L	MW-37	04/02/2024	ND	4.0000	
Barium, total	ug/L	MW-37	10/23/2014		216.0000	
Barium, total	ug/L	MW-37	01/08/2015		169.0000	
Barium, total	ug/L	MW-37	04/01/2015		185.0000	
Barium, total	ug/L	MW-37	07/08/2015		141.0000	
Barium, total	ug/L	MW-37	11/05/2015		175.0000	
Barium, total	ug/L	MW-37	04/21/2016		143.0000	
Barium, total	ug/L	MW-37	10/17/2016		154.0000	
Barium, total	ug/L	MW-37	04/21/2017		163.0000	
Barium, total	ug/L	MW-37	10/16/2017		178.0000	
Barium, total	ug/L	MW-37	04/24/2018		142.0000	
Barium, total	ug/L	MW-37	10/25/2018		91.5000	
Barium, total	ug/L	MW-37	04/15/2019		82.0000	
Barium, total	ug/L	MW-37	10/07/2019		102.0000	
Barium, total	ug/L	MW-37	04/22/2020		78.1000	
Barium, total	ug/L	MW-37	10/02/2020		87.9000	
Barium, total	ug/L	MW-37	04/08/2021		51.5000	
Barium, total	ug/L	MW-37	10/29/2021		71.0000	
Barium, total	ug/L	MW-37	04/25/2022		57.0000	
Barium, total	ug/L	MW-37	10/17/2022		75.8000	
Barium, total	ug/L	MW-37	04/10/2023		31.4000	
Barium, total	ug/L	MW-37	10/27/2023		107.0000	
Barium, total	ug/L	MW-37	04/02/2024		51.9000	
Beryllium, total	ug/L	MW-37	10/23/2014	ND	4.0000	
Beryllium, total	ug/L	MW-37	01/08/2015	ND	4.0000	
Beryllium, total	ug/L	MW-37	04/01/2015	ND	4.0000	
Beryllium, total	ug/L	MW-37	07/08/2015	ND	4.0000	
Beryllium, total	ug/L	MW-37	11/05/2015	ND	4.0000	
Beryllium, total	ug/L	MW-37	04/21/2016	ND	4.0000	
Beryllium, total	ug/L	MW-37	10/17/2016	ND	4.0000	
Beryllium, total	ug/L	MW-37	04/21/2017	ND	4.0000	
Beryllium, total	ug/L	MW-37	10/16/2017	ND	4.0000	
Beryllium, total	ug/L	MW-37	04/24/2018	ND	4.0000	
Beryllium, total	ug/L	MW-37	10/25/2018	ND	4.0000	
Beryllium, total	ug/L	MW-37	04/15/2019	ND	4.0000	
Beryllium, total	ug/L	MW-37	10/07/2019	ND	4.0000	
Beryllium, total	ug/L	MW-37	04/22/2020	ND	4.0000	
Beryllium, total	ug/L	MW-37	10/02/2020	ND	4.0000	
Beryllium, total	ug/L	MW-37	04/08/2021	ND	4.0000	
Beryllium, total	ug/L	MW-37	10/29/2021	ND	4.0000	
Beryllium, total	ug/L	MW-37	04/25/2022	ND	4.0000	
Beryllium, total	ug/L	MW-37	10/17/2022	ND	4.0000	
Beryllium, total	ug/L	MW-37	04/10/2023	ND	4.0000	
Beryllium, total	ug/L	MW-37	10/27/2023	ND	4.0000	
Beryllium, total	ug/L	MW-37	04/02/2024	ND	4.0000	
Cadmium, total	ug/L	MW-37	10/23/2014	ND	0.8000	
Cadmium, total	ug/L	MW-37	01/08/2015	ND	0.8000	
Cadmium, total	ug/L	MW-37	04/01/2015	ND	0.8000	
Cadmium, total	ug/L	MW-37	07/08/2015	ND	0.8000	
Cadmium, total	ug/L	MW-37	11/05/2015	ND	0.8000	
Cadmium, total	ug/L	MW-37	04/21/2016	ND	0.8000	
Cadmium, total	ug/L	MW-37	10/17/2016	ND	0.8000	
Cadmium, total	ug/L	MW-37	04/21/2017	ND	0.8000	
Cadmium, total	ug/L	MW-37	10/16/2017	ND	0.8000	
Cadmium, total	ug/L	MW-37	04/24/2018	ND	0.8000	
Cadmium, total	ug/L	MW-37	10/25/2018	ND	0.8000	
Cadmium, total	ug/L	MW-37	04/15/2019	ND	0.8000	

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Cadmium, total	ug/L	MW-37	10/07/2019	ND	0.8000		
Cadmium, total	ug/L	MW-37	04/22/2020	ND	0.8000		
Cadmium, total	ug/L	MW-37	10/02/2020	ND	0.8000		
Cadmium, total	ug/L	MW-37	04/08/2021	ND	0.8000		
Cadmium, total	ug/L	MW-37	10/29/2021	ND	0.8000		
Cadmium, total	ug/L	MW-37	04/25/2022	ND	0.8000		
Cadmium, total	ug/L	MW-37	10/17/2022	ND	0.8000		
Cadmium, total	ug/L	MW-37	04/10/2023	ND	0.8000		
Cadmium, total	ug/L	MW-37	10/27/2023	ND	0.8000		
Cadmium, total	ug/L	MW-37	04/02/2024	ND	0.8000		
Chromium, total	ug/L	MW-37	10/23/2014	ND	8.0000		
Chromium, total	ug/L	MW-37	01/08/2015	ND	8.0000		
Chromium, total	ug/L	MW-37	04/01/2015	ND	8.0000		
Chromium, total	ug/L	MW-37	07/08/2015	ND	8.0000		
Chromium, total	ug/L	MW-37	11/05/2015	ND	8.0000		
Chromium, total	ug/L	MW-37	04/21/2016	ND	8.0000		
Chromium, total	ug/L	MW-37	10/17/2016	ND	8.0000		
Chromium, total	ug/L	MW-37	04/21/2017		20.3000		
Chromium, total	ug/L	MW-37	10/16/2017	ND	8.0000		
Chromium, total	ug/L	MW-37	04/24/2018	ND	8.0000		
Chromium, total	ug/L	MW-37	10/25/2018	ND	8.0000		
Chromium, total	ug/L	MW-37	04/15/2019	ND	8.0000		
Chromium, total	ug/L	MW-37	10/07/2019	ND	8.0000		
Chromium, total	ug/L	MW-37	04/22/2020	ND	8.0000		
Chromium, total	ug/L	MW-37	10/02/2020	ND	8.0000		
Chromium, total	ug/L	MW-37	04/08/2021	ND	8.0000		
Chromium, total	ug/L	MW-37	10/29/2021	ND	8.0000		
Chromium, total	ug/L	MW-37	04/25/2022	ND	8.0000		
Chromium, total	ug/L	MW-37	10/17/2022	ND	8.0000		
Chromium, total	ug/L	MW-37	04/10/2023	ND	8.0000		
Chromium, total	ug/L	MW-37	10/27/2023	ND	8.0000		
Chromium, total	ug/L	MW-37	04/02/2024	ND	8.0000		
Cobalt, total	ug/L	MW-37	10/23/2014	ND	0.8000		
Cobalt, total	ug/L	MW-37	01/08/2015	ND	0.8000		
Cobalt, total	ug/L	MW-37	04/01/2015	ND	0.8000		
Cobalt, total	ug/L	MW-37	07/08/2015	ND	0.8000		
Cobalt, total	ug/L	MW-37	11/05/2015	ND	0.8000		
Cobalt, total	ug/L	MW-37	04/21/2016	ND	0.8000		
Cobalt, total	ug/L	MW-37	10/17/2016	ND	0.8000		
Cobalt, total	ug/L	MW-37	04/21/2017	ND	0.8000		
Cobalt, total	ug/L	MW-37	10/16/2017	ND	0.8000		
Cobalt, total	ug/L	MW-37	04/24/2018	ND	0.8000		
Cobalt, total	ug/L	MW-37	10/25/2018	ND	0.8000		
Cobalt, total	ug/L	MW-37	04/15/2019	ND	0.8000		
Cobalt, total	ug/L	MW-37	10/07/2019	ND	0.8000		
Cobalt, total	ug/L	MW-37	04/22/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-37	10/02/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-37	04/08/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-37	10/29/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-37	04/25/2022		0.4000		
Cobalt, total	ug/L	MW-37	10/17/2022		2.2000		
Cobalt, total	ug/L	MW-37	04/10/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-37	10/27/2023		9.6000		*
Cobalt, total	ug/L	MW-37	04/02/2024		0.6000		
Copper, total	ug/L	MW-37	10/23/2014		4.1000		
Copper, total	ug/L	MW-37	01/08/2015	ND	4.0000		
Copper, total	ug/L	MW-37	04/01/2015	ND	4.0000		
Copper, total	ug/L	MW-37	07/08/2015	ND	4.0000		
Copper, total	ug/L	MW-37	11/05/2015	ND	4.0000		
Copper, total	ug/L	MW-37	04/21/2016	ND	4.0000		
Copper, total	ug/L	MW-37	10/17/2016	ND	4.0000		
Copper, total	ug/L	MW-37	04/21/2017	ND	4.0000		
Copper, total	ug/L	MW-37	10/16/2017	ND	4.0000		
Copper, total	ug/L	MW-37	04/24/2018	ND	4.0000		
Copper, total	ug/L	MW-37	10/25/2018		13.7000		*
Copper, total	ug/L	MW-37	04/15/2019	ND	4.0000		
Copper, total	ug/L	MW-37	10/07/2019	ND	4.0000		
Copper, total	ug/L	MW-37	04/22/2020	ND	4.0000		
Copper, total	ug/L	MW-37	10/02/2020	ND	4.0000		
Copper, total	ug/L	MW-37	04/08/2021	ND	4.0000		
Copper, total	ug/L	MW-37	10/29/2021	ND	4.0000		
Copper, total	ug/L	MW-37	04/25/2022	ND	4.0000		
Copper, total	ug/L	MW-37	10/17/2022	ND	4.0000		
Copper, total	ug/L	MW-37	04/10/2023	ND	4.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted
Copper, total	ug/L	MW-37	10/27/2023	ND	4.0000	
Copper, total	ug/L	MW-37	04/02/2024	ND	4.0000	
Lead, total	ug/L	MW-37	10/23/2014	ND	4.0000	
Lead, total	ug/L	MW-37	01/08/2015	ND	4.0000	
Lead, total	ug/L	MW-37	04/01/2015	ND	4.0000	
Lead, total	ug/L	MW-37	07/08/2015	ND	4.0000	
Lead, total	ug/L	MW-37	11/05/2015	ND	4.0000	
Lead, total	ug/L	MW-37	04/21/2016	ND	4.0000	
Lead, total	ug/L	MW-37	10/17/2016	ND	4.0000	
Lead, total	ug/L	MW-37	04/21/2017		22.7000	*
Lead, total	ug/L	MW-37	10/16/2017	ND	4.0000	
Lead, total	ug/L	MW-37	04/24/2018	ND	4.0000	
Lead, total	ug/L	MW-37	10/25/2018	ND	4.0000	
Lead, total	ug/L	MW-37	04/15/2019	ND	4.0000	
Lead, total	ug/L	MW-37	10/07/2019	ND	4.0000	
Lead, total	ug/L	MW-37	04/22/2020	ND	4.0000	
Lead, total	ug/L	MW-37	10/02/2020	ND	4.0000	
Lead, total	ug/L	MW-37	04/08/2021	ND	4.0000	
Lead, total	ug/L	MW-37	10/29/2021	ND	4.0000	
Lead, total	ug/L	MW-37	04/25/2022	ND	4.0000	
Lead, total	ug/L	MW-37	10/17/2022	ND	4.0000	
Lead, total	ug/L	MW-37	04/10/2023	ND	4.0000	
Lead, total	ug/L	MW-37	10/27/2023	ND	4.0000	
Lead, total	ug/L	MW-37	04/02/2024	ND	4.0000	
Nickel, total	ug/L	MW-37	10/23/2014	ND	4.0000	
Nickel, total	ug/L	MW-37	01/08/2015	ND	4.0000	
Nickel, total	ug/L	MW-37	04/01/2015	ND	4.0000	
Nickel, total	ug/L	MW-37	07/08/2015	ND	4.0000	
Nickel, total	ug/L	MW-37	11/05/2015	ND	4.0000	
Nickel, total	ug/L	MW-37	04/21/2016	ND	4.0000	
Nickel, total	ug/L	MW-37	10/17/2016	ND	4.0000	
Nickel, total	ug/L	MW-37	04/21/2017	ND	4.0000	
Nickel, total	ug/L	MW-37	10/16/2017	ND	4.0000	
Nickel, total	ug/L	MW-37	04/24/2018	ND	4.0000	
Nickel, total	ug/L	MW-37	10/25/2018	ND	4.0000	
Nickel, total	ug/L	MW-37	04/15/2019	ND	4.0000	
Nickel, total	ug/L	MW-37	10/07/2019	ND	4.0000	
Nickel, total	ug/L	MW-37	04/22/2020	ND	4.0000	
Nickel, total	ug/L	MW-37	10/02/2020	ND	4.0000	
Nickel, total	ug/L	MW-37	04/08/2021	ND	4.0000	
Nickel, total	ug/L	MW-37	10/29/2021	ND	4.0000	
Nickel, total	ug/L	MW-37	04/25/2022	ND	4.0000	
Nickel, total	ug/L	MW-37	10/17/2022	ND	4.0000	
Nickel, total	ug/L	MW-37	04/10/2023	ND	4.0000	
Nickel, total	ug/L	MW-37	10/27/2023		13.9000	*
Nickel, total	ug/L	MW-37	04/02/2024	ND	4.0000	
Selenium, total	ug/L	MW-37	10/23/2014	ND	4.0000	
Selenium, total	ug/L	MW-37	01/08/2015	ND	4.0000	
Selenium, total	ug/L	MW-37	04/01/2015	ND	4.0000	
Selenium, total	ug/L	MW-37	07/08/2015	ND	4.0000	
Selenium, total	ug/L	MW-37	11/05/2015	ND	4.0000	
Selenium, total	ug/L	MW-37	04/21/2016	ND	4.0000	
Selenium, total	ug/L	MW-37	10/17/2016	ND	4.0000	
Selenium, total	ug/L	MW-37	04/21/2017	ND	4.0000	
Selenium, total	ug/L	MW-37	10/16/2017	ND	4.0000	
Selenium, total	ug/L	MW-37	04/24/2018		8.9000	*
Selenium, total	ug/L	MW-37	10/25/2018	ND	4.0000	
Selenium, total	ug/L	MW-37	04/15/2019	ND	4.0000	
Selenium, total	ug/L	MW-37	10/07/2019	ND	4.0000	
Selenium, total	ug/L	MW-37	04/22/2020	ND	4.0000	
Selenium, total	ug/L	MW-37	10/02/2020	ND	4.0000	
Selenium, total	ug/L	MW-37	04/08/2021	ND	4.0000	
Selenium, total	ug/L	MW-37	10/29/2021	ND	4.0000	
Selenium, total	ug/L	MW-37	04/25/2022	ND	4.0000	
Selenium, total	ug/L	MW-37	10/17/2022	ND	4.0000	
Selenium, total	ug/L	MW-37	04/10/2023	ND	4.0000	
Selenium, total	ug/L	MW-37	10/27/2023	ND	4.0000	
Selenium, total	ug/L	MW-37	04/02/2024	ND	4.0000	
Silver, total	ug/L	MW-37	10/23/2014	ND	4.0000	
Silver, total	ug/L	MW-37	01/08/2015	ND	4.0000	
Silver, total	ug/L	MW-37	04/01/2015	ND	4.0000	
Silver, total	ug/L	MW-37	07/08/2015	ND	4.0000	
Silver, total	ug/L	MW-37	11/05/2015	ND	4.0000	
Silver, total	ug/L	MW-37	04/21/2016	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	
Silver, total	ug/L	MW-37	10/17/2016	ND	4.0000		
Silver, total	ug/L	MW-37	04/21/2017	ND	4.0000		
Silver, total	ug/L	MW-37	10/16/2017	ND	4.0000		
Silver, total	ug/L	MW-37	04/24/2018	ND	4.0000		
Silver, total	ug/L	MW-37	10/25/2018	ND	4.0000		
Silver, total	ug/L	MW-37	04/15/2019	ND	4.0000		
Silver, total	ug/L	MW-37	10/07/2019	ND	4.0000		
Silver, total	ug/L	MW-37	04/22/2020	ND	4.0000		
Silver, total	ug/L	MW-37	10/02/2020	ND	4.0000		
Silver, total	ug/L	MW-37	04/08/2021	ND	4.0000		
Silver, total	ug/L	MW-37	10/29/2021	ND	4.0000		
Silver, total	ug/L	MW-37	04/25/2022	ND	4.0000		
Silver, total	ug/L	MW-37	10/17/2022	ND	4.0000		
Silver, total	ug/L	MW-37	04/10/2023	ND	4.0000		
Silver, total	ug/L	MW-37	10/27/2023	ND	4.0000		
Silver, total	ug/L	MW-37	04/02/2024	ND	4.0000		
Thallium, total	ug/L	MW-37	10/23/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	01/08/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	04/01/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	07/08/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	11/05/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	04/21/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	10/17/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	04/21/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	10/16/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	04/24/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	10/25/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	04/15/2019	ND	2.0000		
Thallium, total	ug/L	MW-37	10/07/2019	ND	2.0000		
Thallium, total	ug/L	MW-37	04/22/2020	ND	2.0000		
Thallium, total	ug/L	MW-37	10/02/2020	ND	2.0000		
Thallium, total	ug/L	MW-37	04/08/2021	ND	2.0000		
Thallium, total	ug/L	MW-37	10/29/2021	ND	2.0000		
Thallium, total	ug/L	MW-37	04/25/2022	ND	2.0000		
Thallium, total	ug/L	MW-37	10/17/2022	ND	2.0000		
Thallium, total	ug/L	MW-37	04/10/2023	ND	2.0000		
Thallium, total	ug/L	MW-37	10/27/2023	ND	2.0000		
Thallium, total	ug/L	MW-37	04/02/2024	ND	2.0000		
Vanadium, total	ug/L	MW-37	10/23/2014	ND	20.0000		
Vanadium, total	ug/L	MW-37	01/08/2015	ND	20.0000		
Vanadium, total	ug/L	MW-37	04/01/2015	ND	20.0000		
Vanadium, total	ug/L	MW-37	07/08/2015	ND	20.0000		
Vanadium, total	ug/L	MW-37	11/05/2015	ND	20.0000		
Vanadium, total	ug/L	MW-37	04/21/2016	ND	20.0000		
Vanadium, total	ug/L	MW-37	10/17/2016	ND	20.0000		
Vanadium, total	ug/L	MW-37	04/21/2017	ND	20.0000		
Vanadium, total	ug/L	MW-37	10/16/2017	ND	20.0000		
Vanadium, total	ug/L	MW-37	04/24/2018	ND	20.0000		
Vanadium, total	ug/L	MW-37	10/25/2018	ND	20.0000		
Vanadium, total	ug/L	MW-37	04/15/2019	ND	20.0000		
Vanadium, total	ug/L	MW-37	10/07/2019	ND	20.0000		
Vanadium, total	ug/L	MW-37	04/22/2020	ND	20.0000		
Vanadium, total	ug/L	MW-37	10/02/2020	ND	20.0000		
Vanadium, total	ug/L	MW-37	04/08/2021	ND	20.0000		
Vanadium, total	ug/L	MW-37	10/29/2021	ND	20.0000		
Vanadium, total	ug/L	MW-37	04/25/2022	ND	20.0000		
Vanadium, total	ug/L	MW-37	10/17/2022	ND	20.0000		
Vanadium, total	ug/L	MW-37	04/10/2023	ND	20.0000		
Vanadium, total	ug/L	MW-37	10/27/2023	ND	20.0000		
Vanadium, total	ug/L	MW-37	04/02/2024	ND	20.0000		
Zinc, total	ug/L	MW-37	10/23/2014	ND	20.0000		
Zinc, total	ug/L	MW-37	01/08/2015		14.5000		
Zinc, total	ug/L	MW-37	04/01/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-37	07/08/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-37	11/05/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-37	04/21/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-37	10/17/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-37	04/21/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-37	10/16/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-37	04/24/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-37	10/25/2018	ND	20.0000		
Zinc, total	ug/L	MW-37	04/15/2019	ND	20.0000		
Zinc, total	ug/L	MW-37	10/07/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-37	04/22/2020	ND	20.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted
Zinc, total	ug/L	MW-37	10/02/2020	ND	20.0000	
Zinc, total	ug/L	MW-37	04/08/2021	ND	20.0000	
Zinc, total	ug/L	MW-37	10/29/2021	ND	20.0000	
Zinc, total	ug/L	MW-37	04/25/2022	ND	20.0000	
Zinc, total	ug/L	MW-37	10/17/2022	ND	20.0000	
Zinc, total	ug/L	MW-37	04/10/2023	ND	20.0000	
Zinc, total	ug/L	MW-37	10/27/2023		22.2000	
Zinc, total	ug/L	MW-37	04/02/2024	ND	20.0000	
Antimony, total	ug/L	MW-39	10/23/2014	ND	2.0000	
Antimony, total	ug/L	MW-39	01/08/2015	ND	2.0000	
Antimony, total	ug/L	MW-39	04/01/2015	ND	2.0000	
Antimony, total	ug/L	MW-39	07/08/2015	ND	2.0000	
Antimony, total	ug/L	MW-39	11/05/2015	ND	2.0000	
Antimony, total	ug/L	MW-39	04/21/2016	ND	2.0000	
Antimony, total	ug/L	MW-39	10/17/2016	ND	2.0000	
Antimony, total	ug/L	MW-39	04/21/2017	ND	2.0000	
Antimony, total	ug/L	MW-39	10/16/2017	ND	2.0000	
Antimony, total	ug/L	MW-39	04/24/2018	ND	2.0000	
Antimony, total	ug/L	MW-39	10/25/2018	ND	2.0000	
Antimony, total	ug/L	MW-39	04/15/2019	ND	2.0000	
Antimony, total	ug/L	MW-39	10/07/2019	ND	2.0000	
Antimony, total	ug/L	MW-39	04/22/2020	ND	2.0000	
Antimony, total	ug/L	MW-39	10/02/2020	ND	2.0000	
Antimony, total	ug/L	MW-39	04/08/2021	ND	2.0000	
Antimony, total	ug/L	MW-39	10/29/2021	ND	2.0000	
Antimony, total	ug/L	MW-39	04/25/2022	ND	2.0000	
Antimony, total	ug/L	MW-39	10/17/2022	ND	2.0000	
Antimony, total	ug/L	MW-39	04/10/2023	ND	2.0000	
Antimony, total	ug/L	MW-39	10/27/2023	ND	2.0000	
Antimony, total	ug/L	MW-39	04/02/2024	ND	2.0000	
Arsenic, total	ug/L	MW-39	10/23/2014	ND	4.0000	
Arsenic, total	ug/L	MW-39	01/08/2015	ND	4.0000	
Arsenic, total	ug/L	MW-39	04/01/2015	ND	4.0000	
Arsenic, total	ug/L	MW-39	07/08/2015	ND	4.0000	
Arsenic, total	ug/L	MW-39	11/05/2015	ND	4.0000	
Arsenic, total	ug/L	MW-39	04/21/2016	ND	4.0000	
Arsenic, total	ug/L	MW-39	10/17/2016	ND	4.0000	
Arsenic, total	ug/L	MW-39	04/21/2017	ND	4.0000	
Arsenic, total	ug/L	MW-39	10/16/2017	ND	4.0000	
Arsenic, total	ug/L	MW-39	04/24/2018	ND	4.0000	
Arsenic, total	ug/L	MW-39	10/25/2018	ND	4.0000	
Arsenic, total	ug/L	MW-39	04/15/2019	ND	4.0000	
Arsenic, total	ug/L	MW-39	10/07/2019	ND	4.0000	
Arsenic, total	ug/L	MW-39	04/22/2020	ND	4.0000	
Arsenic, total	ug/L	MW-39	10/02/2020	ND	4.0000	
Arsenic, total	ug/L	MW-39	04/08/2021	ND	4.0000	
Arsenic, total	ug/L	MW-39	10/29/2021	ND	4.0000	
Arsenic, total	ug/L	MW-39	04/25/2022	ND	4.0000	
Arsenic, total	ug/L	MW-39	10/17/2022	ND	4.0000	
Arsenic, total	ug/L	MW-39	04/10/2023	ND	4.0000	
Arsenic, total	ug/L	MW-39	10/27/2023	ND	4.0000	
Arsenic, total	ug/L	MW-39	04/02/2024	ND	4.0000	
Barium, total	ug/L	MW-39	10/23/2014		287.0000	
Barium, total	ug/L	MW-39	01/08/2015		309.0000	
Barium, total	ug/L	MW-39	04/01/2015		272.0000	
Barium, total	ug/L	MW-39	07/08/2015		249.0000	
Barium, total	ug/L	MW-39	11/05/2015		383.0000	
Barium, total	ug/L	MW-39	04/21/2016		266.0000	
Barium, total	ug/L	MW-39	10/17/2016		257.0000	
Barium, total	ug/L	MW-39	04/21/2017		253.0000	
Barium, total	ug/L	MW-39	10/16/2017		268.0000	
Barium, total	ug/L	MW-39	04/24/2018		273.0000	
Barium, total	ug/L	MW-39	10/25/2018		248.0000	
Barium, total	ug/L	MW-39	04/15/2019		251.0000	
Barium, total	ug/L	MW-39	10/07/2019		264.0000	
Barium, total	ug/L	MW-39	04/22/2020		323.0000	
Barium, total	ug/L	MW-39	10/02/2020		222.0000	
Barium, total	ug/L	MW-39	04/08/2021		230.0000	
Barium, total	ug/L	MW-39	10/29/2021		255.0000	
Barium, total	ug/L	MW-39	04/25/2022		232.0000	
Barium, total	ug/L	MW-39	10/17/2022		239.0000	
Barium, total	ug/L	MW-39	04/10/2023		238.0000	
Barium, total	ug/L	MW-39	10/27/2023		225.0000	
Barium, total	ug/L	MW-39	04/02/2024		254.0000	

* - 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-39	10/23/2014	ND	4.0000	
Beryllium, total	ug/L	MW-39	01/08/2015	ND	4.0000	
Beryllium, total	ug/L	MW-39	04/01/2015	ND	4.0000	
Beryllium, total	ug/L	MW-39	07/08/2015	ND	4.0000	
Beryllium, total	ug/L	MW-39	11/05/2015	ND	4.0000	
Beryllium, total	ug/L	MW-39	04/21/2016	ND	4.0000	
Beryllium, total	ug/L	MW-39	10/17/2016	ND	4.0000	
Beryllium, total	ug/L	MW-39	04/21/2017	ND	4.0000	
Beryllium, total	ug/L	MW-39	10/16/2017	ND	4.0000	
Beryllium, total	ug/L	MW-39	04/24/2018	ND	4.0000	
Beryllium, total	ug/L	MW-39	10/25/2018	ND	4.0000	
Beryllium, total	ug/L	MW-39	04/15/2019	ND	4.0000	
Beryllium, total	ug/L	MW-39	10/07/2019	ND	4.0000	
Beryllium, total	ug/L	MW-39	04/22/2020	ND	4.0000	
Beryllium, total	ug/L	MW-39	10/02/2020	ND	4.0000	
Beryllium, total	ug/L	MW-39	04/08/2021	ND	4.0000	
Beryllium, total	ug/L	MW-39	10/29/2021	ND	4.0000	
Beryllium, total	ug/L	MW-39	04/25/2022	ND	4.0000	
Beryllium, total	ug/L	MW-39	10/17/2022	ND	4.0000	
Beryllium, total	ug/L	MW-39	04/10/2023	ND	4.0000	
Beryllium, total	ug/L	MW-39	10/27/2023	ND	4.0000	
Beryllium, total	ug/L	MW-39	04/02/2024	ND	4.0000	
Cadmium, total	ug/L	MW-39	10/23/2014	ND	0.8000	
Cadmium, total	ug/L	MW-39	01/08/2015	ND	0.8000	
Cadmium, total	ug/L	MW-39	04/01/2015	ND	0.8000	
Cadmium, total	ug/L	MW-39	07/08/2015	ND	0.8000	
Cadmium, total	ug/L	MW-39	11/05/2015	ND	0.8000	
Cadmium, total	ug/L	MW-39	04/21/2016	ND	0.8000	
Cadmium, total	ug/L	MW-39	10/17/2016	ND	0.8000	
Cadmium, total	ug/L	MW-39	04/21/2017	ND	0.8000	
Cadmium, total	ug/L	MW-39	10/16/2017	ND	0.8000	
Cadmium, total	ug/L	MW-39	04/24/2018	ND	0.8000	
Cadmium, total	ug/L	MW-39	10/25/2018	ND	0.8000	
Cadmium, total	ug/L	MW-39	04/15/2019	ND	0.8000	
Cadmium, total	ug/L	MW-39	10/07/2019	ND	0.8000	
Cadmium, total	ug/L	MW-39	04/22/2020	ND	0.8000	
Cadmium, total	ug/L	MW-39	10/02/2020	ND	0.8000	
Cadmium, total	ug/L	MW-39	04/08/2021	ND	0.8000	
Cadmium, total	ug/L	MW-39	10/29/2021	ND	0.8000	
Cadmium, total	ug/L	MW-39	04/25/2022	ND	0.8000	
Cadmium, total	ug/L	MW-39	10/17/2022	ND	0.8000	
Cadmium, total	ug/L	MW-39	04/10/2023	ND	0.8000	
Cadmium, total	ug/L	MW-39	10/27/2023	ND	0.8000	
Cadmium, total	ug/L	MW-39	04/02/2024	ND	0.8000	
Chromium, total	ug/L	MW-39	10/23/2014	ND	8.0000	
Chromium, total	ug/L	MW-39	01/08/2015		29.6000	*
Chromium, total	ug/L	MW-39	04/01/2015	ND	8.0000	
Chromium, total	ug/L	MW-39	07/08/2015	ND	8.0000	
Chromium, total	ug/L	MW-39	11/05/2015	ND	8.0000	
Chromium, total	ug/L	MW-39	04/21/2016	ND	8.0000	
Chromium, total	ug/L	MW-39	10/17/2016	ND	8.0000	
Chromium, total	ug/L	MW-39	04/21/2017	ND	8.0000	
Chromium, total	ug/L	MW-39	10/16/2017	ND	8.0000	
Chromium, total	ug/L	MW-39	04/24/2018	ND	8.0000	
Chromium, total	ug/L	MW-39	10/25/2018	ND	8.0000	
Chromium, total	ug/L	MW-39	04/15/2019	ND	8.0000	
Chromium, total	ug/L	MW-39	10/07/2019	ND	8.0000	
Chromium, total	ug/L	MW-39	04/22/2020	ND	8.0000	
Chromium, total	ug/L	MW-39	10/02/2020	ND	8.0000	
Chromium, total	ug/L	MW-39	04/08/2021	ND	8.0000	
Chromium, total	ug/L	MW-39	10/29/2021	ND	8.0000	
Chromium, total	ug/L	MW-39	04/25/2022	ND	8.0000	
Chromium, total	ug/L	MW-39	10/17/2022	ND	8.0000	
Chromium, total	ug/L	MW-39	04/10/2023	ND	8.0000	
Chromium, total	ug/L	MW-39	10/27/2023	ND	8.0000	
Chromium, total	ug/L	MW-39	04/02/2024	ND	8.0000	
Cobalt, total	ug/L	MW-39	10/23/2014	ND	0.8000	
Cobalt, total	ug/L	MW-39	01/08/2015	ND	0.8000	
Cobalt, total	ug/L	MW-39	04/01/2015	ND	0.8000	
Cobalt, total	ug/L	MW-39	07/08/2015	ND	0.8000	
Cobalt, total	ug/L	MW-39	11/05/2015		3.3000	*
Cobalt, total	ug/L	MW-39	04/21/2016	ND	0.8000	
Cobalt, total	ug/L	MW-39	10/17/2016	ND	0.8000	
Cobalt, total	ug/L	MW-39	04/21/2017	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-39	10/16/2017	ND	0.8000		
Cobalt, total	ug/L	MW-39	04/24/2018	ND	0.8000		
Cobalt, total	ug/L	MW-39	10/25/2018	ND	0.8000		
Cobalt, total	ug/L	MW-39	04/15/2019	ND	0.8000		
Cobalt, total	ug/L	MW-39	10/07/2019	ND	0.8000		
Cobalt, total	ug/L	MW-39	04/22/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	10/02/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	04/08/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	10/29/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	04/25/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	10/17/2022		1.5000		
Cobalt, total	ug/L	MW-39	04/10/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	10/27/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	04/02/2024	ND	0.4000	0.8000	**
Copper, total	ug/L	MW-39	10/23/2014	ND	4.0000		
Copper, total	ug/L	MW-39	01/08/2015	ND	4.0000		
Copper, total	ug/L	MW-39	04/01/2015	ND	4.0000		
Copper, total	ug/L	MW-39	07/08/2015	ND	4.0000		
Copper, total	ug/L	MW-39	11/05/2015	ND	4.0000		
Copper, total	ug/L	MW-39	04/21/2016	ND	4.0000		
Copper, total	ug/L	MW-39	10/17/2016	ND	4.0000		
Copper, total	ug/L	MW-39	04/21/2017	ND	4.0000		
Copper, total	ug/L	MW-39	10/16/2017	ND	4.0000		
Copper, total	ug/L	MW-39	04/24/2018	ND	4.0000		
Copper, total	ug/L	MW-39	10/25/2018	ND	4.0000		
Copper, total	ug/L	MW-39	04/15/2019	ND	4.0000		
Copper, total	ug/L	MW-39	10/07/2019	ND	4.0000		
Copper, total	ug/L	MW-39	04/22/2020	ND	4.0000		
Copper, total	ug/L	MW-39	10/02/2020	ND	4.0000		
Copper, total	ug/L	MW-39	04/08/2021	ND	4.0000		
Copper, total	ug/L	MW-39	10/29/2021	ND	4.0000		
Copper, total	ug/L	MW-39	04/25/2022	ND	4.0000		
Copper, total	ug/L	MW-39	10/17/2022	ND	4.0000		
Copper, total	ug/L	MW-39	04/10/2023	ND	4.0000		
Copper, total	ug/L	MW-39	10/27/2023	ND	4.0000		
Copper, total	ug/L	MW-39	04/02/2024		126.0000		*
Lead, total	ug/L	MW-39	10/23/2014	ND	4.0000		
Lead, total	ug/L	MW-39	01/08/2015	ND	4.0000		
Lead, total	ug/L	MW-39	04/01/2015	ND	4.0000		
Lead, total	ug/L	MW-39	07/08/2015	ND	4.0000		
Lead, total	ug/L	MW-39	11/05/2015	ND	4.0000		
Lead, total	ug/L	MW-39	04/21/2016	ND	4.0000		
Lead, total	ug/L	MW-39	10/17/2016	ND	4.0000		
Lead, total	ug/L	MW-39	04/21/2017	ND	4.0000		
Lead, total	ug/L	MW-39	10/16/2017	ND	4.0000		
Lead, total	ug/L	MW-39	04/24/2018	ND	4.0000		
Lead, total	ug/L	MW-39	10/25/2018	ND	4.0000		
Lead, total	ug/L	MW-39	04/15/2019	ND	4.0000		
Lead, total	ug/L	MW-39	10/07/2019	ND	4.0000		
Lead, total	ug/L	MW-39	04/22/2020	ND	4.0000		
Lead, total	ug/L	MW-39	10/02/2020	ND	4.0000		
Lead, total	ug/L	MW-39	04/08/2021	ND	4.0000		
Lead, total	ug/L	MW-39	10/29/2021	ND	4.0000		
Lead, total	ug/L	MW-39	04/25/2022	ND	4.0000		
Lead, total	ug/L	MW-39	10/17/2022	ND	4.0000		
Lead, total	ug/L	MW-39	04/10/2023	ND	4.0000		
Lead, total	ug/L	MW-39	10/27/2023	ND	4.0000		
Lead, total	ug/L	MW-39	04/02/2024	ND	4.0000		
Nickel, total	ug/L	MW-39	10/23/2014	ND	4.0000		
Nickel, total	ug/L	MW-39	01/08/2015		20.5000		*
Nickel, total	ug/L	MW-39	04/01/2015	ND	4.0000		
Nickel, total	ug/L	MW-39	07/08/2015	ND	4.0000		
Nickel, total	ug/L	MW-39	11/05/2015		7.0000		
Nickel, total	ug/L	MW-39	04/21/2016	ND	4.0000		
Nickel, total	ug/L	MW-39	10/17/2016	ND	4.0000		
Nickel, total	ug/L	MW-39	04/21/2017	ND	4.0000		
Nickel, total	ug/L	MW-39	10/16/2017	ND	4.0000		
Nickel, total	ug/L	MW-39	04/24/2018	ND	4.0000		
Nickel, total	ug/L	MW-39	10/25/2018	ND	4.0000		
Nickel, total	ug/L	MW-39	04/15/2019	ND	4.0000		
Nickel, total	ug/L	MW-39	10/07/2019	ND	4.0000		
Nickel, total	ug/L	MW-39	04/22/2020	ND	4.0000		
Nickel, total	ug/L	MW-39	10/02/2020	ND	4.0000		
Nickel, total	ug/L	MW-39	04/08/2021	ND	4.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Nickel, total	ug/L	MW-39	10/29/2021	ND	4.0000		
Nickel, total	ug/L	MW-39	04/25/2022	ND	4.0000		
Nickel, total	ug/L	MW-39	10/17/2022	ND	4.0000		
Nickel, total	ug/L	MW-39	04/10/2023	ND	4.0000		
Nickel, total	ug/L	MW-39	10/27/2023	ND	4.0000		
Nickel, total	ug/L	MW-39	04/02/2024	ND	4.0000		
Selenium, total	ug/L	MW-39	10/23/2014	ND	4.0000		
Selenium, total	ug/L	MW-39	01/08/2015	ND	4.0000		
Selenium, total	ug/L	MW-39	04/01/2015	ND	4.0000		
Selenium, total	ug/L	MW-39	07/08/2015	ND	4.0000		
Selenium, total	ug/L	MW-39	11/05/2015	ND	4.0000		
Selenium, total	ug/L	MW-39	04/21/2016	ND	4.0000		
Selenium, total	ug/L	MW-39	10/17/2016	ND	4.0000		
Selenium, total	ug/L	MW-39	04/21/2017	ND	4.0000		
Selenium, total	ug/L	MW-39	10/16/2017	ND	4.0000		
Selenium, total	ug/L	MW-39	04/24/2018	ND	4.0000		
Selenium, total	ug/L	MW-39	10/25/2018	ND	4.0000		
Selenium, total	ug/L	MW-39	04/15/2019	ND	4.0000		
Selenium, total	ug/L	MW-39	10/07/2019	ND	4.0000		
Selenium, total	ug/L	MW-39	04/22/2020	ND	4.0000		
Selenium, total	ug/L	MW-39	10/02/2020	ND	4.0000		
Selenium, total	ug/L	MW-39	04/08/2021	ND	4.0000		
Selenium, total	ug/L	MW-39	10/29/2021	ND	4.0000		
Selenium, total	ug/L	MW-39	04/25/2022	ND	4.0000		
Selenium, total	ug/L	MW-39	10/17/2022	ND	4.0000		
Selenium, total	ug/L	MW-39	04/10/2023	ND	4.0000		
Selenium, total	ug/L	MW-39	10/27/2023	ND	4.0000		
Selenium, total	ug/L	MW-39	04/02/2024	ND	4.0000		
Silver, total	ug/L	MW-39	10/23/2014	ND	4.0000		
Silver, total	ug/L	MW-39	01/08/2015	ND	4.0000		
Silver, total	ug/L	MW-39	04/01/2015	ND	4.0000		
Silver, total	ug/L	MW-39	07/08/2015	ND	4.0000		
Silver, total	ug/L	MW-39	11/05/2015	ND	4.0000		
Silver, total	ug/L	MW-39	04/21/2016	ND	4.0000		
Silver, total	ug/L	MW-39	10/17/2016	ND	4.0000		
Silver, total	ug/L	MW-39	04/21/2017	ND	4.0000		
Silver, total	ug/L	MW-39	10/16/2017	ND	4.0000		
Silver, total	ug/L	MW-39	04/24/2018	ND	4.0000		
Silver, total	ug/L	MW-39	10/25/2018	ND	4.0000		
Silver, total	ug/L	MW-39	04/15/2019	ND	4.0000		
Silver, total	ug/L	MW-39	10/07/2019	ND	4.0000		
Silver, total	ug/L	MW-39	04/22/2020	ND	4.0000		
Silver, total	ug/L	MW-39	10/02/2020	ND	4.0000		
Silver, total	ug/L	MW-39	04/08/2021	ND	4.0000		
Silver, total	ug/L	MW-39	10/29/2021	ND	4.0000		
Silver, total	ug/L	MW-39	04/25/2022	ND	4.0000		
Silver, total	ug/L	MW-39	10/17/2022	ND	4.0000		
Silver, total	ug/L	MW-39	04/10/2023	ND	4.0000		
Silver, total	ug/L	MW-39	10/27/2023	ND	4.0000		
Silver, total	ug/L	MW-39	04/02/2024	ND	4.0000		
Thallium, total	ug/L	MW-39	10/23/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	01/08/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	04/01/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	07/08/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	11/05/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	04/21/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	10/17/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	04/21/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	10/16/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	04/24/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	10/25/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	04/15/2019	ND	2.0000		
Thallium, total	ug/L	MW-39	10/07/2019	ND	2.0000		
Thallium, total	ug/L	MW-39	04/22/2020	ND	2.0000		
Thallium, total	ug/L	MW-39	10/02/2020	ND	2.0000		
Thallium, total	ug/L	MW-39	04/08/2021	ND	2.0000		
Thallium, total	ug/L	MW-39	10/29/2021	ND	2.0000		
Thallium, total	ug/L	MW-39	04/25/2022	ND	2.0000		
Thallium, total	ug/L	MW-39	10/17/2022	ND	2.0000		
Thallium, total	ug/L	MW-39	04/10/2023	ND	2.0000		
Thallium, total	ug/L	MW-39	10/27/2023	ND	2.0000		
Thallium, total	ug/L	MW-39	04/02/2024	ND	2.0000		
Vanadium, total	ug/L	MW-39	10/23/2014	ND	20.0000		
Vanadium, total	ug/L	MW-39	01/08/2015	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-39	04/01/2015	ND	20.0000		
Vanadium, total	ug/L	MW-39	07/08/2015	ND	20.0000		
Vanadium, total	ug/L	MW-39	11/05/2015	ND	20.0000		
Vanadium, total	ug/L	MW-39	04/21/2016	ND	20.0000		
Vanadium, total	ug/L	MW-39	10/17/2016	ND	20.0000		
Vanadium, total	ug/L	MW-39	04/21/2017	ND	20.0000		
Vanadium, total	ug/L	MW-39	10/16/2017	ND	20.0000		
Vanadium, total	ug/L	MW-39	04/24/2018	ND	20.0000		
Vanadium, total	ug/L	MW-39	10/25/2018	ND	20.0000		
Vanadium, total	ug/L	MW-39	04/15/2019	ND	20.0000		
Vanadium, total	ug/L	MW-39	10/07/2019	ND	20.0000		
Vanadium, total	ug/L	MW-39	04/22/2020	ND	20.0000		
Vanadium, total	ug/L	MW-39	10/02/2020	ND	20.0000		
Vanadium, total	ug/L	MW-39	04/08/2021	ND	20.0000		
Vanadium, total	ug/L	MW-39	10/29/2021	ND	20.0000		
Vanadium, total	ug/L	MW-39	04/25/2022	ND	20.0000		
Vanadium, total	ug/L	MW-39	10/17/2022	ND	20.0000		
Vanadium, total	ug/L	MW-39	04/10/2023	ND	20.0000		
Vanadium, total	ug/L	MW-39	10/27/2023	ND	20.0000		
Vanadium, total	ug/L	MW-39	04/02/2024	ND	20.0000		
Zinc, total	ug/L	MW-39	10/23/2014	ND	20.0000		
Zinc, total	ug/L	MW-39	01/08/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	04/01/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	07/08/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	11/05/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	04/21/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	10/17/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	04/21/2017		25.8000		
Zinc, total	ug/L	MW-39	10/16/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	04/24/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	10/25/2018	ND	20.0000		
Zinc, total	ug/L	MW-39	04/15/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	10/07/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	04/22/2020	ND	20.0000		
Zinc, total	ug/L	MW-39	10/02/2020	ND	20.0000		
Zinc, total	ug/L	MW-39	04/08/2021	ND	20.0000		
Zinc, total	ug/L	MW-39	10/29/2021	ND	20.0000		
Zinc, total	ug/L	MW-39	04/25/2022	ND	20.0000		
Zinc, total	ug/L	MW-39	10/17/2022	ND	20.0000		
Zinc, total	ug/L	MW-39	04/10/2023	ND	20.0000		
Zinc, total	ug/L	MW-39	10/27/2023	ND	20.0000		
Zinc, total	ug/L	MW-39	04/02/2024	ND	20.0000		
Antimony, total	ug/L	MW-40	10/23/2014	ND	2.0000		
Antimony, total	ug/L	MW-40	01/08/2015	ND	2.0000		
Antimony, total	ug/L	MW-40	03/31/2015	ND	2.0000		
Antimony, total	ug/L	MW-40	07/08/2015	ND	2.0000		
Antimony, total	ug/L	MW-40	11/05/2015	ND	2.0000		
Antimony, total	ug/L	MW-40	04/21/2016	ND	2.0000		
Antimony, total	ug/L	MW-40	10/17/2016	ND	2.0000		
Antimony, total	ug/L	MW-40	04/21/2017	ND	2.0000		
Antimony, total	ug/L	MW-40	10/16/2017	ND	2.0000		
Antimony, total	ug/L	MW-40	04/24/2018	ND	2.0000		
Antimony, total	ug/L	MW-40	10/25/2018	ND	2.0000		
Antimony, total	ug/L	MW-40	04/15/2019	ND	2.0000		
Antimony, total	ug/L	MW-40	10/07/2019	ND	2.0000		
Antimony, total	ug/L	MW-40	04/22/2020	ND	2.0000		
Antimony, total	ug/L	MW-40	10/02/2020	ND	2.0000		
Antimony, total	ug/L	MW-40	04/08/2021	ND	2.0000		
Antimony, total	ug/L	MW-40	10/29/2021	ND	2.0000		
Antimony, total	ug/L	MW-40	04/25/2022	ND	2.0000		
Antimony, total	ug/L	MW-40	10/17/2022	ND	2.0000		
Antimony, total	ug/L	MW-40	04/10/2023	ND	2.0000		
Antimony, total	ug/L	MW-40	10/27/2023	ND	2.0000		
Antimony, total	ug/L	MW-40	04/02/2024	ND	2.0000		
Arsenic, total	ug/L	MW-40	10/23/2014	ND	4.0000		
Arsenic, total	ug/L	MW-40	01/08/2015	ND	4.0000		
Arsenic, total	ug/L	MW-40	03/31/2015	ND	4.0000		
Arsenic, total	ug/L	MW-40	07/08/2015	ND	4.0000		
Arsenic, total	ug/L	MW-40	11/05/2015	ND	4.0000		
Arsenic, total	ug/L	MW-40	04/21/2016	ND	4.0000		
Arsenic, total	ug/L	MW-40	10/17/2016	ND	4.0000		
Arsenic, total	ug/L	MW-40	04/21/2017	ND	4.0000		
Arsenic, total	ug/L	MW-40	10/16/2017	ND	4.0000		
Arsenic, total	ug/L	MW-40	04/24/2018	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
Arsenic, total	ug/L	MW-40	10/25/2018	ND	4.0000	
Arsenic, total	ug/L	MW-40	04/15/2019	ND	4.0000	
Arsenic, total	ug/L	MW-40	10/07/2019	ND	4.0000	
Arsenic, total	ug/L	MW-40	04/22/2020	ND	4.0000	
Arsenic, total	ug/L	MW-40	10/02/2020	ND	4.0000	
Arsenic, total	ug/L	MW-40	04/08/2021	ND	4.0000	
Arsenic, total	ug/L	MW-40	10/29/2021		4.3000	
Arsenic, total	ug/L	MW-40	04/25/2022	ND	4.0000	
Arsenic, total	ug/L	MW-40	10/17/2022		8.1000	
Arsenic, total	ug/L	MW-40	04/10/2023		5.9000	
Arsenic, total	ug/L	MW-40	10/27/2023		5.3000	
Arsenic, total	ug/L	MW-40	04/02/2024	ND	4.0000	
Barium, total	ug/L	MW-40	10/23/2014		65.4000	
Barium, total	ug/L	MW-40	01/08/2015		85.3000	
Barium, total	ug/L	MW-40	03/31/2015		96.6000	
Barium, total	ug/L	MW-40	07/08/2015		71.0000	
Barium, total	ug/L	MW-40	11/05/2015		89.1000	
Barium, total	ug/L	MW-40	04/21/2016		74.0000	
Barium, total	ug/L	MW-40	10/17/2016		83.2000	
Barium, total	ug/L	MW-40	04/21/2017		82.9000	
Barium, total	ug/L	MW-40	10/16/2017		45.4000	
Barium, total	ug/L	MW-40	04/24/2018		39.7000	
Barium, total	ug/L	MW-40	10/25/2018		56.3000	
Barium, total	ug/L	MW-40	04/15/2019		35.7000	
Barium, total	ug/L	MW-40	10/07/2019		50.7000	
Barium, total	ug/L	MW-40	04/22/2020		47.5000	
Barium, total	ug/L	MW-40	10/02/2020		47.8000	
Barium, total	ug/L	MW-40	04/08/2021		83.4000	
Barium, total	ug/L	MW-40	10/29/2021		72.2000	
Barium, total	ug/L	MW-40	04/25/2022		27.9000	
Barium, total	ug/L	MW-40	10/17/2022		103.0000	
Barium, total	ug/L	MW-40	04/10/2023		42.8000	
Barium, total	ug/L	MW-40	10/27/2023		46.9000	
Barium, total	ug/L	MW-40	04/02/2024		36.4000	
Beryllium, total	ug/L	MW-40	10/23/2014	ND	4.0000	
Beryllium, total	ug/L	MW-40	01/08/2015	ND	4.0000	
Beryllium, total	ug/L	MW-40	03/31/2015	ND	4.0000	
Beryllium, total	ug/L	MW-40	07/08/2015	ND	4.0000	
Beryllium, total	ug/L	MW-40	11/05/2015	ND	4.0000	
Beryllium, total	ug/L	MW-40	04/21/2016	ND	4.0000	
Beryllium, total	ug/L	MW-40	10/17/2016	ND	4.0000	
Beryllium, total	ug/L	MW-40	04/21/2017	ND	4.0000	
Beryllium, total	ug/L	MW-40	10/16/2017	ND	4.0000	
Beryllium, total	ug/L	MW-40	04/24/2018	ND	4.0000	
Beryllium, total	ug/L	MW-40	10/25/2018	ND	4.0000	
Beryllium, total	ug/L	MW-40	04/15/2019	ND	4.0000	
Beryllium, total	ug/L	MW-40	10/07/2019	ND	4.0000	
Beryllium, total	ug/L	MW-40	04/22/2020	ND	4.0000	
Beryllium, total	ug/L	MW-40	10/02/2020	ND	4.0000	
Beryllium, total	ug/L	MW-40	04/08/2021	ND	4.0000	
Beryllium, total	ug/L	MW-40	10/29/2021	ND	4.0000	
Beryllium, total	ug/L	MW-40	04/25/2022	ND	4.0000	
Beryllium, total	ug/L	MW-40	10/17/2022	ND	4.0000	
Beryllium, total	ug/L	MW-40	04/10/2023	ND	4.0000	
Beryllium, total	ug/L	MW-40	10/27/2023	ND	4.0000	
Beryllium, total	ug/L	MW-40	04/02/2024	ND	4.0000	
Cadmium, total	ug/L	MW-40	10/23/2014	ND	0.8000	
Cadmium, total	ug/L	MW-40	01/08/2015	ND	0.8000	
Cadmium, total	ug/L	MW-40	03/31/2015	ND	0.8000	
Cadmium, total	ug/L	MW-40	07/08/2015	ND	0.8000	
Cadmium, total	ug/L	MW-40	11/05/2015	ND	0.8000	
Cadmium, total	ug/L	MW-40	04/21/2016	ND	0.8000	
Cadmium, total	ug/L	MW-40	10/17/2016	ND	0.8000	
Cadmium, total	ug/L	MW-40	04/21/2017	ND	0.8000	
Cadmium, total	ug/L	MW-40	10/16/2017	ND	0.8000	
Cadmium, total	ug/L	MW-40	04/24/2018	ND	0.8000	
Cadmium, total	ug/L	MW-40	10/25/2018	ND	0.8000	
Cadmium, total	ug/L	MW-40	04/15/2019	ND	0.8000	
Cadmium, total	ug/L	MW-40	10/07/2019	ND	0.8000	
Cadmium, total	ug/L	MW-40	04/22/2020	ND	0.8000	
Cadmium, total	ug/L	MW-40	10/02/2020	ND	0.8000	
Cadmium, total	ug/L	MW-40	04/08/2021	ND	0.8000	
Cadmium, total	ug/L	MW-40	10/29/2021	ND	0.8000	
Cadmium, total	ug/L	MW-40	04/25/2022	ND	0.8000	
Cadmium, total	ug/L	MW-40	10/17/2022	ND	0.8000	
Cadmium, total	ug/L	MW-40	04/10/2023	ND	0.8000	
Cadmium, total	ug/L	MW-40	10/27/2023	ND	0.8000	
Cadmium, total	ug/L	MW-40	04/02/2024	ND	0.8000	

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Cadmium, total	ug/L	MW-40	10/17/2022	ND	0.8000		
Cadmium, total	ug/L	MW-40	04/10/2023	ND	0.8000		
Cadmium, total	ug/L	MW-40	10/27/2023	ND	0.8000		
Cadmium, total	ug/L	MW-40	04/02/2024	ND	0.8000		
Chromium, total	ug/L	MW-40	10/23/2014	ND	8.0000		
Chromium, total	ug/L	MW-40	01/08/2015	ND	8.0000		
Chromium, total	ug/L	MW-40	03/31/2015	ND	8.0000		
Chromium, total	ug/L	MW-40	07/08/2015	ND	8.0000		
Chromium, total	ug/L	MW-40	11/05/2015	ND	8.0000		
Chromium, total	ug/L	MW-40	04/21/2016	ND	8.0000		
Chromium, total	ug/L	MW-40	10/17/2016	ND	8.0000		
Chromium, total	ug/L	MW-40	04/21/2017	ND	8.0000		
Chromium, total	ug/L	MW-40	10/16/2017	ND	8.0000		
Chromium, total	ug/L	MW-40	04/24/2018	ND	8.0000		
Chromium, total	ug/L	MW-40	10/25/2018	ND	8.0000		
Chromium, total	ug/L	MW-40	04/15/2019	ND	8.0000		
Chromium, total	ug/L	MW-40	10/07/2019	ND	8.0000		
Chromium, total	ug/L	MW-40	04/22/2020	ND	8.0000		
Chromium, total	ug/L	MW-40	10/02/2020	ND	8.0000		
Chromium, total	ug/L	MW-40	04/08/2021	ND	8.0000		
Chromium, total	ug/L	MW-40	10/29/2021	ND	8.0000		
Chromium, total	ug/L	MW-40	04/25/2022	ND	8.0000		
Chromium, total	ug/L	MW-40	10/17/2022	ND	8.0000		
Chromium, total	ug/L	MW-40	04/10/2023	ND	8.0000		
Chromium, total	ug/L	MW-40	10/27/2023	ND	8.0000		
Chromium, total	ug/L	MW-40	04/02/2024	ND	8.0000		
Cobalt, total	ug/L	MW-40	10/23/2014	ND	0.8000		
Cobalt, total	ug/L	MW-40	01/08/2015	ND	0.8000		
Cobalt, total	ug/L	MW-40	03/31/2015	ND	0.8000		
Cobalt, total	ug/L	MW-40	07/08/2015	ND	0.8000		
Cobalt, total	ug/L	MW-40	11/05/2015	ND	0.8000		
Cobalt, total	ug/L	MW-40	04/21/2016	ND	0.8000		
Cobalt, total	ug/L	MW-40	10/17/2016	ND	0.8000		
Cobalt, total	ug/L	MW-40	04/21/2017	ND	0.8000		
Cobalt, total	ug/L	MW-40	10/16/2017	ND	0.8000		
Cobalt, total	ug/L	MW-40	04/24/2018	ND	0.8000		
Cobalt, total	ug/L	MW-40	10/25/2018	ND	0.8000		
Cobalt, total	ug/L	MW-40	04/15/2019	ND	0.8000		
Cobalt, total	ug/L	MW-40	10/07/2019	ND	0.8000		
Cobalt, total	ug/L	MW-40	04/22/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-40	10/02/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-40	04/08/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-40	10/29/2021		4.5000		
Cobalt, total	ug/L	MW-40	04/25/2022		5.6000		
Cobalt, total	ug/L	MW-40	10/17/2022		8.3000		
Cobalt, total	ug/L	MW-40	04/10/2023		10.2000		
Cobalt, total	ug/L	MW-40	10/27/2023		4.7000		
Cobalt, total	ug/L	MW-40	04/02/2024		0.5000		
Copper, total	ug/L	MW-40	10/23/2014	ND	4.0000		
Copper, total	ug/L	MW-40	01/08/2015	ND	4.0000		
Copper, total	ug/L	MW-40	03/31/2015	ND	4.0000		
Copper, total	ug/L	MW-40	07/08/2015	ND	4.0000		
Copper, total	ug/L	MW-40	11/05/2015	ND	4.0000		
Copper, total	ug/L	MW-40	04/21/2016	ND	4.0000		
Copper, total	ug/L	MW-40	10/17/2016	ND	4.0000		
Copper, total	ug/L	MW-40	04/21/2017	ND	4.0000		
Copper, total	ug/L	MW-40	10/16/2017	ND	4.0000		
Copper, total	ug/L	MW-40	04/24/2018	ND	4.0000		
Copper, total	ug/L	MW-40	10/25/2018	ND	4.0000		
Copper, total	ug/L	MW-40	04/15/2019	ND	4.0000		
Copper, total	ug/L	MW-40	10/07/2019	ND	4.0000		
Copper, total	ug/L	MW-40	04/22/2020	ND	4.0000		
Copper, total	ug/L	MW-40	10/02/2020	ND	4.0000		
Copper, total	ug/L	MW-40	04/08/2021	ND	4.0000		
Copper, total	ug/L	MW-40	10/29/2021		5.1000		
Copper, total	ug/L	MW-40	04/25/2022	ND	4.0000		
Copper, total	ug/L	MW-40	10/17/2022	ND	4.0000		
Copper, total	ug/L	MW-40	04/10/2023	ND	4.0000		
Copper, total	ug/L	MW-40	10/27/2023	ND	4.0000		
Copper, total	ug/L	MW-40	04/02/2024		8.5000		
Lead, total	ug/L	MW-40	10/23/2014	ND	4.0000		
Lead, total	ug/L	MW-40	01/08/2015	ND	4.0000		
Lead, total	ug/L	MW-40	03/31/2015	ND	4.0000		
Lead, total	ug/L	MW-40	07/08/2015	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
Lead, total	ug/L	MW-40	11/05/2015	ND	4.0000	
Lead, total	ug/L	MW-40	04/21/2016	ND	4.0000	
Lead, total	ug/L	MW-40	10/17/2016	ND	4.0000	
Lead, total	ug/L	MW-40	04/21/2017	ND	4.0000	
Lead, total	ug/L	MW-40	10/16/2017	ND	4.0000	
Lead, total	ug/L	MW-40	04/24/2018	ND	4.0000	
Lead, total	ug/L	MW-40	10/25/2018	ND	4.0000	
Lead, total	ug/L	MW-40	04/15/2019	ND	4.0000	
Lead, total	ug/L	MW-40	10/07/2019	ND	4.0000	
Lead, total	ug/L	MW-40	04/22/2020	ND	4.0000	
Lead, total	ug/L	MW-40	10/02/2020	ND	4.0000	
Lead, total	ug/L	MW-40	04/08/2021	ND	4.0000	
Lead, total	ug/L	MW-40	10/29/2021	ND	4.0000	
Lead, total	ug/L	MW-40	04/25/2022	ND	4.0000	
Lead, total	ug/L	MW-40	10/17/2022	ND	4.0000	
Lead, total	ug/L	MW-40	04/10/2023	ND	4.0000	
Lead, total	ug/L	MW-40	10/27/2023	ND	4.0000	
Lead, total	ug/L	MW-40	04/02/2024	ND	4.0000	
Nickel, total	ug/L	MW-40	10/23/2014	ND	4.0000	
Nickel, total	ug/L	MW-40	01/08/2015	ND	4.0000	
Nickel, total	ug/L	MW-40	03/31/2015	ND	4.0000	
Nickel, total	ug/L	MW-40	07/08/2015	ND	4.0000	
Nickel, total	ug/L	MW-40	11/05/2015	ND	4.0000	
Nickel, total	ug/L	MW-40	04/21/2016	ND	4.0000	
Nickel, total	ug/L	MW-40	10/17/2016	ND	4.0000	
Nickel, total	ug/L	MW-40	04/21/2017	ND	4.0000	
Nickel, total	ug/L	MW-40	10/16/2017	ND	4.0000	
Nickel, total	ug/L	MW-40	04/24/2018	ND	4.0000	
Nickel, total	ug/L	MW-40	10/25/2018	ND	4.0000	
Nickel, total	ug/L	MW-40	04/15/2019	ND	4.0000	
Nickel, total	ug/L	MW-40	10/07/2019	ND	4.0000	
Nickel, total	ug/L	MW-40	04/22/2020	ND	4.0000	
Nickel, total	ug/L	MW-40	10/02/2020	ND	4.0000	
Nickel, total	ug/L	MW-40	04/08/2021		5.0000	
Nickel, total	ug/L	MW-40	10/29/2021		31.9000	*
Nickel, total	ug/L	MW-40	04/25/2022		18.3000	
Nickel, total	ug/L	MW-40	10/17/2022		22.1000	
Nickel, total	ug/L	MW-40	04/10/2023		16.7000	
Nickel, total	ug/L	MW-40	10/27/2023		17.0000	
Nickel, total	ug/L	MW-40	04/02/2024		16.8000	
Selenium, total	ug/L	MW-40	10/23/2014		4.6000	
Selenium, total	ug/L	MW-40	01/08/2015		4.8000	
Selenium, total	ug/L	MW-40	03/31/2015		4.9000	
Selenium, total	ug/L	MW-40	07/08/2015	ND	4.0000	
Selenium, total	ug/L	MW-40	11/05/2015	ND	4.0000	
Selenium, total	ug/L	MW-40	04/21/2016	ND	4.0000	
Selenium, total	ug/L	MW-40	10/17/2016	ND	4.0000	
Selenium, total	ug/L	MW-40	04/21/2017	ND	4.0000	
Selenium, total	ug/L	MW-40	10/16/2017	ND	4.0000	
Selenium, total	ug/L	MW-40	04/24/2018	ND	4.0000	
Selenium, total	ug/L	MW-40	10/25/2018	ND	4.0000	
Selenium, total	ug/L	MW-40	04/15/2019	ND	4.0000	
Selenium, total	ug/L	MW-40	10/07/2019	ND	4.0000	
Selenium, total	ug/L	MW-40	04/22/2020	ND	4.0000	
Selenium, total	ug/L	MW-40	10/02/2020	ND	4.0000	
Selenium, total	ug/L	MW-40	04/08/2021	ND	4.0000	
Selenium, total	ug/L	MW-40	10/29/2021	ND	4.0000	
Selenium, total	ug/L	MW-40	04/25/2022	ND	4.0000	
Selenium, total	ug/L	MW-40	10/17/2022	ND	4.0000	
Selenium, total	ug/L	MW-40	04/10/2023	ND	4.0000	
Selenium, total	ug/L	MW-40	10/27/2023	ND	4.0000	
Selenium, total	ug/L	MW-40	04/02/2024	ND	4.0000	
Silver, total	ug/L	MW-40	10/23/2014	ND	4.0000	
Silver, total	ug/L	MW-40	01/08/2015	ND	4.0000	
Silver, total	ug/L	MW-40	03/31/2015	ND	4.0000	
Silver, total	ug/L	MW-40	07/08/2015	ND	4.0000	
Silver, total	ug/L	MW-40	11/05/2015	ND	4.0000	
Silver, total	ug/L	MW-40	04/21/2016	ND	4.0000	
Silver, total	ug/L	MW-40	10/17/2016	ND	4.0000	
Silver, total	ug/L	MW-40	04/21/2017	ND	4.0000	
Silver, total	ug/L	MW-40	10/16/2017	ND	4.0000	
Silver, total	ug/L	MW-40	04/24/2018	ND	4.0000	
Silver, total	ug/L	MW-40	10/25/2018	ND	4.0000	
Silver, total	ug/L	MW-40	04/15/2019	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	
Silver, total	ug/L	MW-40	10/07/2019	ND	4.0000		
Silver, total	ug/L	MW-40	04/22/2020	ND	4.0000		
Silver, total	ug/L	MW-40	10/02/2020	ND	4.0000		
Silver, total	ug/L	MW-40	04/08/2021	ND	4.0000		
Silver, total	ug/L	MW-40	10/29/2021	ND	4.0000		
Silver, total	ug/L	MW-40	04/25/2022	ND	4.0000		
Silver, total	ug/L	MW-40	10/17/2022	ND	4.0000		
Silver, total	ug/L	MW-40	04/10/2023	ND	4.0000		
Silver, total	ug/L	MW-40	10/27/2023	ND	4.0000		
Silver, total	ug/L	MW-40	04/02/2024	ND	4.0000		
Thallium, total	ug/L	MW-40	10/23/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	01/08/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	03/31/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	07/08/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	11/05/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	04/21/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	10/17/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	04/21/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	10/16/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	04/24/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	10/25/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	04/15/2019	ND	2.0000		
Thallium, total	ug/L	MW-40	10/07/2019	ND	2.0000		
Thallium, total	ug/L	MW-40	04/22/2020	ND	2.0000		
Thallium, total	ug/L	MW-40	10/02/2020	ND	2.0000		
Thallium, total	ug/L	MW-40	04/08/2021	ND	2.0000		
Thallium, total	ug/L	MW-40	10/29/2021	ND	2.0000		
Thallium, total	ug/L	MW-40	04/25/2022	ND	2.0000		
Thallium, total	ug/L	MW-40	10/17/2022	ND	2.0000		
Thallium, total	ug/L	MW-40	04/10/2023	ND	2.0000		
Thallium, total	ug/L	MW-40	10/27/2023	ND	2.0000		
Thallium, total	ug/L	MW-40	04/02/2024	ND	2.0000		
Vanadium, total	ug/L	MW-40	10/23/2014	ND	20.0000		
Vanadium, total	ug/L	MW-40	01/08/2015	ND	20.0000		
Vanadium, total	ug/L	MW-40	03/31/2015	ND	20.0000		
Vanadium, total	ug/L	MW-40	07/08/2015	ND	20.0000		
Vanadium, total	ug/L	MW-40	11/05/2015	ND	20.0000		
Vanadium, total	ug/L	MW-40	04/21/2016	ND	20.0000		
Vanadium, total	ug/L	MW-40	10/17/2016	ND	20.0000		
Vanadium, total	ug/L	MW-40	04/21/2017	ND	20.0000		
Vanadium, total	ug/L	MW-40	10/16/2017	ND	20.0000		
Vanadium, total	ug/L	MW-40	04/24/2018	ND	20.0000		
Vanadium, total	ug/L	MW-40	10/25/2018	ND	20.0000		
Vanadium, total	ug/L	MW-40	04/15/2019	ND	20.0000		
Vanadium, total	ug/L	MW-40	10/07/2019	ND	20.0000		
Vanadium, total	ug/L	MW-40	04/22/2020	ND	20.0000		
Vanadium, total	ug/L	MW-40	10/02/2020	ND	20.0000		
Vanadium, total	ug/L	MW-40	04/08/2021	ND	20.0000		
Vanadium, total	ug/L	MW-40	10/29/2021	ND	20.0000		
Vanadium, total	ug/L	MW-40	04/25/2022	ND	20.0000		
Vanadium, total	ug/L	MW-40	10/17/2022	ND	20.0000		
Vanadium, total	ug/L	MW-40	04/10/2023	ND	20.0000		
Vanadium, total	ug/L	MW-40	10/27/2023	ND	20.0000		
Vanadium, total	ug/L	MW-40	04/02/2024	ND	20.0000		
Zinc, total	ug/L	MW-40	10/23/2014	ND	20.0000		
Zinc, total	ug/L	MW-40	01/08/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-40	03/31/2015		12.8000		
Zinc, total	ug/L	MW-40	07/08/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-40	11/05/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-40	04/21/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-40	10/17/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-40	04/21/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-40	10/16/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-40	04/24/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-40	10/25/2018	ND	20.0000		
Zinc, total	ug/L	MW-40	04/15/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-40	10/07/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-40	04/22/2020	ND	20.0000		
Zinc, total	ug/L	MW-40	10/02/2020	ND	20.0000		
Zinc, total	ug/L	MW-40	04/08/2021	ND	20.0000		
Zinc, total	ug/L	MW-40	10/29/2021	ND	20.0000		
Zinc, total	ug/L	MW-40	04/25/2022	ND	20.0000		
Zinc, total	ug/L	MW-40	10/17/2022	ND	20.0000		
Zinc, total	ug/L	MW-40	04/10/2023	ND	20.0000		
Zinc, total	ug/L	MW-40	10/27/2023	ND	20.0000		
Zinc, total	ug/L	MW-40	04/10/2023	ND	20.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Zinc, total	ug/L	MW-40	10/27/2023	ND	20.0000		
Zinc, total	ug/L	MW-40	04/02/2024	ND	20.0000		
Antimony, total	ug/L	MW-47	10/23/2014	ND	2.0000		
Antimony, total	ug/L	MW-47	03/31/2015	ND	2.0000		
Antimony, total	ug/L	MW-47	07/08/2015	ND	2.0000		
Antimony, total	ug/L	MW-47	11/05/2015	ND	2.0000		
Antimony, total	ug/L	MW-47	04/21/2016	ND	2.0000		
Antimony, total	ug/L	MW-47	10/17/2016	ND	2.0000		
Antimony, total	ug/L	MW-47	04/21/2017	ND	2.0000		
Antimony, total	ug/L	MW-47	10/16/2017	ND	2.0000		
Antimony, total	ug/L	MW-47	04/24/2018	ND	2.0000		
Antimony, total	ug/L	MW-47	10/25/2018	ND	2.0000		
Antimony, total	ug/L	MW-47	04/15/2019	ND	2.0000		
Antimony, total	ug/L	MW-47	10/07/2019	ND	2.0000		
Antimony, total	ug/L	MW-47	04/22/2020	ND	2.0000		
Antimony, total	ug/L	MW-47	10/01/2020	ND	2.0000		
Antimony, total	ug/L	MW-47	04/08/2021	ND	2.0000		
Antimony, total	ug/L	MW-47	10/29/2021	ND	2.0000		
Antimony, total	ug/L	MW-47	04/25/2022	ND	2.0000		
Antimony, total	ug/L	MW-47	10/17/2022	ND	2.0000		
Antimony, total	ug/L	MW-47	04/10/2023	ND	2.0000		
Antimony, total	ug/L	MW-47	10/27/2023	ND	2.0000		
Antimony, total	ug/L	MW-47	04/02/2024	ND	2.0000		
Arsenic, total	ug/L	MW-47	10/23/2014		40.0000		
Arsenic, total	ug/L	MW-47	03/31/2015		153.0000		*
Arsenic, total	ug/L	MW-47	07/08/2015		165.0000		*
Arsenic, total	ug/L	MW-47	11/05/2015		89.3000		*
Arsenic, total	ug/L	MW-47	04/21/2016		1730.0000		*
Arsenic, total	ug/L	MW-47	10/17/2016		18.5000		
Arsenic, total	ug/L	MW-47	04/21/2017		860.0000		*
Arsenic, total	ug/L	MW-47	10/16/2017		720.0000		*
Arsenic, total	ug/L	MW-47	04/24/2018		700.0000		*
Arsenic, total	ug/L	MW-47	10/25/2018		84.0000		
Arsenic, total	ug/L	MW-47	04/15/2019		277.0000		*
Arsenic, total	ug/L	MW-47	10/07/2019		41.0000		
Arsenic, total	ug/L	MW-47	04/22/2020		844.0000		*
Arsenic, total	ug/L	MW-47	10/01/2020		79.7000		
Arsenic, total	ug/L	MW-47	04/08/2021		236.0000		*
Arsenic, total	ug/L	MW-47	10/29/2021		50.4000		
Arsenic, total	ug/L	MW-47	04/25/2022		246.0000		*
Arsenic, total	ug/L	MW-47	10/17/2022		291.0000		*
Arsenic, total	ug/L	MW-47	04/10/2023		271.0000		*
Arsenic, total	ug/L	MW-47	10/27/2023		50.2000		
Arsenic, total	ug/L	MW-47	04/02/2024		182.0000		*
Barium, total	ug/L	MW-47	10/23/2014		392.0000		
Barium, total	ug/L	MW-47	03/31/2015		678.0000		
Barium, total	ug/L	MW-47	07/08/2015		630.0000		
Barium, total	ug/L	MW-47	11/05/2015		525.0000		
Barium, total	ug/L	MW-47	04/21/2016		3520.0000		*
Barium, total	ug/L	MW-47	10/17/2016		443.0000		
Barium, total	ug/L	MW-47	04/21/2017		1690.0000		
Barium, total	ug/L	MW-47	10/16/2017		1550.0000		
Barium, total	ug/L	MW-47	04/24/2018		1750.0000		
Barium, total	ug/L	MW-47	10/25/2018		310.0000		
Barium, total	ug/L	MW-47	04/15/2019		743.0000		
Barium, total	ug/L	MW-47	10/07/2019		497.0000		
Barium, total	ug/L	MW-47	04/22/2020		1880.0000		
Barium, total	ug/L	MW-47	10/01/2020		435.0000		
Barium, total	ug/L	MW-47	04/08/2021		876.0000		
Barium, total	ug/L	MW-47	10/29/2021		407.0000		
Barium, total	ug/L	MW-47	04/25/2022		565.0000		
Barium, total	ug/L	MW-47	10/17/2022		852.0000		
Barium, total	ug/L	MW-47	04/10/2023		713.0000		
Barium, total	ug/L	MW-47	10/27/2023		486.0000		
Barium, total	ug/L	MW-47	04/02/2024		570.0000		
Beryllium, total	ug/L	MW-47	10/23/2014	ND	4.0000		
Beryllium, total	ug/L	MW-47	03/31/2015	ND	4.0000		
Beryllium, total	ug/L	MW-47	07/08/2015	ND	4.0000		
Beryllium, total	ug/L	MW-47	11/05/2015	ND	4.0000		
Beryllium, total	ug/L	MW-47	04/21/2016	ND	4.0000		
Beryllium, total	ug/L	MW-47	10/17/2016	ND	4.0000		
Beryllium, total	ug/L	MW-47	04/21/2017	ND	4.0000		
Beryllium, total	ug/L	MW-47	10/16/2017	ND	4.0000		
Beryllium, total	ug/L	MW-47	04/24/2018	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-47	10/25/2018	ND	4.0000	
Beryllium, total	ug/L	MW-47	04/15/2019	ND	4.0000	
Beryllium, total	ug/L	MW-47	10/07/2019	ND	4.0000	
Beryllium, total	ug/L	MW-47	04/22/2020	ND	4.0000	
Beryllium, total	ug/L	MW-47	10/01/2020	ND	4.0000	
Beryllium, total	ug/L	MW-47	04/08/2021	ND	4.0000	
Beryllium, total	ug/L	MW-47	10/29/2021	ND	4.0000	
Beryllium, total	ug/L	MW-47	04/25/2022	ND	4.0000	
Beryllium, total	ug/L	MW-47	10/17/2022	ND	4.0000	
Beryllium, total	ug/L	MW-47	04/10/2023	ND	4.0000	
Beryllium, total	ug/L	MW-47	10/27/2023	ND	4.0000	
Beryllium, total	ug/L	MW-47	04/02/2024	ND	4.0000	
Cadmium, total	ug/L	MW-47	10/23/2014	ND	0.8000	
Cadmium, total	ug/L	MW-47	03/31/2015	ND	0.8000	
Cadmium, total	ug/L	MW-47	07/08/2015	ND	0.8000	
Cadmium, total	ug/L	MW-47	11/05/2015	ND	0.8000	
Cadmium, total	ug/L	MW-47	04/21/2016	ND	0.8000	
Cadmium, total	ug/L	MW-47	10/17/2016	ND	0.8000	
Cadmium, total	ug/L	MW-47	04/21/2017	ND	0.8000	
Cadmium, total	ug/L	MW-47	10/16/2017	ND	0.8000	
Cadmium, total	ug/L	MW-47	04/24/2018	ND	0.8000	
Cadmium, total	ug/L	MW-47	10/25/2018	ND	0.8000	
Cadmium, total	ug/L	MW-47	04/15/2019	ND	0.8000	
Cadmium, total	ug/L	MW-47	10/07/2019	ND	0.8000	
Cadmium, total	ug/L	MW-47	04/22/2020	ND	0.8000	
Cadmium, total	ug/L	MW-47	10/01/2020	ND	0.8000	
Cadmium, total	ug/L	MW-47	04/08/2021	ND	0.8000	
Cadmium, total	ug/L	MW-47	10/29/2021	ND	0.8000	
Cadmium, total	ug/L	MW-47	04/25/2022	ND	0.8000	
Cadmium, total	ug/L	MW-47	10/17/2022	ND	0.8000	
Cadmium, total	ug/L	MW-47	04/10/2023	ND	0.8000	
Cadmium, total	ug/L	MW-47	10/27/2023	ND	0.8000	
Cadmium, total	ug/L	MW-47	04/02/2024	ND	0.8000	
Chromium, total	ug/L	MW-47	10/23/2014	ND	8.0000	
Chromium, total	ug/L	MW-47	03/31/2015	ND	8.0000	
Chromium, total	ug/L	MW-47	07/08/2015	ND	8.0000	
Chromium, total	ug/L	MW-47	11/05/2015	ND	8.0000	
Chromium, total	ug/L	MW-47	04/21/2016	ND	8.0000	
Chromium, total	ug/L	MW-47	10/17/2016	ND	8.0000	
Chromium, total	ug/L	MW-47	04/21/2017	ND	8.0000	
Chromium, total	ug/L	MW-47	10/16/2017	ND	8.0000	
Chromium, total	ug/L	MW-47	04/24/2018	ND	8.0000	
Chromium, total	ug/L	MW-47	10/25/2018	ND	8.0000	
Chromium, total	ug/L	MW-47	04/15/2019	ND	8.0000	
Chromium, total	ug/L	MW-47	10/07/2019	ND	8.0000	
Chromium, total	ug/L	MW-47	04/22/2020	ND	8.0000	
Chromium, total	ug/L	MW-47	10/01/2020	ND	8.0000	
Chromium, total	ug/L	MW-47	04/08/2021	ND	8.0000	
Chromium, total	ug/L	MW-47	10/29/2021	ND	8.0000	
Chromium, total	ug/L	MW-47	04/25/2022	ND	8.0000	
Chromium, total	ug/L	MW-47	10/17/2022	ND	8.0000	
Chromium, total	ug/L	MW-47	04/10/2023	ND	8.0000	
Chromium, total	ug/L	MW-47	10/27/2023	ND	8.0000	
Chromium, total	ug/L	MW-47	04/02/2024	ND	8.0000	
Cobalt, total	ug/L	MW-47	10/23/2014		0.8000	
Cobalt, total	ug/L	MW-47	03/31/2015		1.0000	
Cobalt, total	ug/L	MW-47	07/08/2015		1.5000	
Cobalt, total	ug/L	MW-47	11/05/2015		1.2000	
Cobalt, total	ug/L	MW-47	04/21/2016		4.2000	
Cobalt, total	ug/L	MW-47	10/17/2016		12.4000	
Cobalt, total	ug/L	MW-47	04/21/2017		1.9000	
Cobalt, total	ug/L	MW-47	10/16/2017		1.5000	
Cobalt, total	ug/L	MW-47	04/24/2018		1.5000	
Cobalt, total	ug/L	MW-47	10/25/2018	ND	0.8000	
Cobalt, total	ug/L	MW-47	04/15/2019		0.9000	
Cobalt, total	ug/L	MW-47	10/07/2019	ND	0.8000	
Cobalt, total	ug/L	MW-47	04/22/2020		1.9000	
Cobalt, total	ug/L	MW-47	10/01/2020		0.9000	
Cobalt, total	ug/L	MW-47	04/08/2021		1.2000	
Cobalt, total	ug/L	MW-47	10/29/2021		0.7000	
Cobalt, total	ug/L	MW-47	04/25/2022		0.7000	
Cobalt, total	ug/L	MW-47	10/17/2022		3.8000	
Cobalt, total	ug/L	MW-47	04/10/2023		1.8000	
Cobalt, total	ug/L	MW-47	10/27/2023		2.3000	

* - Outlier for that well and constituent.
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 ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted
Cobalt, total	ug/L	MW-47	04/02/2024		1.8000	
Copper, total	ug/L	MW-47	10/23/2014	ND	4.0000	
Copper, total	ug/L	MW-47	03/31/2015	ND	4.0000	
Copper, total	ug/L	MW-47	07/08/2015	ND	4.0000	
Copper, total	ug/L	MW-47	11/05/2015	ND	4.0000	
Copper, total	ug/L	MW-47	04/21/2016		4.6000	
Copper, total	ug/L	MW-47	10/17/2016	ND	4.0000	
Copper, total	ug/L	MW-47	04/21/2017	ND	4.0000	
Copper, total	ug/L	MW-47	10/16/2017		4.9000	
Copper, total	ug/L	MW-47	04/24/2018	ND	4.0000	
Copper, total	ug/L	MW-47	10/25/2018	ND	4.0000	
Copper, total	ug/L	MW-47	04/15/2019	ND	4.0000	
Copper, total	ug/L	MW-47	10/07/2019	ND	4.0000	
Copper, total	ug/L	MW-47	04/22/2020	ND	4.0000	
Copper, total	ug/L	MW-47	10/01/2020	ND	4.0000	
Copper, total	ug/L	MW-47	04/08/2021	ND	4.0000	
Copper, total	ug/L	MW-47	10/29/2021	ND	4.0000	
Copper, total	ug/L	MW-47	04/25/2022	ND	4.0000	
Copper, total	ug/L	MW-47	10/17/2022	ND	4.0000	
Copper, total	ug/L	MW-47	04/10/2023	ND	4.0000	
Copper, total	ug/L	MW-47	10/27/2023	ND	4.0000	
Copper, total	ug/L	MW-47	04/02/2024		4.4000	
Lead, total	ug/L	MW-47	10/23/2014	ND	4.0000	
Lead, total	ug/L	MW-47	03/31/2015	ND	4.0000	
Lead, total	ug/L	MW-47	07/08/2015	ND	4.0000	
Lead, total	ug/L	MW-47	11/05/2015	ND	4.0000	
Lead, total	ug/L	MW-47	04/21/2016	ND	4.0000	
Lead, total	ug/L	MW-47	10/17/2016	ND	4.0000	
Lead, total	ug/L	MW-47	04/21/2017	ND	4.0000	
Lead, total	ug/L	MW-47	10/16/2017	ND	4.0000	
Lead, total	ug/L	MW-47	04/24/2018	ND	4.0000	
Lead, total	ug/L	MW-47	10/25/2018	ND	4.0000	
Lead, total	ug/L	MW-47	04/15/2019	ND	4.0000	
Lead, total	ug/L	MW-47	10/07/2019	ND	4.0000	
Lead, total	ug/L	MW-47	04/22/2020	ND	4.0000	
Lead, total	ug/L	MW-47	10/01/2020	ND	4.0000	
Lead, total	ug/L	MW-47	04/08/2021	ND	4.0000	
Lead, total	ug/L	MW-47	10/29/2021	ND	4.0000	
Lead, total	ug/L	MW-47	04/25/2022	ND	4.0000	
Lead, total	ug/L	MW-47	10/17/2022	ND	4.0000	
Lead, total	ug/L	MW-47	04/10/2023	ND	4.0000	
Lead, total	ug/L	MW-47	10/27/2023	ND	4.0000	
Lead, total	ug/L	MW-47	04/02/2024	ND	4.0000	
Nickel, total	ug/L	MW-47	10/23/2014	ND	4.0000	
Nickel, total	ug/L	MW-47	03/31/2015	ND	4.0000	
Nickel, total	ug/L	MW-47	07/08/2015	ND	4.0000	
Nickel, total	ug/L	MW-47	11/05/2015	ND	4.0000	
Nickel, total	ug/L	MW-47	04/21/2016		9.2000	
Nickel, total	ug/L	MW-47	10/17/2016		31.6000	
Nickel, total	ug/L	MW-47	04/21/2017		4.0000	
Nickel, total	ug/L	MW-47	10/16/2017		5.9000	
Nickel, total	ug/L	MW-47	04/24/2018		15.8000	
Nickel, total	ug/L	MW-47	10/25/2018	ND	4.0000	
Nickel, total	ug/L	MW-47	04/15/2019	ND	4.0000	
Nickel, total	ug/L	MW-47	10/07/2019	ND	4.0000	
Nickel, total	ug/L	MW-47	04/22/2020		4.7000	
Nickel, total	ug/L	MW-47	10/01/2020	ND	4.0000	
Nickel, total	ug/L	MW-47	04/08/2021	ND	4.0000	
Nickel, total	ug/L	MW-47	10/29/2021	ND	4.0000	
Nickel, total	ug/L	MW-47	04/25/2022	ND	4.0000	
Nickel, total	ug/L	MW-47	10/17/2022	ND	4.0000	
Nickel, total	ug/L	MW-47	04/10/2023	ND	4.0000	
Nickel, total	ug/L	MW-47	10/27/2023		11.7000	
Nickel, total	ug/L	MW-47	04/02/2024		8.0000	
Selenium, total	ug/L	MW-47	10/23/2014	ND	4.0000	
Selenium, total	ug/L	MW-47	03/31/2015	ND	4.0000	
Selenium, total	ug/L	MW-47	07/08/2015	ND	4.0000	
Selenium, total	ug/L	MW-47	11/05/2015	ND	4.0000	
Selenium, total	ug/L	MW-47	04/21/2016	ND	4.0000	
Selenium, total	ug/L	MW-47	10/17/2016	ND	4.0000	
Selenium, total	ug/L	MW-47	04/21/2017	ND	4.0000	
Selenium, total	ug/L	MW-47	10/16/2017	ND	4.0000	
Selenium, total	ug/L	MW-47	04/24/2018	ND	4.0000	
Selenium, total	ug/L	MW-47	10/25/2018	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	
Selenium, total	ug/L	MW-47	04/15/2019	ND	4.0000		
Selenium, total	ug/L	MW-47	10/07/2019	ND	4.0000		
Selenium, total	ug/L	MW-47	04/22/2020	ND	4.0000		
Selenium, total	ug/L	MW-47	10/01/2020	ND	4.0000		
Selenium, total	ug/L	MW-47	04/08/2021	ND	4.0000		
Selenium, total	ug/L	MW-47	10/29/2021	ND	4.0000		
Selenium, total	ug/L	MW-47	04/25/2022	ND	4.0000		
Selenium, total	ug/L	MW-47	10/17/2022	ND	4.0000		
Selenium, total	ug/L	MW-47	04/10/2023	ND	4.0000		
Selenium, total	ug/L	MW-47	10/27/2023	ND	4.0000		
Selenium, total	ug/L	MW-47	04/02/2024	ND	4.0000		
Silver, total	ug/L	MW-47	10/23/2014	ND	4.0000		
Silver, total	ug/L	MW-47	03/31/2015	ND	4.0000		
Silver, total	ug/L	MW-47	07/08/2015	ND	4.0000		
Silver, total	ug/L	MW-47	11/05/2015	ND	4.0000		
Silver, total	ug/L	MW-47	04/21/2016	ND	4.0000		
Silver, total	ug/L	MW-47	10/17/2016	ND	4.0000		
Silver, total	ug/L	MW-47	04/21/2017	ND	4.0000		
Silver, total	ug/L	MW-47	10/16/2017	ND	4.0000		
Silver, total	ug/L	MW-47	04/24/2018	ND	4.0000		
Silver, total	ug/L	MW-47	10/25/2018	ND	4.0000		
Silver, total	ug/L	MW-47	04/15/2019	ND	4.0000		
Silver, total	ug/L	MW-47	10/07/2019	ND	4.0000		
Silver, total	ug/L	MW-47	04/22/2020	ND	4.0000		
Silver, total	ug/L	MW-47	10/01/2020	ND	4.0000		
Silver, total	ug/L	MW-47	04/08/2021	ND	4.0000		
Silver, total	ug/L	MW-47	10/29/2021	ND	4.0000		
Silver, total	ug/L	MW-47	04/25/2022	ND	4.0000		
Silver, total	ug/L	MW-47	10/17/2022	ND	4.0000		
Silver, total	ug/L	MW-47	04/10/2023	ND	4.0000		
Silver, total	ug/L	MW-47	10/27/2023	ND	4.0000		
Silver, total	ug/L	MW-47	04/02/2024	ND	4.0000		
Thallium, total	ug/L	MW-47	10/23/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-47	03/31/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-47	07/08/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-47	11/05/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-47	04/21/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-47	10/17/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-47	04/21/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-47	10/16/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-47	04/24/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-47	10/25/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-47	04/15/2019	ND	2.0000		
Thallium, total	ug/L	MW-47	10/07/2019	ND	2.0000		
Thallium, total	ug/L	MW-47	04/22/2020	ND	2.0000		
Thallium, total	ug/L	MW-47	10/01/2020	ND	2.0000		
Thallium, total	ug/L	MW-47	04/08/2021	ND	2.0000		
Thallium, total	ug/L	MW-47	10/29/2021	ND	2.0000		
Thallium, total	ug/L	MW-47	04/25/2022	ND	2.0000		
Thallium, total	ug/L	MW-47	10/17/2022	ND	2.0000		
Thallium, total	ug/L	MW-47	04/10/2023	ND	2.0000		
Thallium, total	ug/L	MW-47	10/27/2023	ND	2.0000		
Thallium, total	ug/L	MW-47	04/02/2024	ND	2.0000		
Vanadium, total	ug/L	MW-47	10/23/2014	ND	20.0000		
Vanadium, total	ug/L	MW-47	03/31/2015	ND	20.0000		
Vanadium, total	ug/L	MW-47	07/08/2015	ND	20.0000		
Vanadium, total	ug/L	MW-47	11/05/2015	ND	20.0000		
Vanadium, total	ug/L	MW-47	04/21/2016	ND	20.0000		
Vanadium, total	ug/L	MW-47	10/17/2016	ND	20.0000		
Vanadium, total	ug/L	MW-47	04/21/2017	ND	20.0000		
Vanadium, total	ug/L	MW-47	10/16/2017	ND	20.0000		
Vanadium, total	ug/L	MW-47	04/24/2018	ND	20.0000		
Vanadium, total	ug/L	MW-47	10/25/2018	ND	20.0000		
Vanadium, total	ug/L	MW-47	04/15/2019	ND	20.0000		
Vanadium, total	ug/L	MW-47	10/07/2019	ND	20.0000		
Vanadium, total	ug/L	MW-47	04/22/2020	ND	20.0000		
Vanadium, total	ug/L	MW-47	10/01/2020	ND	20.0000		
Vanadium, total	ug/L	MW-47	04/08/2021	ND	20.0000		
Vanadium, total	ug/L	MW-47	10/29/2021	ND	20.0000		
Vanadium, total	ug/L	MW-47	04/25/2022	ND	20.0000		
Vanadium, total	ug/L	MW-47	10/17/2022	ND	20.0000		
Vanadium, total	ug/L	MW-47	04/10/2023	ND	20.0000		
Vanadium, total	ug/L	MW-47	10/27/2023	ND	20.0000		
Vanadium, total	ug/L	MW-47	04/02/2024	ND	20.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Zinc, total	ug/L	MW-47	10/23/2014	ND	20.0000		
Zinc, total	ug/L	MW-47	03/31/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-47	07/08/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-47	11/05/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-47	04/21/2016		12.0000		
Zinc, total	ug/L	MW-47	10/17/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-47	04/21/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-47	10/16/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-47	04/24/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-47	10/25/2018	ND	20.0000		
Zinc, total	ug/L	MW-47	04/15/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-47	10/07/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-47	04/22/2020	ND	20.0000		
Zinc, total	ug/L	MW-47	10/01/2020	ND	20.0000		
Zinc, total	ug/L	MW-47	04/08/2021	ND	20.0000		
Zinc, total	ug/L	MW-47	10/29/2021	ND	20.0000		
Zinc, total	ug/L	MW-47	04/25/2022	ND	20.0000		
Zinc, total	ug/L	MW-47	10/17/2022	ND	20.0000		
Zinc, total	ug/L	MW-47	04/10/2023	ND	20.0000		
Zinc, total	ug/L	MW-47	10/27/2023		25.9000		
Zinc, total	ug/L	MW-47	04/02/2024	ND	20.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Antimony, total	ug/L	MW-48A	04/02/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-48A	04/02/2024		17.1000		89.3000
Barium, total	ug/L	MW-48A	04/02/2024		217.0000		1880.0000
Beryllium, total	ug/L	MW-48A	04/02/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-48A	04/02/2024	ND	0.8000		0.9000
Chromium, total	ug/L	MW-48A	04/02/2024	ND	8.0000		20.3000
Cobalt, total	ug/L	MW-48A	04/02/2024		0.9000		12.4000
Copper, total	ug/L	MW-48A	04/02/2024	ND	4.0000		11.3000
Lead, total	ug/L	MW-48A	04/02/2024	ND	4.0000		4.3000
Nickel, total	ug/L	MW-48A	04/02/2024	ND	4.0000		31.6000
Selenium, total	ug/L	MW-48A	04/02/2024	ND	4.0000		4.9000
Silver, total	ug/L	MW-48A	04/02/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-48A	04/02/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-48A	04/02/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-48A	04/02/2024	ND	20.0000		26.8000
Antimony, total	ug/L	MW-49A	04/02/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-49A	04/02/2024		29.9000		89.3000
Barium, total	ug/L	MW-49A	04/02/2024		626.0000		1880.0000
Beryllium, total	ug/L	MW-49A	04/02/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-49A	04/02/2024	ND	0.8000		0.9000
Chromium, total	ug/L	MW-49A	04/02/2024	ND	8.0000		20.3000
Cobalt, total	ug/L	MW-49A	04/02/2024		19.9000	***	12.4000
Copper, total	ug/L	MW-49A	04/02/2024		5.3000		11.3000
Lead, total	ug/L	MW-49A	04/02/2024	ND	4.0000		4.3000
Nickel, total	ug/L	MW-49A	04/02/2024		49.4000	***	31.6000
Selenium, total	ug/L	MW-49A	04/02/2024	ND	4.0000		4.9000
Silver, total	ug/L	MW-49A	04/02/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-49A	04/02/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-49A	04/02/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-49A	04/02/2024	ND	20.0000		26.8000
Antimony, total	ug/L	MW-50	04/02/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-50	04/02/2024	ND	4.0000		89.3000
Barium, total	ug/L	MW-50	04/02/2024		685.0000		1880.0000
Beryllium, total	ug/L	MW-50	04/02/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-50	04/02/2024	ND	0.8000		0.9000
Chromium, total	ug/L	MW-50	04/02/2024	ND	8.0000		20.3000
Cobalt, total	ug/L	MW-50	04/02/2024	ND	0.4000		12.4000
Copper, total	ug/L	MW-50	04/02/2024		5.2000		11.3000
Lead, total	ug/L	MW-50	04/02/2024	ND	4.0000		4.3000
Nickel, total	ug/L	MW-50	04/02/2024	ND	4.0000		31.6000
Selenium, total	ug/L	MW-50	04/02/2024	ND	4.0000		4.9000
Silver, total	ug/L	MW-50	04/02/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-50	04/02/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-50	04/02/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-50	04/02/2024	ND	20.0000		26.8000
Antimony, total	ug/L	MW-51	04/02/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-51	04/02/2024	ND	4.0000		89.3000
Barium, total	ug/L	MW-51	04/02/2024		459.0000		1880.0000
Beryllium, total	ug/L	MW-51	04/02/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-51	04/02/2024	ND	0.8000		0.9000
Chromium, total	ug/L	MW-51	04/02/2024	ND	8.0000		20.3000
Cobalt, total	ug/L	MW-51	04/02/2024	ND	0.4000		12.4000
Copper, total	ug/L	MW-51	04/02/2024	ND	4.0000		11.3000
Lead, total	ug/L	MW-51	04/02/2024	ND	4.0000		4.3000
Nickel, total	ug/L	MW-51	04/02/2024	ND	4.0000		31.6000
Selenium, total	ug/L	MW-51	04/02/2024	ND	4.0000		4.9000
Silver, total	ug/L	MW-51	04/02/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-51	04/02/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-51	04/02/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-51	04/02/2024	ND	20.0000		26.8000

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

Table 3

Detection Frequencies in Upgradient and Downgradient Wells

Constituent	Upgradient			Downgradient		
	Detect	N	Proportion	Detect	N	Proportion
Antimony, total	0	105	0.000	1	134	0.007
Arsenic, total	13	92	0.141	66	133	0.496
Barium, total	104	104	1.000	137	137	1.000
Beryllium, total	0	105	0.000	1	132	0.008
Cadmium, total	1	105	0.010	4	132	0.030
Chromium, total	2	104	0.019	8	132	0.061
Cobalt, total	43	102	0.422	71	132	0.538
Copper, total	10	103	0.097	50	133	0.376
Lead, total	2	104	0.019	14	132	0.106
Nickel, total	21	102	0.206	82	133	0.617
Selenium, total	3	104	0.029	1	134	0.007
Silver, total	0	105	0.000	0	134	0.000
Thallium, total	0	105	0.000	2	133	0.015
Vanadium, total	0	105	0.000	7	132	0.053
Zinc, total	10	105	0.095	46	133	0.346

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	105	0.000									nonpar
Arsenic, total	13	92	0.141	0.098	0.379					2.326	normal	nonpar
Barium, total	104	104	1.000	4.471	2.711					2.326	non-norm	nonpar
Beryllium, total	0	105	0.000									nonpar
Cadmium, total	1	105	0.010									nonpar
Chromium, total	2	104	0.019									nonpar
Cobalt, total	43	102	0.422	4.139	1.040					2.326	lognor	nonpar
Copper, total	10	103	0.097	0.449	0.934					2.326	normal	nonpar
Lead, total	2	104	0.019									nonpar
Nickel, total	21	102	0.206	1.761	0.937					2.326	normal	nonpar
Selenium, total	3	104	0.029	0.346	0.307					2.326	normal	nonpar
Silver, total	0	105	0.000									nonpar
Thallium, total	0	105	0.000									nonpar
Vanadium, total	0	105	0.000									nonpar
Zinc, total	10	105	0.095	1.170	0.283					2.326	normal	nonpar

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

Table 5

Summary Statistics and Prediction Limits

Constituent	Units	Detect	N	Mean	SD	alpha	Factor	Pred Limit	Type		Conf
Antimony, total	ug/L	0	105					2.0000	nonpar	***	0.99
Arsenic, total	ug/L	13	92					89.3000	nonpar		0.99
Barium, total	ug/L	104	104					1880.0000	nonpar		0.99
Beryllium, total	ug/L	0	105					4.0000	nonpar	***	0.99
Cadmium, total	ug/L	1	105					0.9000	nonpar		0.99
Chromium, total	ug/L	2	104					20.3000	nonpar		0.99
Cobalt, total	ug/L	43	102					12.4000	nonpar		0.99
Copper, total	ug/L	10	103					11.3000	nonpar		0.99
Lead, total	ug/L	2	104					4.3000	nonpar		0.99
Nickel, total	ug/L	21	102					31.6000	nonpar		0.99
Selenium, total	ug/L	3	104					4.9000	nonpar		0.99
Silver, total	ug/L	0	105					4.0000	nonpar	***	0.99
Thallium, total	ug/L	0	105					2.0000	nonpar	***	0.99
Vanadium, total	ug/L	0	105					20.0000	nonpar	***	0.99
Zinc, total	ug/L	10	105					26.8000	nonpar		0.99

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

* - Insufficient Data.

** - Calculated limit raised to Manual Reporting Limit.

*** - Nonparametric limit based on ND value.

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

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

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

Table 6

**Dixon's Test Outliers
1% Significance Level**

Constituent	Units	Well	Date	Result	ND Qualifier	Date Range	N	Critical Value
Cobalt, total	ug/L	MW-37	10/27/2023	9.6000		10/23/2014-04/02/2024	22	0.5162
Copper, total	ug/L	MW-37	10/25/2018	13.7000		10/23/2014-04/02/2024	22	0.5162
Nickel, total	ug/L	MW-37	10/27/2023	13.9000		10/23/2014-04/02/2024	22	0.5162
Chromium, total	ug/L	MW-39	01/08/2015	29.6000		10/23/2014-04/02/2024	22	0.5162
Cobalt, total	ug/L	MW-39	11/05/2015	3.3000		10/23/2014-04/02/2024	22	0.5162
Copper, total	ug/L	MW-39	04/02/2024	126.0000		10/23/2014-04/02/2024	22	0.5162
Nickel, total	ug/L	MW-39	01/08/2015	20.5000		10/23/2014-04/02/2024	22	0.5162

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

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

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

Table 8

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

Constituent	Units	Well	Date		Result	Pred. Limit
Cobalt, total	ug/L	MW-49A	06/13/2008		12.0000	12.4000
Cobalt, total	ug/L	MW-49A	08/22/2008	ND	10.0000	12.4000
Cobalt, total	ug/L	MW-49A	10/01/2008		6.0000	12.4000
Cobalt, total	ug/L	MW-49A	12/23/2008		4.2000	12.4000
Cobalt, total	ug/L	MW-49A	04/03/2009		11.2000	12.4000
Cobalt, total	ug/L	MW-49A	06/19/2009		8.4000	12.4000
Cobalt, total	ug/L	MW-49A	10/09/2009		8.3000	12.4000
Cobalt, total	ug/L	MW-49A	02/23/2010		8.8000	12.4000
Cobalt, total	ug/L	MW-49A	04/13/2010		21.8000 *	12.4000
Cobalt, total	ug/L	MW-49A	10/14/2010		10.9000	12.4000
Cobalt, total	ug/L	MW-49A	04/08/2011		11.0000	12.4000
Cobalt, total	ug/L	MW-49A	10/18/2011		12.0000	12.4000
Cobalt, total	ug/L	MW-49A	04/18/2012		15.5000 *	12.4000
Cobalt, total	ug/L	MW-49A	10/17/2012		9.2000	12.4000
Cobalt, total	ug/L	MW-49A	04/03/2013		25.7000 *	12.4000
Cobalt, total	ug/L	MW-49A	10/09/2013		14.0000 *	12.4000
Cobalt, total	ug/L	MW-49A	04/16/2014		20.3000 *	12.4000
Cobalt, total	ug/L	MW-49A	10/23/2014		12.0000	12.4000
Cobalt, total	ug/L	MW-49A	03/31/2015		13.3000 *	12.4000
Cobalt, total	ug/L	MW-49A	11/05/2015		15.2000 *	12.4000
Cobalt, total	ug/L	MW-49A	04/21/2016		14.5000 *	12.4000
Cobalt, total	ug/L	MW-49A	10/17/2016		1.1000	12.4000
Cobalt, total	ug/L	MW-49A	04/21/2017		14.9000 *	12.4000
Cobalt, total	ug/L	MW-49A	10/16/2017		5.9000	12.4000
Cobalt, total	ug/L	MW-49A	04/24/2018		24.5000 *	12.4000
Cobalt, total	ug/L	MW-49A	10/25/2018		7.3000	12.4000
Cobalt, total	ug/L	MW-49A	04/15/2019		18.0000 *	12.4000
Cobalt, total	ug/L	MW-49A	10/07/2019		2.7000	12.4000
Cobalt, total	ug/L	MW-49A	04/23/2020		19.1000 *	12.4000
Cobalt, total	ug/L	MW-49A	10/01/2020		16.8000 *	12.4000
Cobalt, total	ug/L	MW-49A	04/08/2021		21.0000 *	12.4000
Cobalt, total	ug/L	MW-49A	10/29/2021		2.6000	12.4000
Cobalt, total	ug/L	MW-49A	04/25/2022		16.5000 *	12.4000
Cobalt, total	ug/L	MW-49A	10/17/2022		20.3000 *	12.4000
Cobalt, total	ug/L	MW-49A	04/10/2023		20.6000 *	12.4000
Cobalt, total	ug/L	MW-49A	10/27/2023		20.5000 *	12.4000
Cobalt, total	ug/L	MW-49A	04/02/2024		19.9000 *	12.4000
Nickel, total	ug/L	MW-49A	06/13/2008		35.0000 *	31.6000
Nickel, total	ug/L	MW-49A	08/22/2008		48.0000 *	31.6000
Nickel, total	ug/L	MW-49A	10/01/2008		40.6000 *	31.6000
Nickel, total	ug/L	MW-49A	12/23/2008		33.7000 *	31.6000
Nickel, total	ug/L	MW-49A	04/03/2009		43.3000 *	31.6000
Nickel, total	ug/L	MW-49A	06/19/2009		38.9000 *	31.6000
Nickel, total	ug/L	MW-49A	10/09/2009		39.6000 *	31.6000
Nickel, total	ug/L	MW-49A	02/23/2010		39.6000 *	31.6000
Nickel, total	ug/L	MW-49A	04/13/2010		64.9000 *	31.6000
Nickel, total	ug/L	MW-49A	10/14/2010		37.7000 *	31.6000
Nickel, total	ug/L	MW-49A	04/08/2011		47.9000 *	31.6000
Nickel, total	ug/L	MW-49A	10/18/2011		43.2000 *	31.6000
Nickel, total	ug/L	MW-49A	04/18/2012		57.3000 *	31.6000
Nickel, total	ug/L	MW-49A	10/17/2012		36.9000 *	31.6000
Nickel, total	ug/L	MW-49A	04/03/2013		83.2000 *	31.6000
Nickel, total	ug/L	MW-49A	10/09/2013		33.9000 *	31.6000
Nickel, total	ug/L	MW-49A	04/16/2014		62.9000 *	31.6000
Nickel, total	ug/L	MW-49A	10/23/2014		32.2000 *	31.6000
Nickel, total	ug/L	MW-49A	03/31/2015		32.8000 *	31.6000
Nickel, total	ug/L	MW-49A	11/05/2015		35.1000 *	31.6000
Nickel, total	ug/L	MW-49A	04/21/2016		38.5000 *	31.6000
Nickel, total	ug/L	MW-49A	10/17/2016	ND	4.0000	31.6000
Nickel, total	ug/L	MW-49A	04/21/2017		37.6000 *	31.6000
Nickel, total	ug/L	MW-49A	10/16/2017		13.3000	31.6000
Nickel, total	ug/L	MW-49A	04/24/2018		61.9000 *	31.6000
Nickel, total	ug/L	MW-49A	10/25/2018		9.3000	31.6000
Nickel, total	ug/L	MW-49A	04/15/2019		41.9000 *	31.6000
Nickel, total	ug/L	MW-49A	10/07/2019		7.4000	31.6000
Nickel, total	ug/L	MW-49A	04/23/2020		49.6000 *	31.6000
Nickel, total	ug/L	MW-49A	10/01/2020		46.9000 *	31.6000
Nickel, total	ug/L	MW-49A	04/08/2021		48.9000 *	31.6000
Nickel, total	ug/L	MW-49A	10/29/2021		7.3000	31.6000
Nickel, total	ug/L	MW-49A	04/25/2022		50.7000 *	31.6000
Nickel, total	ug/L	MW-49A	10/17/2022		54.3000 *	31.6000

* - 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-49A	04/10/2023		55.4000	*	31.6000
Nickel, total	ug/L	MW-49A	10/27/2023		50.5000	*	31.6000
Nickel, total	ug/L	MW-49A	04/02/2024		49.4000	*	31.6000

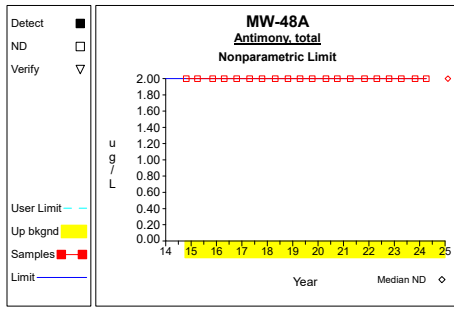
* - Significantly increased over background.

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

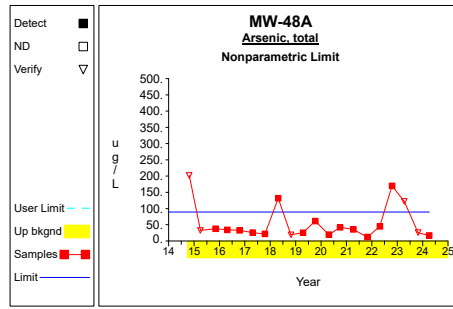
*** - Manual exclusion.

ND = Not Detected, Result = detection limit.

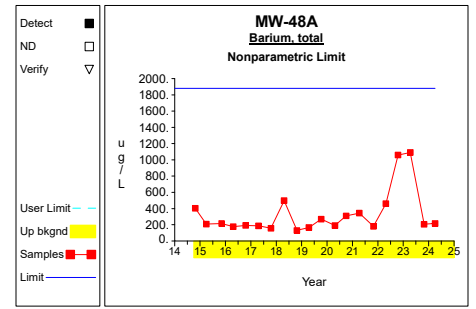
Up vs. Down Prediction Limits



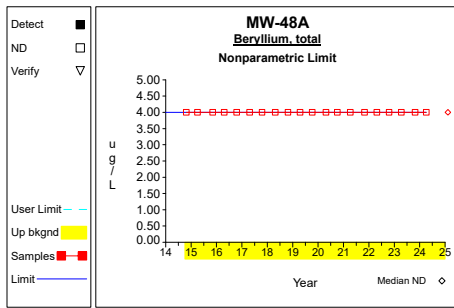
Graph 1



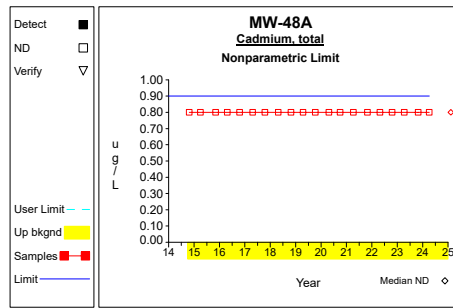
Graph 2



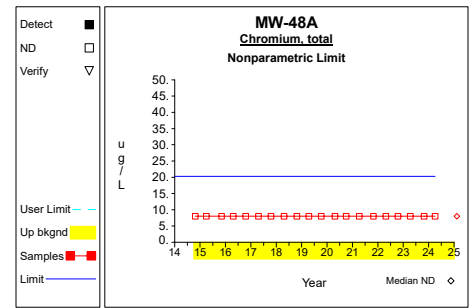
Graph 3



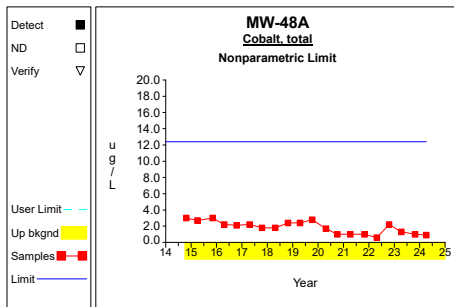
Graph 4



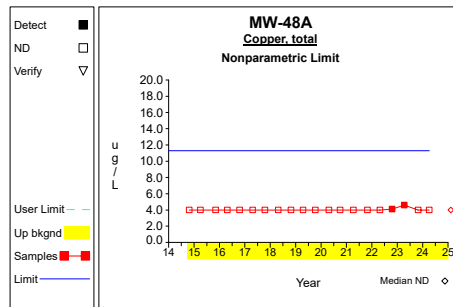
Graph 5



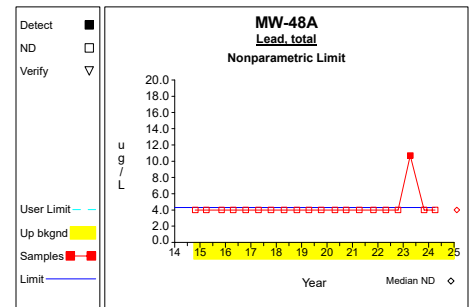
Graph 6



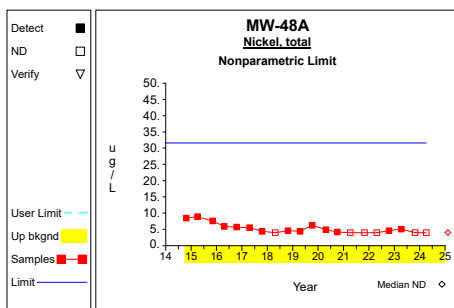
Graph 7



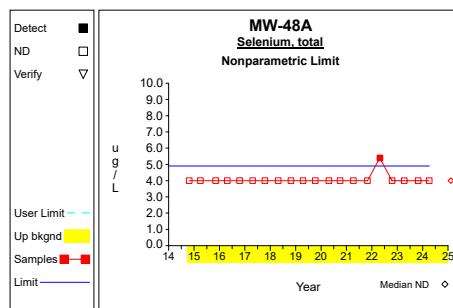
Graph 8



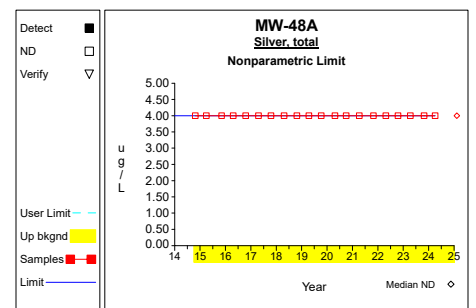
Graph 9



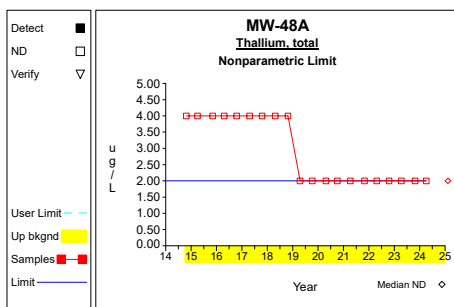
Graph 10



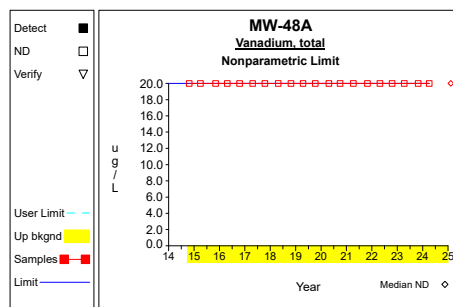
Graph 11



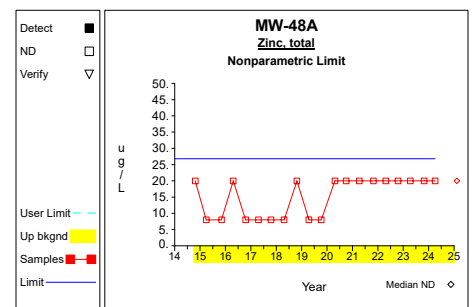
Graph 12



Graph 13

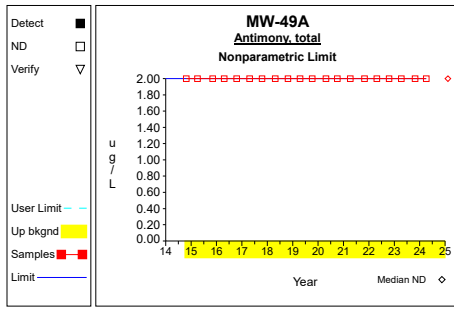


Graph 14

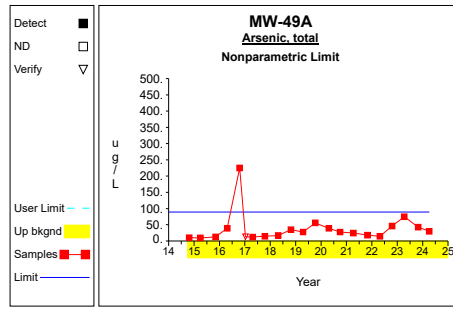


Graph 15

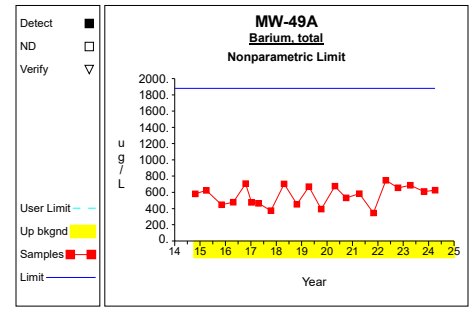
Up vs. Down Prediction Limits



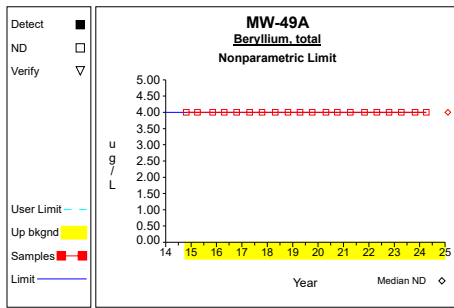
Graph 16



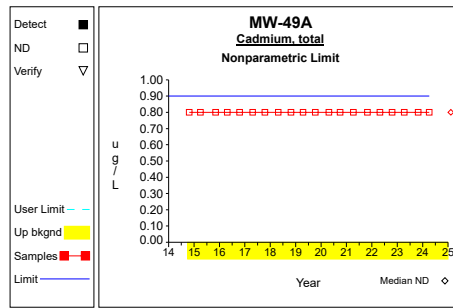
Graph 17



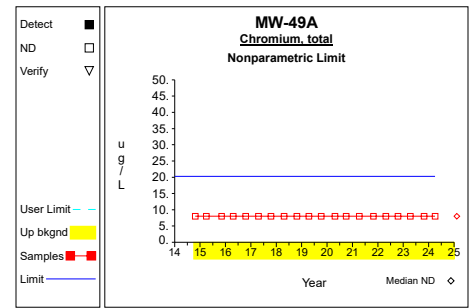
Graph 18



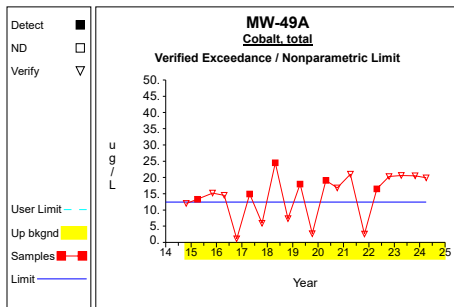
Graph 19



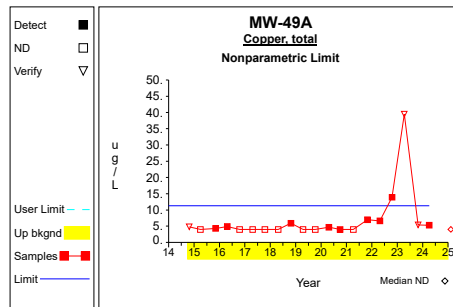
Graph 20



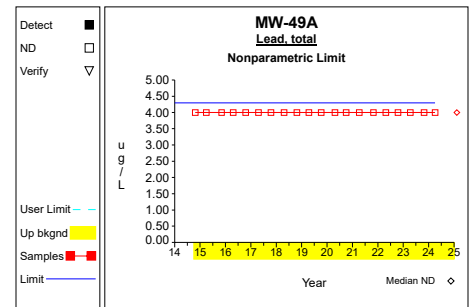
Graph 21



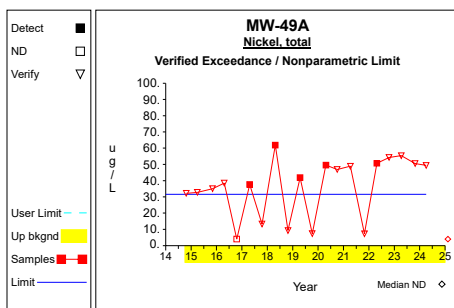
Graph 22



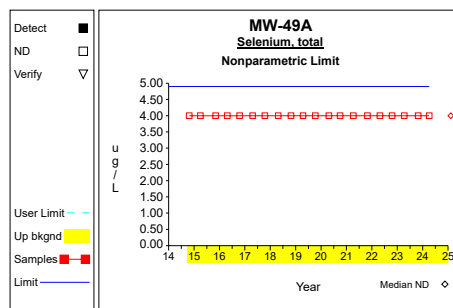
Graph 23



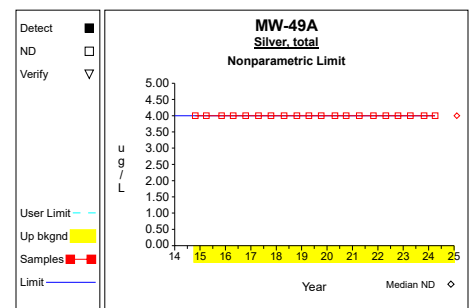
Graph 24



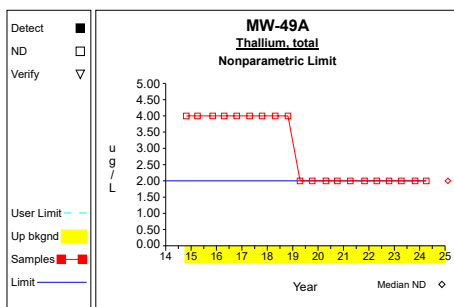
Graph 25



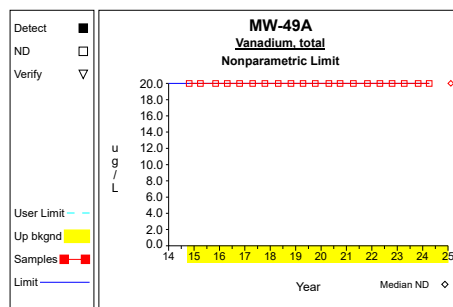
Graph 26



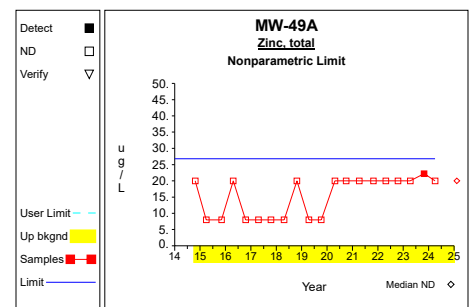
Graph 27



Graph 28

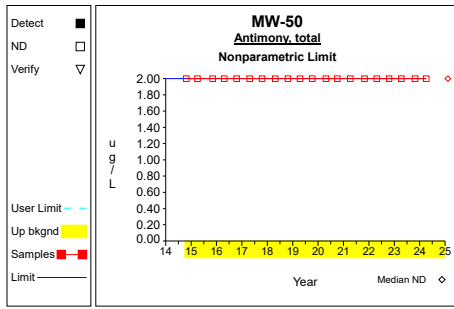


Graph 29

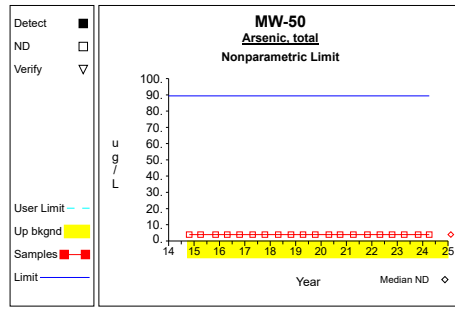


Graph 30

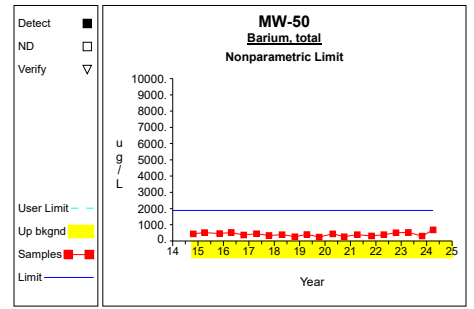
Up vs. Down Prediction Limits



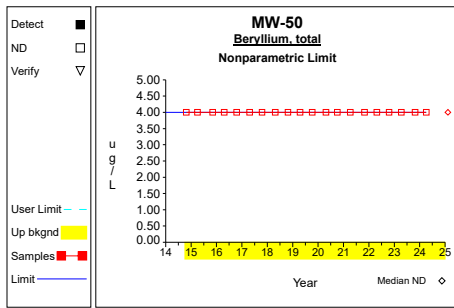
Graph 31



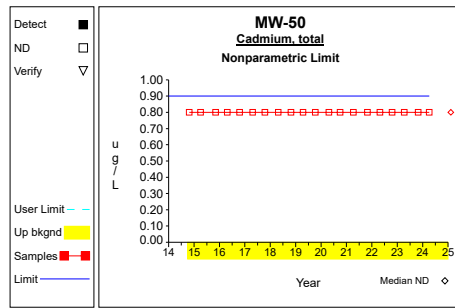
Graph 32



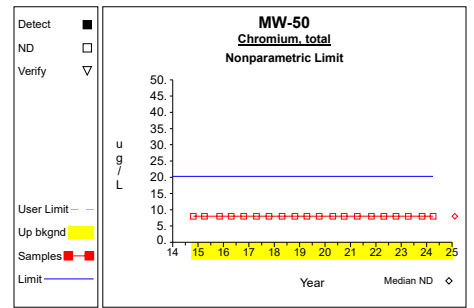
Graph 33



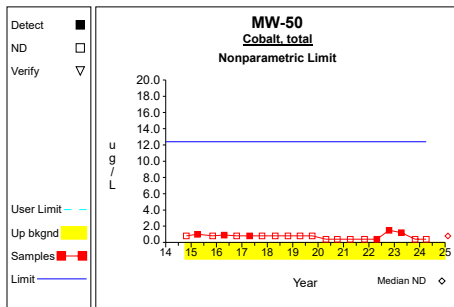
Graph 34



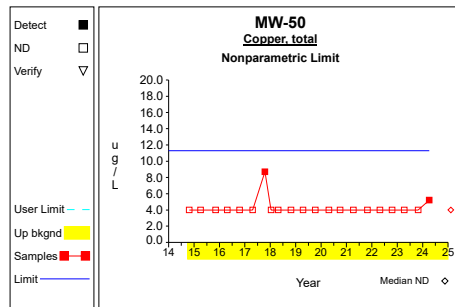
Graph 35



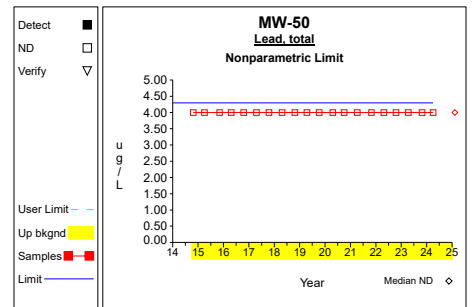
Graph 36



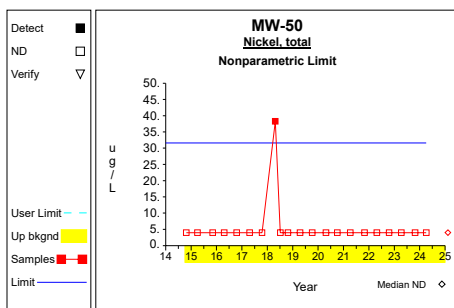
Graph 37



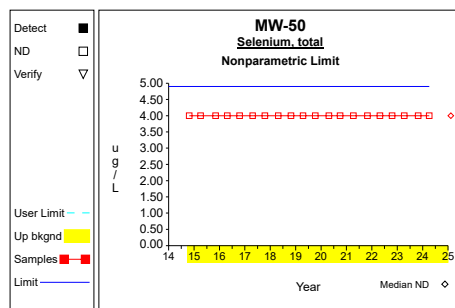
Graph 38



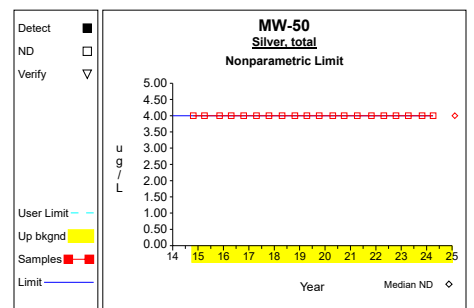
Graph 39



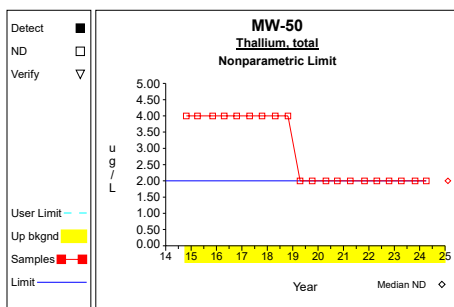
Graph 40



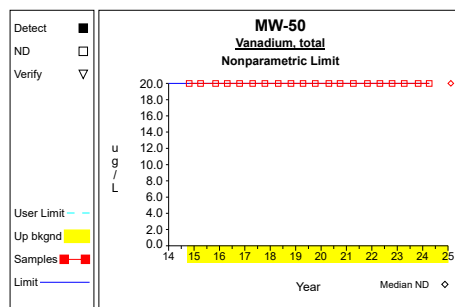
Graph 41



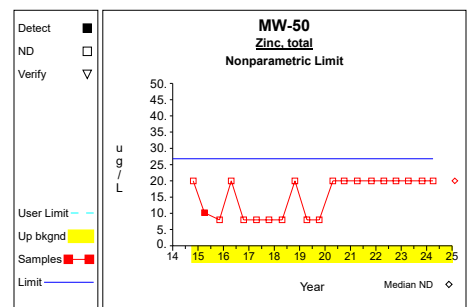
Graph 42



Graph 43

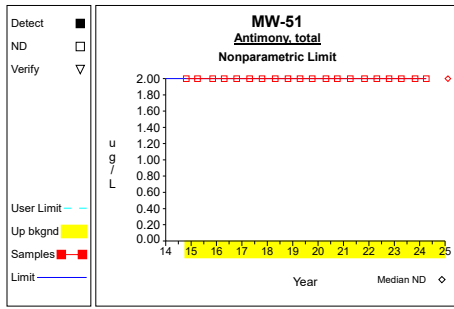


Graph 44

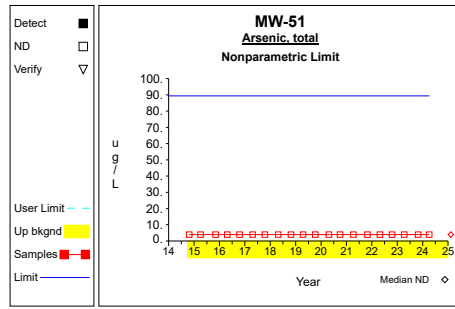


Graph 45

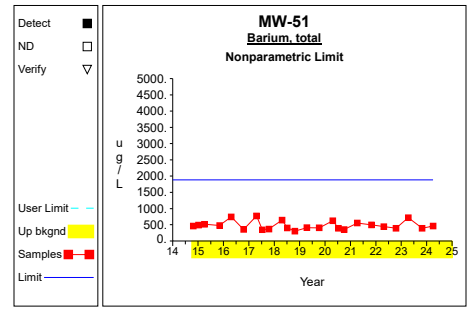
Up vs. Down Prediction Limits



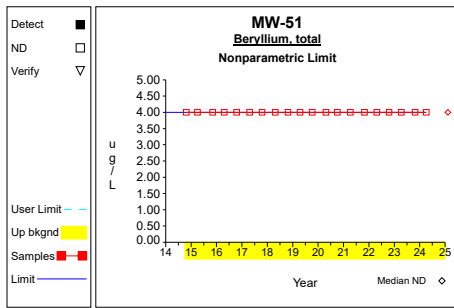
Graph 46



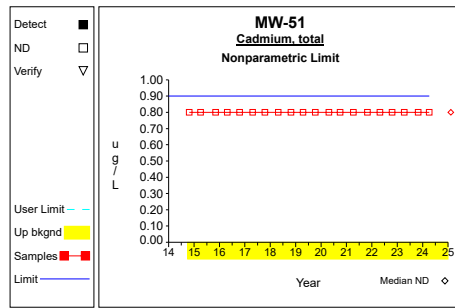
Graph 47



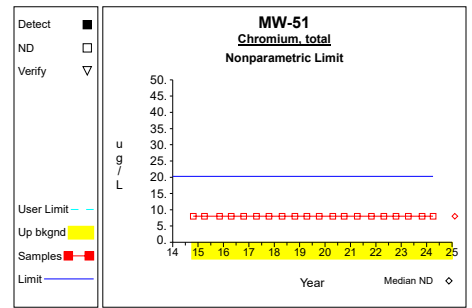
Graph 48



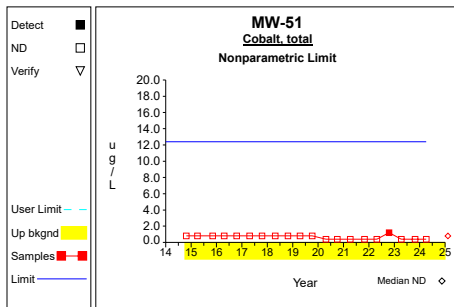
Graph 49



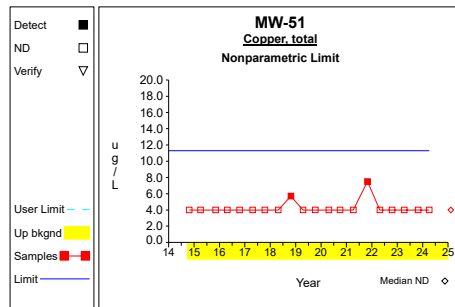
Graph 50



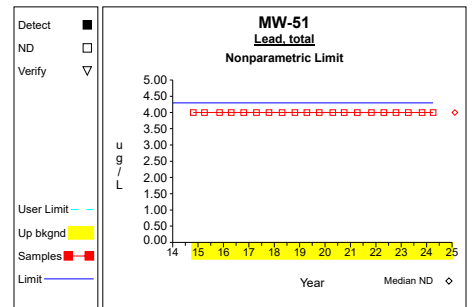
Graph 51



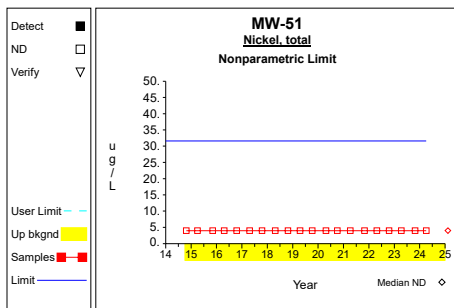
Graph 52



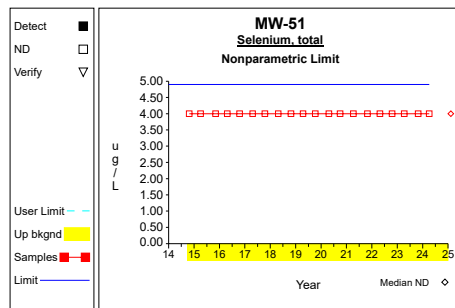
Graph 53



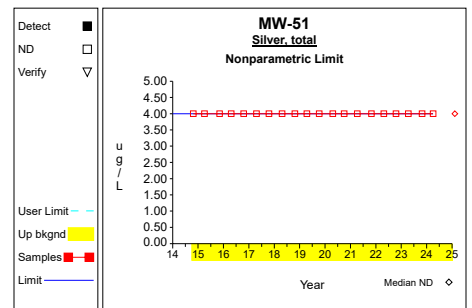
Graph 54



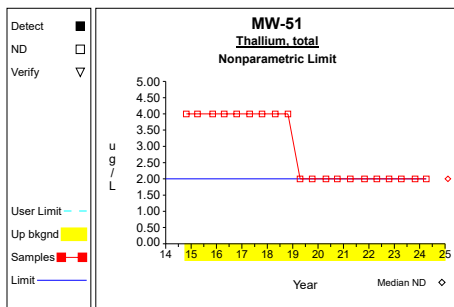
Graph 55



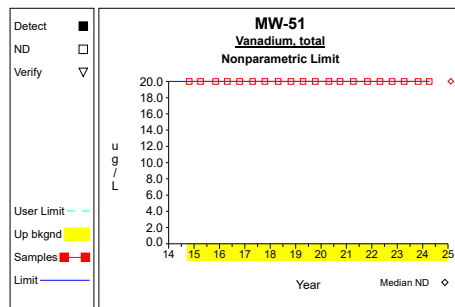
Graph 56



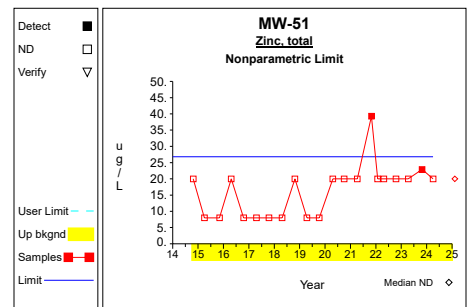
Graph 57



Graph 58

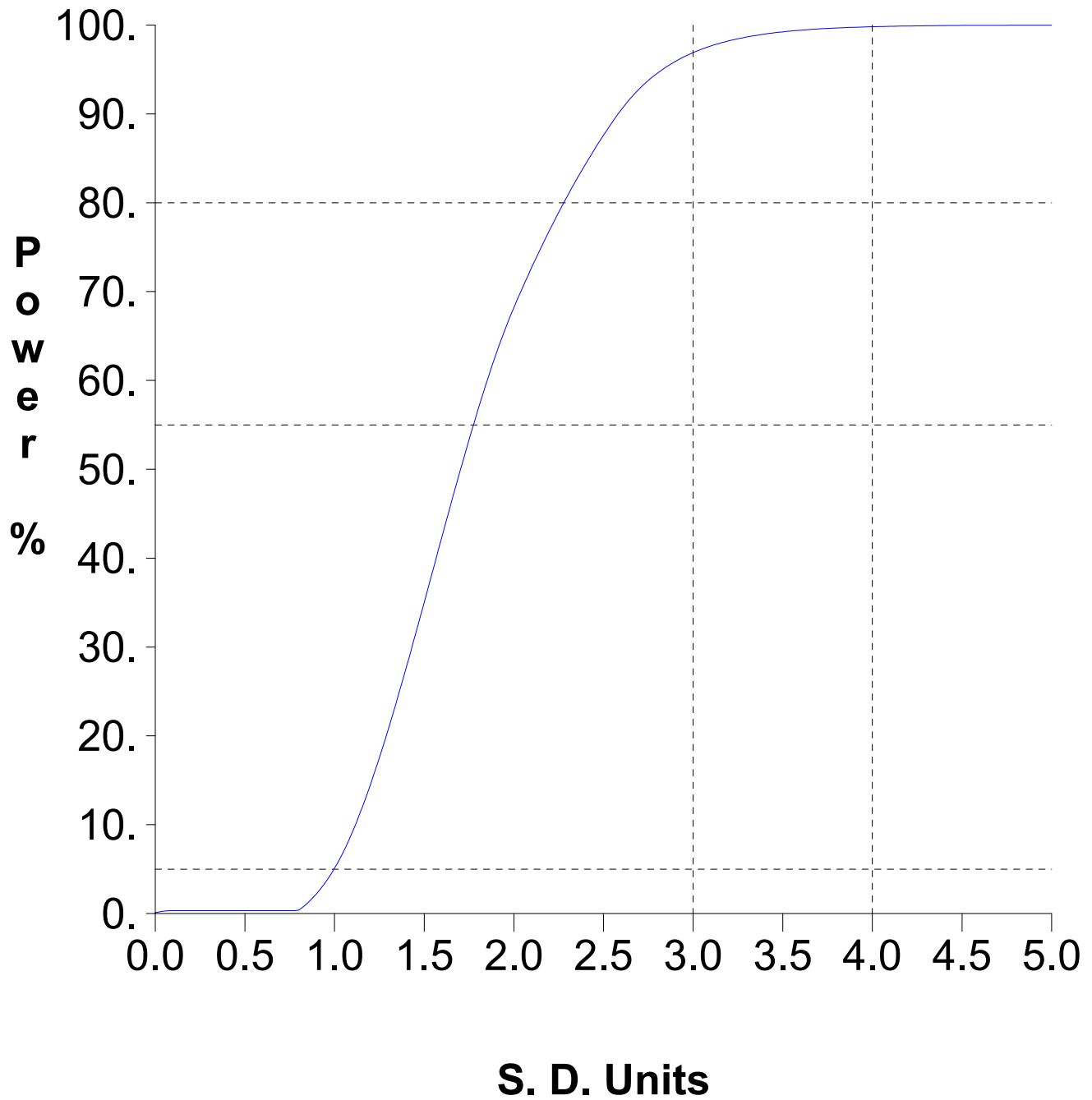


Graph 59



Graph 60

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



Attachment C

Assessment Statistics for Trace Metal Exceedances

Table 1

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

Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend	
Arsenic, total	ug/L	MW-48A	4	83.775	74.564	1.176	0.000	171.484	10.000	inc	
Cobalt, total	ug/L	MW-48A	4	1.350	0.592	1.176	0.654	2.046	2.100		
Copper, total	ug/L	MW-48A	4	3.175	1.372	1.176	1.561	4.789	1300.000		
Lead, total	ug/L	MW-48A	4	4.175	4.350	1.176	0.000	9.292	15.000		
Nickel, total	ug/L	MW-48A	4	3.425	1.658	1.176	1.475	5.375	100.000	dec	
Arsenic, total	ug/L	MW-49A	4	48.400	18.988	1.176	26.065	70.735	10.000	inc	**
Cobalt, total	ug/L	MW-49A	4	20.325	0.310	1.176	19.961	20.689	2.100	inc	**
Copper, total	ug/L	MW-49A	4	16.025	16.161	1.176	0.000	35.035	1300.000		
Lead, total	ug/L	MW-49A	4	2.000	0.000	1.176	2.000	2.000	15.000		
Nickel, total	ug/L	MW-49A	4	52.400	2.899	1.176	48.989	55.811	100.000		
Arsenic, total	ug/L	MW-50	4	2.000	0.000	1.176	2.000	2.000	10.000		
Cobalt, total	ug/L	MW-50	4	0.875	0.562	1.176	0.214	1.536	2.100		
Copper, total	ug/L	MW-50	4	2.800	1.600	1.176	0.918	4.682	1300.000		
Lead, total	ug/L	MW-50	4	2.000	0.000	1.176	2.000	2.000	15.000		
Nickel, total	ug/L	MW-50	4	2.000	0.000	1.176	2.000	2.000	100.000		
Arsenic, total	ug/L	MW-51	4	2.000	0.000	1.176	2.000	2.000	10.000		
Cobalt, total	ug/L	MW-51	4	0.600	0.400	1.176	0.129	1.071	2.100		
Copper, total	ug/L	MW-51	4	2.000	0.000	1.176	2.000	2.000	1300.000		
Lead, total	ug/L	MW-51	4	2.000	0.000	1.176	2.000	2.000	15.000		
Nickel, total	ug/L	MW-51	4	2.000	0.000	1.176	2.000	2.000	100.000		

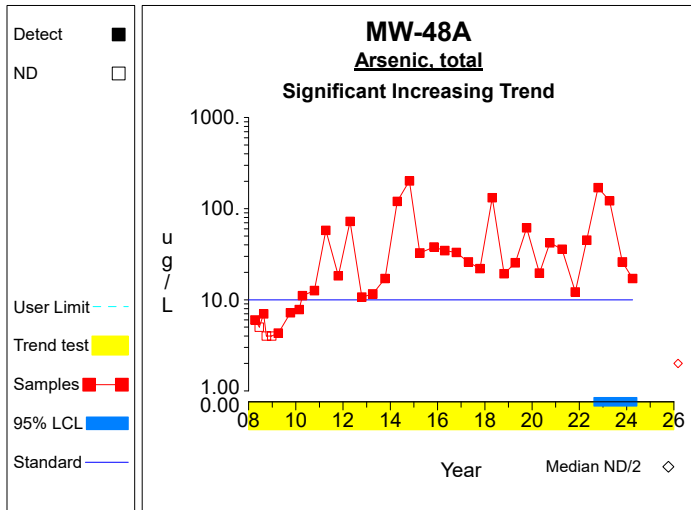
* - Insufficient Data

** - Significant Exceedance

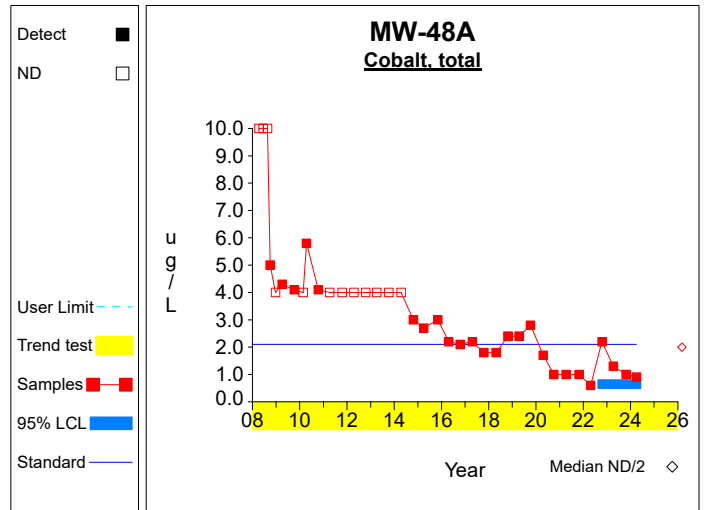
LCL = Lower Confidence Limit

UCL = Upper Confidence Limit

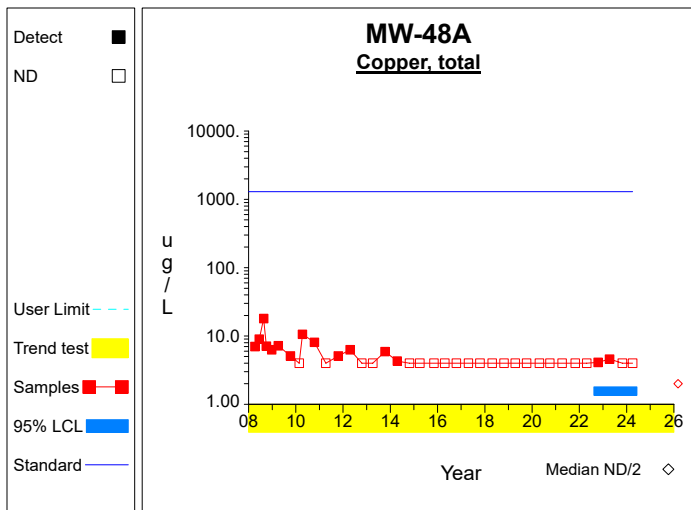
Confidence Limits (Assessment)



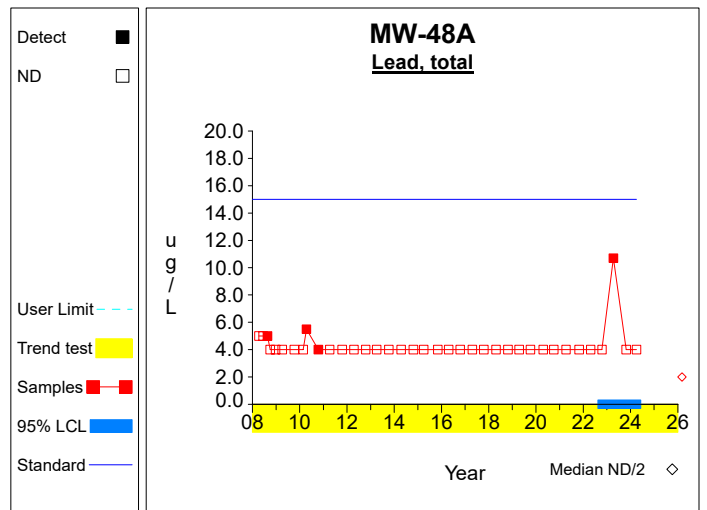
Graph 1



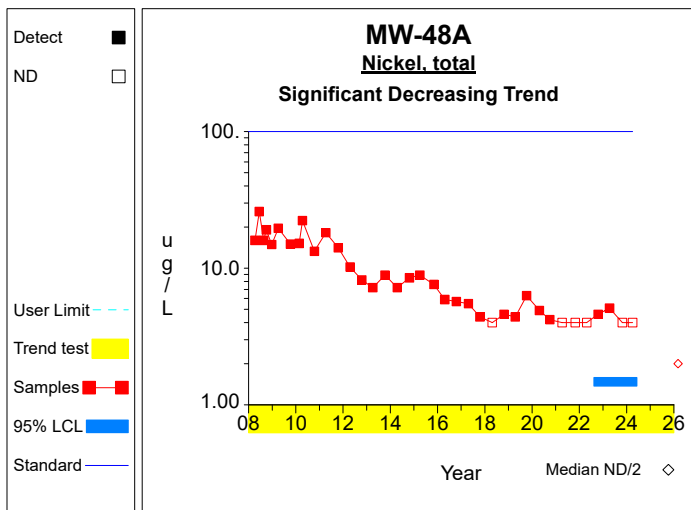
Graph 2



Graph 3

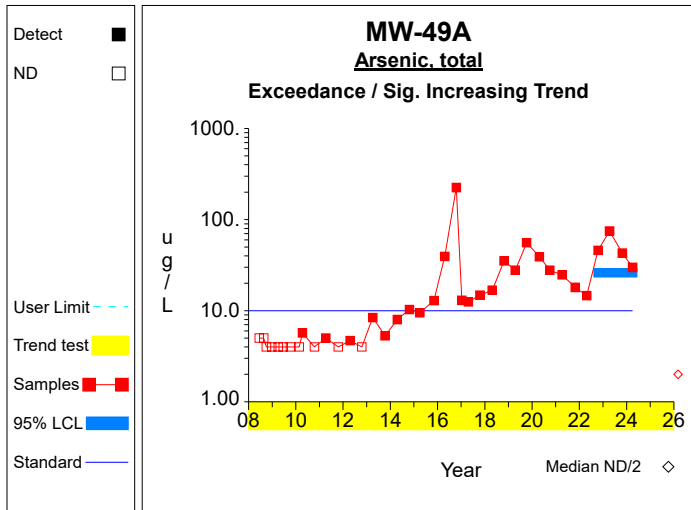


Graph 4

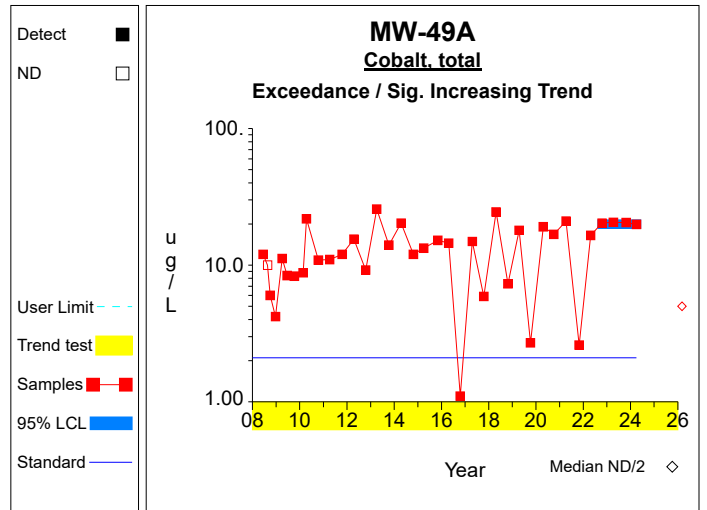


Graph 5

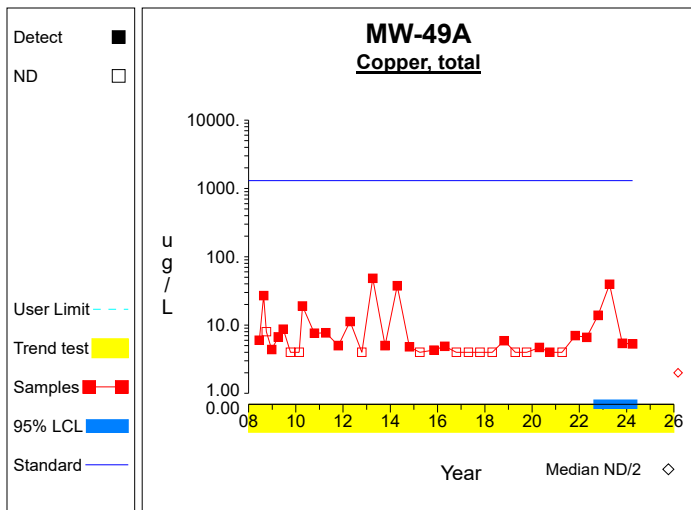
Confidence Limits (Assessment)



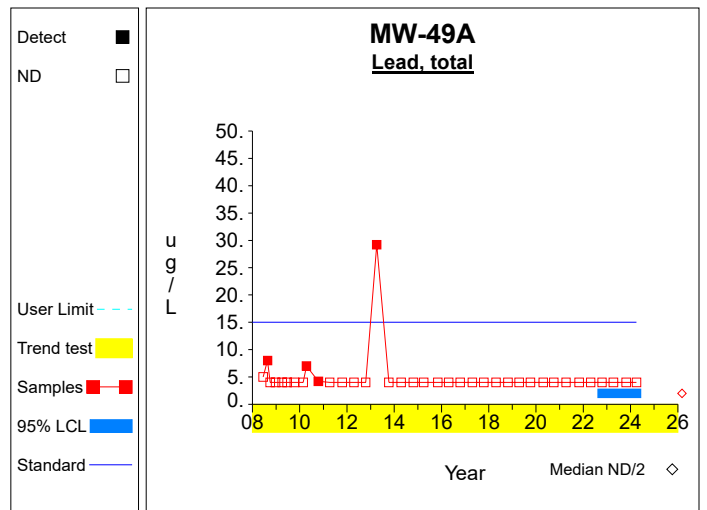
Graph 6



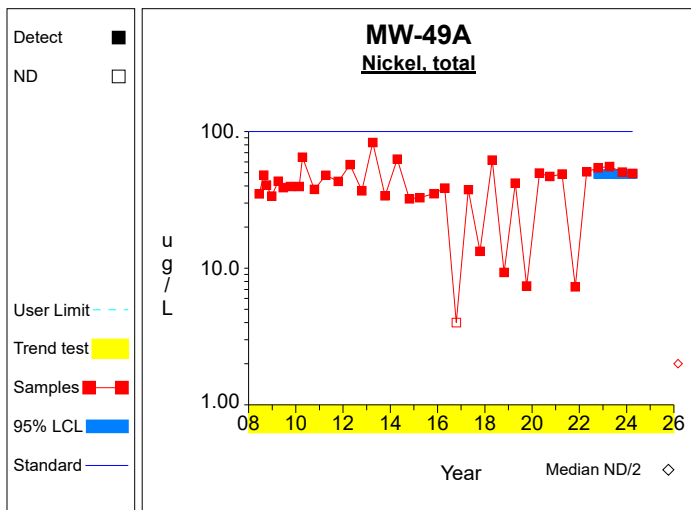
Graph 7



Graph 8

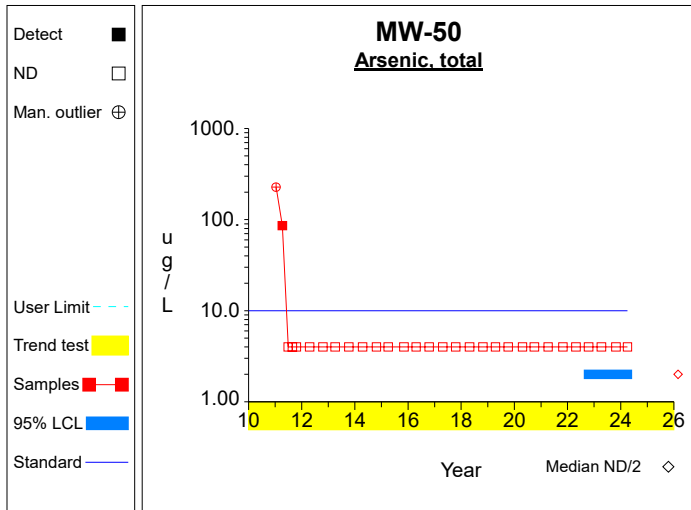


Graph 9

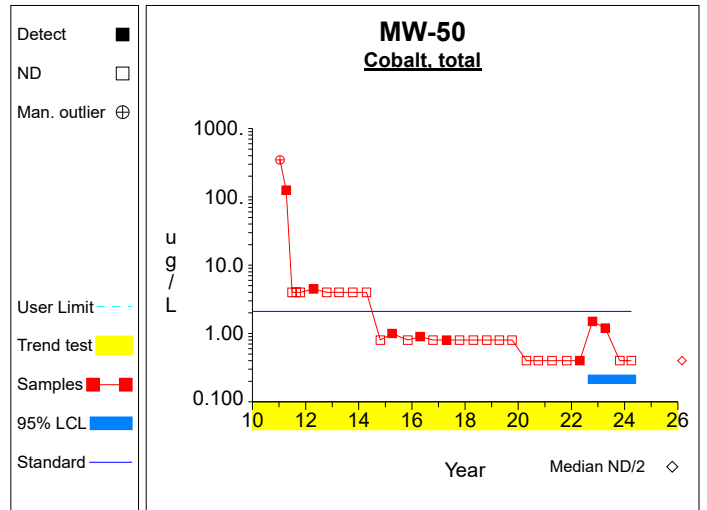


Graph 10

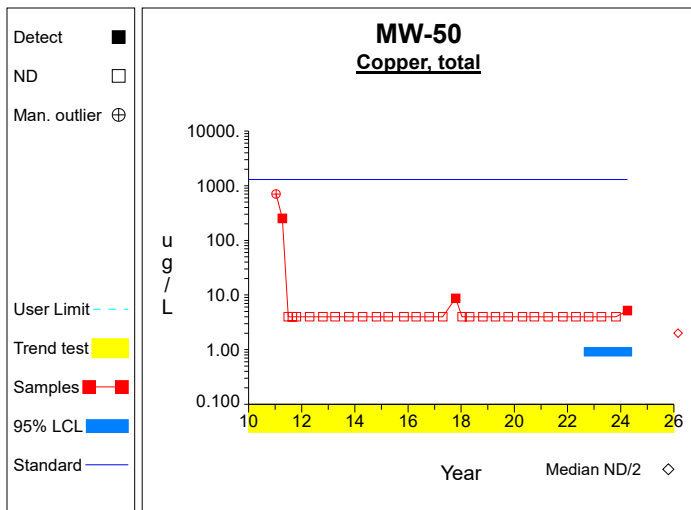
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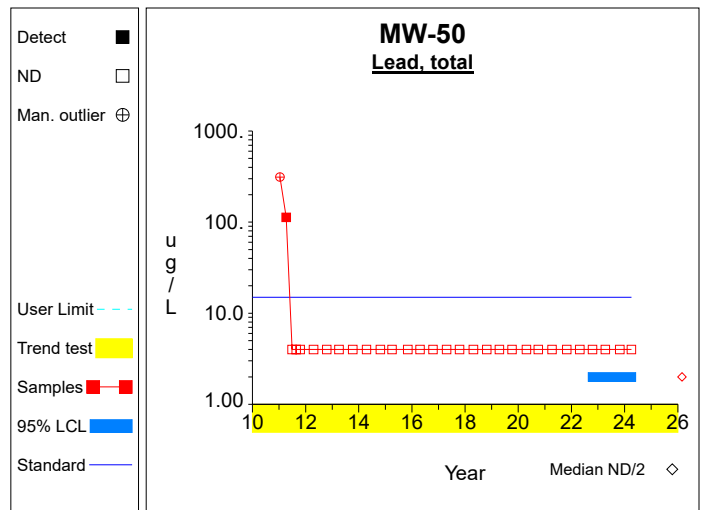
Graph 11



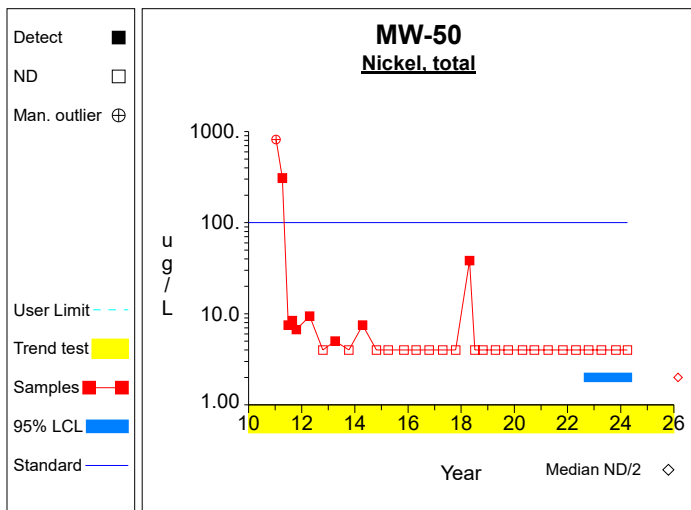
Graph 12



Graph 13

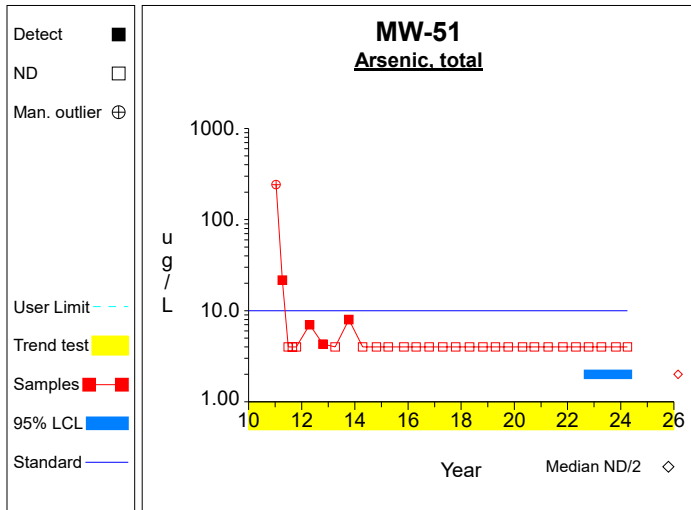


Graph 14

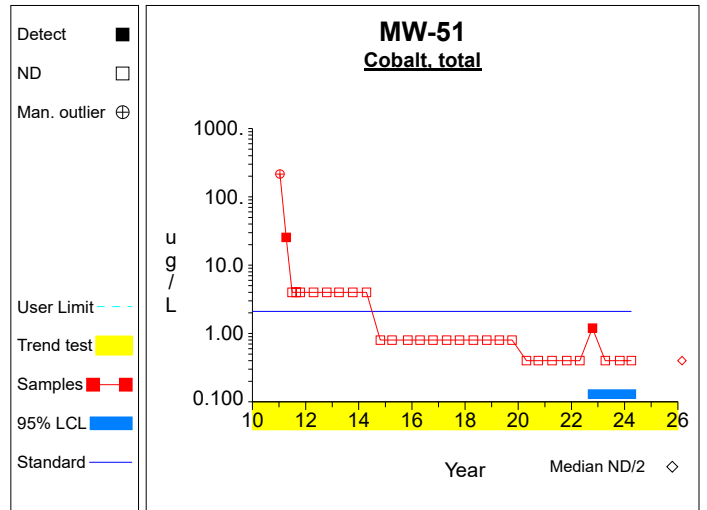


Graph 15

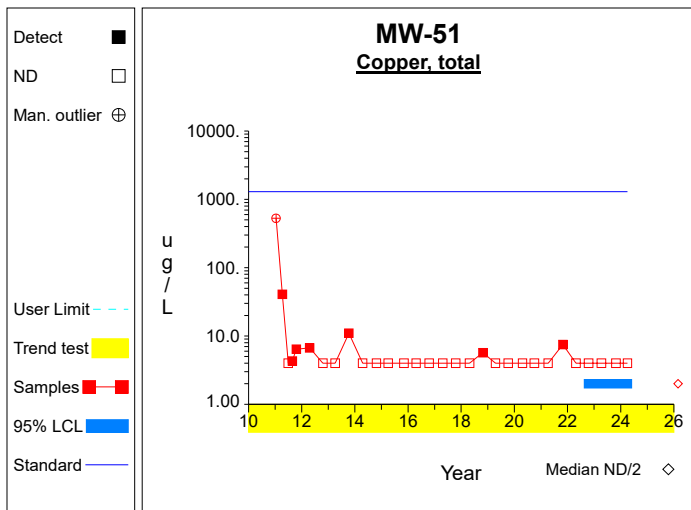
Confidence Limits (Assessment)



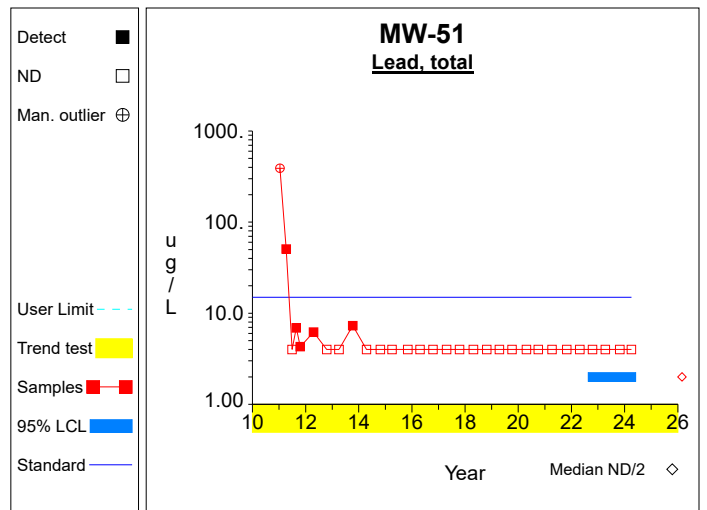
Graph 16



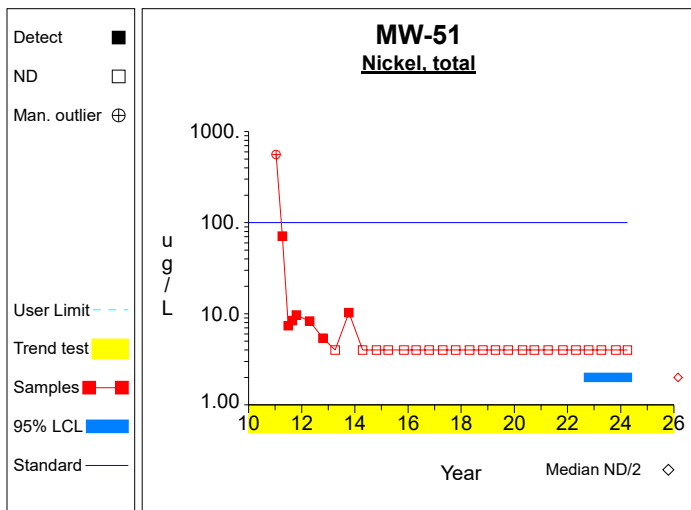
Graph 17



Graph 18



Graph 19



Graph 20

Attachment D

Summary Table of Historical VOC Detections

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Chloroethane	GWD-1	10/18/2011		1.2	1.0	ug/L
Acetone	MW-37	10/16/2017		18.6	10.0	ug/L
Acetone	MW-39	10/16/2017		11	10	ug/L
Acetone	MW-48A	10/16/2017		16.3	10.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-48A	3/31/2015		17	8	ug/L
Acetone	MW-49A	4/16/2014		43.2	10.0	ug/L
Acetone	MW-49A	10/29/2021		281.0	10.0	ug/L
Acetone	MW-49A	4/25/2022		23.8	10.0	ug/L
Benzene	MW-49A	7/12/2005		1.0	1.0	ug/L
Benzene	MW-49A	4/11/2006		1.3	1.0	ug/L
Benzene	MW-49A	10/12/2006		1.3	1.0	ug/L
Benzene	MW-49A	4/20/2007		1.6	1.0	ug/L
Benzene	MW-49A	10/03/2007		2.0	1.0	ug/L
Benzene	MW-49A	6/13/2008		1.2	1.0	ug/L
Benzene	MW-49A	8/22/2008		2.0	1.0	ug/L
Benzene	MW-49A	12/23/2008		1.4	1.0	ug/L
Benzene	MW-49A	4/03/2009		1.9	1.0	ug/L
Benzene	MW-49A	6/19/2009		1.3	1.0	ug/L
Benzene	MW-49A	10/09/2009		1.9	1.0	ug/L
Benzene	MW-49A	2/23/2010		1.2	1.0	ug/L
Benzene	MW-49A	4/13/2010		1.6	1.0	ug/L
Benzene	MW-49A	10/18/2011		1.4	1.0	ug/L
Benzene	MW-49A	4/18/2012		1.9	1.0	ug/L
Benzene	MW-49A	10/09/2013		2.3	1.0	ug/L
Benzene	MW-49A	4/16/2014		1.8	1.0	ug/L
Benzene	MW-49A	10/23/2014		2.9	1.0	ug/L
Benzene	MW-49A	3/31/2015		3.5	1.0	ug/L
Benzene	MW-49A	11/05/2015		5.7	1.0	ug/L
Benzene	MW-49A	4/21/2016		3.4	1.0	ug/L
Benzene	MW-49A	10/17/2016		2.7	1.0	ug/L
Benzene	MW-49A	4/21/2017		1.6	1.0	ug/L
Benzene	MW-49A	10/16/2017		4.0	1.0	ug/L
Benzene	MW-49A	4/24/2018		3.4	1.0	ug/L
Benzene	MW-49A	10/25/2018		4.0	1.0	ug/L
Benzene	MW-49A	4/15/2019		3.2	1.0	ug/L
Benzene	MW-49A	10/07/2019		1.6	1.0	ug/L
Benzene	MW-49A	4/23/2020		2.4	1.0	ug/L
Benzene	MW-49A	10/01/2020		2.9	1.0	ug/L
Benzene	MW-49A	4/08/2021		3.4	1.0	ug/L
Benzene	MW-49A	10/29/2021		7.0	1.0	ug/L
Benzene	MW-49A	4/25/2022		5.9	1.0	ug/L
Benzene	MW-49A	10/17/2022		5.8	1.0	ug/L
Benzene	MW-49A	4/10/2023		4.2	1.0	ug/L
Benzene	MW-49A	10/27/2023		3.4	1.0	ug/L
Benzene	MW-49A	4/02/2024		2.8	1.0	ug/L
Chloroethane	MW-49A	8/22/2008		2.0	1.0	ug/L
Chloroethane	MW-49A	4/03/2009		1.7	1.0	ug/L
Chloroethane	MW-49A	6/19/2009		1.8	1.0	ug/L
Chloroethane	MW-49A	10/09/2009		2.2	1.0	ug/L
Chloroethane	MW-49A	2/23/2010		1.5	1.0	ug/L
Chloroethane	MW-49A	4/13/2010		2.2	1.0	ug/L
Chloroethane	MW-49A	10/14/2010		2.8	1.0	ug/L
Chloroethane	MW-49A	4/08/2011		1.5	1.0	ug/L
Chloroethane	MW-49A	10/18/2011		2.2	1.0	ug/L
Chloroethane	MW-49A	4/18/2012		2.3	1.0	ug/L
Chloroethane	MW-49A	10/17/2012		1.8	1.0	ug/L
Chloroethane	MW-49A	4/03/2013		2.1	1.0	ug/L
Chloroethane	MW-49A	10/09/2013		3.6	1.0	ug/L
Chloroethane	MW-49A	4/16/2014		4.9	1.0	ug/L
Chloroethane	MW-49A	10/23/2014		2.9	1.0	ug/L
Chloroethane	MW-49A	3/31/2015		10.5	1.0	ug/L
Chloroethane	MW-49A	11/05/2015		1.9	1.0	ug/L
Chloroethane	MW-49A	4/21/2016		1.7	1.0	ug/L
Chloroethane	MW-49A	10/17/2016		1.8	1.0	ug/L
Chloroethane	MW-49A	4/21/2017		2.0	1.0	ug/L
Chloroethane	MW-49A	10/16/2017		3.0	1.0	ug/L
Chloroethane	MW-49A	4/24/2018		3.3	1.0	ug/L
Chloroethane	MW-49A	10/25/2018		1.1	1.0	ug/L
Chloroethane	MW-49A	4/15/2019		1.9	1.0	ug/L
Chloroethane	MW-49A	4/23/2020		2.0	1.0	ug/L
Chloroethane	MW-49A	10/01/2020		2.7	1.0	ug/L
Chloroethane	MW-49A	4/08/2021		5.7	1.0	ug/L
Chloroethane	MW-49A	10/29/2021		6.3	1.0	ug/L
Chloroethane	MW-49A	4/25/2022		5.4	1.0	ug/L
Chloroethane	MW-49A	10/17/2022		4.9	1.0	ug/L
Chloroethane	MW-49A	4/10/2023		3.5	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Chloroethane	MW-49A	10/27/2023		3.0	1.0	ug/L
Chloroethane	MW-49A	4/02/2024		3.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49A	4/13/2010		1.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49A	10/14/2010		1.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49A	10/18/2011		1.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49A	11/05/2015		1.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49A	10/01/2020		1.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49A	4/08/2021		3.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49A	10/29/2021		8.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49A	4/25/2022		6.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49A	10/17/2022		3.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49A	4/10/2023		1.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49A	10/27/2023		2.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49A	4/02/2024		3.6	1.0	ug/L
Dichlorodifluoromethane	MW-49A	3/31/2015		1.1	1.0	ug/L
Vinyl chloride	MW-49A	10/09/2013		1.6	1.0	ug/L
Vinyl chloride	MW-49A	4/16/2014		1.9	1.0	ug/L
Vinyl chloride	MW-49A	10/23/2014		1.6	1.0	ug/L
Vinyl chloride	MW-49A	3/31/2015		1.5	1.0	ug/L
Vinyl chloride	MW-49A	10/16/2017		1.3	1.0	ug/L
Vinyl chloride	MW-49A	4/24/2018		1.1	1.0	ug/L
Vinyl chloride	MW-49A	4/08/2021		3.2	1.0	ug/L
Vinyl chloride	MW-49A	10/29/2021		5.0	1.0	ug/L
Vinyl chloride	MW-49A	4/25/2022		3.9	1.0	ug/L
Vinyl chloride	MW-49A	10/17/2022		2.7	1.0	ug/L
Vinyl chloride	MW-49A	4/10/2023		1.6	1.0	ug/L
Vinyl chloride	MW-49A	10/27/2023		1.4	1.0	ug/L
Vinyl chloride	MW-49A	4/02/2024		2.9	1.0	ug/L

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

Table 1

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

Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend
Benzene	ug/L	MW-49A	4	4.050	1.300	1.176	2.521	5.579	5.000	inc
Chloroethane	ug/L	MW-49A	4	3.725	0.818	1.176	2.763	4.687	2800.000	inc
Cis-1,2-dichloroethylene	ug/L	MW-49A	4	2.775	0.995	1.176	1.605	3.945	70.000	
Vinyl chloride	ug/L	MW-49A	4	2.150	0.759	1.176	1.257	3.043	2.000	

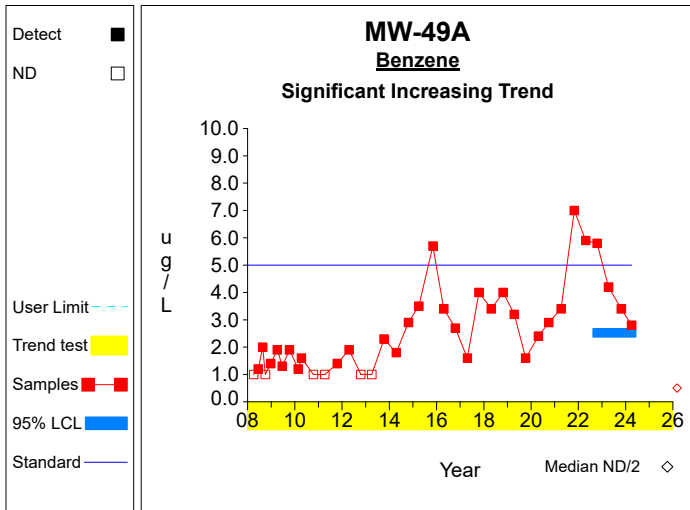
* - Insufficient Data

** - Significant Exceedance

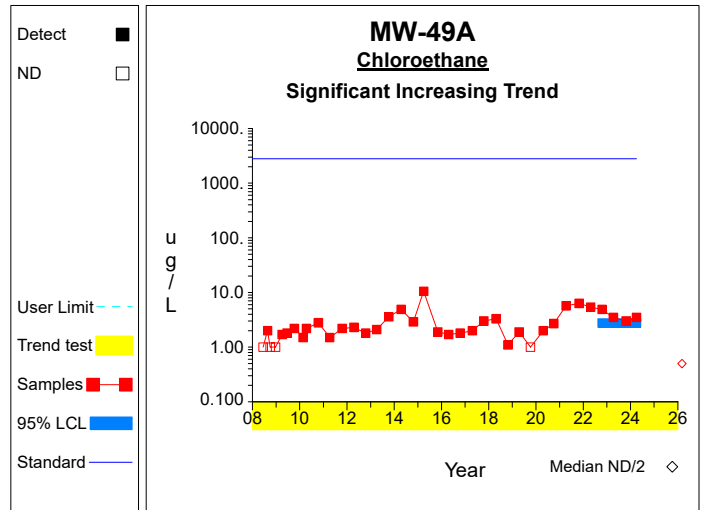
LCL = Lower Confidence Limit

UCL = Upper Confidence Limit

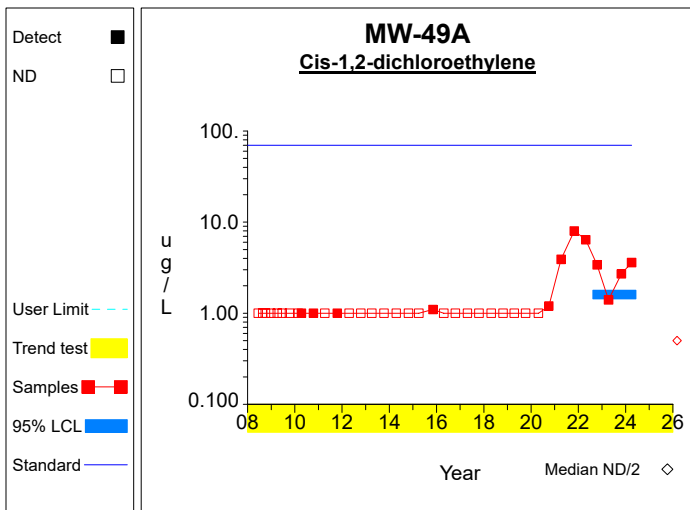
Confidence Limits (Assessment)



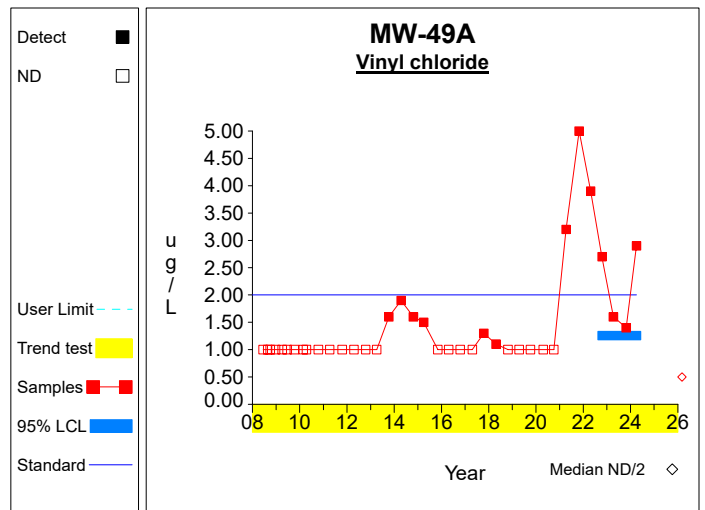
Graph 1



Graph 2



Graph 3



Graph 4

GROUND WATER STATISTICS

FOR THE

RURAL IOWA SANITARY LANDFILL – CLOSED AREA

First Semi-Annual Monitoring Event in 2024

Prepared for:
Rural Iowa Waste Management Association
20488 M Avenue
Eldora, Hardin County, IA

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

May 2024

INTRODUCTION

This report summarizes the results of the statistical analysis used to evaluate the ground water quality data obtained during the first semi-annual monitoring event in 2024 at the Rural Iowa Sanitary Landfill near Eldora in Hardin 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 Rural Iowa Sanitary 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 the closed area of the Rural Iowa Sanitary Landfill includes sample points MW-36 (upgradient), MW-37 (upgradient), MW-39 (upgradient), MW-40 (upgradient), MW-47 (upgradient), GU-3, MW-13R, MW-14, MW-211, MW-29, MW-31R, MW-33, MW-35(R), MW-7, and MW-9. Each of the groundwater monitoring wells is to be sampled at least semiannually and analyzed for the detection monitoring parameters listed in 113.10(5), which includes 15 inorganic constituents and 47 organic compounds, summarized in Table 1 below.

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

Organic Compounds:

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

Inorganic constituents:

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

Monitoring wells GU-3, MW-13R, MW-14, MW-211, MW-29, MW-31R, MW-33, MW-35R, MW-7, MW-9, MW-36, MW-37, MW-39, MW-40, and MW-47 were sampled on April 2, 2024 and analyzed for the constituents required by permit. The ground water data obtained during the first semi-annual monitoring event in 2024 are summarized in Attachment A.

STATISTICAL METHODOLOGIES FOR DETECTION MONITORING

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

Interwell Statistics: Upgradient versus Downgradient Comparisons

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

Results of the Interwell Statistics

The background data used in this statistical analysis includes the ground water data collected from ground water wells MW-36, MW-37, MW-39, MW-40, and MW-47 during the period from October 2014 through the current data. A summary of the background data from monitoring wells MW-36, MW-37, MW-39, MW-40, and MW-47, used to determine the site prediction limits, is listed in Attachment B, Table 1 “Upgradient Data”. This statistical method compares the current downgradient determinations to site prediction limits and checks for exceedances.

Table 2 “Most Current Downgradient Monitoring Data”, summarizes the current data from downgradient wells GU-3, MW-13R, MW-14, MW-211, MW-29, MW-31R, MW-33, MW-35R, MW-7, and MW-9, compared to the site prediction limits. Prediction limit exceedances are flagged with asterisks. For the data obtained during the first semi-annual monitoring event in 2024, 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 2024

Well	Trace Metal Detected	Result, µg/L	Prediction Limit, µg/L	Prediction Limit Type	Verified/Awaiting Verification
MW-14	Cobalt	20.8	12.4000	Nonparametric	Verified
MW-211	Cobalt	12.5	12.4000	Nonparametric	Awaiting Verification
MW-31R	Cobalt	20.6	12.4000	Nonparametric	Verified
	Nickel	34.2	31.6000	Nonparametric	Awaiting Verification
MW-7	Arsenic	167	89.3000	Nonparametric	Verified

The detection frequencies of the parameters in the up and down gradient monitoring wells are summarized in Table 3. Barium was detected at a frequency greater than 50% in the upgradient wells so barium was tested for normality. The remainder of the metals are rarely detected (less than 50%) in the upgradient wells so nonparametric 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 3 standard deviation unit increases over background.

The past and current 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% LCL for arsenic at MW-13R (62.513 µg/L) exceeds the GWPS of 10 µg/L.
- The 95% LCL for cobalt at MW-13R (3.648 µg/L) exceeds the Iowa Statewide Standard of 2.1 µg/L.
- The 95% LCL for arsenic at MW-14 (49.273 µg/L) exceeds the GWPS of 10 µg/L.
- The 95% LCL for cobalt at MW-14 (12.389 µg/L) exceeds the Iowa Statewide Standard of 2.1 µg/L.
- The 95% LCL for arsenic at MW-211 (24.888 µg/L) exceeds the GWPS of 10 µg/L.
- The 95% LCL for cobalt at MW-211 (10.573 µg/L) exceeds the Iowa Statewide Standard of 2.1 µg/L.
- The 95% LCL for arsenic at MW-31R (28.333 µg/L) exceeds the GWPS of 10 µg/L.
- The 95% LCL for cobalt at MW-31R (16.014 µg/L) exceeds the Iowa Statewide Standard of 2.1 µg/L.
- The 95% LCL for cobalt at MW-35R (5.848 µg/L) exceeds the Iowa Statewide Standard of 2.1 µg/L.

The 95% LCL for arsenic at MW-7 (143.347 µg/L) exceeds the GWPS of 10 µg/L. The remainder of the calculated 95% LCLs are below the respective GWPS.

Volatile Organic Compounds

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

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

Well	VOC Detected	Result, µg/L	Reporting Limit, µg/L	Verified/ Awaiting verification	Water Quality Standard
MW-13R	1,4-Dichlorobenzene	1.1	1	Verified	75 ^a
	Benzene	2.1	1	Verified	5 ^a
	Chlorobenzene	36.7	1	Verified	100 ^a
MW-14	1,4-Dichlorobenzene	3.6	1	Verified	75 ^a
	Benzene	2.6	1	Verified	5 ^a
	Chlorobenzene	1.2	1	Awaiting verification	100 ^a
	Chloroethane	1.9	1	Verified	2800 ^b
MW-211	Chlorobenzene	4.4	1	Verified	100 ^a
MW-31R	1,1-Dichloroethane	3.3	1	Verified	140 ^b
	1,4-Dichlorobenzene	14.5	1	Verified	75 ^a
	Benzene	2.1	1	Verified	5 ^a
	Chlorobenzene	21.0	1	Verified	100 ^a
	Chloroethane	3.5	1	Verified	2800 ^b
	<i>cis</i> -1,2-Dichloroethene	19.9	1	Verified	70 ^a
	Ethylbenzene	1.0	1	Awaiting verification	700 ^b
<i>trans</i> -1,2-Dichloroethene	2.5	1	Verified	100 ^a	
MW-35R	Chloroethane	2.1	1	Verified	2800 ^b
TileACM-1	1,1-Dichloroethane	1.6	1	Verified	140 ^b
	Chlorobenzene	3.7	1	Verified	100 ^a
	Chloroethane	2.3	1	Verified	2800 ^b

a - USEPA MCL

b- Iowa Statewide Standard for a protected groundwater source

The verified VOC detections were evaluated against the ground water protection standards (GWPS) using confidence limits calculated in accordance with the Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, USEPA, March 2009.

The calculated 95% LCLs for the verified VOCs are below the respective GWPS (Attachment E).

CONCLUSIONS

This report summarizes the statistical analyses used to evaluate the ground water data obtained during the first semi-annual monitoring event in 2024 at Rural Iowa Sanitary Landfill. The groundwater monitoring network for Rural Iowa Sanitary Landfill includes wells MW-36 (upgradient), MW-37 (upgradient), MW-39 (upgradient), MW-40 (upgradient), MW-47 (upgradient), GU-3, MW-13R, MW-14, MW-211, MW-29, MW-31R, MW-33, MW-35R, MW-7, and MW-9. These monitoring wells were sampled on April 2, 2024 and analyzed for the parameters required by permit.

The ground water data was compared to background using prediction limits (interwell). There are verified site prediction limit exceedances detected for cobalt at MW-14, cobalt at MW-31R, and arsenic at MW-7. The VOCs were compared to MCLs or PQLs, in lieu of statistical comparisons to historical concentrations. There are verified VOC detections at MW-13R, MW-14, MW-211, MW-31R, and MW-35R. The calculated 95% LCLs for the verified VOCs are below the respective GWPS.

Attachment A

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

Table 1

Analytical Data Summary for 4/2/2024

Constituents	Units	GU-3	MW-13R	MW-14	MW-211	MW-29	MW-31R	MW-33	MW-35R	MW-36	MW-37
(3 4)-methylphenol	ug/L										
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	3.3	<1.0	<1.0	<1.0	<1.0
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene	ug/L										
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	ug/L										
1,2,4-trichlorobenzene	ug/L										
1,2-dibromo-3-chloropropane	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene	ug/L										
1,3,5-trinitrobenzene	ug/L										
1,3-dichlorobenzene	ug/L										
1,3-dichloropropane	ug/L										
1,3-dinitrobenzene	ug/L										
1,4-dichlorobenzene	ug/L	<1.0	1.1	3.6	<1.0	<1.0	14.5	<1.0	<1.0	<1.0	<1.0
1,4-naphthoquinone	ug/L										
1,4-phenylenediamine	ug/L										
1-naphthylamine	ug/L										
2,2-dichloropropane	ug/L										
2,3,4,6-tetrachlorophenol	ug/L										
2,4,5-t	ug/L										
2,4,5-tp (silvex)	ug/L										
2,4,5-trichlorophenol	ug/L										
2,4,6-trichlorophenol	ug/L										
2,4-d	ug/L										
2,4-dichlorophenol	ug/L										
2,4-dimethylphenol	ug/L										
2,4-dinitrophenol	ug/L										
2,4-dinitrotoluene	ug/L										
2,6-dichlorophenol	ug/L										
2,6-dinitrotoluene	ug/L										
2-acetylaminofluorene	ug/L										
2-butanone (mek)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-chloronaphthalene	ug/L										
2-chlorophenol	ug/L										
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene	ug/L										
2-methylphenol	ug/L										
2-naphthylamine	ug/L										
2-nitroaniline	ug/L										
2-nitrophenol	ug/L										
3,3'-dichlorobenzidine	ug/L										
3,3'-dimethylbenzidine	ug/L										
3-methylcholanthrene	ug/L										
3-nitroaniline	ug/L										
4,4'-ddd	ug/L										
4,4'-dde	ug/L										
4,4'-ddt	ug/L										
4,6-dinitro-2-methylphenol	ug/L										
4-aminobiphenyl	ug/L										
4-bromophenyl phenyl ether	ug/L										
4-chloro-3-methylphenol	ug/L										
4-chloroaniline	ug/L										
4-chlorophenyl phenyl ether	ug/L										
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline	ug/L										
4-nitrophenol	ug/L										
5-nitro-o-toluidine	ug/L										
7,12-dimethylbenz(a)anthracene	ug/L										
Acenaphthene	ug/L										
Acenaphthylene	ug/L										
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acetonitrile	ug/L										
Acetophenone	ug/L										
Acrolein	ug/L										
Acrylonitrile	ug/L	<5	<5	<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 1

Analytical Data Summary for 4/2/2024

Constituents	MW-39	MW-40	MW-47	MW-7	MW-9	PECS-1	TILE ACM-1
(3 4)-methylphenol					<8		
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.6
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene					<1		
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene					<8		
1,2,4-trichlorobenzene					<1		
1,2-dibromo-3-chloropropane	<5	<5	<5	<5	<1	<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		
1,3,5-trinitrobenzene					<8		
1,3-dichlorobenzene					<1		
1,3-dichloropropane					<1		
1,3-dinitrobenzene					<8		
1,4-dichlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-naphthoquinone					<8		
1,4-phenylenediamine					<8		
1-naphthylamine					<8		
2,2-dichloropropane					<1		
2,3,4,6-tetrachlorophenol					<8		
2,4,5-t					<.5		
2,4,5-tp (silvex)					<.5		
2,4,5-trichlorophenol					<8		
2,4,6-trichlorophenol					<8		
2,4-d					<2		
2,4-dichlorophenol					<8		
2,4-dimethylphenol					<8		
2,4-dinitrophenol					<8		
2,4-dinitrotoluene					<8		
2,6-dichlorophenol					<8		
2,6-dinitrotoluene					<8		
2-acetylaminofluorene					<8		
2-butanone (mek)	<10	<10	<10	<10	<5	<10	<10
2-chloronaphthalene					<8		
2-chlorophenol					<8		
2-hexanone (mbk)	<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
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
Acetonitrile					<10		
Acetophenone					<8		
Acrolein					<10		
Acrylonitrile	<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 1

Analytical Data Summary for 4/2/2024

Constituents	Units	GU-3	MW-13R	MW-14	MW-211	MW-29	MW-31R	MW-33	MW-35R	MW-36	MW-37
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016	ug/L										
Arochlor 1221	ug/L										
Arochlor 1232	ug/L										
Arochlor 1242	ug/L										
Arochlor 1248	ug/L										
Arochlor 1254	ug/L										
Arochlor 1260	ug/L										
Arsenic, total	ug/L	6.3	88.7	46.1	18.6	<4.0	37.8	<4.0	18.4	<4.0	<4.0
Azobenzene	ug/L										
Barium, total	ug/L	201.0	837.0	812.0	306.0	62.2	1810.0	105.0	1590.0	200.0	51.9
Benzene	ug/L	<1.0	2.1	2.6	<1.0	<1.0	2.1	<1.0	<1.0	<1.0	<1.0
Benzo(a)anthracene	ug/L										
Benzo(a)pyrene	ug/L										
Benzo(b)fluoranthene	ug/L										
Benzo(g,h,i)perylene	ug/L										
Benzo(k)fluoranthene	ug/L										
Benzyl alcohol	ug/L										
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Beta-bhc	ug/L										
Bis (2-chloroethoxy) methane	ug/L										
Bis(2-chloroethyl) ether	ug/L										
Bis(2-chloroisopropyl) ether	ug/L										
Bis(2-ethylhexyl) phthalate	ug/L						<6		<6		
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate	ug/L										
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane	ug/L										
Chlorobenzene	ug/L	<1.0	36.7	1.2	4.4	<1.0	21.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzilate	ug/L										
Chloroethane	ug/L	<1.0	<1.0	1.9	<1.0	<1.0	3.5	<1.0	2.1	<1.0	<1.0
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene	ug/L										
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene	ug/L										
Cis-1,2-dichloroethylene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	19.9	<1.0	<1.0	<1.0	<1.0
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	<.4	4.6	20.8	12.5	<.4	20.6	<.4	8.9	<.4	.6
Copper, total	ug/L	<4.0	<4.0	<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	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L										
Dieldrin	ug/L										
Diethyl phthalate	ug/L										
Dimethoate	ug/L										
Dimethylphthalate	ug/L										
Di-n-butyl phthalate	ug/L										
Di-n-octyl phthalate	ug/L										
Dinoseb	ug/L										
Diphenylamine	ug/L										
Disulfoton	ug/L										
Endosulfan i	ug/L										
Endosulfan ii	ug/L										
Endosulfan sulfate	ug/L										
Endrin	ug/L										
Endrin aldehyde	ug/L										
Ethyl methacrylate	ug/L										
Ethyl methanesulfonate	ug/L										
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	1	<1	<1	<1	<1
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 1

Analytical Data Summary for 4/2/2024

Constituents	MW-39	MW-40	MW-47	MW-7	MW-9	PECS-1	TILE ACM-1
Antimony, total	<2	<2	<2	<2	<2		<2
Arochlor 1016					<.2		
Arochlor 1221					<.2		
Arochlor 1232					<.2		
Arochlor 1242					<.2		
Arochlor 1248					<.2		
Arochlor 1254					<.2		
Arochlor 1260					<.2		
Arsenic, total	<4.0	<4.0	182.0	167.0	<4.0		26.7
Azobenzene					<8		
Barium, total	254.0	36.4	570.0	375.0	137.0		307.0
Benzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(a)anthracene					<8		
Benzo(a)pyrene					<8		
Benzo(b)fluoranthene					<8		
Benzo(g,h,i)perylene					<8		
Benzo(k)fluoranthene					<8		
Benzyl alcohol					<8		
Beryllium, total	<4	<4	<4	<4	<4		<4
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
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate					<8		
Cadmium, total	<.8	<.8	<.8	<.8	<.8		<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1
Chlordane					<.1		
Chlorobenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.7
Chlorobenzilate					<8		
Chloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.3
Chloroform	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1
Chloroprene					<1		
Chromium, total	<8	<8	<8	<8	<8		<8
Chrysene					<8		
Cis-1,2-dichloroethylene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.4	.5	1.8	.7	<.4		3.4
Copper, total	126.0	8.5	4.4	<4.0	<4.0		<4.0
Cyanide, total					<.005		
Delta-bhc					<.05		
Diallate					<8		
Dibenzo(a,h)anthracene					<8		
Dibenzofuran					<8		
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane					<1		
Dieldrin					<.05		
Diethyl phthalate					<8		
Dimethoate					<.4		
Dimethylphthalate					<8		
Di-n-butyl phthalate					<8		
Di-n-octyl phthalate					<8		
Dinoseb					<.5		
Diphenylamine					<8		
Disulfoton					<.4		
Endosulfan i					<.05		
Endosulfan ii					<.05		
Endosulfan sulfate					<.05		
Endrin					<.05		
Endrin aldehyde					<.05		
Ethyl methacrylate					<10		
Ethyl methanesulfonate					<8		
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1
Famphur					<.4		
Fluoranthene					<8		
Fluorene					<8		
Gamma-bhc (lindane)					<.05		
Heptachlor					<.05		
Heptachlor epoxide					<.05		
Hexachlorobenzene					<.05		

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

Table 1

Analytical Data Summary for 4/2/2024

Constituents	Units	GU-3	MW-13R	MW-14	MW-211	MW-29	MW-31R	MW-33	MW-35R	MW-36	MW-37
Hexachlorobutadiene	ug/L										
Hexachlorocyclopentadiene	ug/L										
Hexachloroethane	ug/L										
Hexachloropropene	ug/L										
Indeno(1,2,3-cd)pyrene	ug/L										
Isobutanol	ug/L										
Isodrin	ug/L										
Isophorone	ug/L										
Isosafrole	ug/L										
Kepone	ug/L										
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<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	<1	<1
Methyl methacrylate	ug/L										
Methyl methanesulfonate	ug/L										
Methyl parathion	ug/L										
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene	ug/L										
Nickel, total	ug/L	<4.0	9.8	30.8	30.0	<4.0	34.2	<4.0	25.6	<4.0	<4.0
Nitrobenzene	ug/L										
N-nitrosodiethylamine	ug/L										
N-nitrosodimethylamine	ug/L										
N-nitrosodi-n-butylamine	ug/L										
N-nitroso-di-n-propylamine	ug/L										
N-nitrosodiphenylamine	ug/L										
N-nitrosomethylethylamine	ug/L										
N-nitrosopiperidine	ug/L										
N-nitrosopyrrolidine	ug/L										
O,o,o-triethyl phosphorothioate	ug/L										
O-toluidine	ug/L										
Parathion	ug/L										
P-dimethylaminoazobenzene	ug/L										
Pentachlorobenzene	ug/L										
Pentachloronitrobenzene (pcnb)	ug/L										
Pentachlorophenol	ug/L										
Phenacetin	ug/L										
Phenanthrene	ug/L										
Phenol	ug/L										
Phorate	ug/L										
Pronamide	ug/L										
Propionitrile	ug/L										
Pyrene	ug/L										
Safrole	ug/L										
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total	mg/L										
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Thionazin	ug/L										
Tin, total	ug/L										
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene	ug/L										
Trans-1,2-dichloroethylene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	2.5	<1.0	<1.0	<1.0	<1.0
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	22.3	<20.0	<20.0

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

Table 1

Analytical Data Summary for 4/2/2024

Constituents	MW-39	MW-40	MW-47	MW-7	MW-9	PECS-1	TILE ACM-1
Hexachlorobutadiene					<8		
Hexachlorocyclopentadiene					<8		
Hexachloroethane					<8		
Hexachloropropene					<8		
Indeno(1,2,3-cd)pyrene					<8		
Isobutanol					<1000		
Isodrin					<8		
Isophorone					<8		
Isosafrole					<8		
Kepone					<8		
Lead, total	<4	<4	<4	<4	<4		<4
Mercury, total					<.5		
Methacrylonitrile					<1		
Methapyrilene					<8		
Methoxychlor					<.05		
Methyl iodide	<1	<1	<1	<1	<2	<1	<1
Methyl methacrylate					<1		
Methyl methanesulfonate					<8		
Methyl parathion					<.4		
Methylene chloride	<5	<5	<5	<5	<5	<5	<5
Naphthalene					<8		
Nickel, total	<4.0	16.8	8.0	<4.0	19.7		17.0
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
Silver, total	<4	<4	<4	<4	<4		<4
Styrene	<1	<1	<1	<1	<1	<1	<1
Sulfide, total					<.3		
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2		<2
Thionazin					<.4		
Tin, total					<20		
Toluene	<1	<1	<1	<1	<1	<1	<1
Toxaphene					<.2		
Trans-1,2-dichloroethylene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
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
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		26.6

* - 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-36	07/08/2015	ND	2.0000	
Antimony, total	ug/L	MW-36	04/21/2016	ND	2.0000	
Antimony, total	ug/L	MW-36	10/17/2016	ND	2.0000	
Antimony, total	ug/L	MW-36	04/21/2017	ND	2.0000	
Antimony, total	ug/L	MW-36	10/16/2017	ND	2.0000	
Antimony, total	ug/L	MW-36	04/24/2018	ND	2.0000	
Antimony, total	ug/L	MW-36	10/25/2018	ND	2.0000	
Antimony, total	ug/L	MW-36	04/15/2019	ND	2.0000	
Antimony, total	ug/L	MW-36	10/07/2019	ND	2.0000	
Antimony, total	ug/L	MW-36	04/22/2020	ND	2.0000	
Antimony, total	ug/L	MW-36	10/02/2020	ND	2.0000	
Antimony, total	ug/L	MW-36	04/08/2021	ND	2.0000	
Antimony, total	ug/L	MW-36	10/29/2021	ND	2.0000	
Antimony, total	ug/L	MW-36	04/25/2022	ND	2.0000	
Antimony, total	ug/L	MW-36	10/17/2022	ND	2.0000	
Antimony, total	ug/L	MW-36	04/10/2023	ND	2.0000	
Antimony, total	ug/L	MW-36	10/27/2023	ND	2.0000	
Antimony, total	ug/L	MW-36	04/02/2024	ND	2.0000	
Arsenic, total	ug/L	MW-36	07/08/2015	ND	4.0000	
Arsenic, total	ug/L	MW-36	04/21/2016	ND	4.0000	
Arsenic, total	ug/L	MW-36	10/17/2016	ND	4.0000	
Arsenic, total	ug/L	MW-36	04/21/2017	ND	4.0000	
Arsenic, total	ug/L	MW-36	10/16/2017	ND	4.0000	
Arsenic, total	ug/L	MW-36	04/24/2018	ND	4.0000	
Arsenic, total	ug/L	MW-36	10/25/2018	ND	4.0000	
Arsenic, total	ug/L	MW-36	04/15/2019	ND	4.0000	
Arsenic, total	ug/L	MW-36	10/07/2019	ND	4.0000	
Arsenic, total	ug/L	MW-36	04/22/2020	ND	4.0000	
Arsenic, total	ug/L	MW-36	10/02/2020	ND	4.0000	
Arsenic, total	ug/L	MW-36	04/08/2021	ND	4.0000	
Arsenic, total	ug/L	MW-36	10/29/2021	ND	4.0000	
Arsenic, total	ug/L	MW-36	04/25/2022	ND	4.0000	
Arsenic, total	ug/L	MW-36	10/17/2022	ND	4.0000	
Arsenic, total	ug/L	MW-36	04/10/2023	ND	4.0000	
Arsenic, total	ug/L	MW-36	10/27/2023	ND	4.0000	
Arsenic, total	ug/L	MW-36	04/02/2024	ND	4.0000	
Barium, total	ug/L	MW-36	07/08/2015		366.0000	
Barium, total	ug/L	MW-36	04/21/2016		184.0000	
Barium, total	ug/L	MW-36	10/17/2016		162.0000	
Barium, total	ug/L	MW-36	04/21/2017		158.0000	
Barium, total	ug/L	MW-36	10/16/2017		233.0000	
Barium, total	ug/L	MW-36	04/24/2018		230.0000	
Barium, total	ug/L	MW-36	10/25/2018		184.0000	
Barium, total	ug/L	MW-36	04/15/2019		174.0000	
Barium, total	ug/L	MW-36	10/07/2019		235.0000	
Barium, total	ug/L	MW-36	04/22/2020		348.0000	
Barium, total	ug/L	MW-36	10/02/2020		176.0000	
Barium, total	ug/L	MW-36	04/08/2021		173.0000	
Barium, total	ug/L	MW-36	10/29/2021		203.0000	
Barium, total	ug/L	MW-36	04/25/2022		267.0000	
Barium, total	ug/L	MW-36	10/17/2022		219.0000	
Barium, total	ug/L	MW-36	04/10/2023		260.0000	
Barium, total	ug/L	MW-36	10/27/2023		258.0000	
Barium, total	ug/L	MW-36	04/02/2024		200.0000	
Beryllium, total	ug/L	MW-36	07/08/2015	ND	4.0000	
Beryllium, total	ug/L	MW-36	04/21/2016	ND	4.0000	
Beryllium, total	ug/L	MW-36	10/17/2016	ND	4.0000	
Beryllium, total	ug/L	MW-36	04/21/2017	ND	4.0000	
Beryllium, total	ug/L	MW-36	10/16/2017	ND	4.0000	
Beryllium, total	ug/L	MW-36	04/24/2018	ND	4.0000	
Beryllium, total	ug/L	MW-36	10/25/2018	ND	4.0000	
Beryllium, total	ug/L	MW-36	04/15/2019	ND	4.0000	
Beryllium, total	ug/L	MW-36	10/07/2019	ND	4.0000	
Beryllium, total	ug/L	MW-36	04/22/2020	ND	4.0000	
Beryllium, total	ug/L	MW-36	10/02/2020	ND	4.0000	
Beryllium, total	ug/L	MW-36	04/08/2021	ND	4.0000	
Beryllium, total	ug/L	MW-36	10/29/2021	ND	4.0000	
Beryllium, total	ug/L	MW-36	04/25/2022	ND	4.0000	
Beryllium, total	ug/L	MW-36	10/17/2022	ND	4.0000	
Beryllium, total	ug/L	MW-36	04/10/2023	ND	4.0000	
Beryllium, total	ug/L	MW-36	10/27/2023	ND	4.0000	
Beryllium, total	ug/L	MW-36	04/02/2024	ND	4.0000	
Cadmium, total	ug/L	MW-36	07/08/2015	ND	0.8000	
Cadmium, total	ug/L	MW-36	04/21/2016	ND	0.8000	

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Cadmium, total	ug/L	MW-36	10/17/2016	ND	0.8000		
Cadmium, total	ug/L	MW-36	04/21/2017	ND	0.8000		
Cadmium, total	ug/L	MW-36	10/16/2017	ND	0.8000		
Cadmium, total	ug/L	MW-36	04/24/2018	ND	0.8000		
Cadmium, total	ug/L	MW-36	10/25/2018	ND	0.8000		
Cadmium, total	ug/L	MW-36	04/15/2019	ND	0.8000		
Cadmium, total	ug/L	MW-36	10/07/2019	ND	0.8000		
Cadmium, total	ug/L	MW-36	04/22/2020	ND	0.8000		
Cadmium, total	ug/L	MW-36	10/02/2020	ND	0.8000		
Cadmium, total	ug/L	MW-36	04/08/2021	ND	0.8000		
Cadmium, total	ug/L	MW-36	10/29/2021	ND	0.8000		
Cadmium, total	ug/L	MW-36	04/25/2022	ND	0.8000		
Cadmium, total	ug/L	MW-36	10/17/2022	ND	0.8000		
Cadmium, total	ug/L	MW-36	04/10/2023	ND	0.8000		
Cadmium, total	ug/L	MW-36	10/27/2023	ND	0.8000		
Cadmium, total	ug/L	MW-36	04/02/2024	ND	0.8000		
Chromium, total	ug/L	MW-36	07/08/2015	ND	8.0000		
Chromium, total	ug/L	MW-36	04/21/2016	ND	8.0000		
Chromium, total	ug/L	MW-36	10/17/2016	ND	8.0000		
Chromium, total	ug/L	MW-36	04/21/2017	ND	8.0000		
Chromium, total	ug/L	MW-36	10/16/2017	ND	8.0000		
Chromium, total	ug/L	MW-36	04/24/2018	ND	8.0000		
Chromium, total	ug/L	MW-36	10/25/2018	ND	8.0000		
Chromium, total	ug/L	MW-36	04/15/2019	ND	8.0000		
Chromium, total	ug/L	MW-36	10/07/2019	ND	8.0000		
Chromium, total	ug/L	MW-36	04/22/2020		8.0000		
Chromium, total	ug/L	MW-36	10/02/2020	ND	8.0000		
Chromium, total	ug/L	MW-36	04/08/2021	ND	8.0000		
Chromium, total	ug/L	MW-36	10/29/2021	ND	8.0000		
Chromium, total	ug/L	MW-36	04/25/2022	ND	8.0000		
Chromium, total	ug/L	MW-36	10/17/2022	ND	8.0000		
Chromium, total	ug/L	MW-36	04/10/2023	ND	8.0000		
Chromium, total	ug/L	MW-36	10/27/2023	ND	8.0000		
Chromium, total	ug/L	MW-36	04/02/2024	ND	8.0000		
Cobalt, total	ug/L	MW-36	07/08/2015		34.1000		*
Cobalt, total	ug/L	MW-36	04/21/2016		2.4000		
Cobalt, total	ug/L	MW-36	10/17/2016		0.8000		
Cobalt, total	ug/L	MW-36	04/21/2017		2.1000		
Cobalt, total	ug/L	MW-36	10/16/2017		2.0000		
Cobalt, total	ug/L	MW-36	04/24/2018		3.9000		
Cobalt, total	ug/L	MW-36	10/25/2018		0.8000		
Cobalt, total	ug/L	MW-36	04/15/2019	ND	0.8000		
Cobalt, total	ug/L	MW-36	10/07/2019		1.3000		
Cobalt, total	ug/L	MW-36	04/22/2020		7.8000		
Cobalt, total	ug/L	MW-36	10/02/2020		0.4000		
Cobalt, total	ug/L	MW-36	04/08/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-36	10/29/2021		0.7000		
Cobalt, total	ug/L	MW-36	04/25/2022		4.7000		
Cobalt, total	ug/L	MW-36	10/17/2022		2.4000		
Cobalt, total	ug/L	MW-36	04/10/2023		1.4000		
Cobalt, total	ug/L	MW-36	10/27/2023		1.3000		
Cobalt, total	ug/L	MW-36	04/02/2024	ND	0.4000	0.8000	**
Copper, total	ug/L	MW-36	07/08/2015		6.7000		
Copper, total	ug/L	MW-36	04/21/2016	ND	4.0000		
Copper, total	ug/L	MW-36	10/17/2016	ND	4.0000		
Copper, total	ug/L	MW-36	04/21/2017	ND	4.0000		
Copper, total	ug/L	MW-36	10/16/2017	ND	4.0000		
Copper, total	ug/L	MW-36	04/24/2018		4.4000		
Copper, total	ug/L	MW-36	10/25/2018	ND	4.0000		
Copper, total	ug/L	MW-36	04/15/2019	ND	4.0000		
Copper, total	ug/L	MW-36	10/07/2019	ND	4.0000		
Copper, total	ug/L	MW-36	04/22/2020		11.3000		
Copper, total	ug/L	MW-36	10/02/2020	ND	4.0000		
Copper, total	ug/L	MW-36	04/08/2021	ND	4.0000		
Copper, total	ug/L	MW-36	10/29/2021	ND	4.0000		
Copper, total	ug/L	MW-36	04/25/2022		6.8000		
Copper, total	ug/L	MW-36	10/17/2022	ND	4.0000		
Copper, total	ug/L	MW-36	04/10/2023	ND	4.0000		
Copper, total	ug/L	MW-36	10/27/2023	ND	4.0000		
Copper, total	ug/L	MW-36	04/02/2024	ND	4.0000		
Lead, total	ug/L	MW-36	07/08/2015	ND	4.0000		
Lead, total	ug/L	MW-36	04/21/2016	ND	4.0000		
Lead, total	ug/L	MW-36	10/17/2016	ND	4.0000		
Lead, total	ug/L	MW-36	04/21/2017	ND	4.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Lead, total	ug/L	MW-36	10/16/2017	ND	4.0000		
Lead, total	ug/L	MW-36	04/24/2018		4.2000		
Lead, total	ug/L	MW-36	10/25/2018	ND	4.0000		
Lead, total	ug/L	MW-36	04/15/2019	ND	4.0000		
Lead, total	ug/L	MW-36	10/07/2019	ND	4.0000		
Lead, total	ug/L	MW-36	04/22/2020		4.3000		
Lead, total	ug/L	MW-36	10/02/2020	ND	4.0000		
Lead, total	ug/L	MW-36	04/08/2021	ND	4.0000		
Lead, total	ug/L	MW-36	10/29/2021	ND	4.0000		
Lead, total	ug/L	MW-36	04/25/2022	ND	4.0000		
Lead, total	ug/L	MW-36	10/17/2022	ND	4.0000		
Lead, total	ug/L	MW-36	04/10/2023	ND	4.0000		
Lead, total	ug/L	MW-36	10/27/2023	ND	4.0000		
Lead, total	ug/L	MW-36	04/02/2024	ND	4.0000		
Nickel, total	ug/L	MW-36	07/08/2015		15.8000		
Nickel, total	ug/L	MW-36	04/21/2016	ND	4.0000		
Nickel, total	ug/L	MW-36	10/17/2016	ND	4.0000		
Nickel, total	ug/L	MW-36	04/21/2017		5.0000		
Nickel, total	ug/L	MW-36	10/16/2017		4.0000		
Nickel, total	ug/L	MW-36	04/24/2018		9.1000		
Nickel, total	ug/L	MW-36	10/25/2018	ND	4.0000		
Nickel, total	ug/L	MW-36	04/15/2019	ND	4.0000		
Nickel, total	ug/L	MW-36	10/07/2019	ND	4.0000		
Nickel, total	ug/L	MW-36	04/22/2020		19.6000		
Nickel, total	ug/L	MW-36	10/02/2020	ND	4.0000		
Nickel, total	ug/L	MW-36	04/08/2021	ND	4.0000		
Nickel, total	ug/L	MW-36	10/29/2021	ND	4.0000		
Nickel, total	ug/L	MW-36	04/25/2022		11.1000		
Nickel, total	ug/L	MW-36	10/17/2022	ND	4.0000		
Nickel, total	ug/L	MW-36	04/10/2023	ND	4.0000		
Nickel, total	ug/L	MW-36	10/27/2023	ND	4.0000		
Nickel, total	ug/L	MW-36	04/02/2024	ND	4.0000		
Selenium, total	ug/L	MW-36	07/08/2015	ND	4.0000		
Selenium, total	ug/L	MW-36	04/21/2016	ND	4.0000		
Selenium, total	ug/L	MW-36	10/17/2016	ND	4.0000		
Selenium, total	ug/L	MW-36	04/21/2017	ND	4.0000		
Selenium, total	ug/L	MW-36	10/16/2017	ND	4.0000		
Selenium, total	ug/L	MW-36	04/24/2018	ND	4.0000		
Selenium, total	ug/L	MW-36	10/25/2018	ND	4.0000		
Selenium, total	ug/L	MW-36	04/15/2019	ND	4.0000		
Selenium, total	ug/L	MW-36	10/07/2019	ND	4.0000		
Selenium, total	ug/L	MW-36	04/22/2020	ND	4.0000		
Selenium, total	ug/L	MW-36	10/02/2020	ND	4.0000		
Selenium, total	ug/L	MW-36	04/08/2021	ND	4.0000		
Selenium, total	ug/L	MW-36	10/29/2021	ND	4.0000		
Selenium, total	ug/L	MW-36	04/25/2022	ND	4.0000		
Selenium, total	ug/L	MW-36	10/17/2022	ND	4.0000		
Selenium, total	ug/L	MW-36	04/10/2023	ND	4.0000		
Selenium, total	ug/L	MW-36	10/27/2023	ND	4.0000		
Selenium, total	ug/L	MW-36	04/02/2024	ND	4.0000		
Silver, total	ug/L	MW-36	07/08/2015	ND	4.0000		
Silver, total	ug/L	MW-36	04/21/2016	ND	4.0000		
Silver, total	ug/L	MW-36	10/17/2016	ND	4.0000		
Silver, total	ug/L	MW-36	04/21/2017	ND	4.0000		
Silver, total	ug/L	MW-36	10/16/2017	ND	4.0000		
Silver, total	ug/L	MW-36	04/24/2018	ND	4.0000		
Silver, total	ug/L	MW-36	10/25/2018	ND	4.0000		
Silver, total	ug/L	MW-36	04/15/2019	ND	4.0000		
Silver, total	ug/L	MW-36	10/07/2019	ND	4.0000		
Silver, total	ug/L	MW-36	04/22/2020	ND	4.0000		
Silver, total	ug/L	MW-36	10/02/2020	ND	4.0000		
Silver, total	ug/L	MW-36	04/08/2021	ND	4.0000		
Silver, total	ug/L	MW-36	10/29/2021	ND	4.0000		
Silver, total	ug/L	MW-36	04/25/2022	ND	4.0000		
Silver, total	ug/L	MW-36	10/17/2022	ND	4.0000		
Silver, total	ug/L	MW-36	04/10/2023	ND	4.0000		
Silver, total	ug/L	MW-36	10/27/2023	ND	4.0000		
Silver, total	ug/L	MW-36	04/02/2024	ND	4.0000		
Thallium, total	ug/L	MW-36	07/08/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-36	04/21/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-36	10/17/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-36	04/21/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-36	10/16/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-36	04/24/2018	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-36	10/25/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-36	04/15/2019	ND	2.0000		
Thallium, total	ug/L	MW-36	10/07/2019	ND	2.0000		
Thallium, total	ug/L	MW-36	04/22/2020	ND	2.0000		
Thallium, total	ug/L	MW-36	10/02/2020	ND	2.0000		
Thallium, total	ug/L	MW-36	04/08/2021	ND	2.0000		
Thallium, total	ug/L	MW-36	10/29/2021	ND	2.0000		
Thallium, total	ug/L	MW-36	04/25/2022	ND	2.0000		
Thallium, total	ug/L	MW-36	10/17/2022	ND	2.0000		
Thallium, total	ug/L	MW-36	04/10/2023	ND	2.0000		
Thallium, total	ug/L	MW-36	10/27/2023	ND	2.0000		
Thallium, total	ug/L	MW-36	04/02/2024	ND	2.0000		
Vanadium, total	ug/L	MW-36	07/08/2015	ND	20.0000		
Vanadium, total	ug/L	MW-36	04/21/2016	ND	20.0000		
Vanadium, total	ug/L	MW-36	10/17/2016	ND	20.0000		
Vanadium, total	ug/L	MW-36	04/21/2017	ND	20.0000		
Vanadium, total	ug/L	MW-36	10/16/2017	ND	20.0000		
Vanadium, total	ug/L	MW-36	04/24/2018	ND	20.0000		
Vanadium, total	ug/L	MW-36	10/25/2018	ND	20.0000		
Vanadium, total	ug/L	MW-36	04/15/2019	ND	20.0000		
Vanadium, total	ug/L	MW-36	10/07/2019	ND	20.0000		
Vanadium, total	ug/L	MW-36	04/22/2020	ND	20.0000		
Vanadium, total	ug/L	MW-36	10/02/2020	ND	20.0000		
Vanadium, total	ug/L	MW-36	04/08/2021	ND	20.0000		
Vanadium, total	ug/L	MW-36	10/29/2021	ND	20.0000		
Vanadium, total	ug/L	MW-36	04/25/2022	ND	20.0000		
Vanadium, total	ug/L	MW-36	10/17/2022	ND	20.0000		
Vanadium, total	ug/L	MW-36	04/10/2023	ND	20.0000		
Vanadium, total	ug/L	MW-36	10/27/2023	ND	20.0000		
Vanadium, total	ug/L	MW-36	04/02/2024	ND	20.0000		
Zinc, total	ug/L	MW-36	07/08/2015		13.1000		
Zinc, total	ug/L	MW-36	04/21/2016	ND	20.0000		
Zinc, total	ug/L	MW-36	10/17/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-36	04/21/2017		9.0000		
Zinc, total	ug/L	MW-36	10/16/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-36	04/24/2018		10.8000		
Zinc, total	ug/L	MW-36	10/25/2018	ND	20.0000		
Zinc, total	ug/L	MW-36	04/15/2019	ND	20.0000		
Zinc, total	ug/L	MW-36	10/07/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-36	04/22/2020		26.8000		
Zinc, total	ug/L	MW-36	10/02/2020	ND	20.0000		
Zinc, total	ug/L	MW-36	04/08/2021	ND	20.0000		
Zinc, total	ug/L	MW-36	10/29/2021	ND	20.0000		
Zinc, total	ug/L	MW-36	04/25/2022	ND	20.0000		
Zinc, total	ug/L	MW-36	10/17/2022	ND	20.0000		
Zinc, total	ug/L	MW-36	04/10/2023	ND	20.0000		
Zinc, total	ug/L	MW-36	10/27/2023	ND	20.0000		
Zinc, total	ug/L	MW-36	04/02/2024	ND	20.0000		
Antimony, total	ug/L	MW-37	10/23/2014	ND	2.0000		
Antimony, total	ug/L	MW-37	01/08/2015	ND	2.0000		
Antimony, total	ug/L	MW-37	04/01/2015	ND	2.0000		
Antimony, total	ug/L	MW-37	07/08/2015	ND	2.0000		
Antimony, total	ug/L	MW-37	11/05/2015	ND	2.0000		
Antimony, total	ug/L	MW-37	04/21/2016	ND	2.0000		
Antimony, total	ug/L	MW-37	10/17/2016	ND	2.0000		
Antimony, total	ug/L	MW-37	04/21/2017	ND	2.0000		
Antimony, total	ug/L	MW-37	10/16/2017	ND	2.0000		
Antimony, total	ug/L	MW-37	04/24/2018	ND	2.0000		
Antimony, total	ug/L	MW-37	10/25/2018	ND	2.0000		
Antimony, total	ug/L	MW-37	04/15/2019	ND	2.0000		
Antimony, total	ug/L	MW-37	10/07/2019	ND	2.0000		
Antimony, total	ug/L	MW-37	04/22/2020	ND	2.0000		
Antimony, total	ug/L	MW-37	10/02/2020	ND	2.0000		
Antimony, total	ug/L	MW-37	04/08/2021	ND	2.0000		
Antimony, total	ug/L	MW-37	10/29/2021	ND	2.0000		
Antimony, total	ug/L	MW-37	04/25/2022	ND	2.0000		
Antimony, total	ug/L	MW-37	10/17/2022	ND	2.0000		
Antimony, total	ug/L	MW-37	04/10/2023	ND	2.0000		
Antimony, total	ug/L	MW-37	10/27/2023	ND	2.0000		
Antimony, total	ug/L	MW-37	04/02/2024	ND	2.0000		
Arsenic, total	ug/L	MW-37	10/23/2014	ND	4.0000		
Arsenic, total	ug/L	MW-37	01/08/2015	ND	4.0000		
Arsenic, total	ug/L	MW-37	04/01/2015	ND	4.0000		
Arsenic, total	ug/L	MW-37	07/08/2015	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
Arsenic, total	ug/L	MW-37	11/05/2015	ND	4.0000	
Arsenic, total	ug/L	MW-37	04/21/2016	ND	4.0000	
Arsenic, total	ug/L	MW-37	10/17/2016	ND	4.0000	
Arsenic, total	ug/L	MW-37	04/21/2017	ND	4.0000	
Arsenic, total	ug/L	MW-37	10/16/2017	ND	4.0000	
Arsenic, total	ug/L	MW-37	04/24/2018	ND	4.0000	
Arsenic, total	ug/L	MW-37	10/25/2018	ND	4.0000	
Arsenic, total	ug/L	MW-37	04/15/2019	ND	4.0000	
Arsenic, total	ug/L	MW-37	10/07/2019	ND	4.0000	
Arsenic, total	ug/L	MW-37	04/22/2020	ND	4.0000	
Arsenic, total	ug/L	MW-37	10/02/2020	ND	4.0000	
Arsenic, total	ug/L	MW-37	04/08/2021	ND	4.0000	
Arsenic, total	ug/L	MW-37	10/29/2021	ND	4.0000	
Arsenic, total	ug/L	MW-37	04/25/2022	ND	4.0000	
Arsenic, total	ug/L	MW-37	10/17/2022	ND	4.0000	
Arsenic, total	ug/L	MW-37	04/10/2023	ND	4.0000	
Arsenic, total	ug/L	MW-37	10/27/2023		11.6000	
Arsenic, total	ug/L	MW-37	04/02/2024	ND	4.0000	
Barium, total	ug/L	MW-37	10/23/2014		216.0000	
Barium, total	ug/L	MW-37	01/08/2015		169.0000	
Barium, total	ug/L	MW-37	04/01/2015		185.0000	
Barium, total	ug/L	MW-37	07/08/2015		141.0000	
Barium, total	ug/L	MW-37	11/05/2015		175.0000	
Barium, total	ug/L	MW-37	04/21/2016		143.0000	
Barium, total	ug/L	MW-37	10/17/2016		154.0000	
Barium, total	ug/L	MW-37	04/21/2017		163.0000	
Barium, total	ug/L	MW-37	10/16/2017		178.0000	
Barium, total	ug/L	MW-37	04/24/2018		142.0000	
Barium, total	ug/L	MW-37	10/25/2018		91.5000	
Barium, total	ug/L	MW-37	04/15/2019		82.0000	
Barium, total	ug/L	MW-37	10/07/2019		102.0000	
Barium, total	ug/L	MW-37	04/22/2020		78.1000	
Barium, total	ug/L	MW-37	10/02/2020		87.9000	
Barium, total	ug/L	MW-37	04/08/2021		51.5000	
Barium, total	ug/L	MW-37	10/29/2021		71.0000	
Barium, total	ug/L	MW-37	04/25/2022		57.0000	
Barium, total	ug/L	MW-37	10/17/2022		75.8000	
Barium, total	ug/L	MW-37	04/10/2023		31.4000	
Barium, total	ug/L	MW-37	10/27/2023		107.0000	
Barium, total	ug/L	MW-37	04/02/2024		51.9000	
Beryllium, total	ug/L	MW-37	10/23/2014	ND	4.0000	
Beryllium, total	ug/L	MW-37	01/08/2015	ND	4.0000	
Beryllium, total	ug/L	MW-37	04/01/2015	ND	4.0000	
Beryllium, total	ug/L	MW-37	07/08/2015	ND	4.0000	
Beryllium, total	ug/L	MW-37	11/05/2015	ND	4.0000	
Beryllium, total	ug/L	MW-37	04/21/2016	ND	4.0000	
Beryllium, total	ug/L	MW-37	10/17/2016	ND	4.0000	
Beryllium, total	ug/L	MW-37	04/21/2017	ND	4.0000	
Beryllium, total	ug/L	MW-37	10/16/2017	ND	4.0000	
Beryllium, total	ug/L	MW-37	04/24/2018	ND	4.0000	
Beryllium, total	ug/L	MW-37	10/25/2018	ND	4.0000	
Beryllium, total	ug/L	MW-37	04/15/2019	ND	4.0000	
Beryllium, total	ug/L	MW-37	10/07/2019	ND	4.0000	
Beryllium, total	ug/L	MW-37	04/22/2020	ND	4.0000	
Beryllium, total	ug/L	MW-37	10/02/2020	ND	4.0000	
Beryllium, total	ug/L	MW-37	04/08/2021	ND	4.0000	
Beryllium, total	ug/L	MW-37	10/29/2021	ND	4.0000	
Beryllium, total	ug/L	MW-37	04/25/2022	ND	4.0000	
Beryllium, total	ug/L	MW-37	10/17/2022	ND	4.0000	
Beryllium, total	ug/L	MW-37	04/10/2023	ND	4.0000	
Beryllium, total	ug/L	MW-37	10/27/2023	ND	4.0000	
Beryllium, total	ug/L	MW-37	04/02/2024	ND	4.0000	
Cadmium, total	ug/L	MW-37	10/23/2014	ND	0.8000	
Cadmium, total	ug/L	MW-37	01/08/2015	ND	0.8000	
Cadmium, total	ug/L	MW-37	04/01/2015	ND	0.8000	
Cadmium, total	ug/L	MW-37	07/08/2015	ND	0.8000	
Cadmium, total	ug/L	MW-37	11/05/2015	ND	0.8000	
Cadmium, total	ug/L	MW-37	04/21/2016	ND	0.8000	
Cadmium, total	ug/L	MW-37	10/17/2016	ND	0.8000	
Cadmium, total	ug/L	MW-37	04/21/2017	ND	0.8000	
Cadmium, total	ug/L	MW-37	10/16/2017	ND	0.8000	
Cadmium, total	ug/L	MW-37	04/24/2018	ND	0.8000	
Cadmium, total	ug/L	MW-37	10/25/2018	ND	0.8000	
Cadmium, total	ug/L	MW-37	04/15/2019	ND	0.8000	

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Cadmium, total	ug/L	MW-37	10/07/2019	ND	0.8000		
Cadmium, total	ug/L	MW-37	04/22/2020	ND	0.8000		
Cadmium, total	ug/L	MW-37	10/02/2020	ND	0.8000		
Cadmium, total	ug/L	MW-37	04/08/2021	ND	0.8000		
Cadmium, total	ug/L	MW-37	10/29/2021	ND	0.8000		
Cadmium, total	ug/L	MW-37	04/25/2022	ND	0.8000		
Cadmium, total	ug/L	MW-37	10/17/2022	ND	0.8000		
Cadmium, total	ug/L	MW-37	04/10/2023	ND	0.8000		
Cadmium, total	ug/L	MW-37	10/27/2023	ND	0.8000		
Cadmium, total	ug/L	MW-37	04/02/2024	ND	0.8000		
Chromium, total	ug/L	MW-37	10/23/2014	ND	8.0000		
Chromium, total	ug/L	MW-37	01/08/2015	ND	8.0000		
Chromium, total	ug/L	MW-37	04/01/2015	ND	8.0000		
Chromium, total	ug/L	MW-37	07/08/2015	ND	8.0000		
Chromium, total	ug/L	MW-37	11/05/2015	ND	8.0000		
Chromium, total	ug/L	MW-37	04/21/2016	ND	8.0000		
Chromium, total	ug/L	MW-37	10/17/2016	ND	8.0000		
Chromium, total	ug/L	MW-37	04/21/2017		20.3000		
Chromium, total	ug/L	MW-37	10/16/2017	ND	8.0000		
Chromium, total	ug/L	MW-37	04/24/2018	ND	8.0000		
Chromium, total	ug/L	MW-37	10/25/2018	ND	8.0000		
Chromium, total	ug/L	MW-37	04/15/2019	ND	8.0000		
Chromium, total	ug/L	MW-37	10/07/2019	ND	8.0000		
Chromium, total	ug/L	MW-37	04/22/2020	ND	8.0000		
Chromium, total	ug/L	MW-37	10/02/2020	ND	8.0000		
Chromium, total	ug/L	MW-37	04/08/2021	ND	8.0000		
Chromium, total	ug/L	MW-37	10/29/2021	ND	8.0000		
Chromium, total	ug/L	MW-37	04/25/2022	ND	8.0000		
Chromium, total	ug/L	MW-37	10/17/2022	ND	8.0000		
Chromium, total	ug/L	MW-37	04/10/2023	ND	8.0000		
Chromium, total	ug/L	MW-37	10/27/2023	ND	8.0000		
Chromium, total	ug/L	MW-37	04/02/2024	ND	8.0000		
Cobalt, total	ug/L	MW-37	10/23/2014	ND	0.8000		
Cobalt, total	ug/L	MW-37	01/08/2015	ND	0.8000		
Cobalt, total	ug/L	MW-37	04/01/2015	ND	0.8000		
Cobalt, total	ug/L	MW-37	07/08/2015	ND	0.8000		
Cobalt, total	ug/L	MW-37	11/05/2015	ND	0.8000		
Cobalt, total	ug/L	MW-37	04/21/2016	ND	0.8000		
Cobalt, total	ug/L	MW-37	10/17/2016	ND	0.8000		
Cobalt, total	ug/L	MW-37	04/21/2017	ND	0.8000		
Cobalt, total	ug/L	MW-37	10/16/2017	ND	0.8000		
Cobalt, total	ug/L	MW-37	04/24/2018	ND	0.8000		
Cobalt, total	ug/L	MW-37	10/25/2018	ND	0.8000		
Cobalt, total	ug/L	MW-37	04/15/2019	ND	0.8000		
Cobalt, total	ug/L	MW-37	10/07/2019	ND	0.8000		
Cobalt, total	ug/L	MW-37	04/22/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-37	10/02/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-37	04/08/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-37	10/29/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-37	04/25/2022		0.4000		
Cobalt, total	ug/L	MW-37	10/17/2022		2.2000		
Cobalt, total	ug/L	MW-37	04/10/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-37	10/27/2023		9.6000		*
Cobalt, total	ug/L	MW-37	04/02/2024		0.6000		
Copper, total	ug/L	MW-37	10/23/2014		4.1000		
Copper, total	ug/L	MW-37	01/08/2015	ND	4.0000		
Copper, total	ug/L	MW-37	04/01/2015	ND	4.0000		
Copper, total	ug/L	MW-37	07/08/2015	ND	4.0000		
Copper, total	ug/L	MW-37	11/05/2015	ND	4.0000		
Copper, total	ug/L	MW-37	04/21/2016	ND	4.0000		
Copper, total	ug/L	MW-37	10/17/2016	ND	4.0000		
Copper, total	ug/L	MW-37	04/21/2017	ND	4.0000		
Copper, total	ug/L	MW-37	10/16/2017	ND	4.0000		
Copper, total	ug/L	MW-37	04/24/2018	ND	4.0000		
Copper, total	ug/L	MW-37	10/25/2018		13.7000		*
Copper, total	ug/L	MW-37	04/15/2019	ND	4.0000		
Copper, total	ug/L	MW-37	10/07/2019	ND	4.0000		
Copper, total	ug/L	MW-37	04/22/2020	ND	4.0000		
Copper, total	ug/L	MW-37	10/02/2020	ND	4.0000		
Copper, total	ug/L	MW-37	04/08/2021	ND	4.0000		
Copper, total	ug/L	MW-37	10/29/2021	ND	4.0000		
Copper, total	ug/L	MW-37	04/25/2022	ND	4.0000		
Copper, total	ug/L	MW-37	10/17/2022	ND	4.0000		
Copper, total	ug/L	MW-37	04/10/2023	ND	4.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted
Copper, total	ug/L	MW-37	10/27/2023	ND	4.0000	
Copper, total	ug/L	MW-37	04/02/2024	ND	4.0000	
Lead, total	ug/L	MW-37	10/23/2014	ND	4.0000	
Lead, total	ug/L	MW-37	01/08/2015	ND	4.0000	
Lead, total	ug/L	MW-37	04/01/2015	ND	4.0000	
Lead, total	ug/L	MW-37	07/08/2015	ND	4.0000	
Lead, total	ug/L	MW-37	11/05/2015	ND	4.0000	
Lead, total	ug/L	MW-37	04/21/2016	ND	4.0000	
Lead, total	ug/L	MW-37	10/17/2016	ND	4.0000	
Lead, total	ug/L	MW-37	04/21/2017		22.7000	*
Lead, total	ug/L	MW-37	10/16/2017	ND	4.0000	
Lead, total	ug/L	MW-37	04/24/2018	ND	4.0000	
Lead, total	ug/L	MW-37	10/25/2018	ND	4.0000	
Lead, total	ug/L	MW-37	04/15/2019	ND	4.0000	
Lead, total	ug/L	MW-37	10/07/2019	ND	4.0000	
Lead, total	ug/L	MW-37	04/22/2020	ND	4.0000	
Lead, total	ug/L	MW-37	10/02/2020	ND	4.0000	
Lead, total	ug/L	MW-37	04/08/2021	ND	4.0000	
Lead, total	ug/L	MW-37	10/29/2021	ND	4.0000	
Lead, total	ug/L	MW-37	04/25/2022	ND	4.0000	
Lead, total	ug/L	MW-37	10/17/2022	ND	4.0000	
Lead, total	ug/L	MW-37	04/10/2023	ND	4.0000	
Lead, total	ug/L	MW-37	10/27/2023	ND	4.0000	
Lead, total	ug/L	MW-37	04/02/2024	ND	4.0000	
Nickel, total	ug/L	MW-37	10/23/2014	ND	4.0000	
Nickel, total	ug/L	MW-37	01/08/2015	ND	4.0000	
Nickel, total	ug/L	MW-37	04/01/2015	ND	4.0000	
Nickel, total	ug/L	MW-37	07/08/2015	ND	4.0000	
Nickel, total	ug/L	MW-37	11/05/2015	ND	4.0000	
Nickel, total	ug/L	MW-37	04/21/2016	ND	4.0000	
Nickel, total	ug/L	MW-37	10/17/2016	ND	4.0000	
Nickel, total	ug/L	MW-37	04/21/2017	ND	4.0000	
Nickel, total	ug/L	MW-37	10/16/2017	ND	4.0000	
Nickel, total	ug/L	MW-37	04/24/2018	ND	4.0000	
Nickel, total	ug/L	MW-37	10/25/2018	ND	4.0000	
Nickel, total	ug/L	MW-37	04/15/2019	ND	4.0000	
Nickel, total	ug/L	MW-37	10/07/2019	ND	4.0000	
Nickel, total	ug/L	MW-37	04/22/2020	ND	4.0000	
Nickel, total	ug/L	MW-37	10/02/2020	ND	4.0000	
Nickel, total	ug/L	MW-37	04/08/2021	ND	4.0000	
Nickel, total	ug/L	MW-37	10/29/2021	ND	4.0000	
Nickel, total	ug/L	MW-37	04/25/2022	ND	4.0000	
Nickel, total	ug/L	MW-37	10/17/2022	ND	4.0000	
Nickel, total	ug/L	MW-37	04/10/2023	ND	4.0000	
Nickel, total	ug/L	MW-37	10/27/2023		13.9000	*
Nickel, total	ug/L	MW-37	04/02/2024	ND	4.0000	
Selenium, total	ug/L	MW-37	10/23/2014	ND	4.0000	
Selenium, total	ug/L	MW-37	01/08/2015	ND	4.0000	
Selenium, total	ug/L	MW-37	04/01/2015	ND	4.0000	
Selenium, total	ug/L	MW-37	07/08/2015	ND	4.0000	
Selenium, total	ug/L	MW-37	11/05/2015	ND	4.0000	
Selenium, total	ug/L	MW-37	04/21/2016	ND	4.0000	
Selenium, total	ug/L	MW-37	10/17/2016	ND	4.0000	
Selenium, total	ug/L	MW-37	04/21/2017	ND	4.0000	
Selenium, total	ug/L	MW-37	10/16/2017	ND	4.0000	
Selenium, total	ug/L	MW-37	04/24/2018		8.9000	*
Selenium, total	ug/L	MW-37	10/25/2018	ND	4.0000	
Selenium, total	ug/L	MW-37	04/15/2019	ND	4.0000	
Selenium, total	ug/L	MW-37	10/07/2019	ND	4.0000	
Selenium, total	ug/L	MW-37	04/22/2020	ND	4.0000	
Selenium, total	ug/L	MW-37	10/02/2020	ND	4.0000	
Selenium, total	ug/L	MW-37	04/08/2021	ND	4.0000	
Selenium, total	ug/L	MW-37	10/29/2021	ND	4.0000	
Selenium, total	ug/L	MW-37	04/25/2022	ND	4.0000	
Selenium, total	ug/L	MW-37	10/17/2022	ND	4.0000	
Selenium, total	ug/L	MW-37	04/10/2023	ND	4.0000	
Selenium, total	ug/L	MW-37	10/27/2023	ND	4.0000	
Selenium, total	ug/L	MW-37	04/02/2024	ND	4.0000	
Silver, total	ug/L	MW-37	10/23/2014	ND	4.0000	
Silver, total	ug/L	MW-37	01/08/2015	ND	4.0000	
Silver, total	ug/L	MW-37	04/01/2015	ND	4.0000	
Silver, total	ug/L	MW-37	07/08/2015	ND	4.0000	
Silver, total	ug/L	MW-37	11/05/2015	ND	4.0000	
Silver, total	ug/L	MW-37	04/21/2016	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	
Silver, total	ug/L	MW-37	10/17/2016	ND	4.0000		
Silver, total	ug/L	MW-37	04/21/2017	ND	4.0000		
Silver, total	ug/L	MW-37	10/16/2017	ND	4.0000		
Silver, total	ug/L	MW-37	04/24/2018	ND	4.0000		
Silver, total	ug/L	MW-37	10/25/2018	ND	4.0000		
Silver, total	ug/L	MW-37	04/15/2019	ND	4.0000		
Silver, total	ug/L	MW-37	10/07/2019	ND	4.0000		
Silver, total	ug/L	MW-37	04/22/2020	ND	4.0000		
Silver, total	ug/L	MW-37	10/02/2020	ND	4.0000		
Silver, total	ug/L	MW-37	04/08/2021	ND	4.0000		
Silver, total	ug/L	MW-37	10/29/2021	ND	4.0000		
Silver, total	ug/L	MW-37	04/25/2022	ND	4.0000		
Silver, total	ug/L	MW-37	10/17/2022	ND	4.0000		
Silver, total	ug/L	MW-37	04/10/2023	ND	4.0000		
Silver, total	ug/L	MW-37	10/27/2023	ND	4.0000		
Silver, total	ug/L	MW-37	04/02/2024	ND	4.0000		
Thallium, total	ug/L	MW-37	10/23/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	01/08/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	04/01/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	07/08/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	11/05/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	04/21/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	10/17/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	04/21/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	10/16/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	04/24/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	10/25/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	04/15/2019	ND	2.0000		
Thallium, total	ug/L	MW-37	10/07/2019	ND	2.0000		
Thallium, total	ug/L	MW-37	04/22/2020	ND	2.0000		
Thallium, total	ug/L	MW-37	10/02/2020	ND	2.0000		
Thallium, total	ug/L	MW-37	04/08/2021	ND	2.0000		
Thallium, total	ug/L	MW-37	10/29/2021	ND	2.0000		
Thallium, total	ug/L	MW-37	04/25/2022	ND	2.0000		
Thallium, total	ug/L	MW-37	10/17/2022	ND	2.0000		
Thallium, total	ug/L	MW-37	04/10/2023	ND	2.0000		
Thallium, total	ug/L	MW-37	10/27/2023	ND	2.0000		
Thallium, total	ug/L	MW-37	04/02/2024	ND	2.0000		
Vanadium, total	ug/L	MW-37	10/23/2014	ND	20.0000		
Vanadium, total	ug/L	MW-37	01/08/2015	ND	20.0000		
Vanadium, total	ug/L	MW-37	04/01/2015	ND	20.0000		
Vanadium, total	ug/L	MW-37	07/08/2015	ND	20.0000		
Vanadium, total	ug/L	MW-37	11/05/2015	ND	20.0000		
Vanadium, total	ug/L	MW-37	04/21/2016	ND	20.0000		
Vanadium, total	ug/L	MW-37	10/17/2016	ND	20.0000		
Vanadium, total	ug/L	MW-37	04/21/2017	ND	20.0000		
Vanadium, total	ug/L	MW-37	10/16/2017	ND	20.0000		
Vanadium, total	ug/L	MW-37	04/24/2018	ND	20.0000		
Vanadium, total	ug/L	MW-37	10/25/2018	ND	20.0000		
Vanadium, total	ug/L	MW-37	04/15/2019	ND	20.0000		
Vanadium, total	ug/L	MW-37	10/07/2019	ND	20.0000		
Vanadium, total	ug/L	MW-37	04/22/2020	ND	20.0000		
Vanadium, total	ug/L	MW-37	10/02/2020	ND	20.0000		
Vanadium, total	ug/L	MW-37	04/08/2021	ND	20.0000		
Vanadium, total	ug/L	MW-37	10/29/2021	ND	20.0000		
Vanadium, total	ug/L	MW-37	04/25/2022	ND	20.0000		
Vanadium, total	ug/L	MW-37	10/17/2022	ND	20.0000		
Vanadium, total	ug/L	MW-37	04/10/2023	ND	20.0000		
Vanadium, total	ug/L	MW-37	10/27/2023	ND	20.0000		
Vanadium, total	ug/L	MW-37	04/02/2024	ND	20.0000		
Zinc, total	ug/L	MW-37	10/23/2014	ND	20.0000		
Zinc, total	ug/L	MW-37	01/08/2015		14.5000		
Zinc, total	ug/L	MW-37	04/01/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-37	07/08/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-37	11/05/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-37	04/21/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-37	10/17/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-37	04/21/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-37	10/16/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-37	04/24/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-37	10/25/2018	ND	20.0000		
Zinc, total	ug/L	MW-37	04/15/2019	ND	20.0000		
Zinc, total	ug/L	MW-37	10/07/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-37	04/22/2020	ND	20.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted
Zinc, total	ug/L	MW-37	10/02/2020	ND	20.0000	
Zinc, total	ug/L	MW-37	04/08/2021	ND	20.0000	
Zinc, total	ug/L	MW-37	10/29/2021	ND	20.0000	
Zinc, total	ug/L	MW-37	04/25/2022	ND	20.0000	
Zinc, total	ug/L	MW-37	10/17/2022	ND	20.0000	
Zinc, total	ug/L	MW-37	04/10/2023	ND	20.0000	
Zinc, total	ug/L	MW-37	10/27/2023		22.2000	
Zinc, total	ug/L	MW-37	04/02/2024	ND	20.0000	
Antimony, total	ug/L	MW-39	10/23/2014	ND	2.0000	
Antimony, total	ug/L	MW-39	01/08/2015	ND	2.0000	
Antimony, total	ug/L	MW-39	04/01/2015	ND	2.0000	
Antimony, total	ug/L	MW-39	07/08/2015	ND	2.0000	
Antimony, total	ug/L	MW-39	11/05/2015	ND	2.0000	
Antimony, total	ug/L	MW-39	04/21/2016	ND	2.0000	
Antimony, total	ug/L	MW-39	10/17/2016	ND	2.0000	
Antimony, total	ug/L	MW-39	04/21/2017	ND	2.0000	
Antimony, total	ug/L	MW-39	10/16/2017	ND	2.0000	
Antimony, total	ug/L	MW-39	04/24/2018	ND	2.0000	
Antimony, total	ug/L	MW-39	10/25/2018	ND	2.0000	
Antimony, total	ug/L	MW-39	04/15/2019	ND	2.0000	
Antimony, total	ug/L	MW-39	10/07/2019	ND	2.0000	
Antimony, total	ug/L	MW-39	04/22/2020	ND	2.0000	
Antimony, total	ug/L	MW-39	10/02/2020	ND	2.0000	
Antimony, total	ug/L	MW-39	04/08/2021	ND	2.0000	
Antimony, total	ug/L	MW-39	10/29/2021	ND	2.0000	
Antimony, total	ug/L	MW-39	04/25/2022	ND	2.0000	
Antimony, total	ug/L	MW-39	10/17/2022	ND	2.0000	
Antimony, total	ug/L	MW-39	04/10/2023	ND	2.0000	
Antimony, total	ug/L	MW-39	10/27/2023	ND	2.0000	
Antimony, total	ug/L	MW-39	04/02/2024	ND	2.0000	
Arsenic, total	ug/L	MW-39	10/23/2014	ND	4.0000	
Arsenic, total	ug/L	MW-39	01/08/2015	ND	4.0000	
Arsenic, total	ug/L	MW-39	04/01/2015	ND	4.0000	
Arsenic, total	ug/L	MW-39	07/08/2015	ND	4.0000	
Arsenic, total	ug/L	MW-39	11/05/2015	ND	4.0000	
Arsenic, total	ug/L	MW-39	04/21/2016	ND	4.0000	
Arsenic, total	ug/L	MW-39	10/17/2016	ND	4.0000	
Arsenic, total	ug/L	MW-39	04/21/2017	ND	4.0000	
Arsenic, total	ug/L	MW-39	10/16/2017	ND	4.0000	
Arsenic, total	ug/L	MW-39	04/24/2018	ND	4.0000	
Arsenic, total	ug/L	MW-39	10/25/2018	ND	4.0000	
Arsenic, total	ug/L	MW-39	04/15/2019	ND	4.0000	
Arsenic, total	ug/L	MW-39	10/07/2019	ND	4.0000	
Arsenic, total	ug/L	MW-39	04/22/2020	ND	4.0000	
Arsenic, total	ug/L	MW-39	10/02/2020	ND	4.0000	
Arsenic, total	ug/L	MW-39	04/08/2021	ND	4.0000	
Arsenic, total	ug/L	MW-39	10/29/2021	ND	4.0000	
Arsenic, total	ug/L	MW-39	04/25/2022	ND	4.0000	
Arsenic, total	ug/L	MW-39	10/17/2022	ND	4.0000	
Arsenic, total	ug/L	MW-39	04/10/2023	ND	4.0000	
Arsenic, total	ug/L	MW-39	10/27/2023	ND	4.0000	
Arsenic, total	ug/L	MW-39	04/02/2024	ND	4.0000	
Barium, total	ug/L	MW-39	10/23/2014		287.0000	
Barium, total	ug/L	MW-39	01/08/2015		309.0000	
Barium, total	ug/L	MW-39	04/01/2015		272.0000	
Barium, total	ug/L	MW-39	07/08/2015		249.0000	
Barium, total	ug/L	MW-39	11/05/2015		383.0000	
Barium, total	ug/L	MW-39	04/21/2016		266.0000	
Barium, total	ug/L	MW-39	10/17/2016		257.0000	
Barium, total	ug/L	MW-39	04/21/2017		253.0000	
Barium, total	ug/L	MW-39	10/16/2017		268.0000	
Barium, total	ug/L	MW-39	04/24/2018		273.0000	
Barium, total	ug/L	MW-39	10/25/2018		248.0000	
Barium, total	ug/L	MW-39	04/15/2019		251.0000	
Barium, total	ug/L	MW-39	10/07/2019		264.0000	
Barium, total	ug/L	MW-39	04/22/2020		323.0000	
Barium, total	ug/L	MW-39	10/02/2020		222.0000	
Barium, total	ug/L	MW-39	04/08/2021		230.0000	
Barium, total	ug/L	MW-39	10/29/2021		255.0000	
Barium, total	ug/L	MW-39	04/25/2022		232.0000	
Barium, total	ug/L	MW-39	10/17/2022		239.0000	
Barium, total	ug/L	MW-39	04/10/2023		238.0000	
Barium, total	ug/L	MW-39	10/27/2023		225.0000	
Barium, total	ug/L	MW-39	04/02/2024		254.0000	

* - 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-39	10/23/2014	ND	4.0000	
Beryllium, total	ug/L	MW-39	01/08/2015	ND	4.0000	
Beryllium, total	ug/L	MW-39	04/01/2015	ND	4.0000	
Beryllium, total	ug/L	MW-39	07/08/2015	ND	4.0000	
Beryllium, total	ug/L	MW-39	11/05/2015	ND	4.0000	
Beryllium, total	ug/L	MW-39	04/21/2016	ND	4.0000	
Beryllium, total	ug/L	MW-39	10/17/2016	ND	4.0000	
Beryllium, total	ug/L	MW-39	04/21/2017	ND	4.0000	
Beryllium, total	ug/L	MW-39	10/16/2017	ND	4.0000	
Beryllium, total	ug/L	MW-39	04/24/2018	ND	4.0000	
Beryllium, total	ug/L	MW-39	10/25/2018	ND	4.0000	
Beryllium, total	ug/L	MW-39	04/15/2019	ND	4.0000	
Beryllium, total	ug/L	MW-39	10/07/2019	ND	4.0000	
Beryllium, total	ug/L	MW-39	04/22/2020	ND	4.0000	
Beryllium, total	ug/L	MW-39	10/02/2020	ND	4.0000	
Beryllium, total	ug/L	MW-39	04/08/2021	ND	4.0000	
Beryllium, total	ug/L	MW-39	10/29/2021	ND	4.0000	
Beryllium, total	ug/L	MW-39	04/25/2022	ND	4.0000	
Beryllium, total	ug/L	MW-39	10/17/2022	ND	4.0000	
Beryllium, total	ug/L	MW-39	04/10/2023	ND	4.0000	
Beryllium, total	ug/L	MW-39	10/27/2023	ND	4.0000	
Beryllium, total	ug/L	MW-39	04/02/2024	ND	4.0000	
Cadmium, total	ug/L	MW-39	10/23/2014	ND	0.8000	
Cadmium, total	ug/L	MW-39	01/08/2015	ND	0.8000	
Cadmium, total	ug/L	MW-39	04/01/2015	ND	0.8000	
Cadmium, total	ug/L	MW-39	07/08/2015	ND	0.8000	
Cadmium, total	ug/L	MW-39	11/05/2015	ND	0.8000	
Cadmium, total	ug/L	MW-39	04/21/2016	ND	0.8000	
Cadmium, total	ug/L	MW-39	10/17/2016	ND	0.8000	
Cadmium, total	ug/L	MW-39	04/21/2017	ND	0.8000	
Cadmium, total	ug/L	MW-39	10/16/2017	ND	0.8000	
Cadmium, total	ug/L	MW-39	04/24/2018	ND	0.8000	
Cadmium, total	ug/L	MW-39	10/25/2018	ND	0.8000	
Cadmium, total	ug/L	MW-39	04/15/2019	ND	0.8000	
Cadmium, total	ug/L	MW-39	10/07/2019	ND	0.8000	
Cadmium, total	ug/L	MW-39	04/22/2020	ND	0.8000	
Cadmium, total	ug/L	MW-39	10/02/2020	ND	0.8000	
Cadmium, total	ug/L	MW-39	04/08/2021	ND	0.8000	
Cadmium, total	ug/L	MW-39	10/29/2021	ND	0.8000	
Cadmium, total	ug/L	MW-39	04/25/2022	ND	0.8000	
Cadmium, total	ug/L	MW-39	10/17/2022	ND	0.8000	
Cadmium, total	ug/L	MW-39	04/10/2023	ND	0.8000	
Cadmium, total	ug/L	MW-39	10/27/2023	ND	0.8000	
Cadmium, total	ug/L	MW-39	04/02/2024	ND	0.8000	
Chromium, total	ug/L	MW-39	10/23/2014	ND	8.0000	
Chromium, total	ug/L	MW-39	01/08/2015		29.6000	*
Chromium, total	ug/L	MW-39	04/01/2015	ND	8.0000	
Chromium, total	ug/L	MW-39	07/08/2015	ND	8.0000	
Chromium, total	ug/L	MW-39	11/05/2015	ND	8.0000	
Chromium, total	ug/L	MW-39	04/21/2016	ND	8.0000	
Chromium, total	ug/L	MW-39	10/17/2016	ND	8.0000	
Chromium, total	ug/L	MW-39	04/21/2017	ND	8.0000	
Chromium, total	ug/L	MW-39	10/16/2017	ND	8.0000	
Chromium, total	ug/L	MW-39	04/24/2018	ND	8.0000	
Chromium, total	ug/L	MW-39	10/25/2018	ND	8.0000	
Chromium, total	ug/L	MW-39	04/15/2019	ND	8.0000	
Chromium, total	ug/L	MW-39	10/07/2019	ND	8.0000	
Chromium, total	ug/L	MW-39	04/22/2020	ND	8.0000	
Chromium, total	ug/L	MW-39	10/02/2020	ND	8.0000	
Chromium, total	ug/L	MW-39	04/08/2021	ND	8.0000	
Chromium, total	ug/L	MW-39	10/29/2021	ND	8.0000	
Chromium, total	ug/L	MW-39	04/25/2022	ND	8.0000	
Chromium, total	ug/L	MW-39	10/17/2022	ND	8.0000	
Chromium, total	ug/L	MW-39	04/10/2023	ND	8.0000	
Chromium, total	ug/L	MW-39	10/27/2023	ND	8.0000	
Chromium, total	ug/L	MW-39	04/02/2024	ND	8.0000	
Cobalt, total	ug/L	MW-39	10/23/2014	ND	0.8000	
Cobalt, total	ug/L	MW-39	01/08/2015	ND	0.8000	
Cobalt, total	ug/L	MW-39	04/01/2015	ND	0.8000	
Cobalt, total	ug/L	MW-39	07/08/2015	ND	0.8000	
Cobalt, total	ug/L	MW-39	11/05/2015		3.3000	*
Cobalt, total	ug/L	MW-39	04/21/2016	ND	0.8000	
Cobalt, total	ug/L	MW-39	10/17/2016	ND	0.8000	
Cobalt, total	ug/L	MW-39	04/21/2017	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-39	10/16/2017	ND	0.8000		
Cobalt, total	ug/L	MW-39	04/24/2018	ND	0.8000		
Cobalt, total	ug/L	MW-39	10/25/2018	ND	0.8000		
Cobalt, total	ug/L	MW-39	04/15/2019	ND	0.8000		
Cobalt, total	ug/L	MW-39	10/07/2019	ND	0.8000		
Cobalt, total	ug/L	MW-39	04/22/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	10/02/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	04/08/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	10/29/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	04/25/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	10/17/2022		1.5000		
Cobalt, total	ug/L	MW-39	04/10/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	10/27/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	04/02/2024	ND	0.4000	0.8000	**
Copper, total	ug/L	MW-39	10/23/2014	ND	4.0000		
Copper, total	ug/L	MW-39	01/08/2015	ND	4.0000		
Copper, total	ug/L	MW-39	04/01/2015	ND	4.0000		
Copper, total	ug/L	MW-39	07/08/2015	ND	4.0000		
Copper, total	ug/L	MW-39	11/05/2015	ND	4.0000		
Copper, total	ug/L	MW-39	04/21/2016	ND	4.0000		
Copper, total	ug/L	MW-39	10/17/2016	ND	4.0000		
Copper, total	ug/L	MW-39	04/21/2017	ND	4.0000		
Copper, total	ug/L	MW-39	10/16/2017	ND	4.0000		
Copper, total	ug/L	MW-39	04/24/2018	ND	4.0000		
Copper, total	ug/L	MW-39	10/25/2018	ND	4.0000		
Copper, total	ug/L	MW-39	04/15/2019	ND	4.0000		
Copper, total	ug/L	MW-39	10/07/2019	ND	4.0000		
Copper, total	ug/L	MW-39	04/22/2020	ND	4.0000		
Copper, total	ug/L	MW-39	10/02/2020	ND	4.0000		
Copper, total	ug/L	MW-39	04/08/2021	ND	4.0000		
Copper, total	ug/L	MW-39	10/29/2021	ND	4.0000		
Copper, total	ug/L	MW-39	04/25/2022	ND	4.0000		
Copper, total	ug/L	MW-39	10/17/2022	ND	4.0000		
Copper, total	ug/L	MW-39	04/10/2023	ND	4.0000		
Copper, total	ug/L	MW-39	10/27/2023	ND	4.0000		
Copper, total	ug/L	MW-39	04/02/2024		126.0000		*
Lead, total	ug/L	MW-39	10/23/2014	ND	4.0000		
Lead, total	ug/L	MW-39	01/08/2015	ND	4.0000		
Lead, total	ug/L	MW-39	04/01/2015	ND	4.0000		
Lead, total	ug/L	MW-39	07/08/2015	ND	4.0000		
Lead, total	ug/L	MW-39	11/05/2015	ND	4.0000		
Lead, total	ug/L	MW-39	04/21/2016	ND	4.0000		
Lead, total	ug/L	MW-39	10/17/2016	ND	4.0000		
Lead, total	ug/L	MW-39	04/21/2017	ND	4.0000		
Lead, total	ug/L	MW-39	10/16/2017	ND	4.0000		
Lead, total	ug/L	MW-39	04/24/2018	ND	4.0000		
Lead, total	ug/L	MW-39	10/25/2018	ND	4.0000		
Lead, total	ug/L	MW-39	04/15/2019	ND	4.0000		
Lead, total	ug/L	MW-39	10/07/2019	ND	4.0000		
Lead, total	ug/L	MW-39	04/22/2020	ND	4.0000		
Lead, total	ug/L	MW-39	10/02/2020	ND	4.0000		
Lead, total	ug/L	MW-39	04/08/2021	ND	4.0000		
Lead, total	ug/L	MW-39	10/29/2021	ND	4.0000		
Lead, total	ug/L	MW-39	04/25/2022	ND	4.0000		
Lead, total	ug/L	MW-39	10/17/2022	ND	4.0000		
Lead, total	ug/L	MW-39	04/10/2023	ND	4.0000		
Lead, total	ug/L	MW-39	10/27/2023	ND	4.0000		
Lead, total	ug/L	MW-39	04/02/2024	ND	4.0000		
Nickel, total	ug/L	MW-39	10/23/2014	ND	4.0000		
Nickel, total	ug/L	MW-39	01/08/2015		20.5000		*
Nickel, total	ug/L	MW-39	04/01/2015	ND	4.0000		
Nickel, total	ug/L	MW-39	07/08/2015	ND	4.0000		
Nickel, total	ug/L	MW-39	11/05/2015		7.0000		
Nickel, total	ug/L	MW-39	04/21/2016	ND	4.0000		
Nickel, total	ug/L	MW-39	10/17/2016	ND	4.0000		
Nickel, total	ug/L	MW-39	04/21/2017	ND	4.0000		
Nickel, total	ug/L	MW-39	10/16/2017	ND	4.0000		
Nickel, total	ug/L	MW-39	04/24/2018	ND	4.0000		
Nickel, total	ug/L	MW-39	10/25/2018	ND	4.0000		
Nickel, total	ug/L	MW-39	04/15/2019	ND	4.0000		
Nickel, total	ug/L	MW-39	10/07/2019	ND	4.0000		
Nickel, total	ug/L	MW-39	04/22/2020	ND	4.0000		
Nickel, total	ug/L	MW-39	10/02/2020	ND	4.0000		
Nickel, total	ug/L	MW-39	04/08/2021	ND	4.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Nickel, total	ug/L	MW-39	10/29/2021	ND	4.0000		
Nickel, total	ug/L	MW-39	04/25/2022	ND	4.0000		
Nickel, total	ug/L	MW-39	10/17/2022	ND	4.0000		
Nickel, total	ug/L	MW-39	04/10/2023	ND	4.0000		
Nickel, total	ug/L	MW-39	10/27/2023	ND	4.0000		
Nickel, total	ug/L	MW-39	04/02/2024	ND	4.0000		
Selenium, total	ug/L	MW-39	10/23/2014	ND	4.0000		
Selenium, total	ug/L	MW-39	01/08/2015	ND	4.0000		
Selenium, total	ug/L	MW-39	04/01/2015	ND	4.0000		
Selenium, total	ug/L	MW-39	07/08/2015	ND	4.0000		
Selenium, total	ug/L	MW-39	11/05/2015	ND	4.0000		
Selenium, total	ug/L	MW-39	04/21/2016	ND	4.0000		
Selenium, total	ug/L	MW-39	10/17/2016	ND	4.0000		
Selenium, total	ug/L	MW-39	04/21/2017	ND	4.0000		
Selenium, total	ug/L	MW-39	10/16/2017	ND	4.0000		
Selenium, total	ug/L	MW-39	04/24/2018	ND	4.0000		
Selenium, total	ug/L	MW-39	10/25/2018	ND	4.0000		
Selenium, total	ug/L	MW-39	04/15/2019	ND	4.0000		
Selenium, total	ug/L	MW-39	10/07/2019	ND	4.0000		
Selenium, total	ug/L	MW-39	04/22/2020	ND	4.0000		
Selenium, total	ug/L	MW-39	10/02/2020	ND	4.0000		
Selenium, total	ug/L	MW-39	04/08/2021	ND	4.0000		
Selenium, total	ug/L	MW-39	10/29/2021	ND	4.0000		
Selenium, total	ug/L	MW-39	04/25/2022	ND	4.0000		
Selenium, total	ug/L	MW-39	10/17/2022	ND	4.0000		
Selenium, total	ug/L	MW-39	04/10/2023	ND	4.0000		
Selenium, total	ug/L	MW-39	10/27/2023	ND	4.0000		
Selenium, total	ug/L	MW-39	04/02/2024	ND	4.0000		
Silver, total	ug/L	MW-39	10/23/2014	ND	4.0000		
Silver, total	ug/L	MW-39	01/08/2015	ND	4.0000		
Silver, total	ug/L	MW-39	04/01/2015	ND	4.0000		
Silver, total	ug/L	MW-39	07/08/2015	ND	4.0000		
Silver, total	ug/L	MW-39	11/05/2015	ND	4.0000		
Silver, total	ug/L	MW-39	04/21/2016	ND	4.0000		
Silver, total	ug/L	MW-39	10/17/2016	ND	4.0000		
Silver, total	ug/L	MW-39	04/21/2017	ND	4.0000		
Silver, total	ug/L	MW-39	10/16/2017	ND	4.0000		
Silver, total	ug/L	MW-39	04/24/2018	ND	4.0000		
Silver, total	ug/L	MW-39	10/25/2018	ND	4.0000		
Silver, total	ug/L	MW-39	04/15/2019	ND	4.0000		
Silver, total	ug/L	MW-39	10/07/2019	ND	4.0000		
Silver, total	ug/L	MW-39	04/22/2020	ND	4.0000		
Silver, total	ug/L	MW-39	10/02/2020	ND	4.0000		
Silver, total	ug/L	MW-39	04/08/2021	ND	4.0000		
Silver, total	ug/L	MW-39	10/29/2021	ND	4.0000		
Silver, total	ug/L	MW-39	04/25/2022	ND	4.0000		
Silver, total	ug/L	MW-39	10/17/2022	ND	4.0000		
Silver, total	ug/L	MW-39	04/10/2023	ND	4.0000		
Silver, total	ug/L	MW-39	10/27/2023	ND	4.0000		
Silver, total	ug/L	MW-39	04/02/2024	ND	4.0000		
Thallium, total	ug/L	MW-39	10/23/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	01/08/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	04/01/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	07/08/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	11/05/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	04/21/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	10/17/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	04/21/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	10/16/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	04/24/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	10/25/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	04/15/2019	ND	2.0000		
Thallium, total	ug/L	MW-39	10/07/2019	ND	2.0000		
Thallium, total	ug/L	MW-39	04/22/2020	ND	2.0000		
Thallium, total	ug/L	MW-39	10/02/2020	ND	2.0000		
Thallium, total	ug/L	MW-39	04/08/2021	ND	2.0000		
Thallium, total	ug/L	MW-39	10/29/2021	ND	2.0000		
Thallium, total	ug/L	MW-39	04/25/2022	ND	2.0000		
Thallium, total	ug/L	MW-39	10/17/2022	ND	2.0000		
Thallium, total	ug/L	MW-39	04/10/2023	ND	2.0000		
Thallium, total	ug/L	MW-39	10/27/2023	ND	2.0000		
Thallium, total	ug/L	MW-39	04/02/2024	ND	2.0000		
Vanadium, total	ug/L	MW-39	10/23/2014	ND	20.0000		
Vanadium, total	ug/L	MW-39	01/08/2015	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-39	04/01/2015	ND	20.0000		
Vanadium, total	ug/L	MW-39	07/08/2015	ND	20.0000		
Vanadium, total	ug/L	MW-39	11/05/2015	ND	20.0000		
Vanadium, total	ug/L	MW-39	04/21/2016	ND	20.0000		
Vanadium, total	ug/L	MW-39	10/17/2016	ND	20.0000		
Vanadium, total	ug/L	MW-39	04/21/2017	ND	20.0000		
Vanadium, total	ug/L	MW-39	10/16/2017	ND	20.0000		
Vanadium, total	ug/L	MW-39	04/24/2018	ND	20.0000		
Vanadium, total	ug/L	MW-39	10/25/2018	ND	20.0000		
Vanadium, total	ug/L	MW-39	04/15/2019	ND	20.0000		
Vanadium, total	ug/L	MW-39	10/07/2019	ND	20.0000		
Vanadium, total	ug/L	MW-39	04/22/2020	ND	20.0000		
Vanadium, total	ug/L	MW-39	10/02/2020	ND	20.0000		
Vanadium, total	ug/L	MW-39	04/08/2021	ND	20.0000		
Vanadium, total	ug/L	MW-39	10/29/2021	ND	20.0000		
Vanadium, total	ug/L	MW-39	04/25/2022	ND	20.0000		
Vanadium, total	ug/L	MW-39	10/17/2022	ND	20.0000		
Vanadium, total	ug/L	MW-39	04/10/2023	ND	20.0000		
Vanadium, total	ug/L	MW-39	10/27/2023	ND	20.0000		
Vanadium, total	ug/L	MW-39	04/02/2024	ND	20.0000		
Zinc, total	ug/L	MW-39	10/23/2014	ND	20.0000		
Zinc, total	ug/L	MW-39	01/08/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	04/01/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	07/08/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	11/05/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	04/21/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	10/17/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	04/21/2017		25.8000		
Zinc, total	ug/L	MW-39	10/16/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	04/24/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	10/25/2018	ND	20.0000		
Zinc, total	ug/L	MW-39	04/15/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	10/07/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	04/22/2020	ND	20.0000		
Zinc, total	ug/L	MW-39	10/02/2020	ND	20.0000		
Zinc, total	ug/L	MW-39	04/08/2021	ND	20.0000		
Zinc, total	ug/L	MW-39	10/29/2021	ND	20.0000		
Zinc, total	ug/L	MW-39	04/25/2022	ND	20.0000		
Zinc, total	ug/L	MW-39	10/17/2022	ND	20.0000		
Zinc, total	ug/L	MW-39	04/10/2023	ND	20.0000		
Zinc, total	ug/L	MW-39	10/27/2023	ND	20.0000		
Zinc, total	ug/L	MW-39	04/02/2024	ND	20.0000		
Antimony, total	ug/L	MW-40	10/23/2014	ND	2.0000		
Antimony, total	ug/L	MW-40	01/08/2015	ND	2.0000		
Antimony, total	ug/L	MW-40	03/31/2015	ND	2.0000		
Antimony, total	ug/L	MW-40	07/08/2015	ND	2.0000		
Antimony, total	ug/L	MW-40	11/05/2015	ND	2.0000		
Antimony, total	ug/L	MW-40	04/21/2016	ND	2.0000		
Antimony, total	ug/L	MW-40	10/17/2016	ND	2.0000		
Antimony, total	ug/L	MW-40	04/21/2017	ND	2.0000		
Antimony, total	ug/L	MW-40	10/16/2017	ND	2.0000		
Antimony, total	ug/L	MW-40	04/24/2018	ND	2.0000		
Antimony, total	ug/L	MW-40	10/25/2018	ND	2.0000		
Antimony, total	ug/L	MW-40	04/15/2019	ND	2.0000		
Antimony, total	ug/L	MW-40	10/07/2019	ND	2.0000		
Antimony, total	ug/L	MW-40	04/22/2020	ND	2.0000		
Antimony, total	ug/L	MW-40	10/02/2020	ND	2.0000		
Antimony, total	ug/L	MW-40	04/08/2021	ND	2.0000		
Antimony, total	ug/L	MW-40	10/29/2021	ND	2.0000		
Antimony, total	ug/L	MW-40	04/25/2022	ND	2.0000		
Antimony, total	ug/L	MW-40	10/17/2022	ND	2.0000		
Antimony, total	ug/L	MW-40	04/10/2023	ND	2.0000		
Antimony, total	ug/L	MW-40	10/27/2023	ND	2.0000		
Antimony, total	ug/L	MW-40	04/02/2024	ND	2.0000		
Arsenic, total	ug/L	MW-40	10/23/2014	ND	4.0000		
Arsenic, total	ug/L	MW-40	01/08/2015	ND	4.0000		
Arsenic, total	ug/L	MW-40	03/31/2015	ND	4.0000		
Arsenic, total	ug/L	MW-40	07/08/2015	ND	4.0000		
Arsenic, total	ug/L	MW-40	11/05/2015	ND	4.0000		
Arsenic, total	ug/L	MW-40	04/21/2016	ND	4.0000		
Arsenic, total	ug/L	MW-40	10/17/2016	ND	4.0000		
Arsenic, total	ug/L	MW-40	04/21/2017	ND	4.0000		
Arsenic, total	ug/L	MW-40	10/16/2017	ND	4.0000		
Arsenic, total	ug/L	MW-40	04/24/2018	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
Arsenic, total	ug/L	MW-40	10/25/2018	ND	4.0000	
Arsenic, total	ug/L	MW-40	04/15/2019	ND	4.0000	
Arsenic, total	ug/L	MW-40	10/07/2019	ND	4.0000	
Arsenic, total	ug/L	MW-40	04/22/2020	ND	4.0000	
Arsenic, total	ug/L	MW-40	10/02/2020	ND	4.0000	
Arsenic, total	ug/L	MW-40	04/08/2021	ND	4.0000	
Arsenic, total	ug/L	MW-40	10/29/2021		4.3000	
Arsenic, total	ug/L	MW-40	04/25/2022	ND	4.0000	
Arsenic, total	ug/L	MW-40	10/17/2022		8.1000	
Arsenic, total	ug/L	MW-40	04/10/2023		5.9000	
Arsenic, total	ug/L	MW-40	10/27/2023		5.3000	
Arsenic, total	ug/L	MW-40	04/02/2024	ND	4.0000	
Barium, total	ug/L	MW-40	10/23/2014		65.4000	
Barium, total	ug/L	MW-40	01/08/2015		85.3000	
Barium, total	ug/L	MW-40	03/31/2015		96.6000	
Barium, total	ug/L	MW-40	07/08/2015		71.0000	
Barium, total	ug/L	MW-40	11/05/2015		89.1000	
Barium, total	ug/L	MW-40	04/21/2016		74.0000	
Barium, total	ug/L	MW-40	10/17/2016		83.2000	
Barium, total	ug/L	MW-40	04/21/2017		82.9000	
Barium, total	ug/L	MW-40	10/16/2017		45.4000	
Barium, total	ug/L	MW-40	04/24/2018		39.7000	
Barium, total	ug/L	MW-40	10/25/2018		56.3000	
Barium, total	ug/L	MW-40	04/15/2019		35.7000	
Barium, total	ug/L	MW-40	10/07/2019		50.7000	
Barium, total	ug/L	MW-40	04/22/2020		47.5000	
Barium, total	ug/L	MW-40	10/02/2020		47.8000	
Barium, total	ug/L	MW-40	04/08/2021		83.4000	
Barium, total	ug/L	MW-40	10/29/2021		72.2000	
Barium, total	ug/L	MW-40	04/25/2022		27.9000	
Barium, total	ug/L	MW-40	10/17/2022		103.0000	
Barium, total	ug/L	MW-40	04/10/2023		42.8000	
Barium, total	ug/L	MW-40	10/27/2023		46.9000	
Barium, total	ug/L	MW-40	04/02/2024		36.4000	
Beryllium, total	ug/L	MW-40	10/23/2014	ND	4.0000	
Beryllium, total	ug/L	MW-40	01/08/2015	ND	4.0000	
Beryllium, total	ug/L	MW-40	03/31/2015	ND	4.0000	
Beryllium, total	ug/L	MW-40	07/08/2015	ND	4.0000	
Beryllium, total	ug/L	MW-40	11/05/2015	ND	4.0000	
Beryllium, total	ug/L	MW-40	04/21/2016	ND	4.0000	
Beryllium, total	ug/L	MW-40	10/17/2016	ND	4.0000	
Beryllium, total	ug/L	MW-40	04/21/2017	ND	4.0000	
Beryllium, total	ug/L	MW-40	10/16/2017	ND	4.0000	
Beryllium, total	ug/L	MW-40	04/24/2018	ND	4.0000	
Beryllium, total	ug/L	MW-40	10/25/2018	ND	4.0000	
Beryllium, total	ug/L	MW-40	04/15/2019	ND	4.0000	
Beryllium, total	ug/L	MW-40	10/07/2019	ND	4.0000	
Beryllium, total	ug/L	MW-40	04/22/2020	ND	4.0000	
Beryllium, total	ug/L	MW-40	10/02/2020	ND	4.0000	
Beryllium, total	ug/L	MW-40	04/08/2021	ND	4.0000	
Beryllium, total	ug/L	MW-40	10/29/2021	ND	4.0000	
Beryllium, total	ug/L	MW-40	04/25/2022	ND	4.0000	
Beryllium, total	ug/L	MW-40	10/17/2022	ND	4.0000	
Beryllium, total	ug/L	MW-40	04/10/2023	ND	4.0000	
Beryllium, total	ug/L	MW-40	10/27/2023	ND	4.0000	
Beryllium, total	ug/L	MW-40	04/02/2024	ND	4.0000	
Cadmium, total	ug/L	MW-40	10/23/2014	ND	0.8000	
Cadmium, total	ug/L	MW-40	01/08/2015	ND	0.8000	
Cadmium, total	ug/L	MW-40	03/31/2015	ND	0.8000	
Cadmium, total	ug/L	MW-40	07/08/2015	ND	0.8000	
Cadmium, total	ug/L	MW-40	11/05/2015	ND	0.8000	
Cadmium, total	ug/L	MW-40	04/21/2016	ND	0.8000	
Cadmium, total	ug/L	MW-40	10/17/2016	ND	0.8000	
Cadmium, total	ug/L	MW-40	04/21/2017	ND	0.8000	
Cadmium, total	ug/L	MW-40	10/16/2017	ND	0.8000	
Cadmium, total	ug/L	MW-40	04/24/2018	ND	0.8000	
Cadmium, total	ug/L	MW-40	10/25/2018	ND	0.8000	
Cadmium, total	ug/L	MW-40	04/15/2019	ND	0.8000	
Cadmium, total	ug/L	MW-40	10/07/2019	ND	0.8000	
Cadmium, total	ug/L	MW-40	04/22/2020	ND	0.8000	
Cadmium, total	ug/L	MW-40	10/02/2020	ND	0.8000	
Cadmium, total	ug/L	MW-40	04/08/2021	ND	0.8000	
Cadmium, total	ug/L	MW-40	10/29/2021	ND	0.8000	
Cadmium, total	ug/L	MW-40	04/25/2022	ND	0.8000	
Cadmium, total	ug/L	MW-40	10/17/2022	ND	0.8000	
Cadmium, total	ug/L	MW-40	04/10/2023	ND	0.8000	
Cadmium, total	ug/L	MW-40	10/27/2023	ND	0.8000	
Cadmium, total	ug/L	MW-40	04/02/2024	ND	0.8000	

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Cadmium, total	ug/L	MW-40	10/17/2022	ND	0.8000		
Cadmium, total	ug/L	MW-40	04/10/2023	ND	0.8000		
Cadmium, total	ug/L	MW-40	10/27/2023	ND	0.8000		
Cadmium, total	ug/L	MW-40	04/02/2024	ND	0.8000		
Chromium, total	ug/L	MW-40	10/23/2014	ND	8.0000		
Chromium, total	ug/L	MW-40	01/08/2015	ND	8.0000		
Chromium, total	ug/L	MW-40	03/31/2015	ND	8.0000		
Chromium, total	ug/L	MW-40	07/08/2015	ND	8.0000		
Chromium, total	ug/L	MW-40	11/05/2015	ND	8.0000		
Chromium, total	ug/L	MW-40	04/21/2016	ND	8.0000		
Chromium, total	ug/L	MW-40	10/17/2016	ND	8.0000		
Chromium, total	ug/L	MW-40	04/21/2017	ND	8.0000		
Chromium, total	ug/L	MW-40	10/16/2017	ND	8.0000		
Chromium, total	ug/L	MW-40	04/24/2018	ND	8.0000		
Chromium, total	ug/L	MW-40	10/25/2018	ND	8.0000		
Chromium, total	ug/L	MW-40	04/15/2019	ND	8.0000		
Chromium, total	ug/L	MW-40	10/07/2019	ND	8.0000		
Chromium, total	ug/L	MW-40	04/22/2020	ND	8.0000		
Chromium, total	ug/L	MW-40	10/02/2020	ND	8.0000		
Chromium, total	ug/L	MW-40	04/08/2021	ND	8.0000		
Chromium, total	ug/L	MW-40	10/29/2021	ND	8.0000		
Chromium, total	ug/L	MW-40	04/25/2022	ND	8.0000		
Chromium, total	ug/L	MW-40	10/17/2022	ND	8.0000		
Chromium, total	ug/L	MW-40	04/10/2023	ND	8.0000		
Chromium, total	ug/L	MW-40	10/27/2023	ND	8.0000		
Chromium, total	ug/L	MW-40	04/02/2024	ND	8.0000		
Cobalt, total	ug/L	MW-40	10/23/2014	ND	0.8000		
Cobalt, total	ug/L	MW-40	01/08/2015	ND	0.8000		
Cobalt, total	ug/L	MW-40	03/31/2015	ND	0.8000		
Cobalt, total	ug/L	MW-40	07/08/2015	ND	0.8000		
Cobalt, total	ug/L	MW-40	11/05/2015	ND	0.8000		
Cobalt, total	ug/L	MW-40	04/21/2016	ND	0.8000		
Cobalt, total	ug/L	MW-40	10/17/2016	ND	0.8000		
Cobalt, total	ug/L	MW-40	04/21/2017	ND	0.8000		
Cobalt, total	ug/L	MW-40	10/16/2017	ND	0.8000		
Cobalt, total	ug/L	MW-40	04/24/2018	ND	0.8000		
Cobalt, total	ug/L	MW-40	10/25/2018	ND	0.8000		
Cobalt, total	ug/L	MW-40	04/15/2019	ND	0.8000		
Cobalt, total	ug/L	MW-40	10/07/2019	ND	0.8000		
Cobalt, total	ug/L	MW-40	04/22/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-40	10/02/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-40	04/08/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-40	10/29/2021		4.5000		
Cobalt, total	ug/L	MW-40	04/25/2022		5.6000		
Cobalt, total	ug/L	MW-40	10/17/2022		8.3000		
Cobalt, total	ug/L	MW-40	04/10/2023		10.2000		
Cobalt, total	ug/L	MW-40	10/27/2023		4.7000		
Cobalt, total	ug/L	MW-40	04/02/2024		0.5000		
Copper, total	ug/L	MW-40	10/23/2014	ND	4.0000		
Copper, total	ug/L	MW-40	01/08/2015	ND	4.0000		
Copper, total	ug/L	MW-40	03/31/2015	ND	4.0000		
Copper, total	ug/L	MW-40	07/08/2015	ND	4.0000		
Copper, total	ug/L	MW-40	11/05/2015	ND	4.0000		
Copper, total	ug/L	MW-40	04/21/2016	ND	4.0000		
Copper, total	ug/L	MW-40	10/17/2016	ND	4.0000		
Copper, total	ug/L	MW-40	04/21/2017	ND	4.0000		
Copper, total	ug/L	MW-40	10/16/2017	ND	4.0000		
Copper, total	ug/L	MW-40	04/24/2018	ND	4.0000		
Copper, total	ug/L	MW-40	10/25/2018	ND	4.0000		
Copper, total	ug/L	MW-40	04/15/2019	ND	4.0000		
Copper, total	ug/L	MW-40	10/07/2019	ND	4.0000		
Copper, total	ug/L	MW-40	04/22/2020	ND	4.0000		
Copper, total	ug/L	MW-40	10/02/2020	ND	4.0000		
Copper, total	ug/L	MW-40	04/08/2021	ND	4.0000		
Copper, total	ug/L	MW-40	10/29/2021		5.1000		
Copper, total	ug/L	MW-40	04/25/2022	ND	4.0000		
Copper, total	ug/L	MW-40	10/17/2022	ND	4.0000		
Copper, total	ug/L	MW-40	04/10/2023	ND	4.0000		
Copper, total	ug/L	MW-40	10/27/2023	ND	4.0000		
Copper, total	ug/L	MW-40	04/02/2024		8.5000		
Lead, total	ug/L	MW-40	10/23/2014	ND	4.0000		
Lead, total	ug/L	MW-40	01/08/2015	ND	4.0000		
Lead, total	ug/L	MW-40	03/31/2015	ND	4.0000		
Lead, total	ug/L	MW-40	07/08/2015	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
Lead, total	ug/L	MW-40	11/05/2015	ND	4.0000	
Lead, total	ug/L	MW-40	04/21/2016	ND	4.0000	
Lead, total	ug/L	MW-40	10/17/2016	ND	4.0000	
Lead, total	ug/L	MW-40	04/21/2017	ND	4.0000	
Lead, total	ug/L	MW-40	10/16/2017	ND	4.0000	
Lead, total	ug/L	MW-40	04/24/2018	ND	4.0000	
Lead, total	ug/L	MW-40	10/25/2018	ND	4.0000	
Lead, total	ug/L	MW-40	04/15/2019	ND	4.0000	
Lead, total	ug/L	MW-40	10/07/2019	ND	4.0000	
Lead, total	ug/L	MW-40	04/22/2020	ND	4.0000	
Lead, total	ug/L	MW-40	10/02/2020	ND	4.0000	
Lead, total	ug/L	MW-40	04/08/2021	ND	4.0000	
Lead, total	ug/L	MW-40	10/29/2021	ND	4.0000	
Lead, total	ug/L	MW-40	04/25/2022	ND	4.0000	
Lead, total	ug/L	MW-40	10/17/2022	ND	4.0000	
Lead, total	ug/L	MW-40	04/10/2023	ND	4.0000	
Lead, total	ug/L	MW-40	10/27/2023	ND	4.0000	
Lead, total	ug/L	MW-40	04/02/2024	ND	4.0000	
Nickel, total	ug/L	MW-40	10/23/2014	ND	4.0000	
Nickel, total	ug/L	MW-40	01/08/2015	ND	4.0000	
Nickel, total	ug/L	MW-40	03/31/2015	ND	4.0000	
Nickel, total	ug/L	MW-40	07/08/2015	ND	4.0000	
Nickel, total	ug/L	MW-40	11/05/2015	ND	4.0000	
Nickel, total	ug/L	MW-40	04/21/2016	ND	4.0000	
Nickel, total	ug/L	MW-40	10/17/2016	ND	4.0000	
Nickel, total	ug/L	MW-40	04/21/2017	ND	4.0000	
Nickel, total	ug/L	MW-40	10/16/2017	ND	4.0000	
Nickel, total	ug/L	MW-40	04/24/2018	ND	4.0000	
Nickel, total	ug/L	MW-40	10/25/2018	ND	4.0000	
Nickel, total	ug/L	MW-40	04/15/2019	ND	4.0000	
Nickel, total	ug/L	MW-40	10/07/2019	ND	4.0000	
Nickel, total	ug/L	MW-40	04/22/2020	ND	4.0000	
Nickel, total	ug/L	MW-40	10/02/2020	ND	4.0000	
Nickel, total	ug/L	MW-40	04/08/2021		5.0000	
Nickel, total	ug/L	MW-40	10/29/2021		31.9000	*
Nickel, total	ug/L	MW-40	04/25/2022		18.3000	
Nickel, total	ug/L	MW-40	10/17/2022		22.1000	
Nickel, total	ug/L	MW-40	04/10/2023		16.7000	
Nickel, total	ug/L	MW-40	10/27/2023		17.0000	
Nickel, total	ug/L	MW-40	04/02/2024		16.8000	
Selenium, total	ug/L	MW-40	10/23/2014		4.6000	
Selenium, total	ug/L	MW-40	01/08/2015		4.8000	
Selenium, total	ug/L	MW-40	03/31/2015		4.9000	
Selenium, total	ug/L	MW-40	07/08/2015	ND	4.0000	
Selenium, total	ug/L	MW-40	11/05/2015	ND	4.0000	
Selenium, total	ug/L	MW-40	04/21/2016	ND	4.0000	
Selenium, total	ug/L	MW-40	10/17/2016	ND	4.0000	
Selenium, total	ug/L	MW-40	04/21/2017	ND	4.0000	
Selenium, total	ug/L	MW-40	10/16/2017	ND	4.0000	
Selenium, total	ug/L	MW-40	04/24/2018	ND	4.0000	
Selenium, total	ug/L	MW-40	10/25/2018	ND	4.0000	
Selenium, total	ug/L	MW-40	04/15/2019	ND	4.0000	
Selenium, total	ug/L	MW-40	10/07/2019	ND	4.0000	
Selenium, total	ug/L	MW-40	04/22/2020	ND	4.0000	
Selenium, total	ug/L	MW-40	10/02/2020	ND	4.0000	
Selenium, total	ug/L	MW-40	04/08/2021	ND	4.0000	
Selenium, total	ug/L	MW-40	10/29/2021	ND	4.0000	
Selenium, total	ug/L	MW-40	04/25/2022	ND	4.0000	
Selenium, total	ug/L	MW-40	10/17/2022	ND	4.0000	
Selenium, total	ug/L	MW-40	04/10/2023	ND	4.0000	
Selenium, total	ug/L	MW-40	10/27/2023	ND	4.0000	
Selenium, total	ug/L	MW-40	04/02/2024	ND	4.0000	
Silver, total	ug/L	MW-40	10/23/2014	ND	4.0000	
Silver, total	ug/L	MW-40	01/08/2015	ND	4.0000	
Silver, total	ug/L	MW-40	03/31/2015	ND	4.0000	
Silver, total	ug/L	MW-40	07/08/2015	ND	4.0000	
Silver, total	ug/L	MW-40	11/05/2015	ND	4.0000	
Silver, total	ug/L	MW-40	04/21/2016	ND	4.0000	
Silver, total	ug/L	MW-40	10/17/2016	ND	4.0000	
Silver, total	ug/L	MW-40	04/21/2017	ND	4.0000	
Silver, total	ug/L	MW-40	10/16/2017	ND	4.0000	
Silver, total	ug/L	MW-40	04/24/2018	ND	4.0000	
Silver, total	ug/L	MW-40	10/25/2018	ND	4.0000	
Silver, total	ug/L	MW-40	04/15/2019	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	
Silver, total	ug/L	MW-40	10/07/2019	ND	4.0000		
Silver, total	ug/L	MW-40	04/22/2020	ND	4.0000		
Silver, total	ug/L	MW-40	10/02/2020	ND	4.0000		
Silver, total	ug/L	MW-40	04/08/2021	ND	4.0000		
Silver, total	ug/L	MW-40	10/29/2021	ND	4.0000		
Silver, total	ug/L	MW-40	04/25/2022	ND	4.0000		
Silver, total	ug/L	MW-40	10/17/2022	ND	4.0000		
Silver, total	ug/L	MW-40	04/10/2023	ND	4.0000		
Silver, total	ug/L	MW-40	10/27/2023	ND	4.0000		
Silver, total	ug/L	MW-40	04/02/2024	ND	4.0000		
Thallium, total	ug/L	MW-40	10/23/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	01/08/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	03/31/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	07/08/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	11/05/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	04/21/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	10/17/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	04/21/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	10/16/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	04/24/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	10/25/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	04/15/2019	ND	2.0000		
Thallium, total	ug/L	MW-40	10/07/2019	ND	2.0000		
Thallium, total	ug/L	MW-40	04/22/2020	ND	2.0000		
Thallium, total	ug/L	MW-40	10/02/2020	ND	2.0000		
Thallium, total	ug/L	MW-40	04/08/2021	ND	2.0000		
Thallium, total	ug/L	MW-40	10/29/2021	ND	2.0000		
Thallium, total	ug/L	MW-40	04/25/2022	ND	2.0000		
Thallium, total	ug/L	MW-40	10/17/2022	ND	2.0000		
Thallium, total	ug/L	MW-40	04/10/2023	ND	2.0000		
Thallium, total	ug/L	MW-40	10/27/2023	ND	2.0000		
Thallium, total	ug/L	MW-40	04/02/2024	ND	2.0000		
Vanadium, total	ug/L	MW-40	10/23/2014	ND	20.0000		
Vanadium, total	ug/L	MW-40	01/08/2015	ND	20.0000		
Vanadium, total	ug/L	MW-40	03/31/2015	ND	20.0000		
Vanadium, total	ug/L	MW-40	07/08/2015	ND	20.0000		
Vanadium, total	ug/L	MW-40	11/05/2015	ND	20.0000		
Vanadium, total	ug/L	MW-40	04/21/2016	ND	20.0000		
Vanadium, total	ug/L	MW-40	10/17/2016	ND	20.0000		
Vanadium, total	ug/L	MW-40	04/21/2017	ND	20.0000		
Vanadium, total	ug/L	MW-40	10/16/2017	ND	20.0000		
Vanadium, total	ug/L	MW-40	04/24/2018	ND	20.0000		
Vanadium, total	ug/L	MW-40	10/25/2018	ND	20.0000		
Vanadium, total	ug/L	MW-40	04/15/2019	ND	20.0000		
Vanadium, total	ug/L	MW-40	10/07/2019	ND	20.0000		
Vanadium, total	ug/L	MW-40	04/22/2020	ND	20.0000		
Vanadium, total	ug/L	MW-40	10/02/2020	ND	20.0000		
Vanadium, total	ug/L	MW-40	04/08/2021	ND	20.0000		
Vanadium, total	ug/L	MW-40	10/29/2021	ND	20.0000		
Vanadium, total	ug/L	MW-40	04/25/2022	ND	20.0000		
Vanadium, total	ug/L	MW-40	10/17/2022	ND	20.0000		
Vanadium, total	ug/L	MW-40	04/10/2023	ND	20.0000		
Vanadium, total	ug/L	MW-40	10/27/2023	ND	20.0000		
Vanadium, total	ug/L	MW-40	04/02/2024	ND	20.0000		
Zinc, total	ug/L	MW-40	10/23/2014	ND	20.0000		
Zinc, total	ug/L	MW-40	01/08/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-40	03/31/2015		12.8000		
Zinc, total	ug/L	MW-40	07/08/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-40	11/05/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-40	04/21/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-40	10/17/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-40	04/21/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-40	10/16/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-40	04/24/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-40	10/25/2018	ND	20.0000		
Zinc, total	ug/L	MW-40	04/15/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-40	10/07/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-40	04/22/2020	ND	20.0000		
Zinc, total	ug/L	MW-40	10/02/2020	ND	20.0000		
Zinc, total	ug/L	MW-40	04/08/2021	ND	20.0000		
Zinc, total	ug/L	MW-40	10/29/2021	ND	20.0000		
Zinc, total	ug/L	MW-40	04/25/2022	ND	20.0000		
Zinc, total	ug/L	MW-40	10/17/2022	ND	20.0000		
Zinc, total	ug/L	MW-40	04/10/2023	ND	20.0000		
Zinc, total	ug/L	MW-40	10/27/2023	ND	20.0000		
Zinc, total	ug/L	MW-40	04/10/2023	ND	20.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Zinc, total	ug/L	MW-40	10/27/2023	ND	20.0000		
Zinc, total	ug/L	MW-40	04/02/2024	ND	20.0000		
Antimony, total	ug/L	MW-47	10/23/2014	ND	2.0000		
Antimony, total	ug/L	MW-47	03/31/2015	ND	2.0000		
Antimony, total	ug/L	MW-47	07/08/2015	ND	2.0000		
Antimony, total	ug/L	MW-47	11/05/2015	ND	2.0000		
Antimony, total	ug/L	MW-47	04/21/2016	ND	2.0000		
Antimony, total	ug/L	MW-47	10/17/2016	ND	2.0000		
Antimony, total	ug/L	MW-47	04/21/2017	ND	2.0000		
Antimony, total	ug/L	MW-47	10/16/2017	ND	2.0000		
Antimony, total	ug/L	MW-47	04/24/2018	ND	2.0000		
Antimony, total	ug/L	MW-47	10/25/2018	ND	2.0000		
Antimony, total	ug/L	MW-47	04/15/2019	ND	2.0000		
Antimony, total	ug/L	MW-47	10/07/2019	ND	2.0000		
Antimony, total	ug/L	MW-47	04/22/2020	ND	2.0000		
Antimony, total	ug/L	MW-47	10/01/2020	ND	2.0000		
Antimony, total	ug/L	MW-47	04/08/2021	ND	2.0000		
Antimony, total	ug/L	MW-47	10/29/2021	ND	2.0000		
Antimony, total	ug/L	MW-47	04/25/2022	ND	2.0000		
Antimony, total	ug/L	MW-47	10/17/2022	ND	2.0000		
Antimony, total	ug/L	MW-47	04/10/2023	ND	2.0000		
Antimony, total	ug/L	MW-47	10/27/2023	ND	2.0000		
Antimony, total	ug/L	MW-47	04/02/2024	ND	2.0000		
Arsenic, total	ug/L	MW-47	10/23/2014		40.0000		
Arsenic, total	ug/L	MW-47	03/31/2015		153.0000		*
Arsenic, total	ug/L	MW-47	07/08/2015		165.0000		*
Arsenic, total	ug/L	MW-47	11/05/2015		89.3000		*
Arsenic, total	ug/L	MW-47	04/21/2016		1730.0000		*
Arsenic, total	ug/L	MW-47	10/17/2016		18.5000		
Arsenic, total	ug/L	MW-47	04/21/2017		860.0000		*
Arsenic, total	ug/L	MW-47	10/16/2017		720.0000		*
Arsenic, total	ug/L	MW-47	04/24/2018		700.0000		*
Arsenic, total	ug/L	MW-47	10/25/2018		84.0000		
Arsenic, total	ug/L	MW-47	04/15/2019		277.0000		*
Arsenic, total	ug/L	MW-47	10/07/2019		41.0000		
Arsenic, total	ug/L	MW-47	04/22/2020		844.0000		*
Arsenic, total	ug/L	MW-47	10/01/2020		79.7000		
Arsenic, total	ug/L	MW-47	04/08/2021		236.0000		*
Arsenic, total	ug/L	MW-47	10/29/2021		50.4000		
Arsenic, total	ug/L	MW-47	04/25/2022		246.0000		*
Arsenic, total	ug/L	MW-47	10/17/2022		291.0000		*
Arsenic, total	ug/L	MW-47	04/10/2023		271.0000		*
Arsenic, total	ug/L	MW-47	10/27/2023		50.2000		
Arsenic, total	ug/L	MW-47	04/02/2024		182.0000		*
Barium, total	ug/L	MW-47	10/23/2014		392.0000		
Barium, total	ug/L	MW-47	03/31/2015		678.0000		
Barium, total	ug/L	MW-47	07/08/2015		630.0000		
Barium, total	ug/L	MW-47	11/05/2015		525.0000		
Barium, total	ug/L	MW-47	04/21/2016		3520.0000		*
Barium, total	ug/L	MW-47	10/17/2016		443.0000		
Barium, total	ug/L	MW-47	04/21/2017		1690.0000		
Barium, total	ug/L	MW-47	10/16/2017		1550.0000		
Barium, total	ug/L	MW-47	04/24/2018		1750.0000		
Barium, total	ug/L	MW-47	10/25/2018		310.0000		
Barium, total	ug/L	MW-47	04/15/2019		743.0000		
Barium, total	ug/L	MW-47	10/07/2019		497.0000		
Barium, total	ug/L	MW-47	04/22/2020		1880.0000		
Barium, total	ug/L	MW-47	10/01/2020		435.0000		
Barium, total	ug/L	MW-47	04/08/2021		876.0000		
Barium, total	ug/L	MW-47	10/29/2021		407.0000		
Barium, total	ug/L	MW-47	04/25/2022		565.0000		
Barium, total	ug/L	MW-47	10/17/2022		852.0000		
Barium, total	ug/L	MW-47	04/10/2023		713.0000		
Barium, total	ug/L	MW-47	10/27/2023		486.0000		
Barium, total	ug/L	MW-47	04/02/2024		570.0000		
Beryllium, total	ug/L	MW-47	10/23/2014	ND	4.0000		
Beryllium, total	ug/L	MW-47	03/31/2015	ND	4.0000		
Beryllium, total	ug/L	MW-47	07/08/2015	ND	4.0000		
Beryllium, total	ug/L	MW-47	11/05/2015	ND	4.0000		
Beryllium, total	ug/L	MW-47	04/21/2016	ND	4.0000		
Beryllium, total	ug/L	MW-47	10/17/2016	ND	4.0000		
Beryllium, total	ug/L	MW-47	04/21/2017	ND	4.0000		
Beryllium, total	ug/L	MW-47	10/16/2017	ND	4.0000		
Beryllium, total	ug/L	MW-47	04/24/2018	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-47	10/25/2018	ND	4.0000	
Beryllium, total	ug/L	MW-47	04/15/2019	ND	4.0000	
Beryllium, total	ug/L	MW-47	10/07/2019	ND	4.0000	
Beryllium, total	ug/L	MW-47	04/22/2020	ND	4.0000	
Beryllium, total	ug/L	MW-47	10/01/2020	ND	4.0000	
Beryllium, total	ug/L	MW-47	04/08/2021	ND	4.0000	
Beryllium, total	ug/L	MW-47	10/29/2021	ND	4.0000	
Beryllium, total	ug/L	MW-47	04/25/2022	ND	4.0000	
Beryllium, total	ug/L	MW-47	10/17/2022	ND	4.0000	
Beryllium, total	ug/L	MW-47	04/10/2023	ND	4.0000	
Beryllium, total	ug/L	MW-47	10/27/2023	ND	4.0000	
Beryllium, total	ug/L	MW-47	04/02/2024	ND	4.0000	
Cadmium, total	ug/L	MW-47	10/23/2014	ND	0.8000	
Cadmium, total	ug/L	MW-47	03/31/2015	ND	0.8000	
Cadmium, total	ug/L	MW-47	07/08/2015	ND	0.8000	
Cadmium, total	ug/L	MW-47	11/05/2015	ND	0.8000	
Cadmium, total	ug/L	MW-47	04/21/2016	ND	0.8000	
Cadmium, total	ug/L	MW-47	10/17/2016	ND	0.8000	
Cadmium, total	ug/L	MW-47	04/21/2017	ND	0.8000	
Cadmium, total	ug/L	MW-47	10/16/2017	ND	0.8000	
Cadmium, total	ug/L	MW-47	04/24/2018	ND	0.8000	
Cadmium, total	ug/L	MW-47	10/25/2018	ND	0.8000	
Cadmium, total	ug/L	MW-47	04/15/2019	ND	0.8000	
Cadmium, total	ug/L	MW-47	10/07/2019	ND	0.8000	
Cadmium, total	ug/L	MW-47	04/22/2020	ND	0.8000	
Cadmium, total	ug/L	MW-47	10/01/2020	ND	0.8000	
Cadmium, total	ug/L	MW-47	04/08/2021	ND	0.8000	
Cadmium, total	ug/L	MW-47	10/29/2021	ND	0.8000	
Cadmium, total	ug/L	MW-47	04/25/2022	ND	0.8000	
Cadmium, total	ug/L	MW-47	10/17/2022	ND	0.8000	
Cadmium, total	ug/L	MW-47	04/10/2023	ND	0.8000	
Cadmium, total	ug/L	MW-47	10/27/2023	ND	0.8000	
Cadmium, total	ug/L	MW-47	04/02/2024	ND	0.8000	
Chromium, total	ug/L	MW-47	10/23/2014	ND	8.0000	
Chromium, total	ug/L	MW-47	03/31/2015	ND	8.0000	
Chromium, total	ug/L	MW-47	07/08/2015	ND	8.0000	
Chromium, total	ug/L	MW-47	11/05/2015	ND	8.0000	
Chromium, total	ug/L	MW-47	04/21/2016	ND	8.0000	
Chromium, total	ug/L	MW-47	10/17/2016	ND	8.0000	
Chromium, total	ug/L	MW-47	04/21/2017	ND	8.0000	
Chromium, total	ug/L	MW-47	10/16/2017	ND	8.0000	
Chromium, total	ug/L	MW-47	04/24/2018	ND	8.0000	
Chromium, total	ug/L	MW-47	10/25/2018	ND	8.0000	
Chromium, total	ug/L	MW-47	04/15/2019	ND	8.0000	
Chromium, total	ug/L	MW-47	10/07/2019	ND	8.0000	
Chromium, total	ug/L	MW-47	04/22/2020	ND	8.0000	
Chromium, total	ug/L	MW-47	10/01/2020	ND	8.0000	
Chromium, total	ug/L	MW-47	04/08/2021	ND	8.0000	
Chromium, total	ug/L	MW-47	10/29/2021	ND	8.0000	
Chromium, total	ug/L	MW-47	04/25/2022	ND	8.0000	
Chromium, total	ug/L	MW-47	10/17/2022	ND	8.0000	
Chromium, total	ug/L	MW-47	04/10/2023	ND	8.0000	
Chromium, total	ug/L	MW-47	10/27/2023	ND	8.0000	
Chromium, total	ug/L	MW-47	04/02/2024	ND	8.0000	
Cobalt, total	ug/L	MW-47	10/23/2014		0.8000	
Cobalt, total	ug/L	MW-47	03/31/2015		1.0000	
Cobalt, total	ug/L	MW-47	07/08/2015		1.5000	
Cobalt, total	ug/L	MW-47	11/05/2015		1.2000	
Cobalt, total	ug/L	MW-47	04/21/2016		4.2000	
Cobalt, total	ug/L	MW-47	10/17/2016		12.4000	
Cobalt, total	ug/L	MW-47	04/21/2017		1.9000	
Cobalt, total	ug/L	MW-47	10/16/2017		1.5000	
Cobalt, total	ug/L	MW-47	04/24/2018		1.5000	
Cobalt, total	ug/L	MW-47	10/25/2018	ND	0.8000	
Cobalt, total	ug/L	MW-47	04/15/2019		0.9000	
Cobalt, total	ug/L	MW-47	10/07/2019	ND	0.8000	
Cobalt, total	ug/L	MW-47	04/22/2020		1.9000	
Cobalt, total	ug/L	MW-47	10/01/2020		0.9000	
Cobalt, total	ug/L	MW-47	04/08/2021		1.2000	
Cobalt, total	ug/L	MW-47	10/29/2021		0.7000	
Cobalt, total	ug/L	MW-47	04/25/2022		0.7000	
Cobalt, total	ug/L	MW-47	10/17/2022		3.8000	
Cobalt, total	ug/L	MW-47	04/10/2023		1.8000	
Cobalt, total	ug/L	MW-47	10/27/2023		2.3000	

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted
Cobalt, total	ug/L	MW-47	04/02/2024		1.8000	
Copper, total	ug/L	MW-47	10/23/2014	ND	4.0000	
Copper, total	ug/L	MW-47	03/31/2015	ND	4.0000	
Copper, total	ug/L	MW-47	07/08/2015	ND	4.0000	
Copper, total	ug/L	MW-47	11/05/2015	ND	4.0000	
Copper, total	ug/L	MW-47	04/21/2016		4.6000	
Copper, total	ug/L	MW-47	10/17/2016	ND	4.0000	
Copper, total	ug/L	MW-47	04/21/2017	ND	4.0000	
Copper, total	ug/L	MW-47	10/16/2017		4.9000	
Copper, total	ug/L	MW-47	04/24/2018	ND	4.0000	
Copper, total	ug/L	MW-47	10/25/2018	ND	4.0000	
Copper, total	ug/L	MW-47	04/15/2019	ND	4.0000	
Copper, total	ug/L	MW-47	10/07/2019	ND	4.0000	
Copper, total	ug/L	MW-47	04/22/2020	ND	4.0000	
Copper, total	ug/L	MW-47	10/01/2020	ND	4.0000	
Copper, total	ug/L	MW-47	04/08/2021	ND	4.0000	
Copper, total	ug/L	MW-47	10/29/2021	ND	4.0000	
Copper, total	ug/L	MW-47	04/25/2022	ND	4.0000	
Copper, total	ug/L	MW-47	10/17/2022	ND	4.0000	
Copper, total	ug/L	MW-47	04/10/2023	ND	4.0000	
Copper, total	ug/L	MW-47	10/27/2023	ND	4.0000	
Copper, total	ug/L	MW-47	04/02/2024		4.4000	
Lead, total	ug/L	MW-47	10/23/2014	ND	4.0000	
Lead, total	ug/L	MW-47	03/31/2015	ND	4.0000	
Lead, total	ug/L	MW-47	07/08/2015	ND	4.0000	
Lead, total	ug/L	MW-47	11/05/2015	ND	4.0000	
Lead, total	ug/L	MW-47	04/21/2016	ND	4.0000	
Lead, total	ug/L	MW-47	10/17/2016	ND	4.0000	
Lead, total	ug/L	MW-47	04/21/2017	ND	4.0000	
Lead, total	ug/L	MW-47	10/16/2017	ND	4.0000	
Lead, total	ug/L	MW-47	04/24/2018	ND	4.0000	
Lead, total	ug/L	MW-47	10/25/2018	ND	4.0000	
Lead, total	ug/L	MW-47	04/15/2019	ND	4.0000	
Lead, total	ug/L	MW-47	10/07/2019	ND	4.0000	
Lead, total	ug/L	MW-47	04/22/2020	ND	4.0000	
Lead, total	ug/L	MW-47	10/01/2020	ND	4.0000	
Lead, total	ug/L	MW-47	04/08/2021	ND	4.0000	
Lead, total	ug/L	MW-47	10/29/2021	ND	4.0000	
Lead, total	ug/L	MW-47	04/25/2022	ND	4.0000	
Lead, total	ug/L	MW-47	10/17/2022	ND	4.0000	
Lead, total	ug/L	MW-47	04/10/2023	ND	4.0000	
Lead, total	ug/L	MW-47	10/27/2023	ND	4.0000	
Lead, total	ug/L	MW-47	04/02/2024	ND	4.0000	
Nickel, total	ug/L	MW-47	10/23/2014	ND	4.0000	
Nickel, total	ug/L	MW-47	03/31/2015	ND	4.0000	
Nickel, total	ug/L	MW-47	07/08/2015	ND	4.0000	
Nickel, total	ug/L	MW-47	11/05/2015	ND	4.0000	
Nickel, total	ug/L	MW-47	04/21/2016		9.2000	
Nickel, total	ug/L	MW-47	10/17/2016		31.6000	
Nickel, total	ug/L	MW-47	04/21/2017		4.0000	
Nickel, total	ug/L	MW-47	10/16/2017		5.9000	
Nickel, total	ug/L	MW-47	04/24/2018		15.8000	
Nickel, total	ug/L	MW-47	10/25/2018	ND	4.0000	
Nickel, total	ug/L	MW-47	04/15/2019	ND	4.0000	
Nickel, total	ug/L	MW-47	10/07/2019	ND	4.0000	
Nickel, total	ug/L	MW-47	04/22/2020		4.7000	
Nickel, total	ug/L	MW-47	10/01/2020	ND	4.0000	
Nickel, total	ug/L	MW-47	04/08/2021	ND	4.0000	
Nickel, total	ug/L	MW-47	10/29/2021	ND	4.0000	
Nickel, total	ug/L	MW-47	04/25/2022	ND	4.0000	
Nickel, total	ug/L	MW-47	10/17/2022	ND	4.0000	
Nickel, total	ug/L	MW-47	04/10/2023	ND	4.0000	
Nickel, total	ug/L	MW-47	10/27/2023		11.7000	
Nickel, total	ug/L	MW-47	04/02/2024		8.0000	
Selenium, total	ug/L	MW-47	10/23/2014	ND	4.0000	
Selenium, total	ug/L	MW-47	03/31/2015	ND	4.0000	
Selenium, total	ug/L	MW-47	07/08/2015	ND	4.0000	
Selenium, total	ug/L	MW-47	11/05/2015	ND	4.0000	
Selenium, total	ug/L	MW-47	04/21/2016	ND	4.0000	
Selenium, total	ug/L	MW-47	10/17/2016	ND	4.0000	
Selenium, total	ug/L	MW-47	04/21/2017	ND	4.0000	
Selenium, total	ug/L	MW-47	10/16/2017	ND	4.0000	
Selenium, total	ug/L	MW-47	04/24/2018	ND	4.0000	
Selenium, total	ug/L	MW-47	10/25/2018	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	
Selenium, total	ug/L	MW-47	04/15/2019	ND	4.0000		
Selenium, total	ug/L	MW-47	10/07/2019	ND	4.0000		
Selenium, total	ug/L	MW-47	04/22/2020	ND	4.0000		
Selenium, total	ug/L	MW-47	10/01/2020	ND	4.0000		
Selenium, total	ug/L	MW-47	04/08/2021	ND	4.0000		
Selenium, total	ug/L	MW-47	10/29/2021	ND	4.0000		
Selenium, total	ug/L	MW-47	04/25/2022	ND	4.0000		
Selenium, total	ug/L	MW-47	10/17/2022	ND	4.0000		
Selenium, total	ug/L	MW-47	04/10/2023	ND	4.0000		
Selenium, total	ug/L	MW-47	10/27/2023	ND	4.0000		
Selenium, total	ug/L	MW-47	04/02/2024	ND	4.0000		
Silver, total	ug/L	MW-47	10/23/2014	ND	4.0000		
Silver, total	ug/L	MW-47	03/31/2015	ND	4.0000		
Silver, total	ug/L	MW-47	07/08/2015	ND	4.0000		
Silver, total	ug/L	MW-47	11/05/2015	ND	4.0000		
Silver, total	ug/L	MW-47	04/21/2016	ND	4.0000		
Silver, total	ug/L	MW-47	10/17/2016	ND	4.0000		
Silver, total	ug/L	MW-47	04/21/2017	ND	4.0000		
Silver, total	ug/L	MW-47	10/16/2017	ND	4.0000		
Silver, total	ug/L	MW-47	04/24/2018	ND	4.0000		
Silver, total	ug/L	MW-47	10/25/2018	ND	4.0000		
Silver, total	ug/L	MW-47	04/15/2019	ND	4.0000		
Silver, total	ug/L	MW-47	10/07/2019	ND	4.0000		
Silver, total	ug/L	MW-47	04/22/2020	ND	4.0000		
Silver, total	ug/L	MW-47	10/01/2020	ND	4.0000		
Silver, total	ug/L	MW-47	04/08/2021	ND	4.0000		
Silver, total	ug/L	MW-47	10/29/2021	ND	4.0000		
Silver, total	ug/L	MW-47	04/25/2022	ND	4.0000		
Silver, total	ug/L	MW-47	10/17/2022	ND	4.0000		
Silver, total	ug/L	MW-47	04/10/2023	ND	4.0000		
Silver, total	ug/L	MW-47	10/27/2023	ND	4.0000		
Silver, total	ug/L	MW-47	04/02/2024	ND	4.0000		
Thallium, total	ug/L	MW-47	10/23/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-47	03/31/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-47	07/08/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-47	11/05/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-47	04/21/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-47	10/17/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-47	04/21/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-47	10/16/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-47	04/24/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-47	10/25/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-47	04/15/2019	ND	2.0000		
Thallium, total	ug/L	MW-47	10/07/2019	ND	2.0000		
Thallium, total	ug/L	MW-47	04/22/2020	ND	2.0000		
Thallium, total	ug/L	MW-47	10/01/2020	ND	2.0000		
Thallium, total	ug/L	MW-47	04/08/2021	ND	2.0000		
Thallium, total	ug/L	MW-47	10/29/2021	ND	2.0000		
Thallium, total	ug/L	MW-47	04/25/2022	ND	2.0000		
Thallium, total	ug/L	MW-47	10/17/2022	ND	2.0000		
Thallium, total	ug/L	MW-47	04/10/2023	ND	2.0000		
Thallium, total	ug/L	MW-47	10/27/2023	ND	2.0000		
Thallium, total	ug/L	MW-47	04/02/2024	ND	2.0000		
Vanadium, total	ug/L	MW-47	10/23/2014	ND	20.0000		
Vanadium, total	ug/L	MW-47	03/31/2015	ND	20.0000		
Vanadium, total	ug/L	MW-47	07/08/2015	ND	20.0000		
Vanadium, total	ug/L	MW-47	11/05/2015	ND	20.0000		
Vanadium, total	ug/L	MW-47	04/21/2016	ND	20.0000		
Vanadium, total	ug/L	MW-47	10/17/2016	ND	20.0000		
Vanadium, total	ug/L	MW-47	04/21/2017	ND	20.0000		
Vanadium, total	ug/L	MW-47	10/16/2017	ND	20.0000		
Vanadium, total	ug/L	MW-47	04/24/2018	ND	20.0000		
Vanadium, total	ug/L	MW-47	10/25/2018	ND	20.0000		
Vanadium, total	ug/L	MW-47	04/15/2019	ND	20.0000		
Vanadium, total	ug/L	MW-47	10/07/2019	ND	20.0000		
Vanadium, total	ug/L	MW-47	04/22/2020	ND	20.0000		
Vanadium, total	ug/L	MW-47	10/01/2020	ND	20.0000		
Vanadium, total	ug/L	MW-47	04/08/2021	ND	20.0000		
Vanadium, total	ug/L	MW-47	10/29/2021	ND	20.0000		
Vanadium, total	ug/L	MW-47	04/25/2022	ND	20.0000		
Vanadium, total	ug/L	MW-47	10/17/2022	ND	20.0000		
Vanadium, total	ug/L	MW-47	04/10/2023	ND	20.0000		
Vanadium, total	ug/L	MW-47	10/27/2023	ND	20.0000		
Vanadium, total	ug/L	MW-47	04/02/2024	ND	20.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Zinc, total	ug/L	MW-47	10/23/2014	ND	20.0000		
Zinc, total	ug/L	MW-47	03/31/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-47	07/08/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-47	11/05/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-47	04/21/2016		12.0000		
Zinc, total	ug/L	MW-47	10/17/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-47	04/21/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-47	10/16/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-47	04/24/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-47	10/25/2018	ND	20.0000		
Zinc, total	ug/L	MW-47	04/15/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-47	10/07/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-47	04/22/2020	ND	20.0000		
Zinc, total	ug/L	MW-47	10/01/2020	ND	20.0000		
Zinc, total	ug/L	MW-47	04/08/2021	ND	20.0000		
Zinc, total	ug/L	MW-47	10/29/2021	ND	20.0000		
Zinc, total	ug/L	MW-47	04/25/2022	ND	20.0000		
Zinc, total	ug/L	MW-47	10/17/2022	ND	20.0000		
Zinc, total	ug/L	MW-47	04/10/2023	ND	20.0000		
Zinc, total	ug/L	MW-47	10/27/2023		25.9000		
Zinc, total	ug/L	MW-47	04/02/2024	ND	20.0000		

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

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Antimony, total	ug/L	GU-3	04/02/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	GU-3	04/02/2024		6.3000		89.3000
Barium, total	ug/L	GU-3	04/02/2024		201.0000		1880.0000
Beryllium, total	ug/L	GU-3	04/02/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	GU-3	04/02/2024	ND	0.8000		0.9000
Chromium, total	ug/L	GU-3	04/02/2024	ND	8.0000		20.3000
Cobalt, total	ug/L	GU-3	04/02/2024	ND	0.4000		12.4000
Copper, total	ug/L	GU-3	04/02/2024	ND	4.0000		11.3000
Lead, total	ug/L	GU-3	04/02/2024	ND	4.0000		4.3000
Nickel, total	ug/L	GU-3	04/02/2024	ND	4.0000		31.6000
Selenium, total	ug/L	GU-3	04/02/2024	ND	4.0000		4.9000
Silver, total	ug/L	GU-3	04/02/2024	ND	4.0000		4.0000
Thallium, total	ug/L	GU-3	04/02/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	GU-3	04/02/2024	ND	20.0000		20.0000
Zinc, total	ug/L	GU-3	04/02/2024	ND	20.0000		26.8000
Antimony, total	ug/L	MW-13R	04/02/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-13R	04/02/2024		88.7000		89.3000
Barium, total	ug/L	MW-13R	04/02/2024		837.0000		1880.0000
Beryllium, total	ug/L	MW-13R	04/02/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-13R	04/02/2024	ND	0.8000		0.9000
Chromium, total	ug/L	MW-13R	04/02/2024	ND	8.0000		20.3000
Cobalt, total	ug/L	MW-13R	04/02/2024		4.6000		12.4000
Copper, total	ug/L	MW-13R	04/02/2024	ND	4.0000		11.3000
Lead, total	ug/L	MW-13R	04/02/2024	ND	4.0000		4.3000
Nickel, total	ug/L	MW-13R	04/02/2024		9.8000		31.6000
Selenium, total	ug/L	MW-13R	04/02/2024	ND	4.0000		4.9000
Silver, total	ug/L	MW-13R	04/02/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-13R	04/02/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-13R	04/02/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-13R	04/02/2024	ND	20.0000		26.8000
Antimony, total	ug/L	MW-14	04/02/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-14	04/02/2024		46.1000		89.3000
Barium, total	ug/L	MW-14	04/02/2024		812.0000		1880.0000
Beryllium, total	ug/L	MW-14	04/02/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-14	04/02/2024	ND	0.8000		0.9000
Chromium, total	ug/L	MW-14	04/02/2024	ND	8.0000		20.3000
Cobalt, total	ug/L	MW-14	04/02/2024		20.8000	***	12.4000
Copper, total	ug/L	MW-14	04/02/2024	ND	4.0000		11.3000
Lead, total	ug/L	MW-14	04/02/2024	ND	4.0000		4.3000
Nickel, total	ug/L	MW-14	04/02/2024		30.8000		31.6000
Selenium, total	ug/L	MW-14	04/02/2024	ND	4.0000		4.9000
Silver, total	ug/L	MW-14	04/02/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-14	04/02/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-14	04/02/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-14	04/02/2024	ND	20.0000		26.8000
Antimony, total	ug/L	MW-211	04/02/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-211	04/02/2024		18.6000		89.3000
Barium, total	ug/L	MW-211	04/02/2024		306.0000		1880.0000
Beryllium, total	ug/L	MW-211	04/02/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-211	04/02/2024	ND	0.8000		0.9000
Chromium, total	ug/L	MW-211	04/02/2024	ND	8.0000		20.3000
Cobalt, total	ug/L	MW-211	04/02/2024		12.5000	*	12.4000
Copper, total	ug/L	MW-211	04/02/2024	ND	4.0000		11.3000
Lead, total	ug/L	MW-211	04/02/2024	ND	4.0000		4.3000
Nickel, total	ug/L	MW-211	04/02/2024		30.0000		31.6000
Selenium, total	ug/L	MW-211	04/02/2024	ND	4.0000		4.9000
Silver, total	ug/L	MW-211	04/02/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-211	04/02/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-211	04/02/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-211	04/02/2024	ND	20.0000		26.8000
Antimony, total	ug/L	MW-29	04/02/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-29	04/02/2024	ND	4.0000		89.3000
Barium, total	ug/L	MW-29	04/02/2024		62.2000		1880.0000
Beryllium, total	ug/L	MW-29	04/02/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-29	04/02/2024	ND	0.8000		0.9000
Chromium, total	ug/L	MW-29	04/02/2024	ND	8.0000		20.3000
Cobalt, total	ug/L	MW-29	04/02/2024	ND	0.4000		12.4000
Copper, total	ug/L	MW-29	04/02/2024	ND	4.0000		11.3000
Lead, total	ug/L	MW-29	04/02/2024	ND	4.0000		4.3000
Nickel, total	ug/L	MW-29	04/02/2024	ND	4.0000		31.6000
Selenium, total	ug/L	MW-29	04/02/2024	ND	4.0000		4.9000
Silver, total	ug/L	MW-29	04/02/2024	ND	4.0000		4.0000

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

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Thallium, total	ug/L	MW-29	04/02/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-29	04/02/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-29	04/02/2024	ND	20.0000		26.8000
Antimony, total	ug/L	MW-31R	04/02/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-31R	04/02/2024		37.8000		89.3000
Barium, total	ug/L	MW-31R	04/02/2024		1810.0000		1880.0000
Beryllium, total	ug/L	MW-31R	04/02/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-31R	04/02/2024	ND	0.8000		0.9000
Chromium, total	ug/L	MW-31R	04/02/2024	ND	8.0000		20.3000
Cobalt, total	ug/L	MW-31R	04/02/2024		20.6000	***	12.4000
Copper, total	ug/L	MW-31R	04/02/2024	ND	4.0000		11.3000
Lead, total	ug/L	MW-31R	04/02/2024	ND	4.0000		4.3000
Nickel, total	ug/L	MW-31R	04/02/2024		34.2000	*	31.6000
Selenium, total	ug/L	MW-31R	04/02/2024	ND	4.0000		4.9000
Silver, total	ug/L	MW-31R	04/02/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-31R	04/02/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-31R	04/02/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-31R	04/02/2024	ND	20.0000	**	26.8000
Antimony, total	ug/L	MW-33	04/02/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-33	04/02/2024	ND	4.0000		89.3000
Barium, total	ug/L	MW-33	04/02/2024		105.0000		1880.0000
Beryllium, total	ug/L	MW-33	04/02/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-33	04/02/2024	ND	0.8000		0.9000
Chromium, total	ug/L	MW-33	04/02/2024	ND	8.0000		20.3000
Cobalt, total	ug/L	MW-33	04/02/2024	ND	0.4000		12.4000
Copper, total	ug/L	MW-33	04/02/2024	ND	4.0000		11.3000
Lead, total	ug/L	MW-33	04/02/2024	ND	4.0000		4.3000
Nickel, total	ug/L	MW-33	04/02/2024	ND	4.0000		31.6000
Selenium, total	ug/L	MW-33	04/02/2024	ND	4.0000		4.9000
Silver, total	ug/L	MW-33	04/02/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-33	04/02/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-33	04/02/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-33	04/02/2024	ND	20.0000		26.8000
Antimony, total	ug/L	MW-35R	04/02/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-35R	04/02/2024		18.4000		89.3000
Barium, total	ug/L	MW-35R	04/02/2024		1590.0000	**	1880.0000
Beryllium, total	ug/L	MW-35R	04/02/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-35R	04/02/2024	ND	0.8000		0.9000
Chromium, total	ug/L	MW-35R	04/02/2024	ND	8.0000		20.3000
Cobalt, total	ug/L	MW-35R	04/02/2024		8.9000		12.4000
Copper, total	ug/L	MW-35R	04/02/2024	ND	4.0000		11.3000
Lead, total	ug/L	MW-35R	04/02/2024	ND	4.0000		4.3000
Nickel, total	ug/L	MW-35R	04/02/2024		25.6000		31.6000
Selenium, total	ug/L	MW-35R	04/02/2024	ND	4.0000		4.9000
Silver, total	ug/L	MW-35R	04/02/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-35R	04/02/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-35R	04/02/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-35R	04/02/2024	ND	22.3000	**	26.8000
Antimony, total	ug/L	MW-7	04/02/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-7	04/02/2024		167.0000	***	89.3000
Barium, total	ug/L	MW-7	04/02/2024		375.0000		1880.0000
Beryllium, total	ug/L	MW-7	04/02/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-7	04/02/2024	ND	0.8000		0.9000
Chromium, total	ug/L	MW-7	04/02/2024	ND	8.0000		20.3000
Cobalt, total	ug/L	MW-7	04/02/2024		0.7000		12.4000
Copper, total	ug/L	MW-7	04/02/2024	ND	4.0000		11.3000
Lead, total	ug/L	MW-7	04/02/2024	ND	4.0000		4.3000
Nickel, total	ug/L	MW-7	04/02/2024	ND	4.0000		31.6000
Selenium, total	ug/L	MW-7	04/02/2024	ND	4.0000		4.9000
Silver, total	ug/L	MW-7	04/02/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-7	04/02/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-7	04/02/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-7	04/02/2024	ND	20.0000		26.8000
Antimony, total	ug/L	MW-9	04/02/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-9	04/02/2024	ND	4.0000	**	89.3000
Barium, total	ug/L	MW-9	04/02/2024		137.0000		1880.0000
Beryllium, total	ug/L	MW-9	04/02/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-9	04/02/2024	ND	0.8000		0.9000
Chromium, total	ug/L	MW-9	04/02/2024	ND	8.0000		20.3000
Cobalt, total	ug/L	MW-9	04/02/2024	ND	0.4000		12.4000
Copper, total	ug/L	MW-9	04/02/2024	ND	4.0000		11.3000
Lead, total	ug/L	MW-9	04/02/2024	ND	4.0000		4.3000

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

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Nickel, total	ug/L	MW-9	04/02/2024		19.7000		31.6000
Selenium, total	ug/L	MW-9	04/02/2024	ND	4.0000		4.9000
Silver, total	ug/L	MW-9	04/02/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-9	04/02/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-9	04/02/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-9	04/02/2024	ND	20.0000		26.8000

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

Table 3

Detection Frequencies in Upgradient and Downgradient Wells

Constituent	Upgradient			Downgradient		
	Detect	N	Proportion	Detect	N	Proportion
Antimony, total	0	105	0.000	0	244	0.000
Arsenic, total	13	92	0.141	147	245	0.600
Barium, total	104	104	1.000	245	245	1.000
Beryllium, total	0	105	0.000	0	245	0.000
Cadmium, total	1	105	0.010	5	245	0.020
Chromium, total	2	104	0.019	7	244	0.029
Cobalt, total	43	102	0.422	174	247	0.704
Copper, total	10	103	0.097	38	246	0.154
Lead, total	2	104	0.019	10	245	0.041
Nickel, total	21	102	0.206	181	246	0.736
Selenium, total	3	104	0.029	3	245	0.012
Silver, total	0	105	0.000	0	244	0.000
Thallium, total	0	105	0.000	0	244	0.000
Vanadium, total	0	105	0.000	8	245	0.033
Zinc, total	10	105	0.095	49	247	0.198

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	105	0.000									nonpar
Arsenic, total	13	92	0.141	0.098	0.379					2.326	normal	nonpar
Barium, total	104	104	1.000	4.471	2.711					2.326	non-norm	nonpar
Beryllium, total	0	105	0.000									nonpar
Cadmium, total	1	105	0.010									nonpar
Chromium, total	2	104	0.019									nonpar
Cobalt, total	43	102	0.422	4.139	1.040					2.326	lognor	nonpar
Copper, total	10	103	0.097	0.449	0.934					2.326	normal	nonpar
Lead, total	2	104	0.019									nonpar
Nickel, total	21	102	0.206	1.761	0.937					2.326	normal	nonpar
Selenium, total	3	104	0.029	0.346	0.307					2.326	normal	nonpar
Silver, total	0	105	0.000									nonpar
Thallium, total	0	105	0.000									nonpar
Vanadium, total	0	105	0.000									nonpar
Zinc, total	10	105	0.095	1.170	0.283					2.326	normal	nonpar

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

Table 5

Summary Statistics and Prediction Limits

Constituent	Units	Detect	N	Mean	SD	alpha	Factor	Pred Limit	Type		Conf
Antimony, total	ug/L	0	105					2.0000	nonpar	***	0.99
Arsenic, total	ug/L	13	92					89.3000	nonpar		0.99
Barium, total	ug/L	104	104					1880.0000	nonpar		0.99
Beryllium, total	ug/L	0	105					4.0000	nonpar	***	0.99
Cadmium, total	ug/L	1	105					0.9000	nonpar		0.99
Chromium, total	ug/L	2	104					20.3000	nonpar		0.99
Cobalt, total	ug/L	43	102					12.4000	nonpar		0.99
Copper, total	ug/L	10	103					11.3000	nonpar		0.99
Lead, total	ug/L	2	104					4.3000	nonpar		0.99
Nickel, total	ug/L	21	102					31.6000	nonpar		0.99
Selenium, total	ug/L	3	104					4.9000	nonpar		0.99
Silver, total	ug/L	0	105					4.0000	nonpar	***	0.99
Thallium, total	ug/L	0	105					2.0000	nonpar	***	0.99
Vanadium, total	ug/L	0	105					20.0000	nonpar	***	0.99
Zinc, total	ug/L	10	105					26.8000	nonpar		0.99

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

* - Insufficient Data.

** - Calculated limit raised to Manual Reporting Limit.

*** - Nonparametric limit based on ND value.

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

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

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

Table 6

**Dixon's Test Outliers
1% Significance Level**

Constituent	Units	Well	Date	Result	ND Qualifier	Date Range	N	Critical Value
Cobalt, total	ug/L	MW-37	10/27/2023	9.6000		10/23/2014-04/02/2024	22	0.5162
Copper, total	ug/L	MW-37	10/25/2018	13.7000		10/23/2014-04/02/2024	22	0.5162
Nickel, total	ug/L	MW-37	10/27/2023	13.9000		10/23/2014-04/02/2024	22	0.5162
Chromium, total	ug/L	MW-39	01/08/2015	29.6000		10/23/2014-04/02/2024	22	0.5162
Cobalt, total	ug/L	MW-39	11/05/2015	3.3000		10/23/2014-04/02/2024	22	0.5162
Copper, total	ug/L	MW-39	04/02/2024	126.0000		10/23/2014-04/02/2024	22	0.5162
Nickel, total	ug/L	MW-39	01/08/2015	20.5000		10/23/2014-04/02/2024	22	0.5162

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

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

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

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Cobalt, total	ug/L	MW-14	10/14/2010		13.3000	*	12.4000
Cobalt, total	ug/L	MW-14	04/08/2011		15.4000	*	12.4000
Cobalt, total	ug/L	MW-14	10/18/2011		18.0000	*	12.4000
Cobalt, total	ug/L	MW-14	04/18/2012		21.9000	*	12.4000
Cobalt, total	ug/L	MW-14	10/17/2012		18.9000	*	12.4000
Cobalt, total	ug/L	MW-14	04/03/2013		26.7000	*	12.4000
Cobalt, total	ug/L	MW-14	10/09/2013		33.6000	*	12.4000
Cobalt, total	ug/L	MW-14	04/16/2014		40.8000	*	12.4000
Cobalt, total	ug/L	MW-14	10/23/2014		25.7000	*	12.4000
Cobalt, total	ug/L	MW-14	04/01/2015		51.2000	*	12.4000
Cobalt, total	ug/L	MW-14	11/05/2015		18.7000	*	12.4000
Cobalt, total	ug/L	MW-14	04/21/2016		1.4000	*	12.4000
Cobalt, total	ug/L	MW-14	10/17/2016		16.3000	*	12.4000
Cobalt, total	ug/L	MW-14	01/09/2017		4.0000	*	12.4000
Cobalt, total	ug/L	MW-14	04/21/2017		7.7000	*	12.4000
Cobalt, total	ug/L	MW-14	10/16/2017		16.0000	*	12.4000
Cobalt, total	ug/L	MW-14	01/12/2018		11.2000	*	12.4000
Cobalt, total	ug/L	MW-14	04/24/2018		16.9000	*	12.4000
Cobalt, total	ug/L	MW-14	10/25/2018		4.2000	*	12.4000
Cobalt, total	ug/L	MW-14	04/15/2019		27.3000	*	12.4000
Cobalt, total	ug/L	MW-14	10/07/2019		10.0000	*	12.4000
Cobalt, total	ug/L	MW-14	04/22/2020		6.9000	*	12.4000
Cobalt, total	ug/L	MW-14	10/02/2020		11.5000	*	12.4000
Cobalt, total	ug/L	MW-14	04/08/2021		21.2000	*	12.4000
Cobalt, total	ug/L	MW-14	10/29/2021		14.4000	*	12.4000
Cobalt, total	ug/L	MW-14	04/25/2022		13.1000	*	12.4000
Cobalt, total	ug/L	MW-14	10/17/2022		13.1000	*	12.4000
Cobalt, total	ug/L	MW-14	04/10/2023		14.8000	*	12.4000
Cobalt, total	ug/L	MW-14	10/27/2023		16.4000	*	12.4000
Cobalt, total	ug/L	MW-14	04/02/2024		20.8000	*	12.4000
Cobalt, total	ug/L	MW-211	10/14/2010		8.0000		12.4000
Cobalt, total	ug/L	MW-211	04/08/2011	ND	6.1000		12.4000
Cobalt, total	ug/L	MW-211	10/18/2011		4.0000		12.4000
Cobalt, total	ug/L	MW-211	04/18/2012		4.7000		12.4000
Cobalt, total	ug/L	MW-211	10/17/2012		4.6000		12.4000
Cobalt, total	ug/L	MW-211	04/03/2013	ND	4.0000		12.4000
Cobalt, total	ug/L	MW-211	10/09/2013		9.2000		12.4000
Cobalt, total	ug/L	MW-211	04/16/2014		7.3000		12.4000
Cobalt, total	ug/L	MW-211	10/23/2014		18.6000	*	12.4000
Cobalt, total	ug/L	MW-211	04/01/2015		13.1000	*	12.4000
Cobalt, total	ug/L	MW-211	11/05/2015		20.6000	*	12.4000
Cobalt, total	ug/L	MW-211	04/21/2016		10.8000	*	12.4000
Cobalt, total	ug/L	MW-211	10/17/2016		12.9000	*	12.4000
Cobalt, total	ug/L	MW-211	04/21/2017		10.3000	*	12.4000
Cobalt, total	ug/L	MW-211	10/16/2017		16.4000	*	12.4000
Cobalt, total	ug/L	MW-211	04/24/2018		13.3000	*	12.4000
Cobalt, total	ug/L	MW-211	10/25/2018		10.3000	*	12.4000
Cobalt, total	ug/L	MW-211	04/15/2019		17.0000	*	12.4000
Cobalt, total	ug/L	MW-211	10/07/2019		14.9000	*	12.4000
Cobalt, total	ug/L	MW-211	04/22/2020		13.3000	*	12.4000
Cobalt, total	ug/L	MW-211	10/02/2020		10.3000	*	12.4000
Cobalt, total	ug/L	MW-211	04/08/2021		11.5000	*	12.4000
Cobalt, total	ug/L	MW-211	10/29/2021		13.6000	*	12.4000
Cobalt, total	ug/L	MW-211	04/25/2022		12.8000	*	12.4000
Cobalt, total	ug/L	MW-211	10/17/2022		13.3000	*	12.4000
Cobalt, total	ug/L	MW-211	04/10/2023		11.3000	*	12.4000
Cobalt, total	ug/L	MW-211	10/27/2023		10.7000	*	12.4000
Cobalt, total	ug/L	MW-211	04/02/2024		12.5000	*	12.4000
Cobalt, total	ug/L	MW-31R	04/18/2012		13.3000	*	12.4000
Cobalt, total	ug/L	MW-31R	10/17/2012		6.7000	*	12.4000
Cobalt, total	ug/L	MW-31R	04/03/2013		7.8000	*	12.4000
Cobalt, total	ug/L	MW-31R	10/09/2013		9.6000	*	12.4000
Cobalt, total	ug/L	MW-31R	04/16/2014		10.9000	*	12.4000
Cobalt, total	ug/L	MW-31R	10/23/2014		8.7000	*	12.4000
Cobalt, total	ug/L	MW-31R	04/01/2015		11.1000	*	12.4000
Cobalt, total	ug/L	MW-31R	11/05/2015		11.7000	*	12.4000
Cobalt, total	ug/L	MW-31R	04/21/2016		12.2000	*	12.4000
Cobalt, total	ug/L	MW-31R	10/17/2016		12.6000	*	12.4000
Cobalt, total	ug/L	MW-31R	04/21/2017		12.5000	*	12.4000
Cobalt, total	ug/L	MW-31R	10/16/2017		11.5000	*	12.4000
Cobalt, total	ug/L	MW-31R	04/24/2018		15.8000	*	12.4000

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

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Cobalt, total	ug/L	MW-31R	10/25/2018		13.3000	*	12.4000
Cobalt, total	ug/L	MW-31R	04/15/2019		17.7000	*	12.4000
Cobalt, total	ug/L	MW-31R	10/07/2019		15.0000	*	12.4000
Cobalt, total	ug/L	MW-31R	04/22/2020		19.7000	*	12.4000
Cobalt, total	ug/L	MW-31R	10/02/2020		17.5000	*	12.4000
Cobalt, total	ug/L	MW-31R	04/08/2021		25.9000	*	12.4000
Cobalt, total	ug/L	MW-31R	10/29/2021		15.0000	*	12.4000
Cobalt, total	ug/L	MW-31R	04/25/2022		17.0000	*	12.4000
Cobalt, total	ug/L	MW-31R	10/17/2022		16.2000	*	12.4000
Cobalt, total	ug/L	MW-31R	04/10/2023		18.3000	*	12.4000
Cobalt, total	ug/L	MW-31R	10/27/2023		17.6000	*	12.4000
Cobalt, total	ug/L	MW-31R	04/02/2024		20.6000	*	12.4000
Nickel, total	ug/L	MW-31R	04/18/2012		36.3000	*	31.6000
Nickel, total	ug/L	MW-31R	10/17/2012		28.7000		31.6000
Nickel, total	ug/L	MW-31R	04/03/2013		24.4000		31.6000
Nickel, total	ug/L	MW-31R	10/09/2013		24.7000		31.6000
Nickel, total	ug/L	MW-31R	04/16/2014		25.3000		31.6000
Nickel, total	ug/L	MW-31R	10/23/2014		21.4000		31.6000
Nickel, total	ug/L	MW-31R	04/01/2015		19.3000		31.6000
Nickel, total	ug/L	MW-31R	11/05/2015		20.6000		31.6000
Nickel, total	ug/L	MW-31R	04/21/2016		22.2000		31.6000
Nickel, total	ug/L	MW-31R	10/17/2016		18.8000		31.6000
Nickel, total	ug/L	MW-31R	04/21/2017		23.9000		31.6000
Nickel, total	ug/L	MW-31R	10/16/2017		23.6000		31.6000
Nickel, total	ug/L	MW-31R	04/24/2018		29.5000		31.6000
Nickel, total	ug/L	MW-31R	10/25/2018		19.9000		31.6000
Nickel, total	ug/L	MW-31R	04/15/2019		31.9000	*	31.6000
Nickel, total	ug/L	MW-31R	10/07/2019		24.7000		31.6000
Nickel, total	ug/L	MW-31R	04/22/2020		37.3000	*	31.6000
Nickel, total	ug/L	MW-31R	10/02/2020		34.1000	*	31.6000
Nickel, total	ug/L	MW-31R	04/08/2021		52.1000	*	31.6000
Nickel, total	ug/L	MW-31R	10/29/2021		24.1000		31.6000
Nickel, total	ug/L	MW-31R	04/25/2022		30.9000		31.6000
Nickel, total	ug/L	MW-31R	10/17/2022		25.0000		31.6000
Nickel, total	ug/L	MW-31R	04/10/2023		34.7000	*	31.6000
Nickel, total	ug/L	MW-31R	10/27/2023		30.3000		31.6000
Nickel, total	ug/L	MW-31R	04/02/2024		34.2000	*	31.6000
Zinc, total	ug/L	MW-31R	04/18/2012		12.3000		26.8000
Zinc, total	ug/L	MW-31R	10/17/2012		12.6000		26.8000
Zinc, total	ug/L	MW-31R	04/03/2013		13.7000		26.8000
Zinc, total	ug/L	MW-31R	10/09/2013		13.0000		26.8000
Zinc, total	ug/L	MW-31R	04/16/2014	ND	20.0000		26.8000
Zinc, total	ug/L	MW-31R	10/23/2014	ND	20.0000		26.8000
Zinc, total	ug/L	MW-31R	04/01/2015	ND	8.0000		26.8000
Zinc, total	ug/L	MW-31R	11/05/2015	ND	8.0000		26.8000
Zinc, total	ug/L	MW-31R	04/21/2016		23.9000		26.8000
Zinc, total	ug/L	MW-31R	10/17/2016	ND	8.0000		26.8000
Zinc, total	ug/L	MW-31R	04/21/2017	ND	8.0000		26.8000
Zinc, total	ug/L	MW-31R	10/16/2017	ND	8.0000		26.8000
Zinc, total	ug/L	MW-31R	04/24/2018	ND	8.0000		26.8000
Zinc, total	ug/L	MW-31R	10/25/2018	ND	20.0000		26.8000
Zinc, total	ug/L	MW-31R	04/15/2019	ND	8.0000		26.8000
Zinc, total	ug/L	MW-31R	10/07/2019	ND	8.0000		26.8000
Zinc, total	ug/L	MW-31R	04/22/2020	ND	20.0000		26.8000
Zinc, total	ug/L	MW-31R	10/02/2020	ND	20.0000		26.8000
Zinc, total	ug/L	MW-31R	04/08/2021	ND	20.0000		26.8000
Zinc, total	ug/L	MW-31R	10/29/2021	ND	20.0000		26.8000
Zinc, total	ug/L	MW-31R	04/25/2022	ND	20.0000		26.8000
Zinc, total	ug/L	MW-31R	10/17/2022	ND	20.0000		26.8000
Zinc, total	ug/L	MW-31R	04/10/2023	ND	20.0000		26.8000
Zinc, total	ug/L	MW-31R	10/27/2023		41.0000	*	26.8000
Zinc, total	ug/L	MW-31R	04/02/2024	ND	20.0000		26.8000
Barium, total	ug/L	MW-35R	10/01/2020		1300.0000		1880.0000
Barium, total	ug/L	MW-35R	04/08/2021		1290.0000		1880.0000
Barium, total	ug/L	MW-35R	10/29/2021		1370.0000		1880.0000
Barium, total	ug/L	MW-35R	04/25/2022		1150.0000		1880.0000
Barium, total	ug/L	MW-35R	10/17/2022		1420.0000		1880.0000
Barium, total	ug/L	MW-35R	04/10/2023		1100.0000		1880.0000
Barium, total	ug/L	MW-35R	10/27/2023		1890.0000	*	1880.0000
Barium, total	ug/L	MW-35R	04/02/2024		1590.0000		1880.0000
Zinc, total	ug/L	MW-35R	10/01/2020	ND	20.0000		26.8000

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

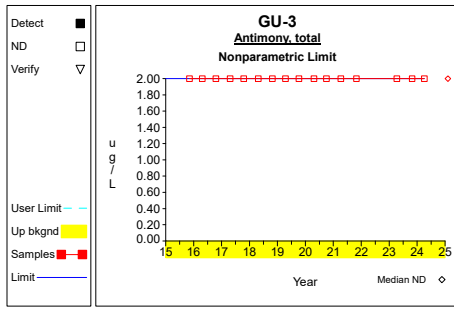
Table 8

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

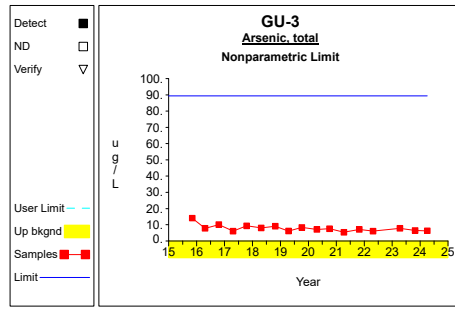
Constituent	Units	Well	Date		Result	Pred. Limit
Zinc, total	ug/L	MW-35R	04/08/2021	ND	20.0000	26.8000
Zinc, total	ug/L	MW-35R	10/29/2021	ND	20.0000	26.8000
Zinc, total	ug/L	MW-35R	04/25/2022	ND	20.0000	26.8000
Zinc, total	ug/L	MW-35R	10/17/2022	ND	20.0000	26.8000
Zinc, total	ug/L	MW-35R	04/10/2023	ND	20.0000	26.8000
Zinc, total	ug/L	MW-35R	10/27/2023		57.7000 *	26.8000
Zinc, total	ug/L	MW-35R	04/02/2024		22.3000	26.8000
Arsenic, total	ug/L	MW-7	10/14/2010		219.0000 *	89.3000
Arsenic, total	ug/L	MW-7	04/08/2011		251.0000 *	89.3000
Arsenic, total	ug/L	MW-7	10/18/2011		131.0000 *	89.3000
Arsenic, total	ug/L	MW-7	04/18/2012		188.0000 *	89.3000
Arsenic, total	ug/L	MW-7	10/16/2012		139.0000 *	89.3000
Arsenic, total	ug/L	MW-7	04/03/2013		136.0000 *	89.3000
Arsenic, total	ug/L	MW-7	10/09/2013		91.1000 *	89.3000
Arsenic, total	ug/L	MW-7	04/16/2014		107.0000 *	89.3000
Arsenic, total	ug/L	MW-7	10/23/2014		297.0000 *	89.3000
Arsenic, total	ug/L	MW-7	04/01/2015		112.0000 *	89.3000
Arsenic, total	ug/L	MW-7	11/05/2015		215.0000 *	89.3000
Arsenic, total	ug/L	MW-7	04/21/2016		146.0000 *	89.3000
Arsenic, total	ug/L	MW-7	10/17/2016		165.0000 *	89.3000
Arsenic, total	ug/L	MW-7	04/21/2017		197.0000 *	89.3000
Arsenic, total	ug/L	MW-7	10/16/2017		115.0000 *	89.3000
Arsenic, total	ug/L	MW-7	04/24/2018	ND	4.0000	89.3000
Arsenic, total	ug/L	MW-7	10/25/2018		36.6000	89.3000
Arsenic, total	ug/L	MW-7	04/15/2019		457.0000 *	89.3000
Arsenic, total	ug/L	MW-7	10/07/2019		33.5000	89.3000
Arsenic, total	ug/L	MW-7	04/22/2020		88.8000	89.3000
Arsenic, total	ug/L	MW-7	10/01/2020		306.0000 *	89.3000
Arsenic, total	ug/L	MW-7	04/08/2021		181.0000 *	89.3000
Arsenic, total	ug/L	MW-7	10/29/2021		117.0000 *	89.3000
Arsenic, total	ug/L	MW-7	04/25/2022		104.0000 *	89.3000
Arsenic, total	ug/L	MW-7	10/17/2022		255.0000 *	89.3000
Arsenic, total	ug/L	MW-7	04/10/2023		158.0000 *	89.3000
Arsenic, total	ug/L	MW-7	10/27/2023		275.0000 *	89.3000
Arsenic, total	ug/L	MW-7	04/02/2024		167.0000 *	89.3000
Arsenic, total	ug/L	MW-9	10/14/2010		26.7000	89.3000
Arsenic, total	ug/L	MW-9	04/08/2011		18.7000	89.3000
Arsenic, total	ug/L	MW-9	10/18/2011		34.1000	89.3000
Arsenic, total	ug/L	MW-9	04/20/2012		20.4000	89.3000
Arsenic, total	ug/L	MW-9	10/17/2012		22.5000	89.3000
Arsenic, total	ug/L	MW-9	04/03/2013	ND	4.0000	89.3000
Arsenic, total	ug/L	MW-9	10/09/2013		11.4000	89.3000
Arsenic, total	ug/L	MW-9	04/16/2014	ND	4.0000	89.3000
Arsenic, total	ug/L	MW-9	10/23/2014	ND	4.0000	89.3000
Arsenic, total	ug/L	MW-9	04/01/2015	ND	4.0000	89.3000
Arsenic, total	ug/L	MW-9	11/05/2015		5.8000	89.3000
Arsenic, total	ug/L	MW-9	04/21/2016	ND	4.0000	89.3000
Arsenic, total	ug/L	MW-9	10/17/2016		12.3000	89.3000
Arsenic, total	ug/L	MW-9	04/21/2017	ND	4.0000	89.3000
Arsenic, total	ug/L	MW-9	10/16/2017	ND	4.0000	89.3000
Arsenic, total	ug/L	MW-9	04/24/2018	ND	4.0000	89.3000
Arsenic, total	ug/L	MW-9	10/25/2018	ND	4.0000	89.3000
Arsenic, total	ug/L	MW-9	04/15/2019		6.1000	89.3000
Arsenic, total	ug/L	MW-9	10/07/2019		6.6000	89.3000
Arsenic, total	ug/L	MW-9	04/22/2020		39.8000	89.3000
Arsenic, total	ug/L	MW-9	10/01/2020		19.0000	89.3000
Arsenic, total	ug/L	MW-9	04/08/2021		13.8000	89.3000
Arsenic, total	ug/L	MW-9	10/29/2021		5.2000	89.3000
Arsenic, total	ug/L	MW-9	04/25/2022	ND	4.0000	89.3000
Arsenic, total	ug/L	MW-9	10/17/2022		45.3000	89.3000
Arsenic, total	ug/L	MW-9	04/10/2023		82.4000	89.3000
Arsenic, total	ug/L	MW-9	10/27/2023		106.0000 *	89.3000
Arsenic, total	ug/L	MW-9	04/02/2024	ND	4.0000	89.3000

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

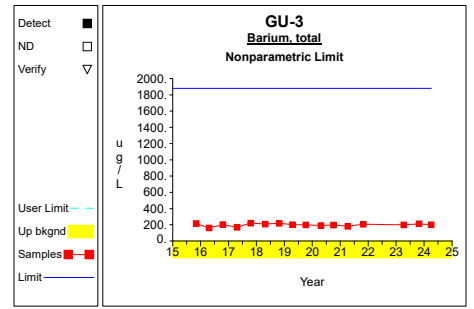
Up vs. Down Prediction Limits



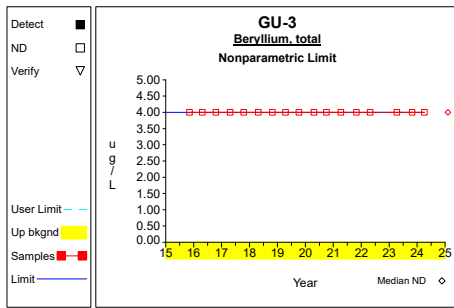
Graph 1



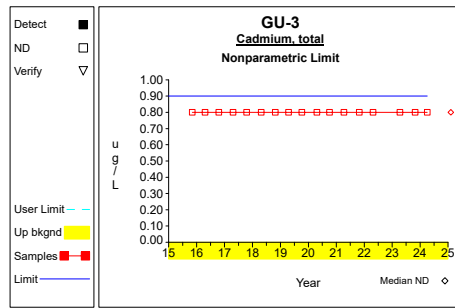
Graph 2



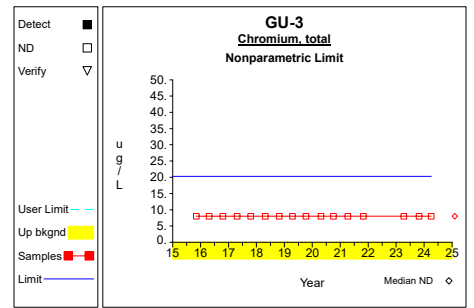
Graph 3



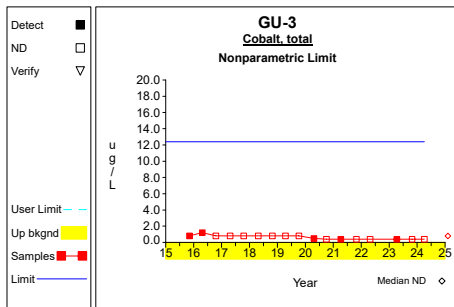
Graph 4



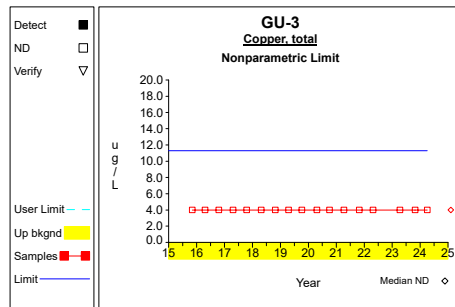
Graph 5



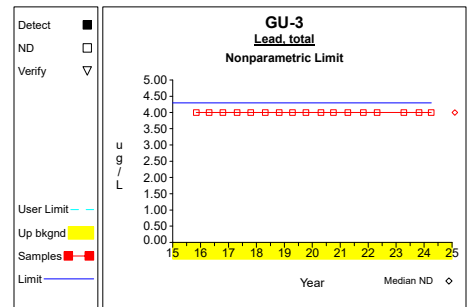
Graph 6



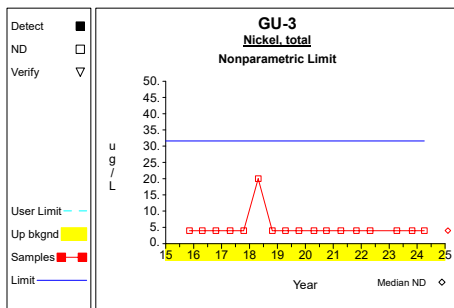
Graph 7



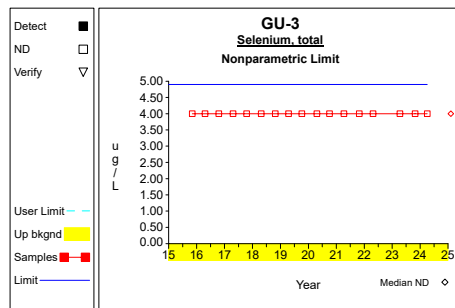
Graph 8



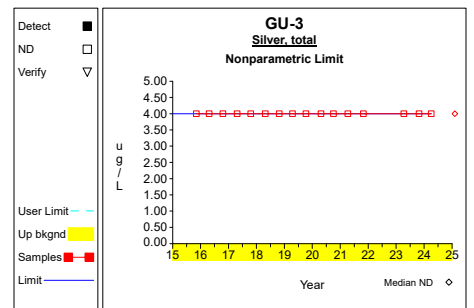
Graph 9



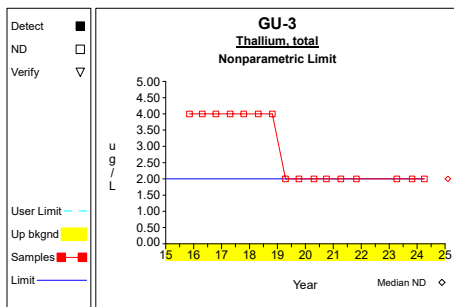
Graph 10



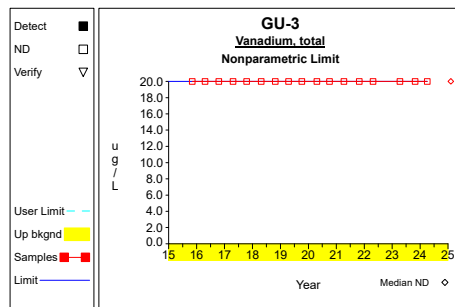
Graph 11



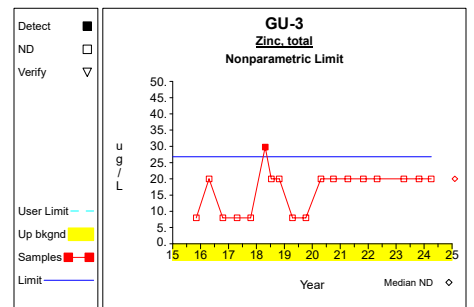
Graph 12



Graph 13

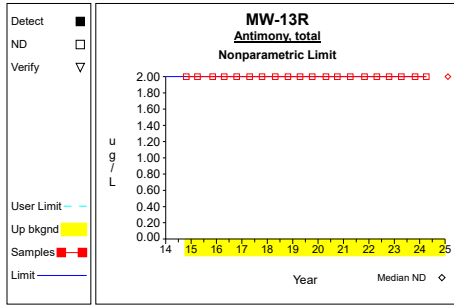


Graph 14

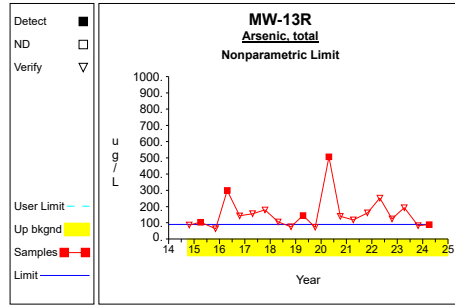


Graph 15

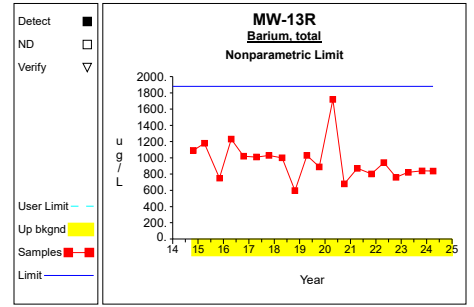
Up vs. Down Prediction Limits



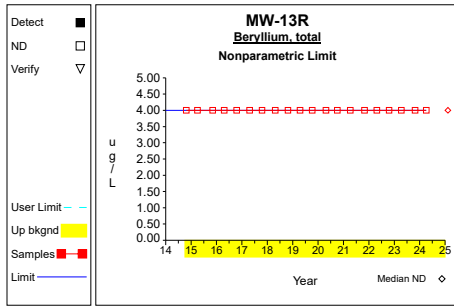
Graph 16



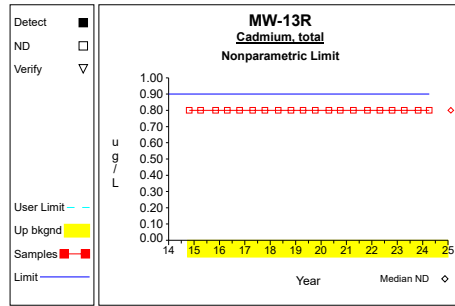
Graph 17



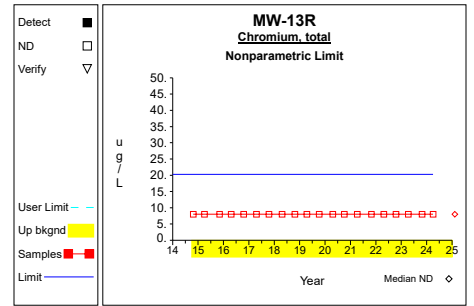
Graph 18



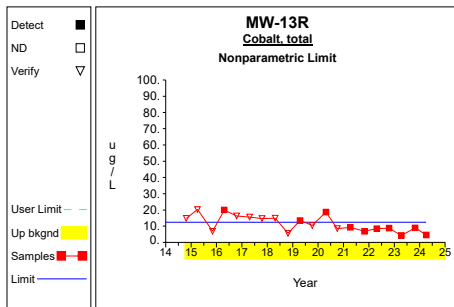
Graph 19



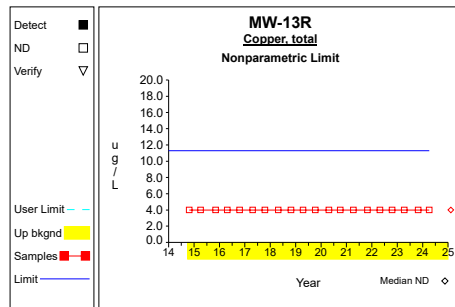
Graph 20



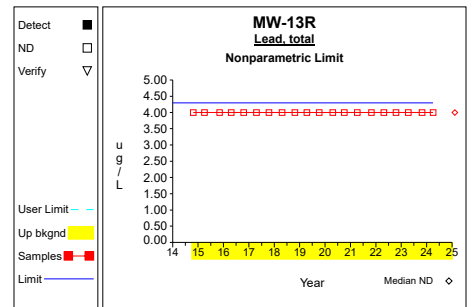
Graph 21



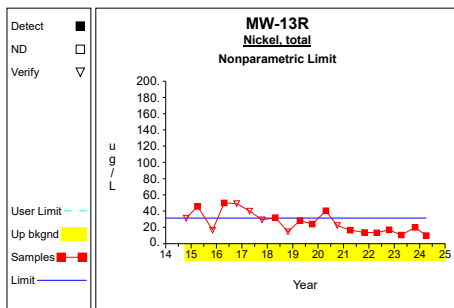
Graph 22



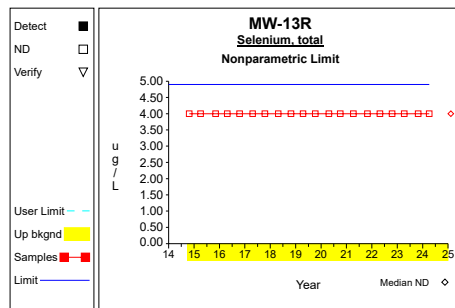
Graph 23



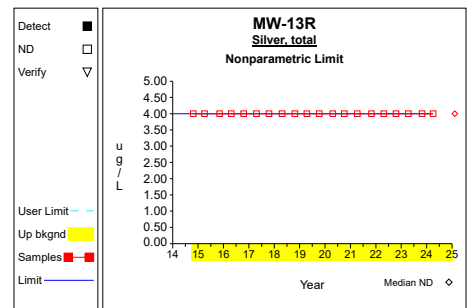
Graph 24



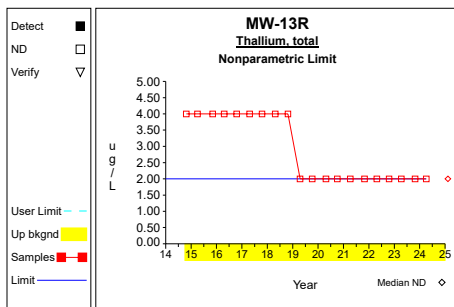
Graph 25



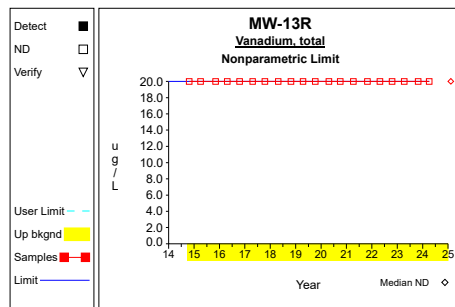
Graph 26



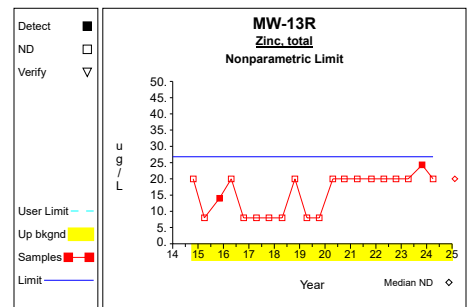
Graph 27



Graph 28

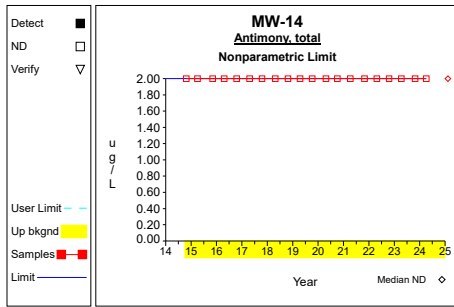


Graph 29

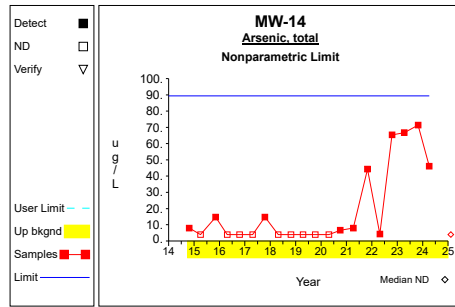


Graph 30

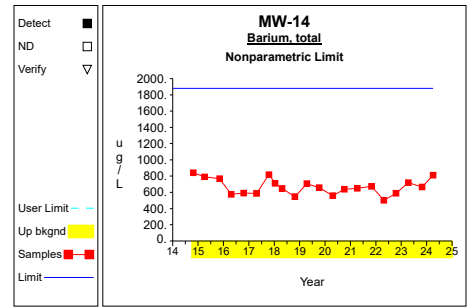
Up vs. Down Prediction Limits



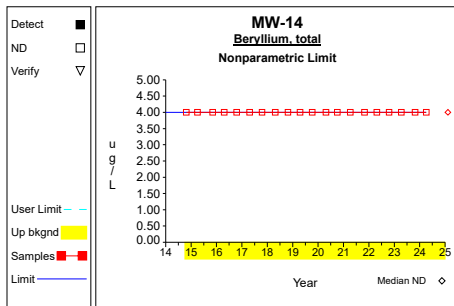
Graph 31



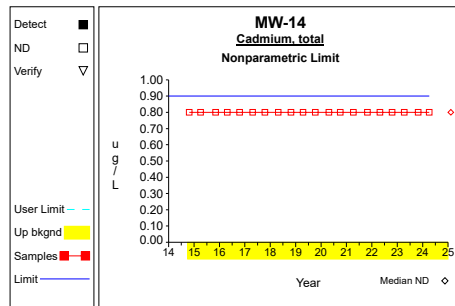
Graph 32



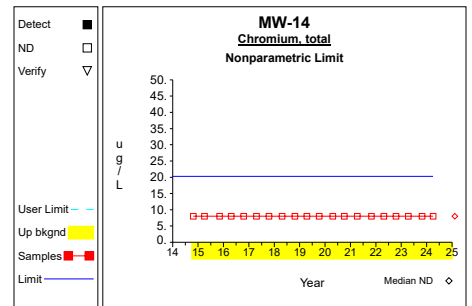
Graph 33



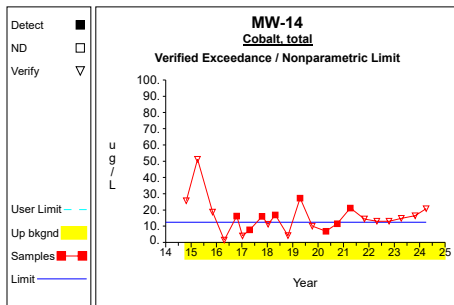
Graph 34



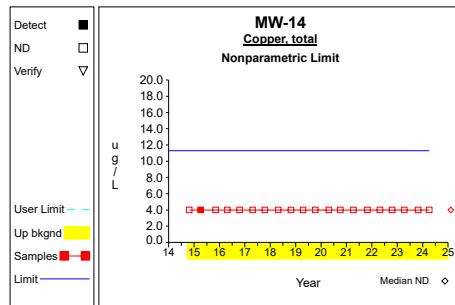
Graph 35



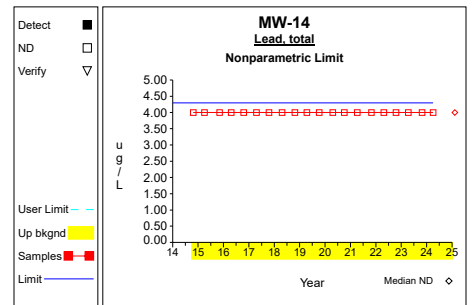
Graph 36



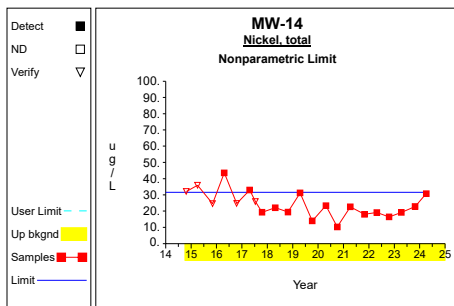
Graph 37



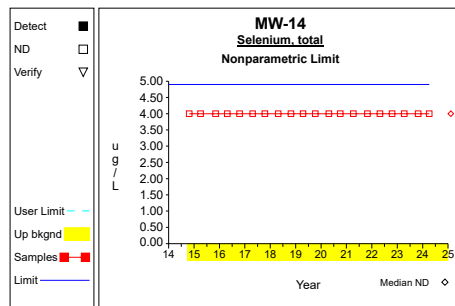
Graph 38



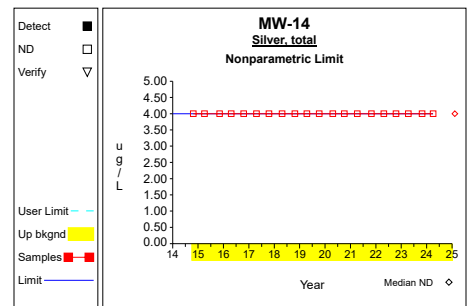
Graph 39



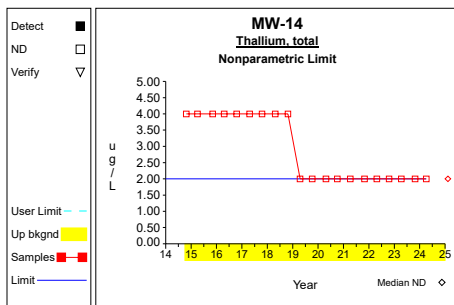
Graph 40



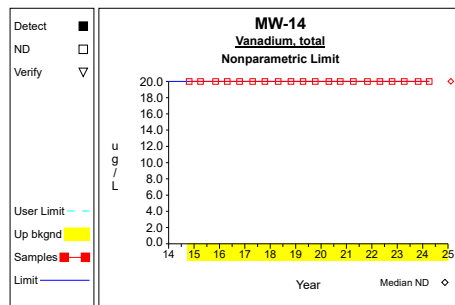
Graph 41



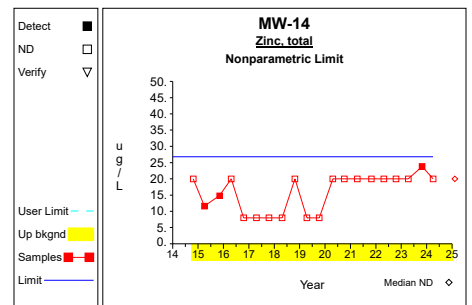
Graph 42



Graph 43

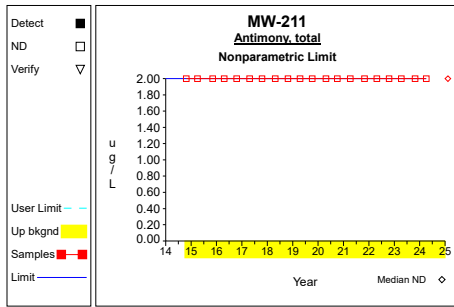


Graph 44

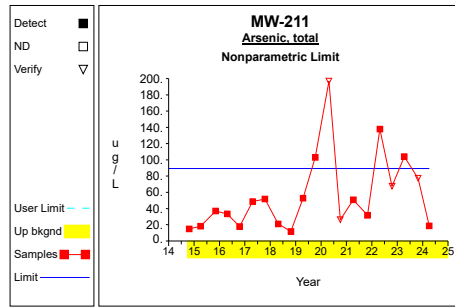


Graph 45

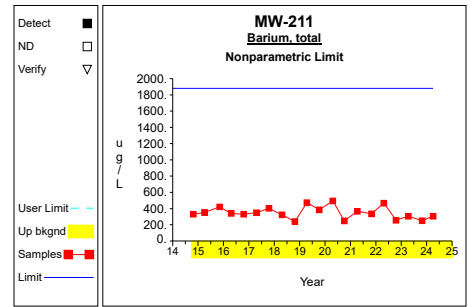
Up vs. Down Prediction Limits



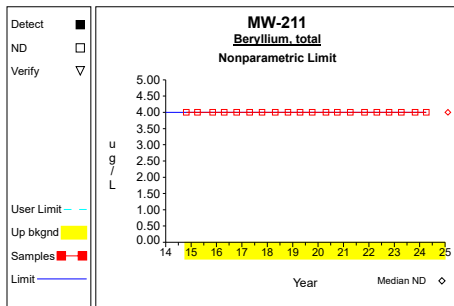
Graph 46



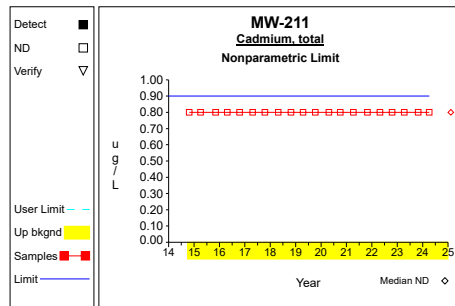
Graph 47



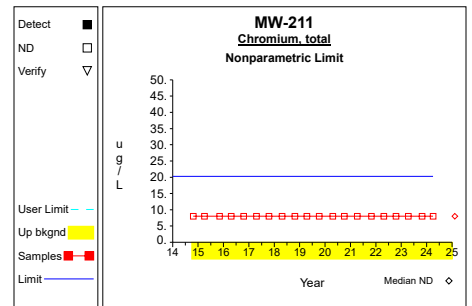
Graph 48



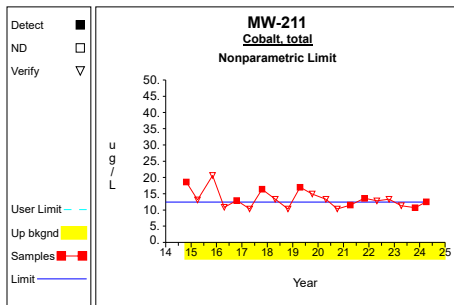
Graph 49



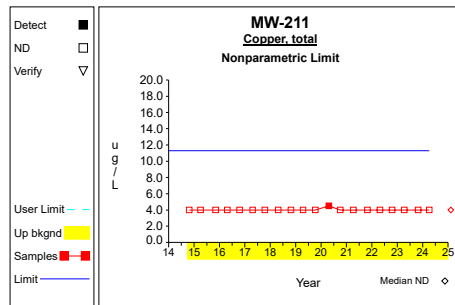
Graph 50



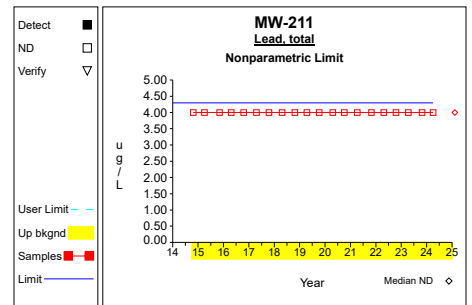
Graph 51



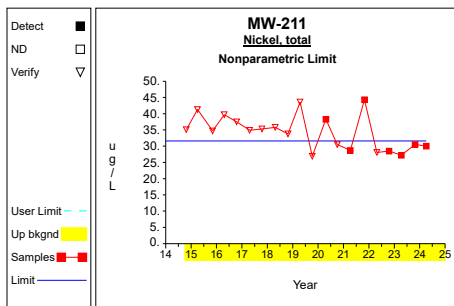
Graph 52



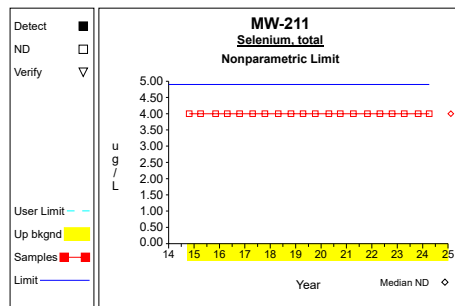
Graph 53



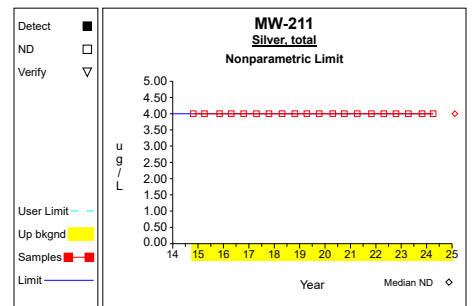
Graph 54



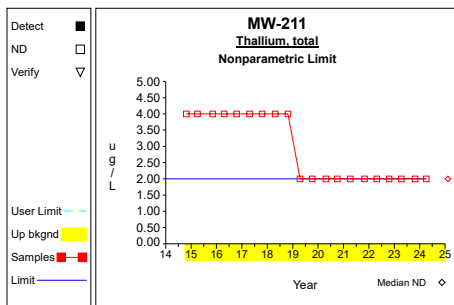
Graph 55



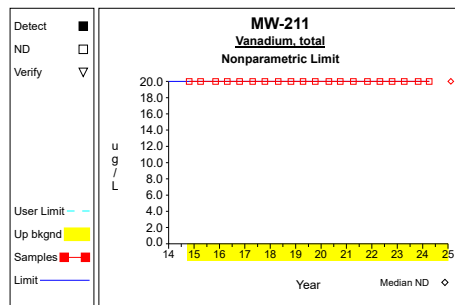
Graph 56



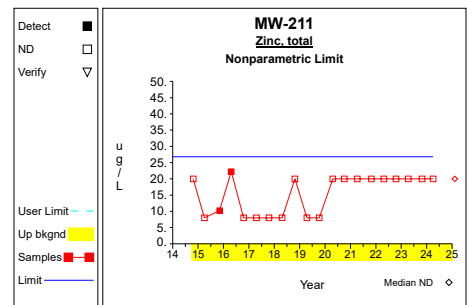
Graph 57



Graph 58

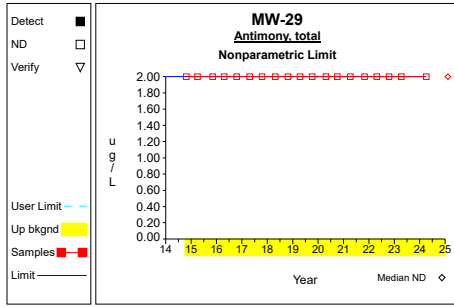


Graph 59

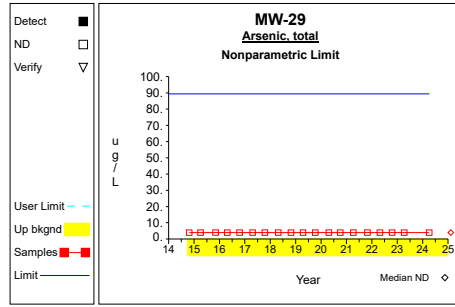


Graph 60

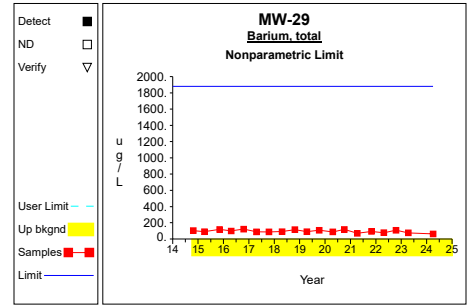
Up vs. Down Prediction Limits



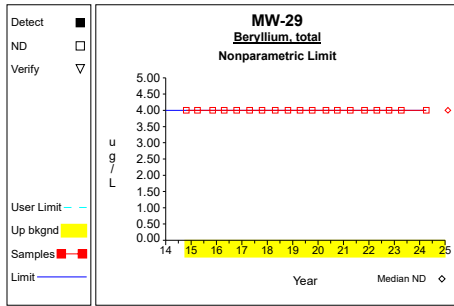
Graph 61



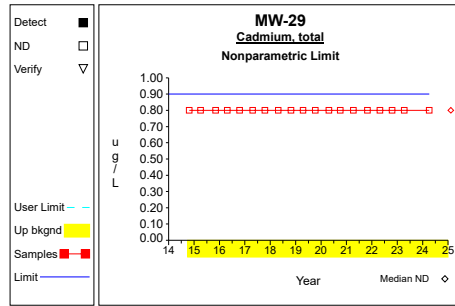
Graph 62



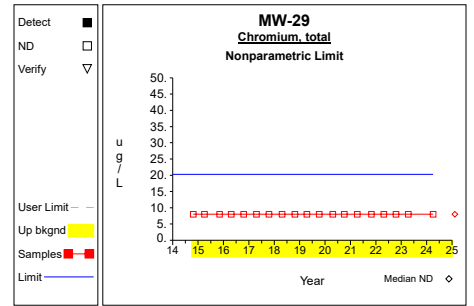
Graph 63



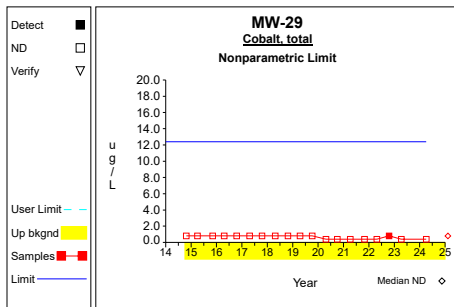
Graph 64



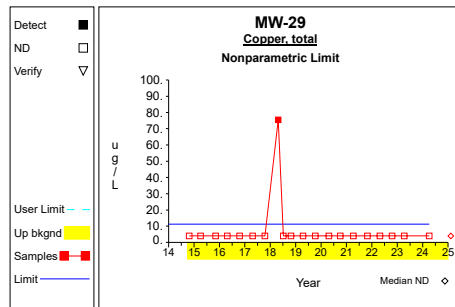
Graph 65



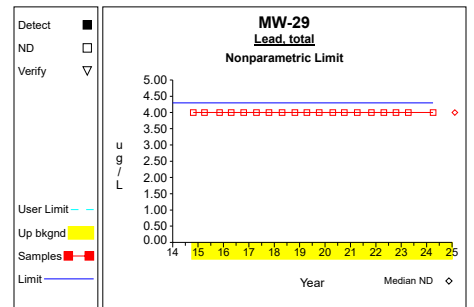
Graph 66



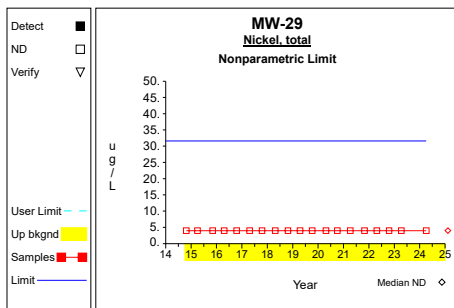
Graph 67



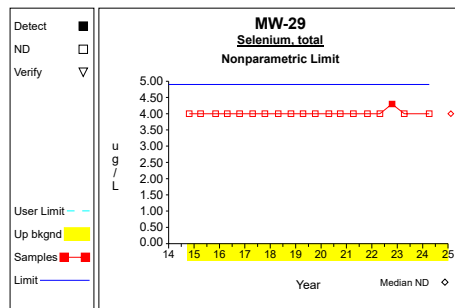
Graph 68



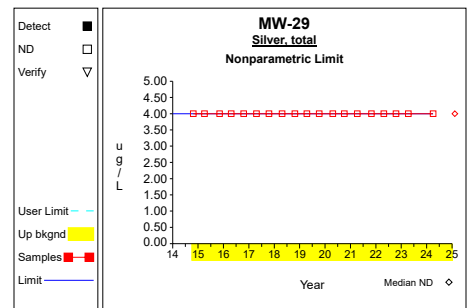
Graph 69



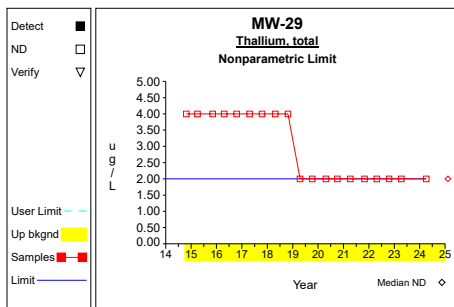
Graph 70



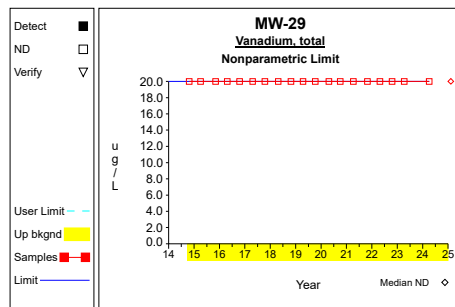
Graph 71



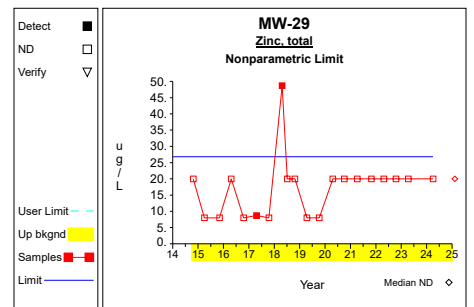
Graph 72



Graph 73

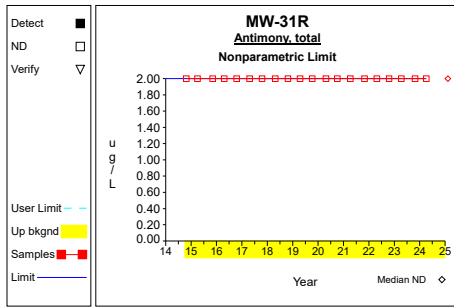


Graph 74

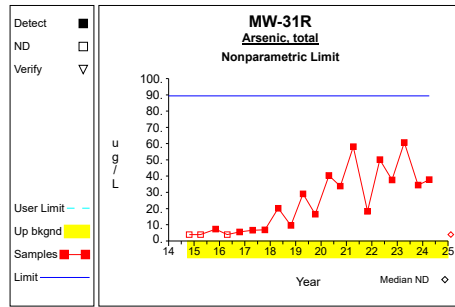


Graph 75

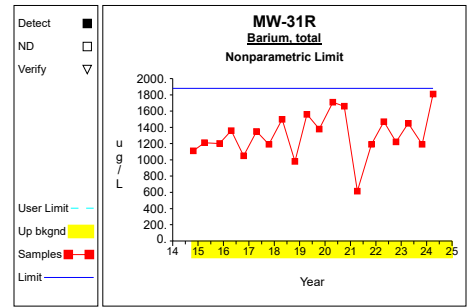
Up vs. Down Prediction Limits



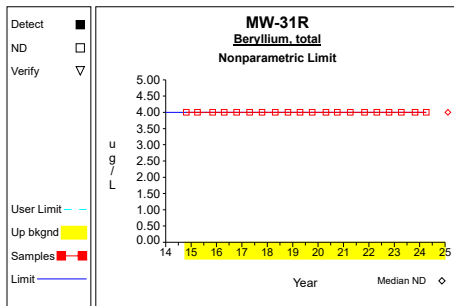
Graph 76



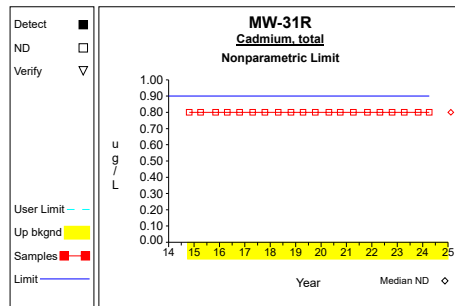
Graph 77



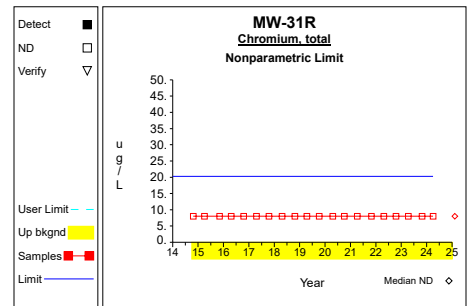
Graph 78



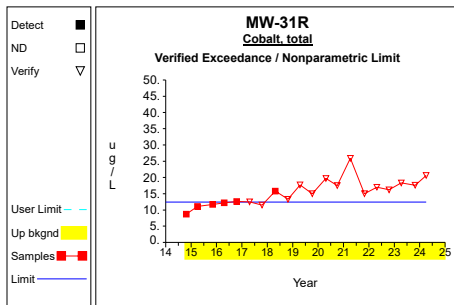
Graph 79



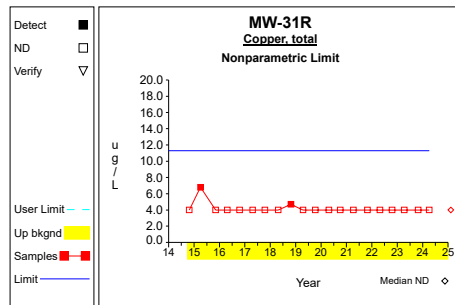
Graph 80



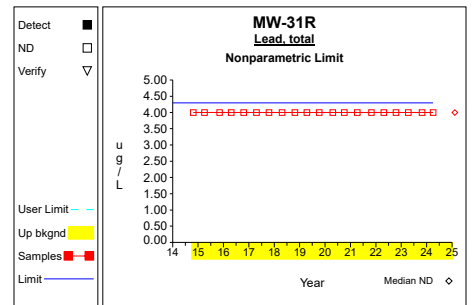
Graph 81



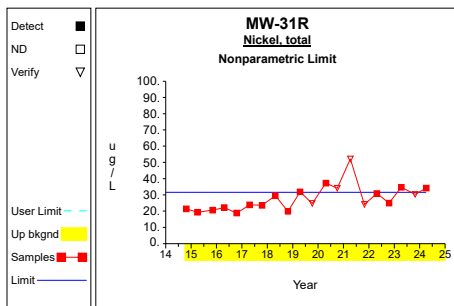
Graph 82



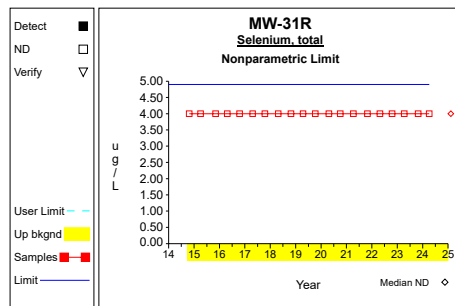
Graph 83



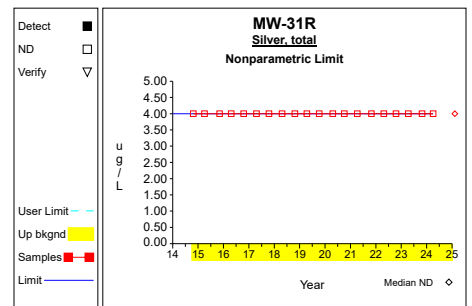
Graph 84



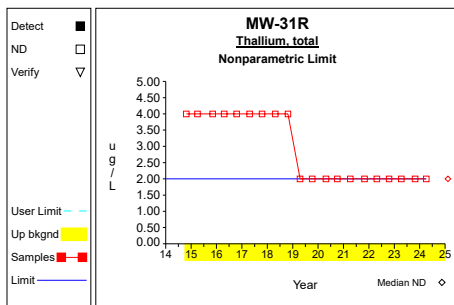
Graph 85



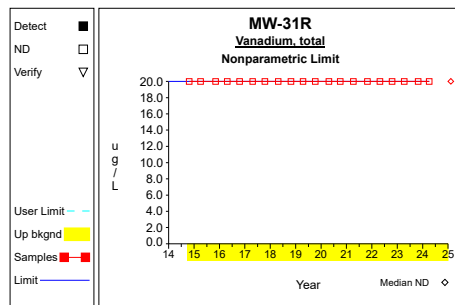
Graph 86



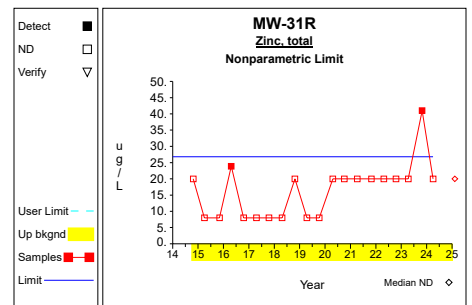
Graph 87



Graph 88

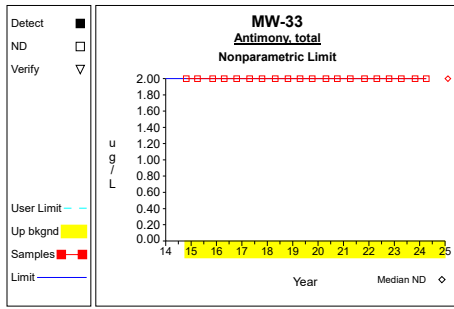


Graph 89

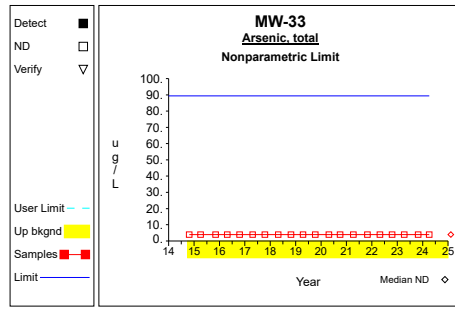


Graph 90

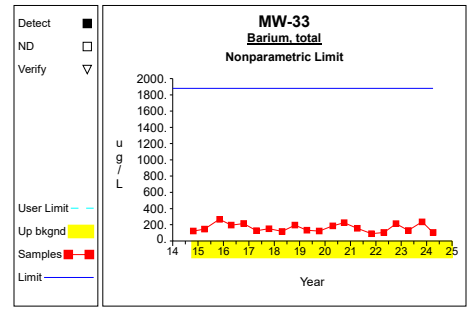
Up vs. Down Prediction Limits



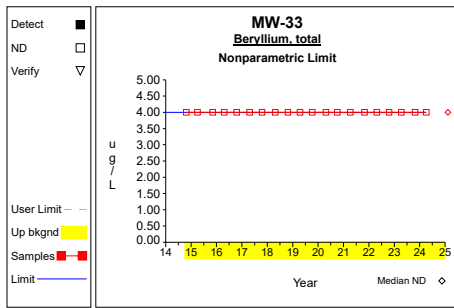
Graph 91



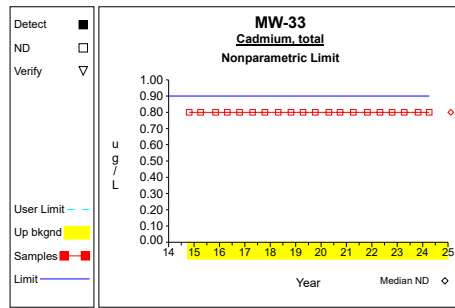
Graph 92



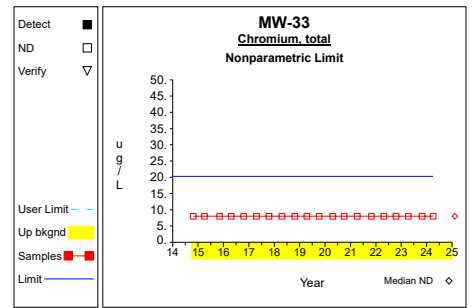
Graph 93



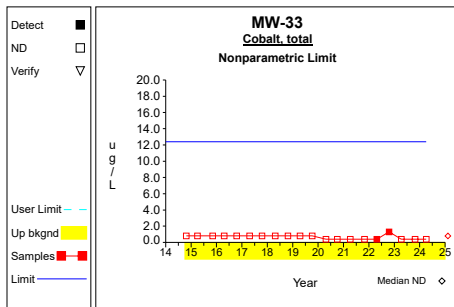
Graph 94



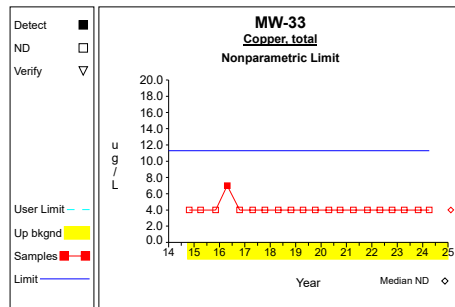
Graph 95



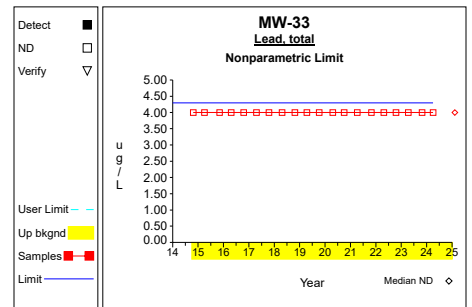
Graph 96



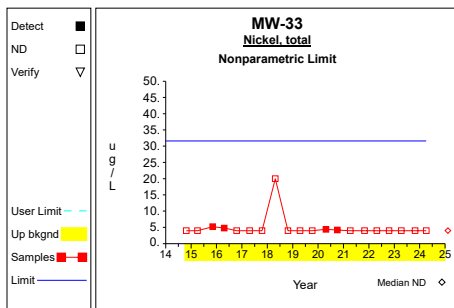
Graph 97



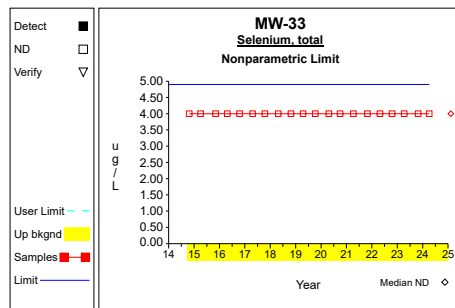
Graph 98



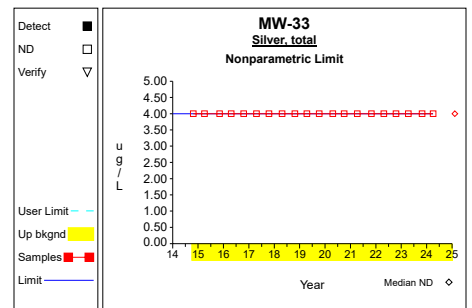
Graph 99



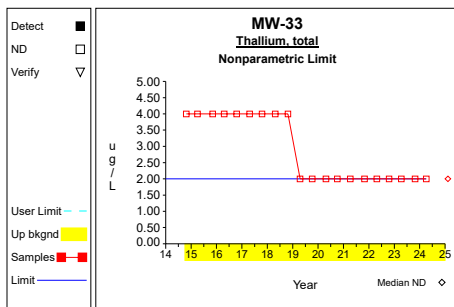
Graph 100



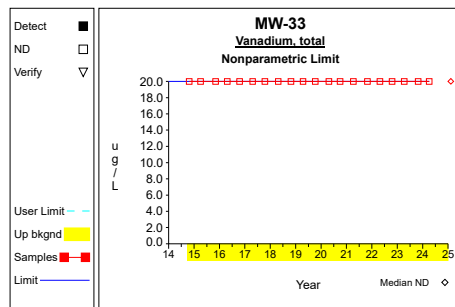
Graph 101



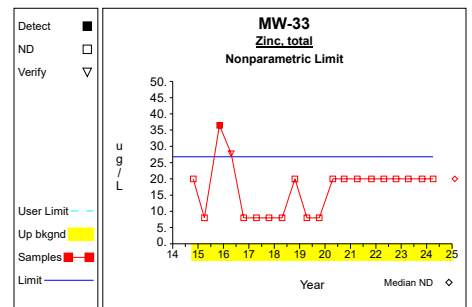
Graph 102



Graph 103

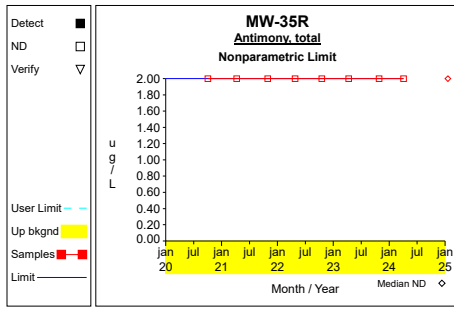


Graph 104

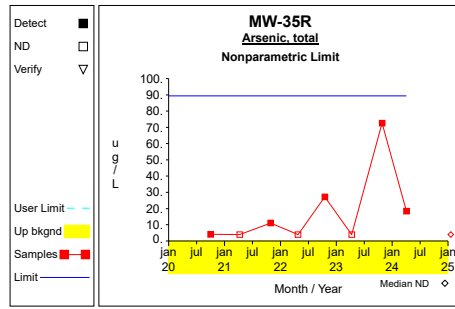


Graph 105

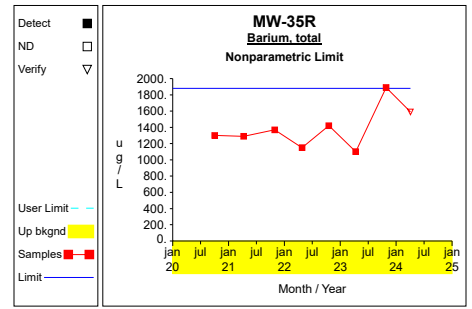
Up vs. Down Prediction Limits



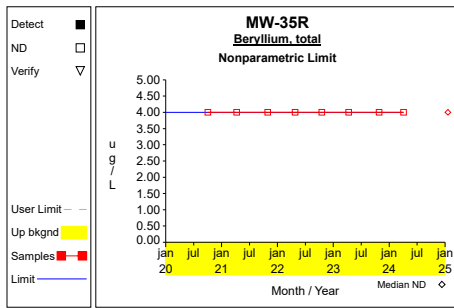
Graph 106



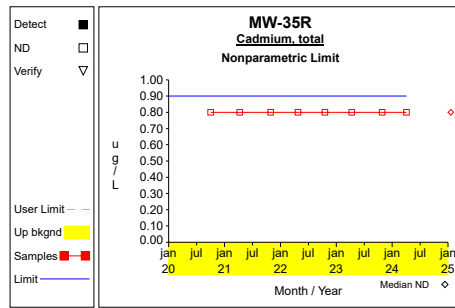
Graph 107



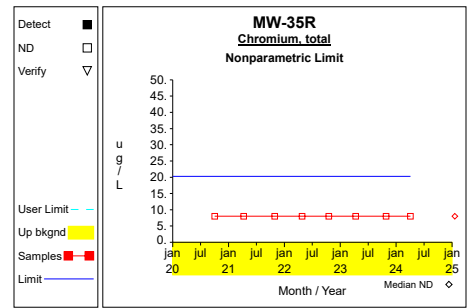
Graph 108



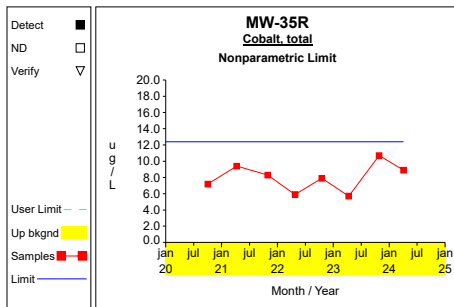
Graph 109



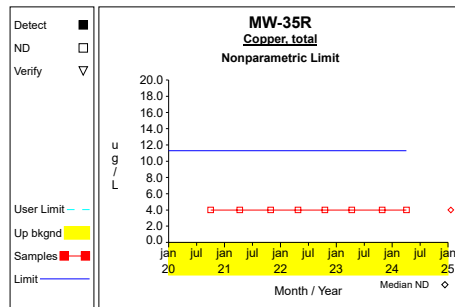
Graph 110



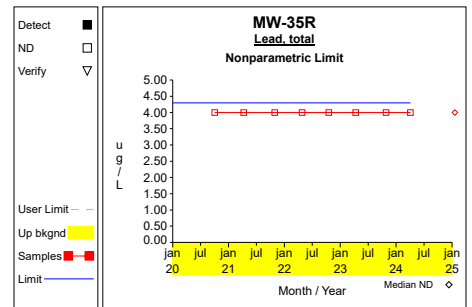
Graph 111



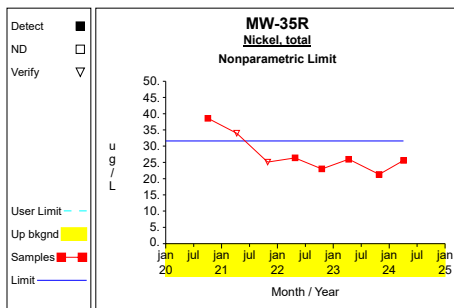
Graph 112



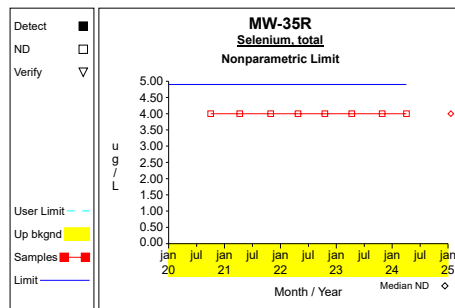
Graph 113



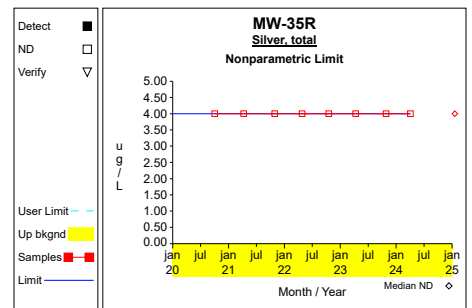
Graph 114



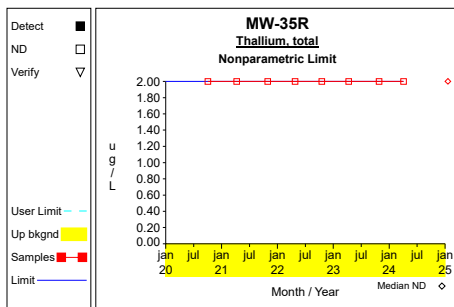
Graph 115



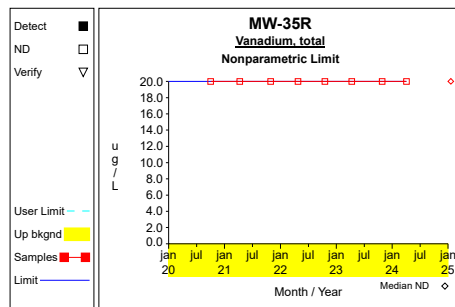
Graph 116



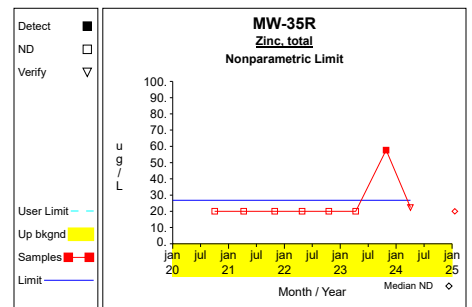
Graph 117



Graph 118

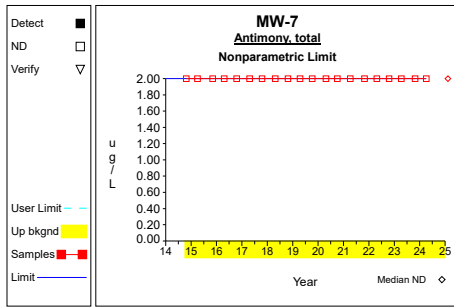


Graph 119

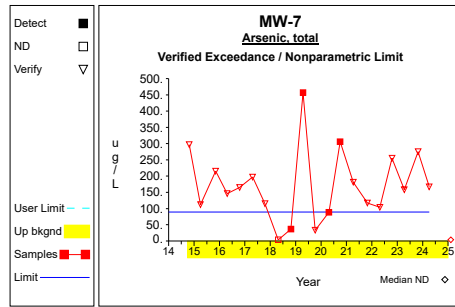


Graph 120

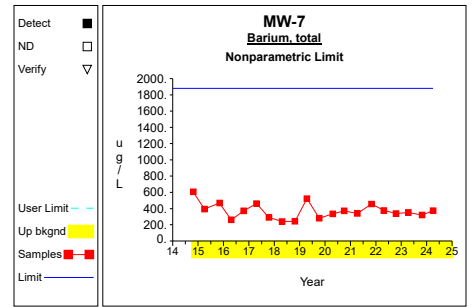
Up vs. Down Prediction Limits



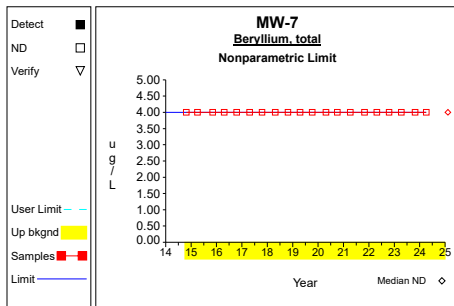
Graph 121



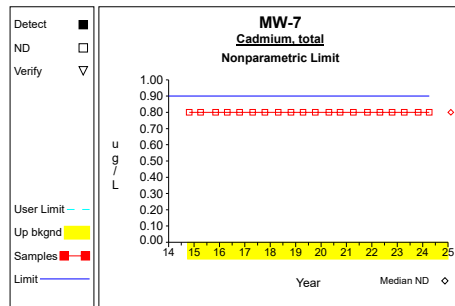
Graph 122



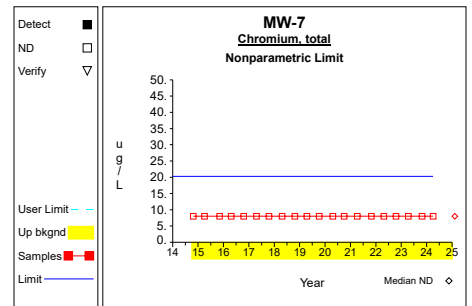
Graph 123



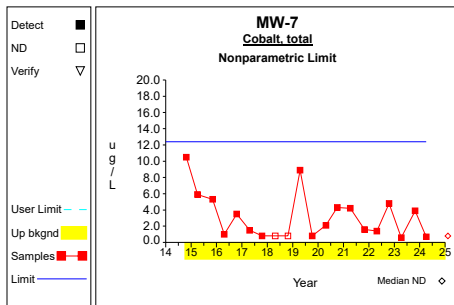
Graph 124



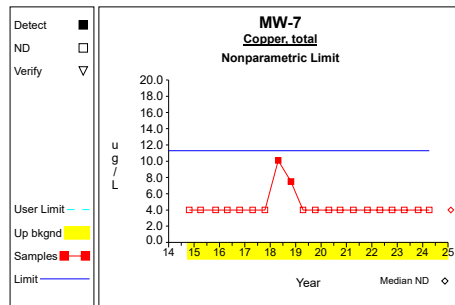
Graph 125



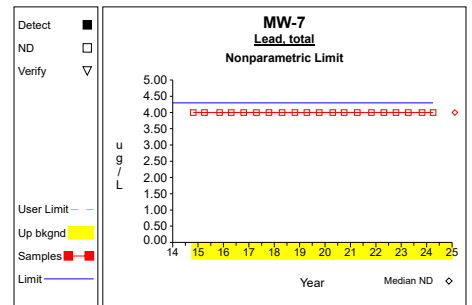
Graph 126



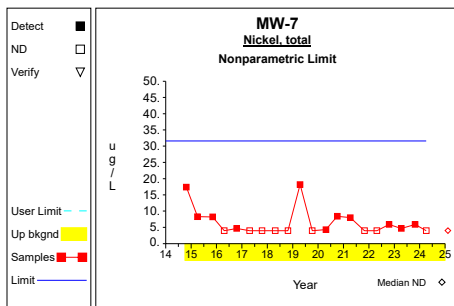
Graph 127



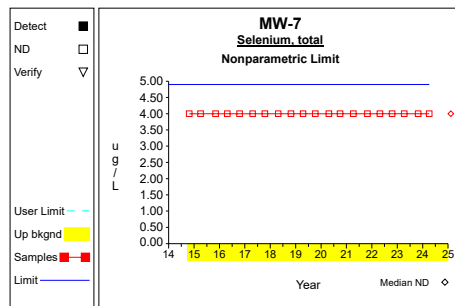
Graph 128



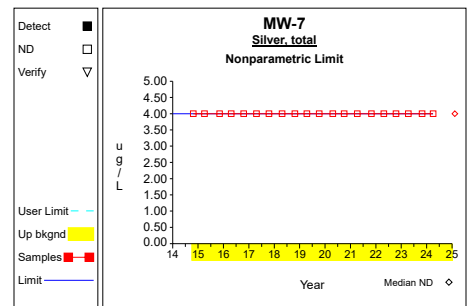
Graph 129



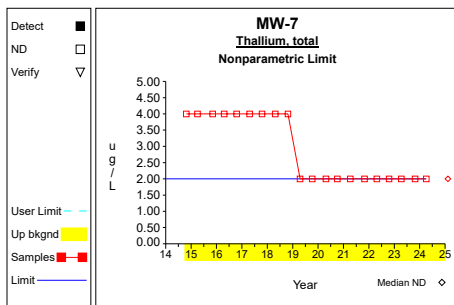
Graph 130



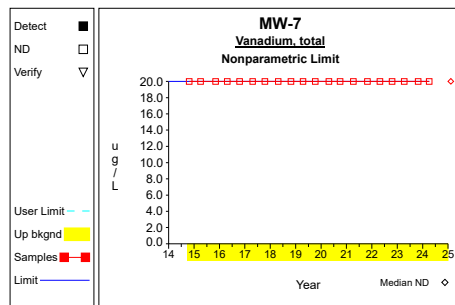
Graph 131



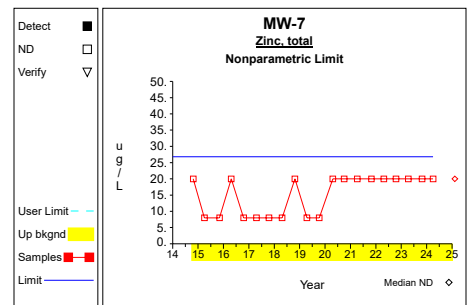
Graph 132



Graph 133

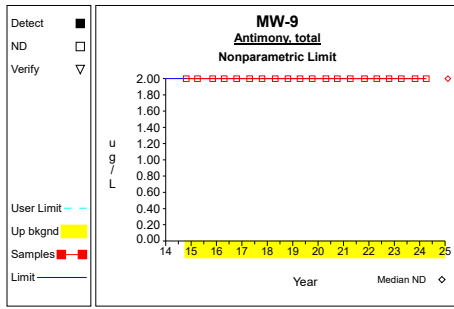


Graph 134

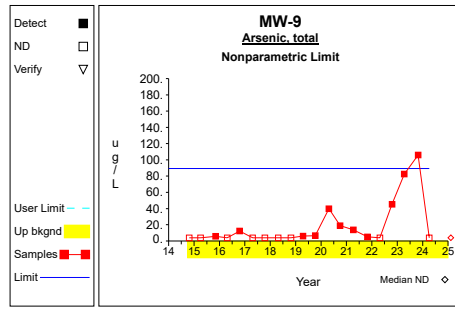


Graph 135

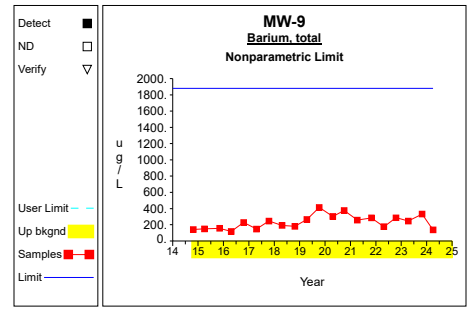
Up vs. Down Prediction Limits



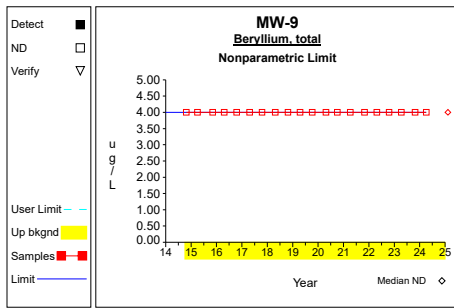
Graph 136



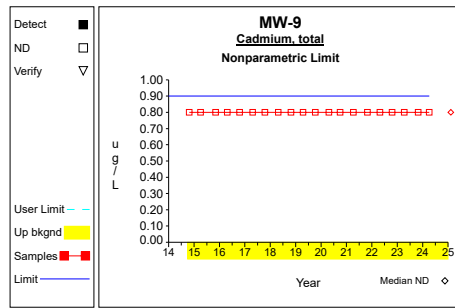
Graph 137



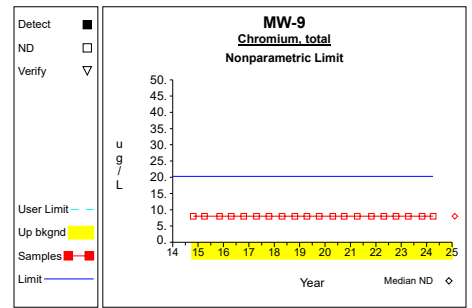
Graph 138



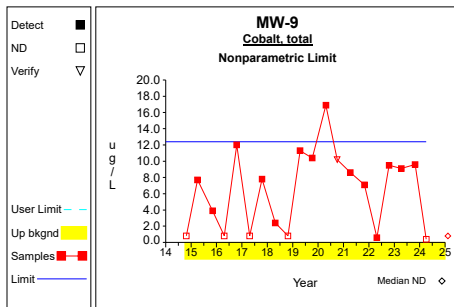
Graph 139



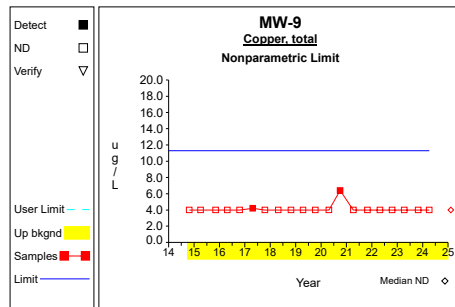
Graph 140



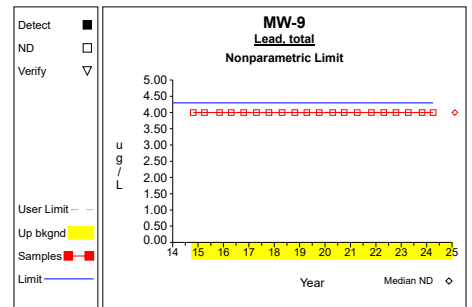
Graph 141



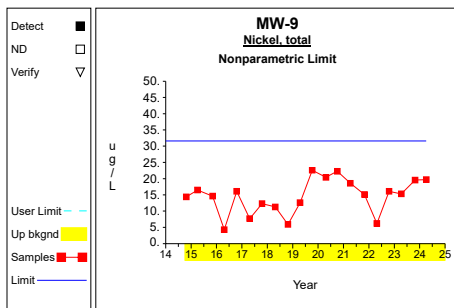
Graph 142



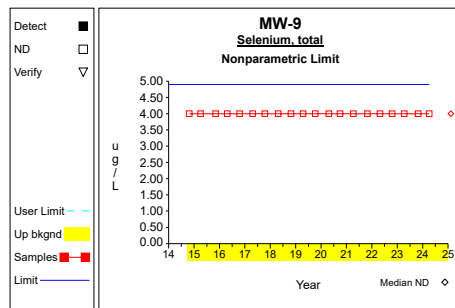
Graph 143



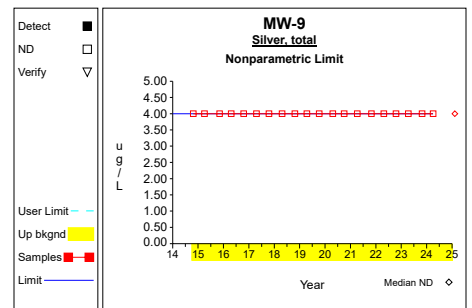
Graph 144



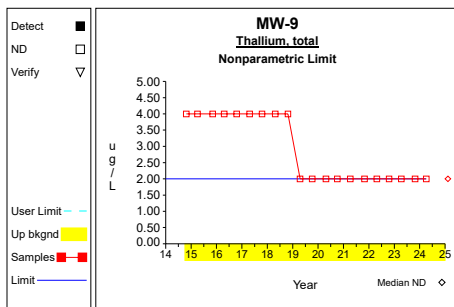
Graph 145



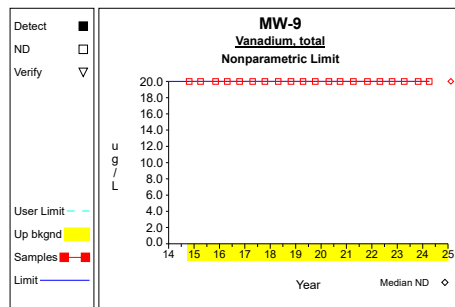
Graph 146



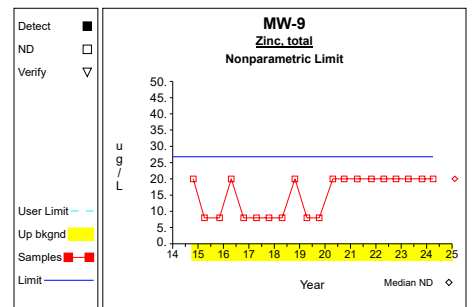
Graph 147



Graph 148

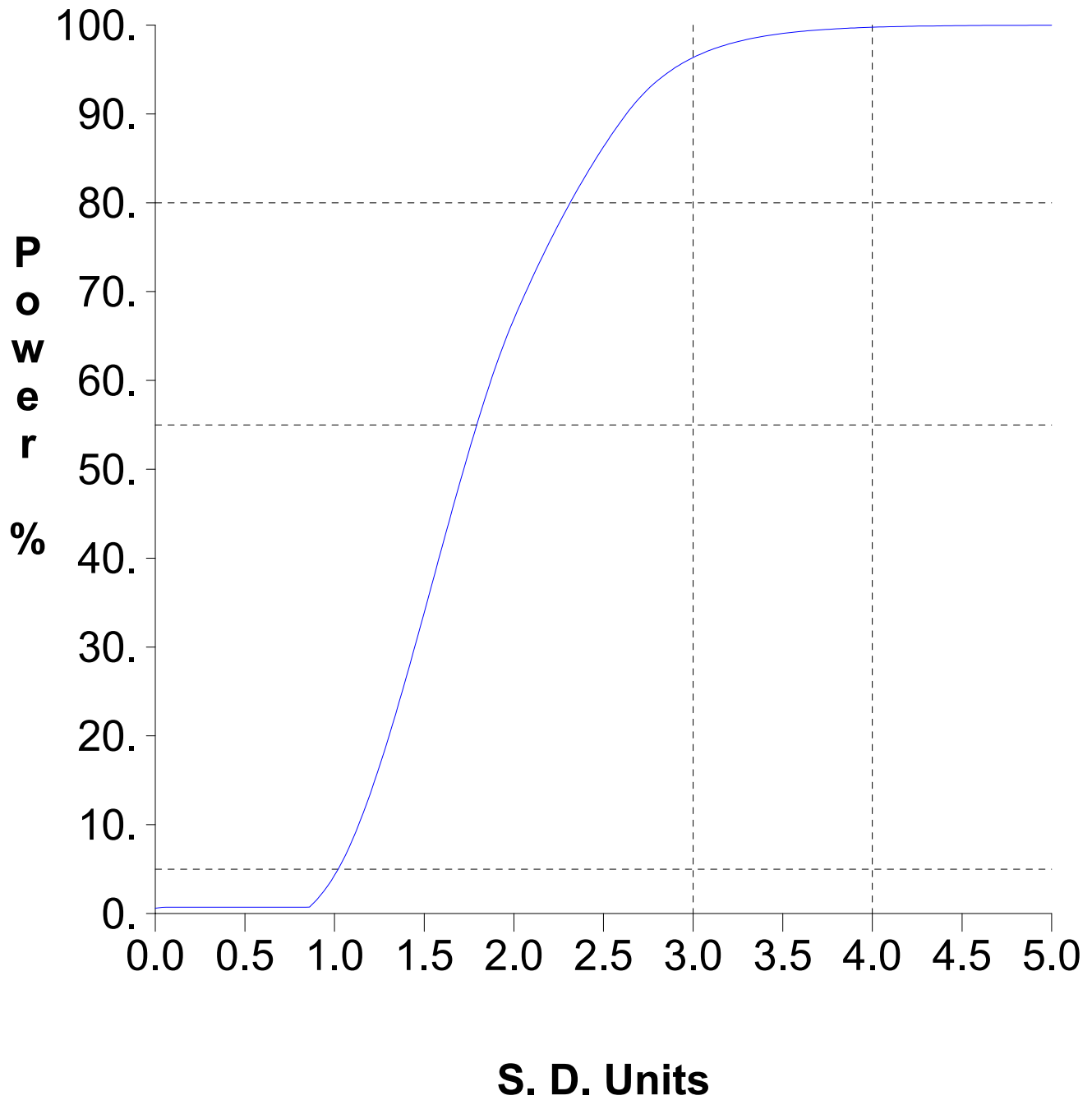


Graph 149



Graph 150

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



Attachment C

Assessment Statistics for Trace Metals

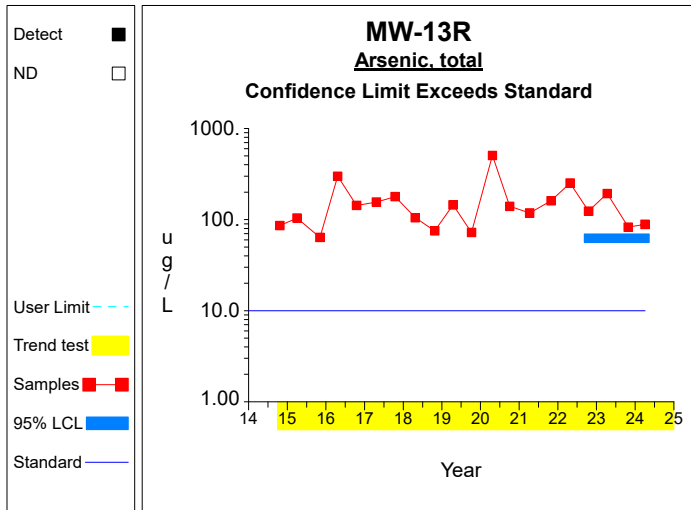
Table 1

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

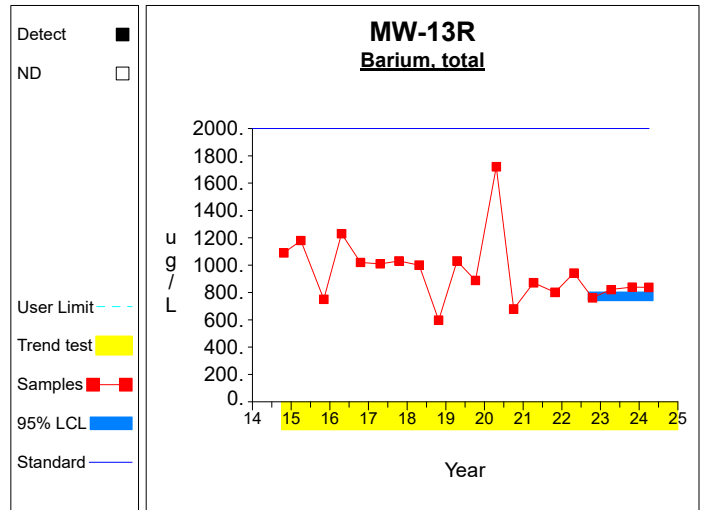
Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend	
Arsenic, total	ug/L	MW-13R	4	122.100	50.657	1.176	62.513	181.687	10.000		**
Barium, total	ug/L	MW-13R	4	814.500	36.565	1.176	771.489	857.511	2000.000		**
Cobalt, total	ug/L	MW-13R	4	6.675	2.573	1.176	3.648	9.702	2.100	dec	**
Nickel, total	ug/L	MW-13R	4	14.375	4.995	1.176	8.500	20.250	100.000	dec	**
Zinc, total	ug/L	MW-13R	4	13.575	7.150	1.176	5.165	21.985	2000.000		**
Arsenic, total	ug/L	MW-14	4	62.425	11.181	1.176	49.273	75.577	10.000		**
Barium, total	ug/L	MW-14	4	696.000	94.181	1.176	585.216	806.784	2000.000		**
Cobalt, total	ug/L	MW-14	4	16.275	3.304	1.176	12.389	20.161	2.100		**
Nickel, total	ug/L	MW-14	4	22.300	6.243	1.176	14.957	29.643	100.000		**
Zinc, total	ug/L	MW-14	4	13.450	6.900	1.176	5.334	21.566	2000.000		**
Arsenic, total	ug/L	MW-211	4	66.850	35.674	1.176	24.888	108.812	10.000		**
Barium, total	ug/L	MW-211	4	279.750	30.445	1.176	243.938	315.562	2000.000		**
Cobalt, total	ug/L	MW-211	4	11.950	1.170	1.176	10.573	13.327	2.100		**
Nickel, total	ug/L	MW-211	4	29.050	1.498	1.176	27.288	30.812	100.000		**
Zinc, total	ug/L	MW-211	4	10.000	0.000	1.176	10.000	10.000	2000.000		**
Arsenic, total	ug/L	MW-31R	4	42.625	12.150	1.176	28.333	56.917	10.000	inc	**
Barium, total	ug/L	MW-31R	4	1417.500	286.284	1.176	1080.748	1754.252	2000.000		**
Cobalt, total	ug/L	MW-31R	4	18.175	1.837	1.176	16.014	20.336	2.100	inc	**
Nickel, total	ug/L	MW-31R	4	31.050	4.487	1.176	25.772	36.328	100.000	inc	**
Zinc, total	ug/L	MW-31R	4	17.750	15.500	1.176	0.000	35.982	2000.000		**
Arsenic, total	ug/L	MW-35R	4	30.050	30.228	1.176	0.000	65.607	10.000		**
Barium, total	ug/L	MW-35R	4	1500.000	329.949	1.176	1111.884	1888.116	2000.000		**
Cobalt, total	ug/L	MW-35R	4	8.300	2.085	1.176	5.848	10.752	2.100		**
Nickel, total	ug/L	MW-35R	4	23.975	2.225	1.176	21.358	26.592	100.000		**
Zinc, total	ug/L	MW-35R	4	25.000	22.558	1.176	0.000	51.535	2000.000		**
Arsenic, total	ug/L	MW-7	4	213.750	59.852	1.176	143.347	284.153	10.000		**
Barium, total	ug/L	MW-7	4	346.750	22.721	1.176	320.023	373.477	2000.000		**
Cobalt, total	ug/L	MW-7	4	2.500	2.168	1.176	0.000	5.050	2.100		**
Nickel, total	ug/L	MW-7	4	4.625	1.839	1.176	2.462	6.788	100.000		**
Zinc, total	ug/L	MW-7	4	10.000	0.000	1.176	10.000	10.000	2000.000		**
Arsenic, total	ug/L	MW-9	4	58.925	45.436	1.176	5.479	112.371	10.000		**
Barium, total	ug/L	MW-9	4	250.750	83.404	1.176	152.643	348.857	2000.000		**
Cobalt, total	ug/L	MW-9	4	7.150	4.505	1.176	1.851	12.449	2.100		**
Nickel, total	ug/L	MW-9	4	17.675	2.304	1.176	14.965	20.385	100.000		**
Zinc, total	ug/L	MW-9	4	10.000	0.000	1.176	10.000	10.000	2000.000		**

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

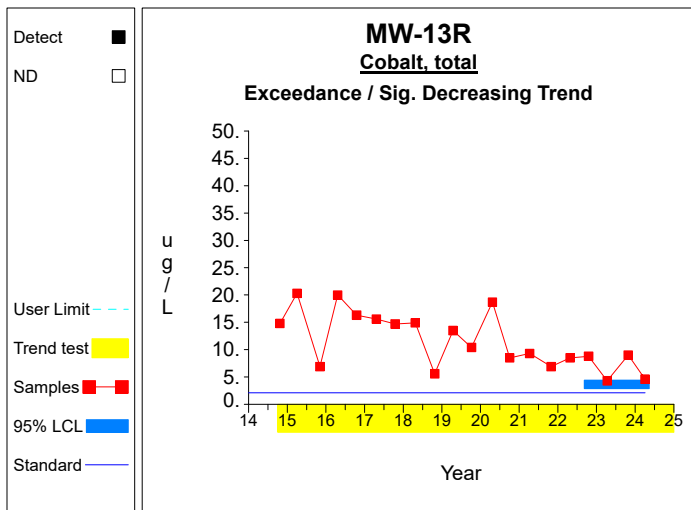
Confidence Limits (Assessment)



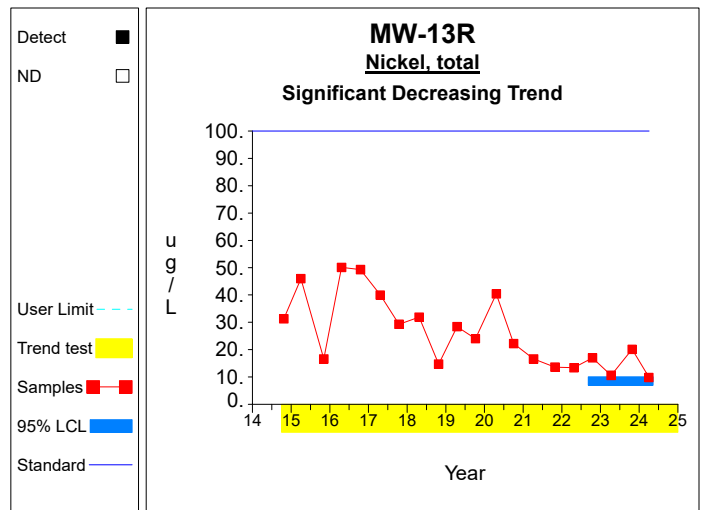
Graph 1



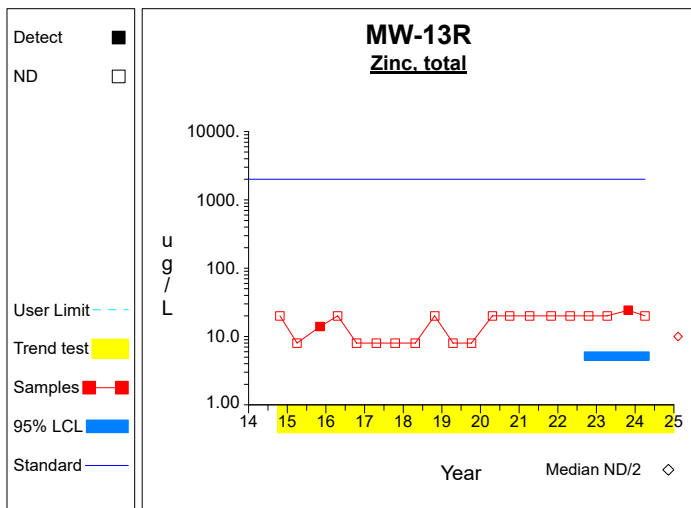
Graph 2



Graph 3

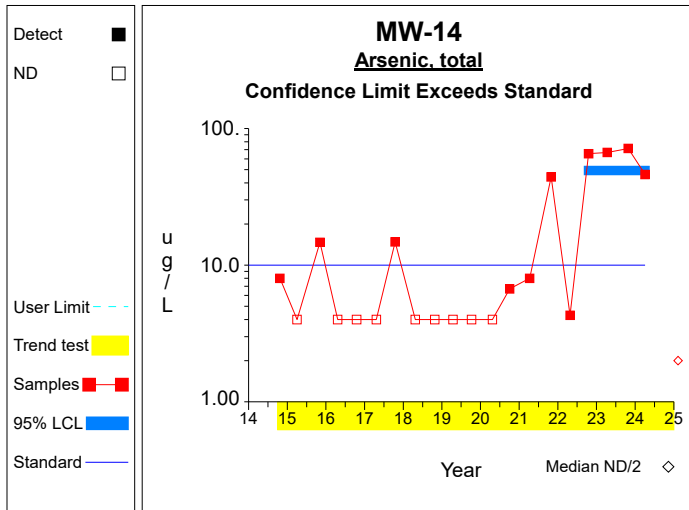


Graph 4

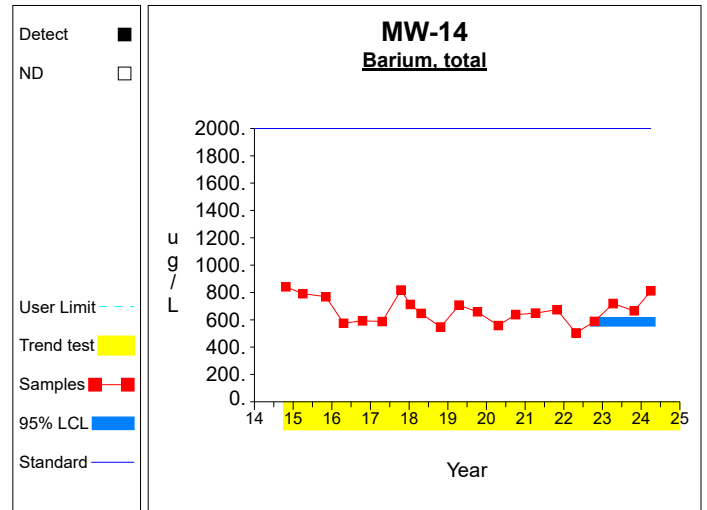


Graph 5

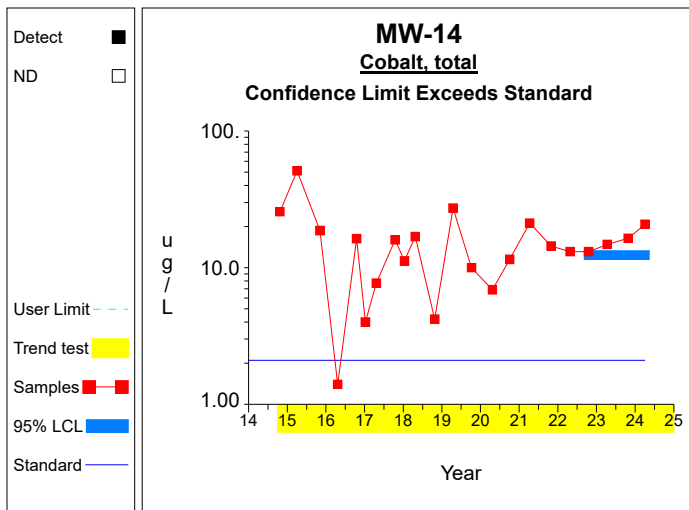
Confidence Limits (Assessment)



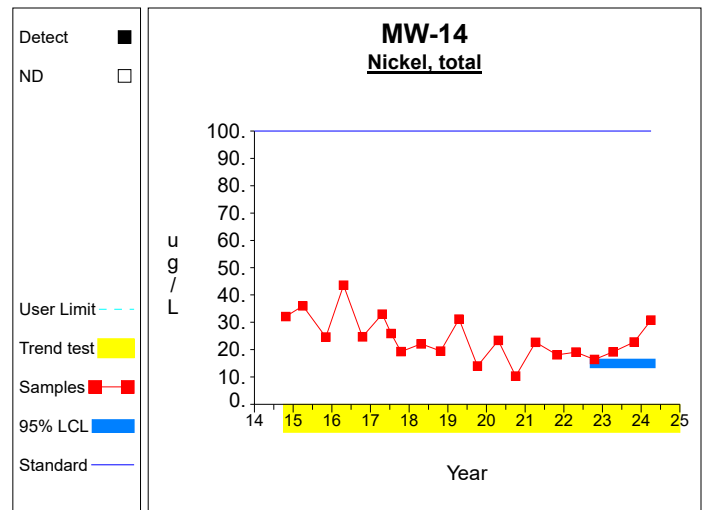
Graph 6



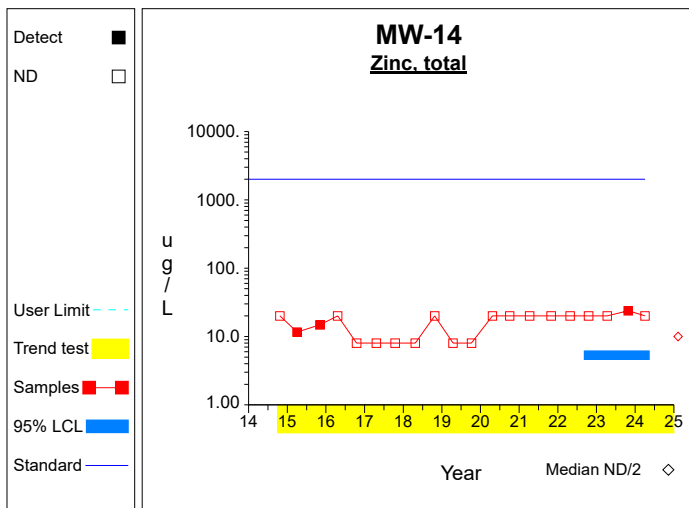
Graph 7



Graph 8

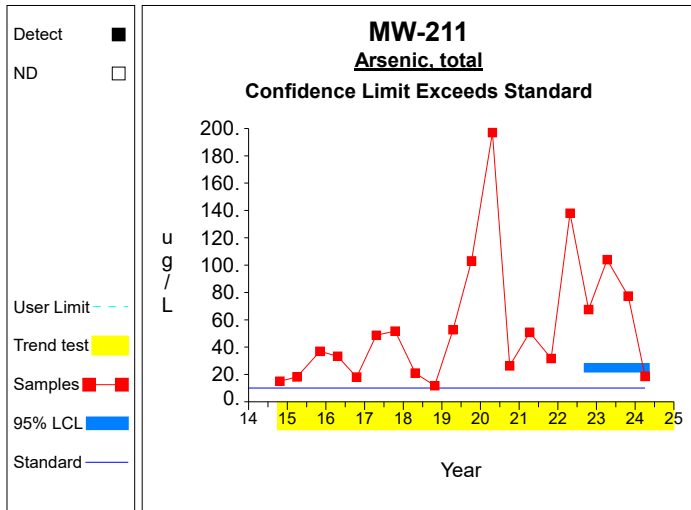


Graph 9

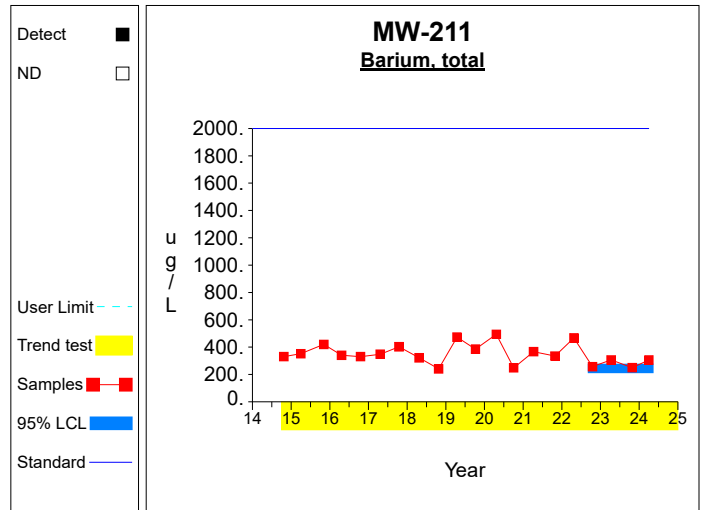


Graph 10

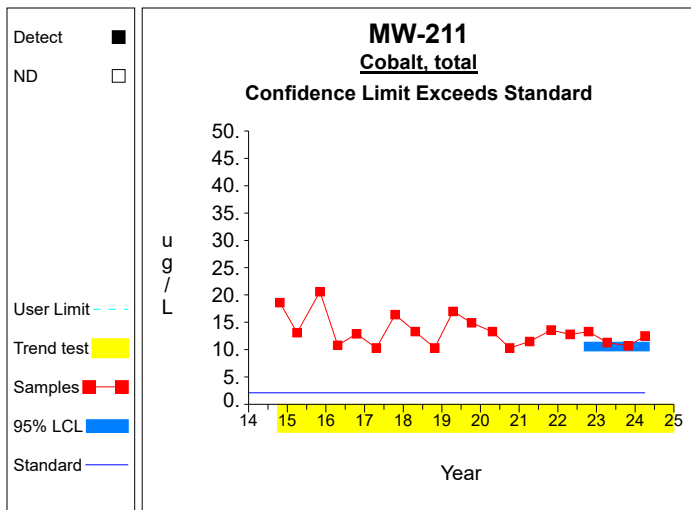
Confidence Limits (Assessment)



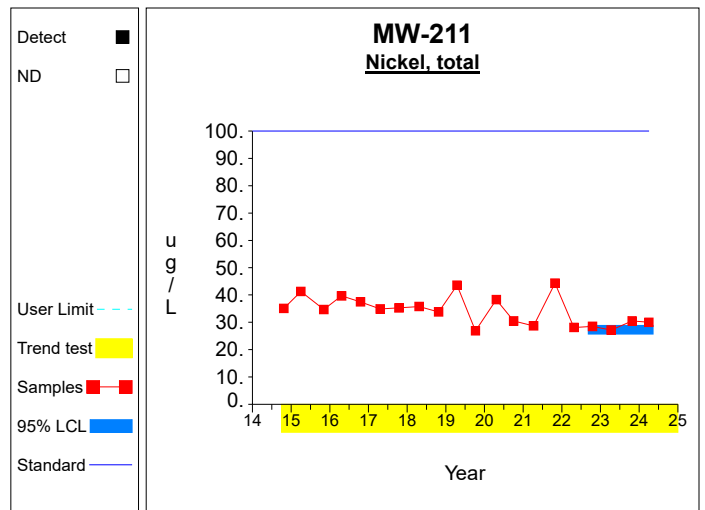
Graph 11



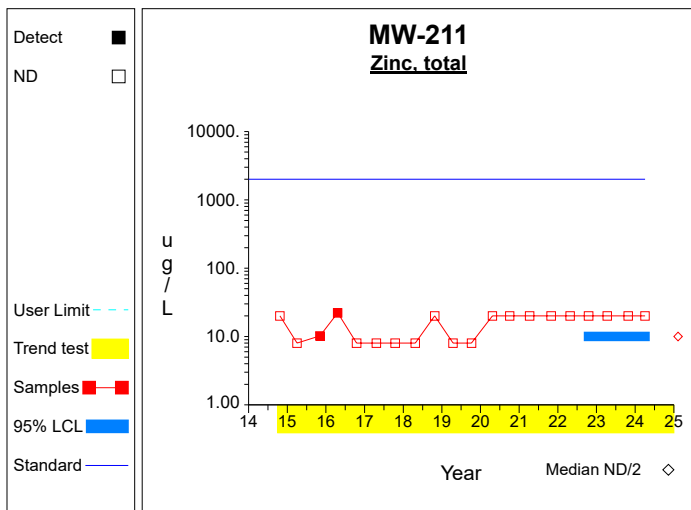
Graph 12



Graph 13

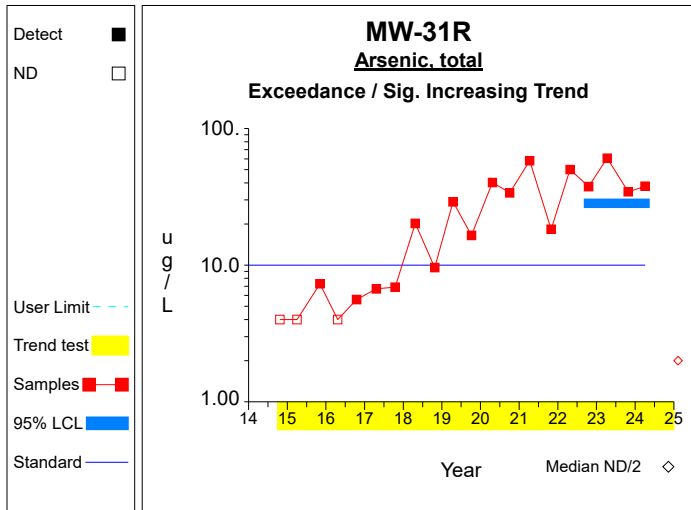


Graph 14

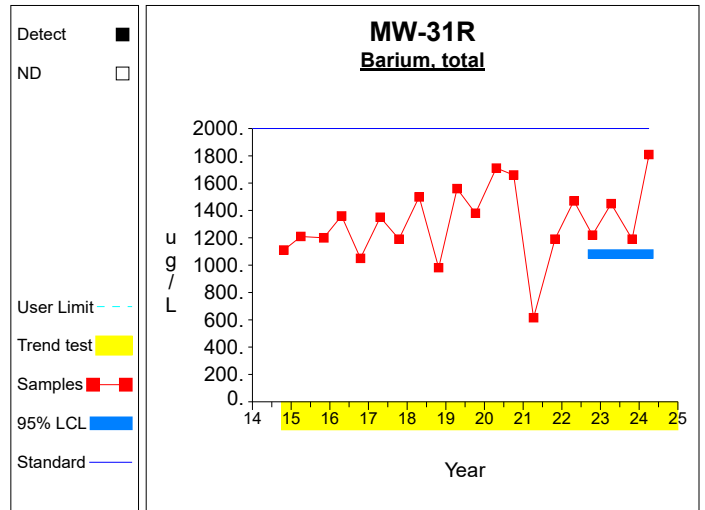


Graph 15

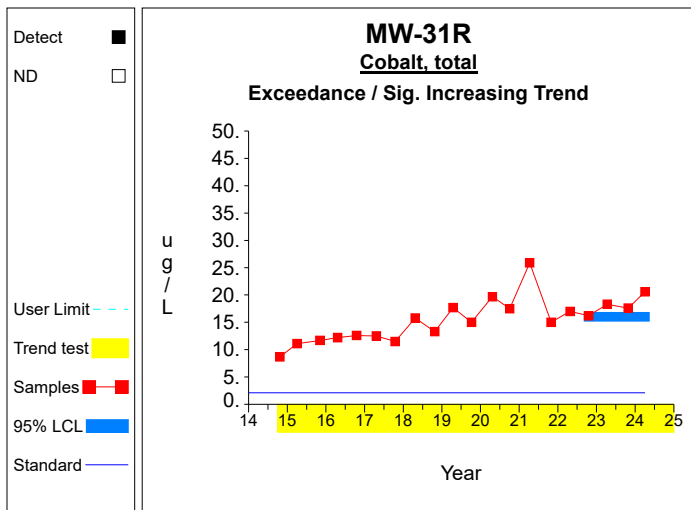
Confidence Limits (Assessment)



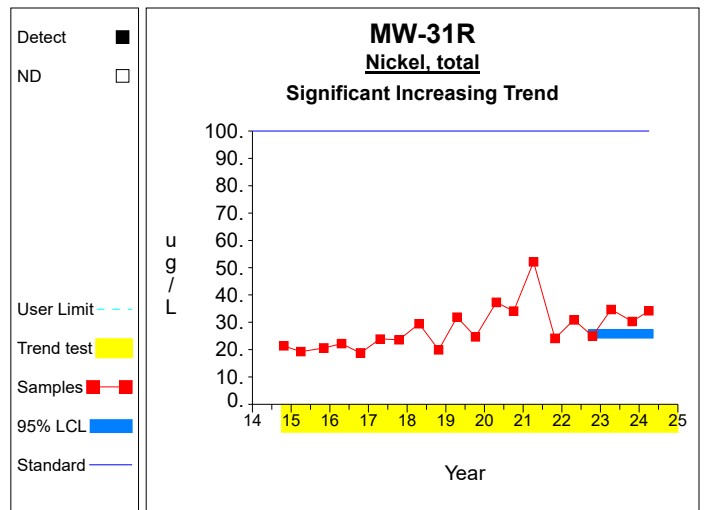
Graph 16



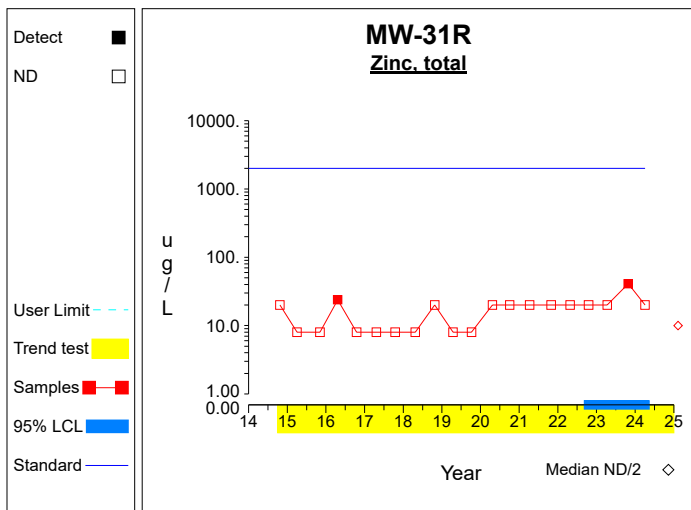
Graph 17



Graph 18

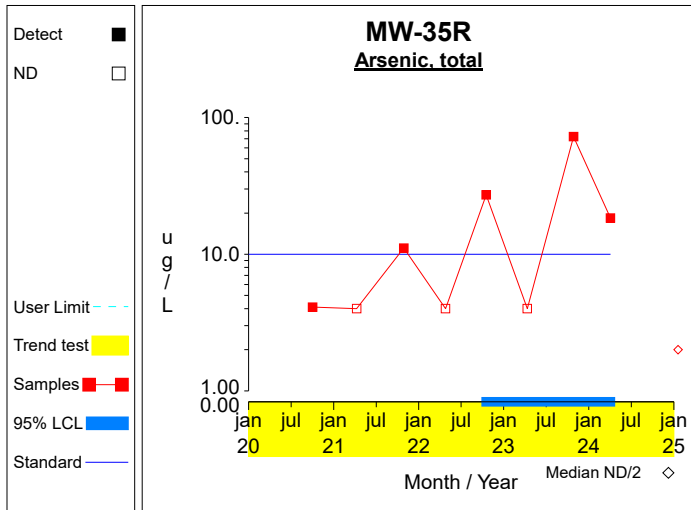


Graph 19

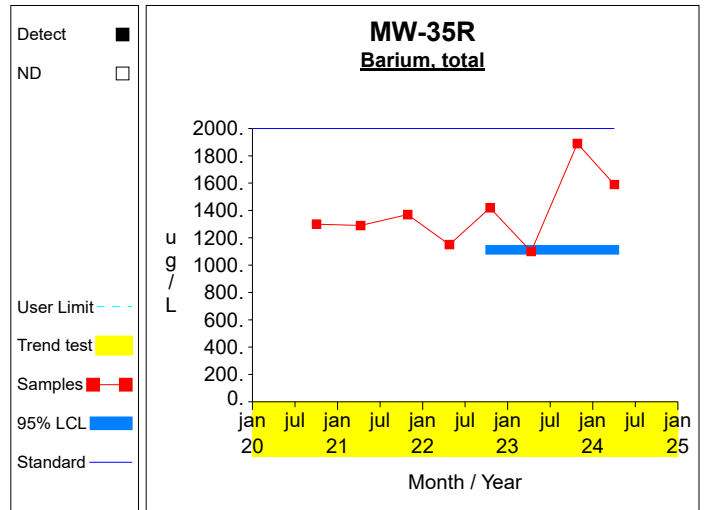


Graph 20

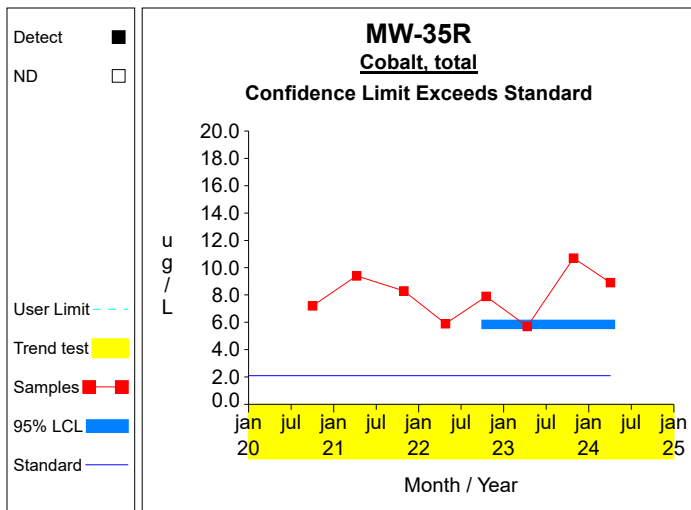
Confidence Limits (Assessment)



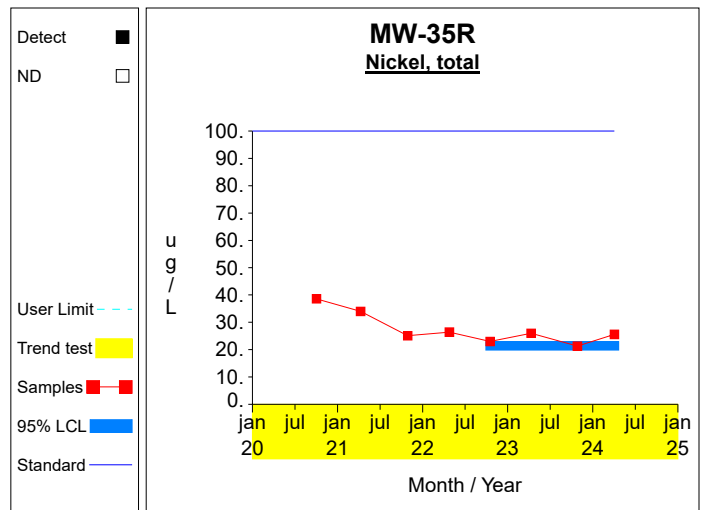
Graph 21



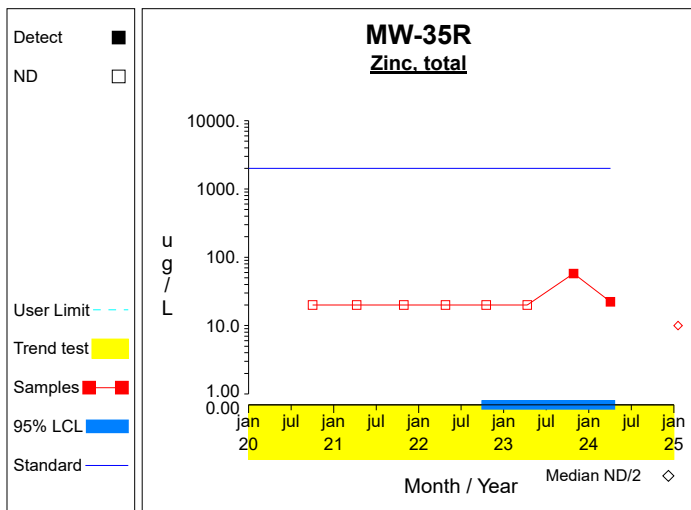
Graph 22



Graph 23

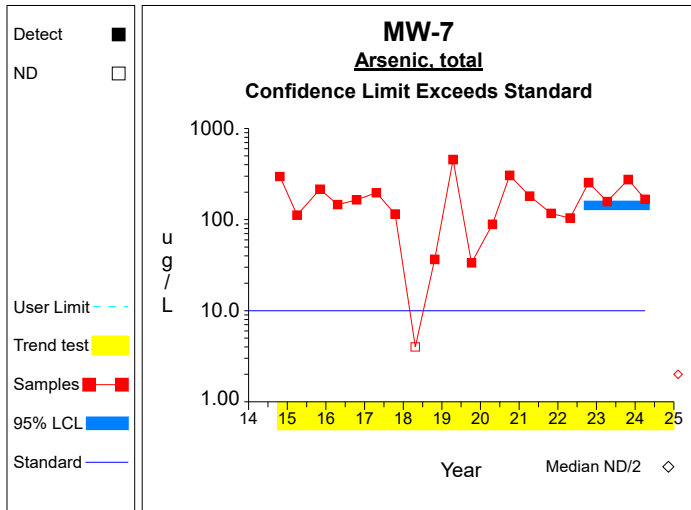


Graph 24

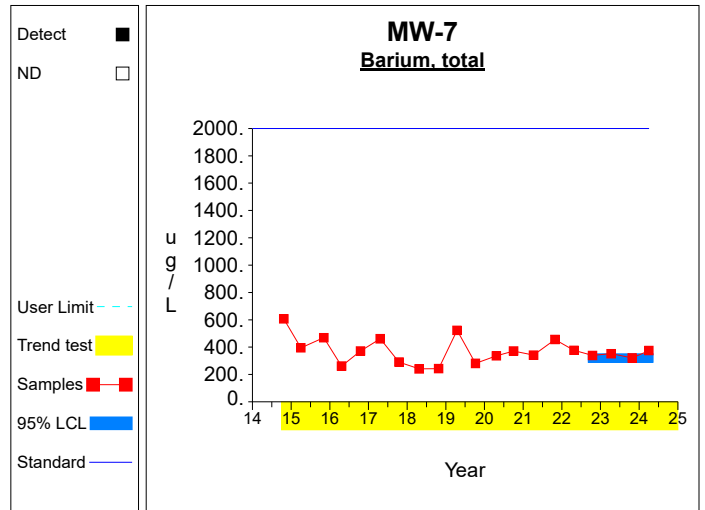


Graph 25

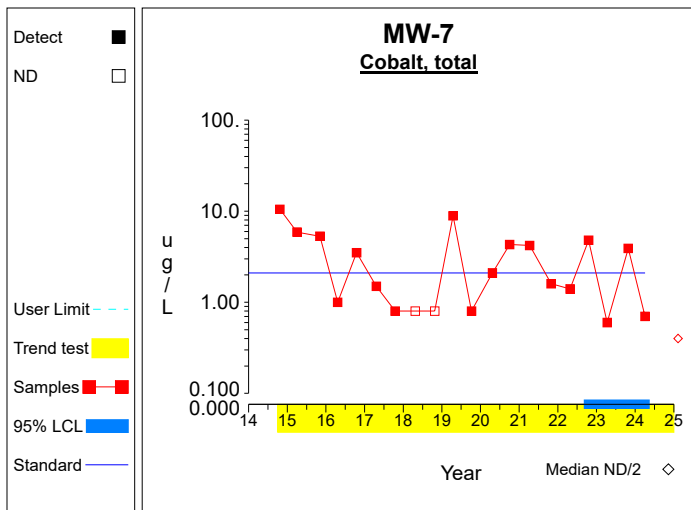
Confidence Limits (Assessment)



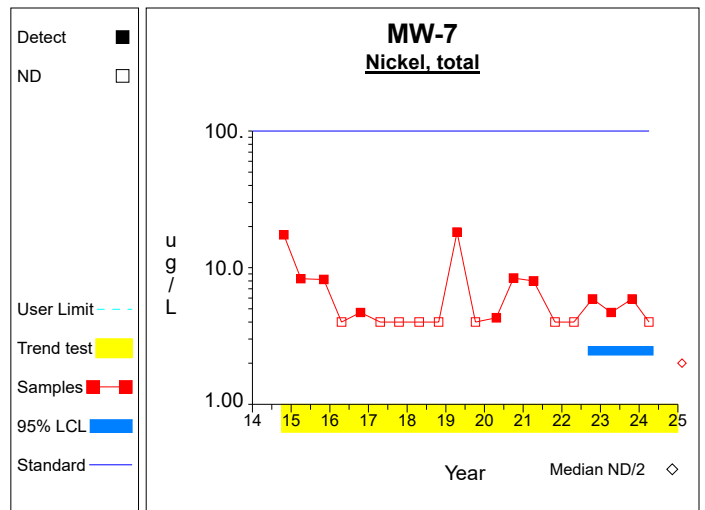
Graph 26



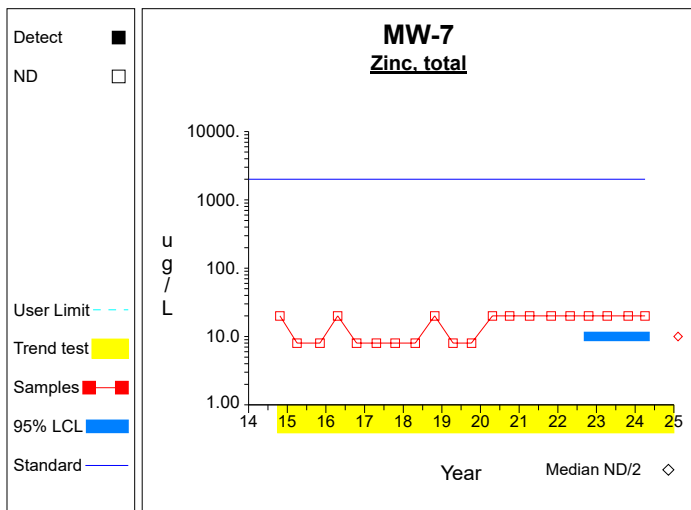
Graph 27



Graph 28

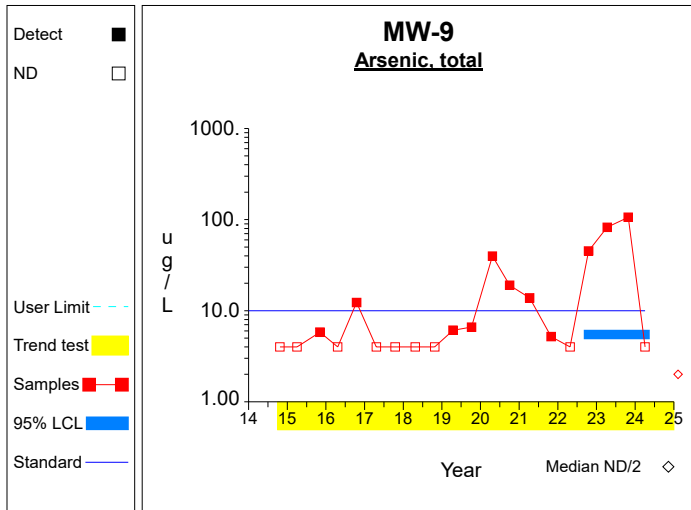


Graph 29

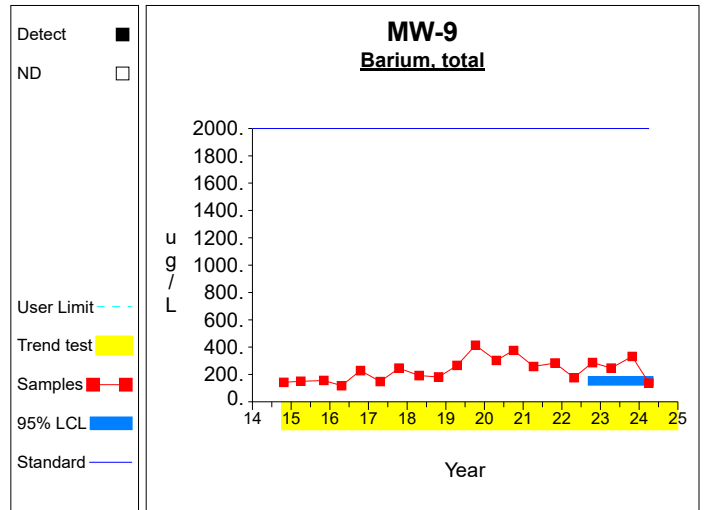


Graph 30

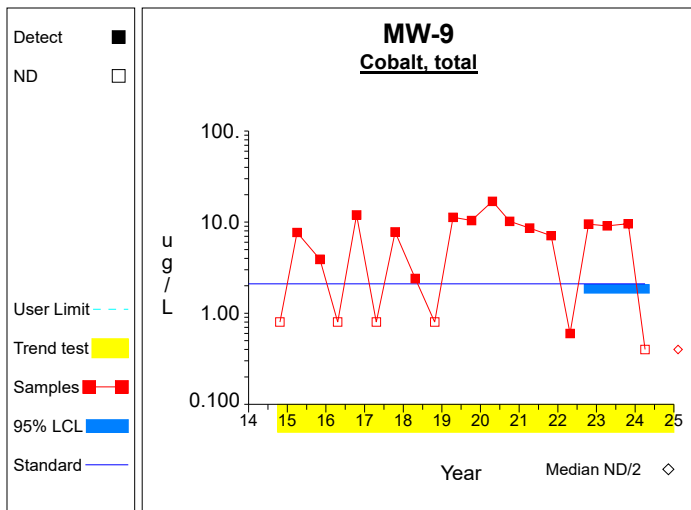
Confidence Limits (Assessment)



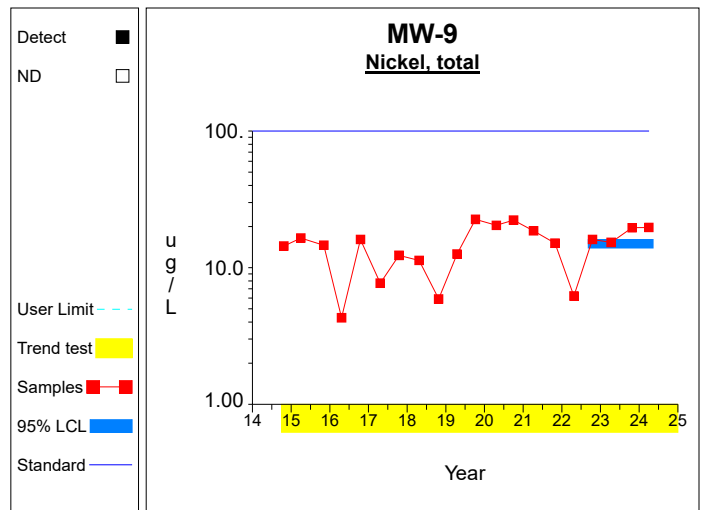
Graph 31



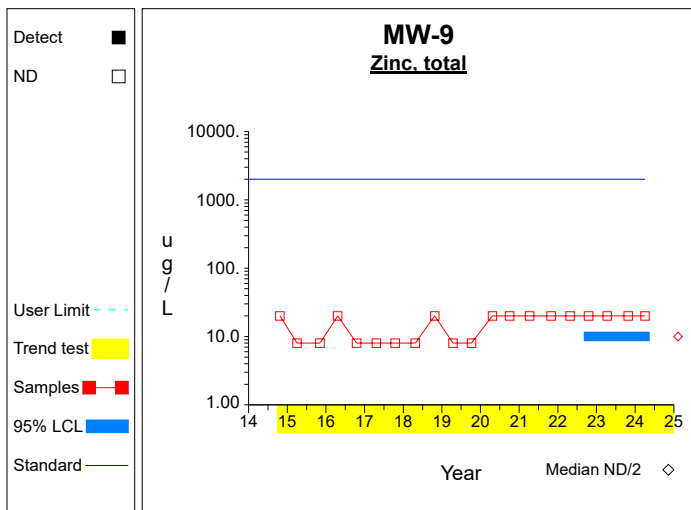
Graph 32



Graph 33



Graph 34



Graph 35

Attachment D

Summary Table of Historical VOC Detections

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Acetone	GU-3	4/08/2021		15.8	10.0	ug/L
(3 + 4)-methylphenol	MW-13R	10/16/2017		12	8	ug/L
1,1-dichloroethane	MW-13R	1/13/2011		1.1	1.0	ug/L
1,1-dichloroethane	MW-13R	4/08/2011		2.2	1.0	ug/L
1,1-dichloroethane	MW-13R	10/18/2011		1.4	1.0	ug/L
1,1-dichloroethane	MW-13R	4/18/2012		1.7	1.0	ug/L
1,1-dichloroethane	MW-13R	10/16/2012		1.2	1.0	ug/L
1,1-dichloroethane	MW-13R	10/09/2013		1.3	1.0	ug/L
1,2-dichloropropane	MW-13R	10/18/2011		1.0	1.0	ug/L
1,2-dichloropropane	MW-13R	4/18/2012		2.0	1.0	ug/L
1,2-dichloropropane	MW-13R	10/16/2012		1.4	1.0	ug/L
1,2-dichloropropane	MW-13R	10/23/2014		1.1	1.0	ug/L
1,2-dichloropropane	MW-13R	11/05/2015		1.1	1.0	ug/L
1,4-dichlorobenzene	MW-13R	11/05/2015		1.1	1.0	ug/L
1,4-dichlorobenzene	MW-13R	4/21/2016		1.1	1.0	ug/L
1,4-dichlorobenzene	MW-13R	10/17/2016		1.3	1.0	ug/L
1,4-dichlorobenzene	MW-13R	4/21/2017		1.2	1.0	ug/L
1,4-dichlorobenzene	MW-13R	10/16/2017		1.2	1.0	ug/L
1,4-dichlorobenzene	MW-13R	4/24/2018		1.1	1.0	ug/L
1,4-dichlorobenzene	MW-13R	10/25/2018		2.0	1.0	ug/L
1,4-dichlorobenzene	MW-13R	4/15/2019		1.2	1.0	ug/L
1,4-dichlorobenzene	MW-13R	4/22/2020		1.1	1.0	ug/L
1,4-dichlorobenzene	MW-13R	10/02/2020		1.3	1.0	ug/L
1,4-dichlorobenzene	MW-13R	4/08/2021		1.0	1.0	ug/L
1,4-dichlorobenzene	MW-13R	10/29/2021		1.4	1.0	ug/L
1,4-dichlorobenzene	MW-13R	4/25/2022		1.2	1.0	ug/L
1,4-dichlorobenzene	MW-13R	10/17/2022		1.4	1.0	ug/L
1,4-dichlorobenzene	MW-13R	4/10/2023		1.6	1.0	ug/L
1,4-dichlorobenzene	MW-13R	10/27/2023		1.0	1.0	ug/L
1,4-dichlorobenzene	MW-13R	4/02/2024		1.1	1.0	ug/L
Acetone	MW-13R	4/16/2014		29.4	10.0	ug/L
Benzene	MW-13R	1/13/2011		1.0	1.0	ug/L
Benzene	MW-13R	4/08/2011		3.0	1.0	ug/L
Benzene	MW-13R	10/18/2011		1.4	1.0	ug/L
Benzene	MW-13R	4/18/2012		4.9	1.0	ug/L
Benzene	MW-13R	10/16/2012		1.8	1.0	ug/L
Benzene	MW-13R	4/03/2013		3.4	1.0	ug/L
Benzene	MW-13R	10/09/2013		3.0	1.0	ug/L
Benzene	MW-13R	4/16/2014		2.2	1.0	ug/L
Benzene	MW-13R	10/23/2014		2.5	1.0	ug/L
Benzene	MW-13R	4/01/2015		6.2	1.0	ug/L
Benzene	MW-13R	11/05/2015		7.2	1.0	ug/L
Benzene	MW-13R	4/21/2016		7.1	1.0	ug/L
Benzene	MW-13R	10/17/2016		7.4	1.0	ug/L
Benzene	MW-13R	4/21/2017		6.0	1.0	ug/L
Benzene	MW-13R	10/16/2017		5.0	1.0	ug/L
Benzene	MW-13R	4/24/2018		5.0	1.0	ug/L
Benzene	MW-13R	10/25/2018		5.0	1.0	ug/L
Benzene	MW-13R	4/15/2019		4.9	1.0	ug/L
Benzene	MW-13R	10/07/2019		2.5	1.0	ug/L
Benzene	MW-13R	4/22/2020		4.6	1.0	ug/L
Benzene	MW-13R	10/02/2020		4.2	1.0	ug/L
Benzene	MW-13R	4/08/2021		3.6	1.0	ug/L
Benzene	MW-13R	10/29/2021		4.0	1.0	ug/L
Benzene	MW-13R	4/25/2022		4.9	1.0	ug/L
Benzene	MW-13R	10/17/2022		2.6	1.0	ug/L
Benzene	MW-13R	4/10/2023		5.1	1.0	ug/L
Benzene	MW-13R	10/27/2023		1.1	1.0	ug/L
Benzene	MW-13R	4/02/2024		2.1	1.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-13R	10/16/2012		9	8	ug/L
Bis(2-ethylhexyl) phthalate	MW-13R	10/16/2017		16	6	ug/L
Bis(2-ethylhexyl) phthalate	MW-13R	10/17/2022		7	6	ug/L
Chlorobenzene	MW-13R	1/13/2011		3.7	1.0	ug/L
Chlorobenzene	MW-13R	4/08/2011		10.7	1.0	ug/L
Chlorobenzene	MW-13R	10/18/2011		2.8	1.0	ug/L
Chlorobenzene	MW-13R	4/18/2012		17.6	1.0	ug/L
Chlorobenzene	MW-13R	10/16/2012		16.0	1.0	ug/L
Chlorobenzene	MW-13R	4/03/2013		18.6	1.0	ug/L
Chlorobenzene	MW-13R	10/09/2013		24.9	1.0	ug/L
Chlorobenzene	MW-13R	4/16/2014		15.0	1.0	ug/L
Chlorobenzene	MW-13R	10/23/2014		14.4	1.0	ug/L
Chlorobenzene	MW-13R	4/01/2015		24.8	1.0	ug/L
Chlorobenzene	MW-13R	11/05/2015		30.3	1.0	ug/L
Chlorobenzene	MW-13R	4/21/2016		23.2	1.0	ug/L
Chlorobenzene	MW-13R	10/17/2016		29.9	1.0	ug/L
Chlorobenzene	MW-13R	4/21/2017		26.4	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Chlorobenzene	MW-13R	10/16/2017		27.9	1.0	ug/L
Chlorobenzene	MW-13R	4/24/2018		30.4	1.0	ug/L
Chlorobenzene	MW-13R	10/25/2018		27.8	1.0	ug/L
Chlorobenzene	MW-13R	4/15/2019		29.1	1.0	ug/L
Chlorobenzene	MW-13R	10/07/2019		29.7	1.0	ug/L
Chlorobenzene	MW-13R	4/22/2020		27.7	1.0	ug/L
Chlorobenzene	MW-13R	10/02/2020		35.0	1.0	ug/L
Chlorobenzene	MW-13R	4/08/2021		34.1	1.0	ug/L
Chlorobenzene	MW-13R	10/29/2021		37.6	1.0	ug/L
Chlorobenzene	MW-13R	4/25/2022		37.2	1.0	ug/L
Chlorobenzene	MW-13R	10/17/2022		38.1	1.0	ug/L
Chlorobenzene	MW-13R	4/10/2023		43.9	1.0	ug/L
Chlorobenzene	MW-13R	10/27/2023		26.8	1.0	ug/L
Chlorobenzene	MW-13R	4/02/2024		36.7	1.0	ug/L
Chloroethane	MW-13R	1/13/2011		1	1	ug/L
Chloroethane	MW-13R	10/18/2011		1	1	ug/L
Cis-1,2-dichloroethylene	MW-13R	1/13/2011		3.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-13R	4/08/2011		2.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW-13R	10/18/2011		3.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-13R	4/18/2012		1.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-13R	10/16/2012		3.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-13R	4/03/2013		1.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-13R	10/09/2013		1.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-13R	4/16/2014		1.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-13R	10/23/2014		1.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-13R	4/01/2015		1.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-13R	11/05/2015		1.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-13R	10/17/2016		1.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-13R	10/16/2017		1.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-13R	10/17/2022		1.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-13R	10/27/2023		1.0	1.0	ug/L
Toluene	MW-13R	1/13/2011		127.0	1.0	ug/L
Toluene	MW-13R	10/16/2012		7.3	1.0	ug/L
Toluene	MW-13R	10/09/2013		7.9	1.0	ug/L
Toluene	MW-13R	4/16/2014		2.3	1.0	ug/L
Toluene	MW-13R	11/05/2015		1.1	1.0	ug/L
Toluene	MW-13R	10/16/2017		1.2	1.0	ug/L
Trans-1,2-dichloroethylene	MW-13R	4/08/2011		1.4	1.0	ug/L
Trans-1,2-dichloroethylene	MW-13R	4/18/2012		1.7	1.0	ug/L
Trans-1,2-dichloroethylene	MW-13R	10/16/2012		1.0	1.0	ug/L
Trans-1,2-dichloroethylene	MW-13R	4/03/2013		1.4	1.0	ug/L
Trans-1,2-dichloroethylene	MW-13R	10/09/2013		1.4	1.0	ug/L
Trans-1,2-dichloroethylene	MW-13R	4/16/2014		1.0	1.0	ug/L
Trans-1,2-dichloroethylene	MW-13R	10/23/2014		1.0	1.0	ug/L
Trans-1,2-dichloroethylene	MW-13R	11/05/2015		1.4	1.0	ug/L
Vinyl chloride	MW-13R	1/13/2011		1.2	1.0	ug/L
Vinyl chloride	MW-13R	4/08/2011		1.4	1.0	ug/L
Vinyl chloride	MW-13R	10/18/2011		1.0	1.0	ug/L
Vinyl chloride	MW-13R	10/16/2012		1.1	1.0	ug/L
Vinyl chloride	MW-13R	4/16/2014		2.5	1.0	ug/L
Vinyl chloride	MW-13R	10/23/2014		2.0	1.0	ug/L
Vinyl chloride	MW-13R	4/01/2015		4.8	1.0	ug/L
Vinyl chloride	MW-13R	11/05/2015		1.5	1.0	ug/L
1,1,1-trichloroethane	MW-14	10/05/1993		1.7	1.0	ug/L
1,1,1-trichloroethane	MW-14	1/13/1994		1.7	1.0	ug/L
1,1,1-trichloroethane	MW-14	4/23/1994		1.8	1.0	ug/L
1,1,1-trichloroethane	MW-14	7/13/1994		1.5	1.0	ug/L
1,1,1-trichloroethane	MW-14	4/13/1995		1.3	1.0	ug/L
1,1-dichloroethane	MW-14	10/14/2010		2.7	1.0	ug/L
1,1-dichloroethane	MW-14	4/08/2011		2.8	1.0	ug/L
1,1-dichloroethane	MW-14	10/18/2011		3.2	1.0	ug/L
1,1-dichloroethane	MW-14	4/18/2012		2.2	1.0	ug/L
1,1-dichloroethane	MW-14	10/17/2012		2.5	1.0	ug/L
1,1-dichloroethane	MW-14	4/03/2013		3.0	1.0	ug/L
1,1-dichloroethane	MW-14	10/09/2013		2.5	1.0	ug/L
1,1-dichloroethane	MW-14	4/16/2014		2.7	1.0	ug/L
1,1-dichloroethane	MW-14	10/23/2014		1.5	1.0	ug/L
1,1-dichloroethane	MW-14	4/01/2015		1.8	1.0	ug/L
1,1-dichloroethane	MW-14	11/05/2015		2.3	1.0	ug/L
1,1-dichloroethane	MW-14	4/21/2016		1.3	1.0	ug/L
1,1-dichloroethane	MW-14	10/17/2016		2.5	1.0	ug/L
1,1-dichloroethane	MW-14	10/02/2020		3.9	1.0	ug/L
1,1-dichloroethane	MW-14	4/08/2021		2.4	1.0	ug/L
1,1-dichloroethane	MW-14	10/29/2021		1.8	1.0	ug/L
1,4-dichlorobenzene	MW-14	4/23/1994		1.1	1.0	ug/L
1,4-dichlorobenzene	MW-14	10/18/2011		1.0	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,4-dichlorobenzene	MW-14	10/17/2012		1.2	1.0	ug/L
1,4-dichlorobenzene	MW-14	4/03/2013		1.4	1.0	ug/L
1,4-dichlorobenzene	MW-14	10/09/2013		1.8	1.0	ug/L
1,4-dichlorobenzene	MW-14	4/16/2014		2.2	1.0	ug/L
1,4-dichlorobenzene	MW-14	10/23/2014		2.6	1.0	ug/L
1,4-dichlorobenzene	MW-14	4/01/2015		1.0	1.0	ug/L
1,4-dichlorobenzene	MW-14	11/05/2015		2.1	1.0	ug/L
1,4-dichlorobenzene	MW-14	10/17/2016		1.0	1.0	ug/L
1,4-dichlorobenzene	MW-14	10/16/2017		1.6	1.0	ug/L
1,4-dichlorobenzene	MW-14	10/02/2020		1.8	1.0	ug/L
1,4-dichlorobenzene	MW-14	4/08/2021		1.9	1.0	ug/L
1,4-dichlorobenzene	MW-14	10/29/2021		3.2	1.0	ug/L
1,4-dichlorobenzene	MW-14	4/25/2022		1.7	1.0	ug/L
1,4-dichlorobenzene	MW-14	10/17/2022		2.4	1.0	ug/L
1,4-dichlorobenzene	MW-14	4/10/2023		1.8	1.0	ug/L
1,4-dichlorobenzene	MW-14	10/27/2023		2.4	1.0	ug/L
1,4-dichlorobenzene	MW-14	4/02/2024		3.6	1.0	ug/L
Benzene	MW-14	10/18/2011		1.5	1.0	ug/L
Benzene	MW-14	4/18/2012		1.6	1.0	ug/L
Benzene	MW-14	10/17/2012		1.0	1.0	ug/L
Benzene	MW-14	4/03/2013		1.3	1.0	ug/L
Benzene	MW-14	10/09/2013		1.7	1.0	ug/L
Benzene	MW-14	4/16/2014		1.6	1.0	ug/L
Benzene	MW-14	10/23/2014		1.0	1.0	ug/L
Benzene	MW-14	10/16/2017		2.5	1.0	ug/L
Benzene	MW-14	4/15/2019		1.9	1.0	ug/L
Benzene	MW-14	10/29/2021		2.0	1.0	ug/L
Benzene	MW-14	10/17/2022		1.4	1.0	ug/L
Benzene	MW-14	4/10/2023		1.1	1.0	ug/L
Benzene	MW-14	10/27/2023		1.2	1.0	ug/L
Benzene	MW-14	4/02/2024		2.6	1.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-14	10/16/2017		18	6	ug/L
Bis(2-ethylhexyl) phthalate	MW-14	10/17/2022		11	6	ug/L
Chlorobenzene	MW-14	10/25/2018		1.3	1.0	ug/L
Chlorobenzene	MW-14	4/02/2024		1.2	1.0	ug/L
Chloroethane	MW-14	10/14/2010		1.4	1.0	ug/L
Chloroethane	MW-14	4/08/2011		1.1	1.0	ug/L
Chloroethane	MW-14	10/18/2011		2.2	1.0	ug/L
Chloroethane	MW-14	4/18/2012		2.0	1.0	ug/L
Chloroethane	MW-14	10/17/2012		2.0	1.0	ug/L
Chloroethane	MW-14	4/03/2013		2.8	1.0	ug/L
Chloroethane	MW-14	10/09/2013		2.8	1.0	ug/L
Chloroethane	MW-14	4/16/2014		3.6	1.0	ug/L
Chloroethane	MW-14	10/23/2014		2.5	1.0	ug/L
Chloroethane	MW-14	11/05/2015		1.4	1.0	ug/L
Chloroethane	MW-14	4/15/2019		1.0	1.0	ug/L
Chloroethane	MW-14	10/07/2019		1.0	1.0	ug/L
Chloroethane	MW-14	10/02/2020		2.7	1.0	ug/L
Chloroethane	MW-14	4/08/2021		1.0	1.0	ug/L
Chloroethane	MW-14	10/29/2021		2.4	1.0	ug/L
Chloroethane	MW-14	10/17/2022		1.3	1.0	ug/L
Chloroethane	MW-14	4/10/2023		1.2	1.0	ug/L
Chloroethane	MW-14	10/27/2023		1.8	1.0	ug/L
Chloroethane	MW-14	4/02/2024		1.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-14	4/13/1995		13.8	2.0	ug/L
Cis-1,2-dichloroethylene	MW-14	10/04/1995		14.5	2.0	ug/L
Cis-1,2-dichloroethylene	MW-14	4/28/1998		19.2	2.0	ug/L
Cis-1,2-dichloroethylene	MW-14	10/29/1998		29.1	2.0	ug/L
Cis-1,2-dichloroethylene	MW-14	4/07/1999		13.5	2.0	ug/L
Cis-1,2-dichloroethylene	MW-14	10/15/1999		28.0	2.0	ug/L
Cis-1,2-dichloroethylene	MW-14	10/26/2000		94.0	2.0	ug/L
Cis-1,2-dichloroethylene	MW-14	4/19/2001		98.5	2.0	ug/L
Cis-1,2-dichloroethylene	MW-14	10/18/2001		89.0	2.0	ug/L
Cis-1,2-dichloroethylene	MW-14	4/04/2002		51.5	2.0	ug/L
Cis-1,2-dichloroethylene	MW-14	10/18/2002		49.9	2.0	ug/L
Cis-1,2-dichloroethylene	MW-14	10/09/2003		65.4	2.0	ug/L
Cis-1,2-dichloroethylene	MW-14	4/13/2004		46.9	2.0	ug/L
Cis-1,2-dichloroethylene	MW-14	10/18/2004		46.2	2.0	ug/L
Cis-1,2-dichloroethylene	MW-14	4/15/2005		25.6	2.0	ug/L
Cis-1,2-dichloroethylene	MW-14	10/10/2005		32.9	2.0	ug/L
Cis-1,2-dichloroethylene	MW-14	4/11/2006		21.1	2.0	ug/L
Cis-1,2-dichloroethylene	MW-14	10/12/2006		13.9	2.0	ug/L
Cis-1,2-dichloroethylene	MW-14	10/03/2007		3.0	2.0	ug/L
Cis-1,2-dichloroethylene	MW-14	4/09/2008		3.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-14	10/01/2008		5.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-14	4/07/2009		15.9	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Cis-1,2-dichloroethylene	MW-14	10/14/2010		2.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-14	4/08/2011		4.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW-14	10/18/2011		3.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-14	4/18/2012		2.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-14	10/17/2012		3.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-14	4/03/2013		3.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-14	10/09/2013		2.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-14	4/16/2014		2.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-14	10/23/2014		1.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-14	11/05/2015		1.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-14	10/17/2016		1.8	1.0	ug/L
Ethylbenzene	MW-14	4/15/2019		1.1	1.0	ug/L
Trichloroethylene	MW-14	10/05/1993		1.3	1.0	ug/L
Trichloroethylene	MW-14	1/13/1994		1.8	1.0	ug/L
Trichloroethylene	MW-14	4/23/1994		3.4	1.0	ug/L
Trichloroethylene	MW-14	7/13/1994		2.6	1.0	ug/L
Trichloroethylene	MW-14	10/04/1995		4.0	1.0	ug/L
Trichloroethylene	MW-14	4/28/1998		2.4	1.0	ug/L
Trichloroethylene	MW-14	10/15/1999		1.7	1.0	ug/L
Trichloroethylene	MW-14	10/26/2000		1.2	1.0	ug/L
Trichloroethylene	MW-14	4/13/2004		.3	.3	ug/L
Vinyl chloride	MW-14	4/13/1995		1.0	.2	ug/L
Vinyl chloride	MW-14	4/19/2001		2.9	2.0	ug/L
Vinyl chloride	MW-14	10/18/2001		1.5	1.0	ug/L
Vinyl chloride	MW-14	4/04/2002		1.3	1.0	ug/L
Vinyl chloride	MW-14	4/13/2004		2.2	2.0	ug/L
Vinyl chloride	MW-14	10/18/2004		3.1	2.0	ug/L
Vinyl chloride	MW-14	4/15/2005		1.4	1.0	ug/L
Vinyl chloride	MW-14	10/12/2006		1.3	1.0	ug/L
Vinyl chloride	MW-14	10/01/2008		1.0	1.0	ug/L
Vinyl chloride	MW-14	4/07/2009		1.9	1.0	ug/L
Vinyl chloride	MW-14	4/03/2013		1.0	1.0	ug/L
Vinyl chloride	MW-14	4/16/2014		1.0	1.0	ug/L
1,1-dichloroethane	MW-211	10/14/2010		3.7	1.0	ug/L
1,1-dichloroethane	MW-211	4/08/2011		5.2	1.0	ug/L
1,1-dichloroethane	MW-211	10/18/2011		4.0	1.0	ug/L
1,1-dichloroethane	MW-211	4/18/2012		3.1	1.0	ug/L
1,1-dichloroethane	MW-211	10/17/2012		2.4	1.0	ug/L
1,1-dichloroethane	MW-211	4/03/2013		2.6	1.0	ug/L
1,1-dichloroethane	MW-211	10/09/2013		1.0	1.0	ug/L
1,1-dichloroethane	MW-211	4/16/2014		1.5	1.0	ug/L
1,1-dichloroethane	MW-211	10/17/2016		2.0	1.0	ug/L
1,1-dichloroethane	MW-211	4/21/2017		1.2	1.0	ug/L
1,1-dichloroethane	MW-211	10/16/2017		1.4	1.0	ug/L
1,1-dichloroethane	MW-211	4/24/2018		1.0	1.0	ug/L
1,2-dichloropropane	MW-211	10/18/2011		2.6	1.0	ug/L
1,2-dichloropropane	MW-211	4/18/2012		2.1	1.0	ug/L
Benzene	MW-211	10/18/2011		1.2	1.0	ug/L
Benzene	MW-211	4/18/2012		2.2	1.0	ug/L
Benzene	MW-211	4/03/2013		1.1	1.0	ug/L
Benzene	MW-211	10/23/2014		2.8	1.0	ug/L
Benzene	MW-211	4/21/2017		1.5	1.0	ug/L
Benzene	MW-211	4/24/2018		1.6	1.0	ug/L
Benzene	MW-211	4/15/2019		1.0	1.0	ug/L
Benzene	MW-211	4/08/2021		1.5	1.0	ug/L
Benzene	MW-211	4/25/2022		1.5	1.0	ug/L
Chlorobenzene	MW-211	4/08/2011		4.6	1.0	ug/L
Chlorobenzene	MW-211	10/18/2011		5.5	1.0	ug/L
Chlorobenzene	MW-211	4/18/2012		6.7	1.0	ug/L
Chlorobenzene	MW-211	10/17/2012		3.6	1.0	ug/L
Chlorobenzene	MW-211	4/03/2013		4.6	1.0	ug/L
Chlorobenzene	MW-211	10/09/2013		3.7	1.0	ug/L
Chlorobenzene	MW-211	4/16/2014		3.9	1.0	ug/L
Chlorobenzene	MW-211	10/23/2014		10.6	1.0	ug/L
Chlorobenzene	MW-211	4/01/2015		7.6	1.0	ug/L
Chlorobenzene	MW-211	11/05/2015		10.5	1.0	ug/L
Chlorobenzene	MW-211	4/21/2016		8.1	1.0	ug/L
Chlorobenzene	MW-211	10/17/2016		8.8	1.0	ug/L
Chlorobenzene	MW-211	4/21/2017		8.3	1.0	ug/L
Chlorobenzene	MW-211	10/16/2017		8.2	1.0	ug/L
Chlorobenzene	MW-211	4/24/2018		8.7	1.0	ug/L
Chlorobenzene	MW-211	10/25/2018		6.2	1.0	ug/L
Chlorobenzene	MW-211	4/15/2019		7.5	1.0	ug/L
Chlorobenzene	MW-211	10/07/2019		5.9	1.0	ug/L
Chlorobenzene	MW-211	4/22/2020		6.1	1.0	ug/L
Chlorobenzene	MW-211	10/02/2020		5.2	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Chlorobenzene	MW-211	4/08/2021		5.3	1.0	ug/L
Chlorobenzene	MW-211	10/29/2021		5.6	1.0	ug/L
Chlorobenzene	MW-211	4/25/2022		5.0	1.0	ug/L
Chlorobenzene	MW-211	10/17/2022		5.2	1.0	ug/L
Chlorobenzene	MW-211	4/10/2023		4.1	1.0	ug/L
Chlorobenzene	MW-211	10/27/2023		1.7	1.0	ug/L
Chlorobenzene	MW-211	4/02/2024		4.4	1.0	ug/L
Chloroethane	MW-211	10/14/2010		3.3	1.0	ug/L
Chloroethane	MW-211	4/08/2011		4.5	1.0	ug/L
Chloroethane	MW-211	10/18/2011		3.2	1.0	ug/L
Chloroethane	MW-211	4/18/2012		2.9	1.0	ug/L
Chloroethane	MW-211	10/17/2012		2.0	1.0	ug/L
Chloroethane	MW-211	4/03/2013		1.5	1.0	ug/L
Chloroethane	MW-211	4/16/2014		1.5	1.0	ug/L
Chloroethane	MW-211	10/23/2014		1.3	1.0	ug/L
Chloroethane	MW-211	11/05/2015		1.4	1.0	ug/L
Chloroethane	MW-211	4/21/2016		1.2	1.0	ug/L
Chloroethane	MW-211	10/17/2016		2.7	1.0	ug/L
Chloroethane	MW-211	4/21/2017		2.1	1.0	ug/L
Chloroethane	MW-211	10/16/2017		2.4	1.0	ug/L
Chloroethane	MW-211	4/24/2018		2.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-211	10/14/2010		3.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-211	4/08/2011		6.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-211	10/18/2011		4.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-211	4/18/2012		4.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-211	10/17/2012		3.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-211	4/03/2013		3.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-211	10/09/2013		1.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-211	4/16/2014		1.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-211	10/23/2014		1.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-211	4/01/2015		1.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-211	11/05/2015		1.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-211	4/21/2016		1.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-211	10/17/2016		3.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-211	4/21/2017		1.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-211	10/16/2017		2.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-211	4/24/2018		1.0	1.0	ug/L
1,1-dichloroethane	MW-31R	4/18/2012		9.5	1.0	ug/L
1,1-dichloroethane	MW-31R	10/17/2012		10.5	1.0	ug/L
1,1-dichloroethane	MW-31R	4/03/2013		14.4	1.0	ug/L
1,1-dichloroethane	MW-31R	10/09/2013		8.2	1.0	ug/L
1,1-dichloroethane	MW-31R	4/16/2014		16.6	1.0	ug/L
1,1-dichloroethane	MW-31R	10/23/2014		4.4	1.0	ug/L
1,1-dichloroethane	MW-31R	4/01/2015		5.8	1.0	ug/L
1,1-dichloroethane	MW-31R	11/05/2015		4.7	1.0	ug/L
1,1-dichloroethane	MW-31R	4/21/2016		1.9	1.0	ug/L
1,1-dichloroethane	MW-31R	10/17/2016		2.0	1.0	ug/L
1,1-dichloroethane	MW-31R	4/21/2017		2.0	1.0	ug/L
1,1-dichloroethane	MW-31R	10/16/2017		1.7	1.0	ug/L
1,1-dichloroethane	MW-31R	4/24/2018		2.9	1.0	ug/L
1,1-dichloroethane	MW-31R	4/15/2019		2.6	1.0	ug/L
1,1-dichloroethane	MW-31R	10/07/2019		1.4	1.0	ug/L
1,1-dichloroethane	MW-31R	4/22/2020		2.9	1.0	ug/L
1,1-dichloroethane	MW-31R	10/02/2020		2.9	1.0	ug/L
1,1-dichloroethane	MW-31R	4/08/2021		2.8	1.0	ug/L
1,1-dichloroethane	MW-31R	10/29/2021		2.9	1.0	ug/L
1,1-dichloroethane	MW-31R	4/25/2022		2.9	1.0	ug/L
1,1-dichloroethane	MW-31R	10/17/2022		3.1	1.0	ug/L
1,1-dichloroethane	MW-31R	4/10/2023		2.8	1.0	ug/L
1,1-dichloroethane	MW-31R	10/27/2023		2.9	1.0	ug/L
1,1-dichloroethane	MW-31R	4/02/2024		3.3	1.0	ug/L
1,4-dichlorobenzene	MW-31R	10/09/2013		1.0	1.0	ug/L
1,4-dichlorobenzene	MW-31R	11/05/2015		3.2	1.0	ug/L
1,4-dichlorobenzene	MW-31R	4/21/2016		5.5	1.0	ug/L
1,4-dichlorobenzene	MW-31R	10/17/2016		7.8	1.0	ug/L
1,4-dichlorobenzene	MW-31R	4/21/2017		6.9	1.0	ug/L
1,4-dichlorobenzene	MW-31R	10/16/2017		6.0	1.0	ug/L
1,4-dichlorobenzene	MW-31R	4/24/2018		11.3	1.0	ug/L
1,4-dichlorobenzene	MW-31R	10/25/2018		9.5	1.0	ug/L
1,4-dichlorobenzene	MW-31R	4/15/2019		15.6	1.0	ug/L
1,4-dichlorobenzene	MW-31R	10/07/2019		16.6	1.0	ug/L
1,4-dichlorobenzene	MW-31R	4/22/2020		16.8	1.0	ug/L
1,4-dichlorobenzene	MW-31R	10/02/2020		15.1	1.0	ug/L
1,4-dichlorobenzene	MW-31R	4/08/2021		15.2	1.0	ug/L
1,4-dichlorobenzene	MW-31R	10/29/2021		17.7	1.0	ug/L
1,4-dichlorobenzene	MW-31R	4/25/2022		17.8	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,4-dichlorobenzene	MW-31R	10/17/2022		17.7	1.0	ug/L
1,4-dichlorobenzene	MW-31R	4/10/2023		21.6	1.0	ug/L
1,4-dichlorobenzene	MW-31R	10/27/2023		15.4	1.0	ug/L
1,4-dichlorobenzene	MW-31R	4/02/2024		14.5	1.0	ug/L
Benzene	MW-31R	4/18/2012		2.7	1.0	ug/L
Benzene	MW-31R	10/17/2012		1.3	1.0	ug/L
Benzene	MW-31R	4/03/2013		2.3	1.0	ug/L
Benzene	MW-31R	10/09/2013		2.3	1.0	ug/L
Benzene	MW-31R	4/16/2014		2.2	1.0	ug/L
Benzene	MW-31R	10/23/2014		2.0	1.0	ug/L
Benzene	MW-31R	4/01/2015		2.0	1.0	ug/L
Benzene	MW-31R	11/05/2015		2.5	1.0	ug/L
Benzene	MW-31R	4/21/2016		3.1	1.0	ug/L
Benzene	MW-31R	10/17/2016		3.2	1.0	ug/L
Benzene	MW-31R	4/21/2017		2.6	1.0	ug/L
Benzene	MW-31R	10/16/2017		2.6	1.0	ug/L
Benzene	MW-31R	4/24/2018		2.9	1.0	ug/L
Benzene	MW-31R	4/15/2019		2.3	1.0	ug/L
Benzene	MW-31R	4/22/2020		2.0	1.0	ug/L
Benzene	MW-31R	10/02/2020		1.7	1.0	ug/L
Benzene	MW-31R	4/08/2021		1.9	1.0	ug/L
Benzene	MW-31R	10/29/2021		2.3	1.0	ug/L
Benzene	MW-31R	4/25/2022		2.5	1.0	ug/L
Benzene	MW-31R	10/17/2022		1.8	1.0	ug/L
Benzene	MW-31R	4/10/2023		1.9	1.0	ug/L
Benzene	MW-31R	10/27/2023		1.4	1.0	ug/L
Benzene	MW-31R	4/02/2024		2.1	1.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-31R	4/03/2013		22	8	ug/L
Bis(2-ethylhexyl) phthalate	MW-31R	10/23/2014		64	10	ug/L
Bis(2-ethylhexyl) phthalate	MW-31R	10/27/2023		9	6	ug/L
Chlorobenzene	MW-31R	4/16/2014		1.1	1.0	ug/L
Chlorobenzene	MW-31R	4/01/2015		1.2	1.0	ug/L
Chlorobenzene	MW-31R	11/05/2015		3.0	1.0	ug/L
Chlorobenzene	MW-31R	4/21/2016		5.0	1.0	ug/L
Chlorobenzene	MW-31R	10/17/2016		7.2	1.0	ug/L
Chlorobenzene	MW-31R	4/21/2017		6.4	1.0	ug/L
Chlorobenzene	MW-31R	10/16/2017		7.9	1.0	ug/L
Chlorobenzene	MW-31R	4/24/2018		12.0	1.0	ug/L
Chlorobenzene	MW-31R	10/25/2018		10.5	1.0	ug/L
Chlorobenzene	MW-31R	4/15/2019		13.8	1.0	ug/L
Chlorobenzene	MW-31R	10/07/2019		13.3	1.0	ug/L
Chlorobenzene	MW-31R	4/22/2020		15.0	1.0	ug/L
Chlorobenzene	MW-31R	10/02/2020		13.8	1.0	ug/L
Chlorobenzene	MW-31R	4/08/2021		15.6	1.0	ug/L
Chlorobenzene	MW-31R	10/29/2021		17.4	1.0	ug/L
Chlorobenzene	MW-31R	4/25/2022		18.6	1.0	ug/L
Chlorobenzene	MW-31R	10/17/2022		19.8	1.0	ug/L
Chlorobenzene	MW-31R	4/10/2023		25.0	1.0	ug/L
Chlorobenzene	MW-31R	10/27/2023		18.6	1.0	ug/L
Chlorobenzene	MW-31R	4/02/2024		21.0	1.0	ug/L
Chloroethane	MW-31R	4/18/2012		5.4	1.0	ug/L
Chloroethane	MW-31R	10/17/2012		5.5	1.0	ug/L
Chloroethane	MW-31R	4/03/2013		6.9	1.0	ug/L
Chloroethane	MW-31R	10/09/2013		5.4	1.0	ug/L
Chloroethane	MW-31R	4/16/2014		8.3	1.0	ug/L
Chloroethane	MW-31R	10/23/2014		3.9	1.0	ug/L
Chloroethane	MW-31R	11/05/2015		4.1	1.0	ug/L
Chloroethane	MW-31R	4/21/2016		2.8	1.0	ug/L
Chloroethane	MW-31R	10/17/2016		3.7	1.0	ug/L
Chloroethane	MW-31R	4/21/2017		3.4	1.0	ug/L
Chloroethane	MW-31R	4/24/2018		4.8	1.0	ug/L
Chloroethane	MW-31R	10/25/2018		3.4	1.0	ug/L
Chloroethane	MW-31R	4/15/2019		3.3	1.0	ug/L
Chloroethane	MW-31R	10/07/2019		3.4	1.0	ug/L
Chloroethane	MW-31R	4/22/2020		3.4	1.0	ug/L
Chloroethane	MW-31R	10/02/2020		2.9	1.0	ug/L
Chloroethane	MW-31R	4/08/2021		3.0	1.0	ug/L
Chloroethane	MW-31R	10/29/2021		2.9	1.0	ug/L
Chloroethane	MW-31R	4/25/2022		3.7	1.0	ug/L
Chloroethane	MW-31R	10/17/2022		3.3	1.0	ug/L
Chloroethane	MW-31R	4/10/2023		3.6	1.0	ug/L
Chloroethane	MW-31R	10/27/2023		3.4	1.0	ug/L
Chloroethane	MW-31R	4/02/2024		3.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	4/18/2012		137.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	10/17/2012		142.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	4/03/2013		165.0	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Cis-1,2-dichloroethylene	MW-31R	10/09/2013		112.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	4/16/2014		185.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	10/23/2014		116.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	4/01/2015		110.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	11/05/2015		80.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	4/21/2016		59.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	10/17/2016		45.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	4/21/2017		39.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	10/16/2017		38.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	4/24/2018		39.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	10/25/2018		26.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	4/15/2019		26.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	10/07/2019		25.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	4/22/2020		20.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	10/02/2020		34.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	4/08/2021		23.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	10/29/2021		18.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	4/25/2022		24.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	10/17/2022		22.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	4/10/2023		11.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	10/27/2023		17.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	4/02/2024		19.9	1.0	ug/L
Dichlorodifluoromethane	MW-31R	4/03/2013		1.3	1.0	ug/L
Dichlorodifluoromethane	MW-31R	4/16/2014		1.5	1.0	ug/L
Dichlorodifluoromethane	MW-31R	10/23/2014		1.2	1.0	ug/L
Disulfoton	MW-31R	10/27/2023		2.9	.4	ug/L
Ethylbenzene	MW-31R	4/02/2024		1	1	ug/L
Trans-1,2-dichloroethylene	MW-31R	4/18/2012		11.1	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	10/17/2012		8.2	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	4/03/2013		13.0	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	10/09/2013		12.0	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	4/16/2014		13.7	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	10/23/2014		9.2	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	4/01/2015		6.5	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	11/05/2015		6.8	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	4/21/2016		3.7	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	10/17/2016		3.7	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	4/21/2017		3.5	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	10/16/2017		3.8	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	4/24/2018		3.9	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	4/15/2019		2.7	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	10/07/2019		1.8	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	4/22/2020		2.9	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	10/02/2020		3.7	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	4/08/2021		2.1	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	10/29/2021		2.6	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	4/25/2022		2.4	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	10/17/2022		2.6	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	4/10/2023		1.6	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	10/27/2023		2.3	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	4/02/2024		2.5	1.0	ug/L
Vinyl chloride	MW-31R	4/18/2012		5.4	1.0	ug/L
Vinyl chloride	MW-31R	10/17/2012		4.0	1.0	ug/L
Vinyl chloride	MW-31R	4/03/2013		3.8	1.0	ug/L
Vinyl chloride	MW-31R	10/09/2013		4.5	1.0	ug/L
Vinyl chloride	MW-31R	4/16/2014		4.1	1.0	ug/L
Vinyl chloride	MW-31R	10/23/2014		4.0	1.0	ug/L
Vinyl chloride	MW-31R	4/01/2015		2.7	1.0	ug/L
Vinyl chloride	MW-31R	11/05/2015		2.2	1.0	ug/L
Vinyl chloride	MW-31R	4/21/2016		2.3	1.0	ug/L
Vinyl chloride	MW-31R	10/17/2016		2.0	1.0	ug/L
Vinyl chloride	MW-31R	4/21/2017		1.1	1.0	ug/L
Vinyl chloride	MW-31R	4/24/2018		1.3	1.0	ug/L
1,1-dichloroethane	MW-35	10/14/2010		7.3	1.0	ug/L
1,1-dichloroethane	MW-35	4/08/2011		10.1	1.0	ug/L
1,1-dichloroethane	MW-35	10/18/2011		5.0	1.0	ug/L
1,1-dichloroethane	MW-35	4/18/2012		4.2	1.0	ug/L
1,1-dichloroethane	MW-35	10/16/2012		3.2	1.0	ug/L
1,1-dichloroethane	MW-35	4/03/2013		2.1	1.0	ug/L
1,1-dichloroethane	MW-35	10/09/2013		2.2	1.0	ug/L
1,1-dichloroethane	MW-35	4/16/2014		1.1	1.0	ug/L
1,1-dichloroethane	MW-35	10/23/2014		1.0	1.0	ug/L
1,1-dichloroethane	MW-35	4/01/2015		1.2	1.0	ug/L
1,1-dichloroethane	MW-35	7/08/2015		2.3	1.0	ug/L
1,1-dichloroethane	MW-35	10/17/2016		10.8	1.0	ug/L
1,1-dichloroethane	MW-35	4/21/2017		9.8	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,1-dichloroethane	MW-35	10/16/2017		9.8	1.0	ug/L
1,1-dichloroethane	MW-35	4/24/2018		12.0	1.0	ug/L
1,1-dichloroethane	MW-35	10/25/2018		5.5	1.0	ug/L
1,1-dichloroethane	MW-35	4/15/2019		5.7	1.0	ug/L
1,1-dichloroethane	MW-35	10/07/2019		5.7	1.0	ug/L
1,1-dichloroethane	MW-35	4/22/2020		5.0	1.0	ug/L
Benzene	MW-35	10/17/2016		1.1	1.0	ug/L
Benzene	MW-35	10/16/2017		1.3	1.0	ug/L
Benzene	MW-35	4/24/2018		1.4	1.0	ug/L
Chloroethane	MW-35	10/14/2010		4.7	1.0	ug/L
Chloroethane	MW-35	4/08/2011		6.8	1.0	ug/L
Chloroethane	MW-35	10/18/2011		1.9	1.0	ug/L
Chloroethane	MW-35	4/18/2012		1.1	1.0	ug/L
Chloroethane	MW-35	10/16/2012		1.0	1.0	ug/L
Chloroethane	MW-35	10/17/2016		28.2	1.0	ug/L
Chloroethane	MW-35	4/21/2017		21.8	1.0	ug/L
Chloroethane	MW-35	10/16/2017		16.7	1.0	ug/L
Chloroethane	MW-35	4/24/2018		28.9	1.0	ug/L
Chloroethane	MW-35	4/15/2019		11.2	1.0	ug/L
Chloroethane	MW-35	10/07/2019		16.8	1.0	ug/L
Chloroethane	MW-35	4/22/2020		10.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-35	10/14/2010		4.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-35	4/08/2011		13.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-35	10/18/2011		3.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW-35	4/18/2012		2.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-35	10/16/2012		1.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-35	10/17/2016		9.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-35	4/21/2017		6.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-35	10/16/2017		9.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-35	4/24/2018		13.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-35	10/25/2018		4.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-35	4/15/2019		5.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-35	10/07/2019		4.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-35	4/22/2020		3.2	1.0	ug/L
Vinyl chloride	MW-35	10/17/2016		1.8	1.0	ug/L
Vinyl chloride	MW-35	4/21/2017		1.2	1.0	ug/L
Vinyl chloride	MW-35	4/24/2018		2.1	1.0	ug/L
1,1-dichloroethane	MW-35R	10/01/2020		5.1	1.0	ug/L
1,1-dichloroethane	MW-35R	4/08/2021		4.9	1.0	ug/L
1,1-dichloroethane	MW-35R	10/29/2021		1.4	1.0	ug/L
1,1-dichloroethane	MW-35R	4/25/2022		2.0	1.0	ug/L
1,1-dichloroethane	MW-35R	4/10/2023		3.1	1.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-35R	10/17/2022		78	6	ug/L
Bis(2-ethylhexyl) phthalate	MW-35R	1/05/2023		79	6	ug/L
Bis(2-ethylhexyl) phthalate	MW-35R	4/10/2023		6	6	ug/L
Bis(2-ethylhexyl) phthalate	MW-35R	10/27/2023		15	6	ug/L
Chloroethane	MW-35R	10/01/2020		19.2	1.0	ug/L
Chloroethane	MW-35R	4/08/2021		11.7	1.0	ug/L
Chloroethane	MW-35R	10/29/2021		2.3	1.0	ug/L
Chloroethane	MW-35R	4/25/2022		5.8	1.0	ug/L
Chloroethane	MW-35R	10/17/2022		2.2	1.0	ug/L
Chloroethane	MW-35R	4/10/2023		2.7	1.0	ug/L
Chloroethane	MW-35R	10/27/2023		1.4	1.0	ug/L
Chloroethane	MW-35R	4/02/2024		2.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-35R	10/01/2020		4.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-35R	4/08/2021		4.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-35R	10/29/2021		1.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-35R	4/25/2022		1.6	1.0	ug/L
Vinyl chloride	MW-35R	10/01/2020		1.1	1.0	ug/L
Acetone	MW-37	10/16/2017		18.6	10.0	ug/L
Acetone	MW-39	10/16/2017		11	10	ug/L
1,1-dichloroethane	MW-7	10/14/2010		13.5	1.0	ug/L
1,1-dichloroethane	MW-7	4/08/2011		13.3	1.0	ug/L
1,1-dichloroethane	MW-7	10/18/2011		6.5	1.0	ug/L
1,1-dichloroethane	MW-7	4/18/2012		6.7	1.0	ug/L
1,1-dichloroethane	MW-7	10/16/2012		1.5	1.0	ug/L
1,1-dichloroethane	MW-7	4/03/2013		2.5	1.0	ug/L
1,1-dichloroethane	MW-7	10/17/2016		1.7	1.0	ug/L
1,1-dichloroethane	MW-7	4/15/2019		2.9	1.0	ug/L
1,1-dichloroethane	MW-7	4/22/2020		1.7	1.0	ug/L
1,1-dichloroethane	MW-7	4/08/2021		1.2	1.0	ug/L
1,1-dichloroethane	MW-7	4/25/2022		1.0	1.0	ug/L
Benzene	MW-7	4/08/2011		2.4	1.0	ug/L
Benzene	MW-7	10/18/2011		1.3	1.0	ug/L
Benzene	MW-7	4/18/2012		1.8	1.0	ug/L
Benzene	MW-7	4/03/2013		1.1	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Benzene	MW-7	4/25/2022		1.4	1.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-7	4/18/2012		15	8	ug/L
Bis(2-ethylhexyl) phthalate	MW-7	10/17/2022		9	6	ug/L
Chloroethane	MW-7	10/14/2010		30.3	1.0	ug/L
Chloroethane	MW-7	4/08/2011		41.4	1.0	ug/L
Chloroethane	MW-7	10/18/2011		19.0	1.0	ug/L
Chloroethane	MW-7	4/18/2012		21.0	1.0	ug/L
Chloroethane	MW-7	10/16/2012		5.8	1.0	ug/L
Chloroethane	MW-7	4/03/2013		11.6	1.0	ug/L
Chloroethane	MW-7	10/09/2013		3.6	1.0	ug/L
Chloroethane	MW-7	4/16/2014		4.1	1.0	ug/L
Chloroethane	MW-7	10/23/2014		2.0	1.0	ug/L
Chloroethane	MW-7	11/05/2015		4.4	1.0	ug/L
Chloroethane	MW-7	4/21/2016		1.0	1.0	ug/L
Chloroethane	MW-7	10/17/2016		13.5	1.0	ug/L
Chloroethane	MW-7	4/21/2017		3.9	1.0	ug/L
Chloroethane	MW-7	10/16/2017		4.4	1.0	ug/L
Chloroethane	MW-7	4/15/2019		8.0	1.0	ug/L
Chloroethane	MW-7	4/22/2020		5.1	1.0	ug/L
Chloroethane	MW-7	10/01/2020		3.7	1.0	ug/L
Chloroethane	MW-7	4/08/2021		6.8	1.0	ug/L
Chloroethane	MW-7	4/25/2022		6.5	1.0	ug/L
Chloroethane	MW-7	10/17/2022		2.6	1.0	ug/L
Chloroethane	MW-7	4/10/2023		3.8	1.0	ug/L
Chloroethane	MW-7	10/27/2023		1.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	10/14/2010		9.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	4/08/2011		14.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	10/18/2011		5.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	4/18/2012		9.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	10/16/2012		1.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	4/03/2013		3.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	4/16/2014		1.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	10/17/2016		1.0	1.0	ug/L
Dichlorodifluoromethane	MW-7	4/18/2012		1	1	ug/L
Vinyl chloride	MW-7	10/14/2010		2.1	1.0	ug/L
Vinyl chloride	MW-7	4/08/2011		3.0	1.0	ug/L
Vinyl chloride	MW-7	10/18/2011		1.4	1.0	ug/L
Vinyl chloride	MW-7	4/18/2012		1.6	1.0	ug/L
Vinyl chloride	MW-7	10/17/2016		1.9	1.0	ug/L
Chloroethane	MW-7A	5/14/2013		3.6	1.0	ug/L
1,1-dichloroethane	MW-9	10/16/2017		1.2	1.0	ug/L
1,1-dichloroethane	MW-9	10/27/2023		1.2	1.0	ug/L
1,2-dichloroethane	MW-9	10/05/1993		5.8	1.0	ug/L
1,2-dichloroethane	MW-9	1/13/1994		8.3	1.0	ug/L
1,2-dichloroethane	MW-9	4/23/1994		6.2	1.0	ug/L
1,2-dichloroethane	MW-9	7/13/1994		5.4	1.0	ug/L
1,2-dichloroethane	MW-9	4/13/1995		1.4	1.0	ug/L
1,2-dichloroethane	MW-9	10/04/1995		1.4	1.0	ug/L
1,2-dichloroethane	MW-9	4/30/1996		1.4	1.0	ug/L
Benzene	MW-9	10/05/1993		1.1	1.0	ug/L
Benzene	MW-9	1/13/1994		1.3	1.0	ug/L
Benzene	MW-9	4/23/1994		1.3	1.0	ug/L
Benzene	MW-9	7/13/1994		1.2	1.0	ug/L
Benzene	MW-9	10/04/1995		2.2	1.0	ug/L
Benzene	MW-9	4/30/1996		2.2	1.0	ug/L
Benzene	MW-9	10/17/2022		1.0	1.0	ug/L
Chloroethane	MW-9	10/14/2010		1.4	1.0	ug/L
Chloroethane	MW-9	10/18/2011		1.1	1.0	ug/L
Chloroethane	MW-9	10/17/2016		1.0	1.0	ug/L
Chloroethane	MW-9	10/16/2017		2.0	1.0	ug/L
Chloroethane	MW-9	10/07/2019		2.0	1.0	ug/L
Chloroethane	MW-9	10/01/2020		1.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-9	10/04/1995		15.1	2.0	ug/L
Cis-1,2-dichloroethylene	MW-9	4/30/1996		15.1	2.0	ug/L
Cis-1,2-dichloroethylene	MW-9	4/28/1998		5.7	2.0	ug/L
Cis-1,2-dichloroethylene	MW-9	10/29/1998		8.9	2.0	ug/L
1,1-dichloroethane	TILE ACM-1	10/25/2018		3.6	1.0	ug/L
1,1-dichloroethane	TILE ACM-1	4/15/2019		3.8	1.0	ug/L
1,1-dichloroethane	TILE ACM-1	10/07/2019		4.7	1.0	ug/L
1,1-dichloroethane	TILE ACM-1	4/22/2020		14.4	1.0	ug/L
1,1-dichloroethane	TILE ACM-1	10/29/2021		2.9	1.0	ug/L
1,1-dichloroethane	TILE ACM-1	4/25/2022		2.9	1.0	ug/L
1,1-dichloroethane	TILE ACM-1	4/10/2023		4.8	1.0	ug/L
1,1-dichloroethane	TILE ACM-1	4/02/2024		1.6	1.0	ug/L
1,4-dichlorobenzene	TILE ACM-1	4/15/2019		3.6	1.0	ug/L
1,4-dichlorobenzene	TILE ACM-1	10/07/2019		3.3	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,4-dichlorobenzene	TILE ACM-1	4/25/2022		1.1	1.0	ug/L
1,4-dichlorobenzene	TILE ACM-1	4/10/2023		1.8	1.0	ug/L
Benzene	TILE ACM-1	4/15/2019		2.0	1.0	ug/L
Benzene	TILE ACM-1	10/07/2019		1.3	1.0	ug/L
Benzene	TILE ACM-1	4/22/2020		2.0	1.0	ug/L
Benzene	TILE ACM-1	4/25/2022		1.8	1.0	ug/L
Benzene	TILE ACM-1	4/10/2023		1.6	1.0	ug/L
Chlorobenzene	TILE ACM-1	10/25/2018		16.6	1.0	ug/L
Chlorobenzene	TILE ACM-1	4/15/2019		13.8	1.0	ug/L
Chlorobenzene	TILE ACM-1	10/07/2019		7.4	1.0	ug/L
Chlorobenzene	TILE ACM-1	4/22/2020		4.6	1.0	ug/L
Chlorobenzene	TILE ACM-1	4/25/2022		7.9	1.0	ug/L
Chlorobenzene	TILE ACM-1	4/10/2023		7.8	1.0	ug/L
Chlorobenzene	TILE ACM-1	4/02/2024		3.7	1.0	ug/L
Chloroethane	TILE ACM-1	10/25/2018		5.8	1.0	ug/L
Chloroethane	TILE ACM-1	4/15/2019		5.0	1.0	ug/L
Chloroethane	TILE ACM-1	10/07/2019		9.8	1.0	ug/L
Chloroethane	TILE ACM-1	4/22/2020		12.2	1.0	ug/L
Chloroethane	TILE ACM-1	10/29/2021		2.6	1.0	ug/L
Chloroethane	TILE ACM-1	4/25/2022		3.7	1.0	ug/L
Chloroethane	TILE ACM-1	4/10/2023		5.1	1.0	ug/L
Chloroethane	TILE ACM-1	4/02/2024		2.3	1.0	ug/L
Cis-1,2-dichloroethylene	TILE ACM-1	10/25/2018		3.0	1.0	ug/L
Cis-1,2-dichloroethylene	TILE ACM-1	4/15/2019		2.8	1.0	ug/L
Cis-1,2-dichloroethylene	TILE ACM-1	10/07/2019		4.2	1.0	ug/L
Cis-1,2-dichloroethylene	TILE ACM-1	4/22/2020		6.3	1.0	ug/L
Cis-1,2-dichloroethylene	TILE ACM-1	4/25/2022		1.3	1.0	ug/L
Cis-1,2-dichloroethylene	TILE ACM-1	4/10/2023		2.0	1.0	ug/L
Ethylbenzene	TILE ACM-1	10/07/2019		1.9	1.0	ug/L
Ethylbenzene	TILE ACM-1	4/25/2022		1.6	1.0	ug/L
Toluene	TILE ACM-1	10/07/2019		1.7	1.0	ug/L
Vinyl chloride	TILE ACM-1	10/07/2019		2.0	1.0	ug/L
Vinyl chloride	TILE ACM-1	4/22/2020		1.8	1.0	ug/L
Vinyl chloride	TILE ACM-1	4/10/2023		1.0	1.0	ug/L
Xylenes, total	TILE ACM-1	4/25/2022		2.4	2.0	ug/L

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

Attachment E

Assessment Statistics for VOCs

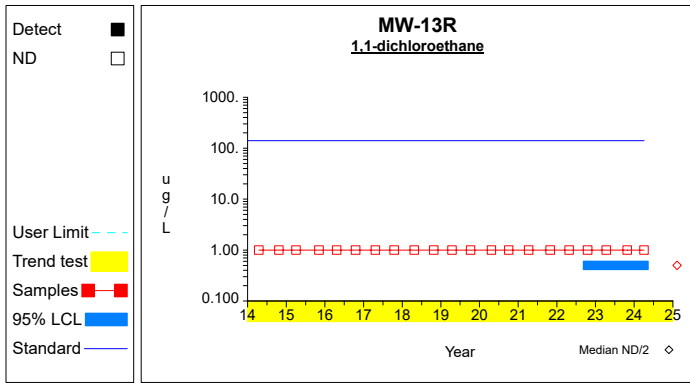
Table 1

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

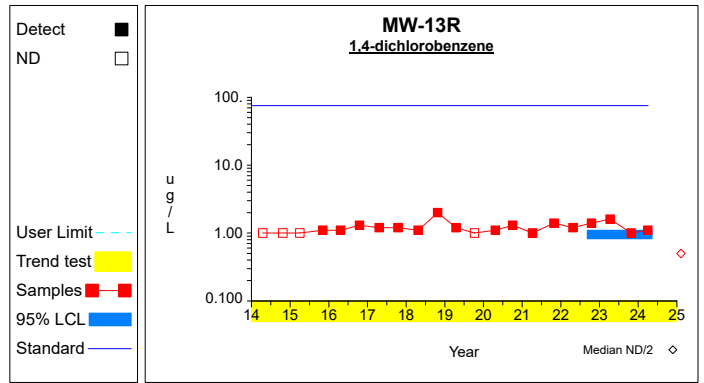
Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend
1,1-dichloroethane	ug/L	MW-13R	4	0.500	0.000	1.176	0.500	0.500	140.000	inc
1,4-dichlorobenzene	ug/L	MW-13R	4	1.275	0.275	1.176	0.951	1.599	75.000	
Benzene	ug/L	MW-13R	4	2.725	1.702	1.176	0.723	4.727	5.000	
Chlorobenzene	ug/L	MW-13R	4	36.375	7.104	1.176	28.019	44.731	100.000	
Chloroethane	ug/L	MW-13R	4	0.500	0.000	1.176	0.500	0.500	2800.000	
Cis-1,2-dichloroethylene	ug/L	MW-13R	4	0.850	0.436	1.176	0.337	1.363	70.000	
Trans-1,2-dichloroethylene	ug/L	MW-13R	4	0.500	0.000	1.176	0.500	0.500	100.000	
1,1-dichloroethane	ug/L	MW-14	4	0.500	0.000	1.176	0.500	0.500	140.000	
1,4-dichlorobenzene	ug/L	MW-14	4	2.550	0.755	1.176	1.662	3.438	75.000	
Benzene	ug/L	MW-14	4	1.575	0.695	1.176	0.758	2.392	5.000	
Chlorobenzene	ug/L	MW-14	4	0.675	0.350	1.176	0.263	1.087	100.000	
Chloroethane	ug/L	MW-14	4	1.550	0.351	1.176	1.137	1.963	2800.000	
Cis-1,2-dichloroethylene	ug/L	MW-14	4	0.500	0.000	1.176	0.500	0.500	70.000	
Trans-1,2-dichloroethylene	ug/L	MW-14	4	0.500	0.000	1.176	0.500	0.500	100.000	
1,1-dichloroethane	ug/L	MW-211	4	0.500	0.000	1.176	0.500	0.500	140.000	dec
1,4-dichlorobenzene	ug/L	MW-211	4	0.500	0.000	1.176	0.500	0.500	75.000	
Benzene	ug/L	MW-211	4	0.500	0.000	1.176	0.500	0.500	5.000	
Chlorobenzene	ug/L	MW-211	4	3.850	1.507	1.176	2.078	5.622	100.000	
Chloroethane	ug/L	MW-211	4	0.500	0.000	1.176	0.500	0.500	2800.000	
Cis-1,2-dichloroethylene	ug/L	MW-211	4	0.500	0.000	1.176	0.500	0.500	70.000	
Trans-1,2-dichloroethylene	ug/L	MW-211	4	0.500	0.000	1.176	0.500	0.500	100.000	
1,1-dichloroethane	ug/L	MW-31R	4	3.025	0.222	1.176	2.764	3.286	140.000	inc
1,4-dichlorobenzene	ug/L	MW-31R	4	17.300	3.168	1.176	13.574	21.026	75.000	
Benzene	ug/L	MW-31R	4	1.800	0.294	1.176	1.454	2.146	5.000	inc
Chlorobenzene	ug/L	MW-31R	4	21.100	2.778	1.176	17.832	24.368	100.000	
Chloroethane	ug/L	MW-31R	4	3.450	0.129	1.176	3.298	3.602	2800.000	dec
Cis-1,2-dichloroethylene	ug/L	MW-31R	4	17.700	4.850	1.176	11.994	23.406	70.000	
Trans-1,2-dichloroethylene	ug/L	MW-31R	4	2.250	0.451	1.176	1.720	2.780	100.000	dec
1,1-dichloroethane	ug/L	MW-35R	4	1.150	1.300	1.176	0.000	2.679	140.000	
1,4-dichlorobenzene	ug/L	MW-35R	4	0.500	0.000	1.176	0.500	0.500	75.000	
Benzene	ug/L	MW-35R	4	0.500	0.000	1.176	0.500	0.500	5.000	
Chlorobenzene	ug/L	MW-35R	4	0.500	0.000	1.176	0.500	0.500	100.000	
Chloroethane	ug/L	MW-35R	4	2.100	0.535	1.176	1.470	2.730	2800.000	
Cis-1,2-dichloroethylene	ug/L	MW-35R	4	0.500	0.000	1.176	0.500	0.500	70.000	
Trans-1,2-dichloroethylene	ug/L	MW-35R	4	0.500	0.000	1.176	0.500	0.500	100.000	
1,1-dichloroethane	ug/L	MW-7	4	0.500	0.000	1.176	0.500	0.500	140.000	
1,4-dichlorobenzene	ug/L	MW-7	4	0.500	0.000	1.176	0.500	0.500	75.000	
Benzene	ug/L	MW-7	4	0.500	0.000	1.176	0.500	0.500	5.000	
Chlorobenzene	ug/L	MW-7	4	0.500	0.000	1.176	0.500	0.500	100.000	
Chloroethane	ug/L	MW-7	4	2.125	1.408	1.176	0.469	3.781	2800.000	
Cis-1,2-dichloroethylene	ug/L	MW-7	4	0.500	0.000	1.176	0.500	0.500	70.000	
Trans-1,2-dichloroethylene	ug/L	MW-7	4	0.500	0.000	1.176	0.500	0.500	100.000	
1,1-dichloroethane	ug/L	MW-9	4	0.675	0.350	1.176	0.263	1.087	140.000	
1,4-dichlorobenzene	ug/L	MW-9	4	0.500	0.000	1.176	0.500	0.500	75.000	
Benzene	ug/L	MW-9	4	0.625	0.250	1.176	0.331	0.919	5.000	
Chlorobenzene	ug/L	MW-9	4	0.500	0.000	1.176	0.500	0.500	100.000	
Chloroethane	ug/L	MW-9	4	0.500	0.000	1.176	0.500	0.500	2800.000	
Cis-1,2-dichloroethylene	ug/L	MW-9	4	0.500	0.000	1.176	0.500	0.500	70.000	
Trans-1,2-dichloroethylene	ug/L	MW-9	4	0.500	0.000	1.176	0.500	0.500	100.000	

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

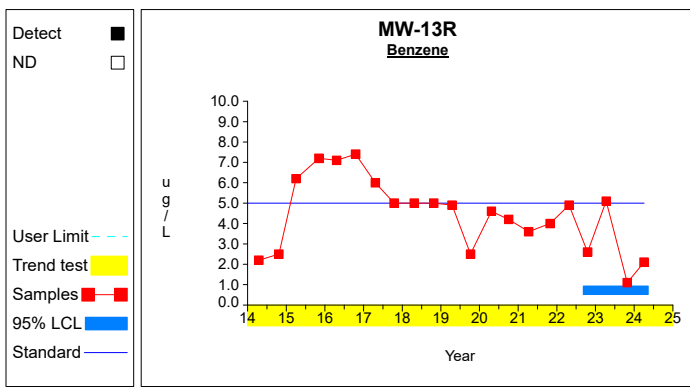
Confidence Limits (Assessment)



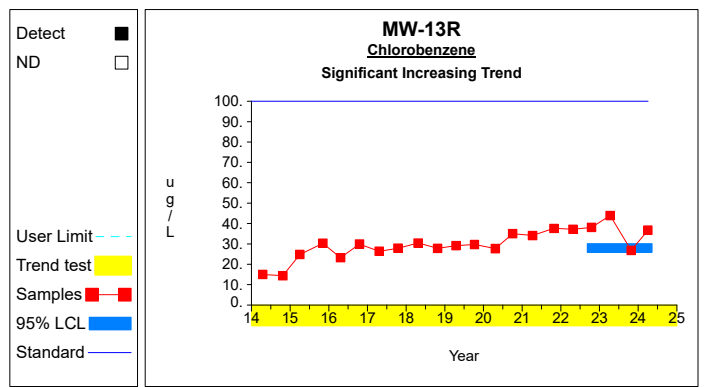
Graph 1



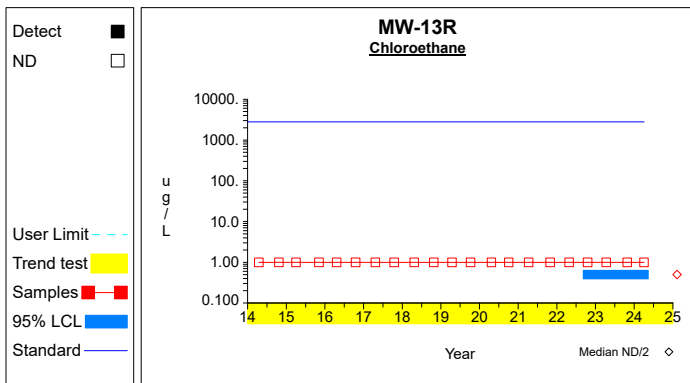
Graph 2



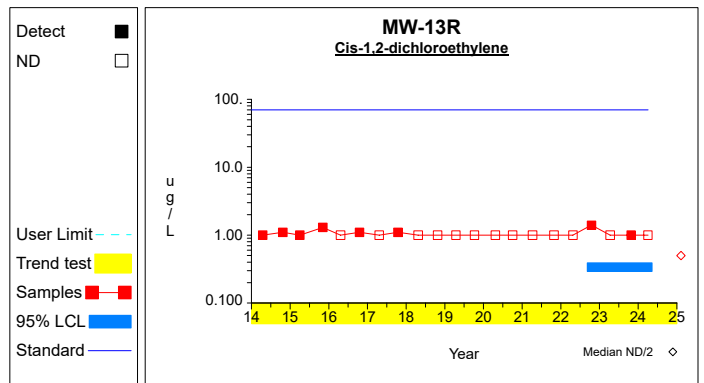
Graph 3



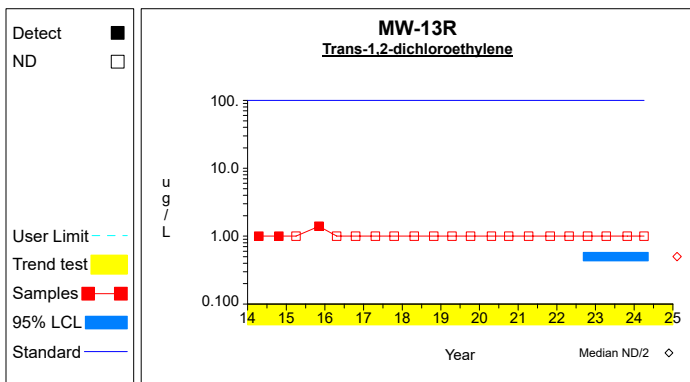
Graph 4



Graph 5

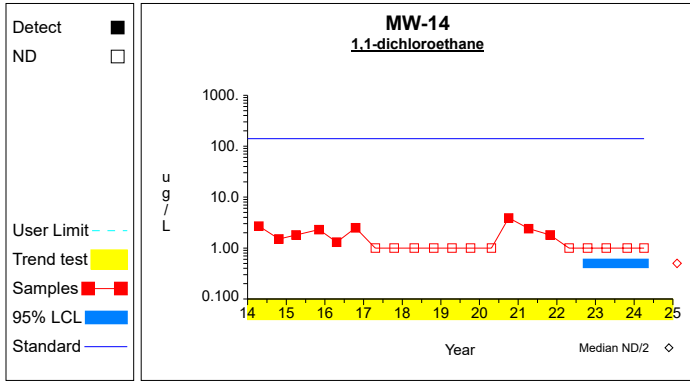


Graph 6

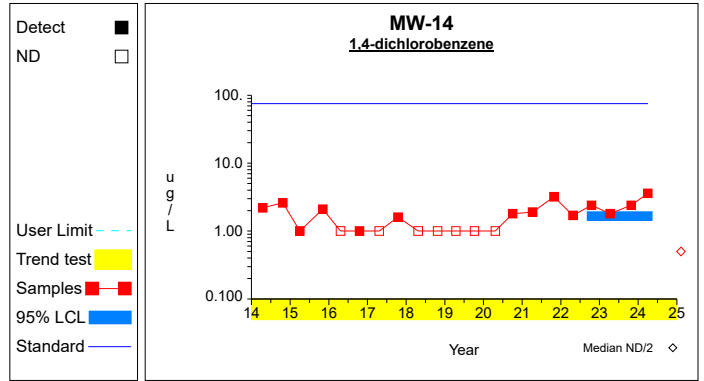


Graph 7

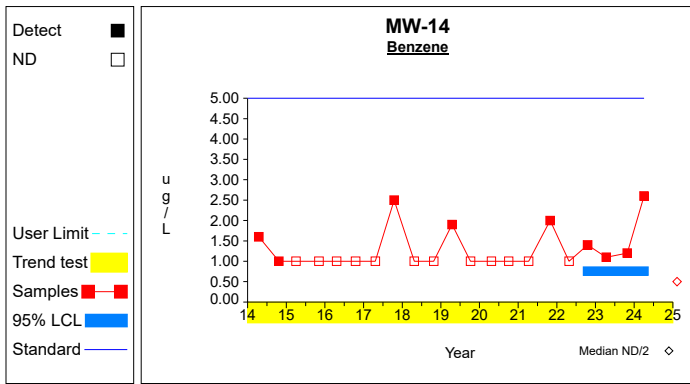
Confidence Limits (Assessment)



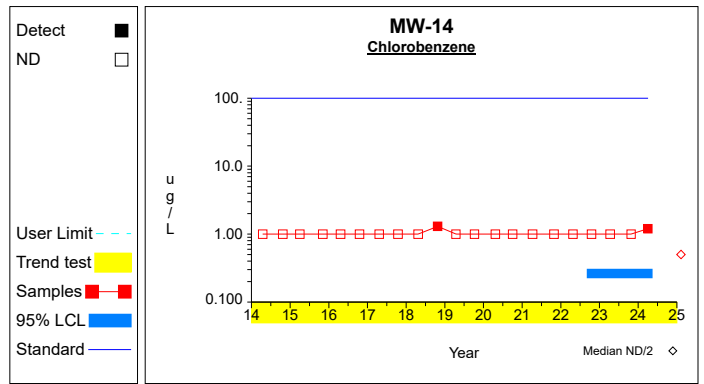
Graph 8



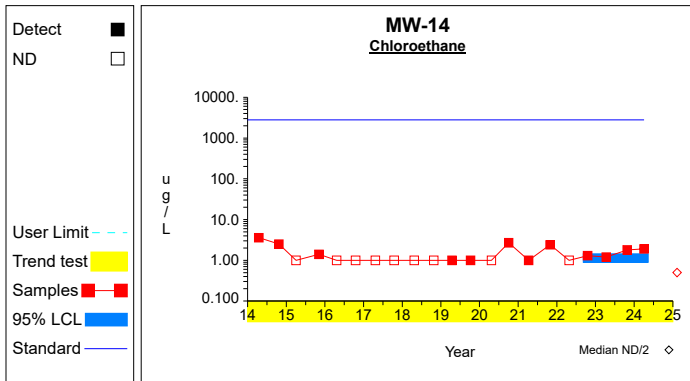
Graph 9



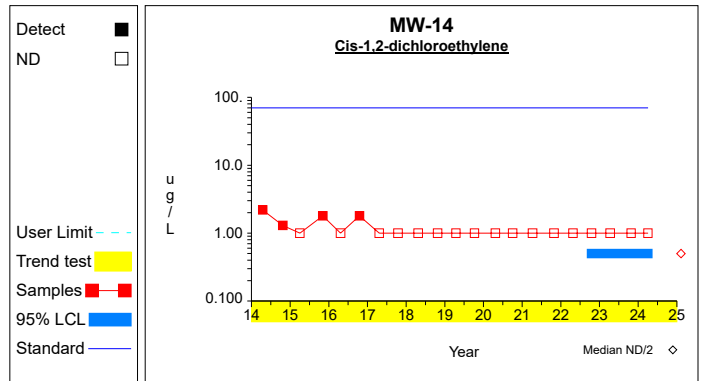
Graph 10



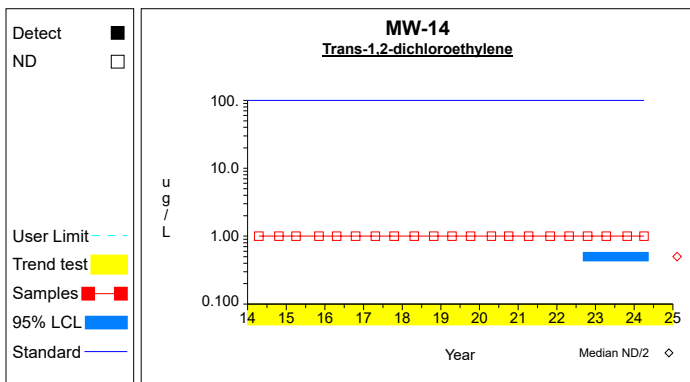
Graph 11



Graph 12

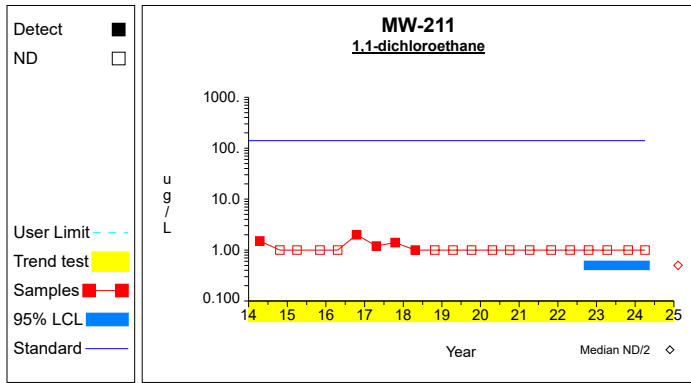


Graph 13

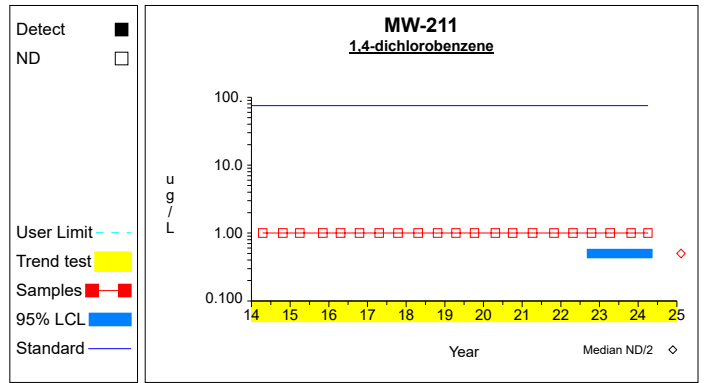


Graph 14

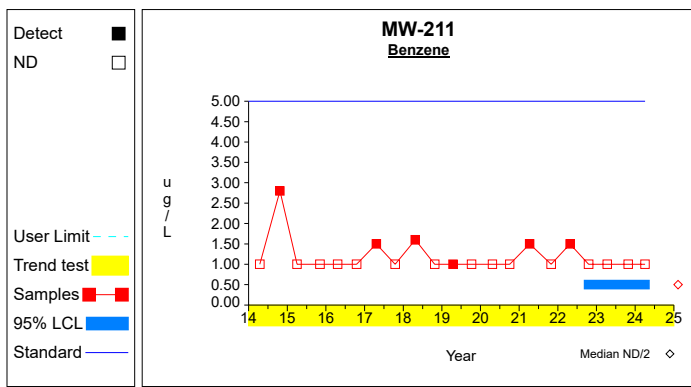
Confidence Limits (Assessment)



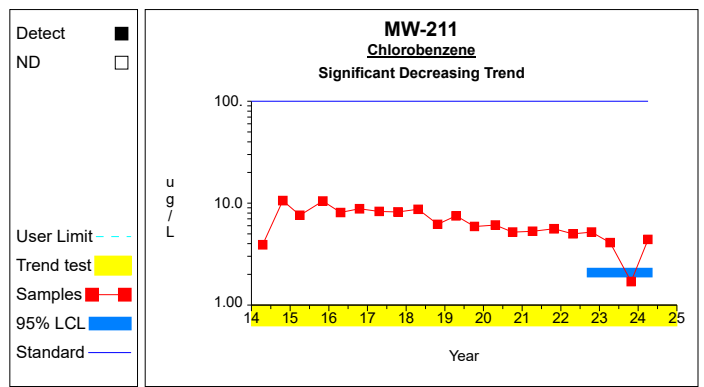
Graph 15



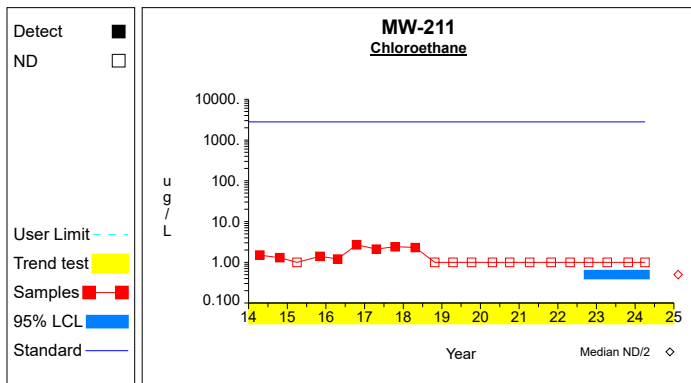
Graph 16



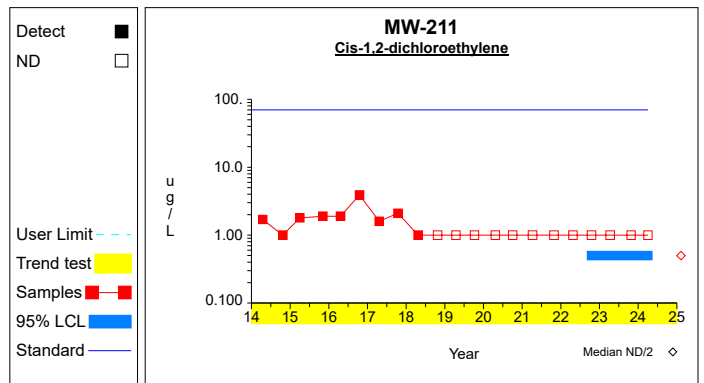
Graph 17



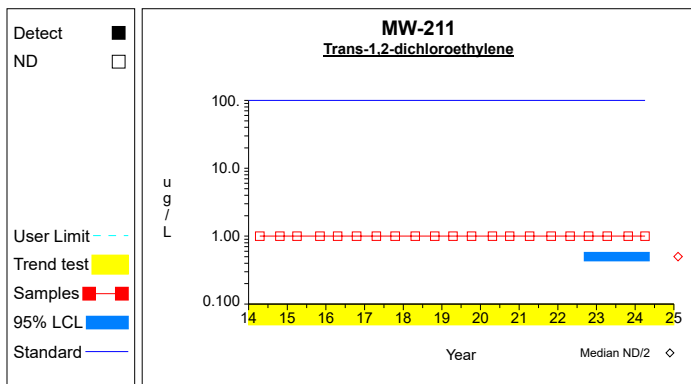
Graph 18



Graph 19

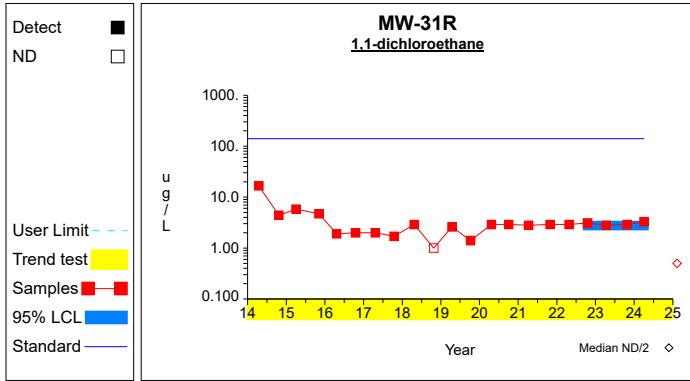


Graph 20

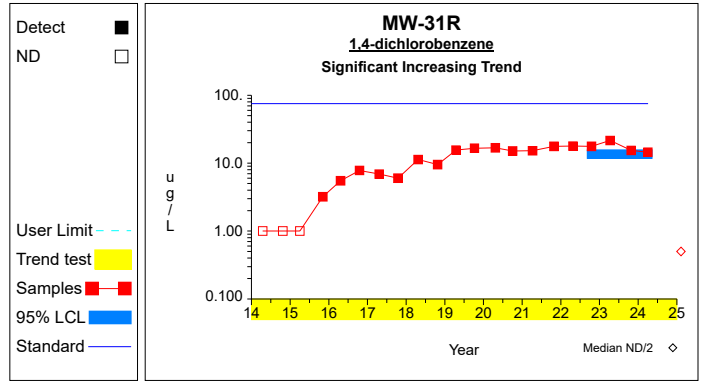


Graph 21

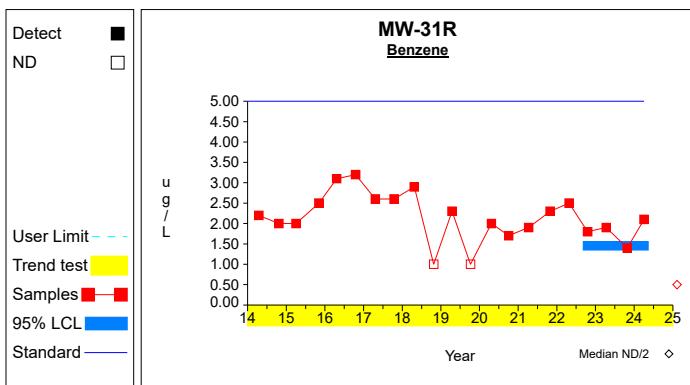
Confidence Limits (Assessment)



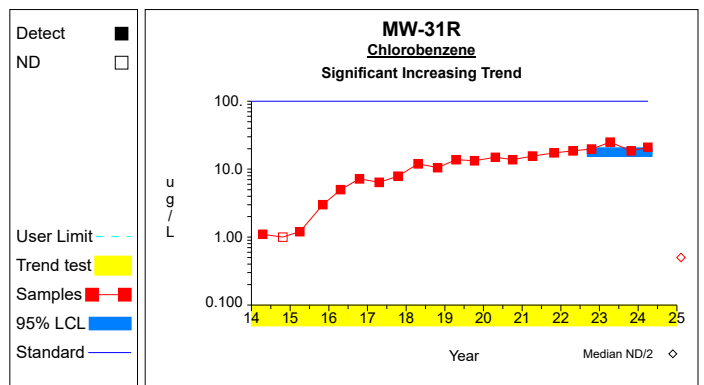
Graph 22



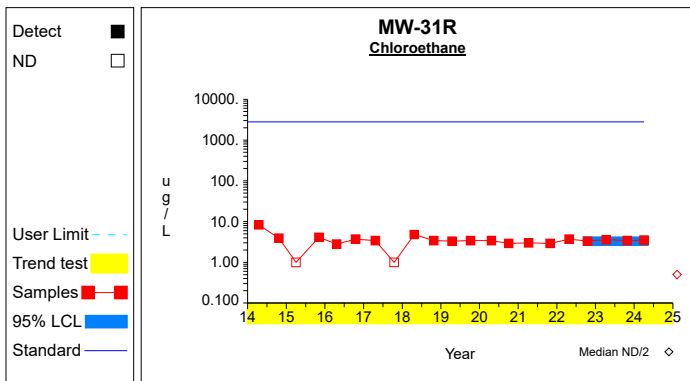
Graph 23



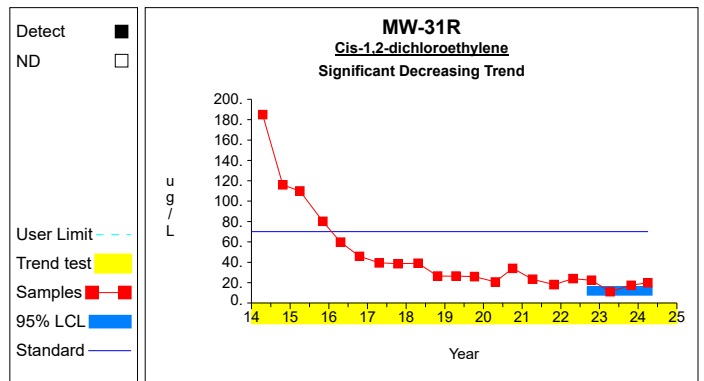
Graph 24



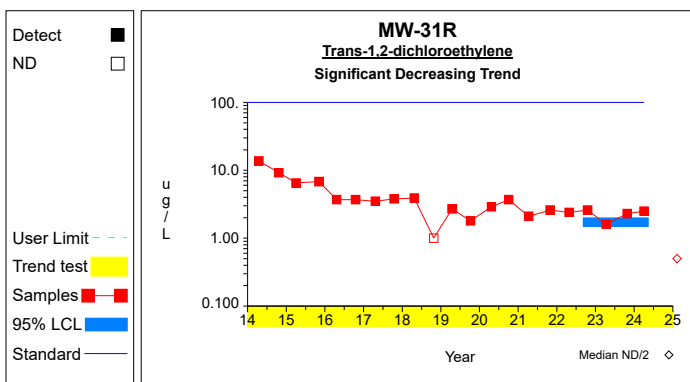
Graph 25



Graph 26

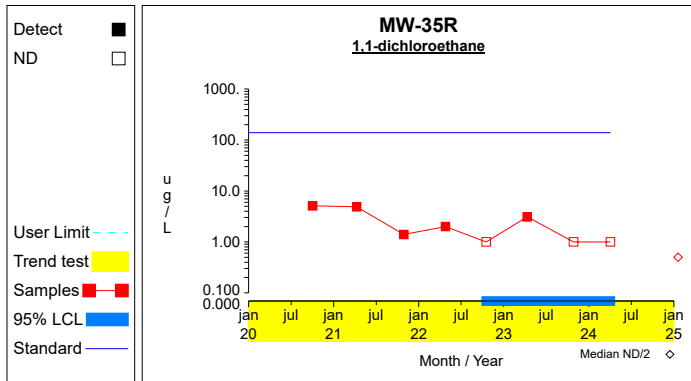


Graph 27

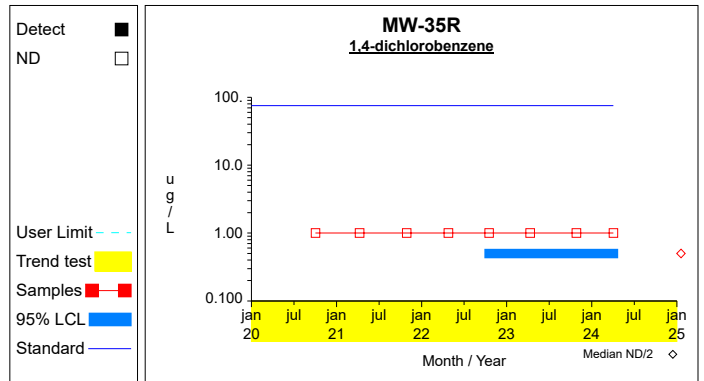


Graph 28

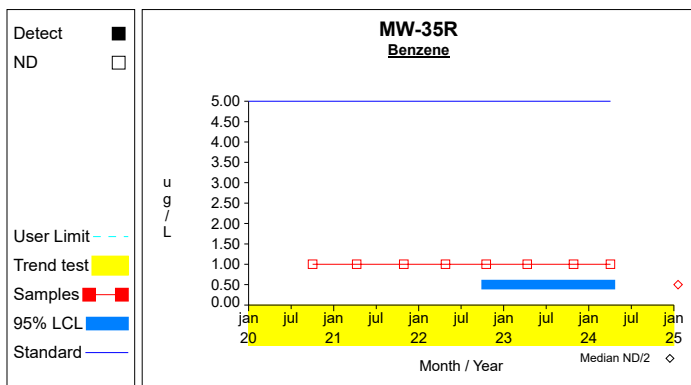
Confidence Limits (Assessment)



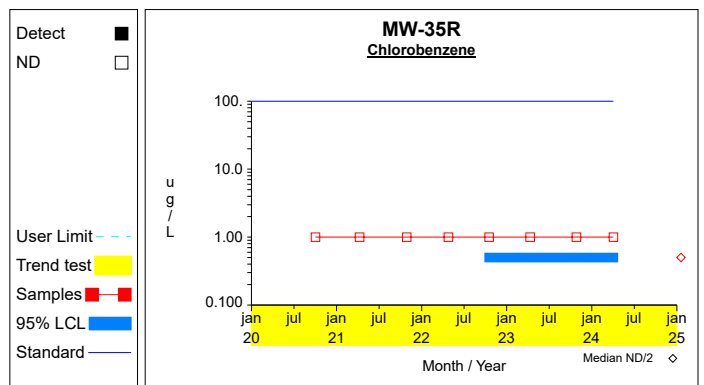
Graph 29



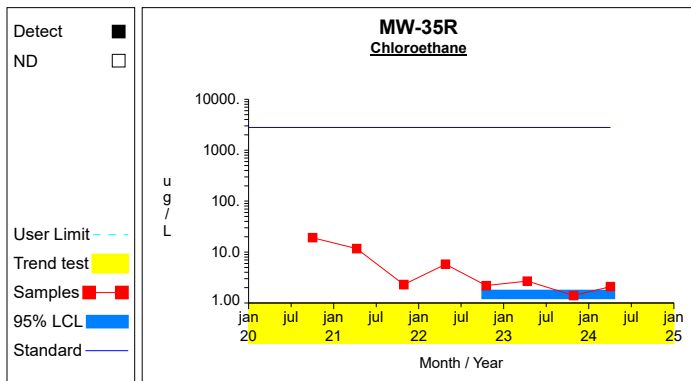
Graph 30



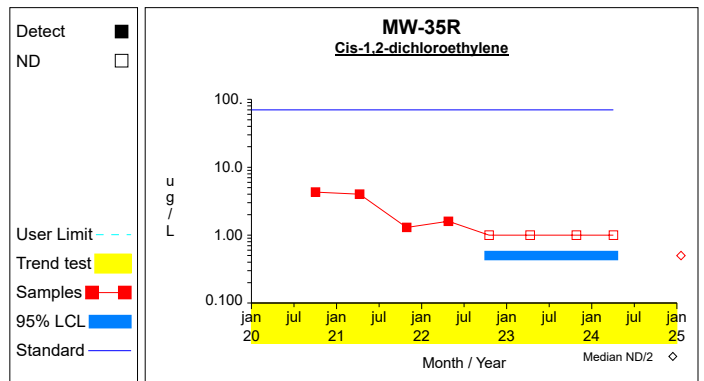
Graph 31



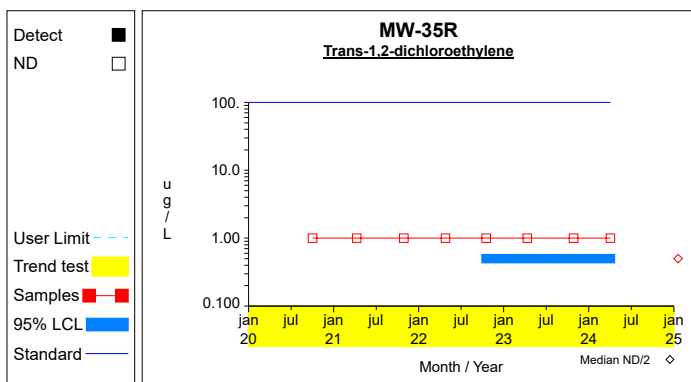
Graph 32



Graph 33

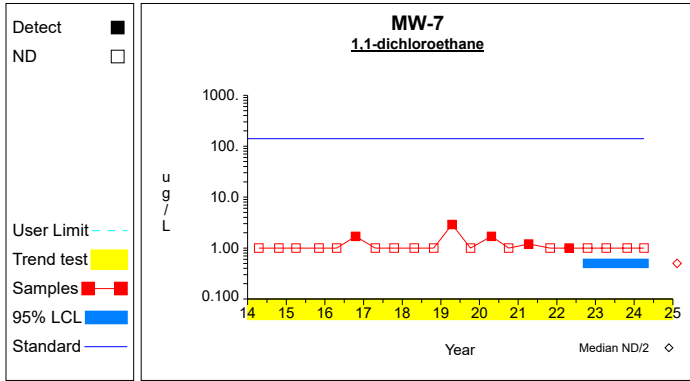


Graph 34

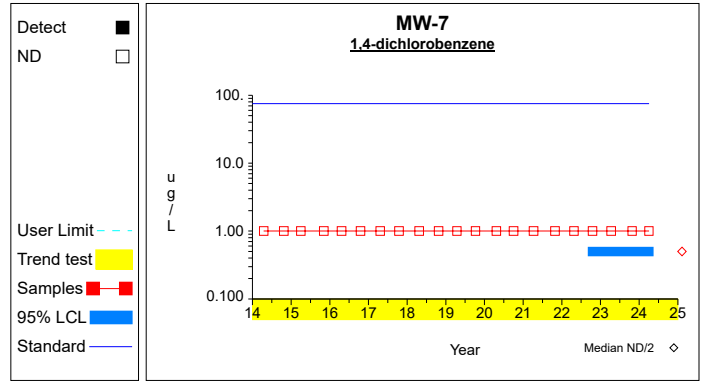


Graph 35

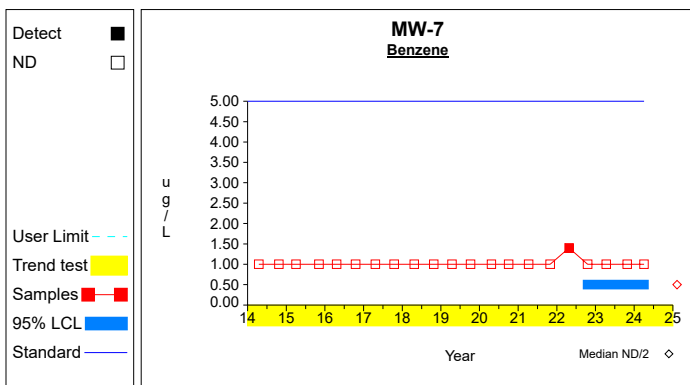
Confidence Limits (Assessment)



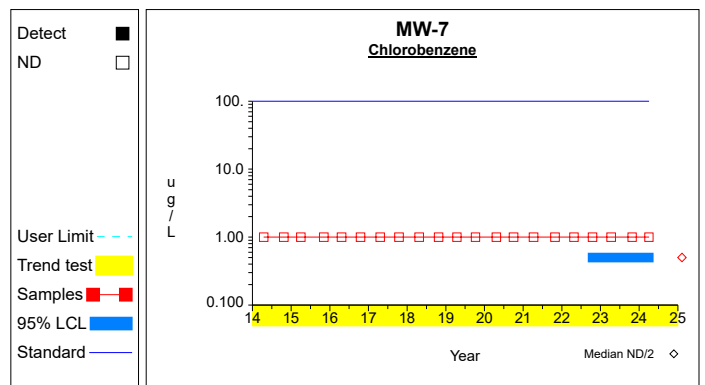
Graph 36



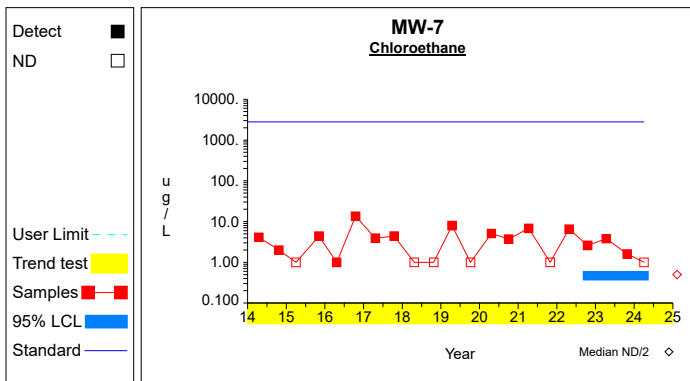
Graph 37



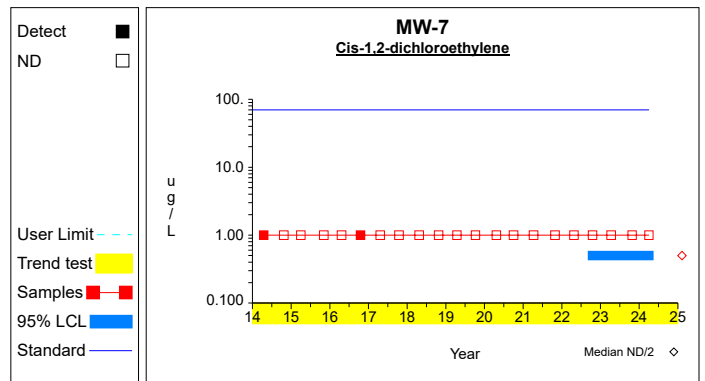
Graph 38



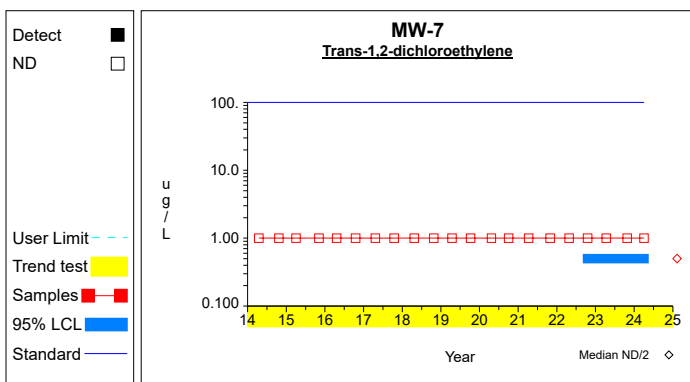
Graph 39



Graph 40

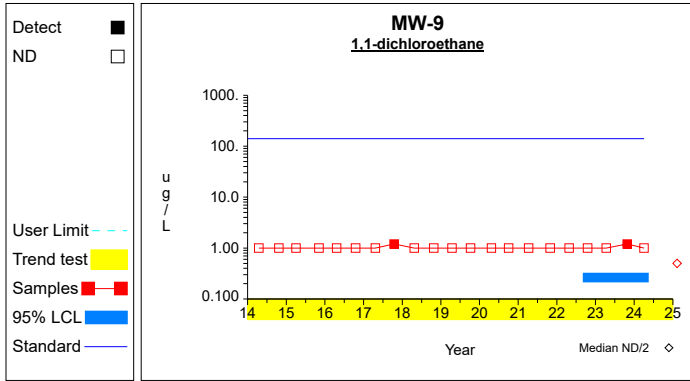


Graph 41

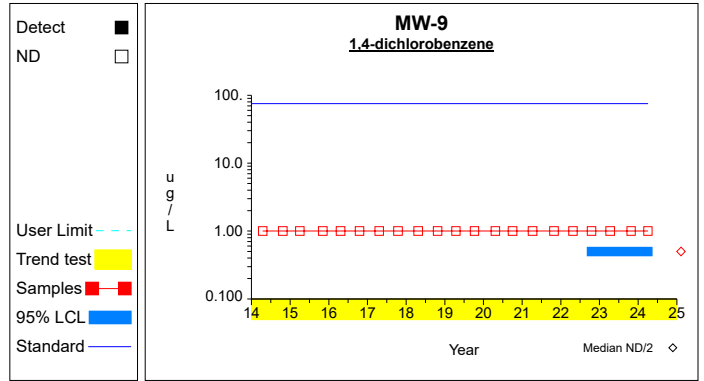


Graph 42

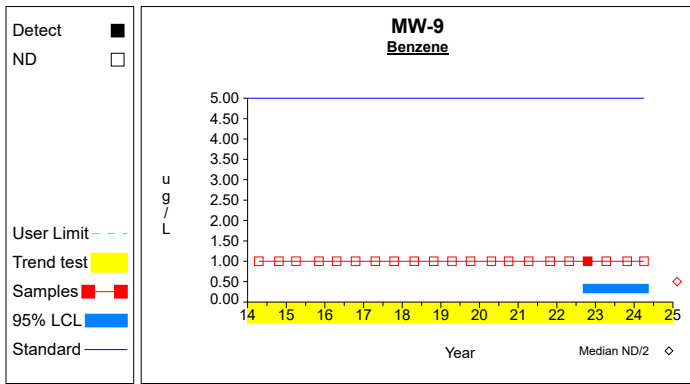
Confidence Limits (Assessment)



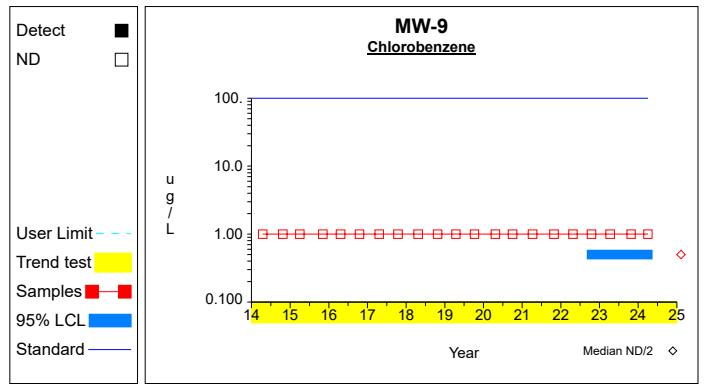
Graph 43



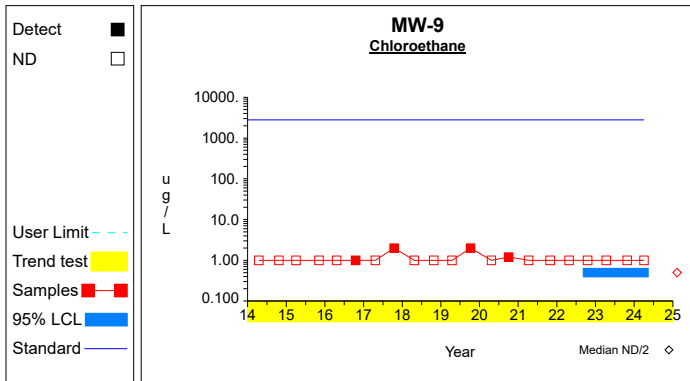
Graph 44



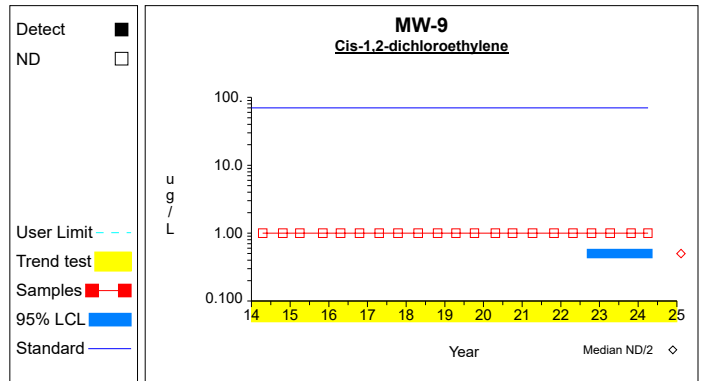
Graph 45



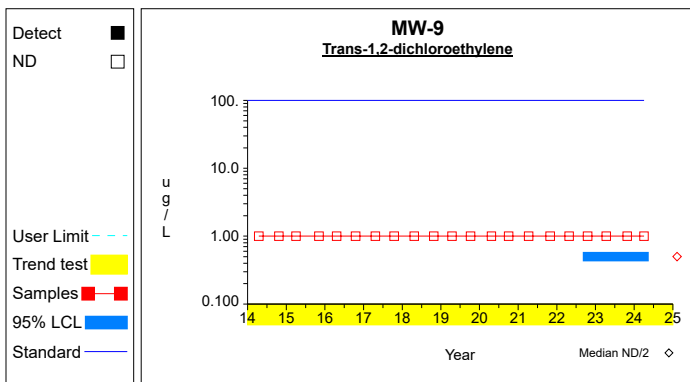
Graph 46



Graph 47



Graph 48



Graph 49

APPENDIX B.2 –Fall Statistical Evaluation

GROUND WATER STATISTICS
FOR THE
RURAL IOWA SANITARY LANDFILL

Second Semi-Annual Monitoring Event in 2024

Prepared for:
Rural Iowa Waste Management Association
20488 M Avenue
Eldora, Hardin County, IA

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

November 2024

INTRODUCTION

This report summarizes the results of the statistical analysis used to evaluate the ground water quality data obtained during the second semi-annual monitoring event in 2024 at the Rural Iowa Sanitary Landfill near Eldora in Hardin 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 Rural Iowa Sanitary 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 the Rural Iowa Sanitary Landfill includes sample points MW-36 (upgradient), MW-37 (upgradient), MW-39 (upgradient), MW-40 (upgradient), MW-47 (upgradient), GWD-1, GWD-2, MW-48A, MW-49A, MW-50, and MW-51. 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

Sample points MW-36, MW-37, MW-39, MW-40, MW-47, MW-48A, MW-49A, MW-50, and MW-51 were sampled on October 10, 2024 and analyzed for the constituents required by permit. The ground water data obtained during the second semi-annual monitoring event in 2024 are summarized in Attachment A.

STATISTICAL METHODOLOGIES FOR DETECTION MONITORING

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

Interwell Statistics: Upgradient versus Downgradient Comparisons

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

Results of the Interwell Statistics

The background data used in this statistical analysis includes the ground water data collected from ground water wells MW-36, MW-37, MW-39, MW-40, and MW-47 during the period from October 2014 through the current data. A summary of the background data from monitoring wells MW-36, MW-37, MW-39, MW-40, and MW-47, 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-48A, MW-49A, MW-50, and MW-51 compared to the site prediction limits. Prediction limit exceedances are flagged with asterisks. For the data obtained during the second semi-annual monitoring event in 2024, 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 2024

Well	Trace Metal Detected	Result, µg/L	Prediction Limit, µg/L	Prediction Limit Type	Verified/Awaiting Verification
MW-49A	Nickel	45.6	31.6000	Nonparametric	Verified

The detection frequencies of the parameters in the up and down gradient monitoring wells are summarized in Table 3. Only barium was detected at a frequency greater than or equal to 50% in the upgradient wells so only this metal will be 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 3 standard deviation unit increases over background.

The past verified trace metal exceedance was 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, April 1989 (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% LCL for arsenic at MW-49A (27.256 µg/L) exceeds the GWPS of 10 µg/L.
 The 95% LCL for cobalt at MW-49A (11.829 µg/L) exceeds the GWPS of 2.1 µg/L.
 The 95% LCLs for the remainder of the metals exceedances are below the respective GWPS.

Volatile Organic Compounds

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

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

Well	VOC Detected	Result, µg/L	Reporting Limit, µg/L	Verified/ Awaiting Verification	Groundwater Standard, µg/L
MW-49A	Benzene	2.4	1	Verified	5 ^a
	Chloroethane	2.4	1	Verified	2800 ^b
	<i>cis</i> -1,2-Dichloroethene	1.8	1	Verified	70 ^a
	Vinyl chloride	1.8	1	Verified	2 ^a

a - USEPA MCL

b - Iowa Statewide Standard

Historical VOC detections are summarized in Attachment D. The verified VOC detections were evaluated against the ground water protection standards (GWPS) using confidence limits. The 95% lower confidence limit (LCL) for the mean of the historical data was used to evaluate whether the regulated unit is in compliance with the ground-water protection standards under 40 CFR 264. An exceedance is verified if the LCL is above the Regulatory GWPS.

The 95% LCLs for the verified VOCs at MW-49A are below the respective GWPS.

CONCLUSIONS

This report summarizes the statistical analyses used to evaluate the ground water data obtained during the second semi-annual monitoring event in 2024 at Rural Iowa Sanitary Landfill. Sample points MW-36, MW-37, MW-39, MW-40, MW-47, MW-48A, MW-49A, MW-50, and MW-51 were sampled on October 10, 2024 and analyzed for the parameters required by permit. The ground water data was compared to background using prediction limits (interwell). There is a verified site prediction limit exceedance detected nickel at MW-49A. There are verified detections of benzene, chloroethane, *cis*-1,2-dichloroethene, and vinyl chloride at MW-49A. The VOCs detected did not exceed ground water quality standards.

Attachment A

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

Table 1

Analytical Data Summary for 10/10/2024

Constituents	Units	MW-36	MW-37	MW-39	MW-40	MW-47	MW-48A	MW-49A	MW-50	MW-51
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	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	4.0	<4.0	<4.0	4.3	88.3	18.3	50.5	<4.0	<4.0
Barium, total	ug/L	329.0	67.6	253.0	34.2	426.0	205.0	616.0	253.0	436.0
Benzene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.4	<1.0	<1.0
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	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.4	<1.0	<1.0
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	13.6	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0
Cis-1,2-dichloroethylene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.8	<1.0	<1.0
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	7.6	4.4	<4.4	5.8	.8	.6	10.2	<4.4	<4.4
Copper, total	ug/L	19.2	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	ug/L	4.4	<4.0	<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	21.5	18.7	<4.0	15.4	<4.0	<4.0	45.6	<4.0	<4.0
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	22.4	<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
Vinyl chloride	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.8	<1.0	<1.0
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	38	<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-36	07/08/2015	ND	2.0000	
Antimony, total	ug/L	MW-36	04/21/2016	ND	2.0000	
Antimony, total	ug/L	MW-36	10/17/2016	ND	2.0000	
Antimony, total	ug/L	MW-36	04/21/2017	ND	2.0000	
Antimony, total	ug/L	MW-36	10/16/2017	ND	2.0000	
Antimony, total	ug/L	MW-36	04/24/2018	ND	2.0000	
Antimony, total	ug/L	MW-36	10/25/2018	ND	2.0000	
Antimony, total	ug/L	MW-36	04/15/2019	ND	2.0000	
Antimony, total	ug/L	MW-36	10/07/2019	ND	2.0000	
Antimony, total	ug/L	MW-36	04/22/2020	ND	2.0000	
Antimony, total	ug/L	MW-36	10/02/2020	ND	2.0000	
Antimony, total	ug/L	MW-36	04/08/2021	ND	2.0000	
Antimony, total	ug/L	MW-36	10/29/2021	ND	2.0000	
Antimony, total	ug/L	MW-36	04/25/2022	ND	2.0000	
Antimony, total	ug/L	MW-36	10/17/2022	ND	2.0000	
Antimony, total	ug/L	MW-36	04/10/2023	ND	2.0000	
Antimony, total	ug/L	MW-36	10/27/2023	ND	2.0000	
Antimony, total	ug/L	MW-36	04/02/2024	ND	2.0000	
Antimony, total	ug/L	MW-36	10/10/2024	ND	2.0000	
Arsenic, total	ug/L	MW-36	07/08/2015	ND	4.0000	
Arsenic, total	ug/L	MW-36	04/21/2016	ND	4.0000	
Arsenic, total	ug/L	MW-36	10/17/2016	ND	4.0000	
Arsenic, total	ug/L	MW-36	04/21/2017	ND	4.0000	
Arsenic, total	ug/L	MW-36	10/16/2017	ND	4.0000	
Arsenic, total	ug/L	MW-36	04/24/2018	ND	4.0000	
Arsenic, total	ug/L	MW-36	10/25/2018	ND	4.0000	
Arsenic, total	ug/L	MW-36	04/15/2019	ND	4.0000	
Arsenic, total	ug/L	MW-36	10/07/2019	ND	4.0000	
Arsenic, total	ug/L	MW-36	04/22/2020	ND	4.0000	
Arsenic, total	ug/L	MW-36	10/02/2020	ND	4.0000	
Arsenic, total	ug/L	MW-36	04/08/2021	ND	4.0000	
Arsenic, total	ug/L	MW-36	10/29/2021	ND	4.0000	
Arsenic, total	ug/L	MW-36	04/25/2022	ND	4.0000	
Arsenic, total	ug/L	MW-36	10/17/2022	ND	4.0000	
Arsenic, total	ug/L	MW-36	04/10/2023	ND	4.0000	
Arsenic, total	ug/L	MW-36	10/27/2023	ND	4.0000	
Arsenic, total	ug/L	MW-36	04/02/2024	ND	4.0000	
Arsenic, total	ug/L	MW-36	10/10/2024	ND	4.0000	
Barium, total	ug/L	MW-36	07/08/2015		366.0000	
Barium, total	ug/L	MW-36	04/21/2016		184.0000	
Barium, total	ug/L	MW-36	10/17/2016		162.0000	
Barium, total	ug/L	MW-36	04/21/2017		158.0000	
Barium, total	ug/L	MW-36	10/16/2017		233.0000	
Barium, total	ug/L	MW-36	04/24/2018		230.0000	
Barium, total	ug/L	MW-36	10/25/2018		184.0000	
Barium, total	ug/L	MW-36	04/15/2019		174.0000	
Barium, total	ug/L	MW-36	10/07/2019		235.0000	
Barium, total	ug/L	MW-36	04/22/2020		348.0000	
Barium, total	ug/L	MW-36	10/02/2020		176.0000	
Barium, total	ug/L	MW-36	04/08/2021		173.0000	
Barium, total	ug/L	MW-36	10/29/2021		203.0000	
Barium, total	ug/L	MW-36	04/25/2022		267.0000	
Barium, total	ug/L	MW-36	10/17/2022		219.0000	
Barium, total	ug/L	MW-36	04/10/2023		260.0000	
Barium, total	ug/L	MW-36	10/27/2023		258.0000	
Barium, total	ug/L	MW-36	04/02/2024		200.0000	
Barium, total	ug/L	MW-36	10/10/2024		329.0000	
Beryllium, total	ug/L	MW-36	07/08/2015	ND	4.0000	
Beryllium, total	ug/L	MW-36	04/21/2016	ND	4.0000	
Beryllium, total	ug/L	MW-36	10/17/2016	ND	4.0000	
Beryllium, total	ug/L	MW-36	04/21/2017	ND	4.0000	
Beryllium, total	ug/L	MW-36	10/16/2017	ND	4.0000	
Beryllium, total	ug/L	MW-36	04/24/2018	ND	4.0000	
Beryllium, total	ug/L	MW-36	10/25/2018	ND	4.0000	
Beryllium, total	ug/L	MW-36	04/15/2019	ND	4.0000	
Beryllium, total	ug/L	MW-36	10/07/2019	ND	4.0000	
Beryllium, total	ug/L	MW-36	04/22/2020	ND	4.0000	
Beryllium, total	ug/L	MW-36	10/02/2020	ND	4.0000	
Beryllium, total	ug/L	MW-36	04/08/2021	ND	4.0000	
Beryllium, total	ug/L	MW-36	10/29/2021	ND	4.0000	
Beryllium, total	ug/L	MW-36	04/25/2022	ND	4.0000	
Beryllium, total	ug/L	MW-36	10/17/2022	ND	4.0000	
Beryllium, total	ug/L	MW-36	04/10/2023	ND	4.0000	
Beryllium, total	ug/L	MW-36	10/27/2023	ND	4.0000	

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Beryllium, total	ug/L	MW-36	04/02/2024	ND	4.0000		
Beryllium, total	ug/L	MW-36	10/10/2024	ND	4.0000		
Cadmium, total	ug/L	MW-36	07/08/2015	ND	0.8000		
Cadmium, total	ug/L	MW-36	04/21/2016	ND	0.8000		
Cadmium, total	ug/L	MW-36	10/17/2016	ND	0.8000		
Cadmium, total	ug/L	MW-36	04/21/2017	ND	0.8000		
Cadmium, total	ug/L	MW-36	10/16/2017	ND	0.8000		
Cadmium, total	ug/L	MW-36	04/24/2018	ND	0.8000		
Cadmium, total	ug/L	MW-36	10/25/2018	ND	0.8000		
Cadmium, total	ug/L	MW-36	04/15/2019	ND	0.8000		
Cadmium, total	ug/L	MW-36	10/07/2019	ND	0.8000		
Cadmium, total	ug/L	MW-36	04/22/2020	ND	0.8000		
Cadmium, total	ug/L	MW-36	10/02/2020	ND	0.8000		
Cadmium, total	ug/L	MW-36	04/08/2021	ND	0.8000		
Cadmium, total	ug/L	MW-36	10/29/2021	ND	0.8000		
Cadmium, total	ug/L	MW-36	04/25/2022	ND	0.8000		
Cadmium, total	ug/L	MW-36	10/17/2022	ND	0.8000		
Cadmium, total	ug/L	MW-36	04/10/2023	ND	0.8000		
Cadmium, total	ug/L	MW-36	10/27/2023	ND	0.8000		
Cadmium, total	ug/L	MW-36	04/02/2024	ND	0.8000		
Cadmium, total	ug/L	MW-36	10/10/2024	ND	0.8000		
Chromium, total	ug/L	MW-36	07/08/2015	ND	8.0000		
Chromium, total	ug/L	MW-36	04/21/2016	ND	8.0000		
Chromium, total	ug/L	MW-36	10/17/2016	ND	8.0000		
Chromium, total	ug/L	MW-36	04/21/2017	ND	8.0000		
Chromium, total	ug/L	MW-36	10/16/2017	ND	8.0000		
Chromium, total	ug/L	MW-36	04/24/2018	ND	8.0000		
Chromium, total	ug/L	MW-36	10/25/2018	ND	8.0000		
Chromium, total	ug/L	MW-36	04/15/2019	ND	8.0000		
Chromium, total	ug/L	MW-36	10/07/2019	ND	8.0000		
Chromium, total	ug/L	MW-36	04/22/2020		8.0000		
Chromium, total	ug/L	MW-36	10/02/2020	ND	8.0000		
Chromium, total	ug/L	MW-36	04/08/2021	ND	8.0000		
Chromium, total	ug/L	MW-36	10/29/2021	ND	8.0000		
Chromium, total	ug/L	MW-36	04/25/2022	ND	8.0000		
Chromium, total	ug/L	MW-36	10/17/2022	ND	8.0000		
Chromium, total	ug/L	MW-36	04/10/2023	ND	8.0000		
Chromium, total	ug/L	MW-36	10/27/2023	ND	8.0000		
Chromium, total	ug/L	MW-36	04/02/2024	ND	8.0000		
Chromium, total	ug/L	MW-36	10/10/2024		13.6000		
Cobalt, total	ug/L	MW-36	07/08/2015		34.1000		*
Cobalt, total	ug/L	MW-36	04/21/2016		2.4000		
Cobalt, total	ug/L	MW-36	10/17/2016		0.8000		
Cobalt, total	ug/L	MW-36	04/21/2017		2.1000		
Cobalt, total	ug/L	MW-36	10/16/2017		2.0000		
Cobalt, total	ug/L	MW-36	04/24/2018		3.9000		
Cobalt, total	ug/L	MW-36	10/25/2018		0.8000		
Cobalt, total	ug/L	MW-36	04/15/2019	ND	0.8000		
Cobalt, total	ug/L	MW-36	10/07/2019		1.3000		
Cobalt, total	ug/L	MW-36	04/22/2020		7.8000		
Cobalt, total	ug/L	MW-36	10/02/2020		0.4000		
Cobalt, total	ug/L	MW-36	04/08/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-36	10/29/2021		0.7000		
Cobalt, total	ug/L	MW-36	04/25/2022		4.7000		
Cobalt, total	ug/L	MW-36	10/17/2022		2.4000		
Cobalt, total	ug/L	MW-36	04/10/2023		1.4000		
Cobalt, total	ug/L	MW-36	10/27/2023		1.3000		
Cobalt, total	ug/L	MW-36	04/02/2024	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-36	10/10/2024		7.6000		
Copper, total	ug/L	MW-36	07/08/2015		6.7000		
Copper, total	ug/L	MW-36	04/21/2016	ND	4.0000		
Copper, total	ug/L	MW-36	10/17/2016	ND	4.0000		
Copper, total	ug/L	MW-36	04/21/2017	ND	4.0000		
Copper, total	ug/L	MW-36	10/16/2017	ND	4.0000		
Copper, total	ug/L	MW-36	04/24/2018		4.4000		
Copper, total	ug/L	MW-36	10/25/2018	ND	4.0000		
Copper, total	ug/L	MW-36	04/15/2019	ND	4.0000		
Copper, total	ug/L	MW-36	10/07/2019	ND	4.0000		
Copper, total	ug/L	MW-36	04/22/2020		11.3000		
Copper, total	ug/L	MW-36	10/02/2020	ND	4.0000		
Copper, total	ug/L	MW-36	04/08/2021	ND	4.0000		
Copper, total	ug/L	MW-36	10/29/2021	ND	4.0000		
Copper, total	ug/L	MW-36	04/25/2022		6.8000		
Copper, total	ug/L	MW-36	10/17/2022	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	
Copper, total	ug/L	MW-36	04/10/2023	ND	4.0000		
Copper, total	ug/L	MW-36	10/27/2023	ND	4.0000		
Copper, total	ug/L	MW-36	04/02/2024	ND	4.0000		
Copper, total	ug/L	MW-36	10/10/2024		19.2000		*
Lead, total	ug/L	MW-36	07/08/2015	ND	4.0000		
Lead, total	ug/L	MW-36	04/21/2016	ND	4.0000		
Lead, total	ug/L	MW-36	10/17/2016	ND	4.0000		
Lead, total	ug/L	MW-36	04/21/2017	ND	4.0000		
Lead, total	ug/L	MW-36	10/16/2017	ND	4.0000		
Lead, total	ug/L	MW-36	04/24/2018		4.2000		
Lead, total	ug/L	MW-36	10/25/2018	ND	4.0000		
Lead, total	ug/L	MW-36	04/15/2019	ND	4.0000		
Lead, total	ug/L	MW-36	10/07/2019	ND	4.0000		
Lead, total	ug/L	MW-36	04/22/2020		4.3000		
Lead, total	ug/L	MW-36	10/02/2020	ND	4.0000		
Lead, total	ug/L	MW-36	04/08/2021	ND	4.0000		
Lead, total	ug/L	MW-36	10/29/2021	ND	4.0000		
Lead, total	ug/L	MW-36	04/25/2022	ND	4.0000		
Lead, total	ug/L	MW-36	10/17/2022	ND	4.0000		
Lead, total	ug/L	MW-36	04/10/2023	ND	4.0000		
Lead, total	ug/L	MW-36	10/27/2023	ND	4.0000		
Lead, total	ug/L	MW-36	04/02/2024	ND	4.0000		
Lead, total	ug/L	MW-36	10/10/2024		4.4000		
Nickel, total	ug/L	MW-36	07/08/2015		15.8000		
Nickel, total	ug/L	MW-36	04/21/2016	ND	4.0000		
Nickel, total	ug/L	MW-36	10/17/2016	ND	4.0000		
Nickel, total	ug/L	MW-36	04/21/2017		5.0000		
Nickel, total	ug/L	MW-36	10/16/2017		4.0000		
Nickel, total	ug/L	MW-36	04/24/2018		9.1000		
Nickel, total	ug/L	MW-36	10/25/2018	ND	4.0000		
Nickel, total	ug/L	MW-36	04/15/2019	ND	4.0000		
Nickel, total	ug/L	MW-36	10/07/2019	ND	4.0000		
Nickel, total	ug/L	MW-36	04/22/2020		19.6000		
Nickel, total	ug/L	MW-36	10/02/2020	ND	4.0000		
Nickel, total	ug/L	MW-36	04/08/2021	ND	4.0000		
Nickel, total	ug/L	MW-36	10/29/2021	ND	4.0000		
Nickel, total	ug/L	MW-36	04/25/2022		11.1000		
Nickel, total	ug/L	MW-36	10/17/2022	ND	4.0000		
Nickel, total	ug/L	MW-36	04/10/2023	ND	4.0000		
Nickel, total	ug/L	MW-36	10/27/2023	ND	4.0000		
Nickel, total	ug/L	MW-36	04/02/2024	ND	4.0000		
Nickel, total	ug/L	MW-36	10/10/2024		21.5000		
Selenium, total	ug/L	MW-36	07/08/2015	ND	4.0000		
Selenium, total	ug/L	MW-36	04/21/2016	ND	4.0000		
Selenium, total	ug/L	MW-36	10/17/2016	ND	4.0000		
Selenium, total	ug/L	MW-36	04/21/2017	ND	4.0000		
Selenium, total	ug/L	MW-36	10/16/2017	ND	4.0000		
Selenium, total	ug/L	MW-36	04/24/2018	ND	4.0000		
Selenium, total	ug/L	MW-36	10/25/2018	ND	4.0000		
Selenium, total	ug/L	MW-36	04/15/2019	ND	4.0000		
Selenium, total	ug/L	MW-36	10/07/2019	ND	4.0000		
Selenium, total	ug/L	MW-36	04/22/2020	ND	4.0000		
Selenium, total	ug/L	MW-36	10/02/2020	ND	4.0000		
Selenium, total	ug/L	MW-36	04/08/2021	ND	4.0000		
Selenium, total	ug/L	MW-36	10/29/2021	ND	4.0000		
Selenium, total	ug/L	MW-36	04/25/2022	ND	4.0000		
Selenium, total	ug/L	MW-36	10/17/2022	ND	4.0000		
Selenium, total	ug/L	MW-36	04/10/2023	ND	4.0000		
Selenium, total	ug/L	MW-36	10/27/2023	ND	4.0000		
Selenium, total	ug/L	MW-36	04/02/2024	ND	4.0000		
Selenium, total	ug/L	MW-36	10/10/2024	ND	4.0000		
Silver, total	ug/L	MW-36	07/08/2015	ND	4.0000		
Silver, total	ug/L	MW-36	04/21/2016	ND	4.0000		
Silver, total	ug/L	MW-36	10/17/2016	ND	4.0000		
Silver, total	ug/L	MW-36	04/21/2017	ND	4.0000		
Silver, total	ug/L	MW-36	10/16/2017	ND	4.0000		
Silver, total	ug/L	MW-36	04/24/2018	ND	4.0000		
Silver, total	ug/L	MW-36	10/25/2018	ND	4.0000		
Silver, total	ug/L	MW-36	04/15/2019	ND	4.0000		
Silver, total	ug/L	MW-36	10/07/2019	ND	4.0000		
Silver, total	ug/L	MW-36	04/22/2020	ND	4.0000		
Silver, total	ug/L	MW-36	10/02/2020	ND	4.0000		
Silver, total	ug/L	MW-36	04/08/2021	ND	4.0000		
Silver, total	ug/L	MW-36	10/29/2021	ND	4.0000		
Silver, total	ug/L	MW-36	04/25/2022	ND	4.0000		
Silver, total	ug/L	MW-36	10/17/2022	ND	4.0000		
Silver, total	ug/L	MW-36	04/10/2023	ND	4.0000		
Silver, total	ug/L	MW-36	10/27/2023	ND	4.0000		
Silver, total	ug/L	MW-36	04/02/2024	ND	4.0000		
Silver, total	ug/L	MW-36	10/29/2021	ND	4.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Silver, total	ug/L	MW-36	04/25/2022	ND	4.0000		
Silver, total	ug/L	MW-36	10/17/2022	ND	4.0000		
Silver, total	ug/L	MW-36	04/10/2023	ND	4.0000		
Silver, total	ug/L	MW-36	10/27/2023	ND	4.0000		
Silver, total	ug/L	MW-36	04/02/2024	ND	4.0000		
Silver, total	ug/L	MW-36	10/10/2024	ND	4.0000		
Thallium, total	ug/L	MW-36	07/08/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-36	04/21/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-36	10/17/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-36	04/21/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-36	10/16/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-36	04/24/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-36	10/25/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-36	04/15/2019	ND	2.0000		
Thallium, total	ug/L	MW-36	10/07/2019	ND	2.0000		
Thallium, total	ug/L	MW-36	04/22/2020	ND	2.0000		
Thallium, total	ug/L	MW-36	10/02/2020	ND	2.0000		
Thallium, total	ug/L	MW-36	04/08/2021	ND	2.0000		
Thallium, total	ug/L	MW-36	10/29/2021	ND	2.0000		
Thallium, total	ug/L	MW-36	04/25/2022	ND	2.0000		
Thallium, total	ug/L	MW-36	10/17/2022	ND	2.0000		
Thallium, total	ug/L	MW-36	04/10/2023	ND	2.0000		
Thallium, total	ug/L	MW-36	10/27/2023	ND	2.0000		
Thallium, total	ug/L	MW-36	04/02/2024	ND	2.0000		
Thallium, total	ug/L	MW-36	10/10/2024	ND	2.0000		
Vanadium, total	ug/L	MW-36	07/08/2015	ND	20.0000		
Vanadium, total	ug/L	MW-36	04/21/2016	ND	20.0000		
Vanadium, total	ug/L	MW-36	10/17/2016	ND	20.0000		
Vanadium, total	ug/L	MW-36	04/21/2017	ND	20.0000		
Vanadium, total	ug/L	MW-36	10/16/2017	ND	20.0000		
Vanadium, total	ug/L	MW-36	04/24/2018	ND	20.0000		
Vanadium, total	ug/L	MW-36	10/25/2018	ND	20.0000		
Vanadium, total	ug/L	MW-36	04/15/2019	ND	20.0000		
Vanadium, total	ug/L	MW-36	10/07/2019	ND	20.0000		
Vanadium, total	ug/L	MW-36	04/22/2020	ND	20.0000		
Vanadium, total	ug/L	MW-36	10/02/2020	ND	20.0000		
Vanadium, total	ug/L	MW-36	04/08/2021	ND	20.0000		
Vanadium, total	ug/L	MW-36	10/29/2021	ND	20.0000		
Vanadium, total	ug/L	MW-36	04/25/2022	ND	20.0000		
Vanadium, total	ug/L	MW-36	10/17/2022	ND	20.0000		
Vanadium, total	ug/L	MW-36	04/10/2023	ND	20.0000		
Vanadium, total	ug/L	MW-36	10/27/2023	ND	20.0000		
Vanadium, total	ug/L	MW-36	04/02/2024	ND	20.0000		
Vanadium, total	ug/L	MW-36	10/10/2024	ND	22.4000		
Zinc, total	ug/L	MW-36	07/08/2015		13.1000		
Zinc, total	ug/L	MW-36	04/21/2016	ND	20.0000		
Zinc, total	ug/L	MW-36	10/17/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-36	04/21/2017		9.0000		
Zinc, total	ug/L	MW-36	10/16/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-36	04/24/2018		10.8000		
Zinc, total	ug/L	MW-36	10/25/2018	ND	20.0000		
Zinc, total	ug/L	MW-36	04/15/2019	ND	20.0000		
Zinc, total	ug/L	MW-36	10/07/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-36	04/22/2020		26.8000		
Zinc, total	ug/L	MW-36	10/02/2020	ND	20.0000		
Zinc, total	ug/L	MW-36	04/08/2021	ND	20.0000		
Zinc, total	ug/L	MW-36	10/29/2021	ND	20.0000		
Zinc, total	ug/L	MW-36	04/25/2022	ND	20.0000		
Zinc, total	ug/L	MW-36	10/17/2022	ND	20.0000		
Zinc, total	ug/L	MW-36	04/10/2023	ND	20.0000		
Zinc, total	ug/L	MW-36	10/27/2023	ND	20.0000		
Zinc, total	ug/L	MW-36	04/02/2024	ND	20.0000		
Zinc, total	ug/L	MW-36	10/10/2024	ND	38.0000		
Antimony, total	ug/L	MW-37	10/23/2014	ND	2.0000		
Antimony, total	ug/L	MW-37	01/08/2015	ND	2.0000		
Antimony, total	ug/L	MW-37	04/01/2015	ND	2.0000		
Antimony, total	ug/L	MW-37	07/08/2015	ND	2.0000		
Antimony, total	ug/L	MW-37	11/05/2015	ND	2.0000		
Antimony, total	ug/L	MW-37	04/21/2016	ND	2.0000		
Antimony, total	ug/L	MW-37	10/17/2016	ND	2.0000		
Antimony, total	ug/L	MW-37	04/21/2017	ND	2.0000		
Antimony, total	ug/L	MW-37	10/16/2017	ND	2.0000		
Antimony, total	ug/L	MW-37	04/24/2018	ND	2.0000		
Antimony, total	ug/L	MW-37	10/25/2018	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-37	04/15/2019	ND	2.0000	
Antimony, total	ug/L	MW-37	10/07/2019	ND	2.0000	
Antimony, total	ug/L	MW-37	04/22/2020	ND	2.0000	
Antimony, total	ug/L	MW-37	10/02/2020	ND	2.0000	
Antimony, total	ug/L	MW-37	04/08/2021	ND	2.0000	
Antimony, total	ug/L	MW-37	10/29/2021	ND	2.0000	
Antimony, total	ug/L	MW-37	04/25/2022	ND	2.0000	
Antimony, total	ug/L	MW-37	10/17/2022	ND	2.0000	
Antimony, total	ug/L	MW-37	04/10/2023	ND	2.0000	
Antimony, total	ug/L	MW-37	10/27/2023	ND	2.0000	
Antimony, total	ug/L	MW-37	04/02/2024	ND	2.0000	
Antimony, total	ug/L	MW-37	10/10/2024	ND	2.0000	
Arsenic, total	ug/L	MW-37	10/23/2014	ND	4.0000	
Arsenic, total	ug/L	MW-37	01/08/2015	ND	4.0000	
Arsenic, total	ug/L	MW-37	04/01/2015	ND	4.0000	
Arsenic, total	ug/L	MW-37	07/08/2015	ND	4.0000	
Arsenic, total	ug/L	MW-37	11/05/2015	ND	4.0000	
Arsenic, total	ug/L	MW-37	04/21/2016	ND	4.0000	
Arsenic, total	ug/L	MW-37	10/17/2016	ND	4.0000	
Arsenic, total	ug/L	MW-37	04/21/2017	ND	4.0000	
Arsenic, total	ug/L	MW-37	10/16/2017	ND	4.0000	
Arsenic, total	ug/L	MW-37	04/24/2018	ND	4.0000	
Arsenic, total	ug/L	MW-37	10/25/2018	ND	4.0000	
Arsenic, total	ug/L	MW-37	04/15/2019	ND	4.0000	
Arsenic, total	ug/L	MW-37	10/07/2019	ND	4.0000	
Arsenic, total	ug/L	MW-37	04/22/2020	ND	4.0000	
Arsenic, total	ug/L	MW-37	10/02/2020	ND	4.0000	
Arsenic, total	ug/L	MW-37	04/08/2021	ND	4.0000	
Arsenic, total	ug/L	MW-37	10/29/2021	ND	4.0000	
Arsenic, total	ug/L	MW-37	04/25/2022	ND	4.0000	
Arsenic, total	ug/L	MW-37	10/17/2022	ND	4.0000	
Arsenic, total	ug/L	MW-37	04/10/2023	ND	4.0000	
Arsenic, total	ug/L	MW-37	10/27/2023		11.6000	
Arsenic, total	ug/L	MW-37	04/02/2024	ND	4.0000	
Arsenic, total	ug/L	MW-37	10/10/2024	ND	4.0000	
Barium, total	ug/L	MW-37	10/23/2014		216.0000	
Barium, total	ug/L	MW-37	01/08/2015		169.0000	
Barium, total	ug/L	MW-37	04/01/2015		185.0000	
Barium, total	ug/L	MW-37	07/08/2015		141.0000	
Barium, total	ug/L	MW-37	11/05/2015		175.0000	
Barium, total	ug/L	MW-37	04/21/2016		143.0000	
Barium, total	ug/L	MW-37	10/17/2016		154.0000	
Barium, total	ug/L	MW-37	04/21/2017		163.0000	
Barium, total	ug/L	MW-37	10/16/2017		178.0000	
Barium, total	ug/L	MW-37	04/24/2018		142.0000	
Barium, total	ug/L	MW-37	10/25/2018		91.5000	
Barium, total	ug/L	MW-37	04/15/2019		82.0000	
Barium, total	ug/L	MW-37	10/07/2019		102.0000	
Barium, total	ug/L	MW-37	04/22/2020		78.1000	
Barium, total	ug/L	MW-37	10/02/2020		87.9000	
Barium, total	ug/L	MW-37	04/08/2021		51.5000	
Barium, total	ug/L	MW-37	10/29/2021		71.0000	
Barium, total	ug/L	MW-37	04/25/2022		57.0000	
Barium, total	ug/L	MW-37	10/17/2022		75.8000	
Barium, total	ug/L	MW-37	04/10/2023		31.4000	
Barium, total	ug/L	MW-37	10/27/2023		107.0000	
Barium, total	ug/L	MW-37	04/02/2024		51.9000	
Barium, total	ug/L	MW-37	10/10/2024		67.6000	
Beryllium, total	ug/L	MW-37	10/23/2014	ND	4.0000	
Beryllium, total	ug/L	MW-37	01/08/2015	ND	4.0000	
Beryllium, total	ug/L	MW-37	04/01/2015	ND	4.0000	
Beryllium, total	ug/L	MW-37	07/08/2015	ND	4.0000	
Beryllium, total	ug/L	MW-37	11/05/2015	ND	4.0000	
Beryllium, total	ug/L	MW-37	04/21/2016	ND	4.0000	
Beryllium, total	ug/L	MW-37	10/17/2016	ND	4.0000	
Beryllium, total	ug/L	MW-37	04/21/2017	ND	4.0000	
Beryllium, total	ug/L	MW-37	10/16/2017	ND	4.0000	
Beryllium, total	ug/L	MW-37	04/24/2018	ND	4.0000	
Beryllium, total	ug/L	MW-37	10/25/2018	ND	4.0000	
Beryllium, total	ug/L	MW-37	04/15/2019	ND	4.0000	
Beryllium, total	ug/L	MW-37	10/07/2019	ND	4.0000	
Beryllium, total	ug/L	MW-37	04/22/2020	ND	4.0000	
Beryllium, total	ug/L	MW-37	10/02/2020	ND	4.0000	
Beryllium, total	ug/L	MW-37	04/08/2021	ND	4.0000	

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Beryllium, total	ug/L	MW-37	10/29/2021	ND	4.0000		
Beryllium, total	ug/L	MW-37	04/25/2022	ND	4.0000		
Beryllium, total	ug/L	MW-37	10/17/2022	ND	4.0000		
Beryllium, total	ug/L	MW-37	04/10/2023	ND	4.0000		
Beryllium, total	ug/L	MW-37	10/27/2023	ND	4.0000		
Beryllium, total	ug/L	MW-37	04/02/2024	ND	4.0000		
Beryllium, total	ug/L	MW-37	10/10/2024	ND	4.0000		
Cadmium, total	ug/L	MW-37	10/23/2014	ND	0.8000		
Cadmium, total	ug/L	MW-37	01/08/2015	ND	0.8000		
Cadmium, total	ug/L	MW-37	04/01/2015	ND	0.8000		
Cadmium, total	ug/L	MW-37	07/08/2015	ND	0.8000		
Cadmium, total	ug/L	MW-37	11/05/2015	ND	0.8000		
Cadmium, total	ug/L	MW-37	04/21/2016	ND	0.8000		
Cadmium, total	ug/L	MW-37	10/17/2016	ND	0.8000		
Cadmium, total	ug/L	MW-37	04/21/2017	ND	0.8000		
Cadmium, total	ug/L	MW-37	10/16/2017	ND	0.8000		
Cadmium, total	ug/L	MW-37	04/24/2018	ND	0.8000		
Cadmium, total	ug/L	MW-37	10/25/2018	ND	0.8000		
Cadmium, total	ug/L	MW-37	04/15/2019	ND	0.8000		
Cadmium, total	ug/L	MW-37	10/07/2019	ND	0.8000		
Cadmium, total	ug/L	MW-37	04/22/2020	ND	0.8000		
Cadmium, total	ug/L	MW-37	10/02/2020	ND	0.8000		
Cadmium, total	ug/L	MW-37	04/08/2021	ND	0.8000		
Cadmium, total	ug/L	MW-37	10/29/2021	ND	0.8000		
Cadmium, total	ug/L	MW-37	04/25/2022	ND	0.8000		
Cadmium, total	ug/L	MW-37	10/17/2022	ND	0.8000		
Cadmium, total	ug/L	MW-37	04/10/2023	ND	0.8000		
Cadmium, total	ug/L	MW-37	10/27/2023	ND	0.8000		
Cadmium, total	ug/L	MW-37	04/02/2024	ND	0.8000		
Cadmium, total	ug/L	MW-37	10/10/2024	ND	0.8000		
Chromium, total	ug/L	MW-37	10/23/2014	ND	8.0000		
Chromium, total	ug/L	MW-37	01/08/2015	ND	8.0000		
Chromium, total	ug/L	MW-37	04/01/2015	ND	8.0000		
Chromium, total	ug/L	MW-37	07/08/2015	ND	8.0000		
Chromium, total	ug/L	MW-37	11/05/2015	ND	8.0000		
Chromium, total	ug/L	MW-37	04/21/2016	ND	8.0000		
Chromium, total	ug/L	MW-37	10/17/2016	ND	8.0000		
Chromium, total	ug/L	MW-37	04/21/2017		20.3000		
Chromium, total	ug/L	MW-37	10/16/2017	ND	8.0000		
Chromium, total	ug/L	MW-37	04/24/2018	ND	8.0000		
Chromium, total	ug/L	MW-37	10/25/2018	ND	8.0000		
Chromium, total	ug/L	MW-37	04/15/2019	ND	8.0000		
Chromium, total	ug/L	MW-37	10/07/2019	ND	8.0000		
Chromium, total	ug/L	MW-37	04/22/2020	ND	8.0000		
Chromium, total	ug/L	MW-37	10/02/2020	ND	8.0000		
Chromium, total	ug/L	MW-37	04/08/2021	ND	8.0000		
Chromium, total	ug/L	MW-37	10/29/2021	ND	8.0000		
Chromium, total	ug/L	MW-37	04/25/2022	ND	8.0000		
Chromium, total	ug/L	MW-37	10/17/2022	ND	8.0000		
Chromium, total	ug/L	MW-37	04/10/2023	ND	8.0000		
Chromium, total	ug/L	MW-37	10/27/2023	ND	8.0000		
Chromium, total	ug/L	MW-37	04/02/2024	ND	8.0000		
Chromium, total	ug/L	MW-37	10/10/2024	ND	8.0000		
Cobalt, total	ug/L	MW-37	10/23/2014	ND	0.8000		
Cobalt, total	ug/L	MW-37	01/08/2015	ND	0.8000		
Cobalt, total	ug/L	MW-37	04/01/2015	ND	0.8000		
Cobalt, total	ug/L	MW-37	07/08/2015	ND	0.8000		
Cobalt, total	ug/L	MW-37	11/05/2015	ND	0.8000		
Cobalt, total	ug/L	MW-37	04/21/2016	ND	0.8000		
Cobalt, total	ug/L	MW-37	10/17/2016	ND	0.8000		
Cobalt, total	ug/L	MW-37	04/21/2017	ND	0.8000		
Cobalt, total	ug/L	MW-37	10/16/2017	ND	0.8000		
Cobalt, total	ug/L	MW-37	04/24/2018	ND	0.8000		
Cobalt, total	ug/L	MW-37	10/25/2018	ND	0.8000		
Cobalt, total	ug/L	MW-37	04/15/2019	ND	0.8000		
Cobalt, total	ug/L	MW-37	10/07/2019	ND	0.8000		
Cobalt, total	ug/L	MW-37	04/22/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-37	10/02/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-37	04/08/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-37	10/29/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-37	04/25/2022		0.4000		
Cobalt, total	ug/L	MW-37	10/17/2022		2.2000		
Cobalt, total	ug/L	MW-37	04/10/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-37	10/27/2023		9.6000		*

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Cobalt, total	ug/L	MW-37	04/02/2024		0.6000		
Cobalt, total	ug/L	MW-37	10/10/2024		4.4000		*
Copper, total	ug/L	MW-37	10/23/2014		4.1000		
Copper, total	ug/L	MW-37	01/08/2015	ND	4.0000		
Copper, total	ug/L	MW-37	04/01/2015	ND	4.0000		
Copper, total	ug/L	MW-37	07/08/2015	ND	4.0000		
Copper, total	ug/L	MW-37	11/05/2015	ND	4.0000		
Copper, total	ug/L	MW-37	04/21/2016	ND	4.0000		
Copper, total	ug/L	MW-37	10/17/2016	ND	4.0000		
Copper, total	ug/L	MW-37	04/21/2017	ND	4.0000		
Copper, total	ug/L	MW-37	10/16/2017	ND	4.0000		
Copper, total	ug/L	MW-37	04/24/2018	ND	4.0000		
Copper, total	ug/L	MW-37	10/25/2018		13.7000		*
Copper, total	ug/L	MW-37	04/15/2019	ND	4.0000		
Copper, total	ug/L	MW-37	10/07/2019	ND	4.0000		
Copper, total	ug/L	MW-37	04/22/2020	ND	4.0000		
Copper, total	ug/L	MW-37	10/02/2020	ND	4.0000		
Copper, total	ug/L	MW-37	04/08/2021	ND	4.0000		
Copper, total	ug/L	MW-37	10/29/2021	ND	4.0000		
Copper, total	ug/L	MW-37	04/25/2022	ND	4.0000		
Copper, total	ug/L	MW-37	10/17/2022	ND	4.0000		
Copper, total	ug/L	MW-37	04/10/2023	ND	4.0000		
Copper, total	ug/L	MW-37	10/27/2023	ND	4.0000		
Copper, total	ug/L	MW-37	04/02/2024	ND	4.0000		
Copper, total	ug/L	MW-37	10/10/2024	ND	4.0000		
Lead, total	ug/L	MW-37	10/23/2014	ND	4.0000		
Lead, total	ug/L	MW-37	01/08/2015	ND	4.0000		
Lead, total	ug/L	MW-37	04/01/2015	ND	4.0000		
Lead, total	ug/L	MW-37	07/08/2015	ND	4.0000		
Lead, total	ug/L	MW-37	11/05/2015	ND	4.0000		
Lead, total	ug/L	MW-37	04/21/2016	ND	4.0000		
Lead, total	ug/L	MW-37	10/17/2016	ND	4.0000		
Lead, total	ug/L	MW-37	04/21/2017		22.7000		*
Lead, total	ug/L	MW-37	10/16/2017	ND	4.0000		
Lead, total	ug/L	MW-37	04/24/2018	ND	4.0000		
Lead, total	ug/L	MW-37	10/25/2018	ND	4.0000		
Lead, total	ug/L	MW-37	04/15/2019	ND	4.0000		
Lead, total	ug/L	MW-37	10/07/2019	ND	4.0000		
Lead, total	ug/L	MW-37	04/22/2020	ND	4.0000		
Lead, total	ug/L	MW-37	10/02/2020	ND	4.0000		
Lead, total	ug/L	MW-37	04/08/2021	ND	4.0000		
Lead, total	ug/L	MW-37	10/29/2021	ND	4.0000		
Lead, total	ug/L	MW-37	04/25/2022	ND	4.0000		
Lead, total	ug/L	MW-37	10/17/2022	ND	4.0000		
Lead, total	ug/L	MW-37	04/10/2023	ND	4.0000		
Lead, total	ug/L	MW-37	10/27/2023	ND	4.0000		
Lead, total	ug/L	MW-37	04/02/2024	ND	4.0000		
Lead, total	ug/L	MW-37	10/10/2024	ND	4.0000		
Nickel, total	ug/L	MW-37	10/23/2014	ND	4.0000		
Nickel, total	ug/L	MW-37	01/08/2015	ND	4.0000		
Nickel, total	ug/L	MW-37	04/01/2015	ND	4.0000		
Nickel, total	ug/L	MW-37	07/08/2015	ND	4.0000		
Nickel, total	ug/L	MW-37	11/05/2015	ND	4.0000		
Nickel, total	ug/L	MW-37	04/21/2016	ND	4.0000		
Nickel, total	ug/L	MW-37	10/17/2016	ND	4.0000		
Nickel, total	ug/L	MW-37	04/21/2017	ND	4.0000		
Nickel, total	ug/L	MW-37	10/16/2017	ND	4.0000		
Nickel, total	ug/L	MW-37	04/24/2018	ND	4.0000		
Nickel, total	ug/L	MW-37	10/25/2018	ND	4.0000		
Nickel, total	ug/L	MW-37	04/15/2019	ND	4.0000		
Nickel, total	ug/L	MW-37	10/07/2019	ND	4.0000		
Nickel, total	ug/L	MW-37	04/22/2020	ND	4.0000		
Nickel, total	ug/L	MW-37	10/02/2020	ND	4.0000		
Nickel, total	ug/L	MW-37	04/08/2021	ND	4.0000		
Nickel, total	ug/L	MW-37	10/29/2021	ND	4.0000		
Nickel, total	ug/L	MW-37	04/25/2022	ND	4.0000		
Nickel, total	ug/L	MW-37	10/17/2022	ND	4.0000		
Nickel, total	ug/L	MW-37	04/10/2023	ND	4.0000		
Nickel, total	ug/L	MW-37	10/27/2023		13.9000		*
Nickel, total	ug/L	MW-37	04/02/2024	ND	4.0000		
Nickel, total	ug/L	MW-37	10/10/2024		18.7000		*
Selenium, total	ug/L	MW-37	10/23/2014	ND	4.0000		
Selenium, total	ug/L	MW-37	01/08/2015	ND	4.0000		
Selenium, total	ug/L	MW-37	04/01/2015	ND	4.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Selenium, total	ug/L	MW-37	07/08/2015	ND	4.0000		
Selenium, total	ug/L	MW-37	11/05/2015	ND	4.0000		
Selenium, total	ug/L	MW-37	04/21/2016	ND	4.0000		
Selenium, total	ug/L	MW-37	10/17/2016	ND	4.0000		
Selenium, total	ug/L	MW-37	04/21/2017	ND	4.0000		
Selenium, total	ug/L	MW-37	10/16/2017	ND	4.0000		
Selenium, total	ug/L	MW-37	04/24/2018		8.9000		*
Selenium, total	ug/L	MW-37	10/25/2018	ND	4.0000		
Selenium, total	ug/L	MW-37	04/15/2019	ND	4.0000		
Selenium, total	ug/L	MW-37	10/07/2019	ND	4.0000		
Selenium, total	ug/L	MW-37	04/22/2020	ND	4.0000		
Selenium, total	ug/L	MW-37	10/02/2020	ND	4.0000		
Selenium, total	ug/L	MW-37	04/08/2021	ND	4.0000		
Selenium, total	ug/L	MW-37	10/29/2021	ND	4.0000		
Selenium, total	ug/L	MW-37	04/25/2022	ND	4.0000		
Selenium, total	ug/L	MW-37	10/17/2022	ND	4.0000		
Selenium, total	ug/L	MW-37	04/10/2023	ND	4.0000		
Selenium, total	ug/L	MW-37	10/27/2023	ND	4.0000		
Selenium, total	ug/L	MW-37	04/02/2024	ND	4.0000		
Selenium, total	ug/L	MW-37	10/10/2024	ND	4.0000		
Silver, total	ug/L	MW-37	10/23/2014	ND	4.0000		
Silver, total	ug/L	MW-37	01/08/2015	ND	4.0000		
Silver, total	ug/L	MW-37	04/01/2015	ND	4.0000		
Silver, total	ug/L	MW-37	07/08/2015	ND	4.0000		
Silver, total	ug/L	MW-37	11/05/2015	ND	4.0000		
Silver, total	ug/L	MW-37	04/21/2016	ND	4.0000		
Silver, total	ug/L	MW-37	10/17/2016	ND	4.0000		
Silver, total	ug/L	MW-37	04/21/2017	ND	4.0000		
Silver, total	ug/L	MW-37	10/16/2017	ND	4.0000		
Silver, total	ug/L	MW-37	04/24/2018	ND	4.0000		
Silver, total	ug/L	MW-37	10/25/2018	ND	4.0000		
Silver, total	ug/L	MW-37	04/15/2019	ND	4.0000		
Silver, total	ug/L	MW-37	10/07/2019	ND	4.0000		
Silver, total	ug/L	MW-37	04/22/2020	ND	4.0000		
Silver, total	ug/L	MW-37	10/02/2020	ND	4.0000		
Silver, total	ug/L	MW-37	04/08/2021	ND	4.0000		
Silver, total	ug/L	MW-37	10/29/2021	ND	4.0000		
Silver, total	ug/L	MW-37	04/25/2022	ND	4.0000		
Silver, total	ug/L	MW-37	10/17/2022	ND	4.0000		
Silver, total	ug/L	MW-37	04/10/2023	ND	4.0000		
Silver, total	ug/L	MW-37	10/27/2023	ND	4.0000		
Silver, total	ug/L	MW-37	04/02/2024	ND	4.0000		
Silver, total	ug/L	MW-37	10/10/2024	ND	4.0000		
Thallium, total	ug/L	MW-37	10/23/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	01/08/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	04/01/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	07/08/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	11/05/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	04/21/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	10/17/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	04/21/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	10/16/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	04/24/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	10/25/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	04/15/2019	ND	2.0000		
Thallium, total	ug/L	MW-37	10/07/2019	ND	2.0000		
Thallium, total	ug/L	MW-37	04/22/2020	ND	2.0000		
Thallium, total	ug/L	MW-37	10/02/2020	ND	2.0000		
Thallium, total	ug/L	MW-37	04/08/2021	ND	2.0000		
Thallium, total	ug/L	MW-37	10/29/2021	ND	2.0000		
Thallium, total	ug/L	MW-37	04/25/2022	ND	2.0000		
Thallium, total	ug/L	MW-37	10/17/2022	ND	2.0000		
Thallium, total	ug/L	MW-37	04/10/2023	ND	2.0000		
Thallium, total	ug/L	MW-37	10/27/2023	ND	2.0000		
Thallium, total	ug/L	MW-37	04/02/2024	ND	2.0000		
Thallium, total	ug/L	MW-37	10/10/2024	ND	2.0000		
Vanadium, total	ug/L	MW-37	10/23/2014	ND	20.0000		
Vanadium, total	ug/L	MW-37	01/08/2015	ND	20.0000		
Vanadium, total	ug/L	MW-37	04/01/2015	ND	20.0000		
Vanadium, total	ug/L	MW-37	07/08/2015	ND	20.0000		
Vanadium, total	ug/L	MW-37	11/05/2015	ND	20.0000		
Vanadium, total	ug/L	MW-37	04/21/2016	ND	20.0000		
Vanadium, total	ug/L	MW-37	10/17/2016	ND	20.0000		
Vanadium, total	ug/L	MW-37	04/21/2017	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-37	10/16/2017	ND	20.0000		
Vanadium, total	ug/L	MW-37	04/24/2018	ND	20.0000		
Vanadium, total	ug/L	MW-37	10/25/2018	ND	20.0000		
Vanadium, total	ug/L	MW-37	04/15/2019	ND	20.0000		
Vanadium, total	ug/L	MW-37	10/07/2019	ND	20.0000		
Vanadium, total	ug/L	MW-37	04/22/2020	ND	20.0000		
Vanadium, total	ug/L	MW-37	10/02/2020	ND	20.0000		
Vanadium, total	ug/L	MW-37	04/08/2021	ND	20.0000		
Vanadium, total	ug/L	MW-37	10/29/2021	ND	20.0000		
Vanadium, total	ug/L	MW-37	04/25/2022	ND	20.0000		
Vanadium, total	ug/L	MW-37	10/17/2022	ND	20.0000		
Vanadium, total	ug/L	MW-37	04/10/2023	ND	20.0000		
Vanadium, total	ug/L	MW-37	10/27/2023	ND	20.0000		
Vanadium, total	ug/L	MW-37	04/02/2024	ND	20.0000		
Vanadium, total	ug/L	MW-37	10/10/2024	ND	20.0000		
Zinc, total	ug/L	MW-37	10/23/2014	ND	20.0000		
Zinc, total	ug/L	MW-37	01/08/2015		14.5000		
Zinc, total	ug/L	MW-37	04/01/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-37	07/08/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-37	11/05/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-37	04/21/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-37	10/17/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-37	04/21/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-37	10/16/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-37	04/24/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-37	10/25/2018	ND	20.0000		
Zinc, total	ug/L	MW-37	04/15/2019	ND	20.0000		
Zinc, total	ug/L	MW-37	10/07/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-37	04/22/2020	ND	20.0000		
Zinc, total	ug/L	MW-37	10/02/2020	ND	20.0000		
Zinc, total	ug/L	MW-37	04/08/2021	ND	20.0000		
Zinc, total	ug/L	MW-37	10/29/2021	ND	20.0000		
Zinc, total	ug/L	MW-37	04/25/2022	ND	20.0000		
Zinc, total	ug/L	MW-37	10/17/2022	ND	20.0000		
Zinc, total	ug/L	MW-37	04/10/2023	ND	20.0000		
Zinc, total	ug/L	MW-37	10/27/2023		22.2000		
Zinc, total	ug/L	MW-37	04/02/2024	ND	20.0000		
Zinc, total	ug/L	MW-37	10/10/2024	ND	20.0000		
Antimony, total	ug/L	MW-39	10/23/2014	ND	2.0000		
Antimony, total	ug/L	MW-39	01/08/2015	ND	2.0000		
Antimony, total	ug/L	MW-39	04/01/2015	ND	2.0000		
Antimony, total	ug/L	MW-39	07/08/2015	ND	2.0000		
Antimony, total	ug/L	MW-39	11/05/2015	ND	2.0000		
Antimony, total	ug/L	MW-39	04/21/2016	ND	2.0000		
Antimony, total	ug/L	MW-39	10/17/2016	ND	2.0000		
Antimony, total	ug/L	MW-39	04/21/2017	ND	2.0000		
Antimony, total	ug/L	MW-39	10/16/2017	ND	2.0000		
Antimony, total	ug/L	MW-39	04/24/2018	ND	2.0000		
Antimony, total	ug/L	MW-39	10/25/2018	ND	2.0000		
Antimony, total	ug/L	MW-39	04/15/2019	ND	2.0000		
Antimony, total	ug/L	MW-39	10/07/2019	ND	2.0000		
Antimony, total	ug/L	MW-39	04/22/2020	ND	2.0000		
Antimony, total	ug/L	MW-39	10/02/2020	ND	2.0000		
Antimony, total	ug/L	MW-39	04/08/2021	ND	2.0000		
Antimony, total	ug/L	MW-39	10/29/2021	ND	2.0000		
Antimony, total	ug/L	MW-39	04/25/2022	ND	2.0000		
Antimony, total	ug/L	MW-39	10/17/2022	ND	2.0000		
Antimony, total	ug/L	MW-39	04/10/2023	ND	2.0000		
Antimony, total	ug/L	MW-39	10/27/2023	ND	2.0000		
Antimony, total	ug/L	MW-39	04/02/2024	ND	2.0000		
Antimony, total	ug/L	MW-39	10/10/2024	ND	2.0000		
Arsenic, total	ug/L	MW-39	10/23/2014	ND	4.0000		
Arsenic, total	ug/L	MW-39	01/08/2015	ND	4.0000		
Arsenic, total	ug/L	MW-39	04/01/2015	ND	4.0000		
Arsenic, total	ug/L	MW-39	07/08/2015	ND	4.0000		
Arsenic, total	ug/L	MW-39	11/05/2015	ND	4.0000		
Arsenic, total	ug/L	MW-39	04/21/2016	ND	4.0000		
Arsenic, total	ug/L	MW-39	10/17/2016	ND	4.0000		
Arsenic, total	ug/L	MW-39	04/21/2017	ND	4.0000		
Arsenic, total	ug/L	MW-39	10/16/2017	ND	4.0000		
Arsenic, total	ug/L	MW-39	04/24/2018	ND	4.0000		
Arsenic, total	ug/L	MW-39	10/25/2018	ND	4.0000		
Arsenic, total	ug/L	MW-39	04/15/2019	ND	4.0000		
Arsenic, total	ug/L	MW-39	10/07/2019	ND	4.0000		
Arsenic, total	ug/L	MW-39	04/22/2020	ND	4.0000		
Arsenic, total	ug/L	MW-39	10/02/2020	ND	4.0000		
Arsenic, total	ug/L	MW-39	04/08/2021	ND	4.0000		
Arsenic, total	ug/L	MW-39	10/29/2021	ND	4.0000		
Arsenic, total	ug/L	MW-39	04/25/2022	ND	4.0000		
Arsenic, total	ug/L	MW-39	10/17/2022	ND	4.0000		
Arsenic, total	ug/L	MW-39	04/10/2023	ND	4.0000		
Arsenic, total	ug/L	MW-39	10/27/2023	ND	4.0000		
Arsenic, total	ug/L	MW-39	04/02/2024	ND	4.0000		
Arsenic, total	ug/L	MW-39	10/10/2024	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
Arsenic, total	ug/L	MW-39	04/22/2020	ND	4.0000	
Arsenic, total	ug/L	MW-39	10/02/2020	ND	4.0000	
Arsenic, total	ug/L	MW-39	04/08/2021	ND	4.0000	
Arsenic, total	ug/L	MW-39	10/29/2021	ND	4.0000	
Arsenic, total	ug/L	MW-39	04/25/2022	ND	4.0000	
Arsenic, total	ug/L	MW-39	10/17/2022	ND	4.0000	
Arsenic, total	ug/L	MW-39	04/10/2023	ND	4.0000	
Arsenic, total	ug/L	MW-39	10/27/2023	ND	4.0000	
Arsenic, total	ug/L	MW-39	04/02/2024	ND	4.0000	
Arsenic, total	ug/L	MW-39	10/10/2024	ND	4.0000	
Barium, total	ug/L	MW-39	10/23/2014		287.0000	
Barium, total	ug/L	MW-39	01/08/2015		309.0000	
Barium, total	ug/L	MW-39	04/01/2015		272.0000	
Barium, total	ug/L	MW-39	07/08/2015		249.0000	
Barium, total	ug/L	MW-39	11/05/2015		383.0000	
Barium, total	ug/L	MW-39	04/21/2016		266.0000	
Barium, total	ug/L	MW-39	10/17/2016		257.0000	
Barium, total	ug/L	MW-39	04/21/2017		253.0000	
Barium, total	ug/L	MW-39	10/16/2017		268.0000	
Barium, total	ug/L	MW-39	04/24/2018		273.0000	
Barium, total	ug/L	MW-39	10/25/2018		248.0000	
Barium, total	ug/L	MW-39	04/15/2019		251.0000	
Barium, total	ug/L	MW-39	10/07/2019		264.0000	
Barium, total	ug/L	MW-39	04/22/2020		323.0000	
Barium, total	ug/L	MW-39	10/02/2020		222.0000	
Barium, total	ug/L	MW-39	04/08/2021		230.0000	
Barium, total	ug/L	MW-39	10/29/2021		255.0000	
Barium, total	ug/L	MW-39	04/25/2022		232.0000	
Barium, total	ug/L	MW-39	10/17/2022		239.0000	
Barium, total	ug/L	MW-39	04/10/2023		238.0000	
Barium, total	ug/L	MW-39	10/27/2023		225.0000	
Barium, total	ug/L	MW-39	04/02/2024		254.0000	
Barium, total	ug/L	MW-39	10/10/2024		253.0000	
Beryllium, total	ug/L	MW-39	10/23/2014	ND	4.0000	
Beryllium, total	ug/L	MW-39	01/08/2015	ND	4.0000	
Beryllium, total	ug/L	MW-39	04/01/2015	ND	4.0000	
Beryllium, total	ug/L	MW-39	07/08/2015	ND	4.0000	
Beryllium, total	ug/L	MW-39	11/05/2015	ND	4.0000	
Beryllium, total	ug/L	MW-39	04/21/2016	ND	4.0000	
Beryllium, total	ug/L	MW-39	10/17/2016	ND	4.0000	
Beryllium, total	ug/L	MW-39	04/21/2017	ND	4.0000	
Beryllium, total	ug/L	MW-39	10/16/2017	ND	4.0000	
Beryllium, total	ug/L	MW-39	04/24/2018	ND	4.0000	
Beryllium, total	ug/L	MW-39	10/25/2018	ND	4.0000	
Beryllium, total	ug/L	MW-39	04/15/2019	ND	4.0000	
Beryllium, total	ug/L	MW-39	10/07/2019	ND	4.0000	
Beryllium, total	ug/L	MW-39	04/22/2020	ND	4.0000	
Beryllium, total	ug/L	MW-39	10/02/2020	ND	4.0000	
Beryllium, total	ug/L	MW-39	04/08/2021	ND	4.0000	
Beryllium, total	ug/L	MW-39	10/29/2021	ND	4.0000	
Beryllium, total	ug/L	MW-39	04/25/2022	ND	4.0000	
Beryllium, total	ug/L	MW-39	10/17/2022	ND	4.0000	
Beryllium, total	ug/L	MW-39	04/10/2023	ND	4.0000	
Beryllium, total	ug/L	MW-39	10/27/2023	ND	4.0000	
Beryllium, total	ug/L	MW-39	04/02/2024	ND	4.0000	
Beryllium, total	ug/L	MW-39	10/10/2024	ND	4.0000	
Cadmium, total	ug/L	MW-39	10/23/2014	ND	0.8000	
Cadmium, total	ug/L	MW-39	01/08/2015	ND	0.8000	
Cadmium, total	ug/L	MW-39	04/01/2015	ND	0.8000	
Cadmium, total	ug/L	MW-39	07/08/2015	ND	0.8000	
Cadmium, total	ug/L	MW-39	11/05/2015	ND	0.8000	
Cadmium, total	ug/L	MW-39	04/21/2016	ND	0.8000	
Cadmium, total	ug/L	MW-39	10/17/2016	ND	0.8000	
Cadmium, total	ug/L	MW-39	04/21/2017	ND	0.8000	
Cadmium, total	ug/L	MW-39	10/16/2017	ND	0.8000	
Cadmium, total	ug/L	MW-39	04/24/2018	ND	0.8000	
Cadmium, total	ug/L	MW-39	10/25/2018	ND	0.8000	
Cadmium, total	ug/L	MW-39	04/15/2019	ND	0.8000	
Cadmium, total	ug/L	MW-39	10/07/2019	ND	0.8000	
Cadmium, total	ug/L	MW-39	04/22/2020	ND	0.8000	
Cadmium, total	ug/L	MW-39	10/02/2020	ND	0.8000	
Cadmium, total	ug/L	MW-39	04/08/2021	ND	0.8000	
Cadmium, total	ug/L	MW-39	10/29/2021	ND	0.8000	
Cadmium, total	ug/L	MW-39	04/25/2022	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-39	10/17/2022	ND	0.8000		
Cadmium, total	ug/L	MW-39	04/10/2023	ND	0.8000		
Cadmium, total	ug/L	MW-39	10/27/2023	ND	0.8000		
Cadmium, total	ug/L	MW-39	04/02/2024	ND	0.8000		
Cadmium, total	ug/L	MW-39	10/10/2024	ND	0.8000		
Chromium, total	ug/L	MW-39	10/23/2014	ND	8.0000		
Chromium, total	ug/L	MW-39	01/08/2015		29.6000		*
Chromium, total	ug/L	MW-39	04/01/2015	ND	8.0000		
Chromium, total	ug/L	MW-39	07/08/2015	ND	8.0000		
Chromium, total	ug/L	MW-39	11/05/2015	ND	8.0000		
Chromium, total	ug/L	MW-39	04/21/2016	ND	8.0000		
Chromium, total	ug/L	MW-39	10/17/2016	ND	8.0000		
Chromium, total	ug/L	MW-39	04/21/2017	ND	8.0000		
Chromium, total	ug/L	MW-39	10/16/2017	ND	8.0000		
Chromium, total	ug/L	MW-39	04/24/2018	ND	8.0000		
Chromium, total	ug/L	MW-39	10/25/2018	ND	8.0000		
Chromium, total	ug/L	MW-39	04/15/2019	ND	8.0000		
Chromium, total	ug/L	MW-39	10/07/2019	ND	8.0000		
Chromium, total	ug/L	MW-39	04/22/2020	ND	8.0000		
Chromium, total	ug/L	MW-39	10/02/2020	ND	8.0000		
Chromium, total	ug/L	MW-39	04/08/2021	ND	8.0000		
Chromium, total	ug/L	MW-39	10/29/2021	ND	8.0000		
Chromium, total	ug/L	MW-39	04/25/2022	ND	8.0000		
Chromium, total	ug/L	MW-39	10/17/2022	ND	8.0000		
Chromium, total	ug/L	MW-39	04/10/2023	ND	8.0000		
Chromium, total	ug/L	MW-39	10/27/2023	ND	8.0000		
Chromium, total	ug/L	MW-39	04/02/2024	ND	8.0000		
Chromium, total	ug/L	MW-39	10/10/2024	ND	8.0000		
Cobalt, total	ug/L	MW-39	10/23/2014	ND	0.8000		
Cobalt, total	ug/L	MW-39	01/08/2015	ND	0.8000		
Cobalt, total	ug/L	MW-39	04/01/2015	ND	0.8000		
Cobalt, total	ug/L	MW-39	07/08/2015	ND	0.8000		
Cobalt, total	ug/L	MW-39	11/05/2015		3.3000		*
Cobalt, total	ug/L	MW-39	04/21/2016	ND	0.8000		
Cobalt, total	ug/L	MW-39	10/17/2016	ND	0.8000		
Cobalt, total	ug/L	MW-39	04/21/2017	ND	0.8000		
Cobalt, total	ug/L	MW-39	10/16/2017	ND	0.8000		
Cobalt, total	ug/L	MW-39	04/24/2018	ND	0.8000		
Cobalt, total	ug/L	MW-39	10/25/2018	ND	0.8000		
Cobalt, total	ug/L	MW-39	04/15/2019	ND	0.8000		
Cobalt, total	ug/L	MW-39	10/07/2019	ND	0.8000		
Cobalt, total	ug/L	MW-39	04/22/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	10/02/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	04/08/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	10/29/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	04/25/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	10/17/2022		1.5000		
Cobalt, total	ug/L	MW-39	04/10/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	10/27/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	04/02/2024	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	10/10/2024	ND	0.4000	0.8000	**
Copper, total	ug/L	MW-39	10/23/2014	ND	4.0000		
Copper, total	ug/L	MW-39	01/08/2015	ND	4.0000		
Copper, total	ug/L	MW-39	04/01/2015	ND	4.0000		
Copper, total	ug/L	MW-39	07/08/2015	ND	4.0000		
Copper, total	ug/L	MW-39	11/05/2015	ND	4.0000		
Copper, total	ug/L	MW-39	04/21/2016	ND	4.0000		
Copper, total	ug/L	MW-39	10/17/2016	ND	4.0000		
Copper, total	ug/L	MW-39	04/21/2017	ND	4.0000		
Copper, total	ug/L	MW-39	10/16/2017	ND	4.0000		
Copper, total	ug/L	MW-39	04/24/2018	ND	4.0000		
Copper, total	ug/L	MW-39	10/25/2018	ND	4.0000		
Copper, total	ug/L	MW-39	04/15/2019	ND	4.0000		
Copper, total	ug/L	MW-39	10/07/2019	ND	4.0000		
Copper, total	ug/L	MW-39	04/22/2020	ND	4.0000		
Copper, total	ug/L	MW-39	10/02/2020	ND	4.0000		
Copper, total	ug/L	MW-39	04/08/2021	ND	4.0000		
Copper, total	ug/L	MW-39	10/29/2021	ND	4.0000		
Copper, total	ug/L	MW-39	04/25/2022	ND	4.0000		
Copper, total	ug/L	MW-39	10/17/2022	ND	4.0000		
Copper, total	ug/L	MW-39	04/10/2023	ND	4.0000		
Copper, total	ug/L	MW-39	10/27/2023	ND	4.0000		
Copper, total	ug/L	MW-39	04/02/2024		126.0000		*
Copper, total	ug/L	MW-39	10/10/2024	ND	4.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Lead, total	ug/L	MW-39	10/23/2014	ND	4.0000		
Lead, total	ug/L	MW-39	01/08/2015	ND	4.0000		
Lead, total	ug/L	MW-39	04/01/2015	ND	4.0000		
Lead, total	ug/L	MW-39	07/08/2015	ND	4.0000		
Lead, total	ug/L	MW-39	11/05/2015	ND	4.0000		
Lead, total	ug/L	MW-39	04/21/2016	ND	4.0000		
Lead, total	ug/L	MW-39	10/17/2016	ND	4.0000		
Lead, total	ug/L	MW-39	04/21/2017	ND	4.0000		
Lead, total	ug/L	MW-39	10/16/2017	ND	4.0000		
Lead, total	ug/L	MW-39	04/24/2018	ND	4.0000		
Lead, total	ug/L	MW-39	10/25/2018	ND	4.0000		
Lead, total	ug/L	MW-39	04/15/2019	ND	4.0000		
Lead, total	ug/L	MW-39	10/07/2019	ND	4.0000		
Lead, total	ug/L	MW-39	04/22/2020	ND	4.0000		
Lead, total	ug/L	MW-39	10/02/2020	ND	4.0000		
Lead, total	ug/L	MW-39	04/08/2021	ND	4.0000		
Lead, total	ug/L	MW-39	10/29/2021	ND	4.0000		
Lead, total	ug/L	MW-39	04/25/2022	ND	4.0000		
Lead, total	ug/L	MW-39	10/17/2022	ND	4.0000		
Lead, total	ug/L	MW-39	04/10/2023	ND	4.0000		
Lead, total	ug/L	MW-39	10/27/2023	ND	4.0000		
Lead, total	ug/L	MW-39	04/02/2024	ND	4.0000		
Lead, total	ug/L	MW-39	10/10/2024	ND	4.0000		
Nickel, total	ug/L	MW-39	10/23/2014	ND	4.0000		
Nickel, total	ug/L	MW-39	01/08/2015		20.5000		*
Nickel, total	ug/L	MW-39	04/01/2015	ND	4.0000		
Nickel, total	ug/L	MW-39	07/08/2015	ND	4.0000		
Nickel, total	ug/L	MW-39	11/05/2015		7.0000		
Nickel, total	ug/L	MW-39	04/21/2016	ND	4.0000		
Nickel, total	ug/L	MW-39	10/17/2016	ND	4.0000		
Nickel, total	ug/L	MW-39	04/21/2017	ND	4.0000		
Nickel, total	ug/L	MW-39	10/16/2017	ND	4.0000		
Nickel, total	ug/L	MW-39	04/24/2018	ND	4.0000		
Nickel, total	ug/L	MW-39	10/25/2018	ND	4.0000		
Nickel, total	ug/L	MW-39	04/15/2019	ND	4.0000		
Nickel, total	ug/L	MW-39	10/07/2019	ND	4.0000		
Nickel, total	ug/L	MW-39	04/22/2020	ND	4.0000		
Nickel, total	ug/L	MW-39	10/02/2020	ND	4.0000		
Nickel, total	ug/L	MW-39	04/08/2021	ND	4.0000		
Nickel, total	ug/L	MW-39	10/29/2021	ND	4.0000		
Nickel, total	ug/L	MW-39	04/25/2022	ND	4.0000		
Nickel, total	ug/L	MW-39	10/17/2022	ND	4.0000		
Nickel, total	ug/L	MW-39	04/10/2023	ND	4.0000		
Nickel, total	ug/L	MW-39	10/27/2023	ND	4.0000		
Nickel, total	ug/L	MW-39	04/02/2024	ND	4.0000		
Nickel, total	ug/L	MW-39	10/10/2024	ND	4.0000		
Selenium, total	ug/L	MW-39	10/23/2014	ND	4.0000		
Selenium, total	ug/L	MW-39	01/08/2015	ND	4.0000		
Selenium, total	ug/L	MW-39	04/01/2015	ND	4.0000		
Selenium, total	ug/L	MW-39	07/08/2015	ND	4.0000		
Selenium, total	ug/L	MW-39	11/05/2015	ND	4.0000		
Selenium, total	ug/L	MW-39	04/21/2016	ND	4.0000		
Selenium, total	ug/L	MW-39	10/17/2016	ND	4.0000		
Selenium, total	ug/L	MW-39	04/21/2017	ND	4.0000		
Selenium, total	ug/L	MW-39	10/16/2017	ND	4.0000		
Selenium, total	ug/L	MW-39	04/24/2018	ND	4.0000		
Selenium, total	ug/L	MW-39	10/25/2018	ND	4.0000		
Selenium, total	ug/L	MW-39	04/15/2019	ND	4.0000		
Selenium, total	ug/L	MW-39	10/07/2019	ND	4.0000		
Selenium, total	ug/L	MW-39	04/22/2020	ND	4.0000		
Selenium, total	ug/L	MW-39	10/02/2020	ND	4.0000		
Selenium, total	ug/L	MW-39	04/08/2021	ND	4.0000		
Selenium, total	ug/L	MW-39	10/29/2021	ND	4.0000		
Selenium, total	ug/L	MW-39	04/25/2022	ND	4.0000		
Selenium, total	ug/L	MW-39	10/17/2022	ND	4.0000		
Selenium, total	ug/L	MW-39	04/10/2023	ND	4.0000		
Selenium, total	ug/L	MW-39	10/27/2023	ND	4.0000		
Selenium, total	ug/L	MW-39	04/02/2024	ND	4.0000		
Selenium, total	ug/L	MW-39	10/10/2024	ND	4.0000		
Silver, total	ug/L	MW-39	10/23/2014	ND	4.0000		
Silver, total	ug/L	MW-39	01/08/2015	ND	4.0000		
Silver, total	ug/L	MW-39	04/01/2015	ND	4.0000		
Silver, total	ug/L	MW-39	07/08/2015	ND	4.0000		
Silver, total	ug/L	MW-39	11/05/2015	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	
Silver, total	ug/L	MW-39	04/21/2016	ND	4.0000		
Silver, total	ug/L	MW-39	10/17/2016	ND	4.0000		
Silver, total	ug/L	MW-39	04/21/2017	ND	4.0000		
Silver, total	ug/L	MW-39	10/16/2017	ND	4.0000		
Silver, total	ug/L	MW-39	04/24/2018	ND	4.0000		
Silver, total	ug/L	MW-39	10/25/2018	ND	4.0000		
Silver, total	ug/L	MW-39	04/15/2019	ND	4.0000		
Silver, total	ug/L	MW-39	10/07/2019	ND	4.0000		
Silver, total	ug/L	MW-39	04/22/2020	ND	4.0000		
Silver, total	ug/L	MW-39	10/02/2020	ND	4.0000		
Silver, total	ug/L	MW-39	04/08/2021	ND	4.0000		
Silver, total	ug/L	MW-39	10/29/2021	ND	4.0000		
Silver, total	ug/L	MW-39	04/25/2022	ND	4.0000		
Silver, total	ug/L	MW-39	10/17/2022	ND	4.0000		
Silver, total	ug/L	MW-39	04/10/2023	ND	4.0000		
Silver, total	ug/L	MW-39	10/27/2023	ND	4.0000		
Silver, total	ug/L	MW-39	04/02/2024	ND	4.0000		
Silver, total	ug/L	MW-39	10/10/2024	ND	4.0000		
Thallium, total	ug/L	MW-39	10/23/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	01/08/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	04/01/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	07/08/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	11/05/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	04/21/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	10/17/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	04/21/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	10/16/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	04/24/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	10/25/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	04/15/2019	ND	2.0000		
Thallium, total	ug/L	MW-39	10/07/2019	ND	2.0000		
Thallium, total	ug/L	MW-39	04/22/2020	ND	2.0000		
Thallium, total	ug/L	MW-39	10/02/2020	ND	2.0000		
Thallium, total	ug/L	MW-39	04/08/2021	ND	2.0000		
Thallium, total	ug/L	MW-39	10/29/2021	ND	2.0000		
Thallium, total	ug/L	MW-39	04/25/2022	ND	2.0000		
Thallium, total	ug/L	MW-39	10/17/2022	ND	2.0000		
Thallium, total	ug/L	MW-39	04/10/2023	ND	2.0000		
Thallium, total	ug/L	MW-39	10/27/2023	ND	2.0000		
Thallium, total	ug/L	MW-39	04/02/2024	ND	2.0000		
Thallium, total	ug/L	MW-39	10/10/2024	ND	2.0000		
Vanadium, total	ug/L	MW-39	10/23/2014	ND	20.0000		
Vanadium, total	ug/L	MW-39	01/08/2015	ND	20.0000		
Vanadium, total	ug/L	MW-39	04/01/2015	ND	20.0000		
Vanadium, total	ug/L	MW-39	07/08/2015	ND	20.0000		
Vanadium, total	ug/L	MW-39	11/05/2015	ND	20.0000		
Vanadium, total	ug/L	MW-39	04/21/2016	ND	20.0000		
Vanadium, total	ug/L	MW-39	10/17/2016	ND	20.0000		
Vanadium, total	ug/L	MW-39	04/21/2017	ND	20.0000		
Vanadium, total	ug/L	MW-39	10/16/2017	ND	20.0000		
Vanadium, total	ug/L	MW-39	04/24/2018	ND	20.0000		
Vanadium, total	ug/L	MW-39	10/25/2018	ND	20.0000		
Vanadium, total	ug/L	MW-39	04/15/2019	ND	20.0000		
Vanadium, total	ug/L	MW-39	10/07/2019	ND	20.0000		
Vanadium, total	ug/L	MW-39	04/22/2020	ND	20.0000		
Vanadium, total	ug/L	MW-39	10/02/2020	ND	20.0000		
Vanadium, total	ug/L	MW-39	04/08/2021	ND	20.0000		
Vanadium, total	ug/L	MW-39	10/29/2021	ND	20.0000		
Vanadium, total	ug/L	MW-39	04/25/2022	ND	20.0000		
Vanadium, total	ug/L	MW-39	10/17/2022	ND	20.0000		
Vanadium, total	ug/L	MW-39	04/10/2023	ND	20.0000		
Vanadium, total	ug/L	MW-39	10/27/2023	ND	20.0000		
Vanadium, total	ug/L	MW-39	04/02/2024	ND	20.0000		
Vanadium, total	ug/L	MW-39	10/10/2024	ND	20.0000		
Zinc, total	ug/L	MW-39	10/23/2014	ND	20.0000		
Zinc, total	ug/L	MW-39	01/08/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	04/01/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	07/08/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	11/05/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	04/21/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	10/17/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	04/21/2017		25.8000		
Zinc, total	ug/L	MW-39	10/16/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	04/24/2018	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-39	10/25/2018	ND	20.0000		
Zinc, total	ug/L	MW-39	04/15/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	10/07/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	04/22/2020	ND	20.0000		
Zinc, total	ug/L	MW-39	10/02/2020	ND	20.0000		
Zinc, total	ug/L	MW-39	04/08/2021	ND	20.0000		
Zinc, total	ug/L	MW-39	10/29/2021	ND	20.0000		
Zinc, total	ug/L	MW-39	04/25/2022	ND	20.0000		
Zinc, total	ug/L	MW-39	10/17/2022	ND	20.0000		
Zinc, total	ug/L	MW-39	04/10/2023	ND	20.0000		
Zinc, total	ug/L	MW-39	10/27/2023	ND	20.0000		
Zinc, total	ug/L	MW-39	04/02/2024	ND	20.0000		
Zinc, total	ug/L	MW-39	10/10/2024	ND	20.0000		
Antimony, total	ug/L	MW-40	10/23/2014	ND	2.0000		
Antimony, total	ug/L	MW-40	01/08/2015	ND	2.0000		
Antimony, total	ug/L	MW-40	03/31/2015	ND	2.0000		
Antimony, total	ug/L	MW-40	07/08/2015	ND	2.0000		
Antimony, total	ug/L	MW-40	11/05/2015	ND	2.0000		
Antimony, total	ug/L	MW-40	04/21/2016	ND	2.0000		
Antimony, total	ug/L	MW-40	10/17/2016	ND	2.0000		
Antimony, total	ug/L	MW-40	04/21/2017	ND	2.0000		
Antimony, total	ug/L	MW-40	10/16/2017	ND	2.0000		
Antimony, total	ug/L	MW-40	04/24/2018	ND	2.0000		
Antimony, total	ug/L	MW-40	10/25/2018	ND	2.0000		
Antimony, total	ug/L	MW-40	04/15/2019	ND	2.0000		
Antimony, total	ug/L	MW-40	10/07/2019	ND	2.0000		
Antimony, total	ug/L	MW-40	04/22/2020	ND	2.0000		
Antimony, total	ug/L	MW-40	10/02/2020	ND	2.0000		
Antimony, total	ug/L	MW-40	04/08/2021	ND	2.0000		
Antimony, total	ug/L	MW-40	10/29/2021	ND	2.0000		
Antimony, total	ug/L	MW-40	04/25/2022	ND	2.0000		
Antimony, total	ug/L	MW-40	10/17/2022	ND	2.0000		
Antimony, total	ug/L	MW-40	04/10/2023	ND	2.0000		
Antimony, total	ug/L	MW-40	10/27/2023	ND	2.0000		
Antimony, total	ug/L	MW-40	04/02/2024	ND	2.0000		
Antimony, total	ug/L	MW-40	10/10/2024	ND	2.0000		
Arsenic, total	ug/L	MW-40	10/23/2014	ND	4.0000		
Arsenic, total	ug/L	MW-40	01/08/2015	ND	4.0000		
Arsenic, total	ug/L	MW-40	03/31/2015	ND	4.0000		
Arsenic, total	ug/L	MW-40	07/08/2015	ND	4.0000		
Arsenic, total	ug/L	MW-40	11/05/2015	ND	4.0000		
Arsenic, total	ug/L	MW-40	04/21/2016	ND	4.0000		
Arsenic, total	ug/L	MW-40	10/17/2016	ND	4.0000		
Arsenic, total	ug/L	MW-40	04/21/2017	ND	4.0000		
Arsenic, total	ug/L	MW-40	10/16/2017	ND	4.0000		
Arsenic, total	ug/L	MW-40	04/24/2018	ND	4.0000		
Arsenic, total	ug/L	MW-40	10/25/2018	ND	4.0000		
Arsenic, total	ug/L	MW-40	04/15/2019	ND	4.0000		
Arsenic, total	ug/L	MW-40	10/07/2019	ND	4.0000		
Arsenic, total	ug/L	MW-40	04/22/2020	ND	4.0000		
Arsenic, total	ug/L	MW-40	10/02/2020	ND	4.0000		
Arsenic, total	ug/L	MW-40	04/08/2021	ND	4.0000		
Arsenic, total	ug/L	MW-40	10/29/2021	ND	4.3000		
Arsenic, total	ug/L	MW-40	04/25/2022	ND	4.0000		
Arsenic, total	ug/L	MW-40	10/17/2022	ND	8.1000		
Arsenic, total	ug/L	MW-40	04/10/2023	ND	5.9000		
Arsenic, total	ug/L	MW-40	10/27/2023	ND	5.3000		
Arsenic, total	ug/L	MW-40	04/02/2024	ND	4.0000		
Arsenic, total	ug/L	MW-40	10/10/2024	ND	4.3000		
Barium, total	ug/L	MW-40	10/23/2014		65.4000		
Barium, total	ug/L	MW-40	01/08/2015		85.3000		
Barium, total	ug/L	MW-40	03/31/2015		96.6000		
Barium, total	ug/L	MW-40	07/08/2015		71.0000		
Barium, total	ug/L	MW-40	11/05/2015		89.1000		
Barium, total	ug/L	MW-40	04/21/2016		74.0000		
Barium, total	ug/L	MW-40	10/17/2016		83.2000		
Barium, total	ug/L	MW-40	04/21/2017		82.9000		
Barium, total	ug/L	MW-40	10/16/2017		45.4000		
Barium, total	ug/L	MW-40	04/24/2018		39.7000		
Barium, total	ug/L	MW-40	10/25/2018		56.3000		
Barium, total	ug/L	MW-40	04/15/2019		35.7000		
Barium, total	ug/L	MW-40	10/07/2019		50.7000		
Barium, total	ug/L	MW-40	04/22/2020		47.5000		
Barium, total	ug/L	MW-40	10/02/2020		47.8000		

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Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted
Barium, total	ug/L	MW-40	04/08/2021		83.4000	
Barium, total	ug/L	MW-40	10/29/2021		72.2000	
Barium, total	ug/L	MW-40	04/25/2022		27.9000	
Barium, total	ug/L	MW-40	10/17/2022		103.0000	
Barium, total	ug/L	MW-40	04/10/2023		42.8000	
Barium, total	ug/L	MW-40	10/27/2023		46.9000	
Barium, total	ug/L	MW-40	04/02/2024		36.4000	
Barium, total	ug/L	MW-40	10/10/2024		34.2000	
Beryllium, total	ug/L	MW-40	10/23/2014	ND	4.0000	
Beryllium, total	ug/L	MW-40	01/08/2015	ND	4.0000	
Beryllium, total	ug/L	MW-40	03/31/2015	ND	4.0000	
Beryllium, total	ug/L	MW-40	07/08/2015	ND	4.0000	
Beryllium, total	ug/L	MW-40	11/05/2015	ND	4.0000	
Beryllium, total	ug/L	MW-40	04/21/2016	ND	4.0000	
Beryllium, total	ug/L	MW-40	10/17/2016	ND	4.0000	
Beryllium, total	ug/L	MW-40	04/21/2017	ND	4.0000	
Beryllium, total	ug/L	MW-40	10/16/2017	ND	4.0000	
Beryllium, total	ug/L	MW-40	04/24/2018	ND	4.0000	
Beryllium, total	ug/L	MW-40	10/25/2018	ND	4.0000	
Beryllium, total	ug/L	MW-40	04/15/2019	ND	4.0000	
Beryllium, total	ug/L	MW-40	10/07/2019	ND	4.0000	
Beryllium, total	ug/L	MW-40	04/22/2020	ND	4.0000	
Beryllium, total	ug/L	MW-40	10/02/2020	ND	4.0000	
Beryllium, total	ug/L	MW-40	04/08/2021	ND	4.0000	
Beryllium, total	ug/L	MW-40	10/29/2021	ND	4.0000	
Beryllium, total	ug/L	MW-40	04/25/2022	ND	4.0000	
Beryllium, total	ug/L	MW-40	10/17/2022	ND	4.0000	
Beryllium, total	ug/L	MW-40	04/10/2023	ND	4.0000	
Beryllium, total	ug/L	MW-40	10/27/2023	ND	4.0000	
Beryllium, total	ug/L	MW-40	04/02/2024	ND	4.0000	
Beryllium, total	ug/L	MW-40	10/10/2024	ND	4.0000	
Cadmium, total	ug/L	MW-40	10/23/2014	ND	0.8000	
Cadmium, total	ug/L	MW-40	01/08/2015	ND	0.8000	
Cadmium, total	ug/L	MW-40	03/31/2015	ND	0.8000	
Cadmium, total	ug/L	MW-40	07/08/2015	ND	0.8000	
Cadmium, total	ug/L	MW-40	11/05/2015	ND	0.8000	
Cadmium, total	ug/L	MW-40	04/21/2016	ND	0.8000	
Cadmium, total	ug/L	MW-40	10/17/2016	ND	0.8000	
Cadmium, total	ug/L	MW-40	04/21/2017	ND	0.8000	
Cadmium, total	ug/L	MW-40	10/16/2017	ND	0.8000	
Cadmium, total	ug/L	MW-40	04/24/2018	ND	0.8000	
Cadmium, total	ug/L	MW-40	10/25/2018	ND	0.8000	
Cadmium, total	ug/L	MW-40	04/15/2019	ND	0.8000	
Cadmium, total	ug/L	MW-40	10/07/2019	ND	0.8000	
Cadmium, total	ug/L	MW-40	04/22/2020	ND	0.8000	
Cadmium, total	ug/L	MW-40	10/02/2020	ND	0.8000	
Cadmium, total	ug/L	MW-40	04/08/2021	ND	0.8000	
Cadmium, total	ug/L	MW-40	10/29/2021	ND	0.9000	
Cadmium, total	ug/L	MW-40	04/25/2022	ND	0.8000	
Cadmium, total	ug/L	MW-40	10/17/2022	ND	0.8000	
Cadmium, total	ug/L	MW-40	04/10/2023	ND	0.8000	
Cadmium, total	ug/L	MW-40	10/27/2023	ND	0.8000	
Cadmium, total	ug/L	MW-40	04/02/2024	ND	0.8000	
Cadmium, total	ug/L	MW-40	10/10/2024	ND	0.8000	
Chromium, total	ug/L	MW-40	10/23/2014	ND	8.0000	
Chromium, total	ug/L	MW-40	01/08/2015	ND	8.0000	
Chromium, total	ug/L	MW-40	03/31/2015	ND	8.0000	
Chromium, total	ug/L	MW-40	07/08/2015	ND	8.0000	
Chromium, total	ug/L	MW-40	11/05/2015	ND	8.0000	
Chromium, total	ug/L	MW-40	04/21/2016	ND	8.0000	
Chromium, total	ug/L	MW-40	10/17/2016	ND	8.0000	
Chromium, total	ug/L	MW-40	04/21/2017	ND	8.0000	
Chromium, total	ug/L	MW-40	10/16/2017	ND	8.0000	
Chromium, total	ug/L	MW-40	04/24/2018	ND	8.0000	
Chromium, total	ug/L	MW-40	10/25/2018	ND	8.0000	
Chromium, total	ug/L	MW-40	04/15/2019	ND	8.0000	
Chromium, total	ug/L	MW-40	10/07/2019	ND	8.0000	
Chromium, total	ug/L	MW-40	04/22/2020	ND	8.0000	
Chromium, total	ug/L	MW-40	10/02/2020	ND	8.0000	
Chromium, total	ug/L	MW-40	04/08/2021	ND	8.0000	
Chromium, total	ug/L	MW-40	10/29/2021	ND	8.0000	
Chromium, total	ug/L	MW-40	04/25/2022	ND	8.0000	
Chromium, total	ug/L	MW-40	10/17/2022	ND	8.0000	
Chromium, total	ug/L	MW-40	04/10/2023	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-40	10/27/2023	ND	8.0000		
Chromium, total	ug/L	MW-40	04/02/2024	ND	8.0000		
Chromium, total	ug/L	MW-40	10/10/2024	ND	8.0000		
Cobalt, total	ug/L	MW-40	10/23/2014	ND	0.8000		
Cobalt, total	ug/L	MW-40	01/08/2015	ND	0.8000		
Cobalt, total	ug/L	MW-40	03/31/2015	ND	0.8000		
Cobalt, total	ug/L	MW-40	07/08/2015	ND	0.8000		
Cobalt, total	ug/L	MW-40	11/05/2015	ND	0.8000		
Cobalt, total	ug/L	MW-40	04/21/2016	ND	0.8000		
Cobalt, total	ug/L	MW-40	10/17/2016	ND	0.8000		
Cobalt, total	ug/L	MW-40	04/21/2017	ND	0.8000		
Cobalt, total	ug/L	MW-40	10/16/2017	ND	0.8000		
Cobalt, total	ug/L	MW-40	04/24/2018	ND	0.8000		
Cobalt, total	ug/L	MW-40	10/25/2018	ND	0.8000		
Cobalt, total	ug/L	MW-40	04/15/2019	ND	0.8000		
Cobalt, total	ug/L	MW-40	10/07/2019	ND	0.8000		
Cobalt, total	ug/L	MW-40	04/22/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-40	10/02/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-40	04/08/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-40	10/29/2021		4.5000		
Cobalt, total	ug/L	MW-40	04/25/2022		5.6000		
Cobalt, total	ug/L	MW-40	10/17/2022		8.3000		
Cobalt, total	ug/L	MW-40	04/10/2023		10.2000		
Cobalt, total	ug/L	MW-40	10/27/2023		4.7000		
Cobalt, total	ug/L	MW-40	04/02/2024		0.5000		
Cobalt, total	ug/L	MW-40	10/10/2024		5.8000		
Copper, total	ug/L	MW-40	10/23/2014	ND	4.0000		
Copper, total	ug/L	MW-40	01/08/2015	ND	4.0000		
Copper, total	ug/L	MW-40	03/31/2015	ND	4.0000		
Copper, total	ug/L	MW-40	07/08/2015	ND	4.0000		
Copper, total	ug/L	MW-40	11/05/2015	ND	4.0000		
Copper, total	ug/L	MW-40	04/21/2016	ND	4.0000		
Copper, total	ug/L	MW-40	10/17/2016	ND	4.0000		
Copper, total	ug/L	MW-40	04/21/2017	ND	4.0000		
Copper, total	ug/L	MW-40	10/16/2017	ND	4.0000		
Copper, total	ug/L	MW-40	04/24/2018	ND	4.0000		
Copper, total	ug/L	MW-40	10/25/2018	ND	4.0000		
Copper, total	ug/L	MW-40	04/15/2019	ND	4.0000		
Copper, total	ug/L	MW-40	10/07/2019	ND	4.0000		
Copper, total	ug/L	MW-40	04/22/2020	ND	4.0000		
Copper, total	ug/L	MW-40	10/02/2020	ND	4.0000		
Copper, total	ug/L	MW-40	04/08/2021	ND	4.0000		
Copper, total	ug/L	MW-40	10/29/2021		5.1000		
Copper, total	ug/L	MW-40	04/25/2022	ND	4.0000		
Copper, total	ug/L	MW-40	10/17/2022	ND	4.0000		
Copper, total	ug/L	MW-40	04/10/2023	ND	4.0000		
Copper, total	ug/L	MW-40	10/27/2023	ND	4.0000		
Copper, total	ug/L	MW-40	04/02/2024		8.5000		
Copper, total	ug/L	MW-40	10/10/2024	ND	4.0000		
Lead, total	ug/L	MW-40	10/23/2014	ND	4.0000		
Lead, total	ug/L	MW-40	01/08/2015	ND	4.0000		
Lead, total	ug/L	MW-40	03/31/2015	ND	4.0000		
Lead, total	ug/L	MW-40	07/08/2015	ND	4.0000		
Lead, total	ug/L	MW-40	11/05/2015	ND	4.0000		
Lead, total	ug/L	MW-40	04/21/2016	ND	4.0000		
Lead, total	ug/L	MW-40	10/17/2016	ND	4.0000		
Lead, total	ug/L	MW-40	04/21/2017	ND	4.0000		
Lead, total	ug/L	MW-40	10/16/2017	ND	4.0000		
Lead, total	ug/L	MW-40	04/24/2018	ND	4.0000		
Lead, total	ug/L	MW-40	10/25/2018	ND	4.0000		
Lead, total	ug/L	MW-40	04/15/2019	ND	4.0000		
Lead, total	ug/L	MW-40	10/07/2019	ND	4.0000		
Lead, total	ug/L	MW-40	04/22/2020	ND	4.0000		
Lead, total	ug/L	MW-40	10/02/2020	ND	4.0000		
Lead, total	ug/L	MW-40	04/08/2021	ND	4.0000		
Lead, total	ug/L	MW-40	10/29/2021	ND	4.0000		
Lead, total	ug/L	MW-40	04/25/2022	ND	4.0000		
Lead, total	ug/L	MW-40	10/17/2022	ND	4.0000		
Lead, total	ug/L	MW-40	04/10/2023	ND	4.0000		
Lead, total	ug/L	MW-40	10/27/2023	ND	4.0000		
Lead, total	ug/L	MW-40	04/02/2024	ND	4.0000		
Lead, total	ug/L	MW-40	10/10/2024	ND	4.0000		
Nickel, total	ug/L	MW-40	10/23/2014	ND	4.0000		
Nickel, total	ug/L	MW-40	01/08/2015	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-40	03/31/2015	ND	4.0000		
Nickel, total	ug/L	MW-40	07/08/2015	ND	4.0000		
Nickel, total	ug/L	MW-40	11/05/2015	ND	4.0000		
Nickel, total	ug/L	MW-40	04/21/2016	ND	4.0000		
Nickel, total	ug/L	MW-40	10/17/2016	ND	4.0000		
Nickel, total	ug/L	MW-40	04/21/2017	ND	4.0000		
Nickel, total	ug/L	MW-40	10/16/2017	ND	4.0000		
Nickel, total	ug/L	MW-40	04/24/2018	ND	4.0000		
Nickel, total	ug/L	MW-40	10/25/2018	ND	4.0000		
Nickel, total	ug/L	MW-40	04/15/2019	ND	4.0000		
Nickel, total	ug/L	MW-40	10/07/2019	ND	4.0000		
Nickel, total	ug/L	MW-40	04/22/2020	ND	4.0000		
Nickel, total	ug/L	MW-40	10/02/2020	ND	4.0000		
Nickel, total	ug/L	MW-40	04/08/2021		5.0000		
Nickel, total	ug/L	MW-40	10/29/2021		31.9000	*	
Nickel, total	ug/L	MW-40	04/25/2022		18.3000		
Nickel, total	ug/L	MW-40	10/17/2022		22.1000		
Nickel, total	ug/L	MW-40	04/10/2023		16.7000		
Nickel, total	ug/L	MW-40	10/27/2023		17.0000		
Nickel, total	ug/L	MW-40	04/02/2024		16.8000		
Nickel, total	ug/L	MW-40	10/10/2024		15.4000		
Selenium, total	ug/L	MW-40	10/23/2014		4.6000		
Selenium, total	ug/L	MW-40	01/08/2015		4.8000		
Selenium, total	ug/L	MW-40	03/31/2015		4.9000		
Selenium, total	ug/L	MW-40	07/08/2015	ND	4.0000		
Selenium, total	ug/L	MW-40	11/05/2015	ND	4.0000		
Selenium, total	ug/L	MW-40	04/21/2016	ND	4.0000		
Selenium, total	ug/L	MW-40	10/17/2016	ND	4.0000		
Selenium, total	ug/L	MW-40	04/21/2017	ND	4.0000		
Selenium, total	ug/L	MW-40	10/16/2017	ND	4.0000		
Selenium, total	ug/L	MW-40	04/24/2018	ND	4.0000		
Selenium, total	ug/L	MW-40	10/25/2018	ND	4.0000		
Selenium, total	ug/L	MW-40	04/15/2019	ND	4.0000		
Selenium, total	ug/L	MW-40	10/07/2019	ND	4.0000		
Selenium, total	ug/L	MW-40	04/22/2020	ND	4.0000		
Selenium, total	ug/L	MW-40	10/02/2020	ND	4.0000		
Selenium, total	ug/L	MW-40	04/08/2021	ND	4.0000		
Selenium, total	ug/L	MW-40	10/29/2021	ND	4.0000		
Selenium, total	ug/L	MW-40	04/25/2022	ND	4.0000		
Selenium, total	ug/L	MW-40	10/17/2022	ND	4.0000		
Selenium, total	ug/L	MW-40	04/10/2023	ND	4.0000		
Selenium, total	ug/L	MW-40	10/27/2023	ND	4.0000		
Selenium, total	ug/L	MW-40	04/02/2024	ND	4.0000		
Selenium, total	ug/L	MW-40	10/10/2024	ND	4.0000		
Silver, total	ug/L	MW-40	10/23/2014	ND	4.0000		
Silver, total	ug/L	MW-40	01/08/2015	ND	4.0000		
Silver, total	ug/L	MW-40	03/31/2015	ND	4.0000		
Silver, total	ug/L	MW-40	07/08/2015	ND	4.0000		
Silver, total	ug/L	MW-40	11/05/2015	ND	4.0000		
Silver, total	ug/L	MW-40	04/21/2016	ND	4.0000		
Silver, total	ug/L	MW-40	10/17/2016	ND	4.0000		
Silver, total	ug/L	MW-40	04/21/2017	ND	4.0000		
Silver, total	ug/L	MW-40	10/16/2017	ND	4.0000		
Silver, total	ug/L	MW-40	04/24/2018	ND	4.0000		
Silver, total	ug/L	MW-40	10/25/2018	ND	4.0000		
Silver, total	ug/L	MW-40	04/15/2019	ND	4.0000		
Silver, total	ug/L	MW-40	10/07/2019	ND	4.0000		
Silver, total	ug/L	MW-40	04/22/2020	ND	4.0000		
Silver, total	ug/L	MW-40	10/02/2020	ND	4.0000		
Silver, total	ug/L	MW-40	04/08/2021	ND	4.0000		
Silver, total	ug/L	MW-40	10/29/2021	ND	4.0000		
Silver, total	ug/L	MW-40	04/25/2022	ND	4.0000		
Silver, total	ug/L	MW-40	10/17/2022	ND	4.0000		
Silver, total	ug/L	MW-40	04/10/2023	ND	4.0000		
Silver, total	ug/L	MW-40	10/27/2023	ND	4.0000		
Silver, total	ug/L	MW-40	04/02/2024	ND	4.0000		
Silver, total	ug/L	MW-40	10/10/2024	ND	4.0000		
Thallium, total	ug/L	MW-40	10/23/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	01/08/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	03/31/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	07/08/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	11/05/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	04/21/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	10/17/2016	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-40	04/21/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	10/16/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	04/24/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	10/25/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	04/15/2019	ND	2.0000		
Thallium, total	ug/L	MW-40	10/07/2019	ND	2.0000		
Thallium, total	ug/L	MW-40	04/22/2020	ND	2.0000		
Thallium, total	ug/L	MW-40	10/02/2020	ND	2.0000		
Thallium, total	ug/L	MW-40	04/08/2021	ND	2.0000		
Thallium, total	ug/L	MW-40	10/29/2021	ND	2.0000		
Thallium, total	ug/L	MW-40	04/25/2022	ND	2.0000		
Thallium, total	ug/L	MW-40	10/17/2022	ND	2.0000		
Thallium, total	ug/L	MW-40	04/10/2023	ND	2.0000		
Thallium, total	ug/L	MW-40	10/27/2023	ND	2.0000		
Thallium, total	ug/L	MW-40	04/02/2024	ND	2.0000		
Thallium, total	ug/L	MW-40	10/10/2024	ND	2.0000		
Vanadium, total	ug/L	MW-40	10/23/2014	ND	20.0000		
Vanadium, total	ug/L	MW-40	01/08/2015	ND	20.0000		
Vanadium, total	ug/L	MW-40	03/31/2015	ND	20.0000		
Vanadium, total	ug/L	MW-40	07/08/2015	ND	20.0000		
Vanadium, total	ug/L	MW-40	11/05/2015	ND	20.0000		
Vanadium, total	ug/L	MW-40	04/21/2016	ND	20.0000		
Vanadium, total	ug/L	MW-40	10/17/2016	ND	20.0000		
Vanadium, total	ug/L	MW-40	04/21/2017	ND	20.0000		
Vanadium, total	ug/L	MW-40	10/16/2017	ND	20.0000		
Vanadium, total	ug/L	MW-40	04/24/2018	ND	20.0000		
Vanadium, total	ug/L	MW-40	10/25/2018	ND	20.0000		
Vanadium, total	ug/L	MW-40	04/15/2019	ND	20.0000		
Vanadium, total	ug/L	MW-40	10/07/2019	ND	20.0000		
Vanadium, total	ug/L	MW-40	04/22/2020	ND	20.0000		
Vanadium, total	ug/L	MW-40	10/02/2020	ND	20.0000		
Vanadium, total	ug/L	MW-40	04/08/2021	ND	20.0000		
Vanadium, total	ug/L	MW-40	10/29/2021	ND	20.0000		
Vanadium, total	ug/L	MW-40	04/25/2022	ND	20.0000		
Vanadium, total	ug/L	MW-40	10/17/2022	ND	20.0000		
Vanadium, total	ug/L	MW-40	04/10/2023	ND	20.0000		
Vanadium, total	ug/L	MW-40	10/27/2023	ND	20.0000		
Vanadium, total	ug/L	MW-40	04/02/2024	ND	20.0000		
Vanadium, total	ug/L	MW-40	10/10/2024	ND	20.0000		
Zinc, total	ug/L	MW-40	10/23/2014	ND	20.0000		
Zinc, total	ug/L	MW-40	01/08/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-40	03/31/2015		12.8000		
Zinc, total	ug/L	MW-40	07/08/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-40	11/05/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-40	04/21/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-40	10/17/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-40	04/21/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-40	10/16/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-40	04/24/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-40	10/25/2018	ND	20.0000		
Zinc, total	ug/L	MW-40	04/15/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-40	10/07/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-40	04/22/2020	ND	20.0000		
Zinc, total	ug/L	MW-40	10/02/2020	ND	20.0000		
Zinc, total	ug/L	MW-40	04/08/2021	ND	20.0000		
Zinc, total	ug/L	MW-40	10/29/2021	ND	20.0000		
Zinc, total	ug/L	MW-40	04/25/2022	ND	20.0000		
Zinc, total	ug/L	MW-40	10/17/2022	ND	20.0000		
Zinc, total	ug/L	MW-40	04/10/2023	ND	20.0000		
Zinc, total	ug/L	MW-40	10/27/2023	ND	20.0000		
Zinc, total	ug/L	MW-40	04/02/2024	ND	20.0000		
Zinc, total	ug/L	MW-40	10/10/2024	ND	20.0000		
Antimony, total	ug/L	MW-47	10/23/2014	ND	2.0000		
Antimony, total	ug/L	MW-47	03/31/2015	ND	2.0000		
Antimony, total	ug/L	MW-47	07/08/2015	ND	2.0000		
Antimony, total	ug/L	MW-47	11/05/2015	ND	2.0000		
Antimony, total	ug/L	MW-47	04/21/2016	ND	2.0000		
Antimony, total	ug/L	MW-47	10/17/2016	ND	2.0000		
Antimony, total	ug/L	MW-47	04/21/2017	ND	2.0000		
Antimony, total	ug/L	MW-47	10/16/2017	ND	2.0000		
Antimony, total	ug/L	MW-47	04/24/2018	ND	2.0000		
Antimony, total	ug/L	MW-47	10/25/2018	ND	2.0000		
Antimony, total	ug/L	MW-47	04/15/2019	ND	2.0000		
Antimony, total	ug/L	MW-47	10/07/2019	ND	2.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Antimony, total	ug/L	MW-47	04/22/2020	ND	2.0000		
Antimony, total	ug/L	MW-47	10/01/2020	ND	2.0000		
Antimony, total	ug/L	MW-47	04/08/2021	ND	2.0000		
Antimony, total	ug/L	MW-47	10/29/2021	ND	2.0000		
Antimony, total	ug/L	MW-47	04/25/2022	ND	2.0000		
Antimony, total	ug/L	MW-47	10/17/2022	ND	2.0000		
Antimony, total	ug/L	MW-47	04/10/2023	ND	2.0000		
Antimony, total	ug/L	MW-47	10/27/2023	ND	2.0000		
Antimony, total	ug/L	MW-47	04/02/2024	ND	2.0000		
Antimony, total	ug/L	MW-47	10/10/2024	ND	2.0000		
Arsenic, total	ug/L	MW-47	10/23/2014		40.0000		
Arsenic, total	ug/L	MW-47	03/31/2015		153.0000		*
Arsenic, total	ug/L	MW-47	07/08/2015		165.0000		*
Arsenic, total	ug/L	MW-47	11/05/2015		89.3000		
Arsenic, total	ug/L	MW-47	04/21/2016		1730.0000		*
Arsenic, total	ug/L	MW-47	10/17/2016		18.5000		
Arsenic, total	ug/L	MW-47	04/21/2017		860.0000		*
Arsenic, total	ug/L	MW-47	10/16/2017		720.0000		*
Arsenic, total	ug/L	MW-47	04/24/2018		700.0000		*
Arsenic, total	ug/L	MW-47	10/25/2018		84.0000		
Arsenic, total	ug/L	MW-47	04/15/2019		277.0000		*
Arsenic, total	ug/L	MW-47	10/07/2019		41.0000		
Arsenic, total	ug/L	MW-47	04/22/2020		844.0000		*
Arsenic, total	ug/L	MW-47	10/01/2020		79.7000		
Arsenic, total	ug/L	MW-47	04/08/2021		236.0000		*
Arsenic, total	ug/L	MW-47	10/29/2021		50.4000		
Arsenic, total	ug/L	MW-47	04/25/2022		246.0000		*
Arsenic, total	ug/L	MW-47	10/17/2022		291.0000		*
Arsenic, total	ug/L	MW-47	04/10/2023		271.0000		*
Arsenic, total	ug/L	MW-47	10/27/2023		50.2000		
Arsenic, total	ug/L	MW-47	04/02/2024		182.0000		*
Arsenic, total	ug/L	MW-47	10/10/2024		88.3000		
Barium, total	ug/L	MW-47	10/23/2014		392.0000		
Barium, total	ug/L	MW-47	03/31/2015		678.0000		
Barium, total	ug/L	MW-47	07/08/2015		630.0000		
Barium, total	ug/L	MW-47	11/05/2015		525.0000		
Barium, total	ug/L	MW-47	04/21/2016		3520.0000		*
Barium, total	ug/L	MW-47	10/17/2016		443.0000		
Barium, total	ug/L	MW-47	04/21/2017		1690.0000		
Barium, total	ug/L	MW-47	10/16/2017		1550.0000		
Barium, total	ug/L	MW-47	04/24/2018		1750.0000		
Barium, total	ug/L	MW-47	10/25/2018		310.0000		
Barium, total	ug/L	MW-47	04/15/2019		743.0000		
Barium, total	ug/L	MW-47	10/07/2019		497.0000		
Barium, total	ug/L	MW-47	04/22/2020		1880.0000		
Barium, total	ug/L	MW-47	10/01/2020		435.0000		
Barium, total	ug/L	MW-47	04/08/2021		876.0000		
Barium, total	ug/L	MW-47	10/29/2021		407.0000		
Barium, total	ug/L	MW-47	04/25/2022		565.0000		
Barium, total	ug/L	MW-47	10/17/2022		852.0000		
Barium, total	ug/L	MW-47	04/10/2023		713.0000		
Barium, total	ug/L	MW-47	10/27/2023		486.0000		
Barium, total	ug/L	MW-47	04/02/2024		570.0000		
Barium, total	ug/L	MW-47	10/10/2024		426.0000		
Beryllium, total	ug/L	MW-47	10/23/2014	ND	4.0000		
Beryllium, total	ug/L	MW-47	03/31/2015	ND	4.0000		
Beryllium, total	ug/L	MW-47	07/08/2015	ND	4.0000		
Beryllium, total	ug/L	MW-47	11/05/2015	ND	4.0000		
Beryllium, total	ug/L	MW-47	04/21/2016	ND	4.0000		
Beryllium, total	ug/L	MW-47	10/17/2016	ND	4.0000		
Beryllium, total	ug/L	MW-47	04/21/2017	ND	4.0000		
Beryllium, total	ug/L	MW-47	10/16/2017	ND	4.0000		
Beryllium, total	ug/L	MW-47	04/24/2018	ND	4.0000		
Beryllium, total	ug/L	MW-47	10/25/2018	ND	4.0000		
Beryllium, total	ug/L	MW-47	04/15/2019	ND	4.0000		
Beryllium, total	ug/L	MW-47	10/07/2019	ND	4.0000		
Beryllium, total	ug/L	MW-47	04/22/2020	ND	4.0000		
Beryllium, total	ug/L	MW-47	10/01/2020	ND	4.0000		
Beryllium, total	ug/L	MW-47	04/08/2021	ND	4.0000		
Beryllium, total	ug/L	MW-47	10/29/2021	ND	4.0000		
Beryllium, total	ug/L	MW-47	04/25/2022	ND	4.0000		
Beryllium, total	ug/L	MW-47	10/17/2022	ND	4.0000		
Beryllium, total	ug/L	MW-47	04/10/2023	ND	4.0000		
Beryllium, total	ug/L	MW-47	10/27/2023	ND	4.0000		

* - Outlier for that well and constituent.
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 *** - ND value replaced with manual RL.
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Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted
Beryllium, total	ug/L	MW-47	04/02/2024	ND	4.0000	
Beryllium, total	ug/L	MW-47	10/10/2024	ND	4.0000	
Cadmium, total	ug/L	MW-47	10/23/2014	ND	0.8000	
Cadmium, total	ug/L	MW-47	03/31/2015	ND	0.8000	
Cadmium, total	ug/L	MW-47	07/08/2015	ND	0.8000	
Cadmium, total	ug/L	MW-47	11/05/2015	ND	0.8000	
Cadmium, total	ug/L	MW-47	04/21/2016	ND	0.8000	
Cadmium, total	ug/L	MW-47	10/17/2016	ND	0.8000	
Cadmium, total	ug/L	MW-47	04/21/2017	ND	0.8000	
Cadmium, total	ug/L	MW-47	10/16/2017	ND	0.8000	
Cadmium, total	ug/L	MW-47	04/24/2018	ND	0.8000	
Cadmium, total	ug/L	MW-47	10/25/2018	ND	0.8000	
Cadmium, total	ug/L	MW-47	04/15/2019	ND	0.8000	
Cadmium, total	ug/L	MW-47	10/07/2019	ND	0.8000	
Cadmium, total	ug/L	MW-47	04/22/2020	ND	0.8000	
Cadmium, total	ug/L	MW-47	10/01/2020	ND	0.8000	
Cadmium, total	ug/L	MW-47	04/08/2021	ND	0.8000	
Cadmium, total	ug/L	MW-47	10/29/2021	ND	0.8000	
Cadmium, total	ug/L	MW-47	04/25/2022	ND	0.8000	
Cadmium, total	ug/L	MW-47	10/17/2022	ND	0.8000	
Cadmium, total	ug/L	MW-47	04/10/2023	ND	0.8000	
Cadmium, total	ug/L	MW-47	10/27/2023	ND	0.8000	
Cadmium, total	ug/L	MW-47	04/02/2024	ND	0.8000	
Cadmium, total	ug/L	MW-47	10/10/2024	ND	0.8000	
Chromium, total	ug/L	MW-47	10/23/2014	ND	8.0000	
Chromium, total	ug/L	MW-47	03/31/2015	ND	8.0000	
Chromium, total	ug/L	MW-47	07/08/2015	ND	8.0000	
Chromium, total	ug/L	MW-47	11/05/2015	ND	8.0000	
Chromium, total	ug/L	MW-47	04/21/2016	ND	8.0000	
Chromium, total	ug/L	MW-47	10/17/2016	ND	8.0000	
Chromium, total	ug/L	MW-47	04/21/2017	ND	8.0000	
Chromium, total	ug/L	MW-47	10/16/2017	ND	8.0000	
Chromium, total	ug/L	MW-47	04/24/2018	ND	8.0000	
Chromium, total	ug/L	MW-47	10/25/2018	ND	8.0000	
Chromium, total	ug/L	MW-47	04/15/2019	ND	8.0000	
Chromium, total	ug/L	MW-47	10/07/2019	ND	8.0000	
Chromium, total	ug/L	MW-47	04/22/2020	ND	8.0000	
Chromium, total	ug/L	MW-47	10/01/2020	ND	8.0000	
Chromium, total	ug/L	MW-47	04/08/2021	ND	8.0000	
Chromium, total	ug/L	MW-47	10/29/2021	ND	8.0000	
Chromium, total	ug/L	MW-47	04/25/2022	ND	8.0000	
Chromium, total	ug/L	MW-47	10/17/2022	ND	8.0000	
Chromium, total	ug/L	MW-47	04/10/2023	ND	8.0000	
Chromium, total	ug/L	MW-47	10/27/2023	ND	8.0000	
Chromium, total	ug/L	MW-47	04/02/2024	ND	8.0000	
Chromium, total	ug/L	MW-47	10/10/2024	ND	8.0000	
Cobalt, total	ug/L	MW-47	10/23/2014		0.8000	
Cobalt, total	ug/L	MW-47	03/31/2015		1.0000	
Cobalt, total	ug/L	MW-47	07/08/2015		1.5000	
Cobalt, total	ug/L	MW-47	11/05/2015		1.2000	
Cobalt, total	ug/L	MW-47	04/21/2016		4.2000	
Cobalt, total	ug/L	MW-47	10/17/2016		12.4000	
Cobalt, total	ug/L	MW-47	04/21/2017		1.9000	
Cobalt, total	ug/L	MW-47	10/16/2017		1.5000	
Cobalt, total	ug/L	MW-47	04/24/2018		1.5000	
Cobalt, total	ug/L	MW-47	10/25/2018	ND	0.8000	
Cobalt, total	ug/L	MW-47	04/15/2019		0.9000	
Cobalt, total	ug/L	MW-47	10/07/2019	ND	0.8000	
Cobalt, total	ug/L	MW-47	04/22/2020		1.9000	
Cobalt, total	ug/L	MW-47	10/01/2020		0.9000	
Cobalt, total	ug/L	MW-47	04/08/2021		1.2000	
Cobalt, total	ug/L	MW-47	10/29/2021		0.7000	
Cobalt, total	ug/L	MW-47	04/25/2022		0.7000	
Cobalt, total	ug/L	MW-47	10/17/2022		3.8000	
Cobalt, total	ug/L	MW-47	04/10/2023		1.8000	
Cobalt, total	ug/L	MW-47	10/27/2023		2.3000	
Cobalt, total	ug/L	MW-47	04/02/2024		1.8000	
Cobalt, total	ug/L	MW-47	10/10/2024		0.8000	
Copper, total	ug/L	MW-47	10/23/2014	ND	4.0000	
Copper, total	ug/L	MW-47	03/31/2015	ND	4.0000	
Copper, total	ug/L	MW-47	07/08/2015	ND	4.0000	
Copper, total	ug/L	MW-47	11/05/2015	ND	4.0000	
Copper, total	ug/L	MW-47	04/21/2016		4.6000	
Copper, total	ug/L	MW-47	10/17/2016	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-47	04/21/2017	ND	4.0000	
Copper, total	ug/L	MW-47	10/16/2017		4.9000	
Copper, total	ug/L	MW-47	04/24/2018	ND	4.0000	
Copper, total	ug/L	MW-47	10/25/2018	ND	4.0000	
Copper, total	ug/L	MW-47	04/15/2019	ND	4.0000	
Copper, total	ug/L	MW-47	10/07/2019	ND	4.0000	
Copper, total	ug/L	MW-47	04/22/2020	ND	4.0000	
Copper, total	ug/L	MW-47	10/01/2020	ND	4.0000	
Copper, total	ug/L	MW-47	04/08/2021	ND	4.0000	
Copper, total	ug/L	MW-47	10/29/2021	ND	4.0000	
Copper, total	ug/L	MW-47	04/25/2022	ND	4.0000	
Copper, total	ug/L	MW-47	10/17/2022	ND	4.0000	
Copper, total	ug/L	MW-47	04/10/2023	ND	4.0000	
Copper, total	ug/L	MW-47	10/27/2023	ND	4.0000	
Copper, total	ug/L	MW-47	04/02/2024		4.4000	
Copper, total	ug/L	MW-47	10/10/2024	ND	4.0000	
Lead, total	ug/L	MW-47	10/23/2014	ND	4.0000	
Lead, total	ug/L	MW-47	03/31/2015	ND	4.0000	
Lead, total	ug/L	MW-47	07/08/2015	ND	4.0000	
Lead, total	ug/L	MW-47	11/05/2015	ND	4.0000	
Lead, total	ug/L	MW-47	04/21/2016	ND	4.0000	
Lead, total	ug/L	MW-47	10/17/2016	ND	4.0000	
Lead, total	ug/L	MW-47	04/21/2017	ND	4.0000	
Lead, total	ug/L	MW-47	10/16/2017	ND	4.0000	
Lead, total	ug/L	MW-47	04/24/2018	ND	4.0000	
Lead, total	ug/L	MW-47	10/25/2018	ND	4.0000	
Lead, total	ug/L	MW-47	04/15/2019	ND	4.0000	
Lead, total	ug/L	MW-47	10/07/2019	ND	4.0000	
Lead, total	ug/L	MW-47	04/22/2020	ND	4.0000	
Lead, total	ug/L	MW-47	10/01/2020	ND	4.0000	
Lead, total	ug/L	MW-47	04/08/2021	ND	4.0000	
Lead, total	ug/L	MW-47	10/29/2021	ND	4.0000	
Lead, total	ug/L	MW-47	04/25/2022	ND	4.0000	
Lead, total	ug/L	MW-47	10/17/2022	ND	4.0000	
Lead, total	ug/L	MW-47	04/10/2023	ND	4.0000	
Lead, total	ug/L	MW-47	10/27/2023	ND	4.0000	
Lead, total	ug/L	MW-47	04/02/2024	ND	4.0000	
Lead, total	ug/L	MW-47	10/10/2024	ND	4.0000	
Nickel, total	ug/L	MW-47	10/23/2014	ND	4.0000	
Nickel, total	ug/L	MW-47	03/31/2015	ND	4.0000	
Nickel, total	ug/L	MW-47	07/08/2015	ND	4.0000	
Nickel, total	ug/L	MW-47	11/05/2015	ND	4.0000	
Nickel, total	ug/L	MW-47	04/21/2016		9.2000	
Nickel, total	ug/L	MW-47	10/17/2016		31.6000	
Nickel, total	ug/L	MW-47	04/21/2017		4.0000	
Nickel, total	ug/L	MW-47	10/16/2017		5.9000	
Nickel, total	ug/L	MW-47	04/24/2018		15.8000	
Nickel, total	ug/L	MW-47	10/25/2018	ND	4.0000	
Nickel, total	ug/L	MW-47	04/15/2019	ND	4.0000	
Nickel, total	ug/L	MW-47	10/07/2019	ND	4.0000	
Nickel, total	ug/L	MW-47	04/22/2020		4.7000	
Nickel, total	ug/L	MW-47	10/01/2020	ND	4.0000	
Nickel, total	ug/L	MW-47	04/08/2021	ND	4.0000	
Nickel, total	ug/L	MW-47	10/29/2021	ND	4.0000	
Nickel, total	ug/L	MW-47	04/25/2022	ND	4.0000	
Nickel, total	ug/L	MW-47	10/17/2022	ND	4.0000	
Nickel, total	ug/L	MW-47	04/10/2023	ND	4.0000	
Nickel, total	ug/L	MW-47	10/27/2023		11.7000	
Nickel, total	ug/L	MW-47	04/02/2024		8.0000	
Nickel, total	ug/L	MW-47	10/10/2024	ND	4.0000	
Selenium, total	ug/L	MW-47	10/23/2014	ND	4.0000	
Selenium, total	ug/L	MW-47	03/31/2015	ND	4.0000	
Selenium, total	ug/L	MW-47	07/08/2015	ND	4.0000	
Selenium, total	ug/L	MW-47	11/05/2015	ND	4.0000	
Selenium, total	ug/L	MW-47	04/21/2016	ND	4.0000	
Selenium, total	ug/L	MW-47	10/17/2016	ND	4.0000	
Selenium, total	ug/L	MW-47	04/21/2017	ND	4.0000	
Selenium, total	ug/L	MW-47	10/16/2017	ND	4.0000	
Selenium, total	ug/L	MW-47	04/24/2018	ND	4.0000	
Selenium, total	ug/L	MW-47	10/25/2018	ND	4.0000	
Selenium, total	ug/L	MW-47	04/15/2019	ND	4.0000	
Selenium, total	ug/L	MW-47	10/07/2019	ND	4.0000	
Selenium, total	ug/L	MW-47	04/22/2020	ND	4.0000	
Selenium, total	ug/L	MW-47	10/01/2020	ND	4.0000	
Selenium, total	ug/L	MW-47	04/08/2021	ND	4.0000	
Selenium, total	ug/L	MW-47	10/29/2021	ND	4.0000	
Selenium, total	ug/L	MW-47	04/25/2022	ND	4.0000	
Selenium, total	ug/L	MW-47	10/17/2022	ND	4.0000	
Selenium, total	ug/L	MW-47	04/10/2023	ND	4.0000	
Selenium, total	ug/L	MW-47	10/27/2023		11.7000	
Selenium, total	ug/L	MW-47	04/02/2024		8.0000	
Selenium, total	ug/L	MW-47	10/10/2024	ND	4.0000	

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Selenium, total	ug/L	MW-47	04/08/2021	ND	4.0000		
Selenium, total	ug/L	MW-47	10/29/2021	ND	4.0000		
Selenium, total	ug/L	MW-47	04/25/2022	ND	4.0000		
Selenium, total	ug/L	MW-47	10/17/2022	ND	4.0000		
Selenium, total	ug/L	MW-47	04/10/2023	ND	4.0000		
Selenium, total	ug/L	MW-47	10/27/2023	ND	4.0000		
Selenium, total	ug/L	MW-47	04/02/2024	ND	4.0000		
Selenium, total	ug/L	MW-47	10/10/2024	ND	4.0000		
Silver, total	ug/L	MW-47	10/23/2014	ND	4.0000		
Silver, total	ug/L	MW-47	03/31/2015	ND	4.0000		
Silver, total	ug/L	MW-47	07/08/2015	ND	4.0000		
Silver, total	ug/L	MW-47	11/05/2015	ND	4.0000		
Silver, total	ug/L	MW-47	04/21/2016	ND	4.0000		
Silver, total	ug/L	MW-47	10/17/2016	ND	4.0000		
Silver, total	ug/L	MW-47	04/21/2017	ND	4.0000		
Silver, total	ug/L	MW-47	10/16/2017	ND	4.0000		
Silver, total	ug/L	MW-47	04/24/2018	ND	4.0000		
Silver, total	ug/L	MW-47	10/25/2018	ND	4.0000		
Silver, total	ug/L	MW-47	04/15/2019	ND	4.0000		
Silver, total	ug/L	MW-47	10/07/2019	ND	4.0000		
Silver, total	ug/L	MW-47	04/22/2020	ND	4.0000		
Silver, total	ug/L	MW-47	10/01/2020	ND	4.0000		
Silver, total	ug/L	MW-47	04/08/2021	ND	4.0000		
Silver, total	ug/L	MW-47	10/29/2021	ND	4.0000		
Silver, total	ug/L	MW-47	04/25/2022	ND	4.0000		
Silver, total	ug/L	MW-47	10/17/2022	ND	4.0000		
Silver, total	ug/L	MW-47	04/10/2023	ND	4.0000		
Silver, total	ug/L	MW-47	10/27/2023	ND	4.0000		
Silver, total	ug/L	MW-47	04/02/2024	ND	4.0000		
Silver, total	ug/L	MW-47	10/10/2024	ND	4.0000		
Thallium, total	ug/L	MW-47	10/23/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-47	03/31/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-47	07/08/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-47	11/05/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-47	04/21/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-47	10/17/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-47	04/21/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-47	10/16/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-47	04/24/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-47	10/25/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-47	04/15/2019	ND	2.0000		
Thallium, total	ug/L	MW-47	10/07/2019	ND	2.0000		
Thallium, total	ug/L	MW-47	04/22/2020	ND	2.0000		
Thallium, total	ug/L	MW-47	10/01/2020	ND	2.0000		
Thallium, total	ug/L	MW-47	04/08/2021	ND	2.0000		
Thallium, total	ug/L	MW-47	10/29/2021	ND	2.0000		
Thallium, total	ug/L	MW-47	04/25/2022	ND	2.0000		
Thallium, total	ug/L	MW-47	10/17/2022	ND	2.0000		
Thallium, total	ug/L	MW-47	04/10/2023	ND	2.0000		
Thallium, total	ug/L	MW-47	10/27/2023	ND	2.0000		
Thallium, total	ug/L	MW-47	04/02/2024	ND	2.0000		
Thallium, total	ug/L	MW-47	10/10/2024	ND	2.0000		
Vanadium, total	ug/L	MW-47	10/23/2014	ND	20.0000		
Vanadium, total	ug/L	MW-47	03/31/2015	ND	20.0000		
Vanadium, total	ug/L	MW-47	07/08/2015	ND	20.0000		
Vanadium, total	ug/L	MW-47	11/05/2015	ND	20.0000		
Vanadium, total	ug/L	MW-47	04/21/2016	ND	20.0000		
Vanadium, total	ug/L	MW-47	10/17/2016	ND	20.0000		
Vanadium, total	ug/L	MW-47	04/21/2017	ND	20.0000		
Vanadium, total	ug/L	MW-47	10/16/2017	ND	20.0000		
Vanadium, total	ug/L	MW-47	04/24/2018	ND	20.0000		
Vanadium, total	ug/L	MW-47	10/25/2018	ND	20.0000		
Vanadium, total	ug/L	MW-47	04/15/2019	ND	20.0000		
Vanadium, total	ug/L	MW-47	10/07/2019	ND	20.0000		
Vanadium, total	ug/L	MW-47	04/22/2020	ND	20.0000		
Vanadium, total	ug/L	MW-47	10/01/2020	ND	20.0000		
Vanadium, total	ug/L	MW-47	04/08/2021	ND	20.0000		
Vanadium, total	ug/L	MW-47	10/29/2021	ND	20.0000		
Vanadium, total	ug/L	MW-47	04/25/2022	ND	20.0000		
Vanadium, total	ug/L	MW-47	10/17/2022	ND	20.0000		
Vanadium, total	ug/L	MW-47	04/10/2023	ND	20.0000		
Vanadium, total	ug/L	MW-47	10/27/2023	ND	20.0000		
Vanadium, total	ug/L	MW-47	04/02/2024	ND	20.0000		
Vanadium, total	ug/L	MW-47	10/10/2024	ND	20.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Zinc, total	ug/L	MW-47	10/23/2014	ND	20.0000		
Zinc, total	ug/L	MW-47	03/31/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-47	07/08/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-47	11/05/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-47	04/21/2016		12.0000		
Zinc, total	ug/L	MW-47	10/17/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-47	04/21/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-47	10/16/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-47	04/24/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-47	10/25/2018	ND	20.0000		
Zinc, total	ug/L	MW-47	04/15/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-47	10/07/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-47	04/22/2020	ND	20.0000		
Zinc, total	ug/L	MW-47	10/01/2020	ND	20.0000		
Zinc, total	ug/L	MW-47	04/08/2021	ND	20.0000		
Zinc, total	ug/L	MW-47	10/29/2021	ND	20.0000		
Zinc, total	ug/L	MW-47	04/25/2022	ND	20.0000		
Zinc, total	ug/L	MW-47	10/17/2022	ND	20.0000		
Zinc, total	ug/L	MW-47	04/10/2023	ND	20.0000		
Zinc, total	ug/L	MW-47	10/27/2023		25.9000		
Zinc, total	ug/L	MW-47	04/02/2024	ND	20.0000		
Zinc, total	ug/L	MW-47	10/10/2024	ND	20.0000		

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

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Antimony, total	ug/L	MW-48A	10/10/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-48A	10/10/2024		18.3000		89.3000
Barium, total	ug/L	MW-48A	10/10/2024		205.0000		1880.0000
Beryllium, total	ug/L	MW-48A	10/10/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-48A	10/10/2024	ND	0.8000		0.9000
Chromium, total	ug/L	MW-48A	10/10/2024	ND	8.0000		20.3000
Cobalt, total	ug/L	MW-48A	10/10/2024		0.6000		12.4000
Copper, total	ug/L	MW-48A	10/10/2024	ND	4.0000		11.3000
Lead, total	ug/L	MW-48A	10/10/2024	ND	4.0000		4.4000
Nickel, total	ug/L	MW-48A	10/10/2024	ND	4.0000		31.6000
Selenium, total	ug/L	MW-48A	10/10/2024	ND	4.0000		4.9000
Silver, total	ug/L	MW-48A	10/10/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-48A	10/10/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-48A	10/10/2024	ND	20.0000		22.4000
Zinc, total	ug/L	MW-48A	10/10/2024	ND	20.0000		38.0000
Antimony, total	ug/L	MW-49A	10/10/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-49A	10/10/2024		50.5000		89.3000
Barium, total	ug/L	MW-49A	10/10/2024		616.0000		1880.0000
Beryllium, total	ug/L	MW-49A	10/10/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-49A	10/10/2024	ND	0.8000		0.9000
Chromium, total	ug/L	MW-49A	10/10/2024	ND	8.0000		20.3000
Cobalt, total	ug/L	MW-49A	10/10/2024		10.2000	**	12.4000
Copper, total	ug/L	MW-49A	10/10/2024	ND	4.0000		11.3000
Lead, total	ug/L	MW-49A	10/10/2024	ND	4.0000		4.4000
Nickel, total	ug/L	MW-49A	10/10/2024		45.6000	***	31.6000
Selenium, total	ug/L	MW-49A	10/10/2024	ND	4.0000		4.9000
Silver, total	ug/L	MW-49A	10/10/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-49A	10/10/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-49A	10/10/2024	ND	20.0000		22.4000
Zinc, total	ug/L	MW-49A	10/10/2024	ND	20.0000		38.0000
Antimony, total	ug/L	MW-50	10/10/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-50	10/10/2024	ND	4.0000		89.3000
Barium, total	ug/L	MW-50	10/10/2024		253.0000		1880.0000
Beryllium, total	ug/L	MW-50	10/10/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-50	10/10/2024	ND	0.8000		0.9000
Chromium, total	ug/L	MW-50	10/10/2024	ND	8.0000		20.3000
Cobalt, total	ug/L	MW-50	10/10/2024	ND	0.4000		12.4000
Copper, total	ug/L	MW-50	10/10/2024	ND	4.0000		11.3000
Lead, total	ug/L	MW-50	10/10/2024	ND	4.0000		4.4000
Nickel, total	ug/L	MW-50	10/10/2024	ND	4.0000		31.6000
Selenium, total	ug/L	MW-50	10/10/2024	ND	4.0000		4.9000
Silver, total	ug/L	MW-50	10/10/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-50	10/10/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-50	10/10/2024	ND	20.0000		22.4000
Zinc, total	ug/L	MW-50	10/10/2024	ND	20.0000		38.0000
Antimony, total	ug/L	MW-51	10/10/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-51	10/10/2024	ND	4.0000		89.3000
Barium, total	ug/L	MW-51	10/10/2024		436.0000		1880.0000
Beryllium, total	ug/L	MW-51	10/10/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-51	10/10/2024	ND	0.8000		0.9000
Chromium, total	ug/L	MW-51	10/10/2024	ND	8.0000		20.3000
Cobalt, total	ug/L	MW-51	10/10/2024	ND	0.4000		12.4000
Copper, total	ug/L	MW-51	10/10/2024	ND	4.0000		11.3000
Lead, total	ug/L	MW-51	10/10/2024	ND	4.0000		4.4000
Nickel, total	ug/L	MW-51	10/10/2024	ND	4.0000		31.6000
Selenium, total	ug/L	MW-51	10/10/2024	ND	4.0000		4.9000
Silver, total	ug/L	MW-51	10/10/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-51	10/10/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-51	10/10/2024	ND	20.0000		22.4000
Zinc, total	ug/L	MW-51	10/10/2024	ND	20.0000		38.0000

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

Table 3

Detection Frequencies in Upgradient and Downgradient Wells

Constituent	Upgradient			Downgradient		
	Detect	N	Proportion	Detect	N	Proportion
Antimony, total	0	110	0.000	1	138	0.007
Arsenic, total	16	97	0.165	68	137	0.496
Barium, total	109	109	1.000	141	141	1.000
Beryllium, total	0	110	0.000	1	136	0.007
Cadmium, total	1	110	0.009	4	136	0.029
Chromium, total	3	109	0.028	8	136	0.059
Cobalt, total	46	106	0.434	73	136	0.537
Copper, total	10	107	0.093	50	137	0.365
Lead, total	3	109	0.028	14	136	0.103
Nickel, total	23	106	0.217	83	137	0.606
Selenium, total	3	109	0.028	1	138	0.007
Silver, total	0	110	0.000	0	138	0.000
Thallium, total	0	110	0.000	2	137	0.015
Vanadium, total	1	110	0.009	7	136	0.051
Zinc, total	11	110	0.100	46	137	0.336

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	110	0.000									nonpar
Arsenic, total	16	97	0.165	1.096	1.061					2.326	normal	nonpar
Barium, total	109	109	1.000	4.810	2.876					2.326	non-norm	nonpar
Beryllium, total	0	110	0.000									nonpar
Cadmium, total	1	110	0.009									nonpar
Chromium, total	3	109	0.028									nonpar
Cobalt, total	46	106	0.434	4.497	1.942					2.326	lognor	nonpar
Copper, total	10	107	0.093	0.449	0.934					2.326	normal	nonpar
Lead, total	3	109	0.028	2.393	2.163					2.326	lognor	nonpar
Nickel, total	23	106	0.217	1.990	1.304					2.326	normal	nonpar
Selenium, total	3	109	0.028	0.346	0.307					2.326	normal	nonpar
Silver, total	0	110	0.000									nonpar
Thallium, total	0	110	0.000									nonpar
Vanadium, total	1	110	0.009									nonpar
Zinc, total	11	110	0.100	0.756	0.169					2.326	normal	nonpar

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

Table 5

Summary Statistics and Prediction Limits

Constituent	Units	Detect	N	Mean	SD	alpha	Factor	Pred Limit	Type		Conf
Antimony, total	ug/L	0	110					2.0000	nonpar	***	0.99
Arsenic, total	ug/L	16	97					89.3000	nonpar		0.99
Barium, total	ug/L	109	109					1880.0000	nonpar		0.99
Beryllium, total	ug/L	0	110					4.0000	nonpar	***	0.99
Cadmium, total	ug/L	1	110					0.9000	nonpar		0.99
Chromium, total	ug/L	3	109					20.3000	nonpar		0.99
Cobalt, total	ug/L	46	106					12.4000	nonpar		0.99
Copper, total	ug/L	10	107					11.3000	nonpar		0.99
Lead, total	ug/L	3	109					4.4000	nonpar		0.99
Nickel, total	ug/L	23	106					31.6000	nonpar		0.99
Selenium, total	ug/L	3	109					4.9000	nonpar		0.99
Silver, total	ug/L	0	110					4.0000	nonpar	***	0.99
Thallium, total	ug/L	0	110					2.0000	nonpar	***	0.99
Vanadium, total	ug/L	1	110					22.4000	nonpar		0.99
Zinc, total	ug/L	11	110					38.0000	nonpar		0.99

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

* - Insufficient Data.

** - Calculated limit raised to Manual Reporting Limit.

*** - Nonparametric limit based on ND value.

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

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

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

Table 6

**Dixon's Test Outliers
1% Significance Level**

Constituent	Units	Well	Date	Result	ND Qualifier	Date Range	N	Critical Value
Copper, total	ug/L	MW-36	10/10/2024	19.2000		07/08/2015-10/10/2024	19	0.5503
Cobalt, total	ug/L	MW-37	10/27/2023	9.6000		10/23/2014-10/10/2024	23	0.5162
Cobalt, total	ug/L	MW-37	10/10/2024	4.4000		10/23/2014-10/10/2024	23	0.5162
Copper, total	ug/L	MW-37	10/25/2018	13.7000		10/23/2014-10/10/2024	23	0.5065
Nickel, total	ug/L	MW-37	10/27/2023	13.9000		10/23/2014-10/10/2024	23	0.5162
Nickel, total	ug/L	MW-37	10/10/2024	18.7000		10/23/2014-10/10/2024	23	0.5162
Chromium, total	ug/L	MW-39	01/08/2015	29.6000		10/23/2014-10/10/2024	23	0.5065
Cobalt, total	ug/L	MW-39	11/05/2015	3.3000		10/23/2014-10/10/2024	23	0.5065
Copper, total	ug/L	MW-39	04/02/2024	126.0000		10/23/2014-10/10/2024	23	0.5065
Nickel, total	ug/L	MW-39	01/08/2015	20.5000		10/23/2014-10/10/2024	23	0.5065

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

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

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

Table 8

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

Constituent	Units	Well	Date		Result	Pred. Limit
Cobalt, total	ug/L	MW-49A	06/13/2008		12.0000	12.4000
Cobalt, total	ug/L	MW-49A	08/22/2008	ND	10.0000	12.4000
Cobalt, total	ug/L	MW-49A	10/01/2008		6.0000	12.4000
Cobalt, total	ug/L	MW-49A	12/23/2008		4.2000	12.4000
Cobalt, total	ug/L	MW-49A	04/03/2009		11.2000	12.4000
Cobalt, total	ug/L	MW-49A	06/19/2009		8.4000	12.4000
Cobalt, total	ug/L	MW-49A	10/09/2009		8.3000	12.4000
Cobalt, total	ug/L	MW-49A	02/23/2010		8.8000	12.4000
Cobalt, total	ug/L	MW-49A	04/13/2010		21.8000 *	12.4000
Cobalt, total	ug/L	MW-49A	10/14/2010		10.9000	12.4000
Cobalt, total	ug/L	MW-49A	04/08/2011		11.0000	12.4000
Cobalt, total	ug/L	MW-49A	10/18/2011		12.0000	12.4000
Cobalt, total	ug/L	MW-49A	04/18/2012		15.5000 *	12.4000
Cobalt, total	ug/L	MW-49A	10/17/2012		9.2000	12.4000
Cobalt, total	ug/L	MW-49A	04/03/2013		25.7000 *	12.4000
Cobalt, total	ug/L	MW-49A	10/09/2013		14.0000 *	12.4000
Cobalt, total	ug/L	MW-49A	04/16/2014		20.3000 *	12.4000
Cobalt, total	ug/L	MW-49A	10/23/2014		12.0000	12.4000
Cobalt, total	ug/L	MW-49A	03/31/2015		13.3000 *	12.4000
Cobalt, total	ug/L	MW-49A	11/05/2015		15.2000 *	12.4000
Cobalt, total	ug/L	MW-49A	04/21/2016		14.5000 *	12.4000
Cobalt, total	ug/L	MW-49A	10/17/2016		1.1000	12.4000
Cobalt, total	ug/L	MW-49A	04/21/2017		14.9000 *	12.4000
Cobalt, total	ug/L	MW-49A	10/16/2017		5.9000	12.4000
Cobalt, total	ug/L	MW-49A	04/24/2018		24.5000 *	12.4000
Cobalt, total	ug/L	MW-49A	10/25/2018		7.3000	12.4000
Cobalt, total	ug/L	MW-49A	04/15/2019		18.0000 *	12.4000
Cobalt, total	ug/L	MW-49A	10/07/2019		2.7000	12.4000
Cobalt, total	ug/L	MW-49A	04/23/2020		19.1000 *	12.4000
Cobalt, total	ug/L	MW-49A	10/01/2020		16.8000 *	12.4000
Cobalt, total	ug/L	MW-49A	04/08/2021		21.0000 *	12.4000
Cobalt, total	ug/L	MW-49A	10/29/2021		2.6000	12.4000
Cobalt, total	ug/L	MW-49A	04/25/2022		16.5000 *	12.4000
Cobalt, total	ug/L	MW-49A	10/17/2022		20.3000 *	12.4000
Cobalt, total	ug/L	MW-49A	04/10/2023		20.6000 *	12.4000
Cobalt, total	ug/L	MW-49A	10/27/2023		20.5000 *	12.4000
Cobalt, total	ug/L	MW-49A	04/02/2024		19.9000 *	12.4000
Cobalt, total	ug/L	MW-49A	10/10/2024		10.2000	12.4000
Nickel, total	ug/L	MW-49A	06/13/2008		35.0000 *	31.6000
Nickel, total	ug/L	MW-49A	08/22/2008		48.0000 *	31.6000
Nickel, total	ug/L	MW-49A	10/01/2008		40.6000 *	31.6000
Nickel, total	ug/L	MW-49A	12/23/2008		33.7000 *	31.6000
Nickel, total	ug/L	MW-49A	04/03/2009		43.3000 *	31.6000
Nickel, total	ug/L	MW-49A	06/19/2009		38.9000 *	31.6000
Nickel, total	ug/L	MW-49A	10/09/2009		39.6000 *	31.6000
Nickel, total	ug/L	MW-49A	02/23/2010		39.6000 *	31.6000
Nickel, total	ug/L	MW-49A	04/13/2010		64.9000 *	31.6000
Nickel, total	ug/L	MW-49A	10/14/2010		37.7000 *	31.6000
Nickel, total	ug/L	MW-49A	04/08/2011		47.9000 *	31.6000
Nickel, total	ug/L	MW-49A	10/18/2011		43.2000 *	31.6000
Nickel, total	ug/L	MW-49A	04/18/2012		57.3000 *	31.6000
Nickel, total	ug/L	MW-49A	10/17/2012		36.9000 *	31.6000
Nickel, total	ug/L	MW-49A	04/03/2013		83.2000 *	31.6000
Nickel, total	ug/L	MW-49A	10/09/2013		33.9000 *	31.6000
Nickel, total	ug/L	MW-49A	04/16/2014		62.9000 *	31.6000
Nickel, total	ug/L	MW-49A	10/23/2014		32.2000 *	31.6000
Nickel, total	ug/L	MW-49A	03/31/2015		32.8000 *	31.6000
Nickel, total	ug/L	MW-49A	11/05/2015		35.1000 *	31.6000
Nickel, total	ug/L	MW-49A	04/21/2016		38.5000 *	31.6000
Nickel, total	ug/L	MW-49A	10/17/2016	ND	4.0000	31.6000
Nickel, total	ug/L	MW-49A	04/21/2017		37.6000 *	31.6000
Nickel, total	ug/L	MW-49A	10/16/2017		13.3000	31.6000
Nickel, total	ug/L	MW-49A	04/24/2018		61.9000 *	31.6000
Nickel, total	ug/L	MW-49A	10/25/2018		9.3000	31.6000
Nickel, total	ug/L	MW-49A	04/15/2019		41.9000 *	31.6000
Nickel, total	ug/L	MW-49A	10/07/2019		7.4000	31.6000
Nickel, total	ug/L	MW-49A	04/23/2020		49.6000 *	31.6000
Nickel, total	ug/L	MW-49A	10/01/2020		46.9000 *	31.6000
Nickel, total	ug/L	MW-49A	04/08/2021		48.9000 *	31.6000
Nickel, total	ug/L	MW-49A	10/29/2021		7.3000	31.6000
Nickel, total	ug/L	MW-49A	04/25/2022		50.7000 *	31.6000

* - 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-49A	10/17/2022		54.3000	*	31.6000
Nickel, total	ug/L	MW-49A	04/10/2023		55.4000	*	31.6000
Nickel, total	ug/L	MW-49A	10/27/2023		50.5000	*	31.6000
Nickel, total	ug/L	MW-49A	04/02/2024		49.4000	*	31.6000
Nickel, total	ug/L	MW-49A	10/10/2024		45.6000	*	31.6000

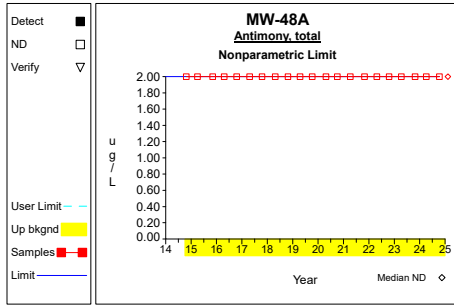
* - Significantly increased over background.

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

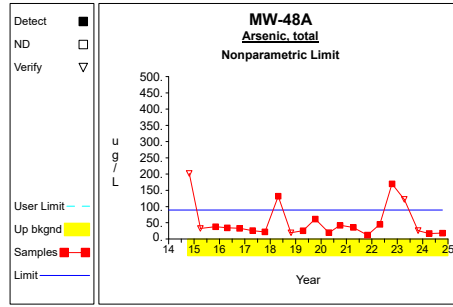
*** - Manual exclusion.

ND = Not Detected, Result = detection limit.

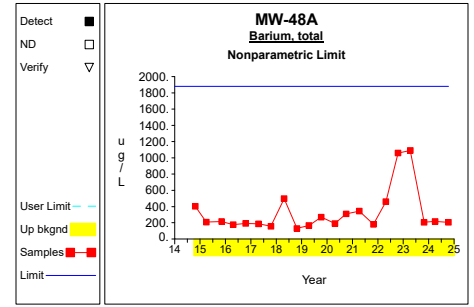
Up vs. Down Prediction Limits



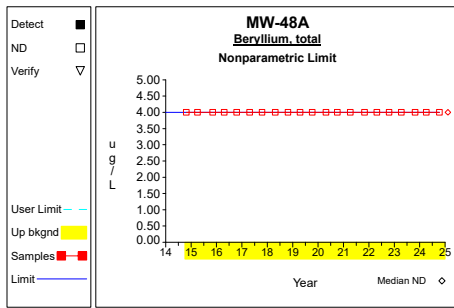
Graph 1



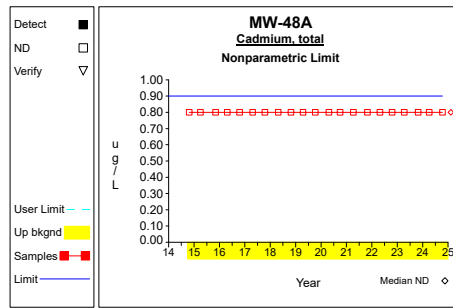
Graph 2



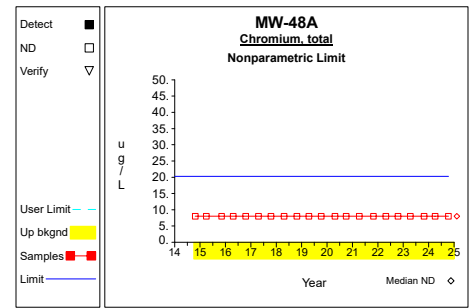
Graph 3



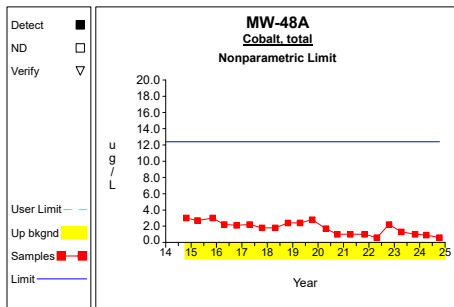
Graph 4



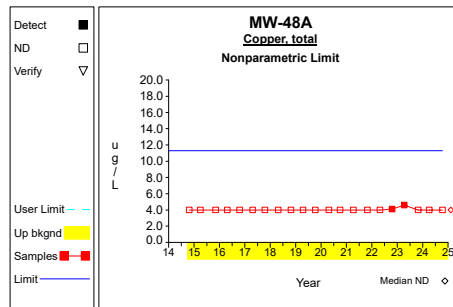
Graph 5



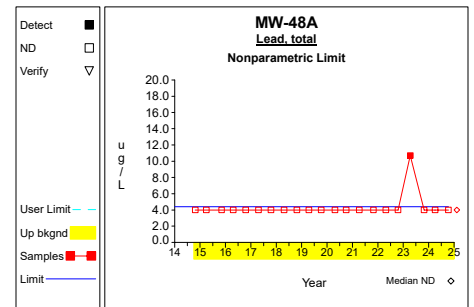
Graph 6



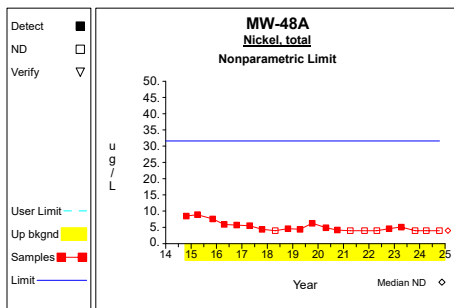
Graph 7



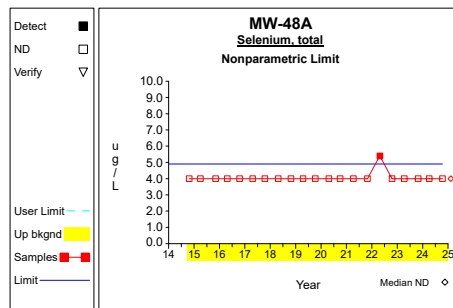
Graph 8



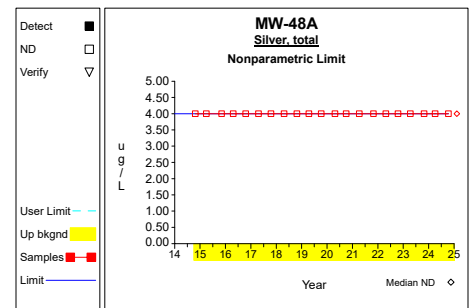
Graph 9



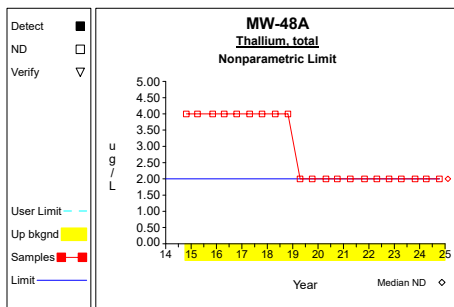
Graph 10



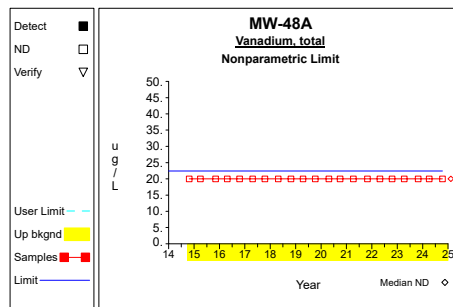
Graph 11



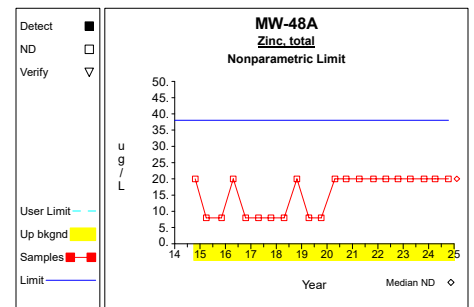
Graph 12



Graph 13

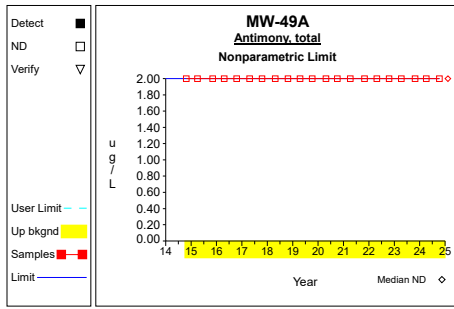


Graph 14

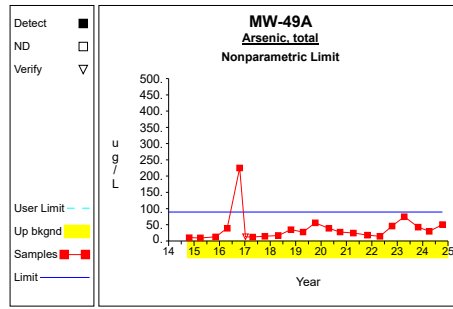


Graph 15

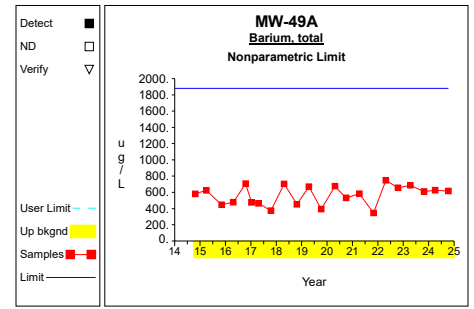
Up vs. Down Prediction Limits



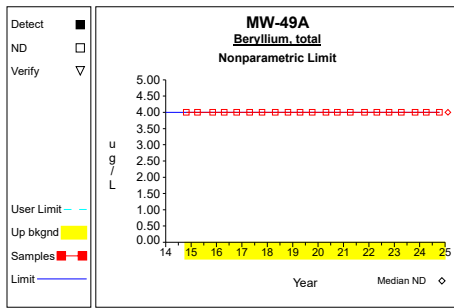
Graph 16



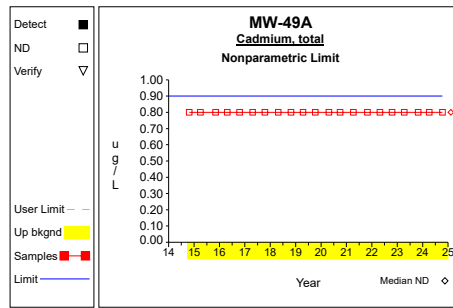
Graph 17



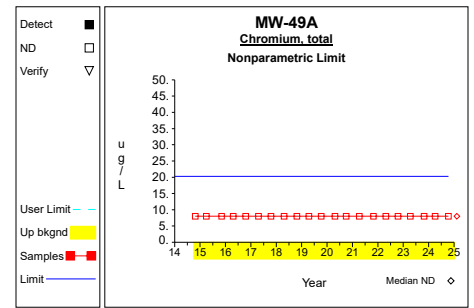
Graph 18



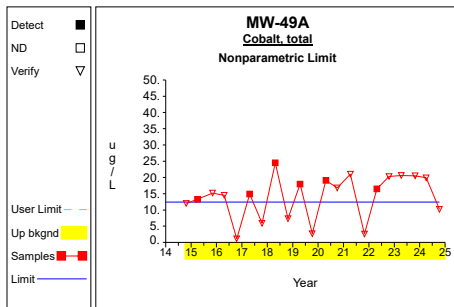
Graph 19



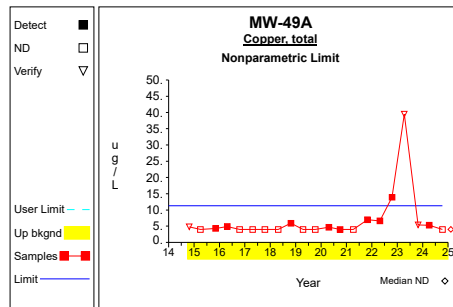
Graph 20



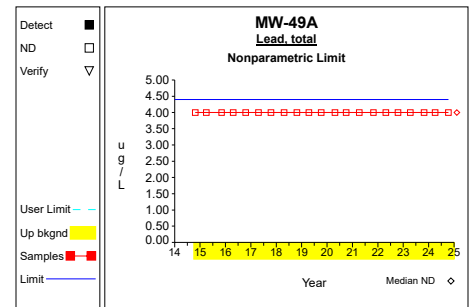
Graph 21



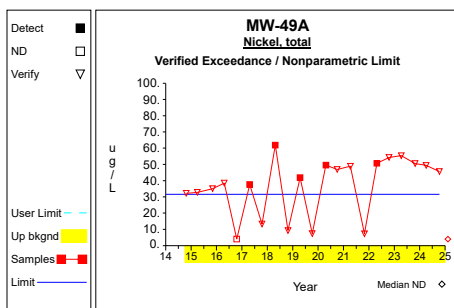
Graph 22



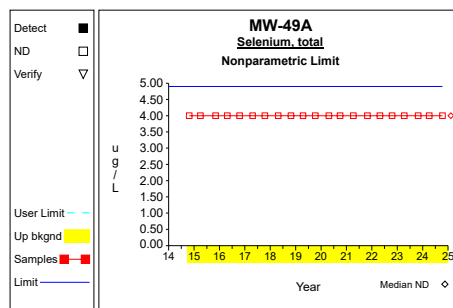
Graph 23



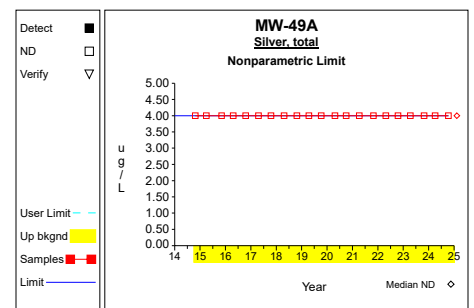
Graph 24



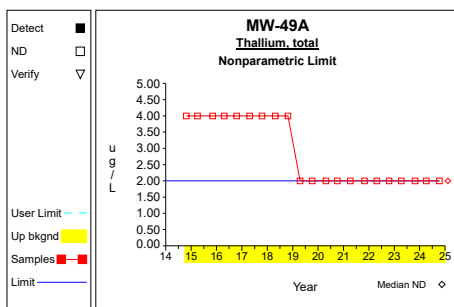
Graph 25



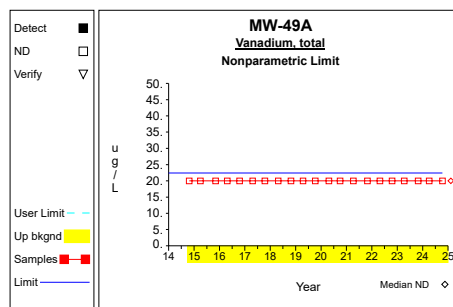
Graph 26



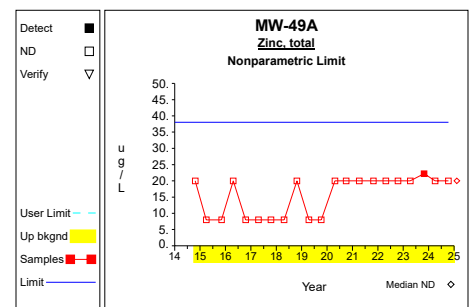
Graph 27



Graph 28

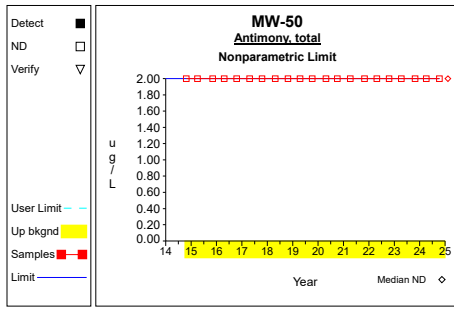


Graph 29

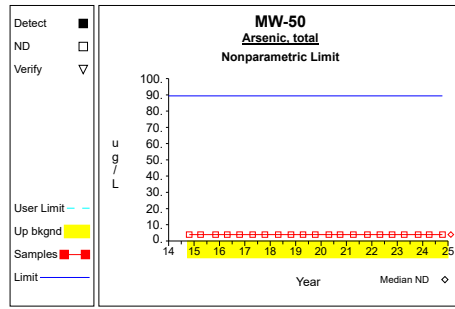


Graph 30

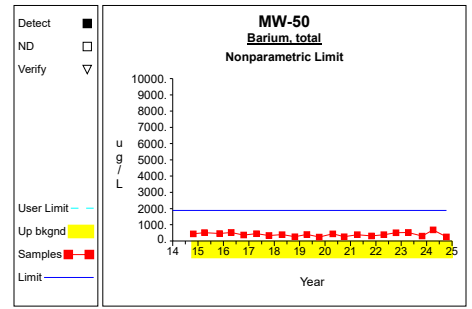
Up vs. Down Prediction Limits



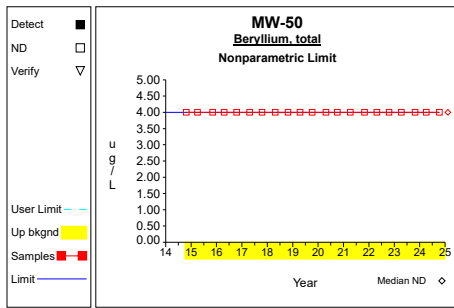
Graph 31



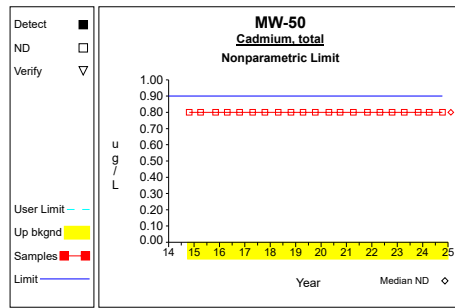
Graph 32



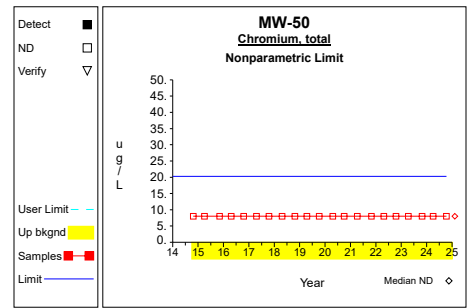
Graph 33



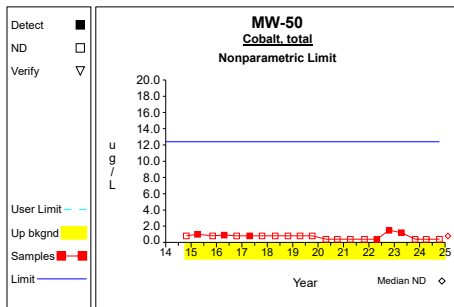
Graph 34



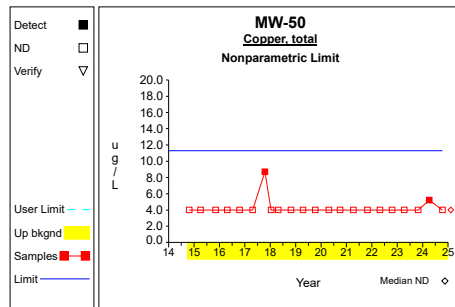
Graph 35



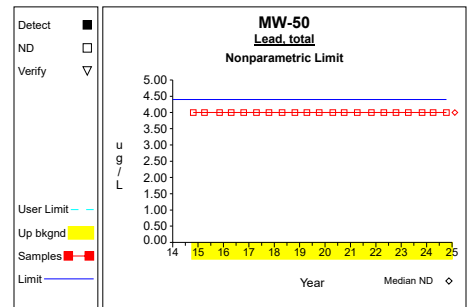
Graph 36



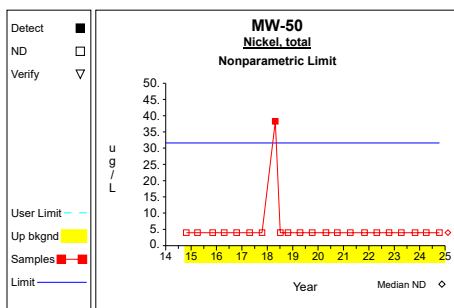
Graph 37



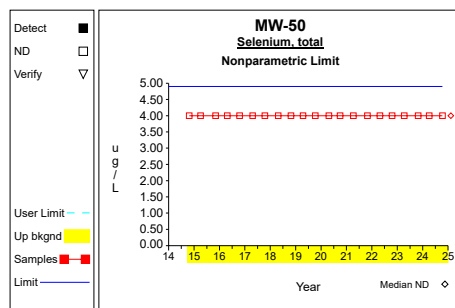
Graph 38



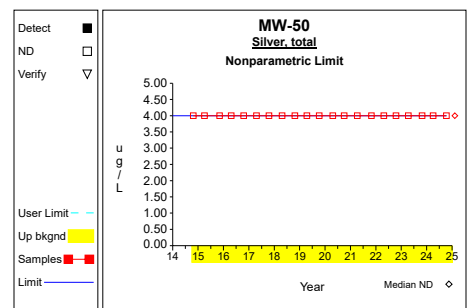
Graph 39



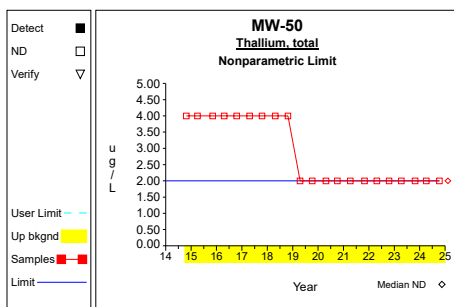
Graph 40



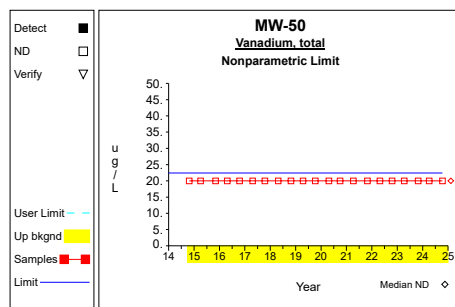
Graph 41



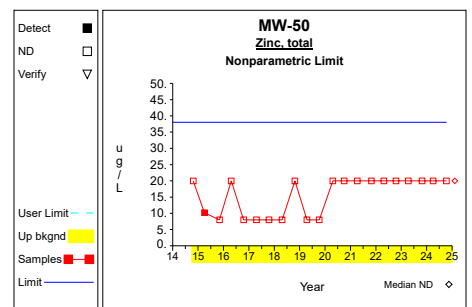
Graph 42



Graph 43

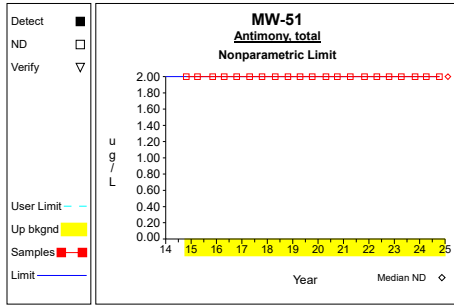


Graph 44

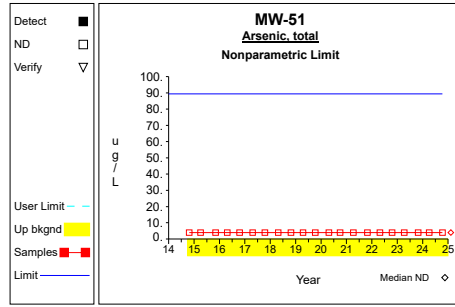


Graph 45

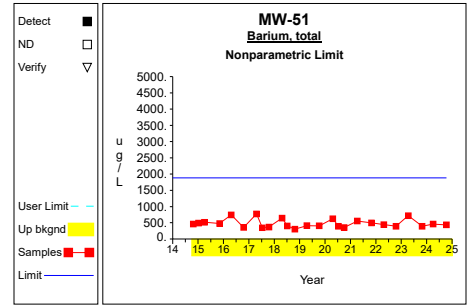
Up vs. Down Prediction Limits



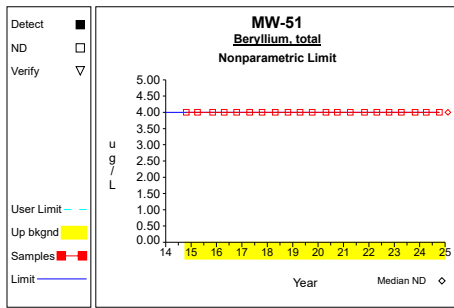
Graph 46



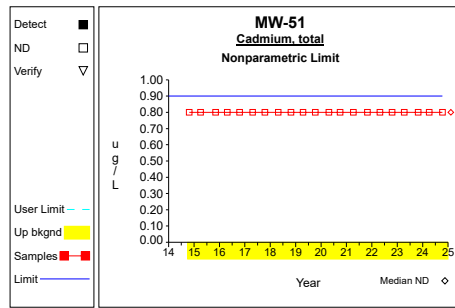
Graph 47



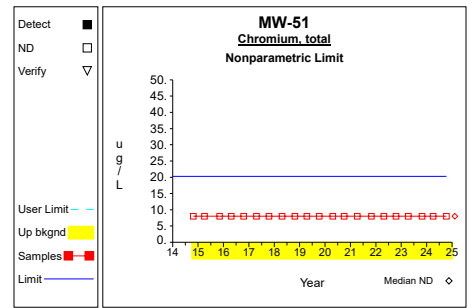
Graph 48



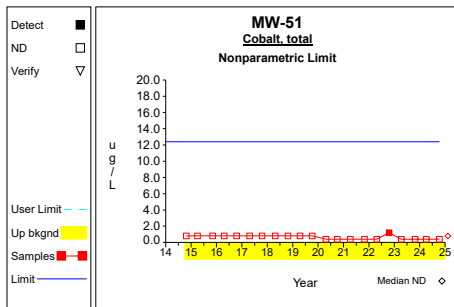
Graph 49



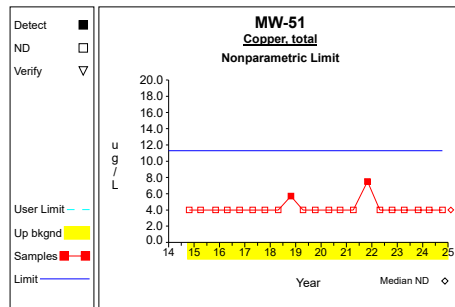
Graph 50



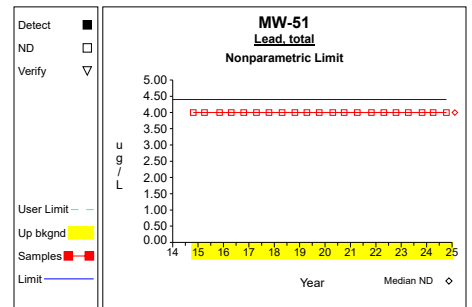
Graph 51



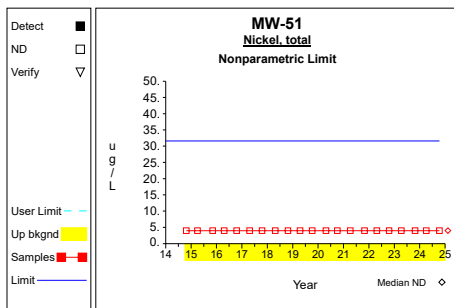
Graph 52



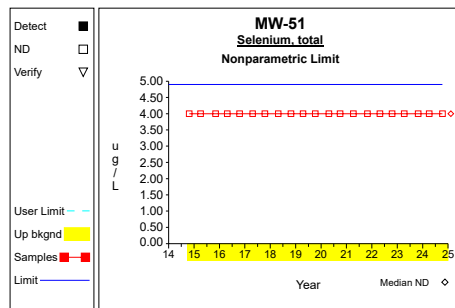
Graph 53



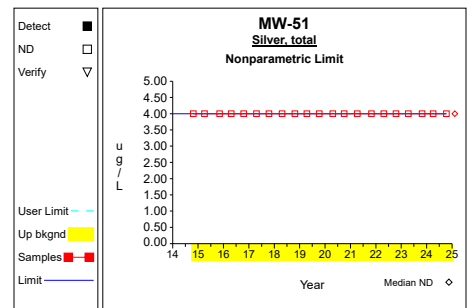
Graph 54



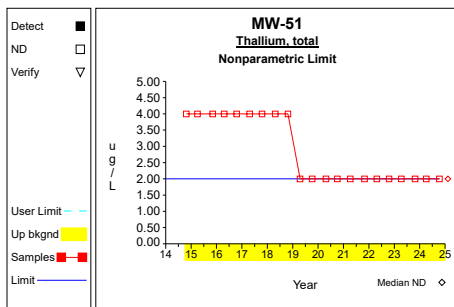
Graph 55



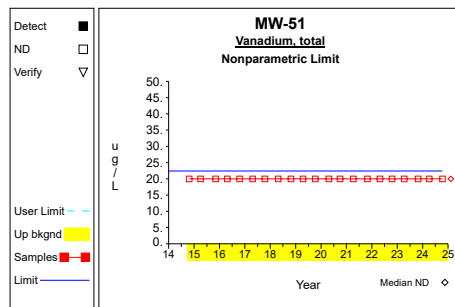
Graph 56



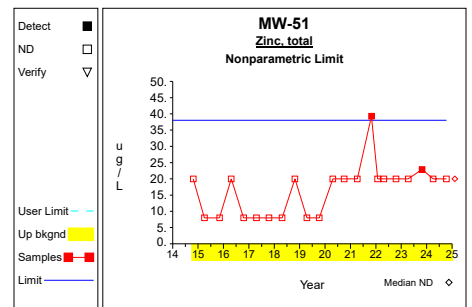
Graph 57



Graph 58

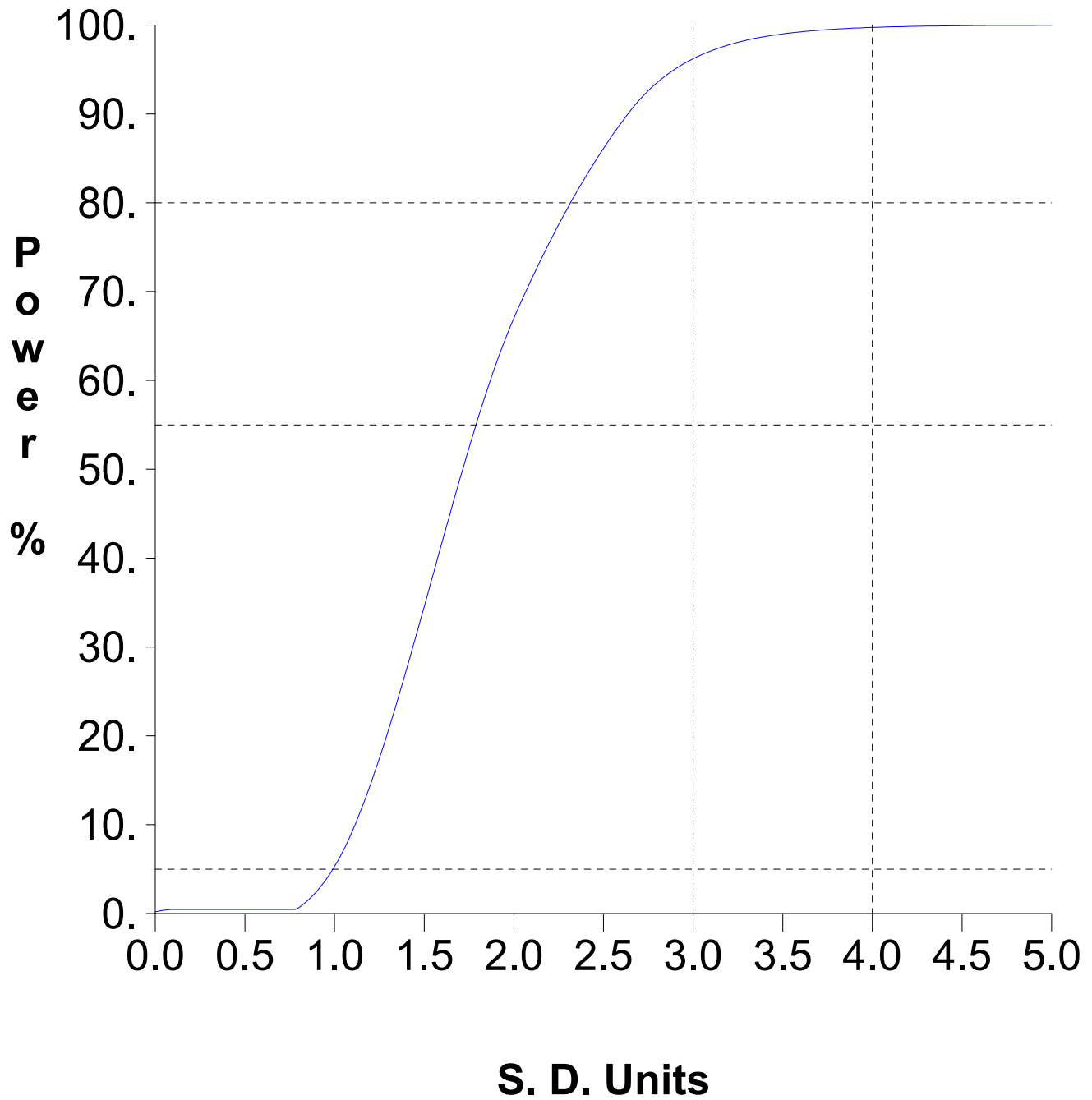


Graph 59



Graph 60

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



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

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

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = max(X) = 89.3	Compute nonparametric prediction limit as largest background measurement.
2	Conf = 0.99	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = max(X) = 1880.0	Compute nonparametric prediction limit as largest background measurement.
2	Conf = 0.99	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

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

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = max(X) = 0.9	Compute nonparametric prediction limit as largest background measurement.
2	Conf = 0.99	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = max(X) = 20.3	Compute nonparametric prediction limit as largest background measurement.
2	Conf = 0.99	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = max(X) = 12.4	Compute nonparametric prediction limit as largest background measurement.
2	Conf = 0.99	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = max(X) = 11.3	Compute nonparametric prediction limit as largest background measurement.
2	Conf = 0.99	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = max(X) = 4.4	Compute nonparametric prediction limit as largest background measurement.
2	Conf = 0.99	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = max(X) = 31.6	Compute nonparametric prediction limit as largest background measurement.
2	Conf = 0.99	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = max(X) = 4.9	Compute nonparametric prediction limit as largest background measurement.
2	Conf = 0.99	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

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

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

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

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = max(X) = 22.4	Compute nonparametric prediction limit as largest background measurement.
2	Conf = 0.99	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = max(X) = 38.0	Compute nonparametric prediction limit as largest background measurement.
2	Conf = 0.99	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

Attachment C

Assessment Statistics for Trace 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-48A	4	45.850	50.920	1.176	0.000	105.746	10.000	inc	
Cobalt, total	ug/L	MW-48A	4	0.950	0.289	1.176	0.610	1.290	2.100		
Nickel, total	ug/L	MW-48A	4	2.775	1.550	1.176	0.952	4.598	100.000	dec	
Arsenic, total	ug/L	MW-49A	4	49.525	18.932	1.176	27.256	71.794	10.000	inc	**
Cobalt, total	ug/L	MW-49A	4	17.800	5.076	1.176	11.829	23.771	2.100		**
Nickel, total	ug/L	MW-49A	4	50.225	4.038	1.176	45.475	54.975	100.000		

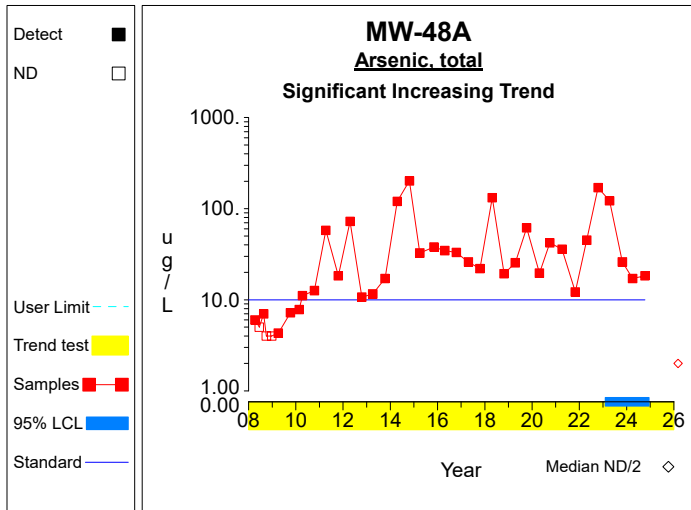
* - Insufficient Data

** - Significant Exceedance

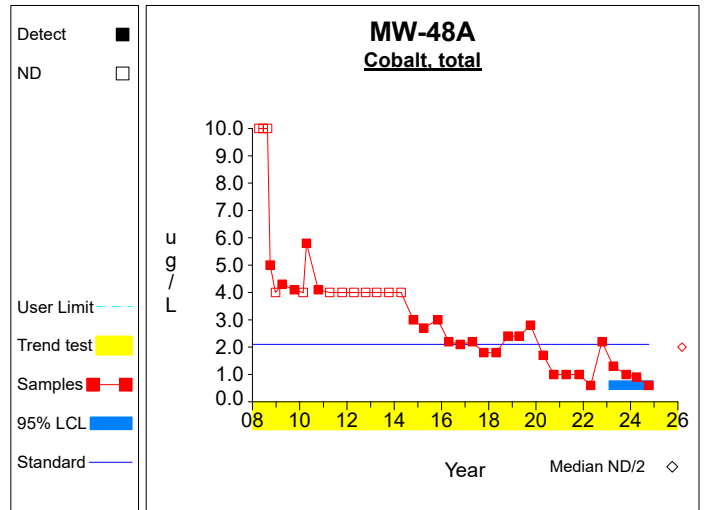
LCL = Lower Confidence Limit

UCL = Upper Confidence Limit

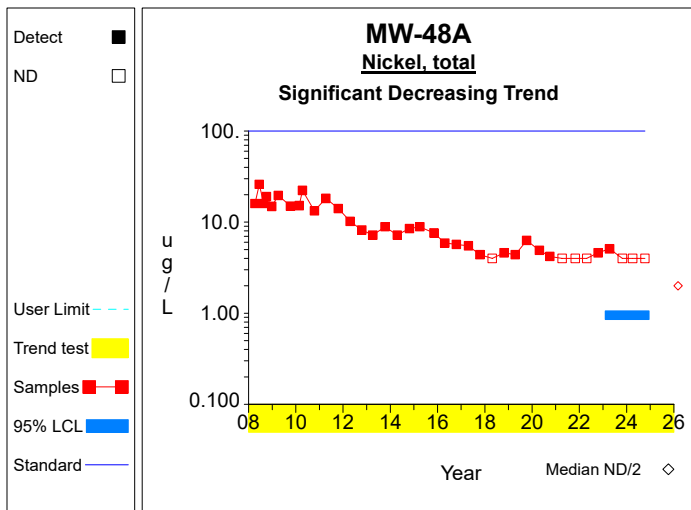
Confidence Limits (Assessment)



Graph 1

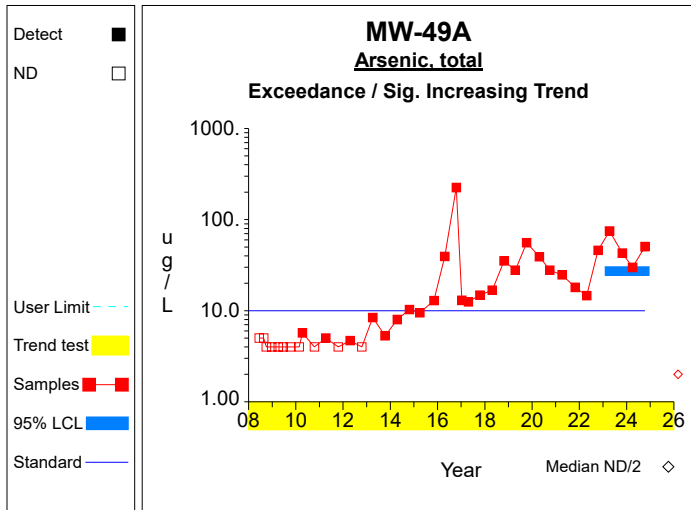


Graph 2

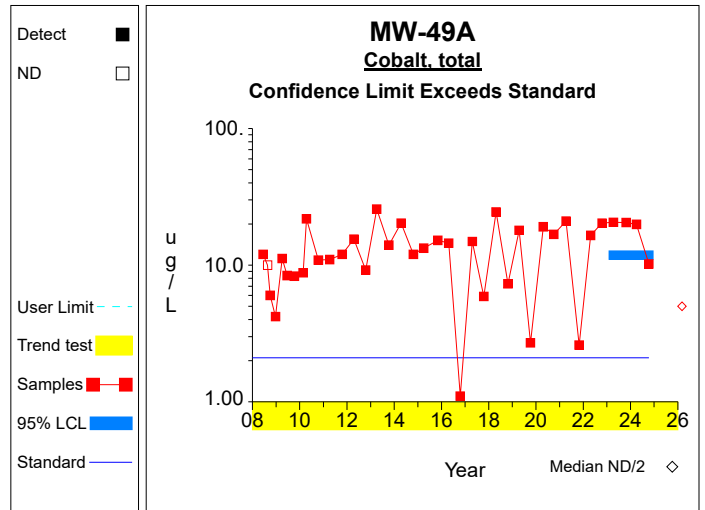


Graph 3

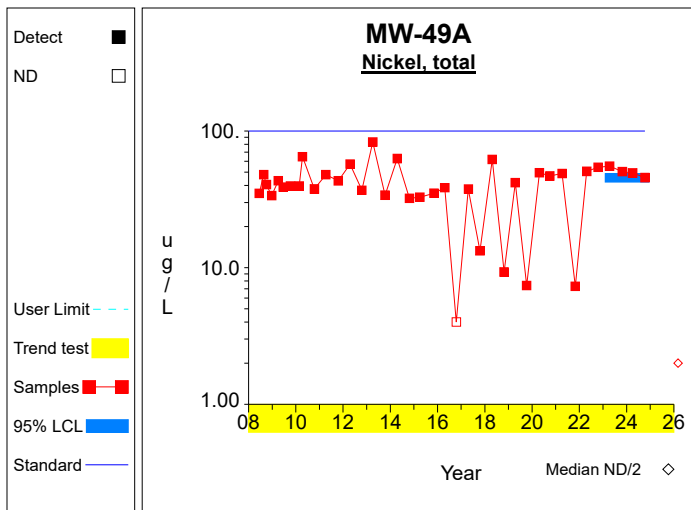
Confidence Limits (Assessment)



Graph 4



Graph 5



Graph 6

Worksheet 6 - Assessment Monitoring
Arsenic, total (ug/L) at MW-48A

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 183.4 / 4$ $= 45.85$	Compute the mean of the last 4 measurements.
2	$S = \left(\frac{\text{sum}[X^2] - \text{sum}[X]^2/N}{N-1} \right)^{1/2}$ $= \left(\frac{16187.3 - 33635.56/4}{4-1} \right)^{1/2}$ $= 50.92$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 45.85 - 2.353 * 50.92/4^{1/2}$ $= 0.0$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 45.85 + 2.353 * 50.92/4^{1/2}$ $= 105.746$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 38 * (38-1) / 2$ $= 703$	Number of sample pairs during trend detection period.
6	$S = 2.174$	Sen's estimator of trend.
7	$\text{var}(S) = 6320.333$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (703 \pm 2.576 * 6320.333^{1/2}) / 2$ $= [249.103, 453.897]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.781, 3.968]$	Two-sided confidence interval for slope.
10	$\text{LCL}(S) > 0$	Significant increasing trend.

Worksheet 6 - Assessment Monitoring
Cobalt, total (ug/L) at MW-48A

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 3.8 / 4$ $= 0.95$	Compute the mean of the last 4 measurements.
2	$S = \left((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1) \right)^{1/2}$ $= \left((3.86 - 14.44/4) / (4-1) \right)^{1/2}$ $= 0.289$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 0.95 - 2.353 * 0.289/4^{1/2}$ $= 0.61$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 0.95 + 2.353 * 0.289/4^{1/2}$ $= 1.29$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 38 * (38-1) / 2$ $= 703$	Number of sample pairs during trend detection period.
6	$S = -0.091$	Sen's estimator of trend.
7	$\text{var}(S) = 6097.0$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (703 \pm 2.576 * 6097.0^{1/2}) / 2$ $= [250.929, 452.071]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [-0.199, 0.0]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel, total (ug/L) at MW-48A

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 11.1 / 4$ $= 2.775$	Compute the mean of the last 4 measurements.
2	$S = \left(\frac{\text{sum}[X^2] - \text{sum}[X]^2/N}{N-1} \right)^{1/2}$ $= \left(\frac{38.01 - 123.21/4}{4-1} \right)^{1/2}$ $= 1.55$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 2.775 - 2.353 * 1.55/4^{1/2}$ $= 0.952$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 2.775 + 2.353 * 1.55/4^{1/2}$ $= 4.598$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 38 * (38-1) / 2$ $= 703$	Number of sample pairs during trend detection period.
6	$S = -0.997$	Sen's estimator of trend.
7	$\text{var}(S) = 6277.667$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (703 \pm 2.576 * 6277.667^{1/2}) / 2$ $= [249.45, 453.55]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [-1.269, -0.724]$	Two-sided confidence interval for slope.
10	$\text{UCL}(S) < 0$	Significant decreasing trend.

Worksheet 6 - Assessment Monitoring
Arsenic, total (ug/L) at MW-49A

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 198.1 / 4$ $= 49.525$	Compute the mean of the last 4 measurements.
2	$S = \left(\frac{\text{sum}[X^2] - \text{sum}[X]^2/N}{N-1} \right)^{1/2}$ $= \left(\frac{10886.11 - 39243.61/4}{4-1} \right)^{1/2}$ $= 18.932$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 49.525 - 2.353 * 18.932/4^{1/2}$ $= 27.256$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 49.525 + 2.353 * 18.932/4^{1/2}$ $= 71.794$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 39 * (39-1) / 2$ $= 741$	Number of sample pairs during trend detection period.
6	$S = 2.082$	Sen's estimator of trend.
7	$\text{var}(S) = 6667.667$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (741 \pm 2.576 * 6667.667^{1/2}) / 2$ $= [265.327, 475.673]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [1.422, 3.127]$	Two-sided confidence interval for slope.
10	$\text{LCL}(S) > 0$	Significant increasing trend.

Worksheet 6 - Assessment Monitoring
Cobalt, total (ug/L) at MW-49A

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 71.2 / 4$ $= 17.8$	Compute the mean of the last 4 measurements.
2	$S = \left(\frac{\text{sum}[X^2] - \text{sum}[X]^2/N}{N-1} \right)^{1/2}$ $= \left(\frac{1344.66 - 5069.44/4}{4-1} \right)^{1/2}$ $= 5.076$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 17.8 - 2.353 * 5.076/4^{1/2}$ $= 11.829$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 17.8 + 2.353 * 5.076/4^{1/2}$ $= 23.771$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 38 * (38-1) / 2$ $= 703$	Number of sample pairs during trend detection period.
6	$S = 0.647$	Sen's estimator of trend.
7	$\text{var}(S) = 6322.333$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (703 \pm 2.576 * 6322.333^{1/2}) / 2$ $= [249.087, 453.913]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.0, 0.986]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel, total (ug/L) at MW-49A

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 200.9 / 4$ $= 50.225$	Compute the mean of the last 4 measurements.
2	$S = \left(\frac{\text{sum}[X^2] - \text{sum}[X]^2/N}{N-1} \right)^{1/2}$ $= \left(\frac{10139.13 - 40360.81/4}{4-1} \right)^{1/2}$ $= 4.038$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 50.225 - 2.353 * 4.038/4^{1/2}$ $= 45.475$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 50.225 + 2.353 * 4.038/4^{1/2}$ $= 54.975$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 38 * (38-1) / 2$ $= 703$	Number of sample pairs during trend detection period.
6	$S = 0.252$	Sen's estimator of trend.
7	$\text{var}(S) = 6326.0$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (703 \pm 2.576 * 6326.0^{1/2}) / 2$ $= [249.057, 453.943]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [-1.299, 1.172]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Attachment D

Summary Table of Historical VOC Detections

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Chloroethane	GWD-1	10/18/2011		1.2	1.0	ug/L
Acetone	MW-37	10/16/2017		18.6	10.0	ug/L
Acetone	MW-39	10/16/2017		11	10	ug/L
Acetone	MW-48A	10/16/2017		16.3	10.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-48A	3/31/2015		17	8	ug/L
Acetone	MW-49A	4/16/2014		43.2	10.0	ug/L
Acetone	MW-49A	10/29/2021		281.0	10.0	ug/L
Acetone	MW-49A	4/25/2022		23.8	10.0	ug/L
Benzene	MW-49A	7/12/2005		1.0	1.0	ug/L
Benzene	MW-49A	4/11/2006		1.3	1.0	ug/L
Benzene	MW-49A	10/12/2006		1.3	1.0	ug/L
Benzene	MW-49A	4/20/2007		1.6	1.0	ug/L
Benzene	MW-49A	10/03/2007		2.0	1.0	ug/L
Benzene	MW-49A	6/13/2008		1.2	1.0	ug/L
Benzene	MW-49A	8/22/2008		2.0	1.0	ug/L
Benzene	MW-49A	12/23/2008		1.4	1.0	ug/L
Benzene	MW-49A	4/03/2009		1.9	1.0	ug/L
Benzene	MW-49A	6/19/2009		1.3	1.0	ug/L
Benzene	MW-49A	10/09/2009		1.9	1.0	ug/L
Benzene	MW-49A	2/23/2010		1.2	1.0	ug/L
Benzene	MW-49A	4/13/2010		1.6	1.0	ug/L
Benzene	MW-49A	10/18/2011		1.4	1.0	ug/L
Benzene	MW-49A	4/18/2012		1.9	1.0	ug/L
Benzene	MW-49A	10/09/2013		2.3	1.0	ug/L
Benzene	MW-49A	4/16/2014		1.8	1.0	ug/L
Benzene	MW-49A	10/23/2014		2.9	1.0	ug/L
Benzene	MW-49A	3/31/2015		3.5	1.0	ug/L
Benzene	MW-49A	11/05/2015		5.7	1.0	ug/L
Benzene	MW-49A	4/21/2016		3.4	1.0	ug/L
Benzene	MW-49A	10/17/2016		2.7	1.0	ug/L
Benzene	MW-49A	4/21/2017		1.6	1.0	ug/L
Benzene	MW-49A	10/16/2017		4.0	1.0	ug/L
Benzene	MW-49A	4/24/2018		3.4	1.0	ug/L
Benzene	MW-49A	10/25/2018		4.0	1.0	ug/L
Benzene	MW-49A	4/15/2019		3.2	1.0	ug/L
Benzene	MW-49A	10/07/2019		1.6	1.0	ug/L
Benzene	MW-49A	4/23/2020		2.4	1.0	ug/L
Benzene	MW-49A	10/01/2020		2.9	1.0	ug/L
Benzene	MW-49A	4/08/2021		3.4	1.0	ug/L
Benzene	MW-49A	10/29/2021		7.0	1.0	ug/L
Benzene	MW-49A	4/25/2022		5.9	1.0	ug/L
Benzene	MW-49A	10/17/2022		5.8	1.0	ug/L
Benzene	MW-49A	4/10/2023		4.2	1.0	ug/L
Benzene	MW-49A	10/27/2023		3.4	1.0	ug/L
Benzene	MW-49A	4/02/2024		2.8	1.0	ug/L
Benzene	MW-49A	10/10/2024		2.4	1.0	ug/L
Chloroethane	MW-49A	8/22/2008		2.0	1.0	ug/L
Chloroethane	MW-49A	4/03/2009		1.7	1.0	ug/L
Chloroethane	MW-49A	6/19/2009		1.8	1.0	ug/L
Chloroethane	MW-49A	10/09/2009		2.2	1.0	ug/L
Chloroethane	MW-49A	2/23/2010		1.5	1.0	ug/L
Chloroethane	MW-49A	4/13/2010		2.2	1.0	ug/L
Chloroethane	MW-49A	10/14/2010		2.8	1.0	ug/L
Chloroethane	MW-49A	4/08/2011		1.5	1.0	ug/L
Chloroethane	MW-49A	10/18/2011		2.2	1.0	ug/L
Chloroethane	MW-49A	4/18/2012		2.3	1.0	ug/L
Chloroethane	MW-49A	10/17/2012		1.8	1.0	ug/L
Chloroethane	MW-49A	4/03/2013		2.1	1.0	ug/L
Chloroethane	MW-49A	10/09/2013		3.6	1.0	ug/L
Chloroethane	MW-49A	4/16/2014		4.9	1.0	ug/L
Chloroethane	MW-49A	10/23/2014		2.9	1.0	ug/L
Chloroethane	MW-49A	3/31/2015		10.5	1.0	ug/L
Chloroethane	MW-49A	11/05/2015		1.9	1.0	ug/L
Chloroethane	MW-49A	4/21/2016		1.7	1.0	ug/L
Chloroethane	MW-49A	10/17/2016		1.8	1.0	ug/L
Chloroethane	MW-49A	4/21/2017		2.0	1.0	ug/L
Chloroethane	MW-49A	10/16/2017		3.0	1.0	ug/L
Chloroethane	MW-49A	4/24/2018		3.3	1.0	ug/L
Chloroethane	MW-49A	10/25/2018		1.1	1.0	ug/L
Chloroethane	MW-49A	4/15/2019		1.9	1.0	ug/L
Chloroethane	MW-49A	4/23/2020		2.0	1.0	ug/L
Chloroethane	MW-49A	10/01/2020		2.7	1.0	ug/L
Chloroethane	MW-49A	4/08/2021		5.7	1.0	ug/L
Chloroethane	MW-49A	10/29/2021		6.3	1.0	ug/L
Chloroethane	MW-49A	4/25/2022		5.4	1.0	ug/L
Chloroethane	MW-49A	10/17/2022		4.9	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Chloroethane	MW-49A	4/10/2023		3.5	1.0	ug/L
Chloroethane	MW-49A	10/27/2023		3.0	1.0	ug/L
Chloroethane	MW-49A	4/02/2024		3.5	1.0	ug/L
Chloroethane	MW-49A	10/10/2024		2.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49A	4/13/2010		1.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49A	10/14/2010		1.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49A	10/18/2011		1.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49A	11/05/2015		1.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49A	10/01/2020		1.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49A	4/08/2021		3.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49A	10/29/2021		8.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49A	4/25/2022		6.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49A	10/17/2022		3.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49A	4/10/2023		1.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49A	10/27/2023		2.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49A	4/02/2024		3.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49A	10/10/2024		1.8	1.0	ug/L
Dichlorodifluoromethane	MW-49A	3/31/2015		1.1	1.0	ug/L
Vinyl chloride	MW-49A	10/09/2013		1.6	1.0	ug/L
Vinyl chloride	MW-49A	4/16/2014		1.9	1.0	ug/L
Vinyl chloride	MW-49A	10/23/2014		1.6	1.0	ug/L
Vinyl chloride	MW-49A	3/31/2015		1.5	1.0	ug/L
Vinyl chloride	MW-49A	10/16/2017		1.3	1.0	ug/L
Vinyl chloride	MW-49A	4/24/2018		1.1	1.0	ug/L
Vinyl chloride	MW-49A	4/08/2021		3.2	1.0	ug/L
Vinyl chloride	MW-49A	10/29/2021		5.0	1.0	ug/L
Vinyl chloride	MW-49A	4/25/2022		3.9	1.0	ug/L
Vinyl chloride	MW-49A	10/17/2022		2.7	1.0	ug/L
Vinyl chloride	MW-49A	4/10/2023		1.6	1.0	ug/L
Vinyl chloride	MW-49A	10/27/2023		1.4	1.0	ug/L
Vinyl chloride	MW-49A	4/02/2024		2.9	1.0	ug/L
Vinyl chloride	MW-49A	10/10/2024		1.8	1.0	ug/L

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

Table 1

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

Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend
Benzene	ug/L	MW-49A	4	3.200	0.783	1.176	2.279	4.121	5.000	inc
Chloroethane	ug/L	MW-49A	4	3.100	0.523	1.176	2.485	3.715	2800.000	inc
Cis-1,2-dichloroethylene	ug/L	MW-49A	4	2.375	0.981	1.176	1.221	3.529	70.000	
Vinyl chloride	ug/L	MW-49A	4	1.925	0.670	1.176	1.137	2.713	2.000	

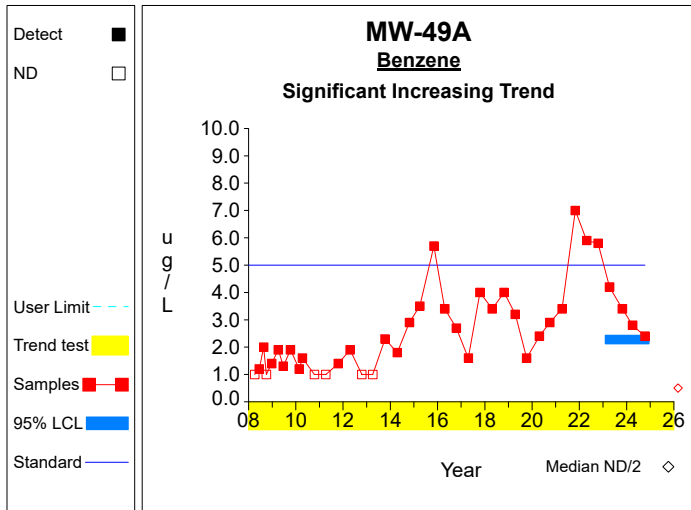
* - Insufficient Data

** - Significant Exceedance

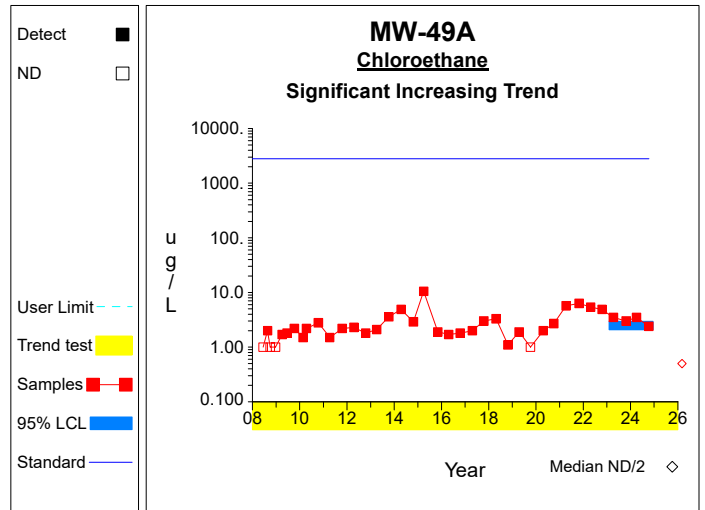
LCL = Lower Confidence Limit

UCL = Upper Confidence Limit

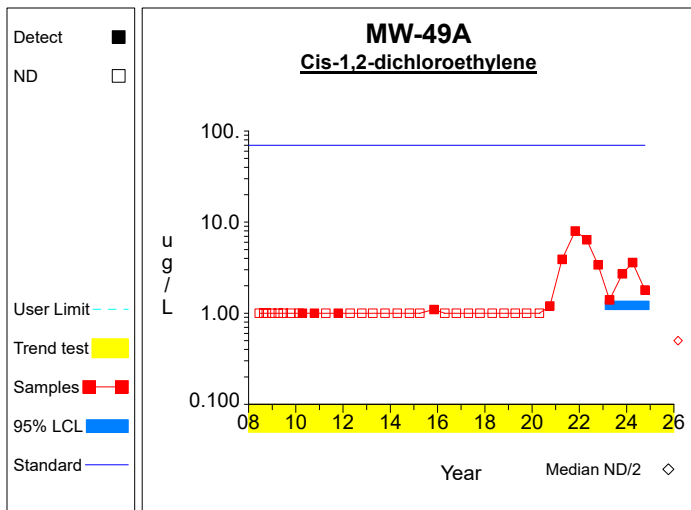
Confidence Limits (Assessment)



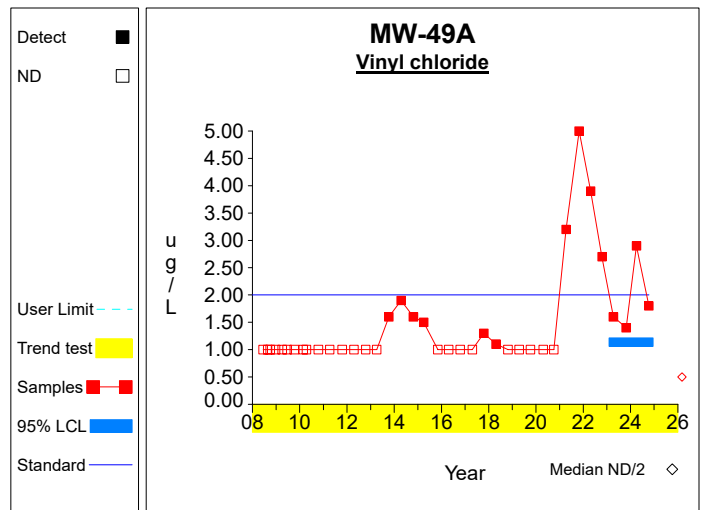
Graph 1



Graph 2



Graph 3



Graph 4

Worksheet 6 - Assessment Monitoring
Benzene (ug/L) at MW-49A

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 12.8 / 4$ $= 3.2$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((42.8 - 163.84/4) / (4-1))^{1/2}$ $= 0.783$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 3.2 - 2.353 * 0.783/4^{1/2}$ $= 2.279$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 3.2 + 2.353 * 0.783/4^{1/2}$ $= 4.121$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 39 * (39-1) / 2$ $= 741$	Number of sample pairs during trend detection period.
6	$S = 0.186$	Sen's estimator of trend.
7	$\text{var}(S) = 6784.333$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (741 \pm 2.576 * 6784.333^{1/2}) / 2$ $= [264.411, 476.589]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.097, 0.299]$	Two-sided confidence interval for slope.
10	$\text{LCL}(S) > 0$	Significant increasing trend.

Worksheet 6 - Assessment Monitoring
Chloroethane (ug/L) at MW-49A

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 12.4 / 4$ $= 3.1$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((39.26 - 153.76/4) / (4-1))^{1/2}$ $= 0.523$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 3.1 - 2.353 * 0.523/4^{1/2}$ $= 2.485$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 3.1 + 2.353 * 0.523/4^{1/2}$ $= 3.715$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 38 * (38-1) / 2$ $= 703$	Number of sample pairs during trend detection period.
6	$S = 0.127$	Sen's estimator of trend.
7	$\text{var}(S) = 6301.333$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (703 \pm 2.576 * 6301.333^{1/2}) / 2$ $= [249.257, 453.743]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.027, 0.254]$	Two-sided confidence interval for slope.
10	$\text{LCL}(S) > 0$	Significant increasing trend.

Worksheet 6 - Assessment Monitoring
Cis-1,2-dichloroethylene (ug/L) at MW-49A

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 9.5 / 4$ $= 2.375$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((25.45 - 90.25/4) / (4-1))^{1/2}$ $= 0.981$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 2.375 - 2.353 * 0.981/4^{1/2}$ $= 1.221$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 2.375 + 2.353 * 0.981/4^{1/2}$ $= 3.529$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 38 * (38-1) / 2$ $= 703$	Number of sample pairs during trend detection period.
6	$S = 0.0$	Sen's estimator of trend.
7	$\text{var}(S) = 4490.0$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (703 \pm 2.576 * 4490.0^{1/2}) / 2$ $= [265.194, 437.806]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.0, 0.095]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Vinyl chloride (ug/L) at MW-49A

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 7.7 / 4$ $= 1.925$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((16.17 - 59.29/4) / (4-1))^{1/2}$ $= 0.67$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 1.925 - 2.353 * 0.67/4^{1/2}$ $= 1.137$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 1.925 + 2.353 * 0.67/4^{1/2}$ $= 2.713$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 38 * (38-1) / 2$ $= 703$	Number of sample pairs during trend detection period.
6	$S = 0.0$	Sen's estimator of trend.
7	$\text{var}(S) = 4698.0$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (703 \pm 2.576 * 4698.0^{1/2}) / 2$ $= [263.218, 439.782]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.0, 0.106]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

GROUND WATER STATISTICS

FOR THE

RURAL IOWA SANITARY LANDFILL – CLOSED AREA

Second Semi-Annual Monitoring Event in 2024

Prepared for:
Rural Iowa Waste Management Association
20488 M Avenue
Eldora, Hardin County, IA

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

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INTRODUCTION

This report summarizes the results of the statistical analysis used to evaluate the ground water quality data obtained during the second semi-annual monitoring event in 2024 at the Rural Iowa Sanitary Landfill near Eldora in Hardin 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 Rural Iowa Sanitary 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 the closed area of the Rural Iowa Sanitary Landfill includes sample points MW-36 (upgradient), MW-37 (upgradient), MW-39 (upgradient), MW-40 (upgradient), MW-47 (upgradient), GU-3, MW-13R, MW-14, MW-211, MW-29, MW-31R, MW-33, MW-35(R), MW-7, and MW-9. Each of the groundwater monitoring wells is to be sampled at least semiannually and analyzed for the detection monitoring parameters listed in 113.10(5), which includes 15 inorganic constituents and 47 organic compounds, summarized in Table 1 below.

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

Organic Compounds:

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

Inorganic constituents:

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

Monitoring wells GU-3, MW-13R, MW-14, MW-211, MW-29, MW-31R, MW-33, MW-7, MW-9, MW-36, MW-37, MW-39, MW-40, and MW-47 were sampled on October 10, 2024 and analyzed for the constituents required by permit. The ground water data obtained during the second semi-annual monitoring event in 2024 are summarized in Attachment A.

STATISTICAL METHODOLOGIES FOR DETECTION MONITORING

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

Interwell Statistics: Upgradient versus Downgradient Comparisons

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

Results of the Interwell Statistics

The background data used in this statistical analysis includes the ground water data collected from ground water wells MW-36, MW-37, MW-39, MW-40, and MW-47 during the period from October 2014 through the current data. A summary of the background data from monitoring wells MW-36, MW-37, MW-39, MW-40, and MW-47, used to determine the site prediction limits, is listed in Attachment B, Table 1 “Upgradient Data”. This statistical method compares the current downgradient determinations to site prediction limits and checks for exceedances.

Table 2 “Most Current Downgradient Monitoring Data”, summarizes the current data from downgradient wells GU-3, MW-13R, MW-14, MW-211, MW-29, MW-31R, MW-33, MW-35R, MW-7, and MW-9, compared to the site prediction limits. Prediction limit exceedances are flagged with asterisks. For the data obtained during the second semi-annual monitoring event in 2024, 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 2024

Well	Trace Metal Detected	Result, µg/L	Prediction Limit, µg/L	Prediction Limit Type	Verified/Awaiting Verification
MW-13R	Arsenic	192	89.3000	Nonparametric	Awaiting Verification
MW-14	Arsenic	91.9	89.3000	Nonparametric	Awaiting Verification
MW-211	Cobalt	12.9	12.4000	Nonparametric	Verified
	Nickel	33.0	31.6000	Nonparametric	Awaiting Verification
MW-31R	Cobalt	14.6	12.4000	Nonparametric	Verified
MW-7	Arsenic	215	89.3000	Nonparametric	Verified

The detection frequencies of the parameters in the up and down gradient monitoring wells are summarized in Table 3. Barium was detected at a frequency greater than 50% in the upgradient wells so barium was tested for normality. The remainder of the metals are rarely detected (less than 50%) in the upgradient wells so nonparametric 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 3 standard deviation unit increases over background.

The past and current 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% LCL for arsenic at MW-13R (66.510 µg/L) exceeds the GWPS of 10 µg/L.
- The 95% LCL for cobalt at MW-13R (2.490 µg/L) exceeds the Iowa Statewide Standard of 2.1 µg/L.
- The 95% LCL for arsenic at MW-14 (46.945 µg/L) exceeds the GWPS of 10 µg/L.
- The 95% LCL for cobalt at MW-14 (10.182 µg/L) exceeds the Iowa Statewide Standard of 2.1 µg/L.
- The 95% LCL for arsenic at MW-211 (23.340 µg/L) exceeds the GWPS of 10 µg/L.
- The 95% LCL for cobalt at MW-211 (10.645 µg/L) exceeds the Iowa Statewide Standard of 2.1 µg/L.
- The 95% LCL for arsenic at MW-31R (20.188 µg/L) exceeds the GWPS of 10 µg/L.
- The 95% LCL for cobalt at MW-31R (14.864 µg/L) exceeds the Iowa Statewide Standard of 2.1 µg/L.

The 95% LCL for arsenic at MW-7 (140.599 µg/L) exceeds the GWPS of 10 µg/L.

The remainder of the calculated 95% LCLs are below the respective GWPS.

Volatile Organic Compounds

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

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

Well	VOC Detected	Result, µg/L	Reporting Limit, µg/L	Verified/ Awaiting verification	Water Quality Standard
MW-13R	1,4-Dichlorobenzene	1.8	1	Verified	75 ^a
	Benzene	2.8	1	Verified	5 ^a
	Chlorobenzene	43.4	1	Verified	100 ^a
MW-14	1,4-Dichlorobenzene	3.3	1	Verified	75 ^a
	Benzene	1.6	1	Verified	5 ^a
	Chlorobenzene	1.0	1	Verified	100 ^a
MW-211	Benzene	1.2	1	Awaiting verification	5 ^a
	Chlorobenzene	4.7	1	Verified	100 ^a
MW-31R	1,1-Dichloroethane	3.1	1	Verified	140 ^b
	1,4-Dichlorobenzene	16.6	1	Verified	75 ^a
	Benzene	2.3	1	Verified	5 ^a
	Chlorobenzene	26.1	1	Verified	100 ^a
	Chloroethane	2.6	1	Verified	2800 ^b
	<i>cis</i> -1,2-Dichloroethene	16.0	1	Verified	70 ^a
	Ethylbenzene	2.8	1	Verified	700 ^b
<i>trans</i> -1,2-Dichloroethene	1.8	1	Verified	100 ^a	
MW-7	Chloroethane	1.7	1	Verified	2800 ^b

a - USEPA MCL

b- Iowa Statewide Standard for a protected groundwater source

The verified VOC detections were evaluated against the ground water protection standards (GWPS) using confidence limits calculated in accordance with the Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, USEPA, March 2009.

The calculated 95% LCLs for the verified VOCs are below the respective GWPS (Attachment E).

CONCLUSIONS

This report summarizes the statistical analyses used to evaluate the ground water data obtained during the second semi-annual monitoring event in 2024 at Rural Iowa Sanitary Landfill. The groundwater monitoring network for Rural Iowa Sanitary Landfill includes wells MW-36 (upgradient), MW-37 (upgradient), MW-39 (upgradient), MW-40 (upgradient), MW-47 (upgradient), GU-3, MW-13R, MW-14, MW-211, MW-29, MW-31R, MW-33, MW-35R, MW-7, and MW-9. These monitoring wells were sampled on April 2, 2024 and analyzed for the parameters required by permit.

The ground water data was compared to background using prediction limits (interwell). There are verified site prediction limit exceedances detected for cobalt at MW-211, cobalt at MW-31R, and arsenic at MW-7. The VOCs were compared to MCLs or PQLs, in lieu of statistical comparisons to historical concentrations. There are verified VOC detections at MW-13R, MW-14, MW-211, MW-31R, and MW-7. The calculated 95% LCLs for the verified VOCs are below the respective GWPS.

Attachment A

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

Table 1

Analytical Data Summary for 10/10/2024

Constituents	Units	GU-3	MW-13R	MW-14	MW-211	MW-29	MW-31R	MW-33	MW-36	MW-37	MW-39	MW-40
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	<1.0	<1.0	<1.0	<1.0	<1.0	3.1	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-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	<1.0	1.8	3.3	<1.0	<1.0	16.6	<1.0	<1.0	<1.0	<1.0	<1.0
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	7.4	192.0	91.9	61.7	<4.0	22.7	<4.0	4.0	<4.0	<4.0	4.3
Barium, total	ug/L	184.0	575.0	575.0	339.0	97.7	1010.0	239.0	329.0	67.6	253.0	34.2
Benzene	ug/L	<1.0	2.8	1.6	1.2	<1.0	2.3	<1.0	<1.0	<1.0	<1.0	<1.0
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
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	<8
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	<1.0	43.4	1.0	4.7	<1.0	26.1	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	2.6	<1.0	<1.0	<1.0	<1.0	<1.0
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	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	13.6	<8.0	<8.0	<8.0
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	16	<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	.8	3.6	9.9	12.9	<4	14.6	<4	7.6	4.4	<4	5.8
Copper, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	19.2	<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	<1.0	<1.0	<1.0	<1.0	<1.0	2.8	<1.0	<1.0	<1.0	<1.0	<1.0
Lead, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	4.4	<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	9.5	7.7	33.0	<4.0	22.7	<4.0	21.5	18.7	<4.0	15.4
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<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	<1.0	<1.0	<1.0	<1.0	<1.0	1.8	<1.0	<1.0	<1.0	<1.0	<1.0
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	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	22.4	<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	<20	<20	<20	<20	<20	<20	38	<20	<20	<20

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

Table 1

Analytical Data Summary for 10/10/2024

Constituents	MW-47	MW-7	MW-9
1,1,1,2-tetrachloroethane	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1
1,1-dichloroethane	<1.0	<1.0	<1.0
1,1-dichloroethylene	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5
1,2-dibromoethane	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1
1,2-dichloroethane	<1	<1	<1
1,2-dichloropropane	<1	<1	<1
1,4-dichlorobenzene	<1.0	<1.0	<1.0
2-butanone (mek)	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5
Acetone	<10	<10	<10
Acrylonitrile	<5	<5	<5
Antimony, total	<2	<2	<2
Arsenic, total	88.3	215.0	14.3
Barium, total	426.0	343.0	185.0
Benzene	<1.0	<1.0	<1.0
Beryllium, total	<4	<4	<4
Bromochloromethane	<1	<1	<1
Bromodichloromethane	<1	<1	<1
Bromoform	<1	<1	<1
Bromomethane	<1	<1	<1
Cadmium, total	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1
Carbon tetrachloride	<1	<1	<1
Chlorobenzene	<1.0	<1.0	<1.0
Chloroethane	<1.0	1.7	<1.0
Chloroform	<1	<1	<1
Chloromethane	<1	<1	<1
Chromium, total	<8.0	<8.0	<8.0
Cis-1,2-dichloroethylene	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1
Cobalt, total	.8	3.8	6.6
Copper, total	<4.0	<4.0	<4.0
Dibromochloromethane	<1	<1	<1
Dibromomethane	<1	<1	<1
Ethylbenzene	<1.0	<1.0	<1.0
Lead, total	<4.0	<4.0	<4.0
Methyl iodide	<1	<1	<1
Methylene chloride	<5	<5	<5
Nickel, total	<4.0	7.4	16.1
Selenium, total	<4	<4	<4
Silver, total	<4	<4	<4
Styrene	<1	<1	<1
Tetrachloroethylene	<1	<1	<1
Thallium, total	<2	<2	<2
Toluene	<1	<1	<1
Trans-1,2-dichloroethylene	<1.0	<1.0	<1.0
Trans-1,3-dichloropropene	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5
Trichloroethylene	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1
Vanadium, total	<20.0	<20.0	<20.0
Vinyl acetate	<5	<5	<5
Vinyl chloride	<1	<1	<1
Xylenes, total	<2	<2	<2
Zinc, total	<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-36	07/08/2015	ND	2.0000	
Antimony, total	ug/L	MW-36	04/21/2016	ND	2.0000	
Antimony, total	ug/L	MW-36	10/17/2016	ND	2.0000	
Antimony, total	ug/L	MW-36	04/21/2017	ND	2.0000	
Antimony, total	ug/L	MW-36	10/16/2017	ND	2.0000	
Antimony, total	ug/L	MW-36	04/24/2018	ND	2.0000	
Antimony, total	ug/L	MW-36	10/25/2018	ND	2.0000	
Antimony, total	ug/L	MW-36	04/15/2019	ND	2.0000	
Antimony, total	ug/L	MW-36	10/07/2019	ND	2.0000	
Antimony, total	ug/L	MW-36	04/22/2020	ND	2.0000	
Antimony, total	ug/L	MW-36	10/02/2020	ND	2.0000	
Antimony, total	ug/L	MW-36	04/08/2021	ND	2.0000	
Antimony, total	ug/L	MW-36	10/29/2021	ND	2.0000	
Antimony, total	ug/L	MW-36	04/25/2022	ND	2.0000	
Antimony, total	ug/L	MW-36	10/17/2022	ND	2.0000	
Antimony, total	ug/L	MW-36	04/10/2023	ND	2.0000	
Antimony, total	ug/L	MW-36	10/27/2023	ND	2.0000	
Antimony, total	ug/L	MW-36	04/02/2024	ND	2.0000	
Antimony, total	ug/L	MW-36	10/10/2024	ND	2.0000	
Arsenic, total	ug/L	MW-36	07/08/2015	ND	4.0000	
Arsenic, total	ug/L	MW-36	04/21/2016	ND	4.0000	
Arsenic, total	ug/L	MW-36	10/17/2016	ND	4.0000	
Arsenic, total	ug/L	MW-36	04/21/2017	ND	4.0000	
Arsenic, total	ug/L	MW-36	10/16/2017	ND	4.0000	
Arsenic, total	ug/L	MW-36	04/24/2018	ND	4.0000	
Arsenic, total	ug/L	MW-36	10/25/2018	ND	4.0000	
Arsenic, total	ug/L	MW-36	04/15/2019	ND	4.0000	
Arsenic, total	ug/L	MW-36	10/07/2019	ND	4.0000	
Arsenic, total	ug/L	MW-36	04/22/2020	ND	4.0000	
Arsenic, total	ug/L	MW-36	10/02/2020	ND	4.0000	
Arsenic, total	ug/L	MW-36	04/08/2021	ND	4.0000	
Arsenic, total	ug/L	MW-36	10/29/2021	ND	4.0000	
Arsenic, total	ug/L	MW-36	04/25/2022	ND	4.0000	
Arsenic, total	ug/L	MW-36	10/17/2022	ND	4.0000	
Arsenic, total	ug/L	MW-36	04/10/2023	ND	4.0000	
Arsenic, total	ug/L	MW-36	10/27/2023	ND	4.0000	
Arsenic, total	ug/L	MW-36	04/02/2024	ND	4.0000	
Arsenic, total	ug/L	MW-36	10/10/2024	ND	4.0000	
Barium, total	ug/L	MW-36	07/08/2015		366.0000	
Barium, total	ug/L	MW-36	04/21/2016		184.0000	
Barium, total	ug/L	MW-36	10/17/2016		162.0000	
Barium, total	ug/L	MW-36	04/21/2017		158.0000	
Barium, total	ug/L	MW-36	10/16/2017		233.0000	
Barium, total	ug/L	MW-36	04/24/2018		230.0000	
Barium, total	ug/L	MW-36	10/25/2018		184.0000	
Barium, total	ug/L	MW-36	04/15/2019		174.0000	
Barium, total	ug/L	MW-36	10/07/2019		235.0000	
Barium, total	ug/L	MW-36	04/22/2020		348.0000	
Barium, total	ug/L	MW-36	10/02/2020		176.0000	
Barium, total	ug/L	MW-36	04/08/2021		173.0000	
Barium, total	ug/L	MW-36	10/29/2021		203.0000	
Barium, total	ug/L	MW-36	04/25/2022		267.0000	
Barium, total	ug/L	MW-36	10/17/2022		219.0000	
Barium, total	ug/L	MW-36	04/10/2023		260.0000	
Barium, total	ug/L	MW-36	10/27/2023		258.0000	
Barium, total	ug/L	MW-36	04/02/2024		200.0000	
Barium, total	ug/L	MW-36	10/10/2024		329.0000	
Beryllium, total	ug/L	MW-36	07/08/2015	ND	4.0000	
Beryllium, total	ug/L	MW-36	04/21/2016	ND	4.0000	
Beryllium, total	ug/L	MW-36	10/17/2016	ND	4.0000	
Beryllium, total	ug/L	MW-36	04/21/2017	ND	4.0000	
Beryllium, total	ug/L	MW-36	10/16/2017	ND	4.0000	
Beryllium, total	ug/L	MW-36	04/24/2018	ND	4.0000	
Beryllium, total	ug/L	MW-36	10/25/2018	ND	4.0000	
Beryllium, total	ug/L	MW-36	04/15/2019	ND	4.0000	
Beryllium, total	ug/L	MW-36	10/07/2019	ND	4.0000	
Beryllium, total	ug/L	MW-36	04/22/2020	ND	4.0000	
Beryllium, total	ug/L	MW-36	10/02/2020	ND	4.0000	
Beryllium, total	ug/L	MW-36	04/08/2021	ND	4.0000	
Beryllium, total	ug/L	MW-36	10/29/2021	ND	4.0000	
Beryllium, total	ug/L	MW-36	04/25/2022	ND	4.0000	
Beryllium, total	ug/L	MW-36	10/17/2022	ND	4.0000	
Beryllium, total	ug/L	MW-36	04/10/2023	ND	4.0000	
Beryllium, total	ug/L	MW-36	10/27/2023	ND	4.0000	

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Beryllium, total	ug/L	MW-36	04/02/2024	ND	4.0000		
Beryllium, total	ug/L	MW-36	10/10/2024	ND	4.0000		
Cadmium, total	ug/L	MW-36	07/08/2015	ND	0.8000		
Cadmium, total	ug/L	MW-36	04/21/2016	ND	0.8000		
Cadmium, total	ug/L	MW-36	10/17/2016	ND	0.8000		
Cadmium, total	ug/L	MW-36	04/21/2017	ND	0.8000		
Cadmium, total	ug/L	MW-36	10/16/2017	ND	0.8000		
Cadmium, total	ug/L	MW-36	04/24/2018	ND	0.8000		
Cadmium, total	ug/L	MW-36	10/25/2018	ND	0.8000		
Cadmium, total	ug/L	MW-36	04/15/2019	ND	0.8000		
Cadmium, total	ug/L	MW-36	10/07/2019	ND	0.8000		
Cadmium, total	ug/L	MW-36	04/22/2020	ND	0.8000		
Cadmium, total	ug/L	MW-36	10/02/2020	ND	0.8000		
Cadmium, total	ug/L	MW-36	04/08/2021	ND	0.8000		
Cadmium, total	ug/L	MW-36	10/29/2021	ND	0.8000		
Cadmium, total	ug/L	MW-36	04/25/2022	ND	0.8000		
Cadmium, total	ug/L	MW-36	10/17/2022	ND	0.8000		
Cadmium, total	ug/L	MW-36	04/10/2023	ND	0.8000		
Cadmium, total	ug/L	MW-36	10/27/2023	ND	0.8000		
Cadmium, total	ug/L	MW-36	04/02/2024	ND	0.8000		
Cadmium, total	ug/L	MW-36	10/10/2024	ND	0.8000		
Chromium, total	ug/L	MW-36	07/08/2015	ND	8.0000		
Chromium, total	ug/L	MW-36	04/21/2016	ND	8.0000		
Chromium, total	ug/L	MW-36	10/17/2016	ND	8.0000		
Chromium, total	ug/L	MW-36	04/21/2017	ND	8.0000		
Chromium, total	ug/L	MW-36	10/16/2017	ND	8.0000		
Chromium, total	ug/L	MW-36	04/24/2018	ND	8.0000		
Chromium, total	ug/L	MW-36	10/25/2018	ND	8.0000		
Chromium, total	ug/L	MW-36	04/15/2019	ND	8.0000		
Chromium, total	ug/L	MW-36	10/07/2019	ND	8.0000		
Chromium, total	ug/L	MW-36	04/22/2020		8.0000		
Chromium, total	ug/L	MW-36	10/02/2020	ND	8.0000		
Chromium, total	ug/L	MW-36	04/08/2021	ND	8.0000		
Chromium, total	ug/L	MW-36	10/29/2021	ND	8.0000		
Chromium, total	ug/L	MW-36	04/25/2022	ND	8.0000		
Chromium, total	ug/L	MW-36	10/17/2022	ND	8.0000		
Chromium, total	ug/L	MW-36	04/10/2023	ND	8.0000		
Chromium, total	ug/L	MW-36	10/27/2023	ND	8.0000		
Chromium, total	ug/L	MW-36	04/02/2024	ND	8.0000		
Chromium, total	ug/L	MW-36	10/10/2024		13.6000		
Cobalt, total	ug/L	MW-36	07/08/2015		34.1000		*
Cobalt, total	ug/L	MW-36	04/21/2016		2.4000		
Cobalt, total	ug/L	MW-36	10/17/2016		0.8000		
Cobalt, total	ug/L	MW-36	04/21/2017		2.1000		
Cobalt, total	ug/L	MW-36	10/16/2017		2.0000		
Cobalt, total	ug/L	MW-36	04/24/2018		3.9000		
Cobalt, total	ug/L	MW-36	10/25/2018		0.8000		
Cobalt, total	ug/L	MW-36	04/15/2019	ND	0.8000		
Cobalt, total	ug/L	MW-36	10/07/2019		1.3000		
Cobalt, total	ug/L	MW-36	04/22/2020		7.8000		
Cobalt, total	ug/L	MW-36	10/02/2020		0.4000		
Cobalt, total	ug/L	MW-36	04/08/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-36	10/29/2021		0.7000		
Cobalt, total	ug/L	MW-36	04/25/2022		4.7000		
Cobalt, total	ug/L	MW-36	10/17/2022		2.4000		
Cobalt, total	ug/L	MW-36	04/10/2023		1.4000		
Cobalt, total	ug/L	MW-36	10/27/2023		1.3000		
Cobalt, total	ug/L	MW-36	04/02/2024	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-36	10/10/2024		7.6000		
Copper, total	ug/L	MW-36	07/08/2015		6.7000		
Copper, total	ug/L	MW-36	04/21/2016	ND	4.0000		
Copper, total	ug/L	MW-36	10/17/2016	ND	4.0000		
Copper, total	ug/L	MW-36	04/21/2017	ND	4.0000		
Copper, total	ug/L	MW-36	10/16/2017	ND	4.0000		
Copper, total	ug/L	MW-36	04/24/2018		4.4000		
Copper, total	ug/L	MW-36	10/25/2018	ND	4.0000		
Copper, total	ug/L	MW-36	04/15/2019	ND	4.0000		
Copper, total	ug/L	MW-36	10/07/2019	ND	4.0000		
Copper, total	ug/L	MW-36	04/22/2020		11.3000		
Copper, total	ug/L	MW-36	10/02/2020	ND	4.0000		
Copper, total	ug/L	MW-36	04/08/2021	ND	4.0000		
Copper, total	ug/L	MW-36	10/29/2021	ND	4.0000		
Copper, total	ug/L	MW-36	04/25/2022		6.8000		
Copper, total	ug/L	MW-36	10/17/2022	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	
Copper, total	ug/L	MW-36	04/10/2023	ND	4.0000		
Copper, total	ug/L	MW-36	10/27/2023	ND	4.0000		
Copper, total	ug/L	MW-36	04/02/2024	ND	4.0000		
Copper, total	ug/L	MW-36	10/10/2024		19.2000		*
Lead, total	ug/L	MW-36	07/08/2015	ND	4.0000		
Lead, total	ug/L	MW-36	04/21/2016	ND	4.0000		
Lead, total	ug/L	MW-36	10/17/2016	ND	4.0000		
Lead, total	ug/L	MW-36	04/21/2017	ND	4.0000		
Lead, total	ug/L	MW-36	10/16/2017	ND	4.0000		
Lead, total	ug/L	MW-36	04/24/2018		4.2000		
Lead, total	ug/L	MW-36	10/25/2018	ND	4.0000		
Lead, total	ug/L	MW-36	04/15/2019	ND	4.0000		
Lead, total	ug/L	MW-36	10/07/2019	ND	4.0000		
Lead, total	ug/L	MW-36	04/22/2020		4.3000		
Lead, total	ug/L	MW-36	10/02/2020	ND	4.0000		
Lead, total	ug/L	MW-36	04/08/2021	ND	4.0000		
Lead, total	ug/L	MW-36	10/29/2021	ND	4.0000		
Lead, total	ug/L	MW-36	04/25/2022	ND	4.0000		
Lead, total	ug/L	MW-36	10/17/2022	ND	4.0000		
Lead, total	ug/L	MW-36	04/10/2023	ND	4.0000		
Lead, total	ug/L	MW-36	10/27/2023	ND	4.0000		
Lead, total	ug/L	MW-36	04/02/2024	ND	4.0000		
Lead, total	ug/L	MW-36	10/10/2024		4.4000		
Nickel, total	ug/L	MW-36	07/08/2015		15.8000		
Nickel, total	ug/L	MW-36	04/21/2016	ND	4.0000		
Nickel, total	ug/L	MW-36	10/17/2016	ND	4.0000		
Nickel, total	ug/L	MW-36	04/21/2017		5.0000		
Nickel, total	ug/L	MW-36	10/16/2017		4.0000		
Nickel, total	ug/L	MW-36	04/24/2018		9.1000		
Nickel, total	ug/L	MW-36	10/25/2018	ND	4.0000		
Nickel, total	ug/L	MW-36	04/15/2019	ND	4.0000		
Nickel, total	ug/L	MW-36	10/07/2019	ND	4.0000		
Nickel, total	ug/L	MW-36	04/22/2020		19.6000		
Nickel, total	ug/L	MW-36	10/02/2020	ND	4.0000		
Nickel, total	ug/L	MW-36	04/08/2021	ND	4.0000		
Nickel, total	ug/L	MW-36	10/29/2021	ND	4.0000		
Nickel, total	ug/L	MW-36	04/25/2022		11.1000		
Nickel, total	ug/L	MW-36	10/17/2022	ND	4.0000		
Nickel, total	ug/L	MW-36	04/10/2023	ND	4.0000		
Nickel, total	ug/L	MW-36	10/27/2023	ND	4.0000		
Nickel, total	ug/L	MW-36	04/02/2024	ND	4.0000		
Nickel, total	ug/L	MW-36	10/10/2024		21.5000		
Selenium, total	ug/L	MW-36	07/08/2015	ND	4.0000		
Selenium, total	ug/L	MW-36	04/21/2016	ND	4.0000		
Selenium, total	ug/L	MW-36	10/17/2016	ND	4.0000		
Selenium, total	ug/L	MW-36	04/21/2017	ND	4.0000		
Selenium, total	ug/L	MW-36	10/16/2017	ND	4.0000		
Selenium, total	ug/L	MW-36	04/24/2018	ND	4.0000		
Selenium, total	ug/L	MW-36	10/25/2018	ND	4.0000		
Selenium, total	ug/L	MW-36	04/15/2019	ND	4.0000		
Selenium, total	ug/L	MW-36	10/07/2019	ND	4.0000		
Selenium, total	ug/L	MW-36	04/22/2020	ND	4.0000		
Selenium, total	ug/L	MW-36	10/02/2020	ND	4.0000		
Selenium, total	ug/L	MW-36	04/08/2021	ND	4.0000		
Selenium, total	ug/L	MW-36	10/29/2021	ND	4.0000		
Selenium, total	ug/L	MW-36	04/25/2022	ND	4.0000		
Selenium, total	ug/L	MW-36	10/17/2022	ND	4.0000		
Selenium, total	ug/L	MW-36	04/10/2023	ND	4.0000		
Selenium, total	ug/L	MW-36	10/27/2023	ND	4.0000		
Selenium, total	ug/L	MW-36	04/02/2024	ND	4.0000		
Selenium, total	ug/L	MW-36	10/10/2024	ND	4.0000		
Silver, total	ug/L	MW-36	07/08/2015	ND	4.0000		
Silver, total	ug/L	MW-36	04/21/2016	ND	4.0000		
Silver, total	ug/L	MW-36	10/17/2016	ND	4.0000		
Silver, total	ug/L	MW-36	04/21/2017	ND	4.0000		
Silver, total	ug/L	MW-36	10/16/2017	ND	4.0000		
Silver, total	ug/L	MW-36	04/24/2018	ND	4.0000		
Silver, total	ug/L	MW-36	10/25/2018	ND	4.0000		
Silver, total	ug/L	MW-36	04/15/2019	ND	4.0000		
Silver, total	ug/L	MW-36	10/07/2019	ND	4.0000		
Silver, total	ug/L	MW-36	04/22/2020	ND	4.0000		
Silver, total	ug/L	MW-36	10/02/2020	ND	4.0000		
Silver, total	ug/L	MW-36	04/08/2021	ND	4.0000		
Silver, total	ug/L	MW-36	10/29/2021	ND	4.0000		
Silver, total	ug/L	MW-36	04/25/2022	ND	4.0000		
Silver, total	ug/L	MW-36	10/17/2022	ND	4.0000		
Silver, total	ug/L	MW-36	04/10/2023	ND	4.0000		
Silver, total	ug/L	MW-36	10/27/2023	ND	4.0000		
Silver, total	ug/L	MW-36	04/02/2024	ND	4.0000		
Silver, total	ug/L	MW-36	10/29/2021	ND	4.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Silver, total	ug/L	MW-36	04/25/2022	ND	4.0000		
Silver, total	ug/L	MW-36	10/17/2022	ND	4.0000		
Silver, total	ug/L	MW-36	04/10/2023	ND	4.0000		
Silver, total	ug/L	MW-36	10/27/2023	ND	4.0000		
Silver, total	ug/L	MW-36	04/02/2024	ND	4.0000		
Silver, total	ug/L	MW-36	10/10/2024	ND	4.0000		
Thallium, total	ug/L	MW-36	07/08/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-36	04/21/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-36	10/17/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-36	04/21/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-36	10/16/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-36	04/24/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-36	10/25/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-36	04/15/2019	ND	2.0000		
Thallium, total	ug/L	MW-36	10/07/2019	ND	2.0000		
Thallium, total	ug/L	MW-36	04/22/2020	ND	2.0000		
Thallium, total	ug/L	MW-36	10/02/2020	ND	2.0000		
Thallium, total	ug/L	MW-36	04/08/2021	ND	2.0000		
Thallium, total	ug/L	MW-36	10/29/2021	ND	2.0000		
Thallium, total	ug/L	MW-36	04/25/2022	ND	2.0000		
Thallium, total	ug/L	MW-36	10/17/2022	ND	2.0000		
Thallium, total	ug/L	MW-36	04/10/2023	ND	2.0000		
Thallium, total	ug/L	MW-36	10/27/2023	ND	2.0000		
Thallium, total	ug/L	MW-36	04/02/2024	ND	2.0000		
Thallium, total	ug/L	MW-36	10/10/2024	ND	2.0000		
Vanadium, total	ug/L	MW-36	07/08/2015	ND	20.0000		
Vanadium, total	ug/L	MW-36	04/21/2016	ND	20.0000		
Vanadium, total	ug/L	MW-36	10/17/2016	ND	20.0000		
Vanadium, total	ug/L	MW-36	04/21/2017	ND	20.0000		
Vanadium, total	ug/L	MW-36	10/16/2017	ND	20.0000		
Vanadium, total	ug/L	MW-36	04/24/2018	ND	20.0000		
Vanadium, total	ug/L	MW-36	10/25/2018	ND	20.0000		
Vanadium, total	ug/L	MW-36	04/15/2019	ND	20.0000		
Vanadium, total	ug/L	MW-36	10/07/2019	ND	20.0000		
Vanadium, total	ug/L	MW-36	04/22/2020	ND	20.0000		
Vanadium, total	ug/L	MW-36	10/02/2020	ND	20.0000		
Vanadium, total	ug/L	MW-36	04/08/2021	ND	20.0000		
Vanadium, total	ug/L	MW-36	10/29/2021	ND	20.0000		
Vanadium, total	ug/L	MW-36	04/25/2022	ND	20.0000		
Vanadium, total	ug/L	MW-36	10/17/2022	ND	20.0000		
Vanadium, total	ug/L	MW-36	04/10/2023	ND	20.0000		
Vanadium, total	ug/L	MW-36	10/27/2023	ND	20.0000		
Vanadium, total	ug/L	MW-36	04/02/2024	ND	20.0000		
Vanadium, total	ug/L	MW-36	10/10/2024	ND	22.4000		
Zinc, total	ug/L	MW-36	07/08/2015		13.1000		
Zinc, total	ug/L	MW-36	04/21/2016	ND	20.0000		
Zinc, total	ug/L	MW-36	10/17/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-36	04/21/2017		9.0000		
Zinc, total	ug/L	MW-36	10/16/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-36	04/24/2018		10.8000		
Zinc, total	ug/L	MW-36	10/25/2018	ND	20.0000		
Zinc, total	ug/L	MW-36	04/15/2019	ND	20.0000		
Zinc, total	ug/L	MW-36	10/07/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-36	04/22/2020		26.8000		
Zinc, total	ug/L	MW-36	10/02/2020	ND	20.0000		
Zinc, total	ug/L	MW-36	04/08/2021	ND	20.0000		
Zinc, total	ug/L	MW-36	10/29/2021	ND	20.0000		
Zinc, total	ug/L	MW-36	04/25/2022	ND	20.0000		
Zinc, total	ug/L	MW-36	10/17/2022	ND	20.0000		
Zinc, total	ug/L	MW-36	04/10/2023	ND	20.0000		
Zinc, total	ug/L	MW-36	10/27/2023	ND	20.0000		
Zinc, total	ug/L	MW-36	04/02/2024	ND	20.0000		
Zinc, total	ug/L	MW-36	10/10/2024	ND	38.0000		
Antimony, total	ug/L	MW-37	10/23/2014	ND	2.0000		
Antimony, total	ug/L	MW-37	01/08/2015	ND	2.0000		
Antimony, total	ug/L	MW-37	04/01/2015	ND	2.0000		
Antimony, total	ug/L	MW-37	07/08/2015	ND	2.0000		
Antimony, total	ug/L	MW-37	11/05/2015	ND	2.0000		
Antimony, total	ug/L	MW-37	04/21/2016	ND	2.0000		
Antimony, total	ug/L	MW-37	10/17/2016	ND	2.0000		
Antimony, total	ug/L	MW-37	04/21/2017	ND	2.0000		
Antimony, total	ug/L	MW-37	10/16/2017	ND	2.0000		
Antimony, total	ug/L	MW-37	04/24/2018	ND	2.0000		
Antimony, total	ug/L	MW-37	10/25/2018	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-37	04/15/2019	ND	2.0000	
Antimony, total	ug/L	MW-37	10/07/2019	ND	2.0000	
Antimony, total	ug/L	MW-37	04/22/2020	ND	2.0000	
Antimony, total	ug/L	MW-37	10/02/2020	ND	2.0000	
Antimony, total	ug/L	MW-37	04/08/2021	ND	2.0000	
Antimony, total	ug/L	MW-37	10/29/2021	ND	2.0000	
Antimony, total	ug/L	MW-37	04/25/2022	ND	2.0000	
Antimony, total	ug/L	MW-37	10/17/2022	ND	2.0000	
Antimony, total	ug/L	MW-37	04/10/2023	ND	2.0000	
Antimony, total	ug/L	MW-37	10/27/2023	ND	2.0000	
Antimony, total	ug/L	MW-37	04/02/2024	ND	2.0000	
Antimony, total	ug/L	MW-37	10/10/2024	ND	2.0000	
Arsenic, total	ug/L	MW-37	10/23/2014	ND	4.0000	
Arsenic, total	ug/L	MW-37	01/08/2015	ND	4.0000	
Arsenic, total	ug/L	MW-37	04/01/2015	ND	4.0000	
Arsenic, total	ug/L	MW-37	07/08/2015	ND	4.0000	
Arsenic, total	ug/L	MW-37	11/05/2015	ND	4.0000	
Arsenic, total	ug/L	MW-37	04/21/2016	ND	4.0000	
Arsenic, total	ug/L	MW-37	10/17/2016	ND	4.0000	
Arsenic, total	ug/L	MW-37	04/21/2017	ND	4.0000	
Arsenic, total	ug/L	MW-37	10/16/2017	ND	4.0000	
Arsenic, total	ug/L	MW-37	04/24/2018	ND	4.0000	
Arsenic, total	ug/L	MW-37	10/25/2018	ND	4.0000	
Arsenic, total	ug/L	MW-37	04/15/2019	ND	4.0000	
Arsenic, total	ug/L	MW-37	10/07/2019	ND	4.0000	
Arsenic, total	ug/L	MW-37	04/22/2020	ND	4.0000	
Arsenic, total	ug/L	MW-37	10/02/2020	ND	4.0000	
Arsenic, total	ug/L	MW-37	04/08/2021	ND	4.0000	
Arsenic, total	ug/L	MW-37	10/29/2021	ND	4.0000	
Arsenic, total	ug/L	MW-37	04/25/2022	ND	4.0000	
Arsenic, total	ug/L	MW-37	10/17/2022	ND	4.0000	
Arsenic, total	ug/L	MW-37	04/10/2023	ND	4.0000	
Arsenic, total	ug/L	MW-37	10/27/2023		11.6000	
Arsenic, total	ug/L	MW-37	04/02/2024	ND	4.0000	
Arsenic, total	ug/L	MW-37	10/10/2024	ND	4.0000	
Barium, total	ug/L	MW-37	10/23/2014		216.0000	
Barium, total	ug/L	MW-37	01/08/2015		169.0000	
Barium, total	ug/L	MW-37	04/01/2015		185.0000	
Barium, total	ug/L	MW-37	07/08/2015		141.0000	
Barium, total	ug/L	MW-37	11/05/2015		175.0000	
Barium, total	ug/L	MW-37	04/21/2016		143.0000	
Barium, total	ug/L	MW-37	10/17/2016		154.0000	
Barium, total	ug/L	MW-37	04/21/2017		163.0000	
Barium, total	ug/L	MW-37	10/16/2017		178.0000	
Barium, total	ug/L	MW-37	04/24/2018		142.0000	
Barium, total	ug/L	MW-37	10/25/2018		91.5000	
Barium, total	ug/L	MW-37	04/15/2019		82.0000	
Barium, total	ug/L	MW-37	10/07/2019		102.0000	
Barium, total	ug/L	MW-37	04/22/2020		78.1000	
Barium, total	ug/L	MW-37	10/02/2020		87.9000	
Barium, total	ug/L	MW-37	04/08/2021		51.5000	
Barium, total	ug/L	MW-37	10/29/2021		71.0000	
Barium, total	ug/L	MW-37	04/25/2022		57.0000	
Barium, total	ug/L	MW-37	10/17/2022		75.8000	
Barium, total	ug/L	MW-37	04/10/2023		31.4000	
Barium, total	ug/L	MW-37	10/27/2023		107.0000	
Barium, total	ug/L	MW-37	04/02/2024		51.9000	
Barium, total	ug/L	MW-37	10/10/2024		67.6000	
Beryllium, total	ug/L	MW-37	10/23/2014	ND	4.0000	
Beryllium, total	ug/L	MW-37	01/08/2015	ND	4.0000	
Beryllium, total	ug/L	MW-37	04/01/2015	ND	4.0000	
Beryllium, total	ug/L	MW-37	07/08/2015	ND	4.0000	
Beryllium, total	ug/L	MW-37	11/05/2015	ND	4.0000	
Beryllium, total	ug/L	MW-37	04/21/2016	ND	4.0000	
Beryllium, total	ug/L	MW-37	10/17/2016	ND	4.0000	
Beryllium, total	ug/L	MW-37	04/21/2017	ND	4.0000	
Beryllium, total	ug/L	MW-37	10/16/2017	ND	4.0000	
Beryllium, total	ug/L	MW-37	04/24/2018	ND	4.0000	
Beryllium, total	ug/L	MW-37	10/25/2018	ND	4.0000	
Beryllium, total	ug/L	MW-37	04/15/2019	ND	4.0000	
Beryllium, total	ug/L	MW-37	10/07/2019	ND	4.0000	
Beryllium, total	ug/L	MW-37	04/22/2020	ND	4.0000	
Beryllium, total	ug/L	MW-37	10/02/2020	ND	4.0000	
Beryllium, total	ug/L	MW-37	04/08/2021	ND	4.0000	

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Beryllium, total	ug/L	MW-37	10/29/2021	ND	4.0000		
Beryllium, total	ug/L	MW-37	04/25/2022	ND	4.0000		
Beryllium, total	ug/L	MW-37	10/17/2022	ND	4.0000		
Beryllium, total	ug/L	MW-37	04/10/2023	ND	4.0000		
Beryllium, total	ug/L	MW-37	10/27/2023	ND	4.0000		
Beryllium, total	ug/L	MW-37	04/02/2024	ND	4.0000		
Beryllium, total	ug/L	MW-37	10/10/2024	ND	4.0000		
Cadmium, total	ug/L	MW-37	10/23/2014	ND	0.8000		
Cadmium, total	ug/L	MW-37	01/08/2015	ND	0.8000		
Cadmium, total	ug/L	MW-37	04/01/2015	ND	0.8000		
Cadmium, total	ug/L	MW-37	07/08/2015	ND	0.8000		
Cadmium, total	ug/L	MW-37	11/05/2015	ND	0.8000		
Cadmium, total	ug/L	MW-37	04/21/2016	ND	0.8000		
Cadmium, total	ug/L	MW-37	10/17/2016	ND	0.8000		
Cadmium, total	ug/L	MW-37	04/21/2017	ND	0.8000		
Cadmium, total	ug/L	MW-37	10/16/2017	ND	0.8000		
Cadmium, total	ug/L	MW-37	04/24/2018	ND	0.8000		
Cadmium, total	ug/L	MW-37	10/25/2018	ND	0.8000		
Cadmium, total	ug/L	MW-37	04/15/2019	ND	0.8000		
Cadmium, total	ug/L	MW-37	10/07/2019	ND	0.8000		
Cadmium, total	ug/L	MW-37	04/22/2020	ND	0.8000		
Cadmium, total	ug/L	MW-37	10/02/2020	ND	0.8000		
Cadmium, total	ug/L	MW-37	04/08/2021	ND	0.8000		
Cadmium, total	ug/L	MW-37	10/29/2021	ND	0.8000		
Cadmium, total	ug/L	MW-37	04/25/2022	ND	0.8000		
Cadmium, total	ug/L	MW-37	10/17/2022	ND	0.8000		
Cadmium, total	ug/L	MW-37	04/10/2023	ND	0.8000		
Cadmium, total	ug/L	MW-37	10/27/2023	ND	0.8000		
Cadmium, total	ug/L	MW-37	04/02/2024	ND	0.8000		
Cadmium, total	ug/L	MW-37	10/10/2024	ND	0.8000		
Chromium, total	ug/L	MW-37	10/23/2014	ND	8.0000		
Chromium, total	ug/L	MW-37	01/08/2015	ND	8.0000		
Chromium, total	ug/L	MW-37	04/01/2015	ND	8.0000		
Chromium, total	ug/L	MW-37	07/08/2015	ND	8.0000		
Chromium, total	ug/L	MW-37	11/05/2015	ND	8.0000		
Chromium, total	ug/L	MW-37	04/21/2016	ND	8.0000		
Chromium, total	ug/L	MW-37	10/17/2016	ND	8.0000		
Chromium, total	ug/L	MW-37	04/21/2017		20.3000		
Chromium, total	ug/L	MW-37	10/16/2017	ND	8.0000		
Chromium, total	ug/L	MW-37	04/24/2018	ND	8.0000		
Chromium, total	ug/L	MW-37	10/25/2018	ND	8.0000		
Chromium, total	ug/L	MW-37	04/15/2019	ND	8.0000		
Chromium, total	ug/L	MW-37	10/07/2019	ND	8.0000		
Chromium, total	ug/L	MW-37	04/22/2020	ND	8.0000		
Chromium, total	ug/L	MW-37	10/02/2020	ND	8.0000		
Chromium, total	ug/L	MW-37	04/08/2021	ND	8.0000		
Chromium, total	ug/L	MW-37	10/29/2021	ND	8.0000		
Chromium, total	ug/L	MW-37	04/25/2022	ND	8.0000		
Chromium, total	ug/L	MW-37	10/17/2022	ND	8.0000		
Chromium, total	ug/L	MW-37	04/10/2023	ND	8.0000		
Chromium, total	ug/L	MW-37	10/27/2023	ND	8.0000		
Chromium, total	ug/L	MW-37	04/02/2024	ND	8.0000		
Chromium, total	ug/L	MW-37	10/10/2024	ND	8.0000		
Cobalt, total	ug/L	MW-37	10/23/2014	ND	0.8000		
Cobalt, total	ug/L	MW-37	01/08/2015	ND	0.8000		
Cobalt, total	ug/L	MW-37	04/01/2015	ND	0.8000		
Cobalt, total	ug/L	MW-37	07/08/2015	ND	0.8000		
Cobalt, total	ug/L	MW-37	11/05/2015	ND	0.8000		
Cobalt, total	ug/L	MW-37	04/21/2016	ND	0.8000		
Cobalt, total	ug/L	MW-37	10/17/2016	ND	0.8000		
Cobalt, total	ug/L	MW-37	04/21/2017	ND	0.8000		
Cobalt, total	ug/L	MW-37	10/16/2017	ND	0.8000		
Cobalt, total	ug/L	MW-37	04/24/2018	ND	0.8000		
Cobalt, total	ug/L	MW-37	10/25/2018	ND	0.8000		
Cobalt, total	ug/L	MW-37	04/15/2019	ND	0.8000		
Cobalt, total	ug/L	MW-37	10/07/2019	ND	0.8000		
Cobalt, total	ug/L	MW-37	04/22/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-37	10/02/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-37	04/08/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-37	10/29/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-37	04/25/2022		0.4000		
Cobalt, total	ug/L	MW-37	10/17/2022		2.2000		
Cobalt, total	ug/L	MW-37	04/10/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-37	10/27/2023		9.6000		*

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Cobalt, total	ug/L	MW-37	04/02/2024		0.6000		
Cobalt, total	ug/L	MW-37	10/10/2024		4.4000		*
Copper, total	ug/L	MW-37	10/23/2014		4.1000		
Copper, total	ug/L	MW-37	01/08/2015	ND	4.0000		
Copper, total	ug/L	MW-37	04/01/2015	ND	4.0000		
Copper, total	ug/L	MW-37	07/08/2015	ND	4.0000		
Copper, total	ug/L	MW-37	11/05/2015	ND	4.0000		
Copper, total	ug/L	MW-37	04/21/2016	ND	4.0000		
Copper, total	ug/L	MW-37	10/17/2016	ND	4.0000		
Copper, total	ug/L	MW-37	04/21/2017	ND	4.0000		
Copper, total	ug/L	MW-37	10/16/2017	ND	4.0000		
Copper, total	ug/L	MW-37	04/24/2018	ND	4.0000		
Copper, total	ug/L	MW-37	10/25/2018		13.7000		*
Copper, total	ug/L	MW-37	04/15/2019	ND	4.0000		
Copper, total	ug/L	MW-37	10/07/2019	ND	4.0000		
Copper, total	ug/L	MW-37	04/22/2020	ND	4.0000		
Copper, total	ug/L	MW-37	10/02/2020	ND	4.0000		
Copper, total	ug/L	MW-37	04/08/2021	ND	4.0000		
Copper, total	ug/L	MW-37	10/29/2021	ND	4.0000		
Copper, total	ug/L	MW-37	04/25/2022	ND	4.0000		
Copper, total	ug/L	MW-37	10/17/2022	ND	4.0000		
Copper, total	ug/L	MW-37	04/10/2023	ND	4.0000		
Copper, total	ug/L	MW-37	10/27/2023	ND	4.0000		
Copper, total	ug/L	MW-37	04/02/2024	ND	4.0000		
Copper, total	ug/L	MW-37	10/10/2024	ND	4.0000		
Lead, total	ug/L	MW-37	10/23/2014	ND	4.0000		
Lead, total	ug/L	MW-37	01/08/2015	ND	4.0000		
Lead, total	ug/L	MW-37	04/01/2015	ND	4.0000		
Lead, total	ug/L	MW-37	07/08/2015	ND	4.0000		
Lead, total	ug/L	MW-37	11/05/2015	ND	4.0000		
Lead, total	ug/L	MW-37	04/21/2016	ND	4.0000		
Lead, total	ug/L	MW-37	10/17/2016	ND	4.0000		
Lead, total	ug/L	MW-37	04/21/2017		22.7000		*
Lead, total	ug/L	MW-37	10/16/2017	ND	4.0000		
Lead, total	ug/L	MW-37	04/24/2018	ND	4.0000		
Lead, total	ug/L	MW-37	10/25/2018	ND	4.0000		
Lead, total	ug/L	MW-37	04/15/2019	ND	4.0000		
Lead, total	ug/L	MW-37	10/07/2019	ND	4.0000		
Lead, total	ug/L	MW-37	04/22/2020	ND	4.0000		
Lead, total	ug/L	MW-37	10/02/2020	ND	4.0000		
Lead, total	ug/L	MW-37	04/08/2021	ND	4.0000		
Lead, total	ug/L	MW-37	10/29/2021	ND	4.0000		
Lead, total	ug/L	MW-37	04/25/2022	ND	4.0000		
Lead, total	ug/L	MW-37	10/17/2022	ND	4.0000		
Lead, total	ug/L	MW-37	04/10/2023	ND	4.0000		
Lead, total	ug/L	MW-37	10/27/2023	ND	4.0000		
Lead, total	ug/L	MW-37	04/02/2024	ND	4.0000		
Lead, total	ug/L	MW-37	10/10/2024	ND	4.0000		
Nickel, total	ug/L	MW-37	10/23/2014	ND	4.0000		
Nickel, total	ug/L	MW-37	01/08/2015	ND	4.0000		
Nickel, total	ug/L	MW-37	04/01/2015	ND	4.0000		
Nickel, total	ug/L	MW-37	07/08/2015	ND	4.0000		
Nickel, total	ug/L	MW-37	11/05/2015	ND	4.0000		
Nickel, total	ug/L	MW-37	04/21/2016	ND	4.0000		
Nickel, total	ug/L	MW-37	10/17/2016	ND	4.0000		
Nickel, total	ug/L	MW-37	04/21/2017	ND	4.0000		
Nickel, total	ug/L	MW-37	10/16/2017	ND	4.0000		
Nickel, total	ug/L	MW-37	04/24/2018	ND	4.0000		
Nickel, total	ug/L	MW-37	10/25/2018	ND	4.0000		
Nickel, total	ug/L	MW-37	04/15/2019	ND	4.0000		
Nickel, total	ug/L	MW-37	10/07/2019	ND	4.0000		
Nickel, total	ug/L	MW-37	04/22/2020	ND	4.0000		
Nickel, total	ug/L	MW-37	10/02/2020	ND	4.0000		
Nickel, total	ug/L	MW-37	04/08/2021	ND	4.0000		
Nickel, total	ug/L	MW-37	10/29/2021	ND	4.0000		
Nickel, total	ug/L	MW-37	04/25/2022	ND	4.0000		
Nickel, total	ug/L	MW-37	10/17/2022	ND	4.0000		
Nickel, total	ug/L	MW-37	04/10/2023	ND	4.0000		
Nickel, total	ug/L	MW-37	10/27/2023		13.9000		*
Nickel, total	ug/L	MW-37	04/02/2024	ND	4.0000		
Nickel, total	ug/L	MW-37	10/10/2024		18.7000		*
Selenium, total	ug/L	MW-37	10/23/2014	ND	4.0000		
Selenium, total	ug/L	MW-37	01/08/2015	ND	4.0000		
Selenium, total	ug/L	MW-37	04/01/2015	ND	4.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Selenium, total	ug/L	MW-37	07/08/2015	ND	4.0000		
Selenium, total	ug/L	MW-37	11/05/2015	ND	4.0000		
Selenium, total	ug/L	MW-37	04/21/2016	ND	4.0000		
Selenium, total	ug/L	MW-37	10/17/2016	ND	4.0000		
Selenium, total	ug/L	MW-37	04/21/2017	ND	4.0000		
Selenium, total	ug/L	MW-37	10/16/2017	ND	4.0000		
Selenium, total	ug/L	MW-37	04/24/2018		8.9000		*
Selenium, total	ug/L	MW-37	10/25/2018	ND	4.0000		
Selenium, total	ug/L	MW-37	04/15/2019	ND	4.0000		
Selenium, total	ug/L	MW-37	10/07/2019	ND	4.0000		
Selenium, total	ug/L	MW-37	04/22/2020	ND	4.0000		
Selenium, total	ug/L	MW-37	10/02/2020	ND	4.0000		
Selenium, total	ug/L	MW-37	04/08/2021	ND	4.0000		
Selenium, total	ug/L	MW-37	10/29/2021	ND	4.0000		
Selenium, total	ug/L	MW-37	04/25/2022	ND	4.0000		
Selenium, total	ug/L	MW-37	10/17/2022	ND	4.0000		
Selenium, total	ug/L	MW-37	04/10/2023	ND	4.0000		
Selenium, total	ug/L	MW-37	10/27/2023	ND	4.0000		
Selenium, total	ug/L	MW-37	04/02/2024	ND	4.0000		
Selenium, total	ug/L	MW-37	10/10/2024	ND	4.0000		
Silver, total	ug/L	MW-37	10/23/2014	ND	4.0000		
Silver, total	ug/L	MW-37	01/08/2015	ND	4.0000		
Silver, total	ug/L	MW-37	04/01/2015	ND	4.0000		
Silver, total	ug/L	MW-37	07/08/2015	ND	4.0000		
Silver, total	ug/L	MW-37	11/05/2015	ND	4.0000		
Silver, total	ug/L	MW-37	04/21/2016	ND	4.0000		
Silver, total	ug/L	MW-37	10/17/2016	ND	4.0000		
Silver, total	ug/L	MW-37	04/21/2017	ND	4.0000		
Silver, total	ug/L	MW-37	10/16/2017	ND	4.0000		
Silver, total	ug/L	MW-37	04/24/2018	ND	4.0000		
Silver, total	ug/L	MW-37	10/25/2018	ND	4.0000		
Silver, total	ug/L	MW-37	04/15/2019	ND	4.0000		
Silver, total	ug/L	MW-37	10/07/2019	ND	4.0000		
Silver, total	ug/L	MW-37	04/22/2020	ND	4.0000		
Silver, total	ug/L	MW-37	10/02/2020	ND	4.0000		
Silver, total	ug/L	MW-37	04/08/2021	ND	4.0000		
Silver, total	ug/L	MW-37	10/29/2021	ND	4.0000		
Silver, total	ug/L	MW-37	04/25/2022	ND	4.0000		
Silver, total	ug/L	MW-37	10/17/2022	ND	4.0000		
Silver, total	ug/L	MW-37	04/10/2023	ND	4.0000		
Silver, total	ug/L	MW-37	10/27/2023	ND	4.0000		
Silver, total	ug/L	MW-37	04/02/2024	ND	4.0000		
Silver, total	ug/L	MW-37	10/10/2024	ND	4.0000		
Thallium, total	ug/L	MW-37	10/23/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	01/08/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	04/01/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	07/08/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	11/05/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	04/21/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	10/17/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	04/21/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	10/16/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	04/24/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	10/25/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-37	04/15/2019	ND	2.0000		
Thallium, total	ug/L	MW-37	10/07/2019	ND	2.0000		
Thallium, total	ug/L	MW-37	04/22/2020	ND	2.0000		
Thallium, total	ug/L	MW-37	10/02/2020	ND	2.0000		
Thallium, total	ug/L	MW-37	04/08/2021	ND	2.0000		
Thallium, total	ug/L	MW-37	10/29/2021	ND	2.0000		
Thallium, total	ug/L	MW-37	04/25/2022	ND	2.0000		
Thallium, total	ug/L	MW-37	10/17/2022	ND	2.0000		
Thallium, total	ug/L	MW-37	04/10/2023	ND	2.0000		
Thallium, total	ug/L	MW-37	10/27/2023	ND	2.0000		
Thallium, total	ug/L	MW-37	04/02/2024	ND	2.0000		
Thallium, total	ug/L	MW-37	10/10/2024	ND	2.0000		
Vanadium, total	ug/L	MW-37	10/23/2014	ND	20.0000		
Vanadium, total	ug/L	MW-37	01/08/2015	ND	20.0000		
Vanadium, total	ug/L	MW-37	04/01/2015	ND	20.0000		
Vanadium, total	ug/L	MW-37	07/08/2015	ND	20.0000		
Vanadium, total	ug/L	MW-37	11/05/2015	ND	20.0000		
Vanadium, total	ug/L	MW-37	04/21/2016	ND	20.0000		
Vanadium, total	ug/L	MW-37	10/17/2016	ND	20.0000		
Vanadium, total	ug/L	MW-37	04/21/2017	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-37	10/16/2017	ND	20.0000		
Vanadium, total	ug/L	MW-37	04/24/2018	ND	20.0000		
Vanadium, total	ug/L	MW-37	10/25/2018	ND	20.0000		
Vanadium, total	ug/L	MW-37	04/15/2019	ND	20.0000		
Vanadium, total	ug/L	MW-37	10/07/2019	ND	20.0000		
Vanadium, total	ug/L	MW-37	04/22/2020	ND	20.0000		
Vanadium, total	ug/L	MW-37	10/02/2020	ND	20.0000		
Vanadium, total	ug/L	MW-37	04/08/2021	ND	20.0000		
Vanadium, total	ug/L	MW-37	10/29/2021	ND	20.0000		
Vanadium, total	ug/L	MW-37	04/25/2022	ND	20.0000		
Vanadium, total	ug/L	MW-37	10/17/2022	ND	20.0000		
Vanadium, total	ug/L	MW-37	04/10/2023	ND	20.0000		
Vanadium, total	ug/L	MW-37	10/27/2023	ND	20.0000		
Vanadium, total	ug/L	MW-37	04/02/2024	ND	20.0000		
Vanadium, total	ug/L	MW-37	10/10/2024	ND	20.0000		
Zinc, total	ug/L	MW-37	10/23/2014	ND	20.0000		
Zinc, total	ug/L	MW-37	01/08/2015		14.5000		
Zinc, total	ug/L	MW-37	04/01/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-37	07/08/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-37	11/05/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-37	04/21/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-37	10/17/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-37	04/21/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-37	10/16/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-37	04/24/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-37	10/25/2018	ND	20.0000		
Zinc, total	ug/L	MW-37	04/15/2019	ND	20.0000		
Zinc, total	ug/L	MW-37	10/07/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-37	04/22/2020	ND	20.0000		
Zinc, total	ug/L	MW-37	10/02/2020	ND	20.0000		
Zinc, total	ug/L	MW-37	04/08/2021	ND	20.0000		
Zinc, total	ug/L	MW-37	10/29/2021	ND	20.0000		
Zinc, total	ug/L	MW-37	04/25/2022	ND	20.0000		
Zinc, total	ug/L	MW-37	10/17/2022	ND	20.0000		
Zinc, total	ug/L	MW-37	04/10/2023	ND	20.0000		
Zinc, total	ug/L	MW-37	10/27/2023		22.2000		
Zinc, total	ug/L	MW-37	04/02/2024	ND	20.0000		
Zinc, total	ug/L	MW-37	10/10/2024	ND	20.0000		
Antimony, total	ug/L	MW-39	10/23/2014	ND	2.0000		
Antimony, total	ug/L	MW-39	01/08/2015	ND	2.0000		
Antimony, total	ug/L	MW-39	04/01/2015	ND	2.0000		
Antimony, total	ug/L	MW-39	07/08/2015	ND	2.0000		
Antimony, total	ug/L	MW-39	11/05/2015	ND	2.0000		
Antimony, total	ug/L	MW-39	04/21/2016	ND	2.0000		
Antimony, total	ug/L	MW-39	10/17/2016	ND	2.0000		
Antimony, total	ug/L	MW-39	04/21/2017	ND	2.0000		
Antimony, total	ug/L	MW-39	10/16/2017	ND	2.0000		
Antimony, total	ug/L	MW-39	04/24/2018	ND	2.0000		
Antimony, total	ug/L	MW-39	10/25/2018	ND	2.0000		
Antimony, total	ug/L	MW-39	04/15/2019	ND	2.0000		
Antimony, total	ug/L	MW-39	10/07/2019	ND	2.0000		
Antimony, total	ug/L	MW-39	04/22/2020	ND	2.0000		
Antimony, total	ug/L	MW-39	10/02/2020	ND	2.0000		
Antimony, total	ug/L	MW-39	04/08/2021	ND	2.0000		
Antimony, total	ug/L	MW-39	10/29/2021	ND	2.0000		
Antimony, total	ug/L	MW-39	04/25/2022	ND	2.0000		
Antimony, total	ug/L	MW-39	10/17/2022	ND	2.0000		
Antimony, total	ug/L	MW-39	04/10/2023	ND	2.0000		
Antimony, total	ug/L	MW-39	10/27/2023	ND	2.0000		
Antimony, total	ug/L	MW-39	04/02/2024	ND	2.0000		
Antimony, total	ug/L	MW-39	10/10/2024	ND	2.0000		
Arsenic, total	ug/L	MW-39	10/23/2014	ND	4.0000		
Arsenic, total	ug/L	MW-39	01/08/2015	ND	4.0000		
Arsenic, total	ug/L	MW-39	04/01/2015	ND	4.0000		
Arsenic, total	ug/L	MW-39	07/08/2015	ND	4.0000		
Arsenic, total	ug/L	MW-39	11/05/2015	ND	4.0000		
Arsenic, total	ug/L	MW-39	04/21/2016	ND	4.0000		
Arsenic, total	ug/L	MW-39	10/17/2016	ND	4.0000		
Arsenic, total	ug/L	MW-39	04/21/2017	ND	4.0000		
Arsenic, total	ug/L	MW-39	10/16/2017	ND	4.0000		
Arsenic, total	ug/L	MW-39	04/24/2018	ND	4.0000		
Arsenic, total	ug/L	MW-39	10/25/2018	ND	4.0000		
Arsenic, total	ug/L	MW-39	04/15/2019	ND	4.0000		
Arsenic, total	ug/L	MW-39	10/07/2019	ND	4.0000		
Arsenic, total	ug/L	MW-39	04/22/2020	ND	4.0000		
Arsenic, total	ug/L	MW-39	10/02/2020	ND	4.0000		
Arsenic, total	ug/L	MW-39	04/08/2021	ND	4.0000		
Arsenic, total	ug/L	MW-39	10/29/2021	ND	4.0000		
Arsenic, total	ug/L	MW-39	04/25/2022	ND	4.0000		
Arsenic, total	ug/L	MW-39	10/17/2022	ND	4.0000		
Arsenic, total	ug/L	MW-39	04/10/2023	ND	4.0000		
Arsenic, total	ug/L	MW-39	10/27/2023	ND	4.0000		
Arsenic, total	ug/L	MW-39	04/02/2024	ND	4.0000		
Arsenic, total	ug/L	MW-39	10/10/2024	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
Arsenic, total	ug/L	MW-39	04/22/2020	ND	4.0000	
Arsenic, total	ug/L	MW-39	10/02/2020	ND	4.0000	
Arsenic, total	ug/L	MW-39	04/08/2021	ND	4.0000	
Arsenic, total	ug/L	MW-39	10/29/2021	ND	4.0000	
Arsenic, total	ug/L	MW-39	04/25/2022	ND	4.0000	
Arsenic, total	ug/L	MW-39	10/17/2022	ND	4.0000	
Arsenic, total	ug/L	MW-39	04/10/2023	ND	4.0000	
Arsenic, total	ug/L	MW-39	10/27/2023	ND	4.0000	
Arsenic, total	ug/L	MW-39	04/02/2024	ND	4.0000	
Arsenic, total	ug/L	MW-39	10/10/2024	ND	4.0000	
Barium, total	ug/L	MW-39	10/23/2014		287.0000	
Barium, total	ug/L	MW-39	01/08/2015		309.0000	
Barium, total	ug/L	MW-39	04/01/2015		272.0000	
Barium, total	ug/L	MW-39	07/08/2015		249.0000	
Barium, total	ug/L	MW-39	11/05/2015		383.0000	
Barium, total	ug/L	MW-39	04/21/2016		266.0000	
Barium, total	ug/L	MW-39	10/17/2016		257.0000	
Barium, total	ug/L	MW-39	04/21/2017		253.0000	
Barium, total	ug/L	MW-39	10/16/2017		268.0000	
Barium, total	ug/L	MW-39	04/24/2018		273.0000	
Barium, total	ug/L	MW-39	10/25/2018		248.0000	
Barium, total	ug/L	MW-39	04/15/2019		251.0000	
Barium, total	ug/L	MW-39	10/07/2019		264.0000	
Barium, total	ug/L	MW-39	04/22/2020		323.0000	
Barium, total	ug/L	MW-39	10/02/2020		222.0000	
Barium, total	ug/L	MW-39	04/08/2021		230.0000	
Barium, total	ug/L	MW-39	10/29/2021		255.0000	
Barium, total	ug/L	MW-39	04/25/2022		232.0000	
Barium, total	ug/L	MW-39	10/17/2022		239.0000	
Barium, total	ug/L	MW-39	04/10/2023		238.0000	
Barium, total	ug/L	MW-39	10/27/2023		225.0000	
Barium, total	ug/L	MW-39	04/02/2024		254.0000	
Barium, total	ug/L	MW-39	10/10/2024		253.0000	
Beryllium, total	ug/L	MW-39	10/23/2014	ND	4.0000	
Beryllium, total	ug/L	MW-39	01/08/2015	ND	4.0000	
Beryllium, total	ug/L	MW-39	04/01/2015	ND	4.0000	
Beryllium, total	ug/L	MW-39	07/08/2015	ND	4.0000	
Beryllium, total	ug/L	MW-39	11/05/2015	ND	4.0000	
Beryllium, total	ug/L	MW-39	04/21/2016	ND	4.0000	
Beryllium, total	ug/L	MW-39	10/17/2016	ND	4.0000	
Beryllium, total	ug/L	MW-39	04/21/2017	ND	4.0000	
Beryllium, total	ug/L	MW-39	10/16/2017	ND	4.0000	
Beryllium, total	ug/L	MW-39	04/24/2018	ND	4.0000	
Beryllium, total	ug/L	MW-39	10/25/2018	ND	4.0000	
Beryllium, total	ug/L	MW-39	04/15/2019	ND	4.0000	
Beryllium, total	ug/L	MW-39	10/07/2019	ND	4.0000	
Beryllium, total	ug/L	MW-39	04/22/2020	ND	4.0000	
Beryllium, total	ug/L	MW-39	10/02/2020	ND	4.0000	
Beryllium, total	ug/L	MW-39	04/08/2021	ND	4.0000	
Beryllium, total	ug/L	MW-39	10/29/2021	ND	4.0000	
Beryllium, total	ug/L	MW-39	04/25/2022	ND	4.0000	
Beryllium, total	ug/L	MW-39	10/17/2022	ND	4.0000	
Beryllium, total	ug/L	MW-39	04/10/2023	ND	4.0000	
Beryllium, total	ug/L	MW-39	10/27/2023	ND	4.0000	
Beryllium, total	ug/L	MW-39	04/02/2024	ND	4.0000	
Beryllium, total	ug/L	MW-39	10/10/2024	ND	4.0000	
Cadmium, total	ug/L	MW-39	10/23/2014	ND	0.8000	
Cadmium, total	ug/L	MW-39	01/08/2015	ND	0.8000	
Cadmium, total	ug/L	MW-39	04/01/2015	ND	0.8000	
Cadmium, total	ug/L	MW-39	07/08/2015	ND	0.8000	
Cadmium, total	ug/L	MW-39	11/05/2015	ND	0.8000	
Cadmium, total	ug/L	MW-39	04/21/2016	ND	0.8000	
Cadmium, total	ug/L	MW-39	10/17/2016	ND	0.8000	
Cadmium, total	ug/L	MW-39	04/21/2017	ND	0.8000	
Cadmium, total	ug/L	MW-39	10/16/2017	ND	0.8000	
Cadmium, total	ug/L	MW-39	04/24/2018	ND	0.8000	
Cadmium, total	ug/L	MW-39	10/25/2018	ND	0.8000	
Cadmium, total	ug/L	MW-39	04/15/2019	ND	0.8000	
Cadmium, total	ug/L	MW-39	10/07/2019	ND	0.8000	
Cadmium, total	ug/L	MW-39	04/22/2020	ND	0.8000	
Cadmium, total	ug/L	MW-39	10/02/2020	ND	0.8000	
Cadmium, total	ug/L	MW-39	04/08/2021	ND	0.8000	
Cadmium, total	ug/L	MW-39	10/29/2021	ND	0.8000	
Cadmium, total	ug/L	MW-39	04/25/2022	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-39	10/17/2022	ND	0.8000		
Cadmium, total	ug/L	MW-39	04/10/2023	ND	0.8000		
Cadmium, total	ug/L	MW-39	10/27/2023	ND	0.8000		
Cadmium, total	ug/L	MW-39	04/02/2024	ND	0.8000		
Cadmium, total	ug/L	MW-39	10/10/2024	ND	0.8000		
Chromium, total	ug/L	MW-39	10/23/2014	ND	8.0000		
Chromium, total	ug/L	MW-39	01/08/2015		29.6000		*
Chromium, total	ug/L	MW-39	04/01/2015	ND	8.0000		
Chromium, total	ug/L	MW-39	07/08/2015	ND	8.0000		
Chromium, total	ug/L	MW-39	11/05/2015	ND	8.0000		
Chromium, total	ug/L	MW-39	04/21/2016	ND	8.0000		
Chromium, total	ug/L	MW-39	10/17/2016	ND	8.0000		
Chromium, total	ug/L	MW-39	04/21/2017	ND	8.0000		
Chromium, total	ug/L	MW-39	10/16/2017	ND	8.0000		
Chromium, total	ug/L	MW-39	04/24/2018	ND	8.0000		
Chromium, total	ug/L	MW-39	10/25/2018	ND	8.0000		
Chromium, total	ug/L	MW-39	04/15/2019	ND	8.0000		
Chromium, total	ug/L	MW-39	10/07/2019	ND	8.0000		
Chromium, total	ug/L	MW-39	04/22/2020	ND	8.0000		
Chromium, total	ug/L	MW-39	10/02/2020	ND	8.0000		
Chromium, total	ug/L	MW-39	04/08/2021	ND	8.0000		
Chromium, total	ug/L	MW-39	10/29/2021	ND	8.0000		
Chromium, total	ug/L	MW-39	04/25/2022	ND	8.0000		
Chromium, total	ug/L	MW-39	10/17/2022	ND	8.0000		
Chromium, total	ug/L	MW-39	04/10/2023	ND	8.0000		
Chromium, total	ug/L	MW-39	10/27/2023	ND	8.0000		
Chromium, total	ug/L	MW-39	04/02/2024	ND	8.0000		
Chromium, total	ug/L	MW-39	10/10/2024	ND	8.0000		
Cobalt, total	ug/L	MW-39	10/23/2014	ND	0.8000		
Cobalt, total	ug/L	MW-39	01/08/2015	ND	0.8000		
Cobalt, total	ug/L	MW-39	04/01/2015	ND	0.8000		
Cobalt, total	ug/L	MW-39	07/08/2015	ND	0.8000		
Cobalt, total	ug/L	MW-39	11/05/2015		3.3000		*
Cobalt, total	ug/L	MW-39	04/21/2016	ND	0.8000		
Cobalt, total	ug/L	MW-39	10/17/2016	ND	0.8000		
Cobalt, total	ug/L	MW-39	04/21/2017	ND	0.8000		
Cobalt, total	ug/L	MW-39	10/16/2017	ND	0.8000		
Cobalt, total	ug/L	MW-39	04/24/2018	ND	0.8000		
Cobalt, total	ug/L	MW-39	10/25/2018	ND	0.8000		
Cobalt, total	ug/L	MW-39	04/15/2019	ND	0.8000		
Cobalt, total	ug/L	MW-39	10/07/2019	ND	0.8000		
Cobalt, total	ug/L	MW-39	04/22/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	10/02/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	04/08/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	10/29/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	04/25/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	10/17/2022		1.5000		
Cobalt, total	ug/L	MW-39	04/10/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	10/27/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	04/02/2024	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-39	10/10/2024	ND	0.4000	0.8000	**
Copper, total	ug/L	MW-39	10/23/2014	ND	4.0000		
Copper, total	ug/L	MW-39	01/08/2015	ND	4.0000		
Copper, total	ug/L	MW-39	04/01/2015	ND	4.0000		
Copper, total	ug/L	MW-39	07/08/2015	ND	4.0000		
Copper, total	ug/L	MW-39	11/05/2015	ND	4.0000		
Copper, total	ug/L	MW-39	04/21/2016	ND	4.0000		
Copper, total	ug/L	MW-39	10/17/2016	ND	4.0000		
Copper, total	ug/L	MW-39	04/21/2017	ND	4.0000		
Copper, total	ug/L	MW-39	10/16/2017	ND	4.0000		
Copper, total	ug/L	MW-39	04/24/2018	ND	4.0000		
Copper, total	ug/L	MW-39	10/25/2018	ND	4.0000		
Copper, total	ug/L	MW-39	04/15/2019	ND	4.0000		
Copper, total	ug/L	MW-39	10/07/2019	ND	4.0000		
Copper, total	ug/L	MW-39	04/22/2020	ND	4.0000		
Copper, total	ug/L	MW-39	10/02/2020	ND	4.0000		
Copper, total	ug/L	MW-39	04/08/2021	ND	4.0000		
Copper, total	ug/L	MW-39	10/29/2021	ND	4.0000		
Copper, total	ug/L	MW-39	04/25/2022	ND	4.0000		
Copper, total	ug/L	MW-39	10/17/2022	ND	4.0000		
Copper, total	ug/L	MW-39	04/10/2023	ND	4.0000		
Copper, total	ug/L	MW-39	10/27/2023	ND	4.0000		
Copper, total	ug/L	MW-39	04/02/2024		126.0000		*
Copper, total	ug/L	MW-39	10/10/2024	ND	4.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Lead, total	ug/L	MW-39	10/23/2014	ND	4.0000		
Lead, total	ug/L	MW-39	01/08/2015	ND	4.0000		
Lead, total	ug/L	MW-39	04/01/2015	ND	4.0000		
Lead, total	ug/L	MW-39	07/08/2015	ND	4.0000		
Lead, total	ug/L	MW-39	11/05/2015	ND	4.0000		
Lead, total	ug/L	MW-39	04/21/2016	ND	4.0000		
Lead, total	ug/L	MW-39	10/17/2016	ND	4.0000		
Lead, total	ug/L	MW-39	04/21/2017	ND	4.0000		
Lead, total	ug/L	MW-39	10/16/2017	ND	4.0000		
Lead, total	ug/L	MW-39	04/24/2018	ND	4.0000		
Lead, total	ug/L	MW-39	10/25/2018	ND	4.0000		
Lead, total	ug/L	MW-39	04/15/2019	ND	4.0000		
Lead, total	ug/L	MW-39	10/07/2019	ND	4.0000		
Lead, total	ug/L	MW-39	04/22/2020	ND	4.0000		
Lead, total	ug/L	MW-39	10/02/2020	ND	4.0000		
Lead, total	ug/L	MW-39	04/08/2021	ND	4.0000		
Lead, total	ug/L	MW-39	10/29/2021	ND	4.0000		
Lead, total	ug/L	MW-39	04/25/2022	ND	4.0000		
Lead, total	ug/L	MW-39	10/17/2022	ND	4.0000		
Lead, total	ug/L	MW-39	04/10/2023	ND	4.0000		
Lead, total	ug/L	MW-39	10/27/2023	ND	4.0000		
Lead, total	ug/L	MW-39	04/02/2024	ND	4.0000		
Lead, total	ug/L	MW-39	10/10/2024	ND	4.0000		
Nickel, total	ug/L	MW-39	10/23/2014	ND	4.0000		
Nickel, total	ug/L	MW-39	01/08/2015		20.5000		*
Nickel, total	ug/L	MW-39	04/01/2015	ND	4.0000		
Nickel, total	ug/L	MW-39	07/08/2015	ND	4.0000		
Nickel, total	ug/L	MW-39	11/05/2015		7.0000		
Nickel, total	ug/L	MW-39	04/21/2016	ND	4.0000		
Nickel, total	ug/L	MW-39	10/17/2016	ND	4.0000		
Nickel, total	ug/L	MW-39	04/21/2017	ND	4.0000		
Nickel, total	ug/L	MW-39	10/16/2017	ND	4.0000		
Nickel, total	ug/L	MW-39	04/24/2018	ND	4.0000		
Nickel, total	ug/L	MW-39	10/25/2018	ND	4.0000		
Nickel, total	ug/L	MW-39	04/15/2019	ND	4.0000		
Nickel, total	ug/L	MW-39	10/07/2019	ND	4.0000		
Nickel, total	ug/L	MW-39	04/22/2020	ND	4.0000		
Nickel, total	ug/L	MW-39	10/02/2020	ND	4.0000		
Nickel, total	ug/L	MW-39	04/08/2021	ND	4.0000		
Nickel, total	ug/L	MW-39	10/29/2021	ND	4.0000		
Nickel, total	ug/L	MW-39	04/25/2022	ND	4.0000		
Nickel, total	ug/L	MW-39	10/17/2022	ND	4.0000		
Nickel, total	ug/L	MW-39	04/10/2023	ND	4.0000		
Nickel, total	ug/L	MW-39	10/27/2023	ND	4.0000		
Nickel, total	ug/L	MW-39	04/02/2024	ND	4.0000		
Nickel, total	ug/L	MW-39	10/10/2024	ND	4.0000		
Selenium, total	ug/L	MW-39	10/23/2014	ND	4.0000		
Selenium, total	ug/L	MW-39	01/08/2015	ND	4.0000		
Selenium, total	ug/L	MW-39	04/01/2015	ND	4.0000		
Selenium, total	ug/L	MW-39	07/08/2015	ND	4.0000		
Selenium, total	ug/L	MW-39	11/05/2015	ND	4.0000		
Selenium, total	ug/L	MW-39	04/21/2016	ND	4.0000		
Selenium, total	ug/L	MW-39	10/17/2016	ND	4.0000		
Selenium, total	ug/L	MW-39	04/21/2017	ND	4.0000		
Selenium, total	ug/L	MW-39	10/16/2017	ND	4.0000		
Selenium, total	ug/L	MW-39	04/24/2018	ND	4.0000		
Selenium, total	ug/L	MW-39	10/25/2018	ND	4.0000		
Selenium, total	ug/L	MW-39	04/15/2019	ND	4.0000		
Selenium, total	ug/L	MW-39	10/07/2019	ND	4.0000		
Selenium, total	ug/L	MW-39	04/22/2020	ND	4.0000		
Selenium, total	ug/L	MW-39	10/02/2020	ND	4.0000		
Selenium, total	ug/L	MW-39	04/08/2021	ND	4.0000		
Selenium, total	ug/L	MW-39	10/29/2021	ND	4.0000		
Selenium, total	ug/L	MW-39	04/25/2022	ND	4.0000		
Selenium, total	ug/L	MW-39	10/17/2022	ND	4.0000		
Selenium, total	ug/L	MW-39	04/10/2023	ND	4.0000		
Selenium, total	ug/L	MW-39	10/27/2023	ND	4.0000		
Selenium, total	ug/L	MW-39	04/02/2024	ND	4.0000		
Selenium, total	ug/L	MW-39	10/10/2024	ND	4.0000		
Silver, total	ug/L	MW-39	10/23/2014	ND	4.0000		
Silver, total	ug/L	MW-39	01/08/2015	ND	4.0000		
Silver, total	ug/L	MW-39	04/01/2015	ND	4.0000		
Silver, total	ug/L	MW-39	07/08/2015	ND	4.0000		
Silver, total	ug/L	MW-39	11/05/2015	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	
Silver, total	ug/L	MW-39	04/21/2016	ND	4.0000		
Silver, total	ug/L	MW-39	10/17/2016	ND	4.0000		
Silver, total	ug/L	MW-39	04/21/2017	ND	4.0000		
Silver, total	ug/L	MW-39	10/16/2017	ND	4.0000		
Silver, total	ug/L	MW-39	04/24/2018	ND	4.0000		
Silver, total	ug/L	MW-39	10/25/2018	ND	4.0000		
Silver, total	ug/L	MW-39	04/15/2019	ND	4.0000		
Silver, total	ug/L	MW-39	10/07/2019	ND	4.0000		
Silver, total	ug/L	MW-39	04/22/2020	ND	4.0000		
Silver, total	ug/L	MW-39	10/02/2020	ND	4.0000		
Silver, total	ug/L	MW-39	04/08/2021	ND	4.0000		
Silver, total	ug/L	MW-39	10/29/2021	ND	4.0000		
Silver, total	ug/L	MW-39	04/25/2022	ND	4.0000		
Silver, total	ug/L	MW-39	10/17/2022	ND	4.0000		
Silver, total	ug/L	MW-39	04/10/2023	ND	4.0000		
Silver, total	ug/L	MW-39	10/27/2023	ND	4.0000		
Silver, total	ug/L	MW-39	04/02/2024	ND	4.0000		
Silver, total	ug/L	MW-39	10/10/2024	ND	4.0000		
Thallium, total	ug/L	MW-39	10/23/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	01/08/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	04/01/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	07/08/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	11/05/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	04/21/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	10/17/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	04/21/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	10/16/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	04/24/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	10/25/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-39	04/15/2019	ND	2.0000		
Thallium, total	ug/L	MW-39	10/07/2019	ND	2.0000		
Thallium, total	ug/L	MW-39	04/22/2020	ND	2.0000		
Thallium, total	ug/L	MW-39	10/02/2020	ND	2.0000		
Thallium, total	ug/L	MW-39	04/08/2021	ND	2.0000		
Thallium, total	ug/L	MW-39	10/29/2021	ND	2.0000		
Thallium, total	ug/L	MW-39	04/25/2022	ND	2.0000		
Thallium, total	ug/L	MW-39	10/17/2022	ND	2.0000		
Thallium, total	ug/L	MW-39	04/10/2023	ND	2.0000		
Thallium, total	ug/L	MW-39	10/27/2023	ND	2.0000		
Thallium, total	ug/L	MW-39	04/02/2024	ND	2.0000		
Thallium, total	ug/L	MW-39	10/10/2024	ND	2.0000		
Vanadium, total	ug/L	MW-39	10/23/2014	ND	20.0000		
Vanadium, total	ug/L	MW-39	01/08/2015	ND	20.0000		
Vanadium, total	ug/L	MW-39	04/01/2015	ND	20.0000		
Vanadium, total	ug/L	MW-39	07/08/2015	ND	20.0000		
Vanadium, total	ug/L	MW-39	11/05/2015	ND	20.0000		
Vanadium, total	ug/L	MW-39	04/21/2016	ND	20.0000		
Vanadium, total	ug/L	MW-39	10/17/2016	ND	20.0000		
Vanadium, total	ug/L	MW-39	04/21/2017	ND	20.0000		
Vanadium, total	ug/L	MW-39	10/16/2017	ND	20.0000		
Vanadium, total	ug/L	MW-39	04/24/2018	ND	20.0000		
Vanadium, total	ug/L	MW-39	10/25/2018	ND	20.0000		
Vanadium, total	ug/L	MW-39	04/15/2019	ND	20.0000		
Vanadium, total	ug/L	MW-39	10/07/2019	ND	20.0000		
Vanadium, total	ug/L	MW-39	04/22/2020	ND	20.0000		
Vanadium, total	ug/L	MW-39	10/02/2020	ND	20.0000		
Vanadium, total	ug/L	MW-39	04/08/2021	ND	20.0000		
Vanadium, total	ug/L	MW-39	10/29/2021	ND	20.0000		
Vanadium, total	ug/L	MW-39	04/25/2022	ND	20.0000		
Vanadium, total	ug/L	MW-39	10/17/2022	ND	20.0000		
Vanadium, total	ug/L	MW-39	04/10/2023	ND	20.0000		
Vanadium, total	ug/L	MW-39	10/27/2023	ND	20.0000		
Vanadium, total	ug/L	MW-39	04/02/2024	ND	20.0000		
Vanadium, total	ug/L	MW-39	10/10/2024	ND	20.0000		
Zinc, total	ug/L	MW-39	10/23/2014	ND	20.0000		
Zinc, total	ug/L	MW-39	01/08/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	04/01/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	07/08/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	11/05/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	04/21/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	10/17/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	04/21/2017	ND	25.8000		
Zinc, total	ug/L	MW-39	10/16/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	04/24/2018	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-39	10/25/2018	ND	20.0000		
Zinc, total	ug/L	MW-39	04/15/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	10/07/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-39	04/22/2020	ND	20.0000		
Zinc, total	ug/L	MW-39	10/02/2020	ND	20.0000		
Zinc, total	ug/L	MW-39	04/08/2021	ND	20.0000		
Zinc, total	ug/L	MW-39	10/29/2021	ND	20.0000		
Zinc, total	ug/L	MW-39	04/25/2022	ND	20.0000		
Zinc, total	ug/L	MW-39	10/17/2022	ND	20.0000		
Zinc, total	ug/L	MW-39	04/10/2023	ND	20.0000		
Zinc, total	ug/L	MW-39	10/27/2023	ND	20.0000		
Zinc, total	ug/L	MW-39	04/02/2024	ND	20.0000		
Zinc, total	ug/L	MW-39	10/10/2024	ND	20.0000		
Antimony, total	ug/L	MW-40	10/23/2014	ND	2.0000		
Antimony, total	ug/L	MW-40	01/08/2015	ND	2.0000		
Antimony, total	ug/L	MW-40	03/31/2015	ND	2.0000		
Antimony, total	ug/L	MW-40	07/08/2015	ND	2.0000		
Antimony, total	ug/L	MW-40	11/05/2015	ND	2.0000		
Antimony, total	ug/L	MW-40	04/21/2016	ND	2.0000		
Antimony, total	ug/L	MW-40	10/17/2016	ND	2.0000		
Antimony, total	ug/L	MW-40	04/21/2017	ND	2.0000		
Antimony, total	ug/L	MW-40	10/16/2017	ND	2.0000		
Antimony, total	ug/L	MW-40	04/24/2018	ND	2.0000		
Antimony, total	ug/L	MW-40	10/25/2018	ND	2.0000		
Antimony, total	ug/L	MW-40	04/15/2019	ND	2.0000		
Antimony, total	ug/L	MW-40	10/07/2019	ND	2.0000		
Antimony, total	ug/L	MW-40	04/22/2020	ND	2.0000		
Antimony, total	ug/L	MW-40	10/02/2020	ND	2.0000		
Antimony, total	ug/L	MW-40	04/08/2021	ND	2.0000		
Antimony, total	ug/L	MW-40	10/29/2021	ND	2.0000		
Antimony, total	ug/L	MW-40	04/25/2022	ND	2.0000		
Antimony, total	ug/L	MW-40	10/17/2022	ND	2.0000		
Antimony, total	ug/L	MW-40	04/10/2023	ND	2.0000		
Antimony, total	ug/L	MW-40	10/27/2023	ND	2.0000		
Antimony, total	ug/L	MW-40	04/02/2024	ND	2.0000		
Antimony, total	ug/L	MW-40	10/10/2024	ND	2.0000		
Arsenic, total	ug/L	MW-40	10/23/2014	ND	4.0000		
Arsenic, total	ug/L	MW-40	01/08/2015	ND	4.0000		
Arsenic, total	ug/L	MW-40	03/31/2015	ND	4.0000		
Arsenic, total	ug/L	MW-40	07/08/2015	ND	4.0000		
Arsenic, total	ug/L	MW-40	11/05/2015	ND	4.0000		
Arsenic, total	ug/L	MW-40	04/21/2016	ND	4.0000		
Arsenic, total	ug/L	MW-40	10/17/2016	ND	4.0000		
Arsenic, total	ug/L	MW-40	04/21/2017	ND	4.0000		
Arsenic, total	ug/L	MW-40	10/16/2017	ND	4.0000		
Arsenic, total	ug/L	MW-40	04/24/2018	ND	4.0000		
Arsenic, total	ug/L	MW-40	10/25/2018	ND	4.0000		
Arsenic, total	ug/L	MW-40	04/15/2019	ND	4.0000		
Arsenic, total	ug/L	MW-40	10/07/2019	ND	4.0000		
Arsenic, total	ug/L	MW-40	04/22/2020	ND	4.0000		
Arsenic, total	ug/L	MW-40	10/02/2020	ND	4.0000		
Arsenic, total	ug/L	MW-40	04/08/2021	ND	4.0000		
Arsenic, total	ug/L	MW-40	10/29/2021	ND	4.3000		
Arsenic, total	ug/L	MW-40	04/25/2022	ND	4.0000		
Arsenic, total	ug/L	MW-40	10/17/2022	ND	8.1000		
Arsenic, total	ug/L	MW-40	04/10/2023	ND	5.9000		
Arsenic, total	ug/L	MW-40	10/27/2023	ND	5.3000		
Arsenic, total	ug/L	MW-40	04/02/2024	ND	4.0000		
Arsenic, total	ug/L	MW-40	10/10/2024	ND	4.3000		
Barium, total	ug/L	MW-40	10/23/2014		65.4000		
Barium, total	ug/L	MW-40	01/08/2015		85.3000		
Barium, total	ug/L	MW-40	03/31/2015		96.6000		
Barium, total	ug/L	MW-40	07/08/2015		71.0000		
Barium, total	ug/L	MW-40	11/05/2015		89.1000		
Barium, total	ug/L	MW-40	04/21/2016		74.0000		
Barium, total	ug/L	MW-40	10/17/2016		83.2000		
Barium, total	ug/L	MW-40	04/21/2017		82.9000		
Barium, total	ug/L	MW-40	10/16/2017		45.4000		
Barium, total	ug/L	MW-40	04/24/2018		39.7000		
Barium, total	ug/L	MW-40	10/25/2018		56.3000		
Barium, total	ug/L	MW-40	04/15/2019		35.7000		
Barium, total	ug/L	MW-40	10/07/2019		50.7000		
Barium, total	ug/L	MW-40	04/22/2020		47.5000		
Barium, total	ug/L	MW-40	10/02/2020		47.8000		

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 ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted
Barium, total	ug/L	MW-40	04/08/2021		83.4000	
Barium, total	ug/L	MW-40	10/29/2021		72.2000	
Barium, total	ug/L	MW-40	04/25/2022		27.9000	
Barium, total	ug/L	MW-40	10/17/2022		103.0000	
Barium, total	ug/L	MW-40	04/10/2023		42.8000	
Barium, total	ug/L	MW-40	10/27/2023		46.9000	
Barium, total	ug/L	MW-40	04/02/2024		36.4000	
Barium, total	ug/L	MW-40	10/10/2024		34.2000	
Beryllium, total	ug/L	MW-40	10/23/2014	ND	4.0000	
Beryllium, total	ug/L	MW-40	01/08/2015	ND	4.0000	
Beryllium, total	ug/L	MW-40	03/31/2015	ND	4.0000	
Beryllium, total	ug/L	MW-40	07/08/2015	ND	4.0000	
Beryllium, total	ug/L	MW-40	11/05/2015	ND	4.0000	
Beryllium, total	ug/L	MW-40	04/21/2016	ND	4.0000	
Beryllium, total	ug/L	MW-40	10/17/2016	ND	4.0000	
Beryllium, total	ug/L	MW-40	04/21/2017	ND	4.0000	
Beryllium, total	ug/L	MW-40	10/16/2017	ND	4.0000	
Beryllium, total	ug/L	MW-40	04/24/2018	ND	4.0000	
Beryllium, total	ug/L	MW-40	10/25/2018	ND	4.0000	
Beryllium, total	ug/L	MW-40	04/15/2019	ND	4.0000	
Beryllium, total	ug/L	MW-40	10/07/2019	ND	4.0000	
Beryllium, total	ug/L	MW-40	04/22/2020	ND	4.0000	
Beryllium, total	ug/L	MW-40	10/02/2020	ND	4.0000	
Beryllium, total	ug/L	MW-40	04/08/2021	ND	4.0000	
Beryllium, total	ug/L	MW-40	10/29/2021	ND	4.0000	
Beryllium, total	ug/L	MW-40	04/25/2022	ND	4.0000	
Beryllium, total	ug/L	MW-40	10/17/2022	ND	4.0000	
Beryllium, total	ug/L	MW-40	04/10/2023	ND	4.0000	
Beryllium, total	ug/L	MW-40	10/27/2023	ND	4.0000	
Beryllium, total	ug/L	MW-40	04/02/2024	ND	4.0000	
Beryllium, total	ug/L	MW-40	10/10/2024	ND	4.0000	
Cadmium, total	ug/L	MW-40	10/23/2014	ND	0.8000	
Cadmium, total	ug/L	MW-40	01/08/2015	ND	0.8000	
Cadmium, total	ug/L	MW-40	03/31/2015	ND	0.8000	
Cadmium, total	ug/L	MW-40	07/08/2015	ND	0.8000	
Cadmium, total	ug/L	MW-40	11/05/2015	ND	0.8000	
Cadmium, total	ug/L	MW-40	04/21/2016	ND	0.8000	
Cadmium, total	ug/L	MW-40	10/17/2016	ND	0.8000	
Cadmium, total	ug/L	MW-40	04/21/2017	ND	0.8000	
Cadmium, total	ug/L	MW-40	10/16/2017	ND	0.8000	
Cadmium, total	ug/L	MW-40	04/24/2018	ND	0.8000	
Cadmium, total	ug/L	MW-40	10/25/2018	ND	0.8000	
Cadmium, total	ug/L	MW-40	04/15/2019	ND	0.8000	
Cadmium, total	ug/L	MW-40	10/07/2019	ND	0.8000	
Cadmium, total	ug/L	MW-40	04/22/2020	ND	0.8000	
Cadmium, total	ug/L	MW-40	10/02/2020	ND	0.8000	
Cadmium, total	ug/L	MW-40	04/08/2021	ND	0.8000	
Cadmium, total	ug/L	MW-40	10/29/2021	ND	0.9000	
Cadmium, total	ug/L	MW-40	04/25/2022	ND	0.8000	
Cadmium, total	ug/L	MW-40	10/17/2022	ND	0.8000	
Cadmium, total	ug/L	MW-40	04/10/2023	ND	0.8000	
Cadmium, total	ug/L	MW-40	10/27/2023	ND	0.8000	
Cadmium, total	ug/L	MW-40	04/02/2024	ND	0.8000	
Cadmium, total	ug/L	MW-40	10/10/2024	ND	0.8000	
Chromium, total	ug/L	MW-40	10/23/2014	ND	8.0000	
Chromium, total	ug/L	MW-40	01/08/2015	ND	8.0000	
Chromium, total	ug/L	MW-40	03/31/2015	ND	8.0000	
Chromium, total	ug/L	MW-40	07/08/2015	ND	8.0000	
Chromium, total	ug/L	MW-40	11/05/2015	ND	8.0000	
Chromium, total	ug/L	MW-40	04/21/2016	ND	8.0000	
Chromium, total	ug/L	MW-40	10/17/2016	ND	8.0000	
Chromium, total	ug/L	MW-40	04/21/2017	ND	8.0000	
Chromium, total	ug/L	MW-40	10/16/2017	ND	8.0000	
Chromium, total	ug/L	MW-40	04/24/2018	ND	8.0000	
Chromium, total	ug/L	MW-40	10/25/2018	ND	8.0000	
Chromium, total	ug/L	MW-40	04/15/2019	ND	8.0000	
Chromium, total	ug/L	MW-40	10/07/2019	ND	8.0000	
Chromium, total	ug/L	MW-40	04/22/2020	ND	8.0000	
Chromium, total	ug/L	MW-40	10/02/2020	ND	8.0000	
Chromium, total	ug/L	MW-40	04/08/2021	ND	8.0000	
Chromium, total	ug/L	MW-40	10/29/2021	ND	8.0000	
Chromium, total	ug/L	MW-40	04/25/2022	ND	8.0000	
Chromium, total	ug/L	MW-40	10/17/2022	ND	8.0000	
Chromium, total	ug/L	MW-40	04/10/2023	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-40	10/27/2023	ND	8.0000		
Chromium, total	ug/L	MW-40	04/02/2024	ND	8.0000		
Chromium, total	ug/L	MW-40	10/10/2024	ND	8.0000		
Cobalt, total	ug/L	MW-40	10/23/2014	ND	0.8000		
Cobalt, total	ug/L	MW-40	01/08/2015	ND	0.8000		
Cobalt, total	ug/L	MW-40	03/31/2015	ND	0.8000		
Cobalt, total	ug/L	MW-40	07/08/2015	ND	0.8000		
Cobalt, total	ug/L	MW-40	11/05/2015	ND	0.8000		
Cobalt, total	ug/L	MW-40	04/21/2016	ND	0.8000		
Cobalt, total	ug/L	MW-40	10/17/2016	ND	0.8000		
Cobalt, total	ug/L	MW-40	04/21/2017	ND	0.8000		
Cobalt, total	ug/L	MW-40	10/16/2017	ND	0.8000		
Cobalt, total	ug/L	MW-40	04/24/2018	ND	0.8000		
Cobalt, total	ug/L	MW-40	10/25/2018	ND	0.8000		
Cobalt, total	ug/L	MW-40	04/15/2019	ND	0.8000		
Cobalt, total	ug/L	MW-40	10/07/2019	ND	0.8000		
Cobalt, total	ug/L	MW-40	04/22/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-40	10/02/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-40	04/08/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-40	10/29/2021		4.5000		
Cobalt, total	ug/L	MW-40	04/25/2022		5.6000		
Cobalt, total	ug/L	MW-40	10/17/2022		8.3000		
Cobalt, total	ug/L	MW-40	04/10/2023		10.2000		
Cobalt, total	ug/L	MW-40	10/27/2023		4.7000		
Cobalt, total	ug/L	MW-40	04/02/2024		0.5000		
Cobalt, total	ug/L	MW-40	10/10/2024		5.8000		
Copper, total	ug/L	MW-40	10/23/2014	ND	4.0000		
Copper, total	ug/L	MW-40	01/08/2015	ND	4.0000		
Copper, total	ug/L	MW-40	03/31/2015	ND	4.0000		
Copper, total	ug/L	MW-40	07/08/2015	ND	4.0000		
Copper, total	ug/L	MW-40	11/05/2015	ND	4.0000		
Copper, total	ug/L	MW-40	04/21/2016	ND	4.0000		
Copper, total	ug/L	MW-40	10/17/2016	ND	4.0000		
Copper, total	ug/L	MW-40	04/21/2017	ND	4.0000		
Copper, total	ug/L	MW-40	10/16/2017	ND	4.0000		
Copper, total	ug/L	MW-40	04/24/2018	ND	4.0000		
Copper, total	ug/L	MW-40	10/25/2018	ND	4.0000		
Copper, total	ug/L	MW-40	04/15/2019	ND	4.0000		
Copper, total	ug/L	MW-40	10/07/2019	ND	4.0000		
Copper, total	ug/L	MW-40	04/22/2020	ND	4.0000		
Copper, total	ug/L	MW-40	10/02/2020	ND	4.0000		
Copper, total	ug/L	MW-40	04/08/2021	ND	4.0000		
Copper, total	ug/L	MW-40	10/29/2021		5.1000		
Copper, total	ug/L	MW-40	04/25/2022	ND	4.0000		
Copper, total	ug/L	MW-40	10/17/2022	ND	4.0000		
Copper, total	ug/L	MW-40	04/10/2023	ND	4.0000		
Copper, total	ug/L	MW-40	10/27/2023	ND	4.0000		
Copper, total	ug/L	MW-40	04/02/2024		8.5000		
Copper, total	ug/L	MW-40	10/10/2024	ND	4.0000		
Lead, total	ug/L	MW-40	10/23/2014	ND	4.0000		
Lead, total	ug/L	MW-40	01/08/2015	ND	4.0000		
Lead, total	ug/L	MW-40	03/31/2015	ND	4.0000		
Lead, total	ug/L	MW-40	07/08/2015	ND	4.0000		
Lead, total	ug/L	MW-40	11/05/2015	ND	4.0000		
Lead, total	ug/L	MW-40	04/21/2016	ND	4.0000		
Lead, total	ug/L	MW-40	10/17/2016	ND	4.0000		
Lead, total	ug/L	MW-40	04/21/2017	ND	4.0000		
Lead, total	ug/L	MW-40	10/16/2017	ND	4.0000		
Lead, total	ug/L	MW-40	04/24/2018	ND	4.0000		
Lead, total	ug/L	MW-40	10/25/2018	ND	4.0000		
Lead, total	ug/L	MW-40	04/15/2019	ND	4.0000		
Lead, total	ug/L	MW-40	10/07/2019	ND	4.0000		
Lead, total	ug/L	MW-40	04/22/2020	ND	4.0000		
Lead, total	ug/L	MW-40	10/02/2020	ND	4.0000		
Lead, total	ug/L	MW-40	04/08/2021	ND	4.0000		
Lead, total	ug/L	MW-40	10/29/2021	ND	4.0000		
Lead, total	ug/L	MW-40	04/25/2022	ND	4.0000		
Lead, total	ug/L	MW-40	10/17/2022	ND	4.0000		
Lead, total	ug/L	MW-40	04/10/2023	ND	4.0000		
Lead, total	ug/L	MW-40	10/27/2023	ND	4.0000		
Lead, total	ug/L	MW-40	04/02/2024	ND	4.0000		
Lead, total	ug/L	MW-40	10/10/2024	ND	4.0000		
Nickel, total	ug/L	MW-40	10/23/2014	ND	4.0000		
Nickel, total	ug/L	MW-40	01/08/2015	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-40	03/31/2015	ND	4.0000		
Nickel, total	ug/L	MW-40	07/08/2015	ND	4.0000		
Nickel, total	ug/L	MW-40	11/05/2015	ND	4.0000		
Nickel, total	ug/L	MW-40	04/21/2016	ND	4.0000		
Nickel, total	ug/L	MW-40	10/17/2016	ND	4.0000		
Nickel, total	ug/L	MW-40	04/21/2017	ND	4.0000		
Nickel, total	ug/L	MW-40	10/16/2017	ND	4.0000		
Nickel, total	ug/L	MW-40	04/24/2018	ND	4.0000		
Nickel, total	ug/L	MW-40	10/25/2018	ND	4.0000		
Nickel, total	ug/L	MW-40	04/15/2019	ND	4.0000		
Nickel, total	ug/L	MW-40	10/07/2019	ND	4.0000		
Nickel, total	ug/L	MW-40	04/22/2020	ND	4.0000		
Nickel, total	ug/L	MW-40	10/02/2020	ND	4.0000		
Nickel, total	ug/L	MW-40	04/08/2021		5.0000		
Nickel, total	ug/L	MW-40	10/29/2021		31.9000	*	
Nickel, total	ug/L	MW-40	04/25/2022		18.3000		
Nickel, total	ug/L	MW-40	10/17/2022		22.1000		
Nickel, total	ug/L	MW-40	04/10/2023		16.7000		
Nickel, total	ug/L	MW-40	10/27/2023		17.0000		
Nickel, total	ug/L	MW-40	04/02/2024		16.8000		
Nickel, total	ug/L	MW-40	10/10/2024		15.4000		
Selenium, total	ug/L	MW-40	10/23/2014		4.6000		
Selenium, total	ug/L	MW-40	01/08/2015		4.8000		
Selenium, total	ug/L	MW-40	03/31/2015		4.9000		
Selenium, total	ug/L	MW-40	07/08/2015	ND	4.0000		
Selenium, total	ug/L	MW-40	11/05/2015	ND	4.0000		
Selenium, total	ug/L	MW-40	04/21/2016	ND	4.0000		
Selenium, total	ug/L	MW-40	10/17/2016	ND	4.0000		
Selenium, total	ug/L	MW-40	04/21/2017	ND	4.0000		
Selenium, total	ug/L	MW-40	10/16/2017	ND	4.0000		
Selenium, total	ug/L	MW-40	04/24/2018	ND	4.0000		
Selenium, total	ug/L	MW-40	10/25/2018	ND	4.0000		
Selenium, total	ug/L	MW-40	04/15/2019	ND	4.0000		
Selenium, total	ug/L	MW-40	10/07/2019	ND	4.0000		
Selenium, total	ug/L	MW-40	04/22/2020	ND	4.0000		
Selenium, total	ug/L	MW-40	10/02/2020	ND	4.0000		
Selenium, total	ug/L	MW-40	04/08/2021	ND	4.0000		
Selenium, total	ug/L	MW-40	10/29/2021	ND	4.0000		
Selenium, total	ug/L	MW-40	04/25/2022	ND	4.0000		
Selenium, total	ug/L	MW-40	10/17/2022	ND	4.0000		
Selenium, total	ug/L	MW-40	04/10/2023	ND	4.0000		
Selenium, total	ug/L	MW-40	10/27/2023	ND	4.0000		
Selenium, total	ug/L	MW-40	04/02/2024	ND	4.0000		
Selenium, total	ug/L	MW-40	10/10/2024	ND	4.0000		
Silver, total	ug/L	MW-40	10/23/2014	ND	4.0000		
Silver, total	ug/L	MW-40	01/08/2015	ND	4.0000		
Silver, total	ug/L	MW-40	03/31/2015	ND	4.0000		
Silver, total	ug/L	MW-40	07/08/2015	ND	4.0000		
Silver, total	ug/L	MW-40	11/05/2015	ND	4.0000		
Silver, total	ug/L	MW-40	04/21/2016	ND	4.0000		
Silver, total	ug/L	MW-40	10/17/2016	ND	4.0000		
Silver, total	ug/L	MW-40	04/21/2017	ND	4.0000		
Silver, total	ug/L	MW-40	10/16/2017	ND	4.0000		
Silver, total	ug/L	MW-40	04/24/2018	ND	4.0000		
Silver, total	ug/L	MW-40	10/25/2018	ND	4.0000		
Silver, total	ug/L	MW-40	04/15/2019	ND	4.0000		
Silver, total	ug/L	MW-40	10/07/2019	ND	4.0000		
Silver, total	ug/L	MW-40	04/22/2020	ND	4.0000		
Silver, total	ug/L	MW-40	10/02/2020	ND	4.0000		
Silver, total	ug/L	MW-40	04/08/2021	ND	4.0000		
Silver, total	ug/L	MW-40	10/29/2021	ND	4.0000		
Silver, total	ug/L	MW-40	04/25/2022	ND	4.0000		
Silver, total	ug/L	MW-40	10/17/2022	ND	4.0000		
Silver, total	ug/L	MW-40	04/10/2023	ND	4.0000		
Silver, total	ug/L	MW-40	10/27/2023	ND	4.0000		
Silver, total	ug/L	MW-40	04/02/2024	ND	4.0000		
Silver, total	ug/L	MW-40	10/10/2024	ND	4.0000		
Thallium, total	ug/L	MW-40	10/23/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	01/08/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	03/31/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	07/08/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	11/05/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	04/21/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	10/17/2016	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-40	04/21/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	10/16/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	04/24/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	10/25/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-40	04/15/2019	ND	2.0000		
Thallium, total	ug/L	MW-40	10/07/2019	ND	2.0000		
Thallium, total	ug/L	MW-40	04/22/2020	ND	2.0000		
Thallium, total	ug/L	MW-40	10/02/2020	ND	2.0000		
Thallium, total	ug/L	MW-40	04/08/2021	ND	2.0000		
Thallium, total	ug/L	MW-40	10/29/2021	ND	2.0000		
Thallium, total	ug/L	MW-40	04/25/2022	ND	2.0000		
Thallium, total	ug/L	MW-40	10/17/2022	ND	2.0000		
Thallium, total	ug/L	MW-40	04/10/2023	ND	2.0000		
Thallium, total	ug/L	MW-40	10/27/2023	ND	2.0000		
Thallium, total	ug/L	MW-40	04/02/2024	ND	2.0000		
Thallium, total	ug/L	MW-40	10/10/2024	ND	2.0000		
Vanadium, total	ug/L	MW-40	10/23/2014	ND	20.0000		
Vanadium, total	ug/L	MW-40	01/08/2015	ND	20.0000		
Vanadium, total	ug/L	MW-40	03/31/2015	ND	20.0000		
Vanadium, total	ug/L	MW-40	07/08/2015	ND	20.0000		
Vanadium, total	ug/L	MW-40	11/05/2015	ND	20.0000		
Vanadium, total	ug/L	MW-40	04/21/2016	ND	20.0000		
Vanadium, total	ug/L	MW-40	10/17/2016	ND	20.0000		
Vanadium, total	ug/L	MW-40	04/21/2017	ND	20.0000		
Vanadium, total	ug/L	MW-40	10/16/2017	ND	20.0000		
Vanadium, total	ug/L	MW-40	04/24/2018	ND	20.0000		
Vanadium, total	ug/L	MW-40	10/25/2018	ND	20.0000		
Vanadium, total	ug/L	MW-40	04/15/2019	ND	20.0000		
Vanadium, total	ug/L	MW-40	10/07/2019	ND	20.0000		
Vanadium, total	ug/L	MW-40	04/22/2020	ND	20.0000		
Vanadium, total	ug/L	MW-40	10/02/2020	ND	20.0000		
Vanadium, total	ug/L	MW-40	04/08/2021	ND	20.0000		
Vanadium, total	ug/L	MW-40	10/29/2021	ND	20.0000		
Vanadium, total	ug/L	MW-40	04/25/2022	ND	20.0000		
Vanadium, total	ug/L	MW-40	10/17/2022	ND	20.0000		
Vanadium, total	ug/L	MW-40	04/10/2023	ND	20.0000		
Vanadium, total	ug/L	MW-40	10/27/2023	ND	20.0000		
Vanadium, total	ug/L	MW-40	04/02/2024	ND	20.0000		
Vanadium, total	ug/L	MW-40	10/10/2024	ND	20.0000		
Zinc, total	ug/L	MW-40	10/23/2014	ND	20.0000		
Zinc, total	ug/L	MW-40	01/08/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-40	03/31/2015		12.8000		
Zinc, total	ug/L	MW-40	07/08/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-40	11/05/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-40	04/21/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-40	10/17/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-40	04/21/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-40	10/16/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-40	04/24/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-40	10/25/2018	ND	20.0000		
Zinc, total	ug/L	MW-40	04/15/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-40	10/07/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-40	04/22/2020	ND	20.0000		
Zinc, total	ug/L	MW-40	10/02/2020	ND	20.0000		
Zinc, total	ug/L	MW-40	04/08/2021	ND	20.0000		
Zinc, total	ug/L	MW-40	10/29/2021	ND	20.0000		
Zinc, total	ug/L	MW-40	04/25/2022	ND	20.0000		
Zinc, total	ug/L	MW-40	10/17/2022	ND	20.0000		
Zinc, total	ug/L	MW-40	04/10/2023	ND	20.0000		
Zinc, total	ug/L	MW-40	10/27/2023	ND	20.0000		
Zinc, total	ug/L	MW-40	04/02/2024	ND	20.0000		
Zinc, total	ug/L	MW-40	10/10/2024	ND	20.0000		
Antimony, total	ug/L	MW-47	10/23/2014	ND	2.0000		
Antimony, total	ug/L	MW-47	03/31/2015	ND	2.0000		
Antimony, total	ug/L	MW-47	07/08/2015	ND	2.0000		
Antimony, total	ug/L	MW-47	11/05/2015	ND	2.0000		
Antimony, total	ug/L	MW-47	04/21/2016	ND	2.0000		
Antimony, total	ug/L	MW-47	10/17/2016	ND	2.0000		
Antimony, total	ug/L	MW-47	04/21/2017	ND	2.0000		
Antimony, total	ug/L	MW-47	10/16/2017	ND	2.0000		
Antimony, total	ug/L	MW-47	04/24/2018	ND	2.0000		
Antimony, total	ug/L	MW-47	10/25/2018	ND	2.0000		
Antimony, total	ug/L	MW-47	04/15/2019	ND	2.0000		
Antimony, total	ug/L	MW-47	10/07/2019	ND	2.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Antimony, total	ug/L	MW-47	04/22/2020	ND	2.0000		
Antimony, total	ug/L	MW-47	10/01/2020	ND	2.0000		
Antimony, total	ug/L	MW-47	04/08/2021	ND	2.0000		
Antimony, total	ug/L	MW-47	10/29/2021	ND	2.0000		
Antimony, total	ug/L	MW-47	04/25/2022	ND	2.0000		
Antimony, total	ug/L	MW-47	10/17/2022	ND	2.0000		
Antimony, total	ug/L	MW-47	04/10/2023	ND	2.0000		
Antimony, total	ug/L	MW-47	10/27/2023	ND	2.0000		
Antimony, total	ug/L	MW-47	04/02/2024	ND	2.0000		
Antimony, total	ug/L	MW-47	10/10/2024	ND	2.0000		
Arsenic, total	ug/L	MW-47	10/23/2014		40.0000		
Arsenic, total	ug/L	MW-47	03/31/2015		153.0000		*
Arsenic, total	ug/L	MW-47	07/08/2015		165.0000		*
Arsenic, total	ug/L	MW-47	11/05/2015		89.3000		
Arsenic, total	ug/L	MW-47	04/21/2016		1730.0000		*
Arsenic, total	ug/L	MW-47	10/17/2016		18.5000		
Arsenic, total	ug/L	MW-47	04/21/2017		860.0000		*
Arsenic, total	ug/L	MW-47	10/16/2017		720.0000		*
Arsenic, total	ug/L	MW-47	04/24/2018		700.0000		*
Arsenic, total	ug/L	MW-47	10/25/2018		84.0000		
Arsenic, total	ug/L	MW-47	04/15/2019		277.0000		*
Arsenic, total	ug/L	MW-47	10/07/2019		41.0000		
Arsenic, total	ug/L	MW-47	04/22/2020		844.0000		*
Arsenic, total	ug/L	MW-47	10/01/2020		79.7000		
Arsenic, total	ug/L	MW-47	04/08/2021		236.0000		*
Arsenic, total	ug/L	MW-47	10/29/2021		50.4000		
Arsenic, total	ug/L	MW-47	04/25/2022		246.0000		*
Arsenic, total	ug/L	MW-47	10/17/2022		291.0000		*
Arsenic, total	ug/L	MW-47	04/10/2023		271.0000		*
Arsenic, total	ug/L	MW-47	10/27/2023		50.2000		
Arsenic, total	ug/L	MW-47	04/02/2024		182.0000		*
Arsenic, total	ug/L	MW-47	10/10/2024		88.3000		
Barium, total	ug/L	MW-47	10/23/2014		392.0000		
Barium, total	ug/L	MW-47	03/31/2015		678.0000		
Barium, total	ug/L	MW-47	07/08/2015		630.0000		
Barium, total	ug/L	MW-47	11/05/2015		525.0000		
Barium, total	ug/L	MW-47	04/21/2016		3520.0000		*
Barium, total	ug/L	MW-47	10/17/2016		443.0000		
Barium, total	ug/L	MW-47	04/21/2017		1690.0000		
Barium, total	ug/L	MW-47	10/16/2017		1550.0000		
Barium, total	ug/L	MW-47	04/24/2018		1750.0000		
Barium, total	ug/L	MW-47	10/25/2018		310.0000		
Barium, total	ug/L	MW-47	04/15/2019		743.0000		
Barium, total	ug/L	MW-47	10/07/2019		497.0000		
Barium, total	ug/L	MW-47	04/22/2020		1880.0000		
Barium, total	ug/L	MW-47	10/01/2020		435.0000		
Barium, total	ug/L	MW-47	04/08/2021		876.0000		
Barium, total	ug/L	MW-47	10/29/2021		407.0000		
Barium, total	ug/L	MW-47	04/25/2022		565.0000		
Barium, total	ug/L	MW-47	10/17/2022		852.0000		
Barium, total	ug/L	MW-47	04/10/2023		713.0000		
Barium, total	ug/L	MW-47	10/27/2023		486.0000		
Barium, total	ug/L	MW-47	04/02/2024		570.0000		
Barium, total	ug/L	MW-47	10/10/2024		426.0000		
Beryllium, total	ug/L	MW-47	10/23/2014	ND	4.0000		
Beryllium, total	ug/L	MW-47	03/31/2015	ND	4.0000		
Beryllium, total	ug/L	MW-47	07/08/2015	ND	4.0000		
Beryllium, total	ug/L	MW-47	11/05/2015	ND	4.0000		
Beryllium, total	ug/L	MW-47	04/21/2016	ND	4.0000		
Beryllium, total	ug/L	MW-47	10/17/2016	ND	4.0000		
Beryllium, total	ug/L	MW-47	04/21/2017	ND	4.0000		
Beryllium, total	ug/L	MW-47	10/16/2017	ND	4.0000		
Beryllium, total	ug/L	MW-47	04/24/2018	ND	4.0000		
Beryllium, total	ug/L	MW-47	10/25/2018	ND	4.0000		
Beryllium, total	ug/L	MW-47	04/15/2019	ND	4.0000		
Beryllium, total	ug/L	MW-47	10/07/2019	ND	4.0000		
Beryllium, total	ug/L	MW-47	04/22/2020	ND	4.0000		
Beryllium, total	ug/L	MW-47	10/01/2020	ND	4.0000		
Beryllium, total	ug/L	MW-47	04/08/2021	ND	4.0000		
Beryllium, total	ug/L	MW-47	10/29/2021	ND	4.0000		
Beryllium, total	ug/L	MW-47	04/25/2022	ND	4.0000		
Beryllium, total	ug/L	MW-47	10/17/2022	ND	4.0000		
Beryllium, total	ug/L	MW-47	04/10/2023	ND	4.0000		
Beryllium, total	ug/L	MW-47	10/27/2023	ND	4.0000		

* - Outlier for that well and constituent.
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 *** - ND value replaced with manual RL.
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Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted
Beryllium, total	ug/L	MW-47	04/02/2024	ND	4.0000	
Beryllium, total	ug/L	MW-47	10/10/2024	ND	4.0000	
Cadmium, total	ug/L	MW-47	10/23/2014	ND	0.8000	
Cadmium, total	ug/L	MW-47	03/31/2015	ND	0.8000	
Cadmium, total	ug/L	MW-47	07/08/2015	ND	0.8000	
Cadmium, total	ug/L	MW-47	11/05/2015	ND	0.8000	
Cadmium, total	ug/L	MW-47	04/21/2016	ND	0.8000	
Cadmium, total	ug/L	MW-47	10/17/2016	ND	0.8000	
Cadmium, total	ug/L	MW-47	04/21/2017	ND	0.8000	
Cadmium, total	ug/L	MW-47	10/16/2017	ND	0.8000	
Cadmium, total	ug/L	MW-47	04/24/2018	ND	0.8000	
Cadmium, total	ug/L	MW-47	10/25/2018	ND	0.8000	
Cadmium, total	ug/L	MW-47	04/15/2019	ND	0.8000	
Cadmium, total	ug/L	MW-47	10/07/2019	ND	0.8000	
Cadmium, total	ug/L	MW-47	04/22/2020	ND	0.8000	
Cadmium, total	ug/L	MW-47	10/01/2020	ND	0.8000	
Cadmium, total	ug/L	MW-47	04/08/2021	ND	0.8000	
Cadmium, total	ug/L	MW-47	10/29/2021	ND	0.8000	
Cadmium, total	ug/L	MW-47	04/25/2022	ND	0.8000	
Cadmium, total	ug/L	MW-47	10/17/2022	ND	0.8000	
Cadmium, total	ug/L	MW-47	04/10/2023	ND	0.8000	
Cadmium, total	ug/L	MW-47	10/27/2023	ND	0.8000	
Cadmium, total	ug/L	MW-47	04/02/2024	ND	0.8000	
Cadmium, total	ug/L	MW-47	10/10/2024	ND	0.8000	
Chromium, total	ug/L	MW-47	10/23/2014	ND	8.0000	
Chromium, total	ug/L	MW-47	03/31/2015	ND	8.0000	
Chromium, total	ug/L	MW-47	07/08/2015	ND	8.0000	
Chromium, total	ug/L	MW-47	11/05/2015	ND	8.0000	
Chromium, total	ug/L	MW-47	04/21/2016	ND	8.0000	
Chromium, total	ug/L	MW-47	10/17/2016	ND	8.0000	
Chromium, total	ug/L	MW-47	04/21/2017	ND	8.0000	
Chromium, total	ug/L	MW-47	10/16/2017	ND	8.0000	
Chromium, total	ug/L	MW-47	04/24/2018	ND	8.0000	
Chromium, total	ug/L	MW-47	10/25/2018	ND	8.0000	
Chromium, total	ug/L	MW-47	04/15/2019	ND	8.0000	
Chromium, total	ug/L	MW-47	10/07/2019	ND	8.0000	
Chromium, total	ug/L	MW-47	04/22/2020	ND	8.0000	
Chromium, total	ug/L	MW-47	10/01/2020	ND	8.0000	
Chromium, total	ug/L	MW-47	04/08/2021	ND	8.0000	
Chromium, total	ug/L	MW-47	10/29/2021	ND	8.0000	
Chromium, total	ug/L	MW-47	04/25/2022	ND	8.0000	
Chromium, total	ug/L	MW-47	10/17/2022	ND	8.0000	
Chromium, total	ug/L	MW-47	04/10/2023	ND	8.0000	
Chromium, total	ug/L	MW-47	10/27/2023	ND	8.0000	
Chromium, total	ug/L	MW-47	04/02/2024	ND	8.0000	
Chromium, total	ug/L	MW-47	10/10/2024	ND	8.0000	
Cobalt, total	ug/L	MW-47	10/23/2014		0.8000	
Cobalt, total	ug/L	MW-47	03/31/2015		1.0000	
Cobalt, total	ug/L	MW-47	07/08/2015		1.5000	
Cobalt, total	ug/L	MW-47	11/05/2015		1.2000	
Cobalt, total	ug/L	MW-47	04/21/2016		4.2000	
Cobalt, total	ug/L	MW-47	10/17/2016		12.4000	
Cobalt, total	ug/L	MW-47	04/21/2017		1.9000	
Cobalt, total	ug/L	MW-47	10/16/2017		1.5000	
Cobalt, total	ug/L	MW-47	04/24/2018		1.5000	
Cobalt, total	ug/L	MW-47	10/25/2018	ND	0.8000	
Cobalt, total	ug/L	MW-47	04/15/2019		0.9000	
Cobalt, total	ug/L	MW-47	10/07/2019	ND	0.8000	
Cobalt, total	ug/L	MW-47	04/22/2020		1.9000	
Cobalt, total	ug/L	MW-47	10/01/2020		0.9000	
Cobalt, total	ug/L	MW-47	04/08/2021		1.2000	
Cobalt, total	ug/L	MW-47	10/29/2021		0.7000	
Cobalt, total	ug/L	MW-47	04/25/2022		0.7000	
Cobalt, total	ug/L	MW-47	10/17/2022		3.8000	
Cobalt, total	ug/L	MW-47	04/10/2023		1.8000	
Cobalt, total	ug/L	MW-47	10/27/2023		2.3000	
Cobalt, total	ug/L	MW-47	04/02/2024		1.8000	
Cobalt, total	ug/L	MW-47	10/10/2024		0.8000	
Copper, total	ug/L	MW-47	10/23/2014	ND	4.0000	
Copper, total	ug/L	MW-47	03/31/2015	ND	4.0000	
Copper, total	ug/L	MW-47	07/08/2015	ND	4.0000	
Copper, total	ug/L	MW-47	11/05/2015	ND	4.0000	
Copper, total	ug/L	MW-47	04/21/2016		4.6000	
Copper, total	ug/L	MW-47	10/17/2016	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-47	04/21/2017	ND	4.0000	
Copper, total	ug/L	MW-47	10/16/2017		4.9000	
Copper, total	ug/L	MW-47	04/24/2018	ND	4.0000	
Copper, total	ug/L	MW-47	10/25/2018	ND	4.0000	
Copper, total	ug/L	MW-47	04/15/2019	ND	4.0000	
Copper, total	ug/L	MW-47	10/07/2019	ND	4.0000	
Copper, total	ug/L	MW-47	04/22/2020	ND	4.0000	
Copper, total	ug/L	MW-47	10/01/2020	ND	4.0000	
Copper, total	ug/L	MW-47	04/08/2021	ND	4.0000	
Copper, total	ug/L	MW-47	10/29/2021	ND	4.0000	
Copper, total	ug/L	MW-47	04/25/2022	ND	4.0000	
Copper, total	ug/L	MW-47	10/17/2022	ND	4.0000	
Copper, total	ug/L	MW-47	04/10/2023	ND	4.0000	
Copper, total	ug/L	MW-47	10/27/2023	ND	4.0000	
Copper, total	ug/L	MW-47	04/02/2024		4.4000	
Copper, total	ug/L	MW-47	10/10/2024	ND	4.0000	
Lead, total	ug/L	MW-47	10/23/2014	ND	4.0000	
Lead, total	ug/L	MW-47	03/31/2015	ND	4.0000	
Lead, total	ug/L	MW-47	07/08/2015	ND	4.0000	
Lead, total	ug/L	MW-47	11/05/2015	ND	4.0000	
Lead, total	ug/L	MW-47	04/21/2016	ND	4.0000	
Lead, total	ug/L	MW-47	10/17/2016	ND	4.0000	
Lead, total	ug/L	MW-47	04/21/2017	ND	4.0000	
Lead, total	ug/L	MW-47	10/16/2017	ND	4.0000	
Lead, total	ug/L	MW-47	04/24/2018	ND	4.0000	
Lead, total	ug/L	MW-47	10/25/2018	ND	4.0000	
Lead, total	ug/L	MW-47	04/15/2019	ND	4.0000	
Lead, total	ug/L	MW-47	10/07/2019	ND	4.0000	
Lead, total	ug/L	MW-47	04/22/2020	ND	4.0000	
Lead, total	ug/L	MW-47	10/01/2020	ND	4.0000	
Lead, total	ug/L	MW-47	04/08/2021	ND	4.0000	
Lead, total	ug/L	MW-47	10/29/2021	ND	4.0000	
Lead, total	ug/L	MW-47	04/25/2022	ND	4.0000	
Lead, total	ug/L	MW-47	10/17/2022	ND	4.0000	
Lead, total	ug/L	MW-47	04/10/2023	ND	4.0000	
Lead, total	ug/L	MW-47	10/27/2023	ND	4.0000	
Lead, total	ug/L	MW-47	04/02/2024	ND	4.0000	
Lead, total	ug/L	MW-47	10/10/2024	ND	4.0000	
Nickel, total	ug/L	MW-47	10/23/2014	ND	4.0000	
Nickel, total	ug/L	MW-47	03/31/2015	ND	4.0000	
Nickel, total	ug/L	MW-47	07/08/2015	ND	4.0000	
Nickel, total	ug/L	MW-47	11/05/2015	ND	4.0000	
Nickel, total	ug/L	MW-47	04/21/2016		9.2000	
Nickel, total	ug/L	MW-47	10/17/2016		31.6000	
Nickel, total	ug/L	MW-47	04/21/2017		4.0000	
Nickel, total	ug/L	MW-47	10/16/2017		5.9000	
Nickel, total	ug/L	MW-47	04/24/2018		15.8000	
Nickel, total	ug/L	MW-47	10/25/2018	ND	4.0000	
Nickel, total	ug/L	MW-47	04/15/2019	ND	4.0000	
Nickel, total	ug/L	MW-47	10/07/2019	ND	4.0000	
Nickel, total	ug/L	MW-47	04/22/2020		4.7000	
Nickel, total	ug/L	MW-47	10/01/2020	ND	4.0000	
Nickel, total	ug/L	MW-47	04/08/2021	ND	4.0000	
Nickel, total	ug/L	MW-47	10/29/2021	ND	4.0000	
Nickel, total	ug/L	MW-47	04/25/2022	ND	4.0000	
Nickel, total	ug/L	MW-47	10/17/2022	ND	4.0000	
Nickel, total	ug/L	MW-47	04/10/2023	ND	4.0000	
Nickel, total	ug/L	MW-47	10/27/2023		11.7000	
Nickel, total	ug/L	MW-47	04/02/2024		8.0000	
Nickel, total	ug/L	MW-47	10/10/2024	ND	4.0000	
Selenium, total	ug/L	MW-47	10/23/2014	ND	4.0000	
Selenium, total	ug/L	MW-47	03/31/2015	ND	4.0000	
Selenium, total	ug/L	MW-47	07/08/2015	ND	4.0000	
Selenium, total	ug/L	MW-47	11/05/2015	ND	4.0000	
Selenium, total	ug/L	MW-47	04/21/2016	ND	4.0000	
Selenium, total	ug/L	MW-47	10/17/2016	ND	4.0000	
Selenium, total	ug/L	MW-47	04/21/2017	ND	4.0000	
Selenium, total	ug/L	MW-47	10/16/2017	ND	4.0000	
Selenium, total	ug/L	MW-47	04/24/2018	ND	4.0000	
Selenium, total	ug/L	MW-47	10/25/2018	ND	4.0000	
Selenium, total	ug/L	MW-47	04/15/2019	ND	4.0000	
Selenium, total	ug/L	MW-47	10/07/2019	ND	4.0000	
Selenium, total	ug/L	MW-47	04/22/2020	ND	4.0000	
Selenium, total	ug/L	MW-47	10/01/2020	ND	4.0000	
Selenium, total	ug/L	MW-47	04/08/2021	ND	4.0000	
Selenium, total	ug/L	MW-47	10/29/2021	ND	4.0000	
Selenium, total	ug/L	MW-47	04/25/2022	ND	4.0000	
Selenium, total	ug/L	MW-47	10/17/2022	ND	4.0000	
Selenium, total	ug/L	MW-47	04/10/2023	ND	4.0000	
Selenium, total	ug/L	MW-47	10/27/2023		11.7000	
Selenium, total	ug/L	MW-47	04/02/2024		8.0000	
Selenium, total	ug/L	MW-47	10/10/2024	ND	4.0000	

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Selenium, total	ug/L	MW-47	04/08/2021	ND	4.0000		
Selenium, total	ug/L	MW-47	10/29/2021	ND	4.0000		
Selenium, total	ug/L	MW-47	04/25/2022	ND	4.0000		
Selenium, total	ug/L	MW-47	10/17/2022	ND	4.0000		
Selenium, total	ug/L	MW-47	04/10/2023	ND	4.0000		
Selenium, total	ug/L	MW-47	10/27/2023	ND	4.0000		
Selenium, total	ug/L	MW-47	04/02/2024	ND	4.0000		
Selenium, total	ug/L	MW-47	10/10/2024	ND	4.0000		
Silver, total	ug/L	MW-47	10/23/2014	ND	4.0000		
Silver, total	ug/L	MW-47	03/31/2015	ND	4.0000		
Silver, total	ug/L	MW-47	07/08/2015	ND	4.0000		
Silver, total	ug/L	MW-47	11/05/2015	ND	4.0000		
Silver, total	ug/L	MW-47	04/21/2016	ND	4.0000		
Silver, total	ug/L	MW-47	10/17/2016	ND	4.0000		
Silver, total	ug/L	MW-47	04/21/2017	ND	4.0000		
Silver, total	ug/L	MW-47	10/16/2017	ND	4.0000		
Silver, total	ug/L	MW-47	04/24/2018	ND	4.0000		
Silver, total	ug/L	MW-47	10/25/2018	ND	4.0000		
Silver, total	ug/L	MW-47	04/15/2019	ND	4.0000		
Silver, total	ug/L	MW-47	10/07/2019	ND	4.0000		
Silver, total	ug/L	MW-47	04/22/2020	ND	4.0000		
Silver, total	ug/L	MW-47	10/01/2020	ND	4.0000		
Silver, total	ug/L	MW-47	04/08/2021	ND	4.0000		
Silver, total	ug/L	MW-47	10/29/2021	ND	4.0000		
Silver, total	ug/L	MW-47	04/25/2022	ND	4.0000		
Silver, total	ug/L	MW-47	10/17/2022	ND	4.0000		
Silver, total	ug/L	MW-47	04/10/2023	ND	4.0000		
Silver, total	ug/L	MW-47	10/27/2023	ND	4.0000		
Silver, total	ug/L	MW-47	04/02/2024	ND	4.0000		
Silver, total	ug/L	MW-47	10/10/2024	ND	4.0000		
Thallium, total	ug/L	MW-47	10/23/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-47	03/31/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-47	07/08/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-47	11/05/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-47	04/21/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-47	10/17/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-47	04/21/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-47	10/16/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-47	04/24/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-47	10/25/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-47	04/15/2019	ND	2.0000		
Thallium, total	ug/L	MW-47	10/07/2019	ND	2.0000		
Thallium, total	ug/L	MW-47	04/22/2020	ND	2.0000		
Thallium, total	ug/L	MW-47	10/01/2020	ND	2.0000		
Thallium, total	ug/L	MW-47	04/08/2021	ND	2.0000		
Thallium, total	ug/L	MW-47	10/29/2021	ND	2.0000		
Thallium, total	ug/L	MW-47	04/25/2022	ND	2.0000		
Thallium, total	ug/L	MW-47	10/17/2022	ND	2.0000		
Thallium, total	ug/L	MW-47	04/10/2023	ND	2.0000		
Thallium, total	ug/L	MW-47	10/27/2023	ND	2.0000		
Thallium, total	ug/L	MW-47	04/02/2024	ND	2.0000		
Thallium, total	ug/L	MW-47	10/10/2024	ND	2.0000		
Vanadium, total	ug/L	MW-47	10/23/2014	ND	20.0000		
Vanadium, total	ug/L	MW-47	03/31/2015	ND	20.0000		
Vanadium, total	ug/L	MW-47	07/08/2015	ND	20.0000		
Vanadium, total	ug/L	MW-47	11/05/2015	ND	20.0000		
Vanadium, total	ug/L	MW-47	04/21/2016	ND	20.0000		
Vanadium, total	ug/L	MW-47	10/17/2016	ND	20.0000		
Vanadium, total	ug/L	MW-47	04/21/2017	ND	20.0000		
Vanadium, total	ug/L	MW-47	10/16/2017	ND	20.0000		
Vanadium, total	ug/L	MW-47	04/24/2018	ND	20.0000		
Vanadium, total	ug/L	MW-47	10/25/2018	ND	20.0000		
Vanadium, total	ug/L	MW-47	04/15/2019	ND	20.0000		
Vanadium, total	ug/L	MW-47	10/07/2019	ND	20.0000		
Vanadium, total	ug/L	MW-47	04/22/2020	ND	20.0000		
Vanadium, total	ug/L	MW-47	10/01/2020	ND	20.0000		
Vanadium, total	ug/L	MW-47	04/08/2021	ND	20.0000		
Vanadium, total	ug/L	MW-47	10/29/2021	ND	20.0000		
Vanadium, total	ug/L	MW-47	04/25/2022	ND	20.0000		
Vanadium, total	ug/L	MW-47	10/17/2022	ND	20.0000		
Vanadium, total	ug/L	MW-47	04/10/2023	ND	20.0000		
Vanadium, total	ug/L	MW-47	10/27/2023	ND	20.0000		
Vanadium, total	ug/L	MW-47	04/02/2024	ND	20.0000		
Vanadium, total	ug/L	MW-47	10/10/2024	ND	20.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Zinc, total	ug/L	MW-47	10/23/2014	ND	20.0000		
Zinc, total	ug/L	MW-47	03/31/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-47	07/08/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-47	11/05/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-47	04/21/2016		12.0000		
Zinc, total	ug/L	MW-47	10/17/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-47	04/21/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-47	10/16/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-47	04/24/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-47	10/25/2018	ND	20.0000		
Zinc, total	ug/L	MW-47	04/15/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-47	10/07/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-47	04/22/2020	ND	20.0000		
Zinc, total	ug/L	MW-47	10/01/2020	ND	20.0000		
Zinc, total	ug/L	MW-47	04/08/2021	ND	20.0000		
Zinc, total	ug/L	MW-47	10/29/2021	ND	20.0000		
Zinc, total	ug/L	MW-47	04/25/2022	ND	20.0000		
Zinc, total	ug/L	MW-47	10/17/2022	ND	20.0000		
Zinc, total	ug/L	MW-47	04/10/2023	ND	20.0000		
Zinc, total	ug/L	MW-47	10/27/2023		25.9000		
Zinc, total	ug/L	MW-47	04/02/2024	ND	20.0000		
Zinc, total	ug/L	MW-47	10/10/2024	ND	20.0000		

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

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Antimony, total	ug/L	GU-3	10/10/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	GU-3	10/10/2024		7.4000		89.3000
Barium, total	ug/L	GU-3	10/10/2024		184.0000		1880.0000
Beryllium, total	ug/L	GU-3	10/10/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	GU-3	10/10/2024	ND	0.8000		0.9000
Chromium, total	ug/L	GU-3	10/10/2024	ND	8.0000		20.3000
Cobalt, total	ug/L	GU-3	10/10/2024		0.8000		12.4000
Copper, total	ug/L	GU-3	10/10/2024	ND	4.0000		11.3000
Lead, total	ug/L	GU-3	10/10/2024	ND	4.0000		4.4000
Nickel, total	ug/L	GU-3	10/10/2024	ND	4.0000		31.6000
Selenium, total	ug/L	GU-3	10/10/2024	ND	4.0000		4.9000
Silver, total	ug/L	GU-3	10/10/2024	ND	4.0000		4.0000
Thallium, total	ug/L	GU-3	10/10/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	GU-3	10/10/2024	ND	20.0000		22.4000
Zinc, total	ug/L	GU-3	10/10/2024	ND	20.0000		38.0000
Antimony, total	ug/L	MW-13R	10/10/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-13R	10/10/2024		192.0000	*	89.3000
Barium, total	ug/L	MW-13R	10/10/2024		575.0000		1880.0000
Beryllium, total	ug/L	MW-13R	10/10/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-13R	10/10/2024	ND	0.8000		0.9000
Chromium, total	ug/L	MW-13R	10/10/2024	ND	8.0000		20.3000
Cobalt, total	ug/L	MW-13R	10/10/2024		3.6000		12.4000
Copper, total	ug/L	MW-13R	10/10/2024	ND	4.0000		11.3000
Lead, total	ug/L	MW-13R	10/10/2024	ND	4.0000		4.4000
Nickel, total	ug/L	MW-13R	10/10/2024		9.5000		31.6000
Selenium, total	ug/L	MW-13R	10/10/2024	ND	4.0000		4.9000
Silver, total	ug/L	MW-13R	10/10/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-13R	10/10/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-13R	10/10/2024	ND	20.0000		22.4000
Zinc, total	ug/L	MW-13R	10/10/2024	ND	20.0000		38.0000
Antimony, total	ug/L	MW-14	10/10/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-14	10/10/2024		91.9000	*	89.3000
Barium, total	ug/L	MW-14	10/10/2024		575.0000		1880.0000
Beryllium, total	ug/L	MW-14	10/10/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-14	10/10/2024	ND	0.8000		0.9000
Chromium, total	ug/L	MW-14	10/10/2024	ND	8.0000		20.3000
Cobalt, total	ug/L	MW-14	10/10/2024		9.9000	**	12.4000
Copper, total	ug/L	MW-14	10/10/2024	ND	4.0000		11.3000
Lead, total	ug/L	MW-14	10/10/2024	ND	4.0000		4.4000
Nickel, total	ug/L	MW-14	10/10/2024		7.7000		31.6000
Selenium, total	ug/L	MW-14	10/10/2024	ND	4.0000		4.9000
Silver, total	ug/L	MW-14	10/10/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-14	10/10/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-14	10/10/2024	ND	20.0000		22.4000
Zinc, total	ug/L	MW-14	10/10/2024	ND	20.0000		38.0000
Antimony, total	ug/L	MW-211	10/10/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-211	10/10/2024		61.7000		89.3000
Barium, total	ug/L	MW-211	10/10/2024		339.0000		1880.0000
Beryllium, total	ug/L	MW-211	10/10/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-211	10/10/2024	ND	0.8000		0.9000
Chromium, total	ug/L	MW-211	10/10/2024	ND	8.0000		20.3000
Cobalt, total	ug/L	MW-211	10/10/2024		12.9000	***	12.4000
Copper, total	ug/L	MW-211	10/10/2024	ND	4.0000		11.3000
Lead, total	ug/L	MW-211	10/10/2024	ND	4.0000		4.4000
Nickel, total	ug/L	MW-211	10/10/2024		33.0000	*	31.6000
Selenium, total	ug/L	MW-211	10/10/2024	ND	4.0000		4.9000
Silver, total	ug/L	MW-211	10/10/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-211	10/10/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-211	10/10/2024	ND	20.0000		22.4000
Zinc, total	ug/L	MW-211	10/10/2024	ND	20.0000		38.0000
Antimony, total	ug/L	MW-29	10/10/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-29	10/10/2024	ND	4.0000		89.3000
Barium, total	ug/L	MW-29	10/10/2024		97.7000		1880.0000
Beryllium, total	ug/L	MW-29	10/10/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-29	10/10/2024	ND	0.8000		0.9000
Chromium, total	ug/L	MW-29	10/10/2024	ND	8.0000		20.3000
Cobalt, total	ug/L	MW-29	10/10/2024	ND	0.4000		12.4000
Copper, total	ug/L	MW-29	10/10/2024	ND	4.0000		11.3000
Lead, total	ug/L	MW-29	10/10/2024	ND	4.0000		4.4000
Nickel, total	ug/L	MW-29	10/10/2024	ND	4.0000		31.6000
Selenium, total	ug/L	MW-29	10/10/2024	ND	4.0000		4.9000
Silver, total	ug/L	MW-29	10/10/2024	ND	4.0000		4.0000

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

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Thallium, total	ug/L	MW-29	10/10/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-29	10/10/2024	ND	20.0000		22.4000
Zinc, total	ug/L	MW-29	10/10/2024	ND	20.0000		38.0000
Antimony, total	ug/L	MW-31R	10/10/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-31R	10/10/2024		22.7000		89.3000
Barium, total	ug/L	MW-31R	10/10/2024		1010.0000		1880.0000
Beryllium, total	ug/L	MW-31R	10/10/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-31R	10/10/2024	ND	0.8000		0.9000
Chromium, total	ug/L	MW-31R	10/10/2024	ND	8.0000		20.3000
Cobalt, total	ug/L	MW-31R	10/10/2024		14.6000	***	12.4000
Copper, total	ug/L	MW-31R	10/10/2024	ND	4.0000		11.3000
Lead, total	ug/L	MW-31R	10/10/2024	ND	4.0000		4.4000
Nickel, total	ug/L	MW-31R	10/10/2024		22.7000	**	31.6000
Selenium, total	ug/L	MW-31R	10/10/2024	ND	4.0000		4.9000
Silver, total	ug/L	MW-31R	10/10/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-31R	10/10/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-31R	10/10/2024	ND	20.0000		22.4000
Zinc, total	ug/L	MW-31R	10/10/2024	ND	20.0000		38.0000
Antimony, total	ug/L	MW-33	10/10/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-33	10/10/2024	ND	4.0000		89.3000
Barium, total	ug/L	MW-33	10/10/2024		239.0000		1880.0000
Beryllium, total	ug/L	MW-33	10/10/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-33	10/10/2024	ND	0.8000		0.9000
Chromium, total	ug/L	MW-33	10/10/2024	ND	8.0000		20.3000
Cobalt, total	ug/L	MW-33	10/10/2024	ND	0.4000		12.4000
Copper, total	ug/L	MW-33	10/10/2024	ND	4.0000		11.3000
Lead, total	ug/L	MW-33	10/10/2024	ND	4.0000		4.4000
Nickel, total	ug/L	MW-33	10/10/2024	ND	4.0000		31.6000
Selenium, total	ug/L	MW-33	10/10/2024	ND	4.0000		4.9000
Silver, total	ug/L	MW-33	10/10/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-33	10/10/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-33	10/10/2024	ND	20.0000		22.4000
Zinc, total	ug/L	MW-33	10/10/2024	ND	20.0000		38.0000
Antimony, total	ug/L	MW-7	10/10/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-7	10/10/2024		215.0000	***	89.3000
Barium, total	ug/L	MW-7	10/10/2024		343.0000		1880.0000
Beryllium, total	ug/L	MW-7	10/10/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-7	10/10/2024	ND	0.8000		0.9000
Chromium, total	ug/L	MW-7	10/10/2024	ND	8.0000		20.3000
Cobalt, total	ug/L	MW-7	10/10/2024		3.8000		12.4000
Copper, total	ug/L	MW-7	10/10/2024	ND	4.0000		11.3000
Lead, total	ug/L	MW-7	10/10/2024	ND	4.0000		4.4000
Nickel, total	ug/L	MW-7	10/10/2024		7.4000		31.6000
Selenium, total	ug/L	MW-7	10/10/2024	ND	4.0000		4.9000
Silver, total	ug/L	MW-7	10/10/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-7	10/10/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-7	10/10/2024	ND	20.0000		22.4000
Zinc, total	ug/L	MW-7	10/10/2024	ND	20.0000		38.0000
Antimony, total	ug/L	MW-9	10/10/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-9	10/10/2024		14.3000		89.3000
Barium, total	ug/L	MW-9	10/10/2024		185.0000		1880.0000
Beryllium, total	ug/L	MW-9	10/10/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-9	10/10/2024	ND	0.8000		0.9000
Chromium, total	ug/L	MW-9	10/10/2024	ND	8.0000		20.3000
Cobalt, total	ug/L	MW-9	10/10/2024		6.6000		12.4000
Copper, total	ug/L	MW-9	10/10/2024	ND	4.0000		11.3000
Lead, total	ug/L	MW-9	10/10/2024	ND	4.0000		4.4000
Nickel, total	ug/L	MW-9	10/10/2024		16.1000		31.6000
Selenium, total	ug/L	MW-9	10/10/2024	ND	4.0000		4.9000
Silver, total	ug/L	MW-9	10/10/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-9	10/10/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-9	10/10/2024	ND	20.0000		22.4000
Zinc, total	ug/L	MW-9	10/10/2024	ND	20.0000		38.0000

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

Table 3

Detection Frequencies in Upgradient and Downgradient Wells

Constituent	Upgradient			Downgradient		
	Detect	N	Proportion	Detect	N	Proportion
Antimony, total	0	110	0.000	0	245	0.000
Arsenic, total	16	97	0.165	149	246	0.606
Barium, total	109	109	1.000	246	246	1.000
Beryllium, total	0	110	0.000	0	246	0.000
Cadmium, total	1	110	0.009	5	246	0.020
Chromium, total	3	109	0.028	7	245	0.029
Cobalt, total	46	106	0.434	173	248	0.698
Copper, total	10	107	0.093	38	247	0.154
Lead, total	3	109	0.028	10	246	0.041
Nickel, total	23	106	0.217	179	247	0.725
Selenium, total	3	109	0.028	3	246	0.012
Silver, total	0	110	0.000	0	245	0.000
Thallium, total	0	110	0.000	0	245	0.000
Vanadium, total	1	110	0.009	8	246	0.033
Zinc, total	11	110	0.100	47	248	0.190

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	110	0.000									nonpar
Arsenic, total	16	97	0.165	1.096	1.061					2.326	normal	nonpar
Barium, total	109	109	1.000	4.810	2.876					2.326	non-norm	nonpar
Beryllium, total	0	110	0.000									nonpar
Cadmium, total	1	110	0.009									nonpar
Chromium, total	3	109	0.028									nonpar
Cobalt, total	46	106	0.434	4.497	1.942					2.326	lognor	nonpar
Copper, total	10	107	0.093	0.449	0.934					2.326	normal	nonpar
Lead, total	3	109	0.028	2.393	2.163					2.326	lognor	nonpar
Nickel, total	23	106	0.217	1.990	1.304					2.326	normal	nonpar
Selenium, total	3	109	0.028	0.346	0.307					2.326	normal	nonpar
Silver, total	0	110	0.000									nonpar
Thallium, total	0	110	0.000									nonpar
Vanadium, total	1	110	0.009									nonpar
Zinc, total	11	110	0.100	0.756	0.169					2.326	normal	nonpar

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

Table 5

Summary Statistics and Prediction Limits

Constituent	Units	Detect	N	Mean	SD	alpha	Factor	Pred Limit	Type		Conf
Antimony, total	ug/L	0	110					2.0000	nonpar	***	0.99
Arsenic, total	ug/L	16	97					89.3000	nonpar		0.99
Barium, total	ug/L	109	109					1880.0000	nonpar		0.99
Beryllium, total	ug/L	0	110					4.0000	nonpar	***	0.99
Cadmium, total	ug/L	1	110					0.9000	nonpar		0.99
Chromium, total	ug/L	3	109					20.3000	nonpar		0.99
Cobalt, total	ug/L	46	106					12.4000	nonpar		0.99
Copper, total	ug/L	10	107					11.3000	nonpar		0.99
Lead, total	ug/L	3	109					4.4000	nonpar		0.99
Nickel, total	ug/L	23	106					31.6000	nonpar		0.99
Selenium, total	ug/L	3	109					4.9000	nonpar		0.99
Silver, total	ug/L	0	110					4.0000	nonpar	***	0.99
Thallium, total	ug/L	0	110					2.0000	nonpar	***	0.99
Vanadium, total	ug/L	1	110					22.4000	nonpar		0.99
Zinc, total	ug/L	11	110					38.0000	nonpar		0.99

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

* - Insufficient Data.

** - Calculated limit raised to Manual Reporting Limit.

*** - Nonparametric limit based on ND value.

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

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

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

Table 6

**Dixon's Test Outliers
1% Significance Level**

Constituent	Units	Well	Date	Result	ND Qualifier	Date Range	N	Critical Value
Copper, total	ug/L	MW-36	10/10/2024	19.2000		07/08/2015-10/10/2024	19	0.5503
Cobalt, total	ug/L	MW-37	10/27/2023	9.6000		10/23/2014-10/10/2024	23	0.5162
Cobalt, total	ug/L	MW-37	10/10/2024	4.4000		10/23/2014-10/10/2024	23	0.5162
Copper, total	ug/L	MW-37	10/25/2018	13.7000		10/23/2014-10/10/2024	23	0.5065
Nickel, total	ug/L	MW-37	10/27/2023	13.9000		10/23/2014-10/10/2024	23	0.5162
Nickel, total	ug/L	MW-37	10/10/2024	18.7000		10/23/2014-10/10/2024	23	0.5162
Chromium, total	ug/L	MW-39	01/08/2015	29.6000		10/23/2014-10/10/2024	23	0.5065
Cobalt, total	ug/L	MW-39	11/05/2015	3.3000		10/23/2014-10/10/2024	23	0.5065
Copper, total	ug/L	MW-39	04/02/2024	126.0000		10/23/2014-10/10/2024	23	0.5065
Nickel, total	ug/L	MW-39	01/08/2015	20.5000		10/23/2014-10/10/2024	23	0.5065

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

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

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

Table 8

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

Constituent	Units	Well	Date		Result	Pred. Limit
Arsenic, total	ug/L	MW-13R	01/13/2011		49.8000	89.3000
Arsenic, total	ug/L	MW-13R	04/08/2011		26.0000	89.3000
Arsenic, total	ug/L	MW-13R	10/18/2011		12.9000	89.3000
Arsenic, total	ug/L	MW-13R	04/18/2012		131.0000 *	89.3000
Arsenic, total	ug/L	MW-13R	10/16/2012		16.7000	89.3000
Arsenic, total	ug/L	MW-13R	04/03/2013		27.2000	89.3000
Arsenic, total	ug/L	MW-13R	10/09/2013		67.9000	89.3000
Arsenic, total	ug/L	MW-13R	04/16/2014		114.0000 *	89.3000
Arsenic, total	ug/L	MW-13R	10/23/2014		86.0000	89.3000
Arsenic, total	ug/L	MW-13R	04/01/2015		104.0000 *	89.3000
Arsenic, total	ug/L	MW-13R	11/05/2015		63.7000	89.3000
Arsenic, total	ug/L	MW-13R	04/21/2016		299.0000 *	89.3000
Arsenic, total	ug/L	MW-13R	10/17/2016		143.0000 *	89.3000
Arsenic, total	ug/L	MW-13R	04/21/2017		156.0000 *	89.3000
Arsenic, total	ug/L	MW-13R	10/16/2017		179.0000 *	89.3000
Arsenic, total	ug/L	MW-13R	04/24/2018		105.0000 *	89.3000
Arsenic, total	ug/L	MW-13R	10/25/2018		75.3000	89.3000
Arsenic, total	ug/L	MW-13R	04/15/2019		145.0000 *	89.3000
Arsenic, total	ug/L	MW-13R	10/07/2019		72.2000	89.3000
Arsenic, total	ug/L	MW-13R	04/22/2020		506.0000 *	89.3000
Arsenic, total	ug/L	MW-13R	10/02/2020		140.0000 *	89.3000
Arsenic, total	ug/L	MW-13R	04/08/2021		118.0000 *	89.3000
Arsenic, total	ug/L	MW-13R	10/29/2021		161.0000 *	89.3000
Arsenic, total	ug/L	MW-13R	04/25/2022		252.0000 *	89.3000
Arsenic, total	ug/L	MW-13R	10/17/2022		124.0000 *	89.3000
Arsenic, total	ug/L	MW-13R	04/10/2023		193.0000 *	89.3000
Arsenic, total	ug/L	MW-13R	10/27/2023		82.7000	89.3000
Arsenic, total	ug/L	MW-13R	04/02/2024		88.7000	89.3000
Arsenic, total	ug/L	MW-13R	10/10/2024		192.0000 *	89.3000
Arsenic, total	ug/L	MW-14	10/14/2010	ND	4.0000	89.3000
Arsenic, total	ug/L	MW-14	04/08/2011	ND	4.0000	89.3000
Arsenic, total	ug/L	MW-14	10/18/2011	ND	4.0000	89.3000
Arsenic, total	ug/L	MW-14	04/18/2012	ND	4.0000	89.3000
Arsenic, total	ug/L	MW-14	10/17/2012	ND	4.0000	89.3000
Arsenic, total	ug/L	MW-14	04/03/2013	ND	4.0000	89.3000
Arsenic, total	ug/L	MW-14	10/09/2013	ND	4.0000	89.3000
Arsenic, total	ug/L	MW-14	04/16/2014	ND	4.0000	89.3000
Arsenic, total	ug/L	MW-14	10/23/2014		8.0000	89.3000
Arsenic, total	ug/L	MW-14	04/01/2015	ND	4.0000	89.3000
Arsenic, total	ug/L	MW-14	11/05/2015		14.7000	89.3000
Arsenic, total	ug/L	MW-14	04/21/2016	ND	4.0000	89.3000
Arsenic, total	ug/L	MW-14	10/17/2016	ND	4.0000	89.3000
Arsenic, total	ug/L	MW-14	04/21/2017	ND	4.0000	89.3000
Arsenic, total	ug/L	MW-14	10/16/2017		14.8000	89.3000
Arsenic, total	ug/L	MW-14	04/24/2018	ND	4.0000	89.3000
Arsenic, total	ug/L	MW-14	10/25/2018	ND	4.0000	89.3000
Arsenic, total	ug/L	MW-14	04/15/2019	ND	4.0000	89.3000
Arsenic, total	ug/L	MW-14	10/07/2019	ND	4.0000	89.3000
Arsenic, total	ug/L	MW-14	04/22/2020	ND	4.0000	89.3000
Arsenic, total	ug/L	MW-14	10/02/2020		6.7000	89.3000
Arsenic, total	ug/L	MW-14	04/08/2021		8.0000	89.3000
Arsenic, total	ug/L	MW-14	10/29/2021		44.3000	89.3000
Arsenic, total	ug/L	MW-14	04/25/2022		4.3000	89.3000
Arsenic, total	ug/L	MW-14	10/17/2022		65.4000	89.3000
Arsenic, total	ug/L	MW-14	04/10/2023		66.8000	89.3000
Arsenic, total	ug/L	MW-14	10/27/2023		71.4000	89.3000
Arsenic, total	ug/L	MW-14	04/02/2024		46.1000	89.3000
Arsenic, total	ug/L	MW-14	10/10/2024		91.9000 *	89.3000
Cobalt, total	ug/L	MW-14	10/14/2010		13.3000 *	12.4000
Cobalt, total	ug/L	MW-14	04/08/2011		15.4000 *	12.4000
Cobalt, total	ug/L	MW-14	10/18/2011		18.0000 *	12.4000
Cobalt, total	ug/L	MW-14	04/18/2012		21.9000 *	12.4000
Cobalt, total	ug/L	MW-14	10/17/2012		18.9000 *	12.4000
Cobalt, total	ug/L	MW-14	04/03/2013		26.7000 *	12.4000
Cobalt, total	ug/L	MW-14	10/09/2013		33.6000 *	12.4000
Cobalt, total	ug/L	MW-14	04/16/2014		40.8000 *	12.4000
Cobalt, total	ug/L	MW-14	10/23/2014		25.7000 *	12.4000
Cobalt, total	ug/L	MW-14	04/01/2015		51.2000 *	12.4000
Cobalt, total	ug/L	MW-14	11/05/2015		18.7000 *	12.4000
Cobalt, total	ug/L	MW-14	04/21/2016		1.4000	12.4000
Cobalt, total	ug/L	MW-14	10/17/2016		16.3000 *	12.4000

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

Table 8

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

Constituent	Units	Well	Date		Result	Pred. Limit
Cobalt, total	ug/L	MW-14	01/09/2017		4.0000	12.4000
Cobalt, total	ug/L	MW-14	04/21/2017		7.7000	12.4000
Cobalt, total	ug/L	MW-14	10/16/2017		16.0000 *	12.4000
Cobalt, total	ug/L	MW-14	01/12/2018		11.2000	12.4000
Cobalt, total	ug/L	MW-14	04/24/2018		16.9000 *	12.4000
Cobalt, total	ug/L	MW-14	10/25/2018		4.2000	12.4000
Cobalt, total	ug/L	MW-14	04/15/2019		27.3000 *	12.4000
Cobalt, total	ug/L	MW-14	10/07/2019		10.0000	12.4000
Cobalt, total	ug/L	MW-14	04/22/2020		6.9000	12.4000
Cobalt, total	ug/L	MW-14	10/02/2020		11.5000	12.4000
Cobalt, total	ug/L	MW-14	04/08/2021		21.2000 *	12.4000
Cobalt, total	ug/L	MW-14	10/29/2021		14.4000 *	12.4000
Cobalt, total	ug/L	MW-14	04/25/2022		13.1000 *	12.4000
Cobalt, total	ug/L	MW-14	10/17/2022		13.1000 *	12.4000
Cobalt, total	ug/L	MW-14	04/10/2023		14.8000 *	12.4000
Cobalt, total	ug/L	MW-14	10/27/2023		16.4000 *	12.4000
Cobalt, total	ug/L	MW-14	04/02/2024		20.8000 *	12.4000
Cobalt, total	ug/L	MW-14	10/10/2024		9.9000	12.4000
Cobalt, total	ug/L	MW-211	10/14/2010		8.0000	12.4000
Cobalt, total	ug/L	MW-211	04/08/2011		6.1000	12.4000
Cobalt, total	ug/L	MW-211	10/18/2011	ND	4.0000	12.4000
Cobalt, total	ug/L	MW-211	04/18/2012		4.7000	12.4000
Cobalt, total	ug/L	MW-211	10/17/2012		4.6000	12.4000
Cobalt, total	ug/L	MW-211	04/03/2013	ND	4.0000	12.4000
Cobalt, total	ug/L	MW-211	10/09/2013		9.2000	12.4000
Cobalt, total	ug/L	MW-211	04/16/2014		7.3000	12.4000
Cobalt, total	ug/L	MW-211	10/23/2014		18.6000 *	12.4000
Cobalt, total	ug/L	MW-211	04/01/2015		13.1000 *	12.4000
Cobalt, total	ug/L	MW-211	11/05/2015		20.6000 *	12.4000
Cobalt, total	ug/L	MW-211	04/21/2016		10.8000	12.4000
Cobalt, total	ug/L	MW-211	10/17/2016		12.9000 *	12.4000
Cobalt, total	ug/L	MW-211	04/21/2017		10.3000	12.4000
Cobalt, total	ug/L	MW-211	10/16/2017		16.4000 *	12.4000
Cobalt, total	ug/L	MW-211	04/24/2018		13.3000 *	12.4000
Cobalt, total	ug/L	MW-211	10/25/2018		10.3000	12.4000
Cobalt, total	ug/L	MW-211	04/15/2019		17.0000 *	12.4000
Cobalt, total	ug/L	MW-211	10/07/2019		14.9000 *	12.4000
Cobalt, total	ug/L	MW-211	04/22/2020		13.3000 *	12.4000
Cobalt, total	ug/L	MW-211	10/02/2020		10.3000	12.4000
Cobalt, total	ug/L	MW-211	04/08/2021		11.5000	12.4000
Cobalt, total	ug/L	MW-211	10/29/2021		13.6000 *	12.4000
Cobalt, total	ug/L	MW-211	04/25/2022		12.8000 *	12.4000
Cobalt, total	ug/L	MW-211	10/17/2022		13.3000 *	12.4000
Cobalt, total	ug/L	MW-211	04/10/2023		11.3000	12.4000
Cobalt, total	ug/L	MW-211	10/27/2023		10.7000	12.4000
Cobalt, total	ug/L	MW-211	04/02/2024		12.5000 *	12.4000
Cobalt, total	ug/L	MW-211	10/10/2024		12.9000 *	12.4000
Nickel, total	ug/L	MW-211	10/14/2010		45.4000 *	31.6000
Nickel, total	ug/L	MW-211	04/08/2011		42.8000 *	31.6000
Nickel, total	ug/L	MW-211	10/18/2011		11.2000	31.6000
Nickel, total	ug/L	MW-211	04/18/2012		33.1000 *	31.6000
Nickel, total	ug/L	MW-211	10/17/2012		33.9000 *	31.6000
Nickel, total	ug/L	MW-211	04/03/2013		31.3000	31.6000
Nickel, total	ug/L	MW-211	10/09/2013		30.0000	31.6000
Nickel, total	ug/L	MW-211	04/16/2014		35.9000 *	31.6000
Nickel, total	ug/L	MW-211	10/23/2014		35.1000 *	31.6000
Nickel, total	ug/L	MW-211	04/01/2015		41.3000 *	31.6000
Nickel, total	ug/L	MW-211	11/05/2015		34.7000 *	31.6000
Nickel, total	ug/L	MW-211	04/21/2016		39.7000 *	31.6000
Nickel, total	ug/L	MW-211	10/17/2016		37.5000 *	31.6000
Nickel, total	ug/L	MW-211	04/21/2017		34.9000 *	31.6000
Nickel, total	ug/L	MW-211	10/16/2017		35.3000 *	31.6000
Nickel, total	ug/L	MW-211	04/24/2018		35.8000 *	31.6000
Nickel, total	ug/L	MW-211	10/25/2018		33.8000 *	31.6000
Nickel, total	ug/L	MW-211	04/15/2019		43.6000 *	31.6000
Nickel, total	ug/L	MW-211	10/07/2019		26.9000	31.6000
Nickel, total	ug/L	MW-211	04/22/2020		38.3000 *	31.6000
Nickel, total	ug/L	MW-211	10/02/2020		30.5000	31.6000
Nickel, total	ug/L	MW-211	04/08/2021		28.7000	31.6000
Nickel, total	ug/L	MW-211	10/29/2021		44.3000 *	31.6000
Nickel, total	ug/L	MW-211	04/25/2022		28.1000	31.6000

* - 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-211	10/17/2022	28.5000	31.6000
Nickel, total	ug/L	MW-211	04/10/2023	27.2000	31.6000
Nickel, total	ug/L	MW-211	10/27/2023	30.5000	31.6000
Nickel, total	ug/L	MW-211	04/02/2024	30.0000	31.6000
Nickel, total	ug/L	MW-211	10/10/2024	33.0000 *	31.6000
Cobalt, total	ug/L	MW-31R	04/18/2012	13.3000 *	12.4000
Cobalt, total	ug/L	MW-31R	10/17/2012	6.7000	12.4000
Cobalt, total	ug/L	MW-31R	04/03/2013	7.8000	12.4000
Cobalt, total	ug/L	MW-31R	10/09/2013	9.6000	12.4000
Cobalt, total	ug/L	MW-31R	04/16/2014	10.9000	12.4000
Cobalt, total	ug/L	MW-31R	10/23/2014	8.7000	12.4000
Cobalt, total	ug/L	MW-31R	04/01/2015	11.1000	12.4000
Cobalt, total	ug/L	MW-31R	11/05/2015	11.7000	12.4000
Cobalt, total	ug/L	MW-31R	04/21/2016	12.2000	12.4000
Cobalt, total	ug/L	MW-31R	10/17/2016	12.6000 *	12.4000
Cobalt, total	ug/L	MW-31R	04/21/2017	12.5000 *	12.4000
Cobalt, total	ug/L	MW-31R	10/16/2017	11.5000	12.4000
Cobalt, total	ug/L	MW-31R	04/24/2018	15.8000 *	12.4000
Cobalt, total	ug/L	MW-31R	10/25/2018	13.3000 *	12.4000
Cobalt, total	ug/L	MW-31R	04/15/2019	17.7000 *	12.4000
Cobalt, total	ug/L	MW-31R	10/07/2019	15.0000 *	12.4000
Cobalt, total	ug/L	MW-31R	04/22/2020	19.7000 *	12.4000
Cobalt, total	ug/L	MW-31R	10/02/2020	17.5000 *	12.4000
Cobalt, total	ug/L	MW-31R	04/08/2021	25.9000 *	12.4000
Cobalt, total	ug/L	MW-31R	10/29/2021	15.0000 *	12.4000
Cobalt, total	ug/L	MW-31R	04/25/2022	17.0000 *	12.4000
Cobalt, total	ug/L	MW-31R	10/17/2022	16.2000 *	12.4000
Cobalt, total	ug/L	MW-31R	04/10/2023	18.3000 *	12.4000
Cobalt, total	ug/L	MW-31R	10/27/2023	17.6000 *	12.4000
Cobalt, total	ug/L	MW-31R	04/02/2024	20.6000 *	12.4000
Cobalt, total	ug/L	MW-31R	10/10/2024	14.6000 *	12.4000
Nickel, total	ug/L	MW-31R	04/18/2012	36.3000 *	31.6000
Nickel, total	ug/L	MW-31R	10/17/2012	28.7000	31.6000
Nickel, total	ug/L	MW-31R	04/03/2013	24.4000	31.6000
Nickel, total	ug/L	MW-31R	10/09/2013	24.7000	31.6000
Nickel, total	ug/L	MW-31R	04/16/2014	25.3000	31.6000
Nickel, total	ug/L	MW-31R	10/23/2014	21.4000	31.6000
Nickel, total	ug/L	MW-31R	04/01/2015	19.3000	31.6000
Nickel, total	ug/L	MW-31R	11/05/2015	20.6000	31.6000
Nickel, total	ug/L	MW-31R	04/21/2016	22.2000	31.6000
Nickel, total	ug/L	MW-31R	10/17/2016	18.8000	31.6000
Nickel, total	ug/L	MW-31R	04/21/2017	23.9000	31.6000
Nickel, total	ug/L	MW-31R	10/16/2017	23.6000	31.6000
Nickel, total	ug/L	MW-31R	04/24/2018	29.5000	31.6000
Nickel, total	ug/L	MW-31R	10/25/2018	19.9000	31.6000
Nickel, total	ug/L	MW-31R	04/15/2019	31.9000 *	31.6000
Nickel, total	ug/L	MW-31R	10/07/2019	24.7000	31.6000
Nickel, total	ug/L	MW-31R	04/22/2020	37.3000 *	31.6000
Nickel, total	ug/L	MW-31R	10/02/2020	34.1000 *	31.6000
Nickel, total	ug/L	MW-31R	04/08/2021	52.1000 *	31.6000
Nickel, total	ug/L	MW-31R	10/29/2021	24.1000	31.6000
Nickel, total	ug/L	MW-31R	04/25/2022	30.9000	31.6000
Nickel, total	ug/L	MW-31R	10/17/2022	25.0000	31.6000
Nickel, total	ug/L	MW-31R	04/10/2023	34.7000 *	31.6000
Nickel, total	ug/L	MW-31R	10/27/2023	30.3000	31.6000
Nickel, total	ug/L	MW-31R	04/02/2024	34.2000 *	31.6000
Nickel, total	ug/L	MW-31R	10/10/2024	22.7000	31.6000
Arsenic, total	ug/L	MW-7	10/14/2010	219.0000 *	89.3000
Arsenic, total	ug/L	MW-7	04/08/2011	251.0000 *	89.3000
Arsenic, total	ug/L	MW-7	10/18/2011	131.0000 *	89.3000
Arsenic, total	ug/L	MW-7	04/18/2012	188.0000 *	89.3000
Arsenic, total	ug/L	MW-7	10/16/2012	139.0000 *	89.3000
Arsenic, total	ug/L	MW-7	04/03/2013	136.0000 *	89.3000
Arsenic, total	ug/L	MW-7	10/09/2013	91.1000 *	89.3000
Arsenic, total	ug/L	MW-7	04/16/2014	107.0000 *	89.3000
Arsenic, total	ug/L	MW-7	10/23/2014	297.0000 *	89.3000
Arsenic, total	ug/L	MW-7	04/01/2015	112.0000 *	89.3000
Arsenic, total	ug/L	MW-7	11/05/2015	215.0000 *	89.3000
Arsenic, total	ug/L	MW-7	04/21/2016	146.0000 *	89.3000
Arsenic, total	ug/L	MW-7	10/17/2016	165.0000 *	89.3000
Arsenic, total	ug/L	MW-7	04/21/2017	197.0000 *	89.3000

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

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Arsenic, total	ug/L	MW-7	10/16/2017		115.0000	*	89.3000
Arsenic, total	ug/L	MW-7	04/24/2018	ND	4.0000		89.3000
Arsenic, total	ug/L	MW-7	10/25/2018		36.6000		89.3000
Arsenic, total	ug/L	MW-7	04/15/2019		457.0000	*	89.3000
Arsenic, total	ug/L	MW-7	10/07/2019		33.5000		89.3000
Arsenic, total	ug/L	MW-7	04/22/2020		88.8000		89.3000
Arsenic, total	ug/L	MW-7	10/01/2020		306.0000	*	89.3000
Arsenic, total	ug/L	MW-7	04/08/2021		181.0000	*	89.3000
Arsenic, total	ug/L	MW-7	10/29/2021		117.0000	*	89.3000
Arsenic, total	ug/L	MW-7	04/25/2022		104.0000	*	89.3000
Arsenic, total	ug/L	MW-7	10/17/2022		255.0000	*	89.3000
Arsenic, total	ug/L	MW-7	04/10/2023		158.0000	*	89.3000
Arsenic, total	ug/L	MW-7	10/27/2023		275.0000	*	89.3000
Arsenic, total	ug/L	MW-7	04/02/2024		167.0000	*	89.3000
Arsenic, total	ug/L	MW-7	10/10/2024		215.0000	*	89.3000

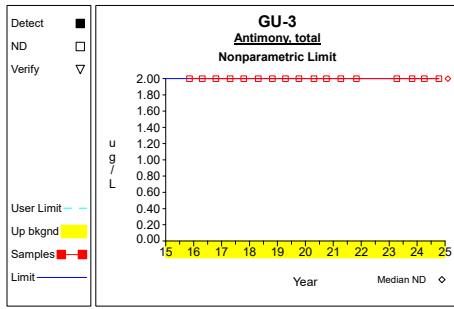
* - Significantly increased over background.

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

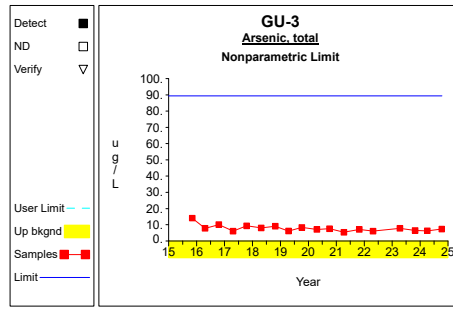
*** - Manual exclusion.

ND = Not Detected, Result = detection limit.

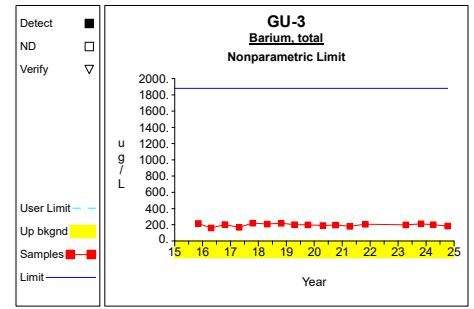
Up vs. Down Prediction Limits



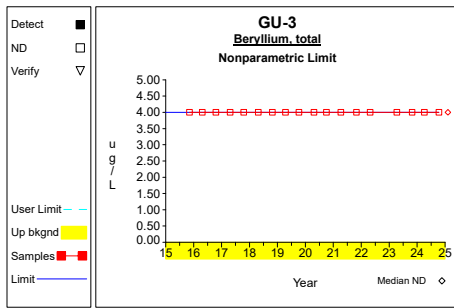
Graph 1



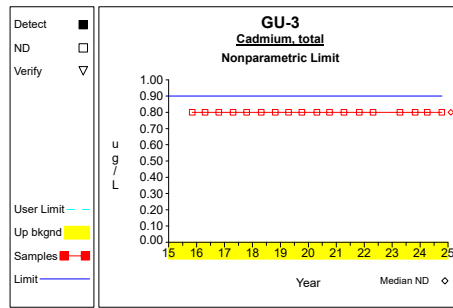
Graph 2



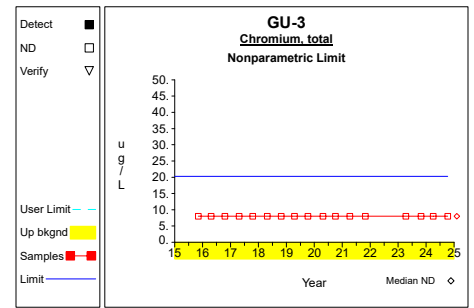
Graph 3



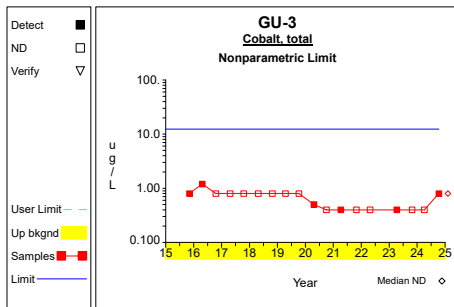
Graph 4



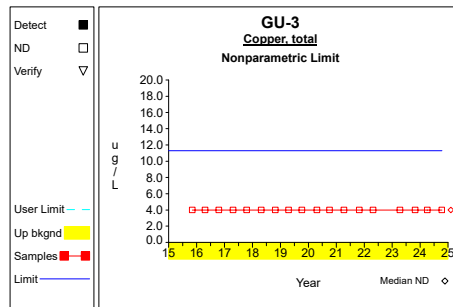
Graph 5



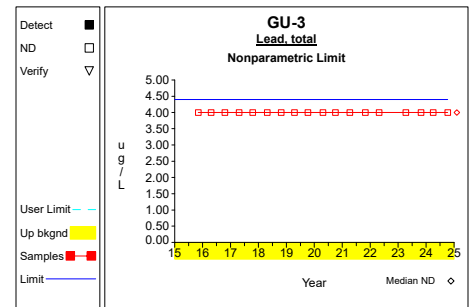
Graph 6



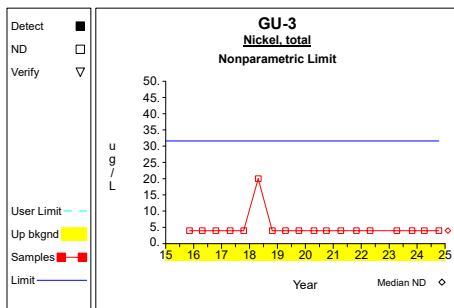
Graph 7



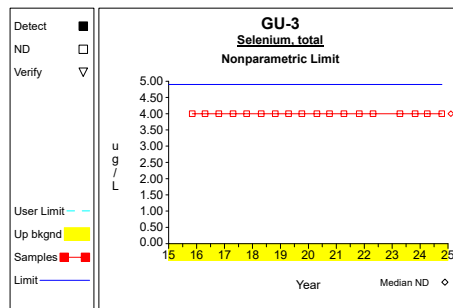
Graph 8



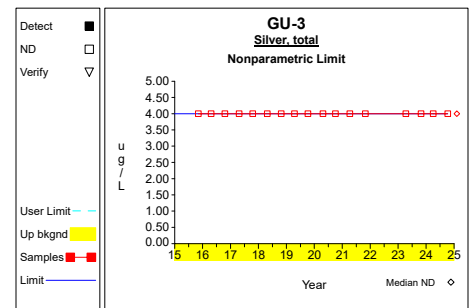
Graph 9



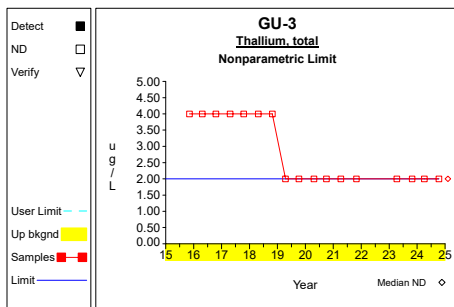
Graph 10



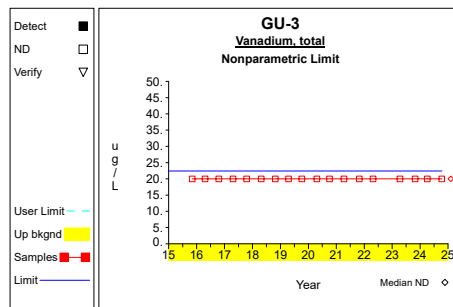
Graph 11



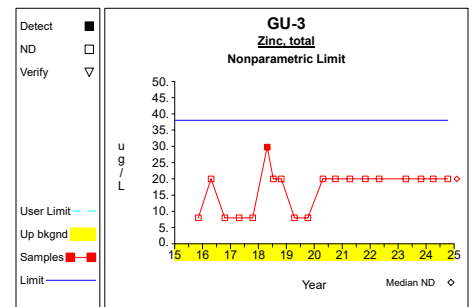
Graph 12



Graph 13

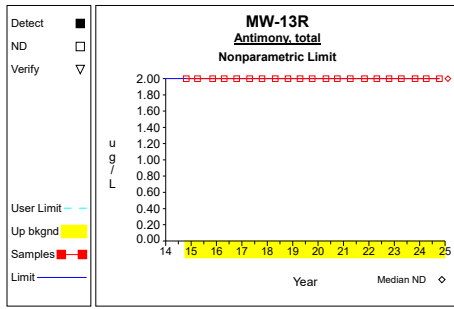


Graph 14

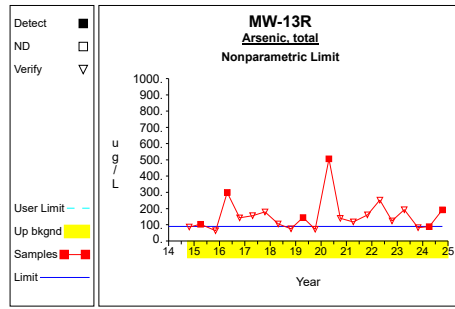


Graph 15

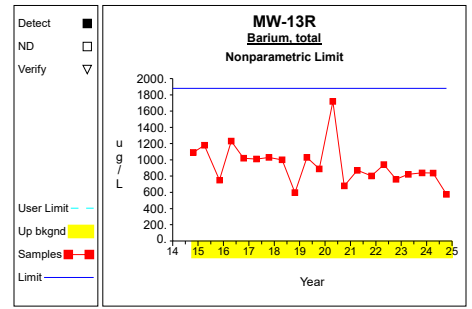
Up vs. Down Prediction Limits



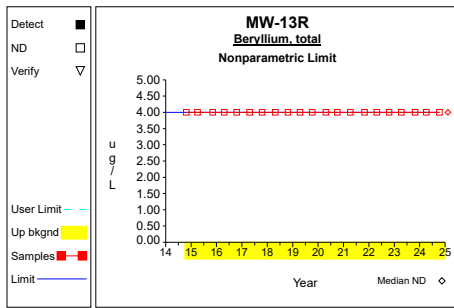
Graph 16



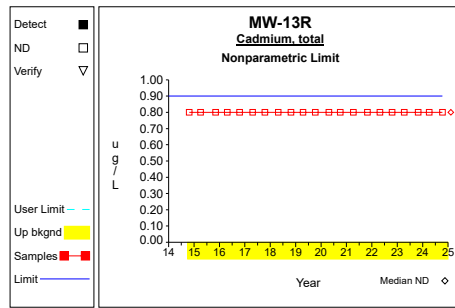
Graph 17



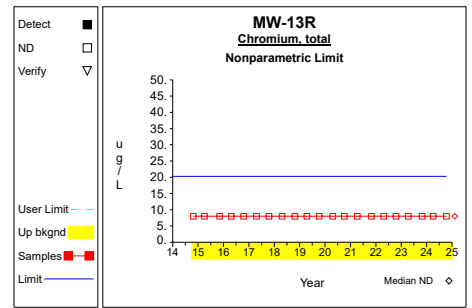
Graph 18



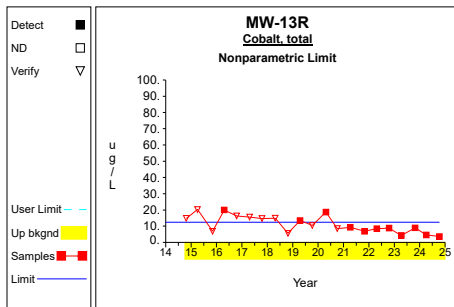
Graph 19



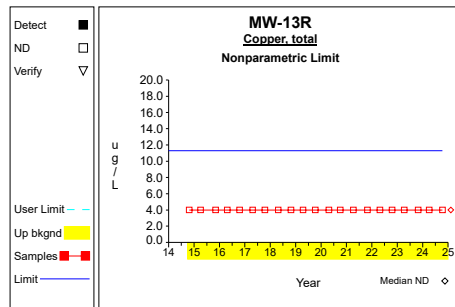
Graph 20



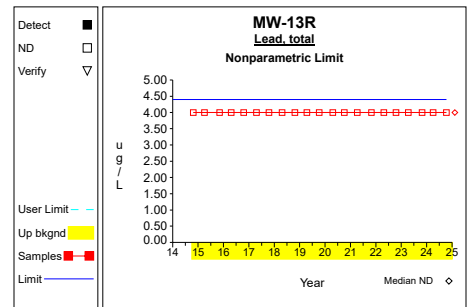
Graph 21



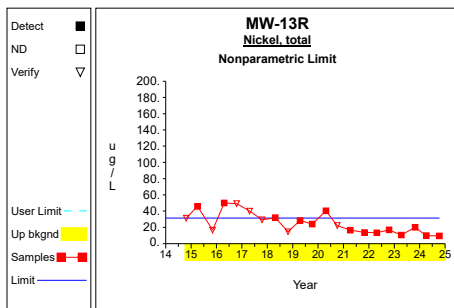
Graph 22



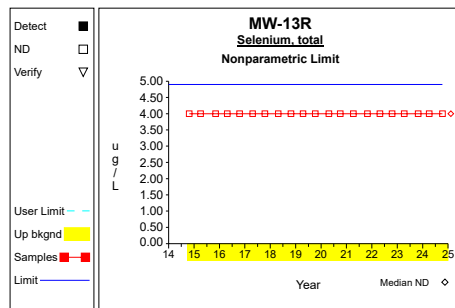
Graph 23



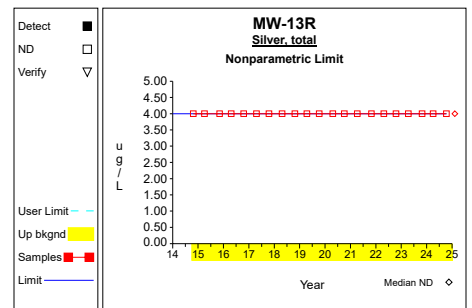
Graph 24



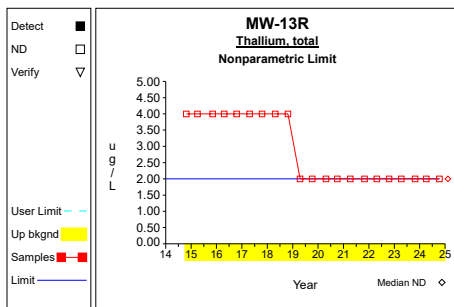
Graph 25



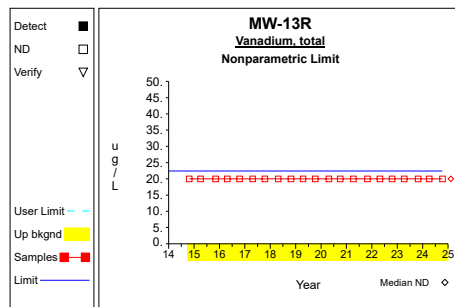
Graph 26



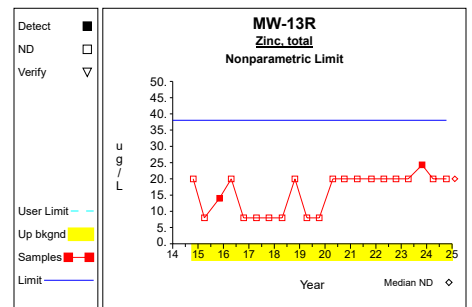
Graph 27



Graph 28

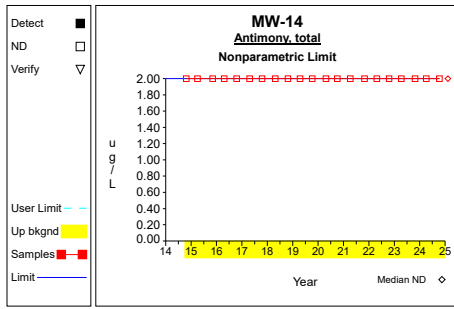


Graph 29

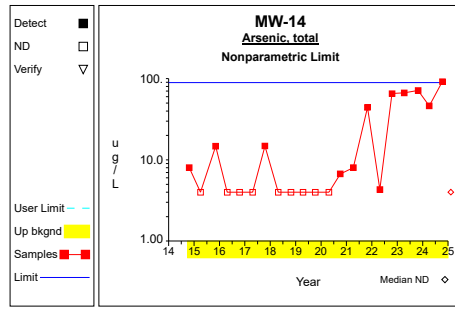


Graph 30

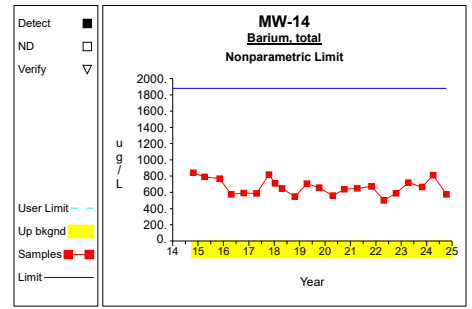
Up vs. Down Prediction Limits



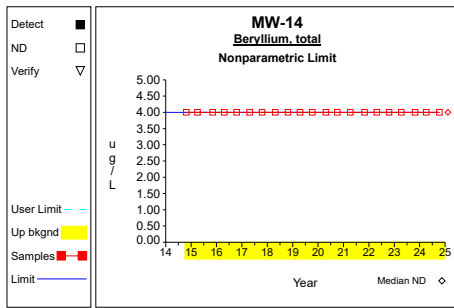
Graph 31



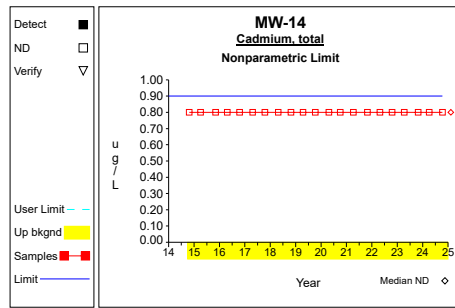
Graph 32



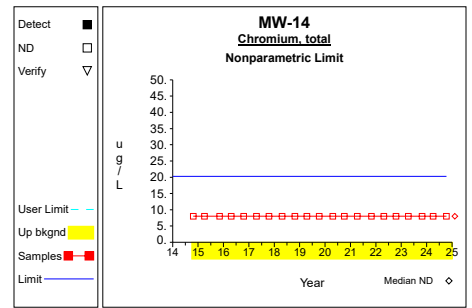
Graph 33



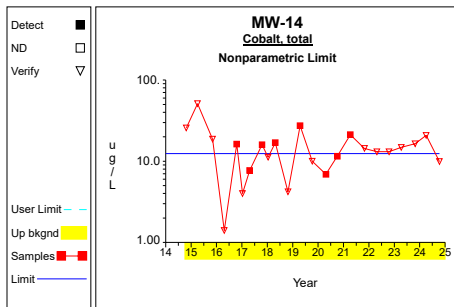
Graph 34



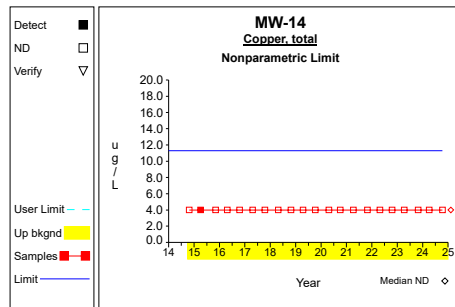
Graph 35



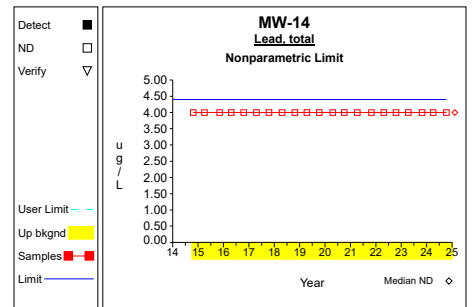
Graph 36



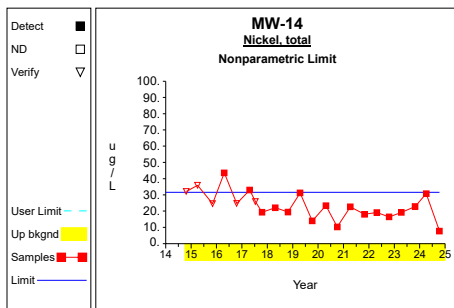
Graph 37



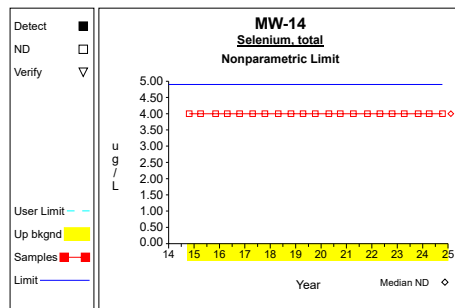
Graph 38



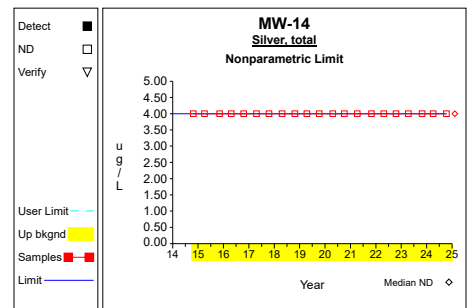
Graph 39



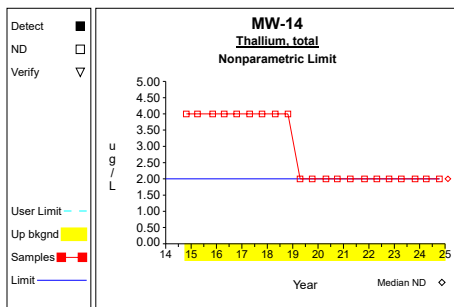
Graph 40



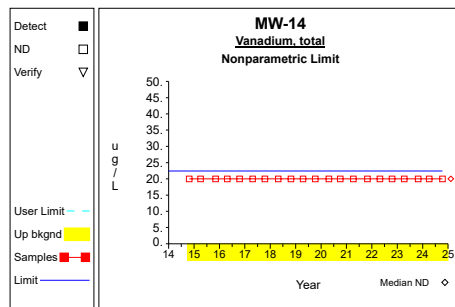
Graph 41



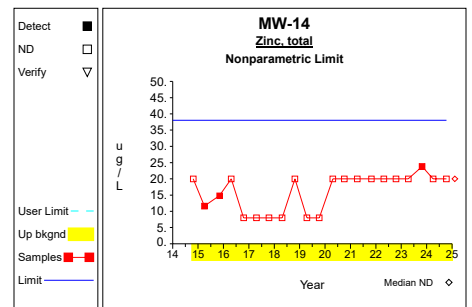
Graph 42



Graph 43

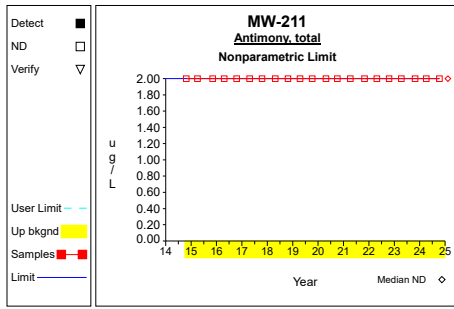


Graph 44

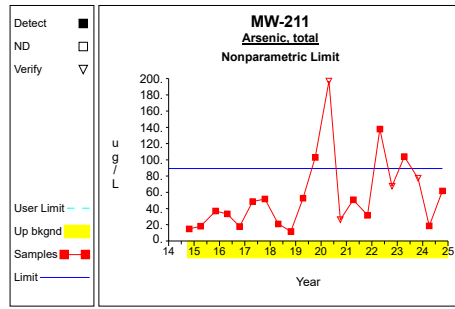


Graph 45

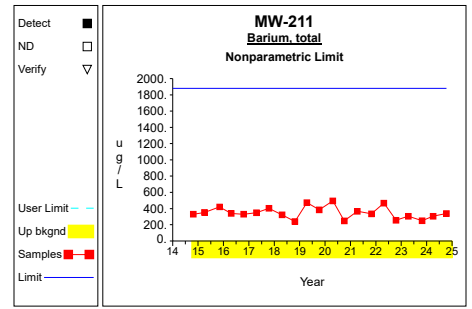
Up vs. Down Prediction Limits



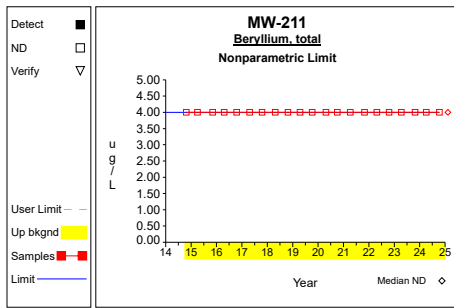
Graph 46



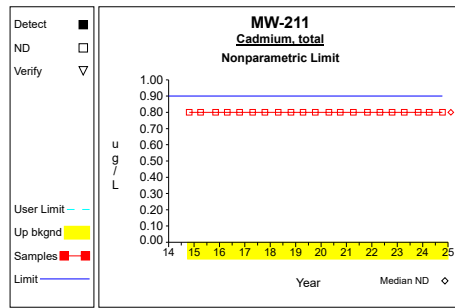
Graph 47



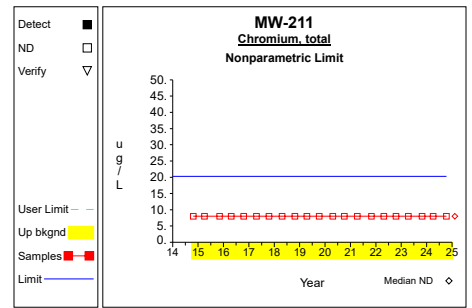
Graph 48



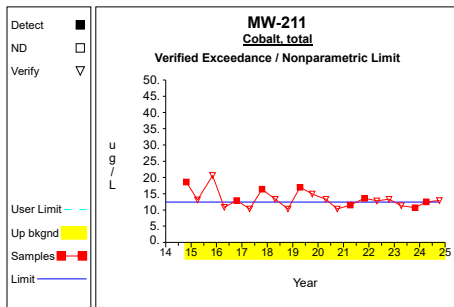
Graph 49



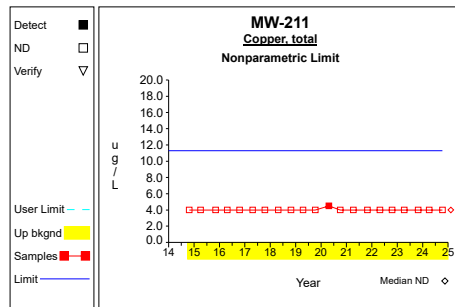
Graph 50



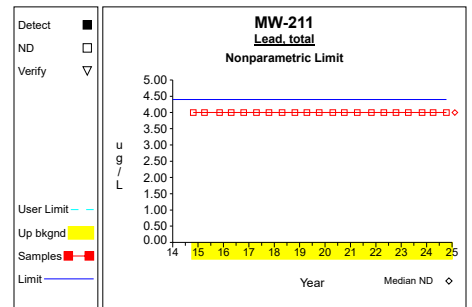
Graph 51



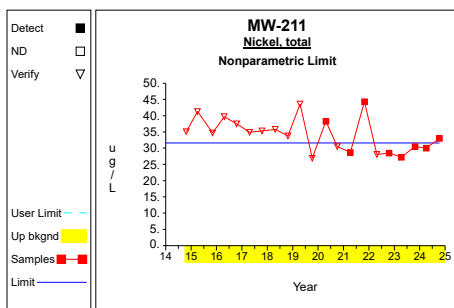
Graph 52



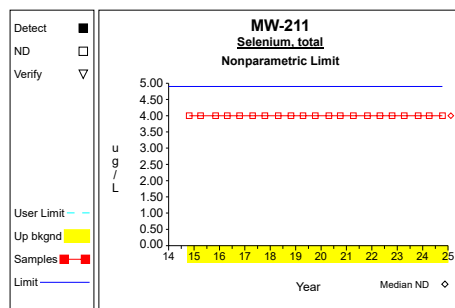
Graph 53



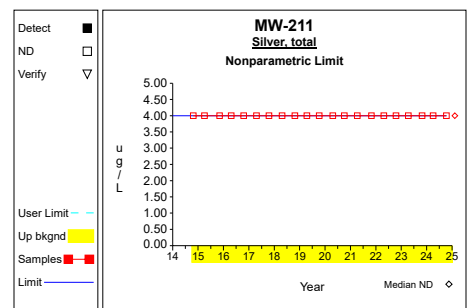
Graph 54



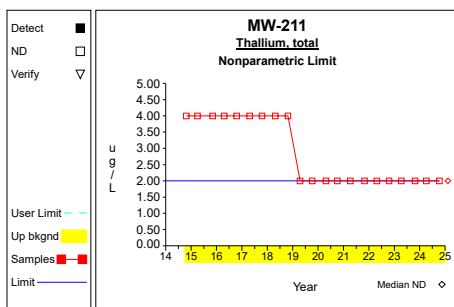
Graph 55



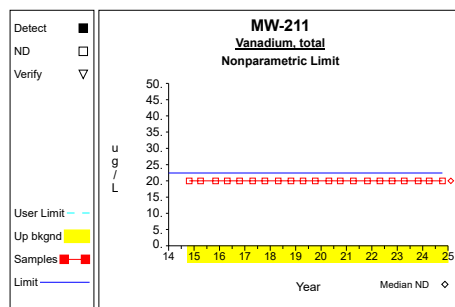
Graph 56



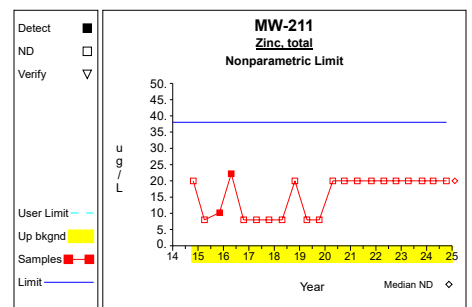
Graph 57



Graph 58

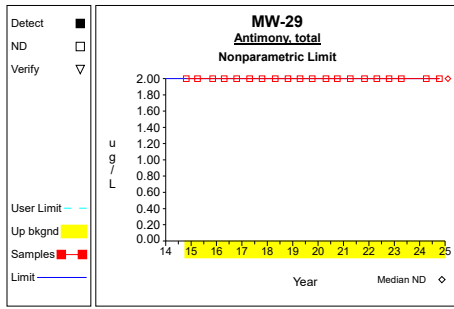


Graph 59

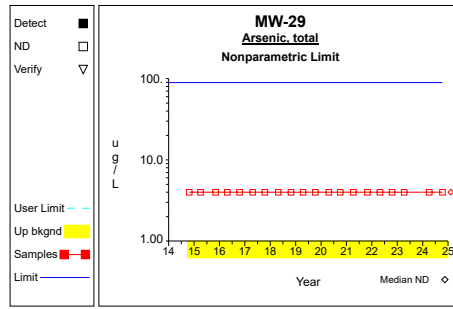


Graph 60

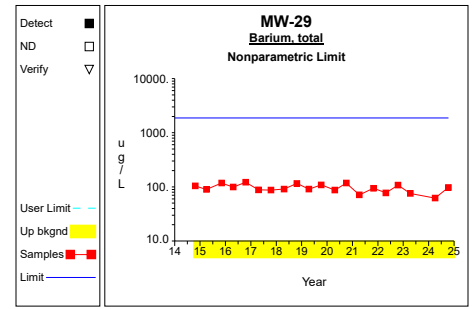
Up vs. Down Prediction Limits



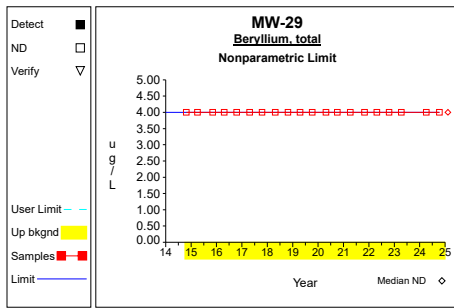
Graph 61



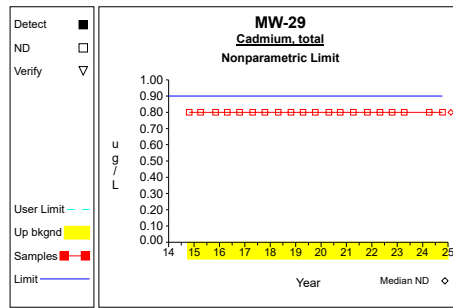
Graph 62



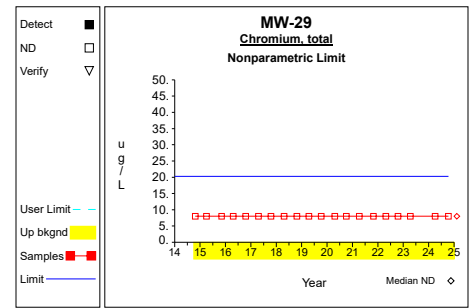
Graph 63



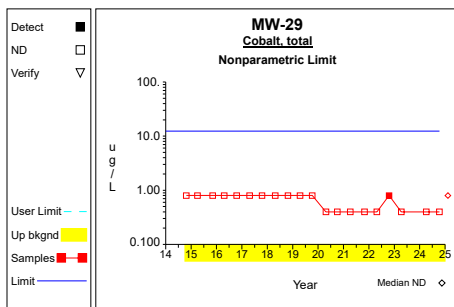
Graph 64



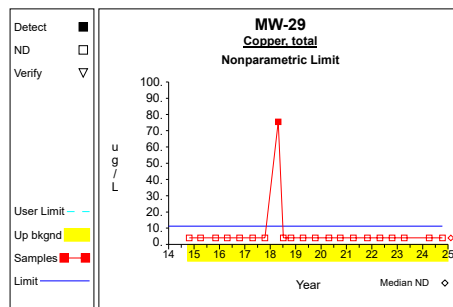
Graph 65



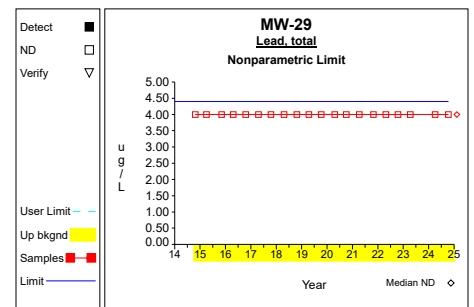
Graph 66



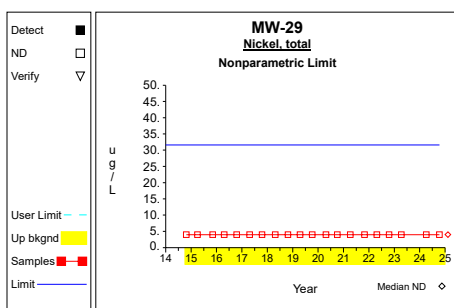
Graph 67



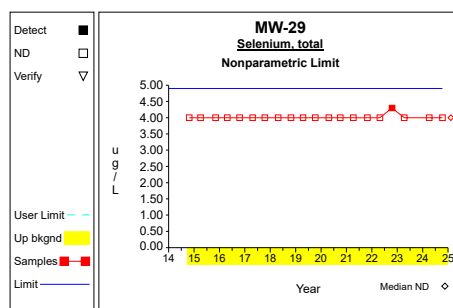
Graph 68



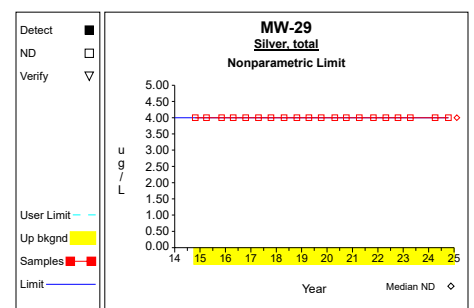
Graph 69



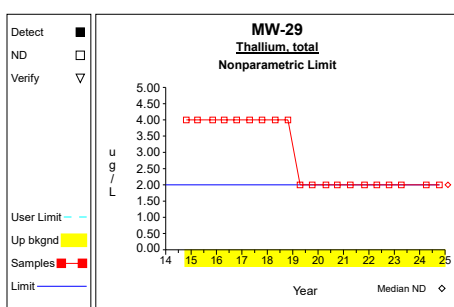
Graph 70



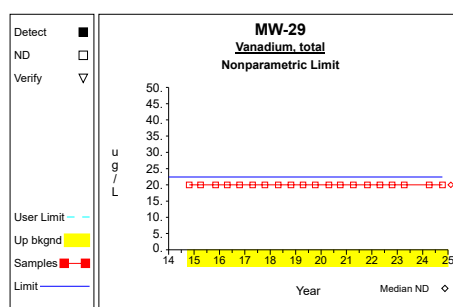
Graph 71



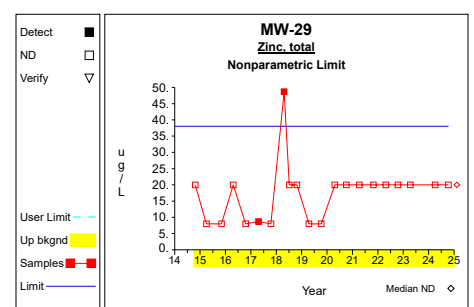
Graph 72



Graph 73

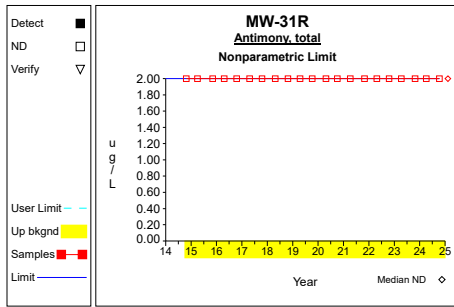


Graph 74

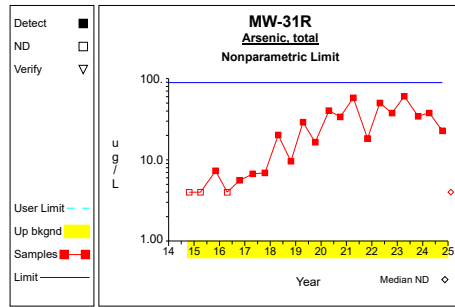


Graph 75

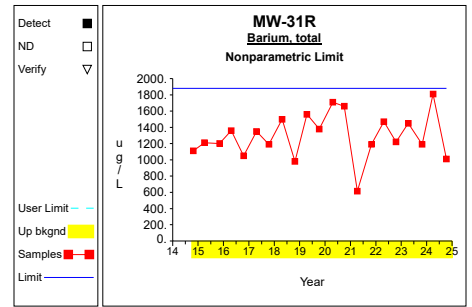
Up vs. Down Prediction Limits



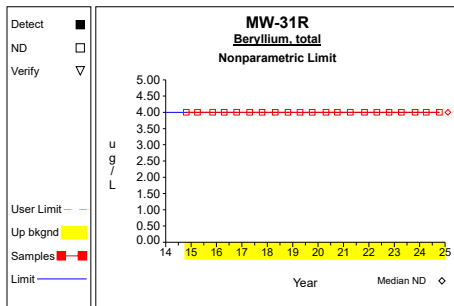
Graph 76



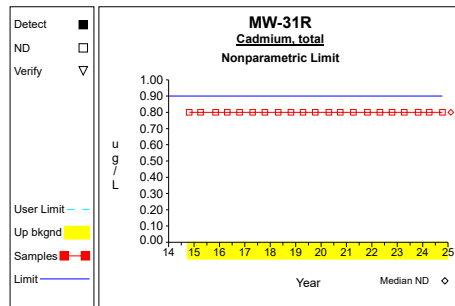
Graph 77



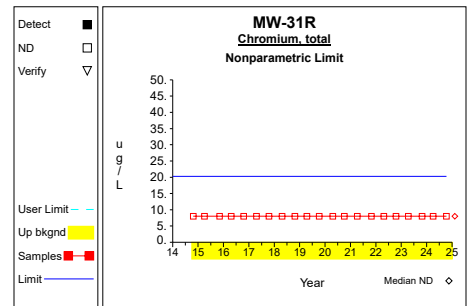
Graph 78



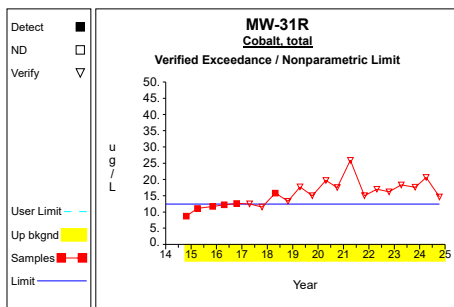
Graph 79



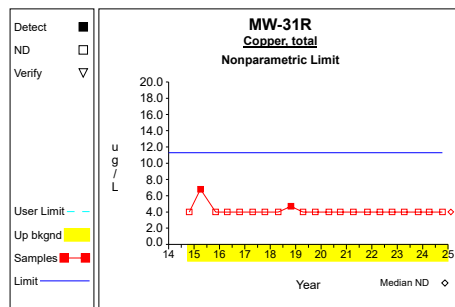
Graph 80



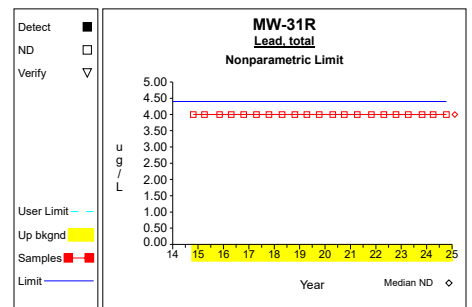
Graph 81



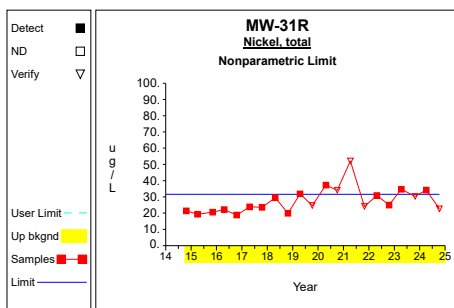
Graph 82



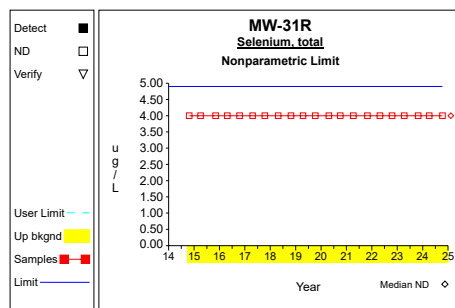
Graph 83



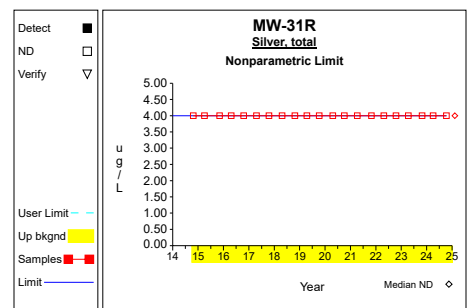
Graph 84



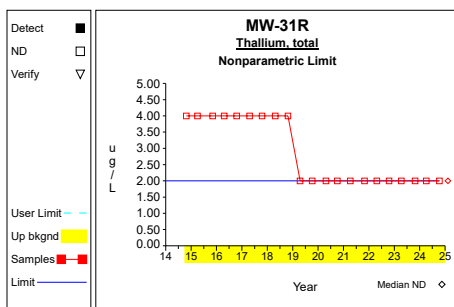
Graph 85



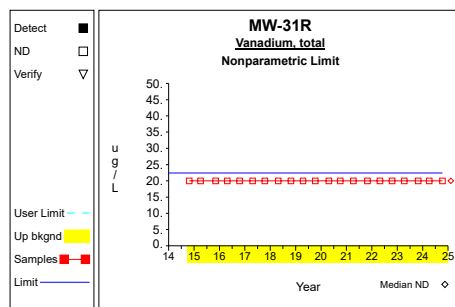
Graph 86



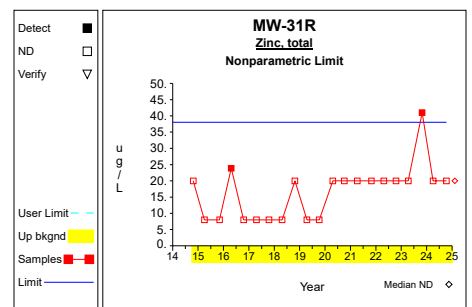
Graph 87



Graph 88

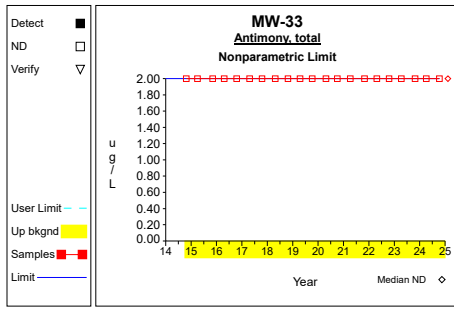


Graph 89

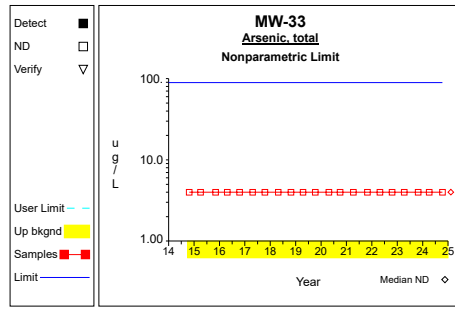


Graph 90

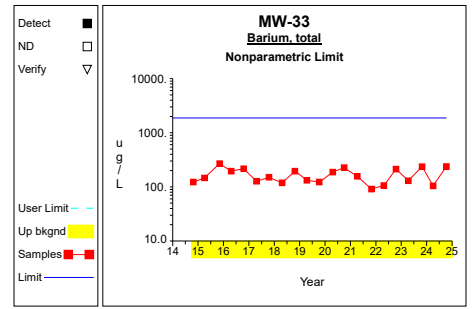
Up vs. Down Prediction Limits



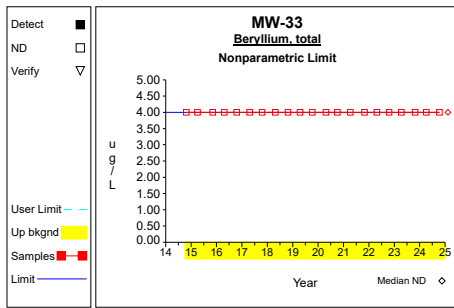
Graph 91



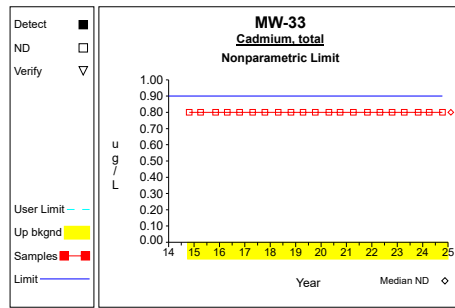
Graph 92



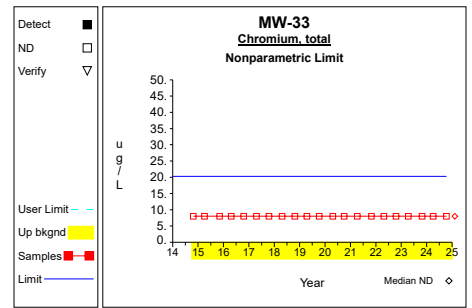
Graph 93



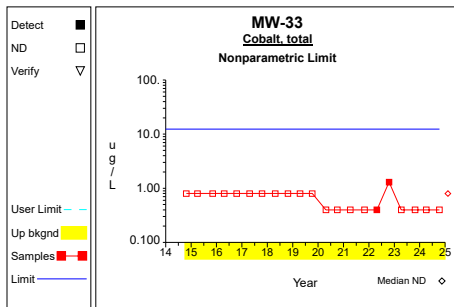
Graph 94



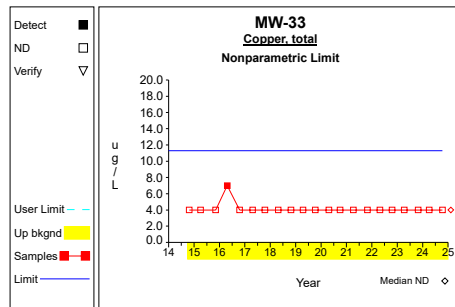
Graph 95



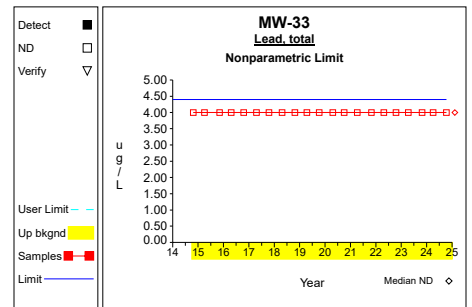
Graph 96



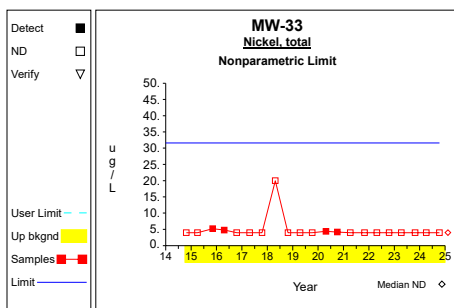
Graph 97



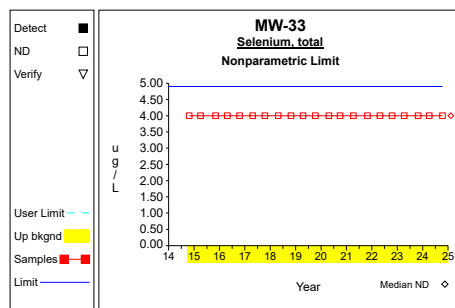
Graph 98



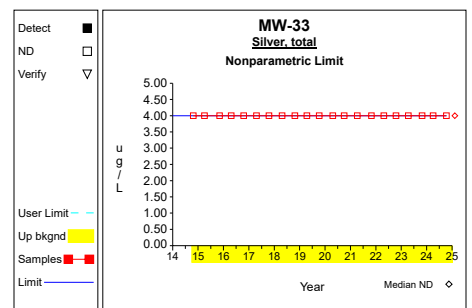
Graph 99



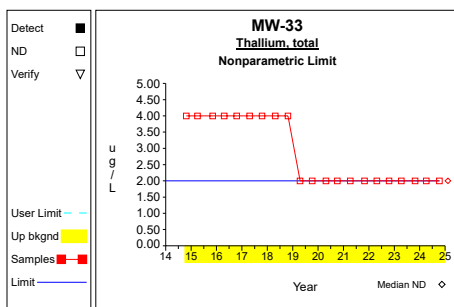
Graph 100



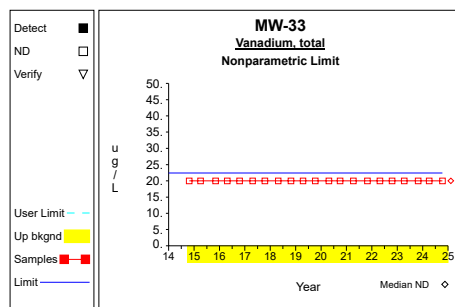
Graph 101



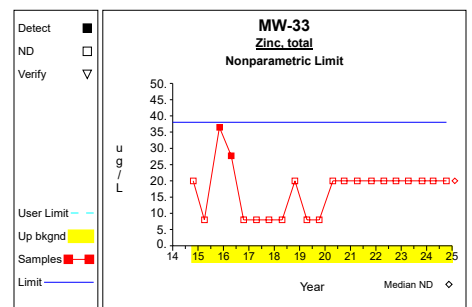
Graph 102



Graph 103

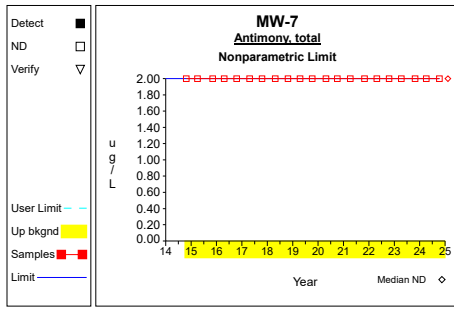


Graph 104

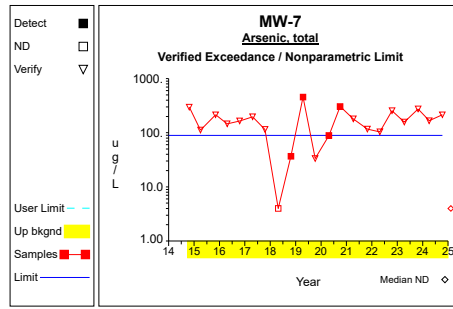


Graph 105

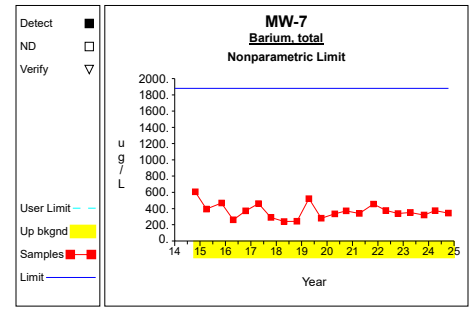
Up vs. Down Prediction Limits



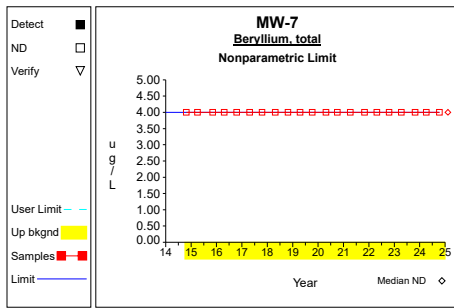
Graph 106



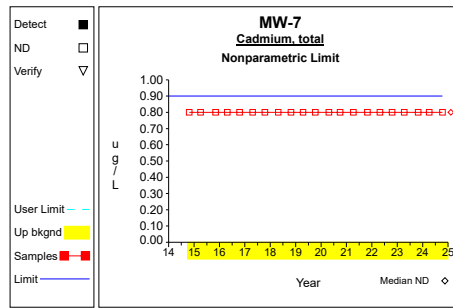
Graph 107



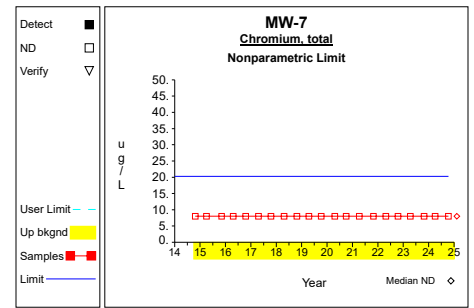
Graph 108



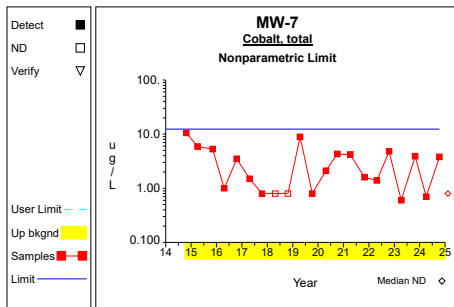
Graph 109



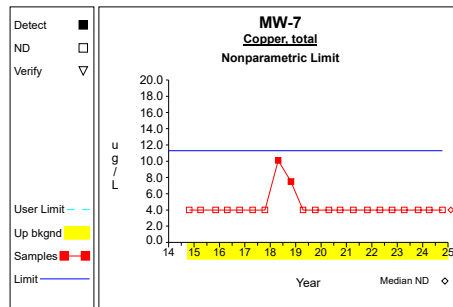
Graph 110



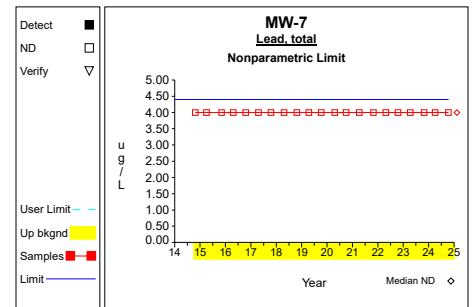
Graph 111



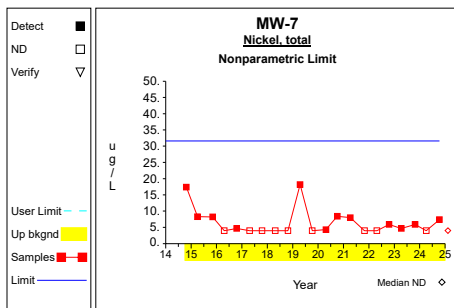
Graph 112



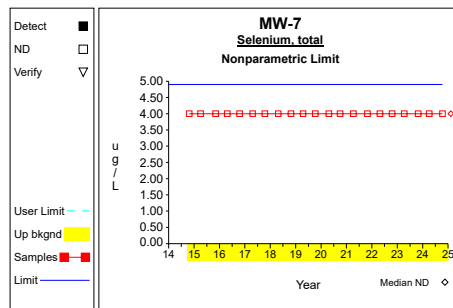
Graph 113



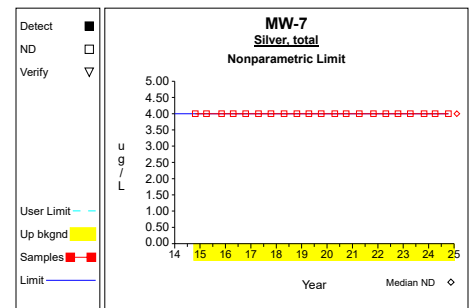
Graph 114



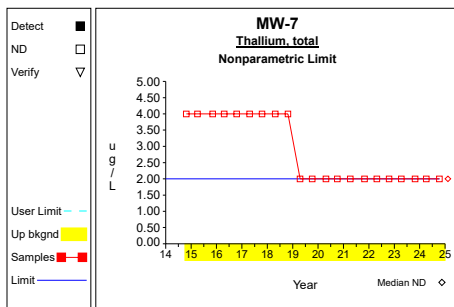
Graph 115



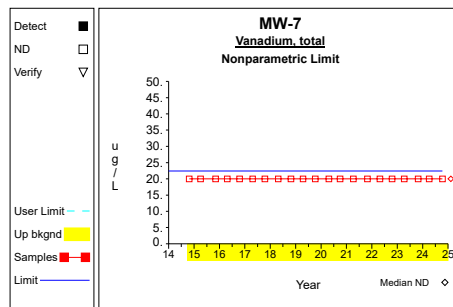
Graph 116



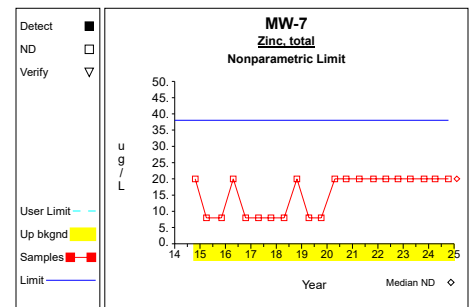
Graph 117



Graph 118

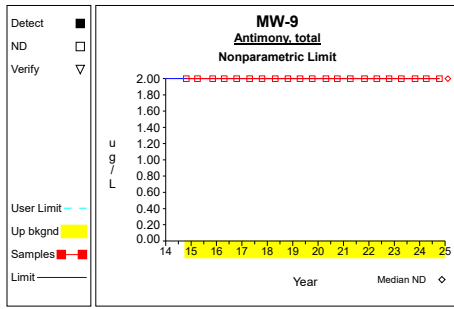


Graph 119

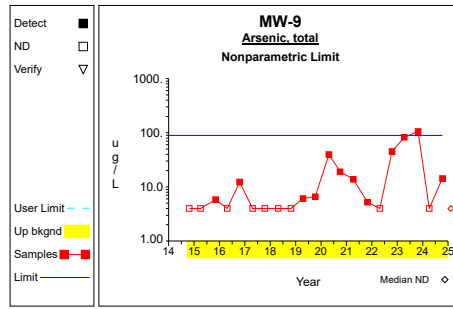


Graph 120

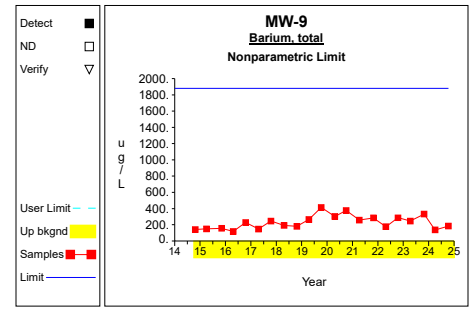
Up vs. Down Prediction Limits



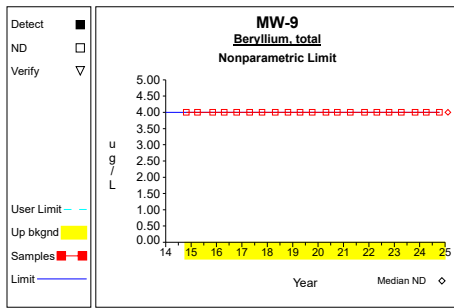
Graph 121



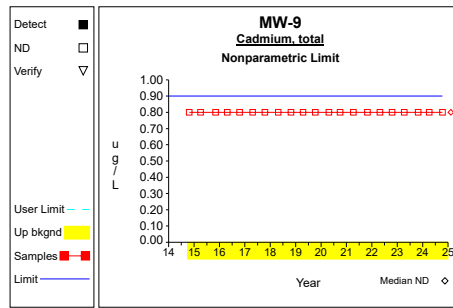
Graph 122



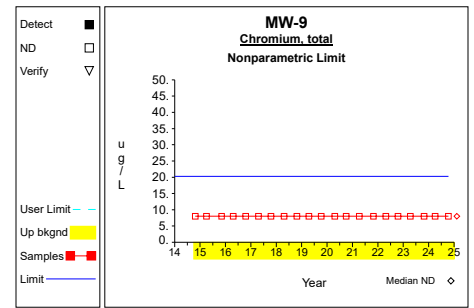
Graph 123



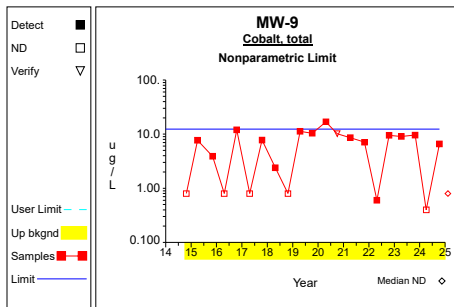
Graph 124



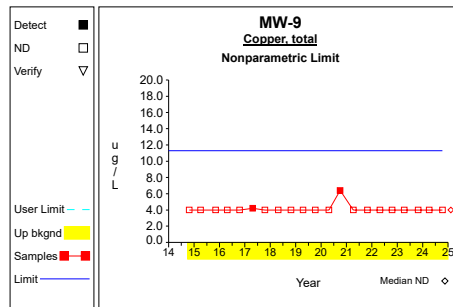
Graph 125



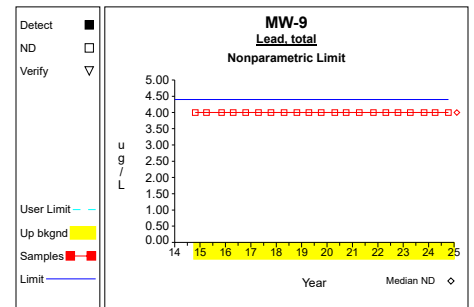
Graph 126



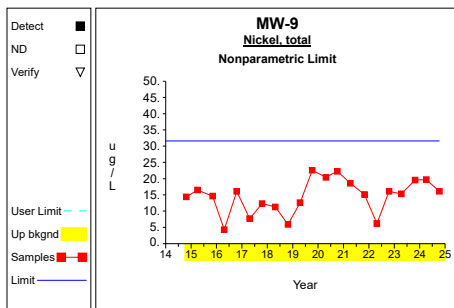
Graph 127



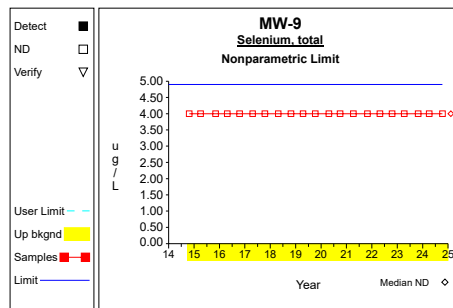
Graph 128



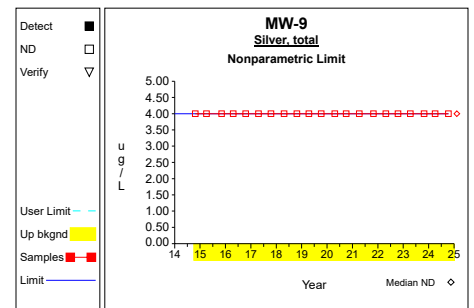
Graph 129



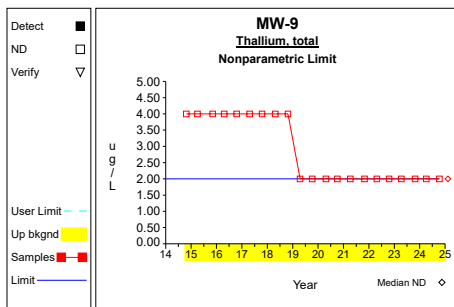
Graph 130



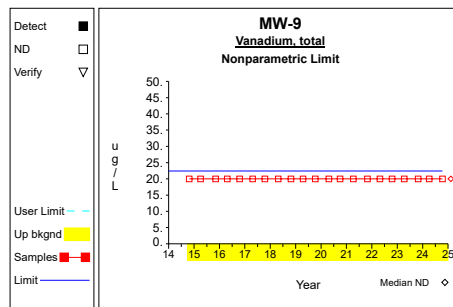
Graph 131



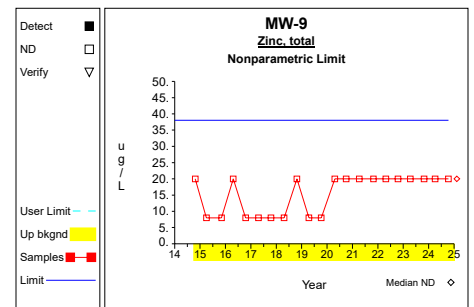
Graph 132



Graph 133

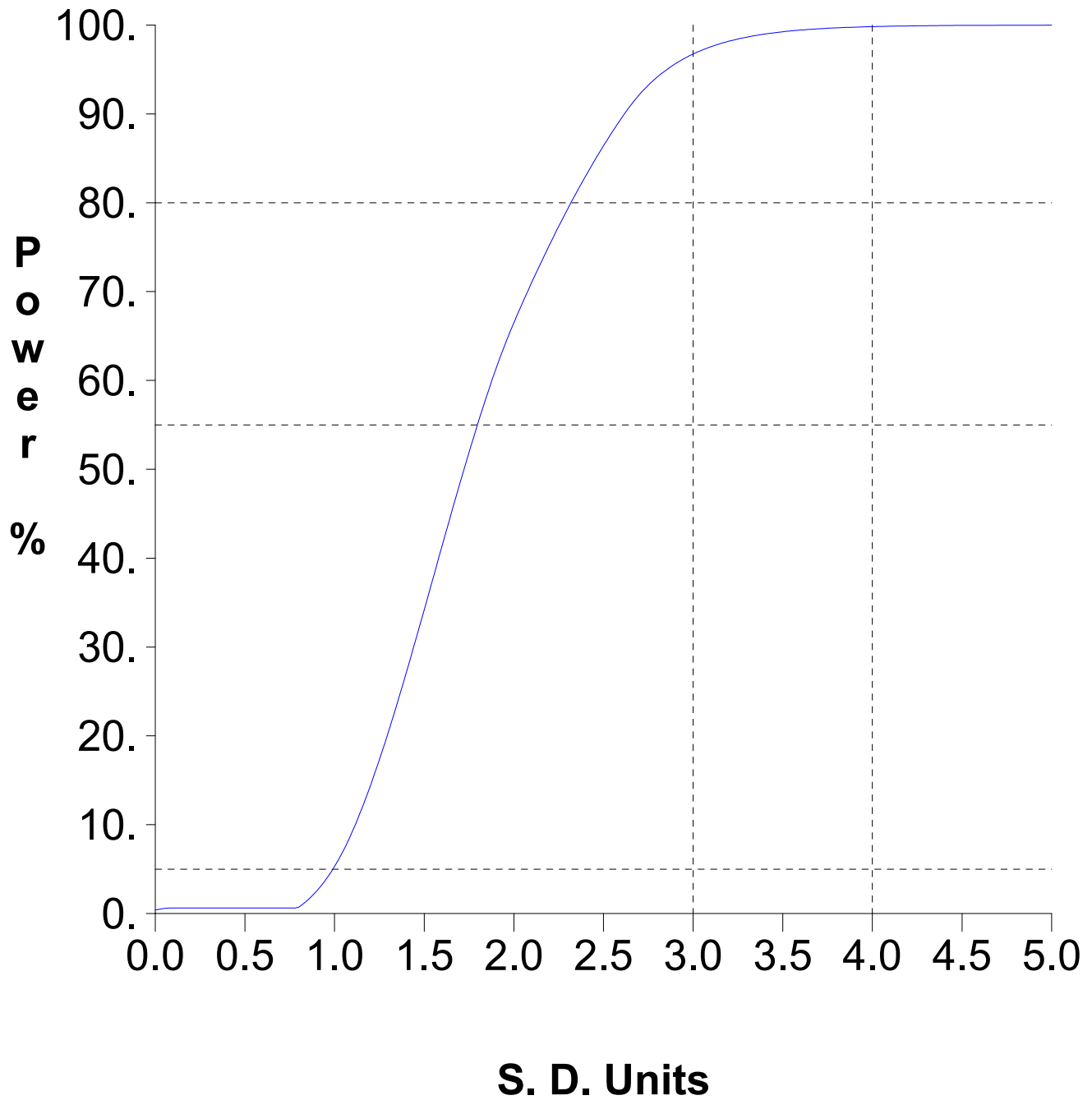


Graph 134



Graph 135

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



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

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

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = max(X) = 89.3	Compute nonparametric prediction limit as largest background measurement.
2	Conf = 0.99	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = max(X) = 1880.0	Compute nonparametric prediction limit as largest background measurement.
2	Conf = 0.99	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

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

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = max(X) = 0.9	Compute nonparametric prediction limit as largest background measurement.
2	Conf = 0.99	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = max(X) = 20.3	Compute nonparametric prediction limit as largest background measurement.
2	Conf = 0.99	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = max(X) = 12.4	Compute nonparametric prediction limit as largest background measurement.
2	Conf = 0.99	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = max(X) = 11.3	Compute nonparametric prediction limit as largest background measurement.
2	Conf = 0.99	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = max(X) = 4.4	Compute nonparametric prediction limit as largest background measurement.
2	Conf = 0.99	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = max(X) = 31.6	Compute nonparametric prediction limit as largest background measurement.
2	Conf = 0.99	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = max(X) = 4.9	Compute nonparametric prediction limit as largest background measurement.
2	Conf = 0.99	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

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

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

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

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = max(X) = 22.4	Compute nonparametric prediction limit as largest background measurement.
2	Conf = 0.99	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = max(X) = 38.0	Compute nonparametric prediction limit as largest background measurement.
2	Conf = 0.99	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

Attachment C

Assessment Statistics for Trace Metals

Table 1

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

Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend	
Arsenic, total	ug/L	MW-13R	4	139.100	61.711	1.176	66.510	211.690	10.000		**
Cobalt, total	ug/L	MW-13R	4	5.375	2.453	1.176	2.490	8.260	2.100	dec	**
Nickel, total	ug/L	MW-13R	4	12.500	5.088	1.176	6.515	18.485	100.000	dec	
Arsenic, total	ug/L	MW-14	4	69.050	18.792	1.176	46.945	91.155	10.000		**
Cobalt, total	ug/L	MW-14	4	15.475	4.500	1.176	10.182	20.768	2.100		**
Nickel, total	ug/L	MW-14	4	20.125	9.598	1.176	8.835	31.415	100.000	dec	
Arsenic, total	ug/L	MW-211	4	65.400	35.756	1.176	23.340	107.460	10.000		**
Cobalt, total	ug/L	MW-211	4	11.850	1.025	1.176	10.645	13.055	2.100		**
Nickel, total	ug/L	MW-211	4	30.175	2.378	1.176	27.378	32.972	100.000		
Arsenic, total	ug/L	MW-31R	4	38.900	15.907	1.176	20.188	57.612	10.000	inc	**
Cobalt, total	ug/L	MW-31R	4	17.775	2.474	1.176	14.864	20.686	2.100	inc	**
Nickel, total	ug/L	MW-31R	4	30.475	5.544	1.176	23.954	36.996	100.000	inc	
Arsenic, total	ug/L	MW-7	4	203.750	53.687	1.176	140.599	266.901	10.000		**
Cobalt, total	ug/L	MW-7	4	2.250	1.848	1.176	0.076	4.424	2.100		
Nickel, total	ug/L	MW-7	4	5.000	2.285	1.176	2.312	7.688	100.000		
Arsenic, total	ug/L	MW-9	4	51.175	50.855	1.176	0.000	110.995	10.000		
Cobalt, total	ug/L	MW-9	4	6.425	4.226	1.176	1.454	11.396	2.100		
Nickel, total	ug/L	MW-9	4	17.675	2.304	1.176	14.965	20.385	100.000		

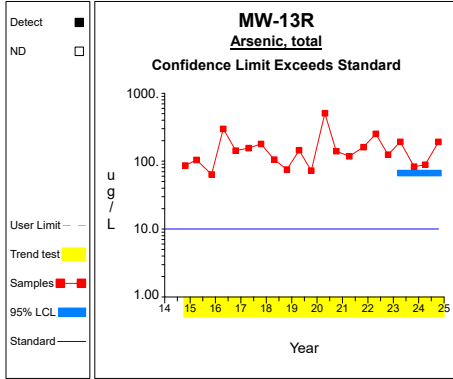
* - Insufficient Data

** - Significant Exceedance

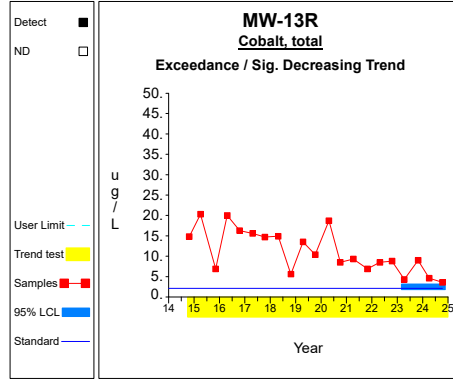
LCL = Lower Confidence Limit

UCL = Upper Confidence Limit

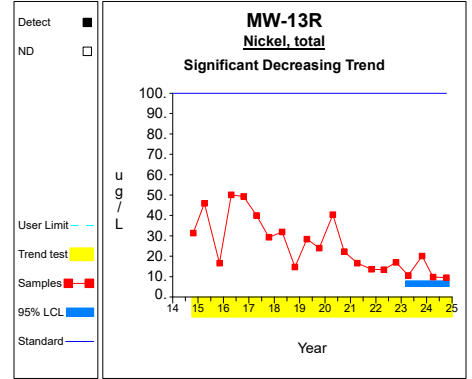
Confidence Limits (Assessment)



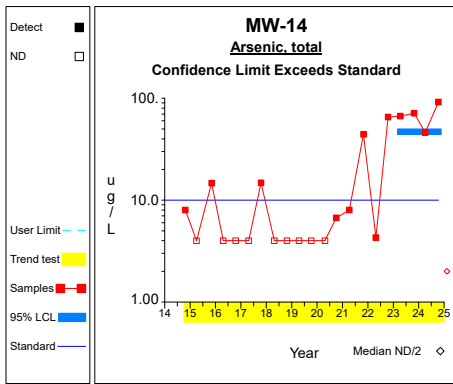
Graph 1



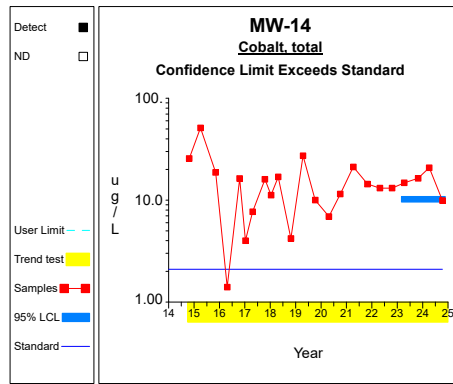
Graph 2



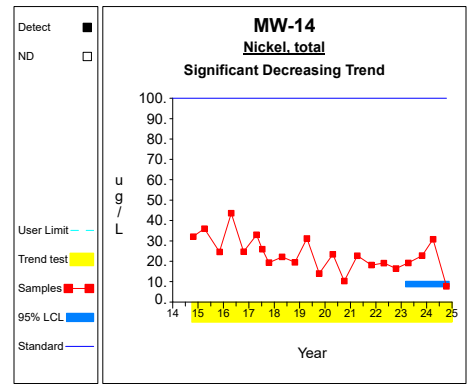
Graph 3



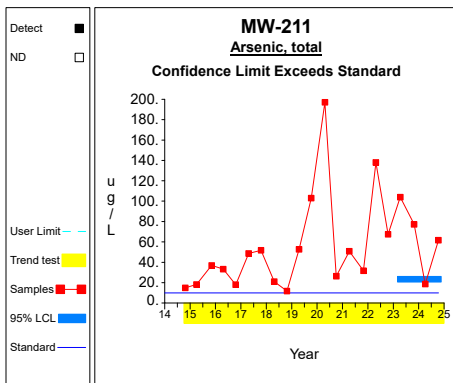
Graph 4



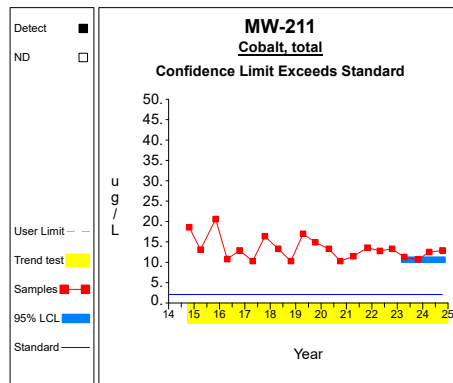
Graph 5



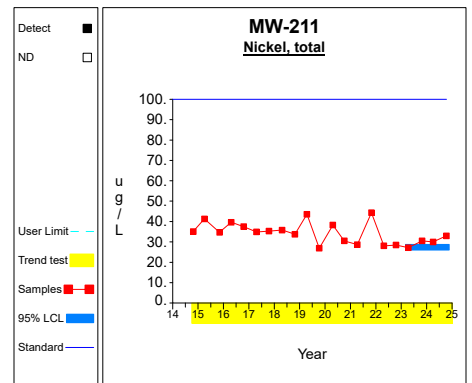
Graph 6



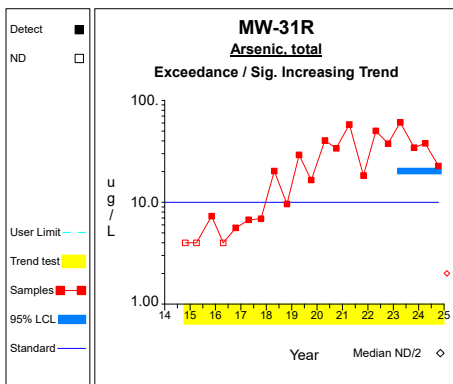
Graph 7



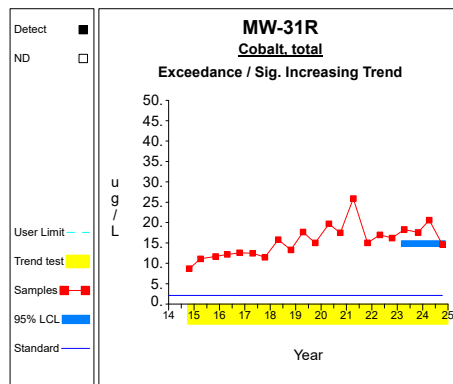
Graph 8



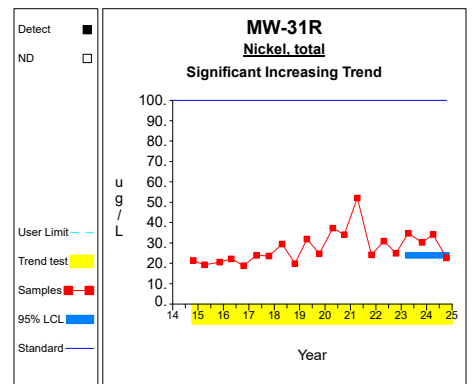
Graph 9



Graph 10

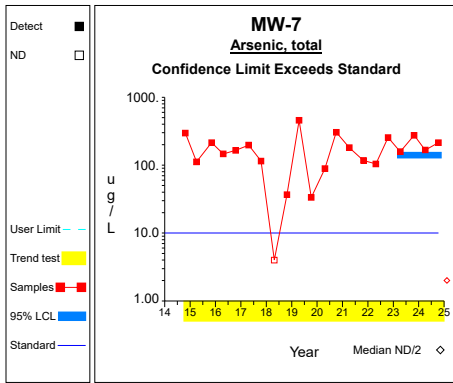


Graph 11

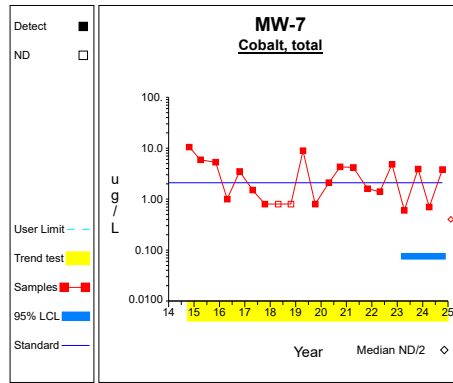


Graph 12

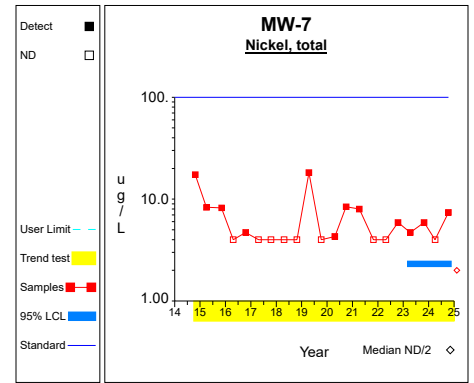
Confidence Limits (Assessment)



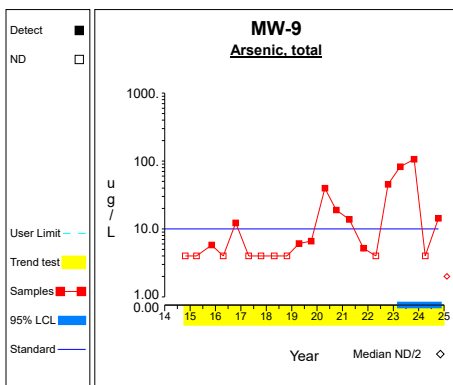
Graph 13



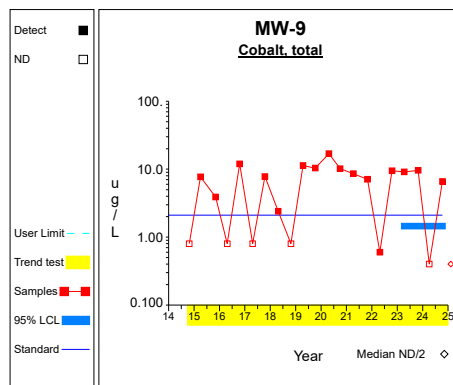
Graph 14



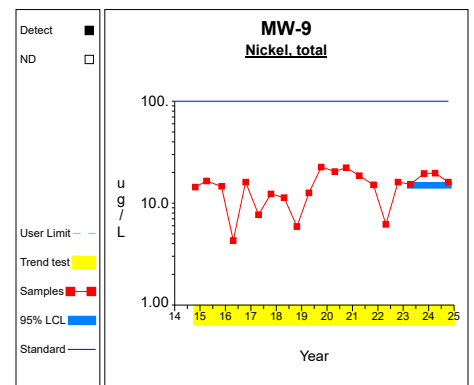
Graph 15



Graph 16



Graph 17



Graph 18

Worksheet 6 - Assessment Monitoring
Arsenic, total (ug/L) at MW-13R

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 556.4 / 4$ $= 139.1$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((88819.98 - 309580.96/4) / (4-1))^{1/2}$ $= 61.711$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 139.1 - 2.353 * 61.711/4^{1/2}$ $= 66.51$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 139.1 + 2.353 * 61.711/4^{1/2}$ $= 211.69$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 21 * (21-1) / 2$ $= 210$	Number of sample pairs during trend detection period.
6	$S = 3.275$	Sen's estimator of trend.
7	$\text{var}(S) = 1096.667$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (210 \pm 2.576 * 1096.667^{1/2}) / 2$ $= [62.347, 147.653]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [-11.305, 17.412]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cobalt, total (ug/L) at MW-13R

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 21.5 / 4$ $= 5.375$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((133.61 - 462.25/4) / (4-1))^{1/2}$ $= 2.453$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 5.375 - 2.353 * 2.453/4^{1/2}$ $= 2.49$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 5.375 + 2.353 * 2.453/4^{1/2}$ $= 8.26$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 21 * (21-1) / 2$ $= 210$	Number of sample pairs during trend detection period.
6	$S = -1.449$	Sen's estimator of trend.
7	$\text{var}(S) = 1094.667$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (210 \pm 2.576 * 1094.667^{1/2}) / 2$ $= [62.386, 147.614]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [-1.935, -0.449]$	Two-sided confidence interval for slope.
10	$\text{UCL}(S) < 0$	Significant decreasing trend.

Worksheet 6 - Assessment Monitoring
Nickel, total (ug/L) at MW-13R

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 50.0 / 4$ $= 12.5$	Compute the mean of the last 4 measurements.
2	$S = \left(\frac{\text{sum}[X^2] - \text{sum}[X]^2/N}{N-1} \right)^{1/2}$ $= \left(\frac{702.66 - 2500.0/4}{4-1} \right)^{1/2}$ $= 5.088$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 12.5 - 2.353 * 5.088/4^{1/2}$ $= 6.515$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 12.5 + 2.353 * 5.088/4^{1/2}$ $= 18.485$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 21 * (21-1) / 2$ $= 210$	Number of sample pairs during trend detection period.
6	$S = -3.427$	Sen's estimator of trend.
7	$\text{var}(S) = 1095.667$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (210 \pm 2.576 * 1095.667^{1/2}) / 2$ $= [62.366, 147.634]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [-5.09, -1.297]$	Two-sided confidence interval for slope.
10	$\text{UCL}(S) < 0$	Significant decreasing trend.

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 276.2 / 4$ $= 69.05$	Compute the mean of the last 4 measurements.
2	$S = \left(\frac{\text{sum}[X^2] - \text{sum}[X]^2/N}{N-1} \right)^{1/2}$ $= \left(\frac{20131.02 - 76286.44/4}{4-1} \right)^{1/2}$ $= 18.792$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 69.05 - 2.353 * 18.792/4^{1/2}$ $= 46.945$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 69.05 + 2.353 * 18.792/4^{1/2}$ $= 91.155$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 21 * (21-1) / 2$ $= 210$	Number of sample pairs during trend detection period.
6	$S = 4.803$	Sen's estimator of trend.
7	$\text{var}(S) = 1003.667$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (210 \pm 2.576 * 1003.667^{1/2}) / 2$ $= [64.195, 145.805]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.0, 9.977]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 61.9 / 4$ $= 15.475$	Compute the mean of the last 4 measurements.
2	$S = \left(\frac{\text{sum}[X^2] - \text{sum}[X]^2/N}{N-1} \right)^{1/2}$ $= \left(\frac{1018.65 - 3831.61/4}{4-1} \right)^{1/2}$ $= 4.5$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 15.475 - 2.353 * 4.5/4^{1/2}$ $= 10.182$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 15.475 + 2.353 * 4.5/4^{1/2}$ $= 20.768$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 23 * (23-1) / 2$ $= 253$	Number of sample pairs during trend detection period.
6	$S = 0.0$	Sen's estimator of trend.
7	$\text{var}(S) = 1432.667$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (253 \pm 2.576 * 1432.667^{1/2}) / 2$ $= [77.748, 175.252]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [-1.947, 1.722]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 80.5 / 4$ $= 20.125$	Compute the mean of the last 4 measurements.
2	$S = \left(\frac{\text{sum}[X^2] - \text{sum}[X]^2/N}{N-1} \right)^{1/2}$ $= \left(\frac{1896.41 - 6480.25/4}{4-1} \right)^{1/2}$ $= 9.598$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 20.125 - 2.353 * 9.598/4^{1/2}$ $= 8.835$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 20.125 + 2.353 * 9.598/4^{1/2}$ $= 31.415$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = -1.61$	Sen's estimator of trend.
7	$\text{var}(S) = 1257.667$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 1257.667^{1/2}) / 2$ $= [69.823, 161.177]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [-3.492, -0.165]$	Two-sided confidence interval for slope.
10	$\text{UCL}(S) < 0$	Significant decreasing trend.

Worksheet 6 - Assessment Monitoring
Arsenic, total (ug/L) at MW-211

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 261.6 / 4$ $= 65.4$	Compute the mean of the last 4 measurements.
2	$S = \left(\frac{\text{sum}[X^2] - \text{sum}[X]^2/N}{N-1} \right)^{1/2}$ $= \left(\frac{20944.14 - 68434.56/4}{4-1} \right)^{1/2}$ $= 35.756$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 65.4 - 2.353 * 35.756/4^{1/2}$ $= 23.34$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 65.4 + 2.353 * 35.756/4^{1/2}$ $= 107.46$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 21 * (21-1) / 2$ $= 210$	Number of sample pairs during trend detection period.
6	$S = 5.162$	Sen's estimator of trend.
7	$\text{var}(S) = 1096.667$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (210 \pm 2.576 * 1096.667^{1/2}) / 2$ $= [62.347, 147.653]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [-0.662, 13.002]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cobalt, total (ug/L) at MW-211

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 47.4 / 4$ $= 11.85$	Compute the mean of the last 4 measurements.
2	$S = \left(\frac{\text{sum}[X^2] - \text{sum}[X]^2/N}{N-1} \right)^{1/2}$ $= \left(\frac{564.84 - 2246.76/4}{4-1} \right)^{1/2}$ $= 1.025$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 11.85 - 2.353 * 1.025/4^{1/2}$ $= 10.645$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 11.85 + 2.353 * 1.025/4^{1/2}$ $= 13.055$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 21 * (21-1) / 2$ $= 210$	Number of sample pairs during trend detection period.
6	$S = -0.248$	Sen's estimator of trend.
7	$\text{var}(S) = 1088.333$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (210 \pm 2.576 * 1088.333^{1/2}) / 2$ $= [62.509, 147.491]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [-0.938, 0.182]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel, total (ug/L) at MW-211

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 120.7 / 4$ $= 30.175$	Compute the mean of the last 4 measurements.
2	$S = \left(\frac{\text{sum}[X^2] - \text{sum}[X]^2/N}{N-1} \right)^{1/2}$ $= \left(\frac{3659.09 - 14568.49/4}{4-1} \right)^{1/2}$ $= 2.378$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 30.175 - 2.353 * 2.378/4^{1/2}$ $= 27.378$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 30.175 + 2.353 * 2.378/4^{1/2}$ $= 32.972$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 21 * (21-1) / 2$ $= 210$	Number of sample pairs during trend detection period.
6	$S = -0.936$	Sen's estimator of trend.
7	$\text{var}(S) = 1095.667$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (210 \pm 2.576 * 1095.667^{1/2}) / 2$ $= [62.366, 147.634]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [-1.764, 0.258]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Arsenic, total (ug/L) at MW-31R

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 155.6 / 4$ $= 38.9$	Compute the mean of the last 4 measurements.
2	$S = \left(\frac{\text{sum}[X^2] - \text{sum}[X]^2/N}{N-1} \right)^{1/2}$ $= \left(\frac{6811.98 - 24211.36/4}{4-1} \right)^{1/2}$ $= 15.907$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 38.9 - 2.353 * 15.907/4^{1/2}$ $= 20.188$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 38.9 + 2.353 * 15.907/4^{1/2}$ $= 57.612$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 21 * (21-1) / 2$ $= 210$	Number of sample pairs during trend detection period.
6	$S = 4.437$	Sen's estimator of trend.
7	$\text{var}(S) = 1093.0$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (210 \pm 2.576 * 1093.0^{1/2}) / 2$ $= [62.418, 147.582]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [2.1, 7.381]$	Two-sided confidence interval for slope.
10	$\text{LCL}(S) > 0$	Significant increasing trend.

Worksheet 6 - Assessment Monitoring
Cobalt, total (ug/L) at MW-31R

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 71.1 / 4$ $= 17.775$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((1282.17 - 5055.21/4) / (4-1))^{1/2}$ $= 2.474$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 17.775 - 2.353 * 2.474/4^{1/2}$ $= 14.864$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 17.775 + 2.353 * 2.474/4^{1/2}$ $= 20.686$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 21 * (21-1) / 2$ $= 210$	Number of sample pairs during trend detection period.
6	$S = 0.878$	Sen's estimator of trend.
7	$\text{var}(S) = 1095.667$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (210 \pm 2.576 * 1095.667^{1/2}) / 2$ $= [62.366, 147.634]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.413, 1.36]$	Two-sided confidence interval for slope.
10	$\text{LCL}(S) > 0$	Significant increasing trend.

Worksheet 6 - Assessment Monitoring
Nickel, total (ug/L) at MW-31R

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 121.9 / 4$ $= 30.475$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((3807.11 - 14859.61/4) / (4-1))^{1/2}$ $= 5.544$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 30.475 - 2.353 * 5.544/4^{1/2}$ $= 23.954$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 30.475 + 2.353 * 5.544/4^{1/2}$ $= 36.996$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 21 * (21-1) / 2$ $= 210$	Number of sample pairs during trend detection period.
6	$S = 1.274$	Sen's estimator of trend.
7	$\text{var}(S) = 1096.667$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (210 \pm 2.576 * 1096.667^{1/2}) / 2$ $= [62.347, 147.653]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.126, 2.571]$	Two-sided confidence interval for slope.
10	$\text{LCL}(S) > 0$	Significant increasing trend.

Worksheet 6 - Assessment Monitoring
Arsenic, total (ug/L) at MW-7

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 815.0 / 4$ $= 203.75$	Compute the mean of the last 4 measurements.
2	$S = \left(\frac{\text{sum}[X^2] - \text{sum}[X]^2/N}{N-1} \right)^{1/2}$ $= \left(\frac{174703.0 - 664225.0/4}{4-1} \right)^{1/2}$ $= 53.687$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 203.75 - 2.353 * 53.687/4^{1/2}$ $= 140.599$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 203.75 + 2.353 * 53.687/4^{1/2}$ $= 266.901$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 21 * (21-1) / 2$ $= 210$	Number of sample pairs during trend detection period.
6	$S = 3.109$	Sen's estimator of trend.
7	$\text{var}(S) = 1095.667$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (210 \pm 2.576 * 1095.667^{1/2}) / 2$ $= [62.366, 147.634]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [-21.038, 28.309]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cobalt, total (ug/L) at MW-7

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 9.0 / 4$ $= 2.25$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((30.5 - 81.0/4) / (4-1))^{1/2}$ $= 1.848$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 2.25 - 2.353 * 1.848/4^{1/2}$ $= 0.076$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 2.25 + 2.353 * 1.848/4^{1/2}$ $= 4.424$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 21 * (21-1) / 2$ $= 210$	Number of sample pairs during trend detection period.
6	$S = -0.159$	Sen's estimator of trend.
7	$\text{var}(S) = 1094.667$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (210 \pm 2.576 * 1094.667^{1/2}) / 2$ $= [62.386, 147.614]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [-0.809, 0.299]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Nickel, total (ug/L) at MW-7

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 20.0 / 4$ $= 5.0$	Compute the mean of the last 4 measurements.
2	$S = \left(\frac{\text{sum}[X^2] - \text{sum}[X]^2/N}{N-1} \right)^{1/2}$ $= \left(\frac{115.66 - 400.0/4}{4-1} \right)^{1/2}$ $= 2.285$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 5.0 - 2.353 * 2.285/4^{1/2}$ $= 2.312$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 5.0 + 2.353 * 2.285/4^{1/2}$ $= 7.688$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 21 * (21-1) / 2$ $= 210$	Number of sample pairs during trend detection period.
6	$S = 0.0$	Sen's estimator of trend.
7	$\text{var}(S) = 1002.667$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (210 \pm 2.576 * 1002.667^{1/2}) / 2$ $= [64.216, 145.784]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [-1.03, 0.568]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 204.7 / 4$ $= 51.175$	Compute the mean of the last 4 measurements.
2	$S = \left(\frac{\text{sum}[X^2] - \text{sum}[X]^2/N}{N-1} \right)^{1/2}$ $= \left(\frac{18234.25 - 41902.09/4}{4-1} \right)^{1/2}$ $= 50.855$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 51.175 - 2.353 * 50.855/4^{1/2}$ $= 0.0$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 51.175 + 2.353 * 50.855/4^{1/2}$ $= 110.995$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 21 * (21-1) / 2$ $= 210$	Number of sample pairs during trend detection period.
6	$S = 1.485$	Sen's estimator of trend.
7	$\text{var}(S) = 1004.667$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (210 \pm 2.576 * 1004.667^{1/2}) / 2$ $= [64.175, 145.825]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.0, 6.672]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 25.7 / 4$ $= 6.425$	Compute the mean of the last 4 measurements.
2	$S = \left(\frac{\text{sum}[X^2] - \text{sum}[X]^2/N}{N-1} \right)^{1/2}$ $= \left(\frac{218.69 - 660.49/4}{4-1} \right)^{1/2}$ $= 4.226$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 6.425 - 2.353 * 4.226/4^{1/2}$ $= 1.454$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 6.425 + 2.353 * 4.226/4^{1/2}$ $= 11.396$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 21 * (21-1) / 2$ $= 210$	Number of sample pairs during trend detection period.
6	$S = 0.077$	Sen's estimator of trend.
7	$\text{var}(S) = 1080.0$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (210 \pm 2.576 * 1080.0^{1/2}) / 2$ $= [62.672, 147.328]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [-0.631, 1.323]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 70.7 / 4$ $= 17.675$	Compute the mean of the last 4 measurements.
2	$S = \left(\frac{\text{sum}[X^2] - \text{sum}[X]^2/N}{N-1} \right)^{1/2}$ $= \left(\frac{1265.55 - 4998.49/4}{4-1} \right)^{1/2}$ $= 2.304$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 17.675 - 2.353 * 2.304/4^{1/2}$ $= 14.965$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 17.675 + 2.353 * 2.304/4^{1/2}$ $= 20.385$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 21 * (21-1) / 2$ $= 210$	Number of sample pairs during trend detection period.
6	$S = 0.546$	Sen's estimator of trend.
7	$\text{var}(S) = 1093.0$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (210 \pm 2.576 * 1093.0^{1/2}) / 2$ $= [62.418, 147.582]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [-0.729, 1.58]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Attachment D

Summary Table of Historical VOC Detections

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Acetone	GU-3	4/08/2021		15.8	10.0	ug/L
(3 + 4)-methylphenol	MW-13R	10/16/2017		12	8	ug/L
1,1-dichloroethane	MW-13R	1/13/2011		1.1	1.0	ug/L
1,1-dichloroethane	MW-13R	4/08/2011		2.2	1.0	ug/L
1,1-dichloroethane	MW-13R	10/18/2011		1.4	1.0	ug/L
1,1-dichloroethane	MW-13R	4/18/2012		1.7	1.0	ug/L
1,1-dichloroethane	MW-13R	10/16/2012		1.2	1.0	ug/L
1,1-dichloroethane	MW-13R	10/09/2013		1.3	1.0	ug/L
1,2-dichloropropane	MW-13R	10/18/2011		1.0	1.0	ug/L
1,2-dichloropropane	MW-13R	4/18/2012		2.0	1.0	ug/L
1,2-dichloropropane	MW-13R	10/16/2012		1.4	1.0	ug/L
1,2-dichloropropane	MW-13R	10/23/2014		1.1	1.0	ug/L
1,2-dichloropropane	MW-13R	11/05/2015		1.1	1.0	ug/L
1,4-dichlorobenzene	MW-13R	11/05/2015		1.1	1.0	ug/L
1,4-dichlorobenzene	MW-13R	4/21/2016		1.1	1.0	ug/L
1,4-dichlorobenzene	MW-13R	10/17/2016		1.3	1.0	ug/L
1,4-dichlorobenzene	MW-13R	4/21/2017		1.2	1.0	ug/L
1,4-dichlorobenzene	MW-13R	10/16/2017		1.2	1.0	ug/L
1,4-dichlorobenzene	MW-13R	4/24/2018		1.1	1.0	ug/L
1,4-dichlorobenzene	MW-13R	10/25/2018		2.0	1.0	ug/L
1,4-dichlorobenzene	MW-13R	4/15/2019		1.2	1.0	ug/L
1,4-dichlorobenzene	MW-13R	4/22/2020		1.1	1.0	ug/L
1,4-dichlorobenzene	MW-13R	10/02/2020		1.3	1.0	ug/L
1,4-dichlorobenzene	MW-13R	4/08/2021		1.0	1.0	ug/L
1,4-dichlorobenzene	MW-13R	10/29/2021		1.4	1.0	ug/L
1,4-dichlorobenzene	MW-13R	4/25/2022		1.2	1.0	ug/L
1,4-dichlorobenzene	MW-13R	10/17/2022		1.4	1.0	ug/L
1,4-dichlorobenzene	MW-13R	4/10/2023		1.6	1.0	ug/L
1,4-dichlorobenzene	MW-13R	10/27/2023		1.0	1.0	ug/L
1,4-dichlorobenzene	MW-13R	4/02/2024		1.1	1.0	ug/L
1,4-dichlorobenzene	MW-13R	10/10/2024		1.8	1.0	ug/L
Acetone	MW-13R	4/16/2014		29.4	10.0	ug/L
Benzene	MW-13R	1/13/2011		1.0	1.0	ug/L
Benzene	MW-13R	4/08/2011		3.0	1.0	ug/L
Benzene	MW-13R	10/18/2011		1.4	1.0	ug/L
Benzene	MW-13R	4/18/2012		4.9	1.0	ug/L
Benzene	MW-13R	10/16/2012		1.8	1.0	ug/L
Benzene	MW-13R	4/03/2013		3.4	1.0	ug/L
Benzene	MW-13R	10/09/2013		3.0	1.0	ug/L
Benzene	MW-13R	4/16/2014		2.2	1.0	ug/L
Benzene	MW-13R	10/23/2014		2.5	1.0	ug/L
Benzene	MW-13R	4/01/2015		6.2	1.0	ug/L
Benzene	MW-13R	11/05/2015		7.2	1.0	ug/L
Benzene	MW-13R	4/21/2016		7.1	1.0	ug/L
Benzene	MW-13R	10/17/2016		7.4	1.0	ug/L
Benzene	MW-13R	4/21/2017		6.0	1.0	ug/L
Benzene	MW-13R	10/16/2017		5.0	1.0	ug/L
Benzene	MW-13R	4/24/2018		5.0	1.0	ug/L
Benzene	MW-13R	10/25/2018		5.0	1.0	ug/L
Benzene	MW-13R	4/15/2019		4.9	1.0	ug/L
Benzene	MW-13R	10/07/2019		2.5	1.0	ug/L
Benzene	MW-13R	4/22/2020		4.6	1.0	ug/L
Benzene	MW-13R	10/02/2020		4.2	1.0	ug/L
Benzene	MW-13R	4/08/2021		3.6	1.0	ug/L
Benzene	MW-13R	10/29/2021		4.0	1.0	ug/L
Benzene	MW-13R	4/25/2022		4.9	1.0	ug/L
Benzene	MW-13R	10/17/2022		2.6	1.0	ug/L
Benzene	MW-13R	4/10/2023		5.1	1.0	ug/L
Benzene	MW-13R	10/27/2023		1.1	1.0	ug/L
Benzene	MW-13R	4/02/2024		2.1	1.0	ug/L
Benzene	MW-13R	10/10/2024		2.8	1.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-13R	10/16/2012		9	8	ug/L
Bis(2-ethylhexyl) phthalate	MW-13R	10/16/2017		16	6	ug/L
Bis(2-ethylhexyl) phthalate	MW-13R	10/17/2022		7	6	ug/L
Chlorobenzene	MW-13R	1/13/2011		3.7	1.0	ug/L
Chlorobenzene	MW-13R	4/08/2011		10.7	1.0	ug/L
Chlorobenzene	MW-13R	10/18/2011		2.8	1.0	ug/L
Chlorobenzene	MW-13R	4/18/2012		17.6	1.0	ug/L
Chlorobenzene	MW-13R	10/16/2012		16.0	1.0	ug/L
Chlorobenzene	MW-13R	4/03/2013		18.6	1.0	ug/L
Chlorobenzene	MW-13R	10/09/2013		24.9	1.0	ug/L
Chlorobenzene	MW-13R	4/16/2014		15.0	1.0	ug/L
Chlorobenzene	MW-13R	10/23/2014		14.4	1.0	ug/L
Chlorobenzene	MW-13R	4/01/2015		24.8	1.0	ug/L
Chlorobenzene	MW-13R	11/05/2015		30.3	1.0	ug/L
Chlorobenzene	MW-13R	4/21/2016		23.2	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Chlorobenzene	MW-13R	10/17/2016		29.9	1.0	ug/L
Chlorobenzene	MW-13R	4/21/2017		26.4	1.0	ug/L
Chlorobenzene	MW-13R	10/16/2017		27.9	1.0	ug/L
Chlorobenzene	MW-13R	4/24/2018		30.4	1.0	ug/L
Chlorobenzene	MW-13R	10/25/2018		27.8	1.0	ug/L
Chlorobenzene	MW-13R	4/15/2019		29.1	1.0	ug/L
Chlorobenzene	MW-13R	10/07/2019		29.7	1.0	ug/L
Chlorobenzene	MW-13R	4/22/2020		27.7	1.0	ug/L
Chlorobenzene	MW-13R	10/02/2020		35.0	1.0	ug/L
Chlorobenzene	MW-13R	4/08/2021		34.1	1.0	ug/L
Chlorobenzene	MW-13R	10/29/2021		37.6	1.0	ug/L
Chlorobenzene	MW-13R	4/25/2022		37.2	1.0	ug/L
Chlorobenzene	MW-13R	10/17/2022		38.1	1.0	ug/L
Chlorobenzene	MW-13R	4/10/2023		43.9	1.0	ug/L
Chlorobenzene	MW-13R	10/27/2023		26.8	1.0	ug/L
Chlorobenzene	MW-13R	4/02/2024		36.7	1.0	ug/L
Chlorobenzene	MW-13R	10/10/2024		43.4	1.0	ug/L
Chloroethane	MW-13R	1/13/2011		1	1	ug/L
Chloroethane	MW-13R	10/18/2011		1	1	ug/L
Cis-1,2-dichloroethylene	MW-13R	1/13/2011		3.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-13R	4/08/2011		2.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW-13R	10/18/2011		3.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-13R	4/18/2012		1.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-13R	10/16/2012		3.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-13R	4/03/2013		1.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-13R	10/09/2013		1.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-13R	4/16/2014		1.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-13R	10/23/2014		1.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-13R	4/01/2015		1.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-13R	11/05/2015		1.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-13R	10/17/2016		1.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-13R	10/16/2017		1.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-13R	10/17/2022		1.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-13R	10/27/2023		1.0	1.0	ug/L
Toluene	MW-13R	1/13/2011		127.0	1.0	ug/L
Toluene	MW-13R	10/16/2012		7.3	1.0	ug/L
Toluene	MW-13R	10/09/2013		7.9	1.0	ug/L
Toluene	MW-13R	4/16/2014		2.3	1.0	ug/L
Toluene	MW-13R	11/05/2015		1.1	1.0	ug/L
Toluene	MW-13R	10/16/2017		1.2	1.0	ug/L
Trans-1,2-dichloroethylene	MW-13R	4/08/2011		1.4	1.0	ug/L
Trans-1,2-dichloroethylene	MW-13R	4/18/2012		1.7	1.0	ug/L
Trans-1,2-dichloroethylene	MW-13R	10/16/2012		1.0	1.0	ug/L
Trans-1,2-dichloroethylene	MW-13R	4/03/2013		1.4	1.0	ug/L
Trans-1,2-dichloroethylene	MW-13R	10/09/2013		1.4	1.0	ug/L
Trans-1,2-dichloroethylene	MW-13R	4/16/2014		1.0	1.0	ug/L
Trans-1,2-dichloroethylene	MW-13R	10/23/2014		1.0	1.0	ug/L
Trans-1,2-dichloroethylene	MW-13R	11/05/2015		1.4	1.0	ug/L
Vinyl chloride	MW-13R	1/13/2011		1.2	1.0	ug/L
Vinyl chloride	MW-13R	4/08/2011		1.4	1.0	ug/L
Vinyl chloride	MW-13R	10/18/2011		1.0	1.0	ug/L
Vinyl chloride	MW-13R	10/16/2012		1.1	1.0	ug/L
Vinyl chloride	MW-13R	4/16/2014		2.5	1.0	ug/L
Vinyl chloride	MW-13R	10/23/2014		2.0	1.0	ug/L
Vinyl chloride	MW-13R	4/01/2015		4.8	1.0	ug/L
Vinyl chloride	MW-13R	11/05/2015		1.5	1.0	ug/L
1,1,1-trichloroethane	MW-14	10/05/1993		1.7	1.0	ug/L
1,1,1-trichloroethane	MW-14	1/13/1994		1.7	1.0	ug/L
1,1,1-trichloroethane	MW-14	4/23/1994		1.8	1.0	ug/L
1,1,1-trichloroethane	MW-14	7/13/1994		1.5	1.0	ug/L
1,1,1-trichloroethane	MW-14	4/13/1995		1.3	1.0	ug/L
1,1-dichloroethane	MW-14	10/14/2010		2.7	1.0	ug/L
1,1-dichloroethane	MW-14	4/08/2011		2.8	1.0	ug/L
1,1-dichloroethane	MW-14	10/18/2011		3.2	1.0	ug/L
1,1-dichloroethane	MW-14	4/18/2012		2.2	1.0	ug/L
1,1-dichloroethane	MW-14	10/17/2012		2.5	1.0	ug/L
1,1-dichloroethane	MW-14	4/03/2013		3.0	1.0	ug/L
1,1-dichloroethane	MW-14	10/09/2013		2.5	1.0	ug/L
1,1-dichloroethane	MW-14	4/16/2014		2.7	1.0	ug/L
1,1-dichloroethane	MW-14	10/23/2014		1.5	1.0	ug/L
1,1-dichloroethane	MW-14	4/01/2015		1.8	1.0	ug/L
1,1-dichloroethane	MW-14	11/05/2015		2.3	1.0	ug/L
1,1-dichloroethane	MW-14	4/21/2016		1.3	1.0	ug/L
1,1-dichloroethane	MW-14	10/17/2016		2.5	1.0	ug/L
1,1-dichloroethane	MW-14	10/02/2020		3.9	1.0	ug/L
1,1-dichloroethane	MW-14	4/08/2021		2.4	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,1-dichloroethane	MW-14	10/29/2021		1.8	1.0	ug/L
1,4-dichlorobenzene	MW-14	4/23/1994		1.1	1.0	ug/L
1,4-dichlorobenzene	MW-14	10/18/2011		1.0	1.0	ug/L
1,4-dichlorobenzene	MW-14	10/17/2012		1.2	1.0	ug/L
1,4-dichlorobenzene	MW-14	4/03/2013		1.4	1.0	ug/L
1,4-dichlorobenzene	MW-14	10/09/2013		1.8	1.0	ug/L
1,4-dichlorobenzene	MW-14	4/16/2014		2.2	1.0	ug/L
1,4-dichlorobenzene	MW-14	10/23/2014		2.6	1.0	ug/L
1,4-dichlorobenzene	MW-14	4/01/2015		1.0	1.0	ug/L
1,4-dichlorobenzene	MW-14	11/05/2015		2.1	1.0	ug/L
1,4-dichlorobenzene	MW-14	10/17/2016		1.0	1.0	ug/L
1,4-dichlorobenzene	MW-14	10/16/2017		1.6	1.0	ug/L
1,4-dichlorobenzene	MW-14	10/02/2020		1.8	1.0	ug/L
1,4-dichlorobenzene	MW-14	4/08/2021		1.9	1.0	ug/L
1,4-dichlorobenzene	MW-14	10/29/2021		3.2	1.0	ug/L
1,4-dichlorobenzene	MW-14	4/25/2022		1.7	1.0	ug/L
1,4-dichlorobenzene	MW-14	10/17/2022		2.4	1.0	ug/L
1,4-dichlorobenzene	MW-14	4/10/2023		1.8	1.0	ug/L
1,4-dichlorobenzene	MW-14	10/27/2023		2.4	1.0	ug/L
1,4-dichlorobenzene	MW-14	4/02/2024		3.6	1.0	ug/L
1,4-dichlorobenzene	MW-14	10/10/2024		3.3	1.0	ug/L
Benzene	MW-14	10/18/2011		1.5	1.0	ug/L
Benzene	MW-14	4/18/2012		1.6	1.0	ug/L
Benzene	MW-14	10/17/2012		1.0	1.0	ug/L
Benzene	MW-14	4/03/2013		1.3	1.0	ug/L
Benzene	MW-14	10/09/2013		1.7	1.0	ug/L
Benzene	MW-14	4/16/2014		1.6	1.0	ug/L
Benzene	MW-14	10/23/2014		1.0	1.0	ug/L
Benzene	MW-14	10/16/2017		2.5	1.0	ug/L
Benzene	MW-14	4/15/2019		1.9	1.0	ug/L
Benzene	MW-14	10/29/2021		2.0	1.0	ug/L
Benzene	MW-14	10/17/2022		1.4	1.0	ug/L
Benzene	MW-14	4/10/2023		1.1	1.0	ug/L
Benzene	MW-14	10/27/2023		1.2	1.0	ug/L
Benzene	MW-14	4/02/2024		2.6	1.0	ug/L
Benzene	MW-14	10/10/2024		1.6	1.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-14	10/16/2017		18	6	ug/L
Bis(2-ethylhexyl) phthalate	MW-14	10/17/2022		11	6	ug/L
Chlorobenzene	MW-14	10/25/2018		1.3	1.0	ug/L
Chlorobenzene	MW-14	4/02/2024		1.2	1.0	ug/L
Chlorobenzene	MW-14	10/10/2024		1.0	1.0	ug/L
Chloroethane	MW-14	10/14/2010		1.4	1.0	ug/L
Chloroethane	MW-14	4/08/2011		1.1	1.0	ug/L
Chloroethane	MW-14	10/18/2011		2.2	1.0	ug/L
Chloroethane	MW-14	4/18/2012		2.0	1.0	ug/L
Chloroethane	MW-14	10/17/2012		2.0	1.0	ug/L
Chloroethane	MW-14	4/03/2013		2.8	1.0	ug/L
Chloroethane	MW-14	10/09/2013		2.8	1.0	ug/L
Chloroethane	MW-14	4/16/2014		3.6	1.0	ug/L
Chloroethane	MW-14	10/23/2014		2.5	1.0	ug/L
Chloroethane	MW-14	11/05/2015		1.4	1.0	ug/L
Chloroethane	MW-14	4/15/2019		1.0	1.0	ug/L
Chloroethane	MW-14	10/07/2019		1.0	1.0	ug/L
Chloroethane	MW-14	10/02/2020		2.7	1.0	ug/L
Chloroethane	MW-14	4/08/2021		1.0	1.0	ug/L
Chloroethane	MW-14	10/29/2021		2.4	1.0	ug/L
Chloroethane	MW-14	10/17/2022		1.3	1.0	ug/L
Chloroethane	MW-14	4/10/2023		1.2	1.0	ug/L
Chloroethane	MW-14	10/27/2023		1.8	1.0	ug/L
Chloroethane	MW-14	4/02/2024		1.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-14	4/13/1995		13.8	2.0	ug/L
Cis-1,2-dichloroethylene	MW-14	10/04/1995		14.5	2.0	ug/L
Cis-1,2-dichloroethylene	MW-14	4/28/1998		19.2	2.0	ug/L
Cis-1,2-dichloroethylene	MW-14	10/29/1998		29.1	2.0	ug/L
Cis-1,2-dichloroethylene	MW-14	4/07/1999		13.5	2.0	ug/L
Cis-1,2-dichloroethylene	MW-14	10/15/1999		28.0	2.0	ug/L
Cis-1,2-dichloroethylene	MW-14	10/26/2000		94.0	2.0	ug/L
Cis-1,2-dichloroethylene	MW-14	4/19/2001		98.5	2.0	ug/L
Cis-1,2-dichloroethylene	MW-14	10/18/2001		89.0	2.0	ug/L
Cis-1,2-dichloroethylene	MW-14	4/04/2002		51.5	2.0	ug/L
Cis-1,2-dichloroethylene	MW-14	10/18/2002		49.9	2.0	ug/L
Cis-1,2-dichloroethylene	MW-14	10/09/2003		65.4	2.0	ug/L
Cis-1,2-dichloroethylene	MW-14	4/13/2004		46.9	2.0	ug/L
Cis-1,2-dichloroethylene	MW-14	10/18/2004		46.2	2.0	ug/L
Cis-1,2-dichloroethylene	MW-14	4/15/2005		25.6	2.0	ug/L
Cis-1,2-dichloroethylene	MW-14	10/10/2005		32.9	2.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Cis-1,2-dichloroethylene	MW-14	4/11/2006		21.1	2.0	ug/L
Cis-1,2-dichloroethylene	MW-14	10/12/2006		13.9	2.0	ug/L
Cis-1,2-dichloroethylene	MW-14	10/03/2007		3.0	2.0	ug/L
Cis-1,2-dichloroethylene	MW-14	4/09/2008		3.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-14	10/01/2008		5.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-14	4/07/2009		15.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-14	10/14/2010		2.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-14	4/08/2011		4.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW-14	10/18/2011		3.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-14	4/18/2012		2.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-14	10/17/2012		3.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-14	4/03/2013		3.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-14	10/09/2013		2.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-14	4/16/2014		2.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-14	10/23/2014		1.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-14	11/05/2015		1.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-14	10/17/2016		1.8	1.0	ug/L
Ethylbenzene	MW-14	4/15/2019		1.1	1.0	ug/L
Trichloroethylene	MW-14	10/05/1993		1.3	1.0	ug/L
Trichloroethylene	MW-14	1/13/1994		1.8	1.0	ug/L
Trichloroethylene	MW-14	4/23/1994		3.4	1.0	ug/L
Trichloroethylene	MW-14	7/13/1994		2.6	1.0	ug/L
Trichloroethylene	MW-14	10/04/1995		4.0	1.0	ug/L
Trichloroethylene	MW-14	4/28/1998		2.4	1.0	ug/L
Trichloroethylene	MW-14	10/15/1999		1.7	1.0	ug/L
Trichloroethylene	MW-14	10/26/2000		1.2	1.0	ug/L
Trichloroethylene	MW-14	4/13/2004		.3	.3	ug/L
Vinyl chloride	MW-14	4/13/1995		1.0	.2	ug/L
Vinyl chloride	MW-14	4/19/2001		2.9	2.0	ug/L
Vinyl chloride	MW-14	10/18/2001		1.5	1.0	ug/L
Vinyl chloride	MW-14	4/04/2002		1.3	1.0	ug/L
Vinyl chloride	MW-14	4/13/2004		2.2	2.0	ug/L
Vinyl chloride	MW-14	10/18/2004		3.1	2.0	ug/L
Vinyl chloride	MW-14	4/15/2005		1.4	1.0	ug/L
Vinyl chloride	MW-14	10/12/2006		1.3	1.0	ug/L
Vinyl chloride	MW-14	10/01/2008		1.0	1.0	ug/L
Vinyl chloride	MW-14	4/07/2009		1.9	1.0	ug/L
Vinyl chloride	MW-14	4/03/2013		1.0	1.0	ug/L
Vinyl chloride	MW-14	4/16/2014		1.0	1.0	ug/L
1,1-dichloroethane	MW-211	10/14/2010		3.7	1.0	ug/L
1,1-dichloroethane	MW-211	4/08/2011		5.2	1.0	ug/L
1,1-dichloroethane	MW-211	10/18/2011		4.0	1.0	ug/L
1,1-dichloroethane	MW-211	4/18/2012		3.1	1.0	ug/L
1,1-dichloroethane	MW-211	10/17/2012		2.4	1.0	ug/L
1,1-dichloroethane	MW-211	4/03/2013		2.6	1.0	ug/L
1,1-dichloroethane	MW-211	10/09/2013		1.0	1.0	ug/L
1,1-dichloroethane	MW-211	4/16/2014		1.5	1.0	ug/L
1,1-dichloroethane	MW-211	10/17/2016		2.0	1.0	ug/L
1,1-dichloroethane	MW-211	4/21/2017		1.2	1.0	ug/L
1,1-dichloroethane	MW-211	10/16/2017		1.4	1.0	ug/L
1,1-dichloroethane	MW-211	4/24/2018		1.0	1.0	ug/L
1,2-dichloropropane	MW-211	10/18/2011		2.6	1.0	ug/L
1,2-dichloropropane	MW-211	4/18/2012		2.1	1.0	ug/L
Benzene	MW-211	10/18/2011		1.2	1.0	ug/L
Benzene	MW-211	4/18/2012		2.2	1.0	ug/L
Benzene	MW-211	4/03/2013		1.1	1.0	ug/L
Benzene	MW-211	10/23/2014		2.8	1.0	ug/L
Benzene	MW-211	4/21/2017		1.5	1.0	ug/L
Benzene	MW-211	4/24/2018		1.6	1.0	ug/L
Benzene	MW-211	4/15/2019		1.0	1.0	ug/L
Benzene	MW-211	4/08/2021		1.5	1.0	ug/L
Benzene	MW-211	4/25/2022		1.5	1.0	ug/L
Benzene	MW-211	10/10/2024		1.2	1.0	ug/L
Chlorobenzene	MW-211	4/08/2011		4.6	1.0	ug/L
Chlorobenzene	MW-211	10/18/2011		5.5	1.0	ug/L
Chlorobenzene	MW-211	4/18/2012		6.7	1.0	ug/L
Chlorobenzene	MW-211	10/17/2012		3.6	1.0	ug/L
Chlorobenzene	MW-211	4/03/2013		4.6	1.0	ug/L
Chlorobenzene	MW-211	10/09/2013		3.7	1.0	ug/L
Chlorobenzene	MW-211	4/16/2014		3.9	1.0	ug/L
Chlorobenzene	MW-211	10/23/2014		10.6	1.0	ug/L
Chlorobenzene	MW-211	4/01/2015		7.6	1.0	ug/L
Chlorobenzene	MW-211	11/05/2015		10.5	1.0	ug/L
Chlorobenzene	MW-211	4/21/2016		8.1	1.0	ug/L
Chlorobenzene	MW-211	10/17/2016		8.8	1.0	ug/L
Chlorobenzene	MW-211	4/21/2017		8.3	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Chlorobenzene	MW-211	10/16/2017		8.2	1.0	ug/L
Chlorobenzene	MW-211	4/24/2018		8.7	1.0	ug/L
Chlorobenzene	MW-211	10/25/2018		6.2	1.0	ug/L
Chlorobenzene	MW-211	4/15/2019		7.5	1.0	ug/L
Chlorobenzene	MW-211	10/07/2019		5.9	1.0	ug/L
Chlorobenzene	MW-211	4/22/2020		6.1	1.0	ug/L
Chlorobenzene	MW-211	10/02/2020		5.2	1.0	ug/L
Chlorobenzene	MW-211	4/08/2021		5.3	1.0	ug/L
Chlorobenzene	MW-211	10/29/2021		5.6	1.0	ug/L
Chlorobenzene	MW-211	4/25/2022		5.0	1.0	ug/L
Chlorobenzene	MW-211	10/17/2022		5.2	1.0	ug/L
Chlorobenzene	MW-211	4/10/2023		4.1	1.0	ug/L
Chlorobenzene	MW-211	10/27/2023		1.7	1.0	ug/L
Chlorobenzene	MW-211	4/02/2024		4.4	1.0	ug/L
Chlorobenzene	MW-211	10/10/2024		4.7	1.0	ug/L
Chloroethane	MW-211	10/14/2010		3.3	1.0	ug/L
Chloroethane	MW-211	4/08/2011		4.5	1.0	ug/L
Chloroethane	MW-211	10/18/2011		3.2	1.0	ug/L
Chloroethane	MW-211	4/18/2012		2.9	1.0	ug/L
Chloroethane	MW-211	10/17/2012		2.0	1.0	ug/L
Chloroethane	MW-211	4/03/2013		1.5	1.0	ug/L
Chloroethane	MW-211	4/16/2014		1.5	1.0	ug/L
Chloroethane	MW-211	10/23/2014		1.3	1.0	ug/L
Chloroethane	MW-211	11/05/2015		1.4	1.0	ug/L
Chloroethane	MW-211	4/21/2016		1.2	1.0	ug/L
Chloroethane	MW-211	10/17/2016		2.7	1.0	ug/L
Chloroethane	MW-211	4/21/2017		2.1	1.0	ug/L
Chloroethane	MW-211	10/16/2017		2.4	1.0	ug/L
Chloroethane	MW-211	4/24/2018		2.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-211	10/14/2010		3.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-211	4/08/2011		6.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-211	10/18/2011		4.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-211	4/18/2012		4.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-211	10/17/2012		3.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-211	4/03/2013		3.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-211	10/09/2013		1.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-211	4/16/2014		1.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-211	10/23/2014		1.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-211	4/01/2015		1.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-211	11/05/2015		1.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-211	4/21/2016		1.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-211	10/17/2016		3.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-211	4/21/2017		1.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-211	10/16/2017		2.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-211	4/24/2018		1.0	1.0	ug/L
1,1-dichloroethane	MW-31R	4/18/2012		9.5	1.0	ug/L
1,1-dichloroethane	MW-31R	10/17/2012		10.5	1.0	ug/L
1,1-dichloroethane	MW-31R	4/03/2013		14.4	1.0	ug/L
1,1-dichloroethane	MW-31R	10/09/2013		8.2	1.0	ug/L
1,1-dichloroethane	MW-31R	4/16/2014		16.6	1.0	ug/L
1,1-dichloroethane	MW-31R	10/23/2014		4.4	1.0	ug/L
1,1-dichloroethane	MW-31R	4/01/2015		5.8	1.0	ug/L
1,1-dichloroethane	MW-31R	11/05/2015		4.7	1.0	ug/L
1,1-dichloroethane	MW-31R	4/21/2016		1.9	1.0	ug/L
1,1-dichloroethane	MW-31R	10/17/2016		2.0	1.0	ug/L
1,1-dichloroethane	MW-31R	4/21/2017		2.0	1.0	ug/L
1,1-dichloroethane	MW-31R	10/16/2017		1.7	1.0	ug/L
1,1-dichloroethane	MW-31R	4/24/2018		2.9	1.0	ug/L
1,1-dichloroethane	MW-31R	4/15/2019		2.6	1.0	ug/L
1,1-dichloroethane	MW-31R	10/07/2019		1.4	1.0	ug/L
1,1-dichloroethane	MW-31R	4/22/2020		2.9	1.0	ug/L
1,1-dichloroethane	MW-31R	10/02/2020		2.9	1.0	ug/L
1,1-dichloroethane	MW-31R	4/08/2021		2.8	1.0	ug/L
1,1-dichloroethane	MW-31R	10/29/2021		2.9	1.0	ug/L
1,1-dichloroethane	MW-31R	4/25/2022		2.9	1.0	ug/L
1,1-dichloroethane	MW-31R	10/17/2022		3.1	1.0	ug/L
1,1-dichloroethane	MW-31R	4/10/2023		2.8	1.0	ug/L
1,1-dichloroethane	MW-31R	10/27/2023		2.9	1.0	ug/L
1,1-dichloroethane	MW-31R	4/02/2024		3.3	1.0	ug/L
1,1-dichloroethane	MW-31R	10/10/2024		3.1	1.0	ug/L
1,4-dichlorobenzene	MW-31R	10/09/2013		1.0	1.0	ug/L
1,4-dichlorobenzene	MW-31R	11/05/2015		3.2	1.0	ug/L
1,4-dichlorobenzene	MW-31R	4/21/2016		5.5	1.0	ug/L
1,4-dichlorobenzene	MW-31R	10/17/2016		7.8	1.0	ug/L
1,4-dichlorobenzene	MW-31R	4/21/2017		6.9	1.0	ug/L
1,4-dichlorobenzene	MW-31R	10/16/2017		6.0	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,4-dichlorobenzene	MW-31R	4/24/2018		11.3	1.0	ug/L
1,4-dichlorobenzene	MW-31R	10/25/2018		9.5	1.0	ug/L
1,4-dichlorobenzene	MW-31R	4/15/2019		15.6	1.0	ug/L
1,4-dichlorobenzene	MW-31R	10/07/2019		16.6	1.0	ug/L
1,4-dichlorobenzene	MW-31R	4/22/2020		16.8	1.0	ug/L
1,4-dichlorobenzene	MW-31R	10/02/2020		15.1	1.0	ug/L
1,4-dichlorobenzene	MW-31R	4/08/2021		15.2	1.0	ug/L
1,4-dichlorobenzene	MW-31R	10/29/2021		17.7	1.0	ug/L
1,4-dichlorobenzene	MW-31R	4/25/2022		17.8	1.0	ug/L
1,4-dichlorobenzene	MW-31R	10/17/2022		17.7	1.0	ug/L
1,4-dichlorobenzene	MW-31R	4/10/2023		21.6	1.0	ug/L
1,4-dichlorobenzene	MW-31R	10/27/2023		15.4	1.0	ug/L
1,4-dichlorobenzene	MW-31R	4/02/2024		14.5	1.0	ug/L
1,4-dichlorobenzene	MW-31R	10/10/2024		16.6	1.0	ug/L
Benzene	MW-31R	4/18/2012		2.7	1.0	ug/L
Benzene	MW-31R	10/17/2012		1.3	1.0	ug/L
Benzene	MW-31R	4/03/2013		2.3	1.0	ug/L
Benzene	MW-31R	10/09/2013		2.3	1.0	ug/L
Benzene	MW-31R	4/16/2014		2.2	1.0	ug/L
Benzene	MW-31R	10/23/2014		2.0	1.0	ug/L
Benzene	MW-31R	4/01/2015		2.0	1.0	ug/L
Benzene	MW-31R	11/05/2015		2.5	1.0	ug/L
Benzene	MW-31R	4/21/2016		3.1	1.0	ug/L
Benzene	MW-31R	10/17/2016		3.2	1.0	ug/L
Benzene	MW-31R	4/21/2017		2.6	1.0	ug/L
Benzene	MW-31R	10/16/2017		2.6	1.0	ug/L
Benzene	MW-31R	4/24/2018		2.9	1.0	ug/L
Benzene	MW-31R	4/15/2019		2.3	1.0	ug/L
Benzene	MW-31R	4/22/2020		2.0	1.0	ug/L
Benzene	MW-31R	10/02/2020		1.7	1.0	ug/L
Benzene	MW-31R	4/08/2021		1.9	1.0	ug/L
Benzene	MW-31R	10/29/2021		2.3	1.0	ug/L
Benzene	MW-31R	4/25/2022		2.5	1.0	ug/L
Benzene	MW-31R	10/17/2022		1.8	1.0	ug/L
Benzene	MW-31R	4/10/2023		1.9	1.0	ug/L
Benzene	MW-31R	10/27/2023		1.4	1.0	ug/L
Benzene	MW-31R	4/02/2024		2.1	1.0	ug/L
Benzene	MW-31R	10/10/2024		2.3	1.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-31R	4/03/2013		22	8	ug/L
Bis(2-ethylhexyl) phthalate	MW-31R	10/23/2014		64	10	ug/L
Bis(2-ethylhexyl) phthalate	MW-31R	10/27/2023		9	6	ug/L
Chlorobenzene	MW-31R	4/16/2014		1.1	1.0	ug/L
Chlorobenzene	MW-31R	4/01/2015		1.2	1.0	ug/L
Chlorobenzene	MW-31R	11/05/2015		3.0	1.0	ug/L
Chlorobenzene	MW-31R	4/21/2016		5.0	1.0	ug/L
Chlorobenzene	MW-31R	10/17/2016		7.2	1.0	ug/L
Chlorobenzene	MW-31R	4/21/2017		6.4	1.0	ug/L
Chlorobenzene	MW-31R	10/16/2017		7.9	1.0	ug/L
Chlorobenzene	MW-31R	4/24/2018		12.0	1.0	ug/L
Chlorobenzene	MW-31R	10/25/2018		10.5	1.0	ug/L
Chlorobenzene	MW-31R	4/15/2019		13.8	1.0	ug/L
Chlorobenzene	MW-31R	10/07/2019		13.3	1.0	ug/L
Chlorobenzene	MW-31R	4/22/2020		15.0	1.0	ug/L
Chlorobenzene	MW-31R	10/02/2020		13.8	1.0	ug/L
Chlorobenzene	MW-31R	4/08/2021		15.6	1.0	ug/L
Chlorobenzene	MW-31R	10/29/2021		17.4	1.0	ug/L
Chlorobenzene	MW-31R	4/25/2022		18.6	1.0	ug/L
Chlorobenzene	MW-31R	10/17/2022		19.8	1.0	ug/L
Chlorobenzene	MW-31R	4/10/2023		25.0	1.0	ug/L
Chlorobenzene	MW-31R	10/27/2023		18.6	1.0	ug/L
Chlorobenzene	MW-31R	4/02/2024		21.0	1.0	ug/L
Chlorobenzene	MW-31R	10/10/2024		26.1	1.0	ug/L
Chloroethane	MW-31R	4/18/2012		5.4	1.0	ug/L
Chloroethane	MW-31R	10/17/2012		5.5	1.0	ug/L
Chloroethane	MW-31R	4/03/2013		6.9	1.0	ug/L
Chloroethane	MW-31R	10/09/2013		5.4	1.0	ug/L
Chloroethane	MW-31R	4/16/2014		8.3	1.0	ug/L
Chloroethane	MW-31R	10/23/2014		3.9	1.0	ug/L
Chloroethane	MW-31R	11/05/2015		4.1	1.0	ug/L
Chloroethane	MW-31R	4/21/2016		2.8	1.0	ug/L
Chloroethane	MW-31R	10/17/2016		3.7	1.0	ug/L
Chloroethane	MW-31R	4/21/2017		3.4	1.0	ug/L
Chloroethane	MW-31R	4/24/2018		4.8	1.0	ug/L
Chloroethane	MW-31R	10/25/2018		3.4	1.0	ug/L
Chloroethane	MW-31R	4/15/2019		3.3	1.0	ug/L
Chloroethane	MW-31R	10/07/2019		3.4	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Chloroethane	MW-31R	4/22/2020		3.4	1.0	ug/L
Chloroethane	MW-31R	10/02/2020		2.9	1.0	ug/L
Chloroethane	MW-31R	4/08/2021		3.0	1.0	ug/L
Chloroethane	MW-31R	10/29/2021		2.9	1.0	ug/L
Chloroethane	MW-31R	4/25/2022		3.7	1.0	ug/L
Chloroethane	MW-31R	10/17/2022		3.3	1.0	ug/L
Chloroethane	MW-31R	4/10/2023		3.6	1.0	ug/L
Chloroethane	MW-31R	10/27/2023		3.4	1.0	ug/L
Chloroethane	MW-31R	4/02/2024		3.5	1.0	ug/L
Chloroethane	MW-31R	10/10/2024		2.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	4/18/2012		137.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	10/17/2012		142.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	4/03/2013		165.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	10/09/2013		112.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	4/16/2014		185.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	10/23/2014		116.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	4/01/2015		110.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	11/05/2015		80.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	4/21/2016		59.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	10/17/2016		45.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	4/21/2017		39.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	10/16/2017		38.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	4/24/2018		39.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	10/25/2018		26.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	4/15/2019		26.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	10/07/2019		25.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	4/22/2020		20.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	10/02/2020		34.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	4/08/2021		23.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	10/29/2021		18.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	4/25/2022		24.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	10/17/2022		22.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	4/10/2023		11.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	10/27/2023		17.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	4/02/2024		19.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-31R	10/10/2024		16.0	1.0	ug/L
Dichlorodifluoromethane	MW-31R	4/03/2013		1.3	1.0	ug/L
Dichlorodifluoromethane	MW-31R	4/16/2014		1.5	1.0	ug/L
Dichlorodifluoromethane	MW-31R	10/23/2014		1.2	1.0	ug/L
Disulfoton	MW-31R	10/27/2023		2.9	.4	ug/L
Ethylbenzene	MW-31R	4/02/2024		1.0	1.0	ug/L
Ethylbenzene	MW-31R	10/10/2024		2.8	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	4/18/2012		11.1	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	10/17/2012		8.2	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	4/03/2013		13.0	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	10/09/2013		12.0	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	4/16/2014		13.7	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	10/23/2014		9.2	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	4/01/2015		6.5	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	11/05/2015		6.8	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	4/21/2016		3.7	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	10/17/2016		3.7	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	4/21/2017		3.5	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	10/16/2017		3.8	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	4/24/2018		3.9	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	4/15/2019		2.7	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	10/07/2019		1.8	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	4/22/2020		2.9	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	10/02/2020		3.7	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	4/08/2021		2.1	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	10/29/2021		2.6	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	4/25/2022		2.4	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	10/17/2022		2.6	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	4/10/2023		1.6	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	10/27/2023		2.3	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	4/02/2024		2.5	1.0	ug/L
Trans-1,2-dichloroethylene	MW-31R	10/10/2024		1.8	1.0	ug/L
Vinyl chloride	MW-31R	4/18/2012		5.4	1.0	ug/L
Vinyl chloride	MW-31R	10/17/2012		4.0	1.0	ug/L
Vinyl chloride	MW-31R	4/03/2013		3.8	1.0	ug/L
Vinyl chloride	MW-31R	10/09/2013		4.5	1.0	ug/L
Vinyl chloride	MW-31R	4/16/2014		4.1	1.0	ug/L
Vinyl chloride	MW-31R	10/23/2014		4.0	1.0	ug/L
Vinyl chloride	MW-31R	4/01/2015		2.7	1.0	ug/L
Vinyl chloride	MW-31R	11/05/2015		2.2	1.0	ug/L
Vinyl chloride	MW-31R	4/21/2016		2.3	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Vinyl chloride	MW-31R	10/17/2016		2.0	1.0	ug/L
Vinyl chloride	MW-31R	4/21/2017		1.1	1.0	ug/L
Vinyl chloride	MW-31R	4/24/2018		1.3	1.0	ug/L
1,1-dichloroethane	MW-35	10/14/2010		7.3	1.0	ug/L
1,1-dichloroethane	MW-35	4/08/2011		10.1	1.0	ug/L
1,1-dichloroethane	MW-35	10/18/2011		5.0	1.0	ug/L
1,1-dichloroethane	MW-35	4/18/2012		4.2	1.0	ug/L
1,1-dichloroethane	MW-35	10/16/2012		3.2	1.0	ug/L
1,1-dichloroethane	MW-35	4/03/2013		2.1	1.0	ug/L
1,1-dichloroethane	MW-35	10/09/2013		2.2	1.0	ug/L
1,1-dichloroethane	MW-35	4/16/2014		1.1	1.0	ug/L
1,1-dichloroethane	MW-35	10/23/2014		1.0	1.0	ug/L
1,1-dichloroethane	MW-35	4/01/2015		1.2	1.0	ug/L
1,1-dichloroethane	MW-35	7/08/2015		2.3	1.0	ug/L
1,1-dichloroethane	MW-35	10/17/2016		10.8	1.0	ug/L
1,1-dichloroethane	MW-35	4/21/2017		9.8	1.0	ug/L
1,1-dichloroethane	MW-35	10/16/2017		9.8	1.0	ug/L
1,1-dichloroethane	MW-35	4/24/2018		12.0	1.0	ug/L
1,1-dichloroethane	MW-35	10/25/2018		5.5	1.0	ug/L
1,1-dichloroethane	MW-35	4/15/2019		5.7	1.0	ug/L
1,1-dichloroethane	MW-35	10/07/2019		5.7	1.0	ug/L
1,1-dichloroethane	MW-35	4/22/2020		5.0	1.0	ug/L
Benzene	MW-35	10/17/2016		1.1	1.0	ug/L
Benzene	MW-35	10/16/2017		1.3	1.0	ug/L
Benzene	MW-35	4/24/2018		1.4	1.0	ug/L
Chloroethane	MW-35	10/14/2010		4.7	1.0	ug/L
Chloroethane	MW-35	4/08/2011		6.8	1.0	ug/L
Chloroethane	MW-35	10/18/2011		1.9	1.0	ug/L
Chloroethane	MW-35	4/18/2012		1.1	1.0	ug/L
Chloroethane	MW-35	10/16/2012		1.0	1.0	ug/L
Chloroethane	MW-35	10/17/2016		28.2	1.0	ug/L
Chloroethane	MW-35	4/21/2017		21.8	1.0	ug/L
Chloroethane	MW-35	10/16/2017		16.7	1.0	ug/L
Chloroethane	MW-35	4/24/2018		28.9	1.0	ug/L
Chloroethane	MW-35	4/15/2019		11.2	1.0	ug/L
Chloroethane	MW-35	10/07/2019		16.8	1.0	ug/L
Chloroethane	MW-35	4/22/2020		10.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-35	10/14/2010		4.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-35	4/08/2011		13.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-35	10/18/2011		3.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW-35	4/18/2012		2.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-35	10/16/2012		1.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-35	10/17/2016		9.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-35	4/21/2017		6.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-35	10/16/2017		9.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-35	4/24/2018		13.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-35	10/25/2018		4.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-35	4/15/2019		5.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-35	10/07/2019		4.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-35	4/22/2020		3.2	1.0	ug/L
Vinyl chloride	MW-35	10/17/2016		1.8	1.0	ug/L
Vinyl chloride	MW-35	4/21/2017		1.2	1.0	ug/L
Vinyl chloride	MW-35	4/24/2018		2.1	1.0	ug/L
1,1-dichloroethane	MW-35R	10/01/2020		5.1	1.0	ug/L
1,1-dichloroethane	MW-35R	4/08/2021		4.9	1.0	ug/L
1,1-dichloroethane	MW-35R	10/29/2021		1.4	1.0	ug/L
1,1-dichloroethane	MW-35R	4/25/2022		2.0	1.0	ug/L
1,1-dichloroethane	MW-35R	4/10/2023		3.1	1.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-35R	10/17/2022		78	6	ug/L
Bis(2-ethylhexyl) phthalate	MW-35R	1/05/2023		79	6	ug/L
Bis(2-ethylhexyl) phthalate	MW-35R	4/10/2023		6	6	ug/L
Bis(2-ethylhexyl) phthalate	MW-35R	10/27/2023		15	6	ug/L
Chloroethane	MW-35R	10/01/2020		19.2	1.0	ug/L
Chloroethane	MW-35R	4/08/2021		11.7	1.0	ug/L
Chloroethane	MW-35R	10/29/2021		2.3	1.0	ug/L
Chloroethane	MW-35R	4/25/2022		5.8	1.0	ug/L
Chloroethane	MW-35R	10/17/2022		2.2	1.0	ug/L
Chloroethane	MW-35R	4/10/2023		2.7	1.0	ug/L
Chloroethane	MW-35R	10/27/2023		1.4	1.0	ug/L
Chloroethane	MW-35R	4/02/2024		2.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-35R	10/01/2020		4.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-35R	4/08/2021		4.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-35R	10/29/2021		1.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-35R	4/25/2022		1.6	1.0	ug/L
Vinyl chloride	MW-35R	10/01/2020		1.1	1.0	ug/L
Acetone	MW-37	10/16/2017		18.6	10.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Acetone	MW-39	10/16/2017		11	10	ug/L
1,1-dichloroethane	MW-7	10/14/2010		13.5	1.0	ug/L
1,1-dichloroethane	MW-7	4/08/2011		13.3	1.0	ug/L
1,1-dichloroethane	MW-7	10/18/2011		6.5	1.0	ug/L
1,1-dichloroethane	MW-7	4/18/2012		6.7	1.0	ug/L
1,1-dichloroethane	MW-7	10/16/2012		1.5	1.0	ug/L
1,1-dichloroethane	MW-7	4/03/2013		2.5	1.0	ug/L
1,1-dichloroethane	MW-7	10/17/2016		1.7	1.0	ug/L
1,1-dichloroethane	MW-7	4/15/2019		2.9	1.0	ug/L
1,1-dichloroethane	MW-7	4/22/2020		1.7	1.0	ug/L
1,1-dichloroethane	MW-7	4/08/2021		1.2	1.0	ug/L
1,1-dichloroethane	MW-7	4/25/2022		1.0	1.0	ug/L
Benzene	MW-7	4/08/2011		2.4	1.0	ug/L
Benzene	MW-7	10/18/2011		1.3	1.0	ug/L
Benzene	MW-7	4/18/2012		1.8	1.0	ug/L
Benzene	MW-7	4/03/2013		1.1	1.0	ug/L
Benzene	MW-7	4/25/2022		1.4	1.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-7	4/18/2012		15	8	ug/L
Bis(2-ethylhexyl) phthalate	MW-7	10/17/2022		9	6	ug/L
Chloroethane	MW-7	10/14/2010		30.3	1.0	ug/L
Chloroethane	MW-7	4/08/2011		41.4	1.0	ug/L
Chloroethane	MW-7	10/18/2011		19.0	1.0	ug/L
Chloroethane	MW-7	4/18/2012		21.0	1.0	ug/L
Chloroethane	MW-7	10/16/2012		5.8	1.0	ug/L
Chloroethane	MW-7	4/03/2013		11.6	1.0	ug/L
Chloroethane	MW-7	10/09/2013		3.6	1.0	ug/L
Chloroethane	MW-7	4/16/2014		4.1	1.0	ug/L
Chloroethane	MW-7	10/23/2014		2.0	1.0	ug/L
Chloroethane	MW-7	11/05/2015		4.4	1.0	ug/L
Chloroethane	MW-7	4/21/2016		1.0	1.0	ug/L
Chloroethane	MW-7	10/17/2016		13.5	1.0	ug/L
Chloroethane	MW-7	4/21/2017		3.9	1.0	ug/L
Chloroethane	MW-7	10/16/2017		4.4	1.0	ug/L
Chloroethane	MW-7	4/15/2019		8.0	1.0	ug/L
Chloroethane	MW-7	4/22/2020		5.1	1.0	ug/L
Chloroethane	MW-7	10/01/2020		3.7	1.0	ug/L
Chloroethane	MW-7	4/08/2021		6.8	1.0	ug/L
Chloroethane	MW-7	4/25/2022		6.5	1.0	ug/L
Chloroethane	MW-7	10/17/2022		2.6	1.0	ug/L
Chloroethane	MW-7	4/10/2023		3.8	1.0	ug/L
Chloroethane	MW-7	10/27/2023		1.6	1.0	ug/L
Chloroethane	MW-7	10/10/2024		1.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	10/14/2010		9.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	4/08/2011		14.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	10/18/2011		5.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	4/18/2012		9.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	10/16/2012		1.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	4/03/2013		3.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	4/16/2014		1.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	10/17/2016		1.0	1.0	ug/L
Dichlorodifluoromethane	MW-7	4/18/2012		1	1	ug/L
Vinyl chloride	MW-7	10/14/2010		2.1	1.0	ug/L
Vinyl chloride	MW-7	4/08/2011		3.0	1.0	ug/L
Vinyl chloride	MW-7	10/18/2011		1.4	1.0	ug/L
Vinyl chloride	MW-7	4/18/2012		1.6	1.0	ug/L
Vinyl chloride	MW-7	10/17/2016		1.9	1.0	ug/L
Chloroethane	MW-7A	5/14/2013		3.6	1.0	ug/L
1,1-dichloroethane	MW-9	10/16/2017		1.2	1.0	ug/L
1,1-dichloroethane	MW-9	10/27/2023		1.2	1.0	ug/L
1,2-dichloroethane	MW-9	10/05/1993		5.8	1.0	ug/L
1,2-dichloroethane	MW-9	1/13/1994		8.3	1.0	ug/L
1,2-dichloroethane	MW-9	4/23/1994		6.2	1.0	ug/L
1,2-dichloroethane	MW-9	7/13/1994		5.4	1.0	ug/L
1,2-dichloroethane	MW-9	4/13/1995		1.4	1.0	ug/L
1,2-dichloroethane	MW-9	10/04/1995		1.4	1.0	ug/L
1,2-dichloroethane	MW-9	4/30/1996		1.4	1.0	ug/L
Benzene	MW-9	10/05/1993		1.1	1.0	ug/L
Benzene	MW-9	1/13/1994		1.3	1.0	ug/L
Benzene	MW-9	4/23/1994		1.3	1.0	ug/L
Benzene	MW-9	7/13/1994		1.2	1.0	ug/L
Benzene	MW-9	10/04/1995		2.2	1.0	ug/L
Benzene	MW-9	4/30/1996		2.2	1.0	ug/L
Benzene	MW-9	10/17/2022		1.0	1.0	ug/L
Chloroethane	MW-9	10/14/2010		1.4	1.0	ug/L
Chloroethane	MW-9	10/18/2011		1.1	1.0	ug/L
Chloroethane	MW-9	10/17/2016		1.0	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Chloroethane	MW-9	10/16/2017		2.0	1.0	ug/L
Chloroethane	MW-9	10/07/2019		2.0	1.0	ug/L
Chloroethane	MW-9	10/01/2020		1.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-9	10/04/1995		15.1	2.0	ug/L
Cis-1,2-dichloroethylene	MW-9	4/30/1996		15.1	2.0	ug/L
Cis-1,2-dichloroethylene	MW-9	4/28/1998		5.7	2.0	ug/L
Cis-1,2-dichloroethylene	MW-9	10/29/1998		8.9	2.0	ug/L
1,1-dichloroethane	TILE ACM-1	10/25/2018		3.6	1.0	ug/L
1,1-dichloroethane	TILE ACM-1	4/15/2019		3.8	1.0	ug/L
1,1-dichloroethane	TILE ACM-1	10/07/2019		4.7	1.0	ug/L
1,1-dichloroethane	TILE ACM-1	4/22/2020		14.4	1.0	ug/L
1,1-dichloroethane	TILE ACM-1	10/29/2021		2.9	1.0	ug/L
1,1-dichloroethane	TILE ACM-1	4/25/2022		2.9	1.0	ug/L
1,1-dichloroethane	TILE ACM-1	4/10/2023		4.8	1.0	ug/L
1,1-dichloroethane	TILE ACM-1	4/02/2024		1.6	1.0	ug/L
1,4-dichlorobenzene	TILE ACM-1	4/15/2019		3.6	1.0	ug/L
1,4-dichlorobenzene	TILE ACM-1	10/07/2019		3.3	1.0	ug/L
1,4-dichlorobenzene	TILE ACM-1	4/25/2022		1.1	1.0	ug/L
1,4-dichlorobenzene	TILE ACM-1	4/10/2023		1.8	1.0	ug/L
Benzene	TILE ACM-1	4/15/2019		2.0	1.0	ug/L
Benzene	TILE ACM-1	10/07/2019		1.3	1.0	ug/L
Benzene	TILE ACM-1	4/22/2020		2.0	1.0	ug/L
Benzene	TILE ACM-1	4/25/2022		1.8	1.0	ug/L
Benzene	TILE ACM-1	4/10/2023		1.6	1.0	ug/L
Chlorobenzene	TILE ACM-1	10/25/2018		16.6	1.0	ug/L
Chlorobenzene	TILE ACM-1	4/15/2019		13.8	1.0	ug/L
Chlorobenzene	TILE ACM-1	10/07/2019		7.4	1.0	ug/L
Chlorobenzene	TILE ACM-1	4/22/2020		4.6	1.0	ug/L
Chlorobenzene	TILE ACM-1	4/25/2022		7.9	1.0	ug/L
Chlorobenzene	TILE ACM-1	4/10/2023		7.8	1.0	ug/L
Chlorobenzene	TILE ACM-1	4/02/2024		3.7	1.0	ug/L
Chloroethane	TILE ACM-1	10/25/2018		5.8	1.0	ug/L
Chloroethane	TILE ACM-1	4/15/2019		5.0	1.0	ug/L
Chloroethane	TILE ACM-1	10/07/2019		9.8	1.0	ug/L
Chloroethane	TILE ACM-1	4/22/2020		12.2	1.0	ug/L
Chloroethane	TILE ACM-1	10/29/2021		2.6	1.0	ug/L
Chloroethane	TILE ACM-1	4/25/2022		3.7	1.0	ug/L
Chloroethane	TILE ACM-1	4/10/2023		5.1	1.0	ug/L
Chloroethane	TILE ACM-1	4/02/2024		2.3	1.0	ug/L
Cis-1,2-dichloroethylene	TILE ACM-1	10/25/2018		3.0	1.0	ug/L
Cis-1,2-dichloroethylene	TILE ACM-1	4/15/2019		2.8	1.0	ug/L
Cis-1,2-dichloroethylene	TILE ACM-1	10/07/2019		4.2	1.0	ug/L
Cis-1,2-dichloroethylene	TILE ACM-1	4/22/2020		6.3	1.0	ug/L
Cis-1,2-dichloroethylene	TILE ACM-1	4/25/2022		1.3	1.0	ug/L
Cis-1,2-dichloroethylene	TILE ACM-1	4/10/2023		2.0	1.0	ug/L
Ethylbenzene	TILE ACM-1	10/07/2019		1.9	1.0	ug/L
Ethylbenzene	TILE ACM-1	4/25/2022		1.6	1.0	ug/L
Toluene	TILE ACM-1	10/07/2019		1.7	1.0	ug/L
Vinyl chloride	TILE ACM-1	10/07/2019		2.0	1.0	ug/L
Vinyl chloride	TILE ACM-1	4/22/2020		1.8	1.0	ug/L
Vinyl chloride	TILE ACM-1	4/10/2023		1.0	1.0	ug/L
Xylenes, total	TILE ACM-1	4/25/2022		2.4	2.0	ug/L

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

Attachment E

Assessment Statistics for VOCs

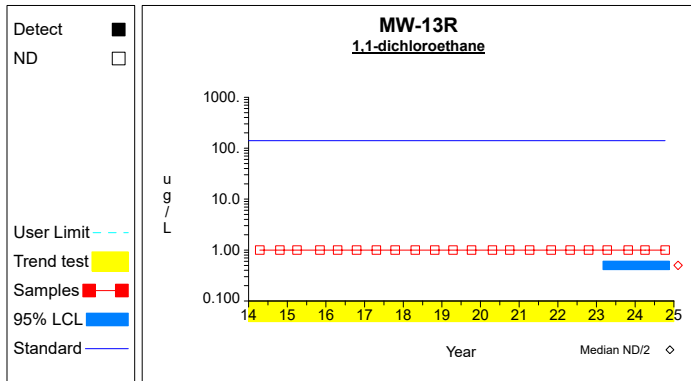
Table 1

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

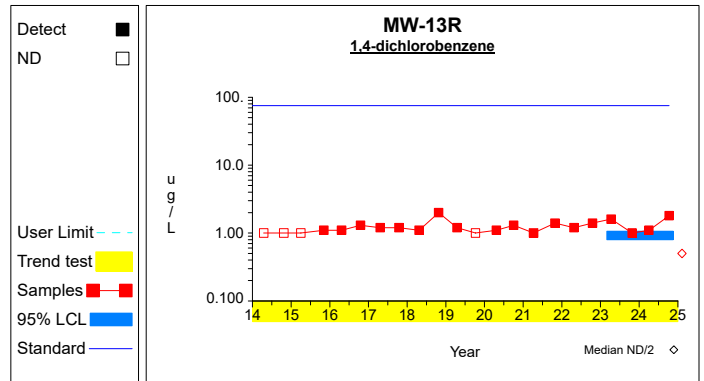
Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend	
1,1-dichloroethane	ug/L	MW-13R	4	0.500	0.000	1.176	0.500	0.500	140.000	inc	
1,4-dichlorobenzene	ug/L	MW-13R	4	1.375	0.386	1.176	0.921	1.829	75.000		
Benzene	ug/L	MW-13R	4	2.775	1.700	1.176	0.776	4.774	5.000		
Chlorobenzene	ug/L	MW-13R	4	37.700	7.974	1.176	28.321	47.079	100.000		
Chloroethane	ug/L	MW-13R	4	0.500	0.000	1.176	0.500	0.500	2800.000		
Cis-1,2-dichloroethylene	ug/L	MW-13R	4	0.625	0.250	1.176	0.331	0.919	70.000		
Ethylbenzene	ug/L	MW-13R	4	0.500	0.000	1.176	0.500	0.500	700.000		
Trans-1,2-dichloroethylene	ug/L	MW-13R	4	0.500	0.000	1.176	0.500	0.500	100.000		
1,1-dichloroethane	ug/L	MW-14	4	0.500	0.000	1.176	0.500	0.500	140.000		
1,4-dichlorobenzene	ug/L	MW-14	4	2.775	0.826	1.176	1.803	3.747	75.000		
Benzene	ug/L	MW-14	4	1.625	0.685	1.176	0.819	2.431	5.000		
Chlorobenzene	ug/L	MW-14	4	0.800	0.356	1.176	0.381	1.219	100.000		
Chloroethane	ug/L	MW-14	4	1.350	0.645	1.176	0.591	2.109	2800.000		
Cis-1,2-dichloroethylene	ug/L	MW-14	4	0.500	0.000	1.176	0.500	0.500	70.000		
Ethylbenzene	ug/L	MW-14	4	0.500	0.000	1.176	0.500	0.500	700.000		
Trans-1,2-dichloroethylene	ug/L	MW-14	4	0.500	0.000	1.176	0.500	0.500	100.000		
1,1-dichloroethane	ug/L	MW-211	4	0.500	0.000	1.176	0.500	0.500	140.000	dec	
1,4-dichlorobenzene	ug/L	MW-211	4	0.500	0.000	1.176	0.500	0.500	75.000		
Benzene	ug/L	MW-211	4	0.675	0.350	1.176	0.263	1.087	5.000		
Chlorobenzene	ug/L	MW-211	4	3.725	1.372	1.176	2.111	5.339	100.000		
Chloroethane	ug/L	MW-211	4	0.500	0.000	1.176	0.500	0.500	2800.000		
Cis-1,2-dichloroethylene	ug/L	MW-211	4	0.500	0.000	1.176	0.500	0.500	70.000		
Ethylbenzene	ug/L	MW-211	4	0.500	0.000	1.176	0.500	0.500	700.000		
Trans-1,2-dichloroethylene	ug/L	MW-211	4	0.500	0.000	1.176	0.500	0.500	100.000		
1,1-dichloroethane	ug/L	MW-31R	4	3.025	0.222	1.176	2.764	3.286	140.000		inc
1,4-dichlorobenzene	ug/L	MW-31R	4	17.025	3.169	1.176	13.297	20.753	75.000		
Benzene	ug/L	MW-31R	4	1.925	0.386	1.176	1.471	2.379	5.000	inc	
Chlorobenzene	ug/L	MW-31R	4	22.675	3.490	1.176	18.569	26.781	100.000		
Chloroethane	ug/L	MW-31R	4	3.275	0.457	1.176	2.737	3.813	2800.000	dec	
Cis-1,2-dichloroethylene	ug/L	MW-31R	4	16.100	3.703	1.176	11.744	20.456	70.000		
Ethylbenzene	ug/L	MW-31R	4	1.200	1.092	1.176	0.000	2.485	700.000	dec	
Trans-1,2-dichloroethylene	ug/L	MW-31R	4	2.050	0.420	1.176	1.556	2.544	100.000		
1,1-dichloroethane	ug/L	MW-7	4	0.500	0.000	1.176	0.500	0.500	140.000		
1,4-dichlorobenzene	ug/L	MW-7	4	0.500	0.000	1.176	0.500	0.500	75.000		
Benzene	ug/L	MW-7	4	0.500	0.000	1.176	0.500	0.500	5.000		
Chlorobenzene	ug/L	MW-7	4	0.500	0.000	1.176	0.500	0.500	100.000		
Chloroethane	ug/L	MW-7	4	1.900	1.378	1.176	0.279	3.521	2800.000		
Cis-1,2-dichloroethylene	ug/L	MW-7	4	0.500	0.000	1.176	0.500	0.500	70.000		
Ethylbenzene	ug/L	MW-7	4	0.500	0.000	1.176	0.500	0.500	700.000		
Trans-1,2-dichloroethylene	ug/L	MW-7	4	0.500	0.000	1.176	0.500	0.500	100.000		
1,1-dichloroethane	ug/L	MW-9	4	0.675	0.350	1.176	0.263	1.087	140.000		
1,4-dichlorobenzene	ug/L	MW-9	4	0.500	0.000	1.176	0.500	0.500	75.000		
Benzene	ug/L	MW-9	4	0.500	0.000	1.176	0.500	0.500	5.000		
Chlorobenzene	ug/L	MW-9	4	0.500	0.000	1.176	0.500	0.500	100.000		
Chloroethane	ug/L	MW-9	4	0.500	0.000	1.176	0.500	0.500	2800.000		
Cis-1,2-dichloroethylene	ug/L	MW-9	4	0.500	0.000	1.176	0.500	0.500	70.000		
Ethylbenzene	ug/L	MW-9	4	0.500	0.000	1.176	0.500	0.500	700.000		
Trans-1,2-dichloroethylene	ug/L	MW-9	4	0.500	0.000	1.176	0.500	0.500	100.000		

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

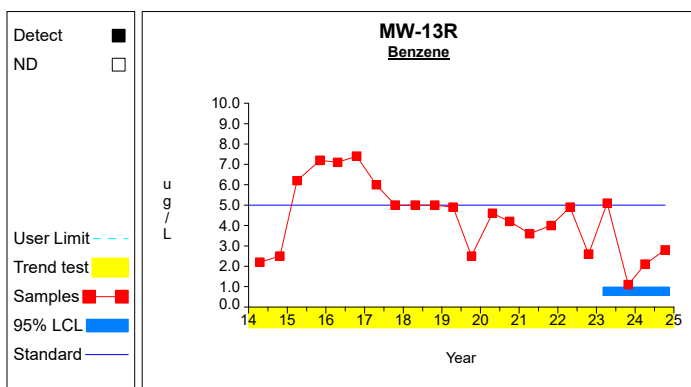
Confidence Limits (Assessment)



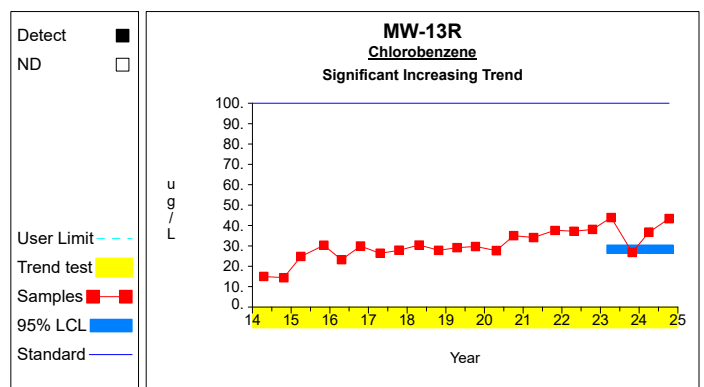
Graph 1



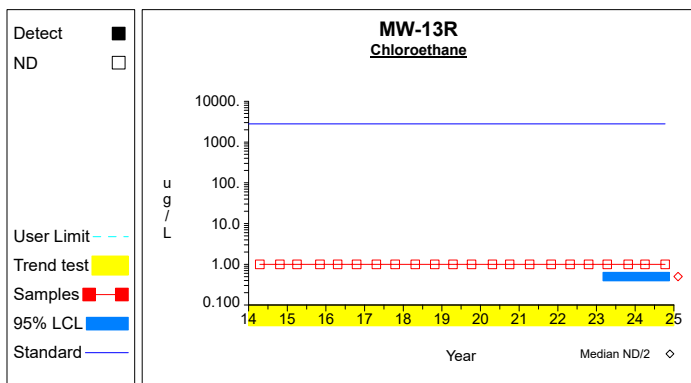
Graph 2



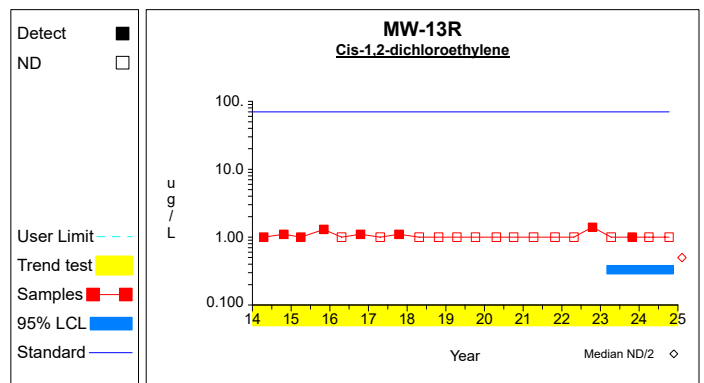
Graph 3



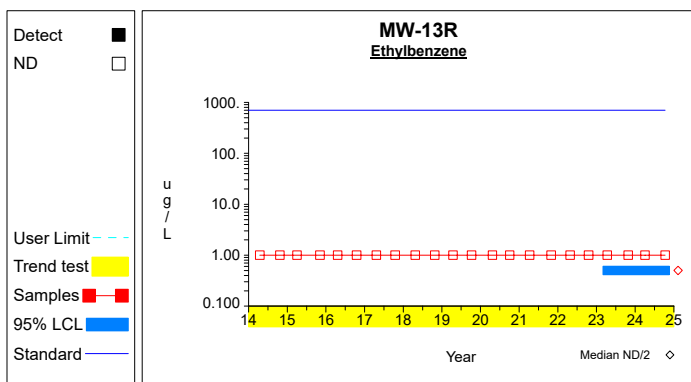
Graph 4



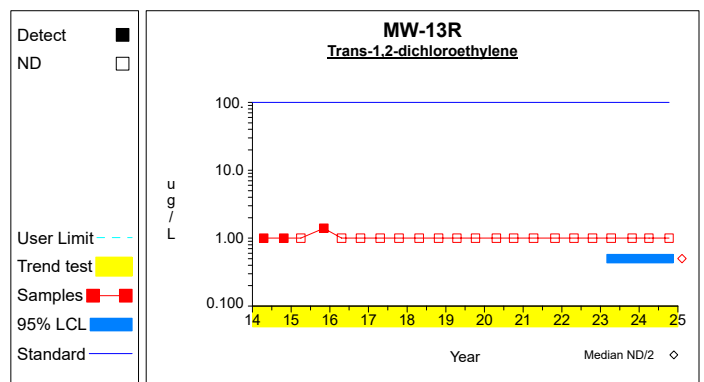
Graph 5



Graph 6

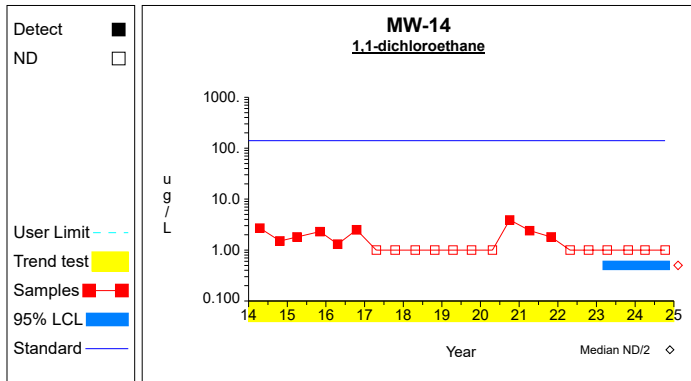


Graph 7

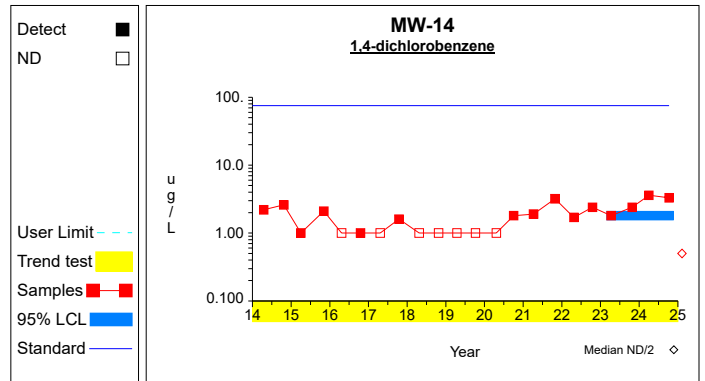


Graph 8

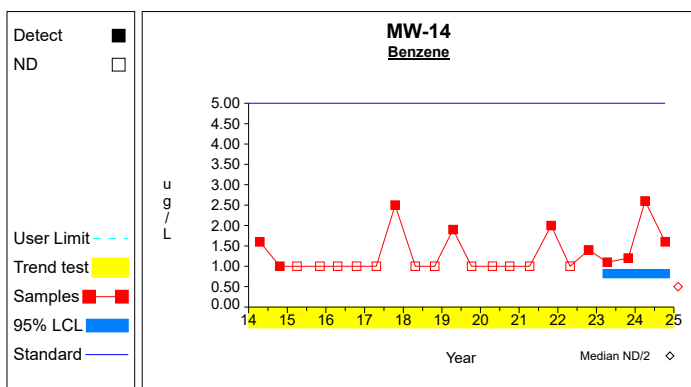
Confidence Limits (Assessment)



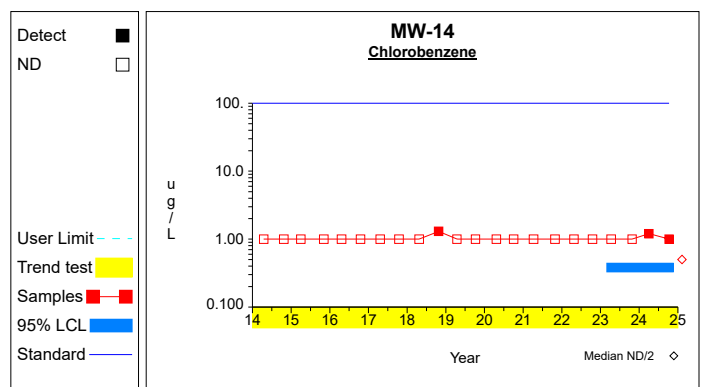
Graph 9



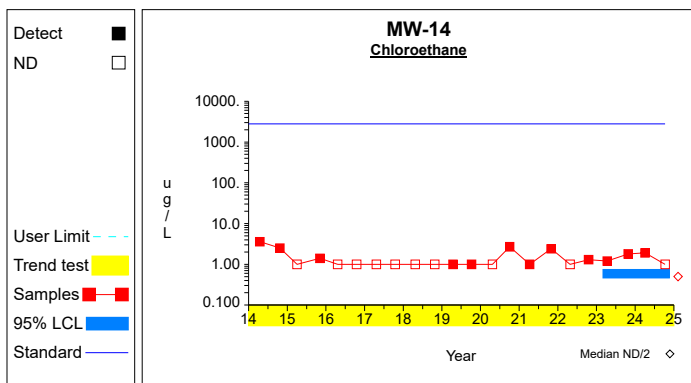
Graph 10



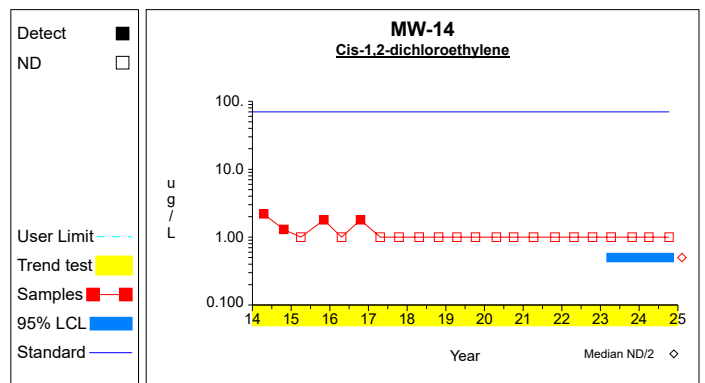
Graph 11



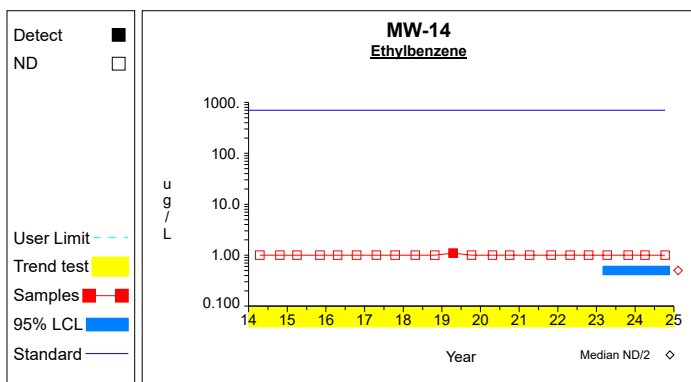
Graph 12



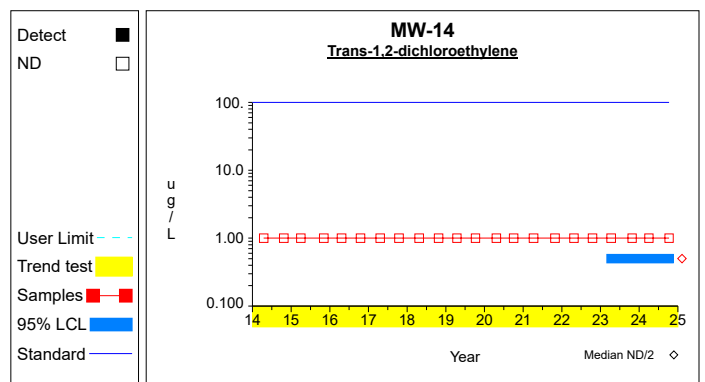
Graph 13



Graph 14

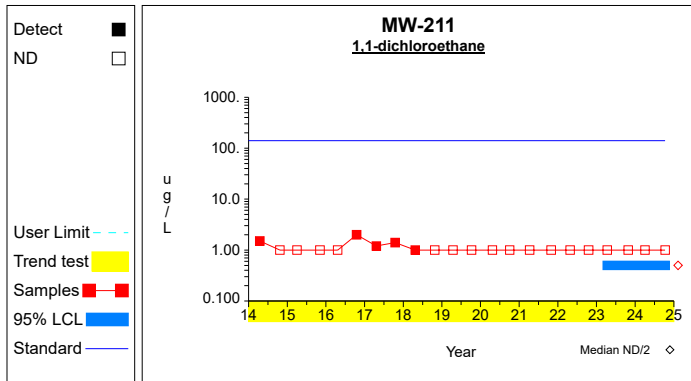


Graph 15

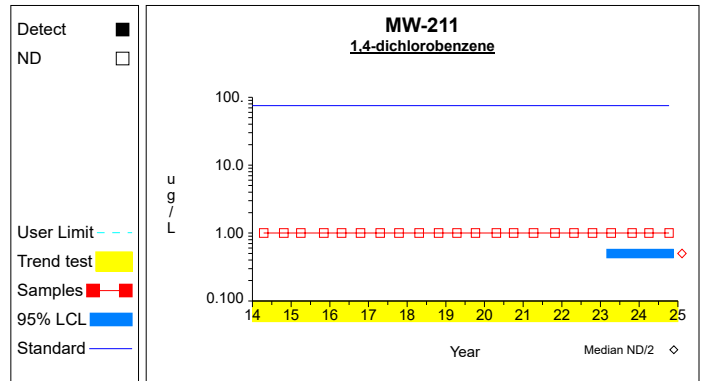


Graph 16

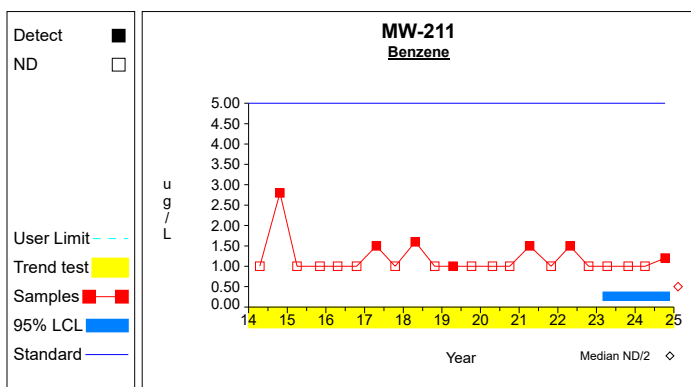
Confidence Limits (Assessment)



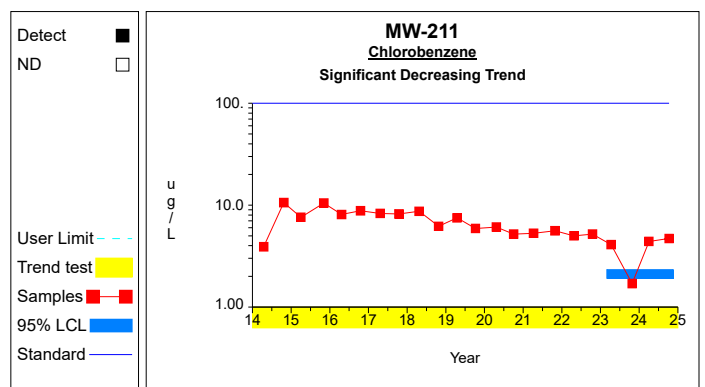
Graph 17



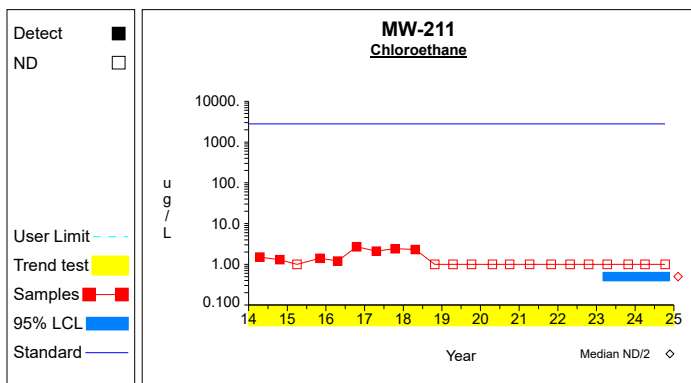
Graph 18



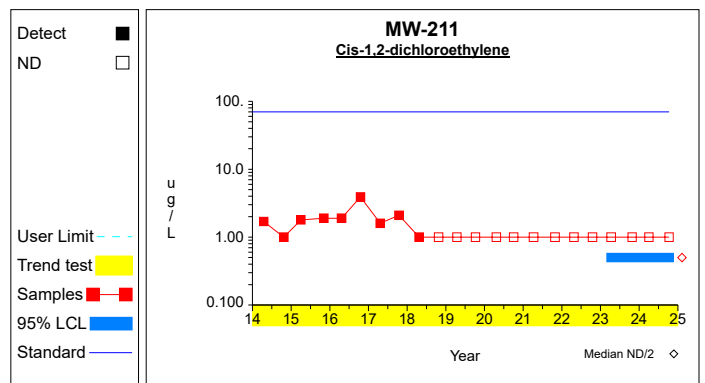
Graph 19



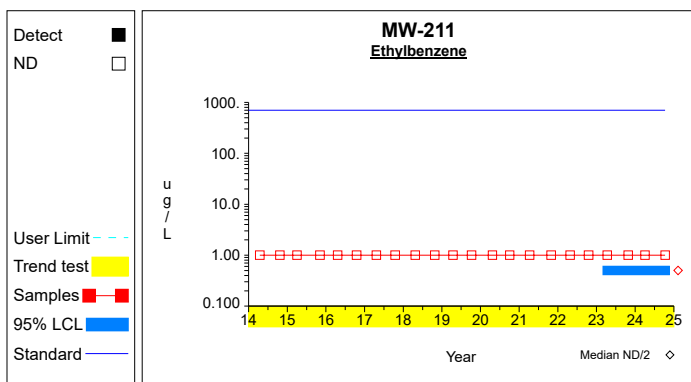
Graph 20



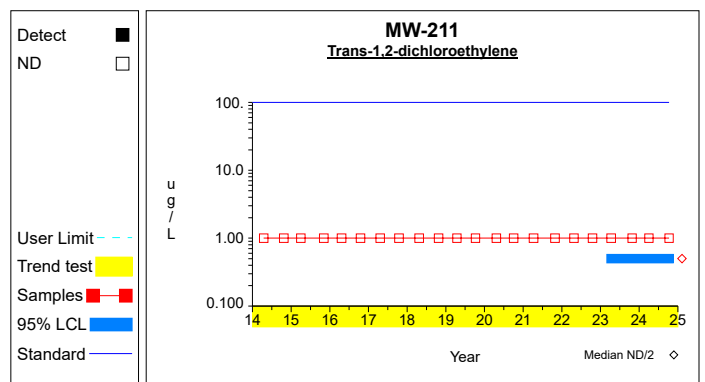
Graph 21



Graph 22

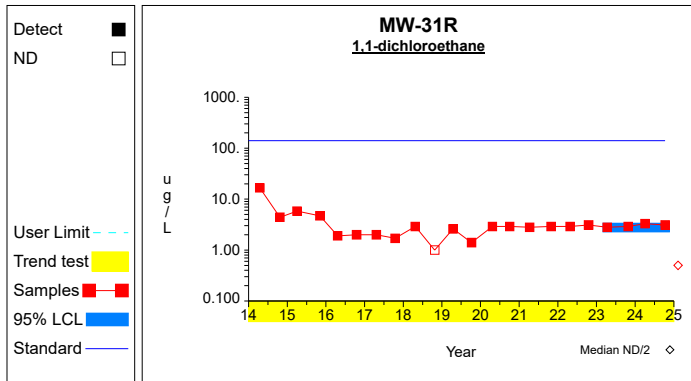


Graph 23

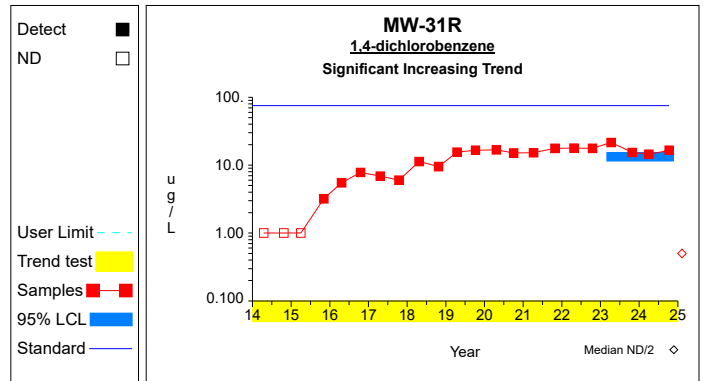


Graph 24

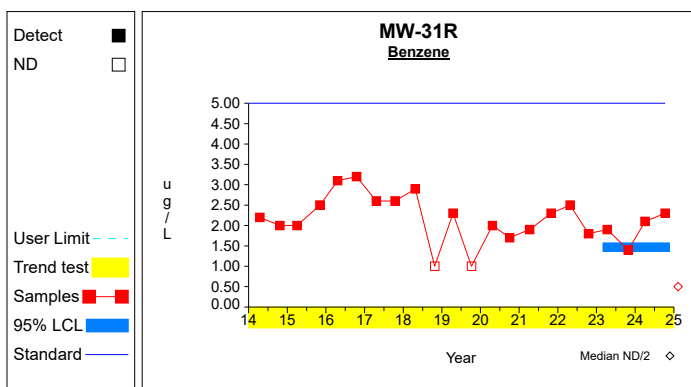
Confidence Limits (Assessment)



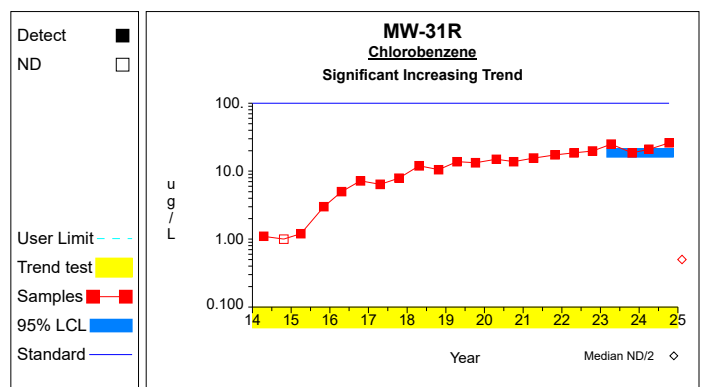
Graph 25



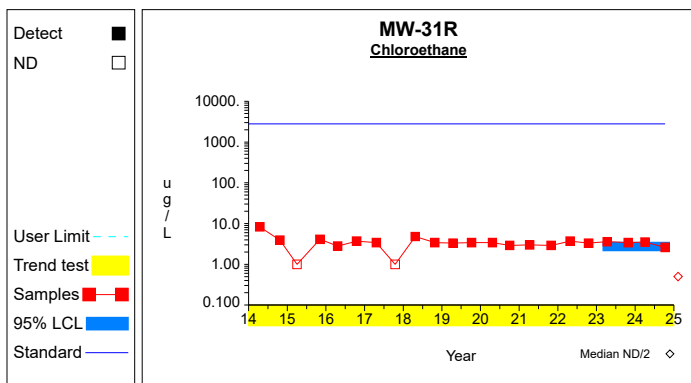
Graph 26



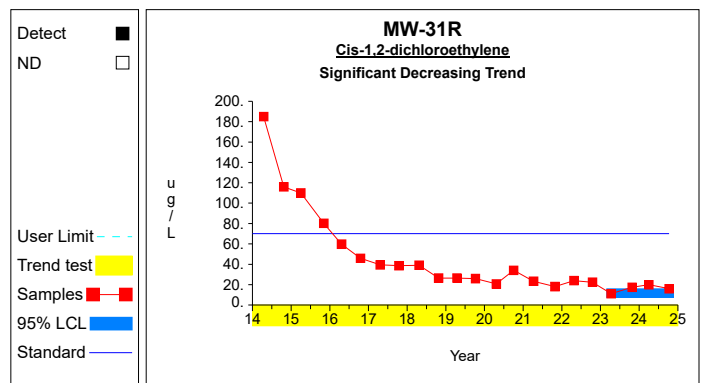
Graph 27



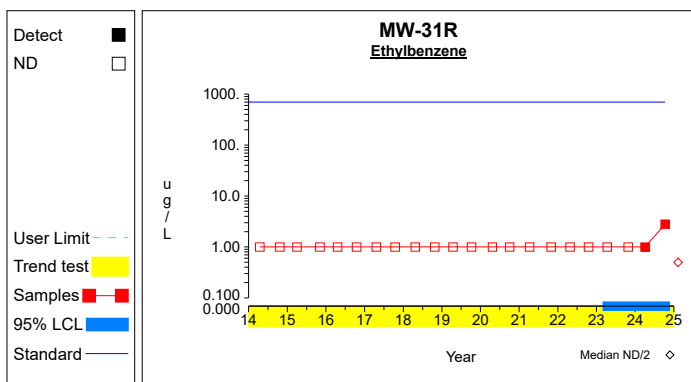
Graph 28



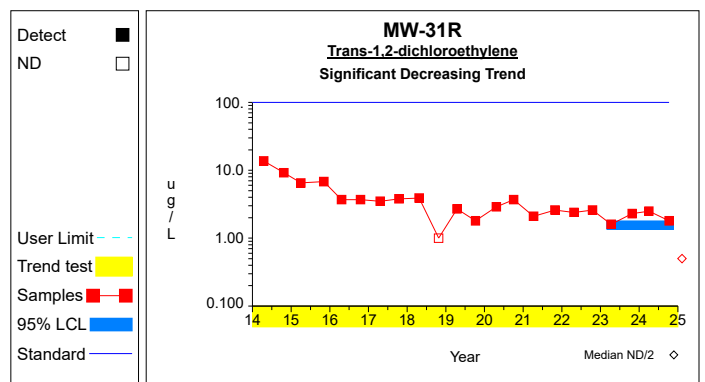
Graph 29



Graph 30

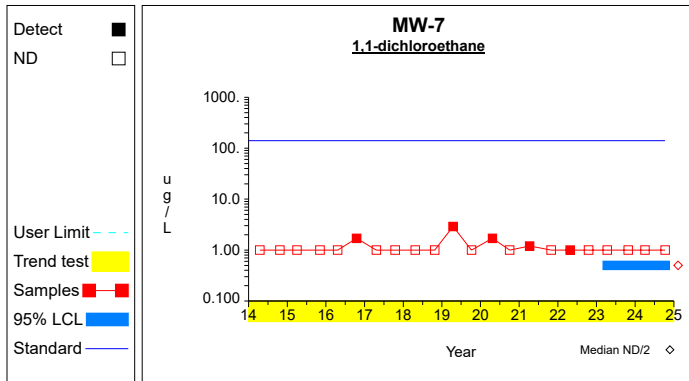


Graph 31

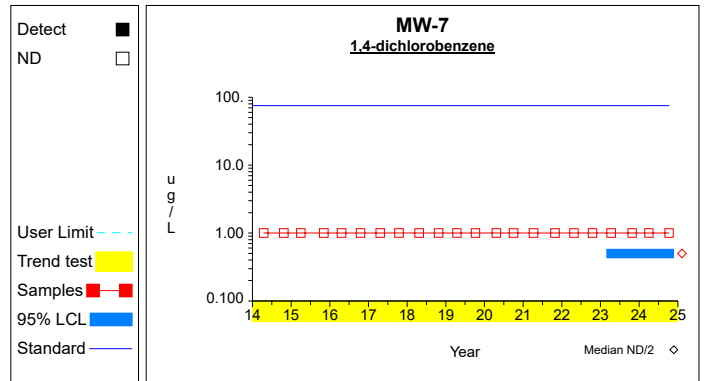


Graph 32

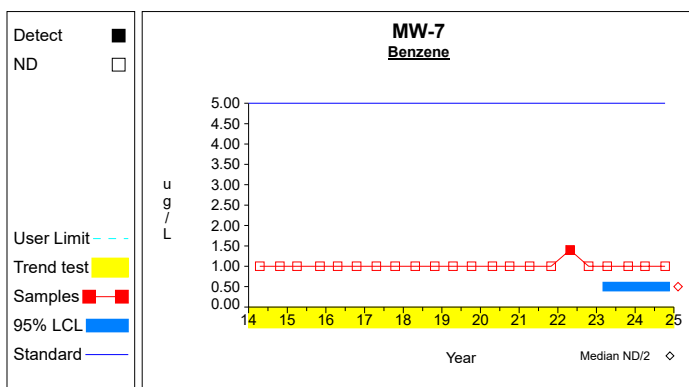
Confidence Limits (Assessment)



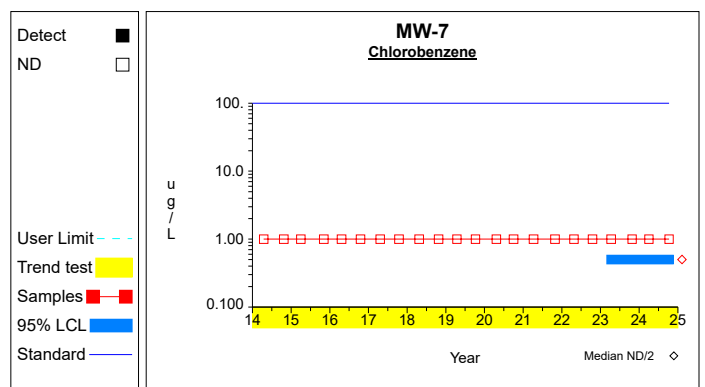
Graph 33



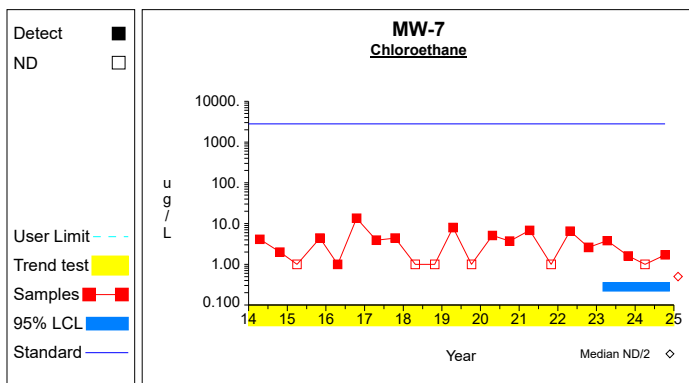
Graph 34



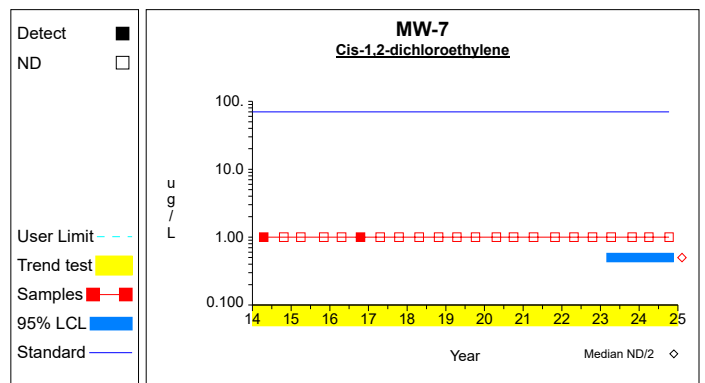
Graph 35



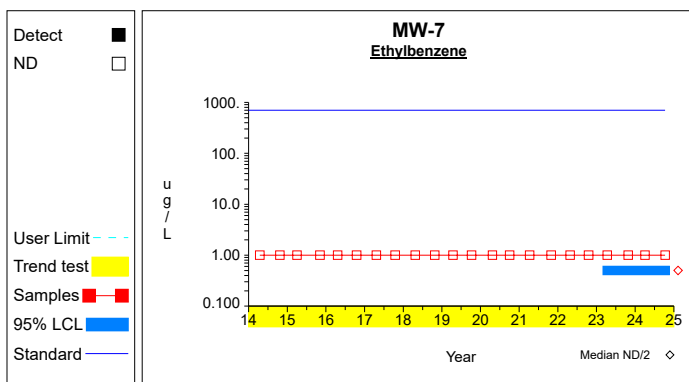
Graph 36



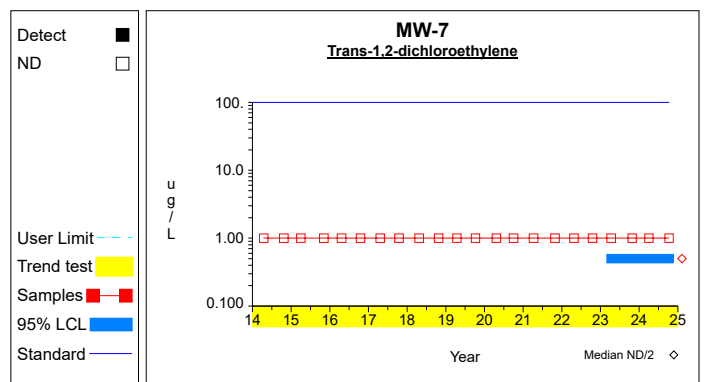
Graph 37



Graph 38

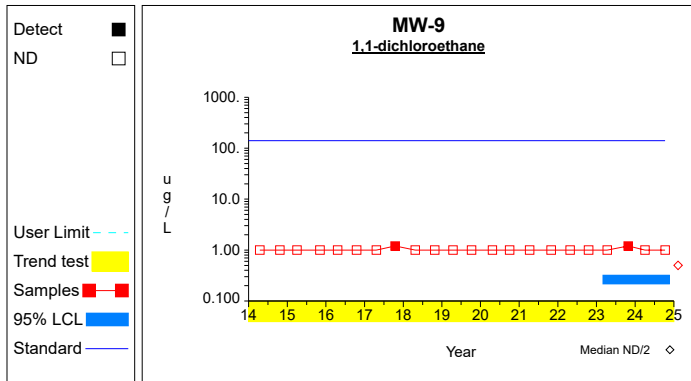


Graph 39

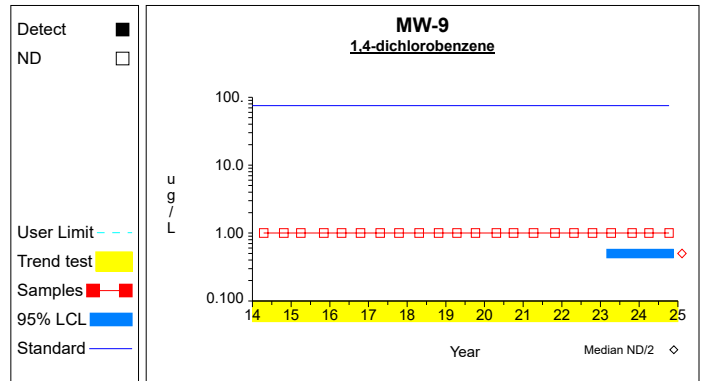


Graph 40

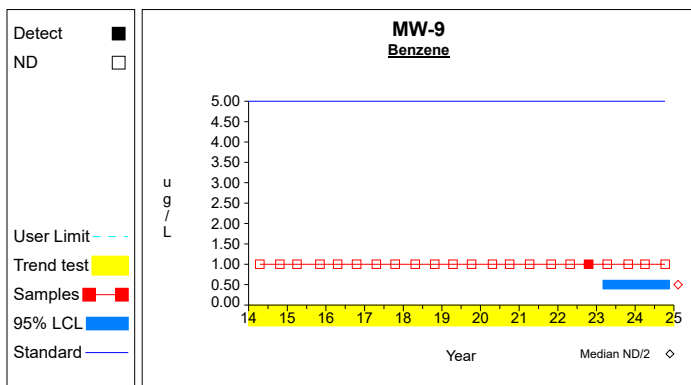
Confidence Limits (Assessment)



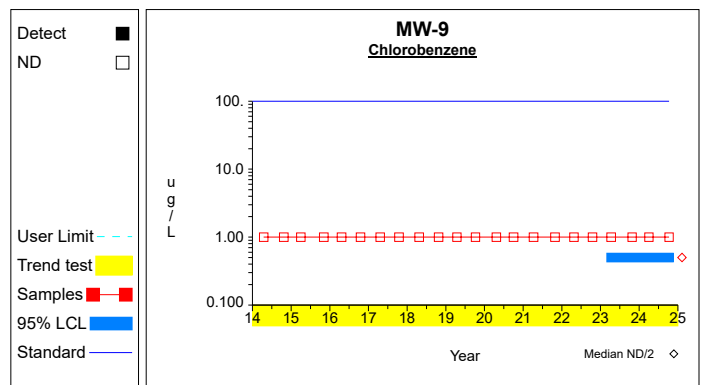
Graph 41



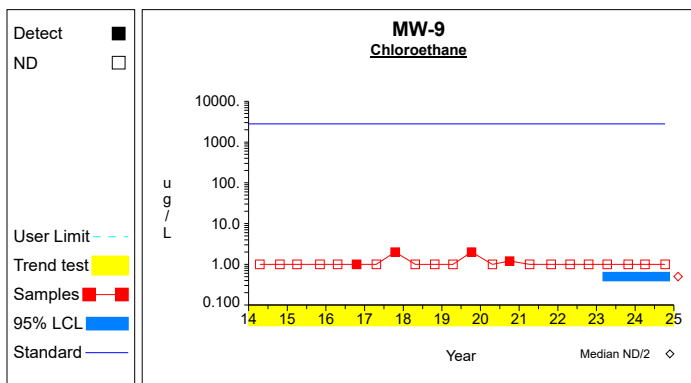
Graph 42



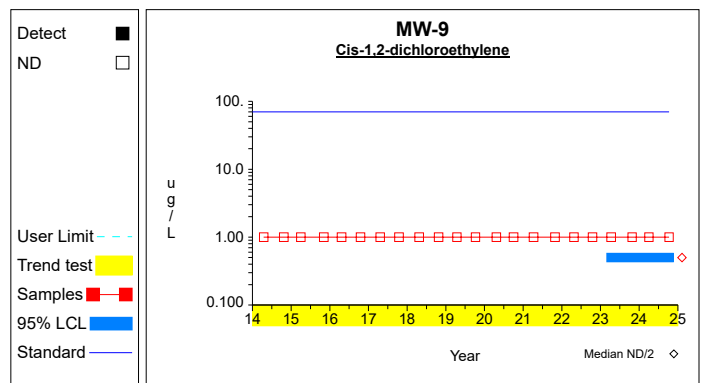
Graph 43



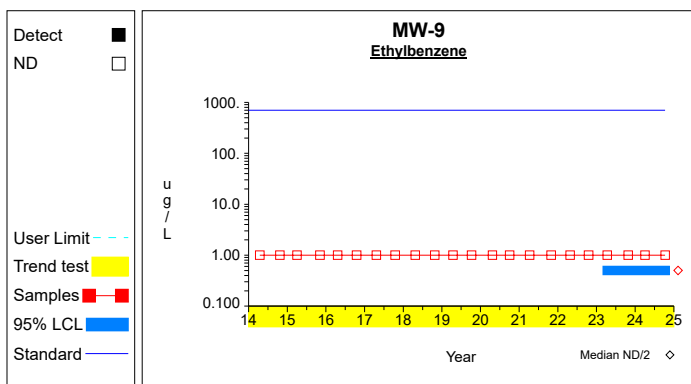
Graph 44



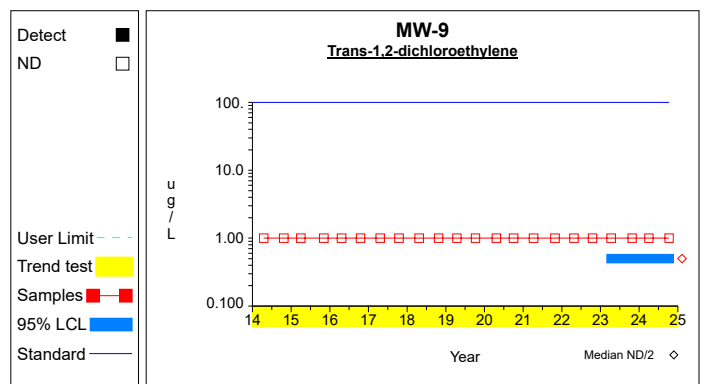
Graph 45



Graph 46



Graph 47



Graph 48

Worksheet 6 - Assessment Monitoring
1,1-dichloroethane (ug/L) at MW-13R

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 2.0 / 4$ $= 0.5$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((1.0 - 4.0/4) / (4-1))^{1/2}$ $= 0.0$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 0.5 - 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 0.5 + 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = 0.0$	Sen's estimator of trend.
7	$\text{var}(S) = 0.0$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 0.0^{1/2}) / 2$ $= [115.5, 115.5]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.0, 0.0]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
1,4-dichlorobenzene (ug/L) at MW-13R

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 5.5 / 4$ $= 1.375$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((8.01 - 30.25/4) / (4-1))^{1/2}$ $= 0.386$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 1.375 - 2.353 * 0.386/4^{1/2}$ $= 0.921$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 1.375 + 2.353 * 0.386/4^{1/2}$ $= 1.829$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = 0.058$	Sen's estimator of trend.
7	$\text{var}(S) = 1220.667$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 1220.667^{1/2}) / 2$ $= [70.5, 160.5]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.0, 0.124]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Benzene (ug/L) at MW-13R

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 11.1 / 4$ $= 2.775$	Compute the mean of the last 4 measurements.
2	$S = \left(\frac{\text{sum}[X^2] - \text{sum}[X]^2/N}{N-1} \right)^{1/2}$ $= \left(\frac{39.47 - 123.21/4}{4-1} \right)^{1/2}$ $= 1.7$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 2.775 - 2.353 * 1.7/4^{1/2}$ $= 0.776$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 2.775 + 2.353 * 1.7/4^{1/2}$ $= 4.774$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = -0.357$	Sen's estimator of trend.
7	$\text{var}(S) = 1252.0$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 1252.0^{1/2}) / 2$ $= [69.926, 161.074]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [-0.629, 0.0]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chlorobenzene (ug/L) at MW-13R

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 150.8 / 4$ $= 37.7$	Compute the mean of the last 4 measurements.
2	$S = \left(\frac{\text{sum}[X^2] - \text{sum}[X]^2/N}{N-1} \right)^{1/2}$ $= \left(\frac{5875.9 - 22740.64/4}{4-1} \right)^{1/2}$ $= 7.974$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 37.7 - 2.353 * 7.974/4^{1/2}$ $= 28.321$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 37.7 + 2.353 * 7.974/4^{1/2}$ $= 47.079$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = 2.039$	Sen's estimator of trend.
7	$\text{var}(S) = 1257.667$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 1257.667^{1/2}) / 2$ $= [69.823, 161.177]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [1.081, 2.768]$	Two-sided confidence interval for slope.
10	$\text{LCL}(S) > 0$	Significant increasing trend.

Worksheet 6 - Assessment Monitoring
Chloroethane (ug/L) at MW-13R

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 2.0 / 4$ $= 0.5$	Compute the mean of the last 4 measurements.
2	$S = \left(\frac{\text{sum}[X^2] - \text{sum}[X]^2/N}{N-1} \right)^{1/2}$ $= \left(\frac{1.0 - 4.0/4}{4-1} \right)^{1/2}$ $= 0.0$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 0.5 - 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 0.5 + 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = 0.0$	Sen's estimator of trend.
7	$\text{var}(S) = 0.0$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 0.0^{1/2}) / 2$ $= [115.5, 115.5]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.0, 0.0]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cis-1,2-dichloroethylene (ug/L) at MW-13R

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 2.5 / 4$ $= 0.625$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((1.75 - 6.25/4) / (4-1))^{1/2}$ $= 0.25$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 0.625 - 2.353 * 0.25/4^{1/2}$ $= 0.331$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 0.625 + 2.353 * 0.25/4^{1/2}$ $= 0.919$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = 0.0$	Sen's estimator of trend.
7	$\text{var}(S) = 916.667$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 916.667^{1/2}) / 2$ $= [76.504, 154.496]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [-0.076, 0.0]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Ethylbenzene (ug/L) at MW-13R

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 2.0 / 4$ $= 0.5$	Compute the mean of the last 4 measurements.
2	$S = \left(\frac{\text{sum}[X^2] - \text{sum}[X]^2/N}{N-1} \right)^{1/2}$ $= \left(\frac{1.0 - 4.0/4}{4-1} \right)^{1/2}$ $= 0.0$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 0.5 - 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 0.5 + 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = 0.0$	Sen's estimator of trend.
7	$\text{var}(S) = 0.0$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 0.0^{1/2}) / 2$ $= [115.5, 115.5]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.0, 0.0]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Trans-1,2-dichloroethylene (ug/L) at MW-13R

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 2.0 / 4$ $= 0.5$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((1.0 - 4.0/4) / (4-1))^{1/2}$ $= 0.0$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 0.5 - 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 0.5 + 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = 0.0$	Sen's estimator of trend.
7	$\text{var}(S) = 439.667$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 439.667^{1/2}) / 2$ $= [88.493, 142.507]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.0, 0.0]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
1,1-dichloroethane (ug/L) at MW-14

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 2.0 / 4$ $= 0.5$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((1.0 - 4.0/4) / (4-1))^{1/2}$ $= 0.0$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 0.5 - 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 0.5 + 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = 0.0$	Sen's estimator of trend.
7	$\text{var}(S) = 988.0$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 988.0^{1/2}) / 2$ $= [75.015, 155.985]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [-0.245, 0.0]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
1,4-dichlorobenzene (ug/L) at MW-14

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 11.1 / 4$ $= 2.775$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((32.85 - 123.21/4) / (4-1))^{1/2}$ $= 0.826$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 2.775 - 2.353 * 0.826/4^{1/2}$ $= 1.803$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 2.775 + 2.353 * 0.826/4^{1/2}$ $= 3.747$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = 0.133$	Sen's estimator of trend.
7	$\text{var}(S) = 1210.333$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 1210.333^{1/2}) / 2$ $= [70.691, 160.309]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [-0.029, 0.35]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 6.5 / 4$ $= 1.625$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((11.97 - 42.25/4) / (4-1))^{1/2}$ $= 0.685$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 1.625 - 2.353 * 0.685/4^{1/2}$ $= 0.819$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 1.625 + 2.353 * 0.685/4^{1/2}$ $= 2.431$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = 0.0$	Sen's estimator of trend.
7	$\text{var}(S) = 1044.0$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 1044.0^{1/2}) / 2$ $= [73.883, 157.117]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.0, 0.141]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 3.2 / 4$ $= 0.8$	Compute the mean of the last 4 measurements.
2	$S = \left(\frac{\text{sum}[X^2] - \text{sum}[X]^2/N}{N-1} \right)^{1/2}$ $= \left(\frac{2.94 - 10.24/4}{4-1} \right)^{1/2}$ $= 0.356$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 0.8 - 2.353 * 0.356/4^{1/2}$ $= 0.381$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 0.8 + 2.353 * 0.356/4^{1/2}$ $= 1.219$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = 0.0$	Sen's estimator of trend.
7	$\text{var}(S) = 440.667$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 440.667^{1/2}) / 2$ $= [88.462, 142.538]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.0, 0.0]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 5.4 / 4$ $= 1.35$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((8.54 - 29.16/4) / (4-1))^{1/2}$ $= 0.645$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 1.35 - 2.353 * 0.645/4^{1/2}$ $= 0.591$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 1.35 + 2.353 * 0.645/4^{1/2}$ $= 2.109$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = 0.0$	Sen's estimator of trend.
7	$\text{var}(S) = 1129.0$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 1129.0^{1/2}) / 2$ $= [72.222, 158.778]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [-0.102, 0.159]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cis-1,2-dichloroethylene (ug/L) at MW-14

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 2.0 / 4$ $= 0.5$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((1.0 - 4.0/4) / (4-1))^{1/2}$ $= 0.0$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 0.5 - 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 0.5 + 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = 0.0$	Sen's estimator of trend.
7	$\text{var}(S) = 559.667$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 559.667^{1/2}) / 2$ $= [85.029, 145.971]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.0, 0.0]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 2.0 / 4$ $= 0.5$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((1.0 - 4.0/4) / (4-1))^{1/2}$ $= 0.0$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 0.5 - 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 0.5 + 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = 0.0$	Sen's estimator of trend.
7	$\text{var}(S) = 161.0$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 161.0^{1/2}) / 2$ $= [99.157, 131.843]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.0, 0.0]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Trans-1,2-dichloroethylene (ug/L) at MW-14

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 2.0 / 4$ $= 0.5$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((1.0 - 4.0/4) / (4-1))^{1/2}$ $= 0.0$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 0.5 - 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 0.5 + 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = 0.0$	Sen's estimator of trend.
7	$\text{var}(S) = 0.0$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 0.0^{1/2}) / 2$ $= [115.5, 115.5]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.0, 0.0]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
1,1-dichloroethane (ug/L) at MW-211

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 2.0 / 4$ $= 0.5$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((1.0 - 4.0/4) / (4-1))^{1/2}$ $= 0.0$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 0.5 - 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 0.5 + 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = 0.0$	Sen's estimator of trend.
7	$\text{var}(S) = 668.333$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 668.333^{1/2}) / 2$ $= [82.202, 148.798]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.0, 0.0]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
1,4-dichlorobenzene (ug/L) at MW-211

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 2.0 / 4$ $= 0.5$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((1.0 - 4.0/4) / (4-1))^{1/2}$ $= 0.0$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 0.5 - 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 0.5 + 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = 0.0$	Sen's estimator of trend.
7	$\text{var}(S) = 0.0$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 0.0^{1/2}) / 2$ $= [115.5, 115.5]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.0, 0.0]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Benzene (ug/L) at MW-211

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 2.7 / 4$ $= 0.675$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((2.19 - 7.29/4) / (4-1))^{1/2}$ $= 0.35$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 0.675 - 2.353 * 0.35/4^{1/2}$ $= 0.263$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 0.675 + 2.353 * 0.35/4^{1/2}$ $= 1.087$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = 0.0$	Sen's estimator of trend.
7	$\text{var}(S) = 845.667$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 845.667^{1/2}) / 2$ $= [78.045, 152.955]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.0, 0.0]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chlorobenzene (ug/L) at MW-211

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 14.9 / 4$ $= 3.725$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((61.15 - 222.01/4) / (4-1))^{1/2}$ $= 1.372$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 3.725 - 2.353 * 1.372/4^{1/2}$ $= 2.111$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 3.725 + 2.353 * 1.372/4^{1/2}$ $= 5.339$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = -0.574$	Sen's estimator of trend.
7	$\text{var}(S) = 1256.667$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 1256.667^{1/2}) / 2$ $= [69.841, 161.159]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [-0.822, -0.309]$	Two-sided confidence interval for slope.
10	$\text{UCL}(S) < 0$	Significant decreasing trend.

Worksheet 6 - Assessment Monitoring
Chloroethane (ug/L) at MW-211

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 2.0 / 4$ $= 0.5$	Compute the mean of the last 4 measurements.
2	$S = \left(\frac{\text{sum}[X^2] - \text{sum}[X]^2/N}{N-1} \right)^{1/2}$ $= \left(\frac{1.0 - 4.0/4}{4-1} \right)^{1/2}$ $= 0.0$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 0.5 - 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 0.5 + 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = 0.0$	Sen's estimator of trend.
7	$\text{var}(S) = 924.0$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 924.0^{1/2}) / 2$ $= [76.348, 154.652]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [-0.164, 0.0]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cis-1,2-dichloroethylene (ug/L) at MW-211

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 2.0 / 4$ $= 0.5$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((1.0 - 4.0/4) / (4-1))^{1/2}$ $= 0.0$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 0.5 - 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 0.5 + 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = -0.101$	Sen's estimator of trend.
7	$\text{var}(S) = 987.0$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 987.0^{1/2}) / 2$ $= [75.035, 155.965]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [-0.206, 0.0]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Ethylbenzene (ug/L) at MW-211

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 2.0 / 4$ $= 0.5$	Compute the mean of the last 4 measurements.
2	$S = \left(\frac{\text{sum}[X^2] - \text{sum}[X]^2/N}{N-1} \right)^{1/2}$ $= \left(\frac{1.0 - 4.0/4}{4-1} \right)^{1/2}$ $= 0.0$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 0.5 - 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 0.5 + 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = 0.0$	Sen's estimator of trend.
7	$\text{var}(S) = 0.0$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 0.0^{1/2}) / 2$ $= [115.5, 115.5]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.0, 0.0]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Trans-1,2-dichloroethylene (ug/L) at MW-211

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 2.0 / 4$ $= 0.5$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((1.0 - 4.0/4) / (4-1))^{1/2}$ $= 0.0$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 0.5 - 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 0.5 + 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = 0.0$	Sen's estimator of trend.
7	$\text{var}(S) = 0.0$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 0.0^{1/2}) / 2$ $= [115.5, 115.5]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.0, 0.0]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
1,1-dichloroethane (ug/L) at MW-31R

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 12.1 / 4$ $= 3.025$	Compute the mean of the last 4 measurements.
2	$S = \left(\frac{\text{sum}[X^2] - \text{sum}[X]^2/N}{N-1} \right)^{1/2}$ $= \left(\frac{36.75 - 146.41/4}{4-1} \right)^{1/2}$ $= 0.222$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 3.025 - 2.353 * 0.222/4^{1/2}$ $= 2.764$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 3.025 + 2.353 * 0.222/4^{1/2}$ $= 3.286$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = 0.0$	Sen's estimator of trend.
7	$\text{var}(S) = 1226.333$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 1226.333^{1/2}) / 2$ $= [70.395, 160.605]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [-0.294, 0.179]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
1,4-dichlorobenzene (ug/L) at MW-31R

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 68.1 / 4$ $= 17.025$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((1189.53 - 4637.61/4) / (4-1))^{1/2}$ $= 3.169$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 17.025 - 2.353 * 3.169/4^{1/2}$ $= 13.297$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 17.025 + 2.353 * 3.169/4^{1/2}$ $= 20.753$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = 1.988$	Sen's estimator of trend.
7	$\text{var}(S) = 1252.0$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 1252.0^{1/2}) / 2$ $= [69.926, 161.074]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [1.253, 2.495]$	Two-sided confidence interval for slope.
10	$\text{LCL}(S) > 0$	Significant increasing trend.

Worksheet 6 - Assessment Monitoring
Benzene (ug/L) at MW-31R

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 7.7 / 4$ $= 1.925$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((15.27 - 59.29/4) / (4-1))^{1/2}$ $= 0.386$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 1.925 - 2.353 * 0.386/4^{1/2}$ $= 1.471$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 1.925 + 2.353 * 0.386/4^{1/2}$ $= 2.379$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = -0.048$	Sen's estimator of trend.
7	$\text{var}(S) = 1246.333$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 1246.333^{1/2}) / 2$ $= [70.029, 160.971]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [-0.179, 0.067]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chlorobenzene (ug/L) at MW-31R

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 90.7 / 4$ $= 22.675$	Compute the mean of the last 4 measurements.
2	$S = \left(\frac{\text{sum}[X^2] - \text{sum}[X]^2/N}{N-1} \right)^{1/2}$ $= \left(\frac{2093.17 - 8226.49/4}{4-1} \right)^{1/2}$ $= 3.49$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 22.675 - 2.353 * 3.49/4^{1/2}$ $= 18.569$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 22.675 + 2.353 * 3.49/4^{1/2}$ $= 26.781$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = 2.354$	Sen's estimator of trend.
7	$\text{var}(S) = 1255.667$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 1255.667^{1/2}) / 2$ $= [69.859, 161.141]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [1.988, 2.635]$	Two-sided confidence interval for slope.
10	$\text{LCL}(S) > 0$	Significant increasing trend.

Worksheet 6 - Assessment Monitoring
Chloroethane (ug/L) at MW-31R

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 13.1 / 4$ $= 3.275$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((43.53 - 171.61/4) / (4-1))^{1/2}$ $= 0.457$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 3.275 - 2.353 * 0.457/4^{1/2}$ $= 2.737$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 3.275 + 2.353 * 0.457/4^{1/2}$ $= 3.813$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = -0.05$	Sen's estimator of trend.
7	$\text{var}(S) = 1237.0$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 1237.0^{1/2}) / 2$ $= [70.2, 160.8]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [-0.179, 0.095]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cis-1,2-dichloroethylene (ug/L) at MW-31R

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 64.4 / 4$ $= 16.1$	Compute the mean of the last 4 measurements.
2	$S = \left(\frac{\text{sum}[X^2] - \text{sum}[X]^2/N}{N-1} \right)^{1/2}$ $= \left(\frac{1077.98 - 4147.36/4}{4-1} \right)^{1/2}$ $= 3.703$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 16.1 - 2.353 * 3.703/4^{1/2}$ $= 11.744$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 16.1 + 2.353 * 3.703/4^{1/2}$ $= 20.456$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = -6.083$	Sen's estimator of trend.
7	$\text{var}(S) = 1256.667$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 1256.667^{1/2}) / 2$ $= [69.841, 161.159]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [-12.336, -3.332]$	Two-sided confidence interval for slope.
10	$\text{UCL}(S) < 0$	Significant decreasing trend.

Worksheet 6 - Assessment Monitoring
Ethylbenzene (ug/L) at MW-31R

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 4.8 / 4$ $= 1.2$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((9.34 - 23.04/4) / (4-1))^{1/2}$ $= 1.092$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 1.2 - 2.353 * 1.092/4^{1/2}$ $= 0.0$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 1.2 + 2.353 * 1.092/4^{1/2}$ $= 2.485$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = 0.0$	Sen's estimator of trend.
7	$\text{var}(S) = 307.667$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 307.667^{1/2}) / 2$ $= [92.908, 138.092]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.0, 0.0]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Trans-1,2-dichloroethylene (ug/L) at MW-31R

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 8.2 / 4$ $= 2.05$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((17.34 - 67.24/4) / (4-1))^{1/2}$ $= 0.42$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 2.05 - 2.353 * 0.42/4^{1/2}$ $= 1.556$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 2.05 + 2.353 * 0.42/4^{1/2}$ $= 2.544$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = -0.37$	Sen's estimator of trend.
7	$\text{var}(S) = 1252.0$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 1252.0^{1/2}) / 2$ $= [69.926, 161.074]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [-0.834, -0.182]$	Two-sided confidence interval for slope.
10	$\text{UCL}(S) < 0$	Significant decreasing trend.

Worksheet 6 - Assessment Monitoring
1,1-dichloroethane (ug/L) at MW-7

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 2.0 / 4$ $= 0.5$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((1.0 - 4.0/4) / (4-1))^{1/2}$ $= 0.0$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 0.5 - 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 0.5 + 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = 0.0$	Sen's estimator of trend.
7	$\text{var}(S) = 667.333$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 667.333^{1/2}) / 2$ $= [82.227, 148.773]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.0, 0.0]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
1,4-dichlorobenzene (ug/L) at MW-7

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 2.0 / 4$ $= 0.5$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((1.0 - 4.0/4) / (4-1))^{1/2}$ $= 0.0$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 0.5 - 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 0.5 + 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = 0.0$	Sen's estimator of trend.
7	$\text{var}(S) = 0.0$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 0.0^{1/2}) / 2$ $= [115.5, 115.5]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.0, 0.0]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Benzene (ug/L) at MW-7

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 2.0 / 4$ $= 0.5$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((1.0 - 4.0/4) / (4-1))^{1/2}$ $= 0.0$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 0.5 - 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 0.5 + 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = 0.0$	Sen's estimator of trend.
7	$\text{var}(S) = 161.0$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 161.0^{1/2}) / 2$ $= [99.157, 131.843]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.0, 0.0]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chlorobenzene (ug/L) at MW-7

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 2.0 / 4$ $= 0.5$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((1.0 - 4.0/4) / (4-1))^{1/2}$ $= 0.0$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 0.5 - 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 0.5 + 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = 0.0$	Sen's estimator of trend.
7	$\text{var}(S) = 0.0$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 0.0^{1/2}) / 2$ $= [115.5, 115.5]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.0, 0.0]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chloroethane (ug/L) at MW-7

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 7.6 / 4$ $= 1.9$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((20.14 - 57.76/4) / (4-1))^{1/2}$ $= 1.378$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 1.9 - 2.353 * 1.378/4^{1/2}$ $= 0.279$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 1.9 + 2.353 * 1.378/4^{1/2}$ $= 3.521$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = -0.033$	Sen's estimator of trend.
7	$\text{var}(S) = 1228.333$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 1228.333^{1/2}) / 2$ $= [70.359, 160.641]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [-0.665, 0.401]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cis-1,2-dichloroethylene (ug/L) at MW-7

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 2.0 / 4$ $= 0.5$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((1.0 - 4.0/4) / (4-1))^{1/2}$ $= 0.0$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 0.5 - 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 0.5 + 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = 0.0$	Sen's estimator of trend.
7	$\text{var}(S) = 306.667$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 306.667^{1/2}) / 2$ $= [92.945, 138.055]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.0, 0.0]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Ethylbenzene (ug/L) at MW-7

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 2.0 / 4$ $= 0.5$	Compute the mean of the last 4 measurements.
2	$S = \left(\frac{\text{sum}[X^2] - \text{sum}[X]^2/N}{N-1} \right)^{1/2}$ $= \left(\frac{1.0 - 4.0/4}{4-1} \right)^{1/2}$ $= 0.0$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 0.5 - 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 0.5 + 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = 0.0$	Sen's estimator of trend.
7	$\text{var}(S) = 0.0$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 0.0^{1/2}) / 2$ $= [115.5, 115.5]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.0, 0.0]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Trans-1,2-dichloroethylene (ug/L) at MW-7

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 2.0 / 4$ $= 0.5$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((1.0 - 4.0/4) / (4-1))^{1/2}$ $= 0.0$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 0.5 - 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 0.5 + 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = 0.0$	Sen's estimator of trend.
7	$\text{var}(S) = 0.0$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 0.0^{1/2}) / 2$ $= [115.5, 115.5]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.0, 0.0]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
1,1-dichloroethane (ug/L) at MW-9

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 2.7 / 4$ $= 0.675$	Compute the mean of the last 4 measurements.
2	$S = \left(\frac{\text{sum}[X^2] - \text{sum}[X]^2/N}{N-1} \right)^{1/2}$ $= \left(\frac{2.19 - 7.29/4}{4-1} \right)^{1/2}$ $= 0.35$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 0.675 - 2.353 * 0.35/4^{1/2}$ $= 0.263$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 0.675 + 2.353 * 0.35/4^{1/2}$ $= 1.087$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = 0.0$	Sen's estimator of trend.
7	$\text{var}(S) = 306.667$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 306.667^{1/2}) / 2$ $= [92.945, 138.055]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.0, 0.0]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
1,4-dichlorobenzene (ug/L) at MW-9

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 2.0 / 4$ $= 0.5$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((1.0 - 4.0/4) / (4-1))^{1/2}$ $= 0.0$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 0.5 - 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 0.5 + 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = 0.0$	Sen's estimator of trend.
7	$\text{var}(S) = 0.0$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 0.0^{1/2}) / 2$ $= [115.5, 115.5]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.0, 0.0]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Benzene (ug/L) at MW-9

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 2.0 / 4$ $= 0.5$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((1.0 - 4.0/4) / (4-1))^{1/2}$ $= 0.0$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 0.5 - 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 0.5 + 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = 0.0$	Sen's estimator of trend.
7	$\text{var}(S) = 161.0$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 161.0^{1/2}) / 2$ $= [99.157, 131.843]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.0, 0.0]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chlorobenzene (ug/L) at MW-9

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 2.0 / 4$ $= 0.5$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((1.0 - 4.0/4) / (4-1))^{1/2}$ $= 0.0$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 0.5 - 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 0.5 + 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = 0.0$	Sen's estimator of trend.
7	$\text{var}(S) = 0.0$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 0.0^{1/2}) / 2$ $= [115.5, 115.5]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.0, 0.0]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Chloroethane (ug/L) at MW-9

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 2.0 / 4$ $= 0.5$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((1.0 - 4.0/4) / (4-1))^{1/2}$ $= 0.0$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 0.5 - 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 0.5 + 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = 0.0$	Sen's estimator of trend.
7	$\text{var}(S) = 559.667$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 559.667^{1/2}) / 2$ $= [85.029, 145.971]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.0, 0.0]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Cis-1,2-dichloroethylene (ug/L) at MW-9

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 2.0 / 4$ $= 0.5$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((1.0 - 4.0/4) / (4-1))^{1/2}$ $= 0.0$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 0.5 - 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 0.5 + 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = 0.0$	Sen's estimator of trend.
7	$\text{var}(S) = 0.0$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 0.0^{1/2}) / 2$ $= [115.5, 115.5]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.0, 0.0]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Ethylbenzene (ug/L) at MW-9

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 2.0 / 4$ $= 0.5$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((1.0 - 4.0/4) / (4-1))^{1/2}$ $= 0.0$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 0.5 - 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 0.5 + 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = 0.0$	Sen's estimator of trend.
7	$\text{var}(S) = 0.0$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 0.0^{1/2}) / 2$ $= [115.5, 115.5]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.0, 0.0]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Worksheet 6 - Assessment Monitoring
Trans-1,2-dichloroethylene (ug/L) at MW-9

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ $= 2.0 / 4$ $= 0.5$	Compute the mean of the last 4 measurements.
2	$S = ((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1))^{1/2}$ $= ((1.0 - 4.0/4) / (4-1))^{1/2}$ $= 0.0$	Compute sd of the last 4 measurements.
3	$\text{LCL} = \bar{X} - tS/N^{1/2}$ $= 0.5 - 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute lower confidence limit for the mean of the last 4 measurements.
4	$\text{UCL} = \bar{X} + tS/N^{1/2}$ $= 0.5 + 2.353 * 0.0/4^{1/2}$ $= 0.5$	Compute upper confidence limit for the mean of the last 4 measurements.
5	$N' = N * (N-1) / 2$ $= 22 * (22-1) / 2$ $= 231$	Number of sample pairs during trend detection period.
6	$S = 0.0$	Sen's estimator of trend.
7	$\text{var}(S) = 0.0$	Variance estimate for slope.
8	$M(S) = (N' \pm Z_{.995} * \text{var}(S)^{1/2}) / 2$ $= (231 \pm 2.576 * 0.0^{1/2}) / 2$ $= [115.5, 115.5]$	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the M th largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	$\text{CL}(S) = [0.0, 0.0]$	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

Appendix C

Laboratory Reports



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HD0315

Project Description

6006

For:

Todd Whipple

HLW Engineering

PO Box 314

Story City, IA 50248

Heather Murphy

Customer Relationship Specialist

Monday, April 29, 2024

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

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

Microbac Laboratories, Inc.

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Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HD0315

HLW Engineering

Project Name: 6006

Todd Whipple
PO Box 314
Story City, IA 50248

Project / PO Number: N/A
Received: 04/03/2024
Reported: 04/29/2024

Sample Summary Report

<u>Sample Name</u>	<u>Laboratory ID</u>	<u>Client Matrix</u>	<u>Sample Type</u>	<u>Sample Begin</u>	<u>Sample Taken</u>	<u>Lab Received</u>
MW-36 (B)	1HD0315-01	Aqueous	GRAB		04/02/24 08:38	04/03/24 10:10
MW-37 (B)	1HD0315-02	Aqueous	GRAB		04/02/24 08:49	04/03/24 10:10
MW-39 (B)	1HD0315-03	Aqueous	GRAB		04/02/24 08:10	04/03/24 10:10
MW-40 (B)	1HD0315-04	Aqueous	GRAB		04/02/24 09:12	04/03/24 10:10
MW-47 (B)	1HD0315-05	Aqueous	GRAB		04/02/24 09:54	04/03/24 10:10
MW-48A	1HD0315-06	Aqueous	GRAB		04/02/24 10:48	04/03/24 10:10
MW-49A	1HD0315-07	Aqueous	GRAB		04/02/24 11:28	04/03/24 10:10
MW-50	1HD0315-08	Aqueous	GRAB		04/02/24 10:24	04/03/24 10:10
MW-51	1HD0315-09	Aqueous	GRAB		04/02/24 11:09	04/03/24 10:10
MW-7	1HD0315-10	Aqueous	GRAB		04/02/24 14:49	04/03/24 10:10
MW-9	1HD0315-11	Aqueous	GRAB		04/02/24 17:02	04/03/24 10:10
MW-13R	1HD0315-12	Aqueous	GRAB		04/02/24 13:37	04/03/24 10:10
MW-14	1HD0315-13	Aqueous	GRAB		04/02/24 13:10	04/03/24 10:10
MW-29	1HD0315-14	Aqueous	GRAB		04/02/24 13:59	04/03/24 10:10
MW-31R	1HD0315-15	Aqueous	GRAB		04/02/24 15:12	04/03/24 10:10
MW-33	1HD0315-16	Aqueous	GRAB		04/02/24 16:07	04/03/24 10:10
MW-35R	1HD0315-17	Aqueous	GRAB		04/02/24 14:19	04/03/24 10:10
MW-211	1HD0315-18	Aqueous	GRAB		04/02/24 15:43	04/03/24 10:10
GU-3	1HD0315-19	Aqueous	GRAB		04/02/24 10:13	04/03/24 10:10
Tile ACM-1	1HD0315-20	Aqueous	GRAB		04/02/24 13:00	04/03/24 10:10
PECS-1	1HD0315-21	Aqueous	GRAB		04/02/24 14:38	04/03/24 10:10
MW-7A North	1HD0315-22	Aqueous	GRAB		04/02/24 16:27	04/03/24 10:10
MW-7B Northwest	1HD0315-23	Aqueous	GRAB		04/02/24 16:42	04/03/24 10:10
Field Duplicate	1HD0315-24	Aqueous	GRAB		04/02/24 00:00	04/03/24 10:10



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HD0315

Analytical Testing Parameters

Client Sample ID:	MW-36 (B)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 8:38
Lab Sample ID:	1HD0315-01		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
Bromomethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
Chloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
Acetone	<10.0	10.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
Chloroform	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
Benzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
Dibromomethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
Toluene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
Xylenes, total	<2.0	2.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
Styrene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM

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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	MW-36 (B)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 8:38
Lab Sample ID:	1HD0315-01		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Bromoform	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1719	CSM
Surrogate: Dibromofluoromethane	94.5	Limit: 75-136	% Rec	1		04/04/24 0000	04/04/24 1719	CSM
Surrogate: Dibromofluoromethane	94.5	Limit: 80-126	% Rec	1		04/04/24 0000	04/04/24 1719	CSM
Surrogate: 1,2-Dichloroethane-d4	97.5	Limit: 63-138	% Rec	1		04/04/24 0000	04/04/24 1719	CSM
Surrogate: 1,2-Dichloroethane-d4	97.5	Limit: 61-142	% Rec	1		04/04/24 0000	04/04/24 1719	CSM
Surrogate: Toluene-d8	98.5	Limit: 82-121	% Rec	1		04/04/24 0000	04/04/24 1719	CSM
Surrogate: Toluene-d8	98.5	Limit: 87-116	% Rec	1		04/04/24 0000	04/04/24 1719	CSM
Surrogate: 4-Bromofluorobenzene	98.6	Limit: 80-116	% Rec	1		04/04/24 0000	04/04/24 1719	CSM
Surrogate: 4-Bromofluorobenzene	98.6	Limit: 85-111	% Rec	1		04/04/24 0000	04/04/24 1719	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		04/04/24 0845	04/04/24 2155	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2155	RVV
Barium, total	0.200	0.0040	mg/L	4		04/04/24 0845	04/04/24 2155	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2155	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/04/24 0845	04/04/24 2155	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/04/24 0845	04/04/24 2155	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		04/04/24 0845	04/04/24 2155	RVV
Copper, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2155	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2155	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2155	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2155	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2155	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/04/24 0845	04/04/24 2155	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/04/24 0845	04/04/24 2155	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/04/24 0845	04/04/24 2155	RVV



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	MW-37 (B)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 8:49
Lab Sample ID:	1HD0315-02		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
Bromomethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
Chloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
Acetone	<10.0	10.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
Chloroform	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
Benzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
Dibromomethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
Toluene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
Xylenes, total	<2.0	2.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
Styrene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
Bromoform	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM

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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	MW-37 (B)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 8:49
Lab Sample ID:	1HD0315-02		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1741	CSM
Surrogate: Dibromofluoromethane	93.1	Limit: 80-126	% Rec	1		04/04/24 0000	04/04/24 1741	CSM
Surrogate: Dibromofluoromethane	93.1	Limit: 75-136	% Rec	1		04/04/24 0000	04/04/24 1741	CSM
Surrogate: 1,2-Dichloroethane-d4	96.3	Limit: 61-142	% Rec	1		04/04/24 0000	04/04/24 1741	CSM
Surrogate: 1,2-Dichloroethane-d4	96.3	Limit: 63-138	% Rec	1		04/04/24 0000	04/04/24 1741	CSM
Surrogate: Toluene-d8	98.6	Limit: 82-121	% Rec	1		04/04/24 0000	04/04/24 1741	CSM
Surrogate: Toluene-d8	98.6	Limit: 87-116	% Rec	1		04/04/24 0000	04/04/24 1741	CSM
Surrogate: 4-Bromofluorobenzene	99.2	Limit: 80-116	% Rec	1		04/04/24 0000	04/04/24 1741	CSM
Surrogate: 4-Bromofluorobenzene	99.2	Limit: 85-111	% Rec	1		04/04/24 0000	04/04/24 1741	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		04/04/24 0845	04/04/24 2219	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2219	RVV
Barium, total	0.0519	0.0040	mg/L	4		04/04/24 0845	04/04/24 2219	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2219	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/04/24 0845	04/04/24 2219	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/04/24 0845	04/04/24 2219	RVV
Cobalt, total	0.0006	0.0004	mg/L	4		04/04/24 0845	04/04/24 2219	RVV
Copper, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2219	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2219	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2219	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2219	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2219	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/04/24 0845	04/04/24 2219	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/04/24 0845	04/04/24 2219	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/04/24 0845	04/04/24 2219	RVV



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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	MW-39 (B)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 8:10
Lab Sample ID:	1HD0315-03		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
Bromomethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
Chloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
Acetone	<10.0	10.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
Chloroform	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
Benzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
Dibromomethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
Toluene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
Xylenes, total	<2.0	2.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
Styrene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
Bromoform	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM

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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	MW-39 (B)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 8:10
Lab Sample ID:	1HD0315-03		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1804	CSM
Surrogate: Dibromofluoromethane	93.8	Limit: 75-136	% Rec	1		04/04/24 0000	04/04/24 1804	CSM
Surrogate: Dibromofluoromethane	93.8	Limit: 80-126	% Rec	1		04/04/24 0000	04/04/24 1804	CSM
Surrogate: 1,2-Dichloroethane-d4	97.7	Limit: 61-142	% Rec	1		04/04/24 0000	04/04/24 1804	CSM
Surrogate: 1,2-Dichloroethane-d4	97.7	Limit: 63-138	% Rec	1		04/04/24 0000	04/04/24 1804	CSM
Surrogate: Toluene-d8	98.1	Limit: 82-121	% Rec	1		04/04/24 0000	04/04/24 1804	CSM
Surrogate: Toluene-d8	98.1	Limit: 87-116	% Rec	1		04/04/24 0000	04/04/24 1804	CSM
Surrogate: 4-Bromofluorobenzene	98.7	Limit: 80-116	% Rec	1		04/04/24 0000	04/04/24 1804	CSM
Surrogate: 4-Bromofluorobenzene	98.7	Limit: 85-111	% Rec	1		04/04/24 0000	04/04/24 1804	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		04/04/24 0845	04/04/24 2226	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2226	RVV
Barium, total	0.254	0.0040	mg/L	4		04/04/24 0845	04/04/24 2226	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2226	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/04/24 0845	04/04/24 2226	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/04/24 0845	04/04/24 2226	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		04/04/24 0845	04/04/24 2226	RVV
Copper, total	0.126	0.0040	mg/L	4		04/04/24 0845	04/04/24 2226	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2226	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2226	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2226	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2226	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/04/24 0845	04/04/24 2226	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/04/24 0845	04/04/24 2226	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/04/24 0845	04/04/24 2226	RVV

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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	MW-40 (B)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 9:12
Lab Sample ID:	1HD0315-04		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
Bromomethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
Chloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
Acetone	<10.0	10.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
Chloroform	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
Benzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
Dibromomethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
Toluene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
Xylenes, total	<2.0	2.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
Styrene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
Bromoform	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM

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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	MW-40 (B)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 9:12
Lab Sample ID:	1HD0315-04		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1827	CSM
Surrogate: Dibromofluoromethane	94.3	Limit: 80-126	% Rec	1		04/04/24 0000	04/04/24 1827	CSM
Surrogate: Dibromofluoromethane	94.3	Limit: 75-136	% Rec	1		04/04/24 0000	04/04/24 1827	CSM
Surrogate: 1,2-Dichloroethane-d4	97.2	Limit: 63-138	% Rec	1		04/04/24 0000	04/04/24 1827	CSM
Surrogate: 1,2-Dichloroethane-d4	97.2	Limit: 61-142	% Rec	1		04/04/24 0000	04/04/24 1827	CSM
Surrogate: Toluene-d8	98.3	Limit: 82-121	% Rec	1		04/04/24 0000	04/04/24 1827	CSM
Surrogate: Toluene-d8	98.3	Limit: 87-116	% Rec	1		04/04/24 0000	04/04/24 1827	CSM
Surrogate: 4-Bromofluorobenzene	98.1	Limit: 85-111	% Rec	1		04/04/24 0000	04/04/24 1827	CSM
Surrogate: 4-Bromofluorobenzene	98.1	Limit: 80-116	% Rec	1		04/04/24 0000	04/04/24 1827	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		04/04/24 0845	04/04/24 2232	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2232	RVV
Barium, total	0.0364	0.0040	mg/L	4		04/04/24 0845	04/04/24 2232	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2232	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/04/24 0845	04/04/24 2232	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/04/24 0845	04/04/24 2232	RVV
Cobalt, total	0.0005	0.0004	mg/L	4		04/04/24 0845	04/04/24 2232	RVV
Copper, total	0.0085	0.0040	mg/L	4		04/04/24 0845	04/04/24 2232	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2232	RVV
Nickel, total	0.0168	0.0040	mg/L	4		04/04/24 0845	04/04/24 2232	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2232	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2232	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/04/24 0845	04/04/24 2232	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/04/24 0845	04/04/24 2232	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/04/24 0845	04/04/24 2232	RVV

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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	MW-47 (B)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 9:54
Lab Sample ID:	1HD0315-05		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
Bromomethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
Chloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
Acetone	<10.0	10.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
Chloroform	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
Benzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
Dibromomethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
Toluene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
Xylenes, total	<2.0	2.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
Styrene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
Bromoform	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM



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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	MW-47 (B)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 9:54
Lab Sample ID:	1HD0315-05		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1850	CSM
Surrogate: Dibromofluoromethane	95.0	Limit: 75-136	% Rec	1		04/04/24 0000	04/04/24 1850	CSM
Surrogate: Dibromofluoromethane	95.0	Limit: 80-126	% Rec	1		04/04/24 0000	04/04/24 1850	CSM
Surrogate: 1,2-Dichloroethane-d4	98.3	Limit: 63-138	% Rec	1		04/04/24 0000	04/04/24 1850	CSM
Surrogate: 1,2-Dichloroethane-d4	98.3	Limit: 61-142	% Rec	1		04/04/24 0000	04/04/24 1850	CSM
Surrogate: Toluene-d8	98.1	Limit: 87-116	% Rec	1		04/04/24 0000	04/04/24 1850	CSM
Surrogate: Toluene-d8	98.1	Limit: 82-121	% Rec	1		04/04/24 0000	04/04/24 1850	CSM
Surrogate: 4-Bromofluorobenzene	98.4	Limit: 85-111	% Rec	1		04/04/24 0000	04/04/24 1850	CSM
Surrogate: 4-Bromofluorobenzene	98.4	Limit: 80-116	% Rec	1		04/04/24 0000	04/04/24 1850	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		04/04/24 0845	04/04/24 2250	RVV
Arsenic, total	0.182	0.0040	mg/L	4		04/04/24 0845	04/04/24 2250	RVV
Barium, total	0.570	0.0040	mg/L	4		04/04/24 0845	04/04/24 2250	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2250	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/04/24 0845	04/04/24 2250	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/04/24 0845	04/04/24 2250	RVV
Cobalt, total	0.0018	0.0004	mg/L	4		04/04/24 0845	04/04/24 2250	RVV
Copper, total	0.0044	0.0040	mg/L	4		04/04/24 0845	04/04/24 2250	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2250	RVV
Nickel, total	0.0080	0.0040	mg/L	4		04/04/24 0845	04/04/24 2250	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2250	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2250	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/04/24 0845	04/04/24 2250	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/04/24 0845	04/04/24 2250	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/04/24 0845	04/04/24 2250	RVV

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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	MW-48A	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 10:48
Lab Sample ID:	1HD0315-06		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
Bromomethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
Chloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
Acetone	<10.0	10.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
Chloroform	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
Benzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
Dibromomethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
Toluene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
Xylenes, total	<2.0	2.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
Styrene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
Bromoform	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM

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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	MW-48A	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 10:48
Lab Sample ID:	1HD0315-06		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1913	CSM
Surrogate: Dibromofluoromethane	94.3	Limit: 75-136	% Rec	1		04/04/24 0000	04/04/24 1913	CSM
Surrogate: Dibromofluoromethane	94.3	Limit: 80-126	% Rec	1		04/04/24 0000	04/04/24 1913	CSM
Surrogate: 1,2-Dichloroethane-d4	97.4	Limit: 61-142	% Rec	1		04/04/24 0000	04/04/24 1913	CSM
Surrogate: 1,2-Dichloroethane-d4	97.4	Limit: 63-138	% Rec	1		04/04/24 0000	04/04/24 1913	CSM
Surrogate: Toluene-d8	98.7	Limit: 87-116	% Rec	1		04/04/24 0000	04/04/24 1913	CSM
Surrogate: Toluene-d8	98.7	Limit: 82-121	% Rec	1		04/04/24 0000	04/04/24 1913	CSM
Surrogate: 4-Bromofluorobenzene	98.1	Limit: 85-111	% Rec	1		04/04/24 0000	04/04/24 1913	CSM
Surrogate: 4-Bromofluorobenzene	98.1	Limit: 80-116	% Rec	1		04/04/24 0000	04/04/24 1913	CSM

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		04/04/24 0845	04/04/24 2256	RVV
Arsenic, total	0.0171	0.0040	mg/L	4		04/04/24 0845	04/04/24 2256	RVV
Barium, total	0.217	0.0040	mg/L	4		04/04/24 0845	04/04/24 2256	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2256	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/04/24 0845	04/04/24 2256	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/04/24 0845	04/04/24 2256	RVV
Cobalt, total	0.0009	0.0004	mg/L	4		04/04/24 0845	04/04/24 2256	RVV
Copper, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2256	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2256	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2256	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2256	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2256	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/04/24 0845	04/04/24 2256	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/04/24 0845	04/04/24 2256	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/04/24 0845	04/04/24 2256	RVV



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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	MW-49A	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 11:28
Lab Sample ID:	1HD0315-07		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
Vinyl Chloride	2.9	1.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
Bromomethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
Chloroethane	3.5	1.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
Acetone	<10.0	10.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
cis-1,2-Dichloroethylene	3.6	1.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
Chloroform	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
Benzene	2.8	1.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
Dibromomethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
Toluene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
Xylenes, total	<2.0	2.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
Styrene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
Bromoform	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM

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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	MW-49A	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 11:28
Lab Sample ID:	1HD0315-07		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1936	CSM
Surrogate: Dibromofluoromethane	93.9	Limit: 80-126	% Rec	1		04/04/24 0000	04/04/24 1936	CSM
Surrogate: Dibromofluoromethane	93.9	Limit: 75-136	% Rec	1		04/04/24 0000	04/04/24 1936	CSM
Surrogate: 1,2-Dichloroethane-d4	96.6	Limit: 61-142	% Rec	1		04/04/24 0000	04/04/24 1936	CSM
Surrogate: 1,2-Dichloroethane-d4	96.6	Limit: 63-138	% Rec	1		04/04/24 0000	04/04/24 1936	CSM
Surrogate: Toluene-d8	99.4	Limit: 87-116	% Rec	1		04/04/24 0000	04/04/24 1936	CSM
Surrogate: Toluene-d8	99.4	Limit: 82-121	% Rec	1		04/04/24 0000	04/04/24 1936	CSM
Surrogate: 4-Bromofluorobenzene	99.2	Limit: 85-111	% Rec	1		04/04/24 0000	04/04/24 1936	CSM
Surrogate: 4-Bromofluorobenzene	99.2	Limit: 80-116	% Rec	1		04/04/24 0000	04/04/24 1936	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		04/04/24 0845	04/04/24 2302	RVV
Arsenic, total	0.0299	0.0040	mg/L	4		04/04/24 0845	04/04/24 2302	RVV
Barium, total	0.626	0.0040	mg/L	4		04/04/24 0845	04/04/24 2302	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2302	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/04/24 0845	04/04/24 2302	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/04/24 0845	04/04/24 2302	RVV
Cobalt, total	0.0199	0.0004	mg/L	4		04/04/24 0845	04/04/24 2302	RVV
Copper, total	0.0053	0.0040	mg/L	4		04/04/24 0845	04/04/24 2302	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2302	RVV
Nickel, total	0.0494	0.0040	mg/L	4		04/04/24 0845	04/04/24 2302	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2302	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2302	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/04/24 0845	04/04/24 2302	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/04/24 0845	04/04/24 2302	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/04/24 0845	04/04/24 2302	RVV

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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	MW-50	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 10:24
Lab Sample ID:	1HD0315-08		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
Bromomethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
Chloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
Acetone	<10.0	10.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
Chloroform	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
Benzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
Dibromomethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
Toluene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
Xylenes, total	<2.0	2.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
Styrene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
Bromoform	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM

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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	MW-50	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 10:24
Lab Sample ID:	1HD0315-08		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 1959	CSM
Surrogate: Dibromofluoromethane	94.8	Limit: 75-136	% Rec	1		04/04/24 0000	04/04/24 1959	CSM
Surrogate: Dibromofluoromethane	94.8	Limit: 80-126	% Rec	1		04/04/24 0000	04/04/24 1959	CSM
Surrogate: 1,2-Dichloroethane-d4	96.9	Limit: 63-138	% Rec	1		04/04/24 0000	04/04/24 1959	CSM
Surrogate: 1,2-Dichloroethane-d4	96.9	Limit: 61-142	% Rec	1		04/04/24 0000	04/04/24 1959	CSM
Surrogate: Toluene-d8	98.4	Limit: 82-121	% Rec	1		04/04/24 0000	04/04/24 1959	CSM
Surrogate: Toluene-d8	98.4	Limit: 87-116	% Rec	1		04/04/24 0000	04/04/24 1959	CSM
Surrogate: 4-Bromofluorobenzene	98.8	Limit: 85-111	% Rec	1		04/04/24 0000	04/04/24 1959	CSM
Surrogate: 4-Bromofluorobenzene	98.8	Limit: 80-116	% Rec	1		04/04/24 0000	04/04/24 1959	CSM

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		04/04/24 0845	04/04/24 2309	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2309	RVV
Barium, total	0.685	0.0040	mg/L	4		04/04/24 0845	04/04/24 2309	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2309	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/04/24 0845	04/04/24 2309	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/04/24 0845	04/04/24 2309	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		04/04/24 0845	04/04/24 2309	RVV
Copper, total	0.0052	0.0040	mg/L	4		04/04/24 0845	04/04/24 2309	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2309	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2309	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2309	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2309	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/04/24 0845	04/04/24 2309	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/04/24 0845	04/04/24 2309	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/04/24 0845	04/04/24 2309	RVV



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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	MW-51	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 11:09
Lab Sample ID:	1HD0315-09		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
Bromomethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
Chloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
Acetone	<10.0	10.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
Chloroform	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
Benzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
Dibromomethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
Toluene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
Xylenes, total	<2.0	2.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
Styrene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
Bromoform	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM

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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	MW-51	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 11:09
Lab Sample ID:	1HD0315-09		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2022	CSM
Surrogate: Dibromofluoromethane	95.1	Limit: 80-126	% Rec	1		04/04/24 0000	04/04/24 2022	CSM
Surrogate: Dibromofluoromethane	95.1	Limit: 75-136	% Rec	1		04/04/24 0000	04/04/24 2022	CSM
Surrogate: 1,2-Dichloroethane-d4	98.7	Limit: 61-142	% Rec	1		04/04/24 0000	04/04/24 2022	CSM
Surrogate: 1,2-Dichloroethane-d4	98.7	Limit: 63-138	% Rec	1		04/04/24 0000	04/04/24 2022	CSM
Surrogate: Toluene-d8	98.2	Limit: 82-121	% Rec	1		04/04/24 0000	04/04/24 2022	CSM
Surrogate: Toluene-d8	98.2	Limit: 87-116	% Rec	1		04/04/24 0000	04/04/24 2022	CSM
Surrogate: 4-Bromofluorobenzene	98.8	Limit: 85-111	% Rec	1		04/04/24 0000	04/04/24 2022	CSM
Surrogate: 4-Bromofluorobenzene	98.8	Limit: 80-116	% Rec	1		04/04/24 0000	04/04/24 2022	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		04/04/24 0845	04/04/24 2315	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2315	RVV
Barium, total	0.459	0.0040	mg/L	4		04/04/24 0845	04/04/24 2315	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2315	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/04/24 0845	04/04/24 2315	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/04/24 0845	04/04/24 2315	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		04/04/24 0845	04/04/24 2315	RVV
Copper, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2315	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2315	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2315	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2315	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2315	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/04/24 0845	04/04/24 2315	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/04/24 0845	04/04/24 2315	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/04/24 0845	04/04/24 2315	RVV



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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	MW-7	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 14:49
Lab Sample ID:	1HD0315-10		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
Bromomethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
Chloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
Acetone	<10.0	10.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
Chloroform	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
Benzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
Dibromomethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
Toluene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
Xylenes, total	<2.0	2.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
Styrene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
Bromoform	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM

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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	MW-7	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 14:49
Lab Sample ID:	1HD0315-10		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2045	CSM
Surrogate: Dibromofluoromethane	94.6	Limit: 75-136	% Rec	1		04/04/24 0000	04/04/24 2045	CSM
Surrogate: Dibromofluoromethane	94.6	Limit: 80-126	% Rec	1		04/04/24 0000	04/04/24 2045	CSM
Surrogate: 1,2-Dichloroethane-d4	97.3	Limit: 61-142	% Rec	1		04/04/24 0000	04/04/24 2045	CSM
Surrogate: 1,2-Dichloroethane-d4	97.3	Limit: 63-138	% Rec	1		04/04/24 0000	04/04/24 2045	CSM
Surrogate: Toluene-d8	98.4	Limit: 87-116	% Rec	1		04/04/24 0000	04/04/24 2045	CSM
Surrogate: Toluene-d8	98.4	Limit: 82-121	% Rec	1		04/04/24 0000	04/04/24 2045	CSM
Surrogate: 4-Bromofluorobenzene	98.1	Limit: 80-116	% Rec	1		04/04/24 0000	04/04/24 2045	CSM
Surrogate: 4-Bromofluorobenzene	98.1	Limit: 85-111	% Rec	1		04/04/24 0000	04/04/24 2045	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		04/04/24 0845	04/04/24 2321	RVV
Arsenic, total	0.167	0.0040	mg/L	4		04/04/24 0845	04/04/24 2321	RVV
Barium, total	0.375	0.0040	mg/L	4		04/04/24 0845	04/04/24 2321	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2321	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/04/24 0845	04/04/24 2321	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/04/24 0845	04/04/24 2321	RVV
Cobalt, total	0.0007	0.0004	mg/L	4		04/04/24 0845	04/04/24 2321	RVV
Copper, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2321	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2321	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2321	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2321	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2321	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/04/24 0845	04/04/24 2321	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/04/24 0845	04/04/24 2321	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/04/24 0845	04/04/24 2321	RVV



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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	MW-9	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 17:02
Lab Sample ID:	1HD0315-11		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Dichlorodifluoromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
Chloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
Bromomethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
Chloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
Acrolein	<10.0	10.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
Acetone	<10.0	10.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
Methyl Iodide	<2.0	2.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
Acetonitrile	<10.0	10.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
2,2-Dichloropropane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
2-Butanone (MEK)	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
Chloroform	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
1,1-Dichloropropene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
Benzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
Dibromomethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
Toluene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
Ethyl Methacrylate	<10.0	10.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
1,3-Dichloropropane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM

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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	MW-9	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 17:02
Lab Sample ID:	1HD0315-11		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Chlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
Xylenes, total	<2.0	2.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
Styrene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
Bromoform	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
1,3-Dichlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
1,2-Dibromo-3-chloropropane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
1,2,4-Trichlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2108	CSM
Allyl chloride	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1945	LJS
Chloroprene	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1945	LJS
Methacrylonitrile	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1945	LJS
Methyl Methacrylate	<1.0	1.0	ug/L	1		04/08/24 0000	04/08/24 1945	LJS
Propionitrile	<10.0	10.0	ug/L	1		04/08/24 0000	04/08/24 1945	LJS
Surrogate: Dibromofluoromethane	94.9	Limit: 80-126	% Rec	1		04/04/24 0000	04/04/24 2108	CSM
Surrogate: Dibromofluoromethane	86.8	Limit: 80-126	% Rec	1		04/08/24 0000	04/08/24 1945	LJS
Surrogate: 1,2-Dichloroethane-d4	98.2	Limit: 63-138	% Rec	1		04/04/24 0000	04/04/24 2108	CSM
Surrogate: 1,2-Dichloroethane-d4	92.9	Limit: 63-138	% Rec	1		04/08/24 0000	04/08/24 1945	LJS
Surrogate: 1,2-Dichloroethane-d4	98.2	Limit: 63-138	% Rec	1		04/04/24 0000	04/04/24 2108	CSM
Surrogate: Toluene-d8	98.5	Limit: 87-116	% Rec	1		04/04/24 0000	04/04/24 2108	CSM
Surrogate: Toluene-d8	100	Limit: 87-116	% Rec	1		04/08/24 0000	04/08/24 1945	LJS
Surrogate: Toluene-d8	98.5	Limit: 87-116	% Rec	1		04/04/24 0000	04/04/24 2108	CSM
Surrogate: 4-Bromofluorobenzene	98.3	Limit: 85-111	% Rec	1		04/04/24 0000	04/04/24 2108	CSM
Surrogate: 4-Bromofluorobenzene	101	Limit: 85-111	% Rec	1		04/08/24 0000	04/08/24 1945	LJS
Surrogate: 4-Bromofluorobenzene	98.3	Limit: 85-111	% Rec	1		04/04/24 0000	04/04/24 2108	CSM

Determination of General Solvents	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 8015C								
Isobutanol	<1.0	1.0	mg/L	1		04/15/24 0830	04/15/24 1831	PDS

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3520C/EPA 8270C								
N-Nitrosodimethylamine	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Methyl Methanesulfonate	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
N-Nitrosodiethylamine	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
N-Nitrosomethylethylamine	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Ethyl Methanesulfonate	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Phenol	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP



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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	MW-9	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 17:02
Lab Sample ID:	1HD0315-11		

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Bis(2-Chloroethyl) Ether	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
2-Chlorophenol	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Benzyl Alcohol	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
2-Methylphenol (o-Cresol)	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Bis[2-Chloroisopropyl]ether	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
n-Nitroso-di-n-propylamine	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
N-Nitrosopyrrolidine	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Acetophenone	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
o-Toluidine	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
(3 & 4)-Methylphenol	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Hexachloroethane	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Nitrobenzene	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
N-Nitrosopiperidine	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Isophorone	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
2-Nitrophenol	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
2,4-Dimethylphenol	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Bis (2-Chloroethoxy) Methane	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
2,4-Dichlorophenol	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Naphthalene	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
4-Chloroaniline	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
2,6-Dichlorophenol	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Hexachloropropene	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Hexachlorobutadiene	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
N-Nitrosodi-n-butylamine	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
1,4-Phenylenediamine	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
4-Chloro-3-methylphenol	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
2-Methylnaphthalene	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Isosafrole	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
1,2,4,5-Tetrachlorobenzene	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Hexachlorocyclopentadiene	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
2,4,6-Trichlorophenol	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
2,4,5-Trichlorophenol	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Safrole	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
2-Chloronaphthalene	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
2-Nitroaniline	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
1,4-Naphthoquinone	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Dimethylphthalate	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
1,3-Dinitrobenzene	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
1,2-Dinitrobenzene	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
2,6-Dinitrotoluene	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Acenaphthylene	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
3-Nitroaniline	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Acenaphthene	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP

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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	MW-9	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 17:02
Lab Sample ID:	1HD0315-11		

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
2,4-Dinitrophenol	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
4-Nitrophenol	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Dibenzofuran	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
2,4-Dinitrotoluene	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
2,3,4,6-Tetrachlorophenol	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Pentachlorobenzene	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
1-Naphthylamine	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
2-Naphthylamine	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Diethyl Phthalate	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Fluorene	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
4-Chlorophenyl Phenyl Ether	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
4-Nitroaniline	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
5-Nitro-o-toluidine	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
4,6-Dinitro-2-methylphenol	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
N-Nitrosodiphenylamine	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Diphenylamine	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Azobenzene	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Diallate	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
1,3,5-Trinitrobenzene	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Phenacetin	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
4-Bromophenyl Phenyl Ether	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
4-Aminobiphenyl	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Pentachlorophenol	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Pronamide	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Pentachloronitrobenzene (PCNB)	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Phenanthrene	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Anthracene	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Di-n-butyl Phthalate	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Methapyrilene	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Fluoranthene	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Isodrin	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Chlorobenzilate	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Pyrene	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
p-(Dimethylamino)azobenzene	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
3,3-Dimethylbenzidine	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Butyl Benzyl Phthalate	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Benzo(a)anthracene	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Chrysene	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Bis(2-Ethylhexyl) Phthalate	<6	6	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Kepone	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
3,3'-Dichlorobenzidine	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
2-Acetylamino fluorene	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Di-n-octyl Phthalate	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP

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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	MW-9	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 17:02
Lab Sample ID:	1HD0315-11		

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Benzo(b)Fluoranthene	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
7,12-Dimethylbenz [a] anthracene	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Benzo(k)Fluoranthene	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Benzo(a)Pyrene	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
3-Methylcholanthrene	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Dibenzo(a,h)anthracene	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Indeno(1,2,3-cd)Pyrene	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Benzo(g,h,i)perylene	<8	8	ug/L	1		04/08/24 1024	04/17/24 1922	EPP
Surrogate: 2-Fluorophenol	67.7	Limit: 24-136	% Rec	1		04/08/24 1024	04/17/24 1922	EPP
Surrogate: Phenol-d6	68.7	Limit: 15-140	% Rec	1		04/08/24 1024	04/17/24 1922	EPP
Surrogate: Nitrobenzene-d5	88.5	Limit: 29-130	% Rec	1		04/08/24 1024	04/17/24 1922	EPP
Surrogate: 2-Fluorobiphenyl	73.2	Limit: 23-113	% Rec	1		04/08/24 1024	04/17/24 1922	EPP
Surrogate: 2,4,6-Tribromophenol	74.9	Limit: 15-139	% Rec	1		04/08/24 1024	04/17/24 1922	EPP
Surrogate: Terphenyl-dl4	76.0	Limit: 27-141	% Rec	1		04/08/24 1024	04/17/24 1922	EPP

Determination of Organophosphorus Insecticides	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3510C/EPA 8141								
O,O,O-Triethyl phosphorothioate	<0.4	0.4	ug/L	1		04/08/24 1609	04/19/24 0302	EPP
Thionazin	<0.4	0.4	ug/L	1		04/08/24 1609	04/19/24 0302	EPP
Phorate	<0.4	0.4	ug/L	1		04/08/24 1609	04/19/24 0302	EPP
Dimethoate	<0.4	0.4	ug/L	1		04/08/24 1609	04/19/24 0302	EPP
Disulfoton	<0.4	0.4	ug/L	1		04/08/24 1609	04/19/24 0302	EPP
Methyl Parathion	<0.4	0.4	ug/L	1		04/08/24 1609	04/19/24 0302	EPP
Parathion	<0.4	0.4	ug/L	1		04/08/24 1609	04/19/24 0302	EPP
Famphur	<0.4	0.4	ug/L	1		04/08/24 1609	04/19/24 0302	EPP
Surrogate: 2-Nitro-m-xylene	68.9	Limit: 38-122	% Rec	1		04/08/24 1609	04/19/24 0302	EPP

Determination of Chlorinated Phenoxy Herbicides	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 8151A								
2,4-D	<2.0	2.0	ug/L	1		04/08/24 1316	04/17/24 0913	EPP
2,4,5-TP (Silvex)	<0.5	0.5	ug/L	1		04/08/24 1316	04/17/24 0913	EPP
2,4,5-T	<0.5	0.5	ug/L	1		04/08/24 1316	04/17/24 0913	EPP
Dinoseb	<0.5	0.5	ug/L	1		04/08/24 1316	04/17/24 0913	EPP
Surrogate: 2,5-Dichlorobenzoic Acid	89.4	Limit: 31-116	% Rec	1		04/08/24 1316	04/17/24 0913	EPP

Determination of Organochlorine Insecticides & Metabolites	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3510C/EPA 8081								
Alpha-BHC	<0.05	0.05	ug/L	1		04/08/24 1608	04/17/24 1816	EPP
Gamma-BHC [Lindane]	<0.05	0.05	ug/L	1		04/08/24 1608	04/17/24 1816	EPP
Beta-BHC	<0.05	0.05	ug/L	1		04/08/24 1608	04/17/24 1816	EPP
Heptachlor	<0.05	0.05	ug/L	1		04/08/24 1608	04/17/24 1816	EPP



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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	MW-9	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 17:02
Lab Sample ID:	1HD0315-11		

Determination of Organochlorine Insecticides & Metabolites	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Delta-BHC	<0.05	0.05	ug/L	1		04/08/24 1608	04/17/24 1816	EPP
Aldrin	<0.05	0.05	ug/L	1		04/08/24 1608	04/17/24 1816	EPP
Heptachlor Epoxide	<0.05	0.05	ug/L	1		04/08/24 1608	04/17/24 1816	EPP
Endosulfan I	<0.05	0.05	ug/L	1		04/08/24 1608	04/17/24 1816	EPP
4,4`-DDE	<0.05	0.05	ug/L	1		04/08/24 1608	04/17/24 1816	EPP
Dieldrin	<0.05	0.05	ug/L	1		04/08/24 1608	04/17/24 1816	EPP
Endrin	<0.05	0.05	ug/L	1		04/08/24 1608	04/17/24 1816	EPP
4,4`-DDD	<0.05	0.05	ug/L	1		04/08/24 1608	04/17/24 1816	EPP
Endosulfan II	<0.05	0.05	ug/L	1		04/08/24 1608	04/17/24 1816	EPP
4,4`-DDT	<0.05	0.05	ug/L	1		04/08/24 1608	04/17/24 1816	EPP
Endrin Aldehyde	<0.05	0.05	ug/L	1		04/08/24 1608	04/17/24 1816	EPP
Endosulfan Sulfate	<0.05	0.05	ug/L	1		04/08/24 1608	04/17/24 1816	EPP
Methoxychlor	<0.05	0.05	ug/L	1		04/08/24 1608	04/17/24 1816	EPP
Chlordane	<0.10	0.10	ug/L	1		04/08/24 1608	04/17/24 1816	EPP
Toxaphene	<0.20	0.20	ug/L	1		04/08/24 1608	04/17/24 1816	EPP
Hexachlorobenzene	<0.05	0.05	ug/L	1		04/08/24 1608	04/17/24 1816	EPP
Surrogate: Tetrachloro-m-xylene	84.0	Limit: 10-121	% Rec	1		04/08/24 1608	04/17/24 1816	EPP

Determination of Polychlorinated Biphenyls (PCB)	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3510C/EPA 8082								
Arochlor 1016	<0.20	0.20	ug/L	1		04/08/24 1609	04/17/24 1816	EPP
Arochlor 1221	<0.20	0.20	ug/L	1		04/08/24 1609	04/17/24 1816	EPP
Arochlor 1232	<0.20	0.20	ug/L	1		04/08/24 1609	04/17/24 1816	EPP
Arochlor 1242	<0.20	0.20	ug/L	1		04/08/24 1609	04/17/24 1816	EPP
Arochlor 1248	<0.20	0.20	ug/L	1		04/08/24 1609	04/17/24 1816	EPP
Arochlor 1254	<0.20	0.20	ug/L	1		04/08/24 1609	04/17/24 1816	EPP
Arochlor 1260	<0.20	0.20	ug/L	1		04/08/24 1609	04/17/24 1816	EPP
Surrogate: Tetrachloro-m-xylene	90.5	Limit: 38-121	% Rec	1		04/08/24 1609	04/17/24 1816	EPP
Surrogate: Decachlorobiphenyl	86.3	Limit: 25-119	% Rec	1		04/08/24 1609	04/17/24 1816	EPP

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

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		04/04/24 0845	04/04/24 2327	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2327	RVV
Barium, total	0.137	0.0040	mg/L	4		04/04/24 0845	04/04/24 2327	RVV



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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	MW-9	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 17:02
Lab Sample ID:	1HD0315-11		

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Beryllium, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2327	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/04/24 0845	04/04/24 2327	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/04/24 0845	04/04/24 2327	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		04/04/24 0845	04/04/24 2327	RVV
Copper, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2327	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2327	RVV
Nickel, total	0.0197	0.0040	mg/L	4		04/04/24 0845	04/04/24 2327	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2327	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2327	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/04/24 0845	04/04/24 2327	RVV
Tin, total	<0.0200	0.0200	mg/L	4		04/04/24 0845	04/04/24 2327	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/04/24 0845	04/04/24 2327	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/04/24 0845	04/04/24 2327	RVV
EPA 7470A								
Mercury, total	<0.00050	0.00050	mg/L	1		04/09/24 1533	04/10/24 1619	JAR



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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	MW-13R	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 13:37
Lab Sample ID:	1HD0315-12		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
Bromomethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
Chloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
Acetone	<10.0	10.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
Chloroform	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
Benzene	2.1	1.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
Dibromomethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
Toluene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
Chlorobenzene	36.7	1.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
Xylenes, total	<2.0	2.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
Styrene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
Bromoform	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM

Microbac Laboratories, Inc., Newton

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Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	MW-13R	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 13:37
Lab Sample ID:	1HD0315-12		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
1,4-Dichlorobenzene	1.1	1.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2131	CSM
Surrogate: Dibromofluoromethane	95.5	Limit: 80-126	% Rec	1		04/04/24 0000	04/04/24 2131	CSM
Surrogate: Dibromofluoromethane	95.5	Limit: 75-136	% Rec	1		04/04/24 0000	04/04/24 2131	CSM
Surrogate: 1,2-Dichloroethane-d4	98.2	Limit: 63-138	% Rec	1		04/04/24 0000	04/04/24 2131	CSM
Surrogate: 1,2-Dichloroethane-d4	98.2	Limit: 61-142	% Rec	1		04/04/24 0000	04/04/24 2131	CSM
Surrogate: Toluene-d8	99.7	Limit: 87-116	% Rec	1		04/04/24 0000	04/04/24 2131	CSM
Surrogate: Toluene-d8	99.7	Limit: 82-121	% Rec	1		04/04/24 0000	04/04/24 2131	CSM
Surrogate: 4-Bromofluorobenzene	99.0	Limit: 85-111	% Rec	1		04/04/24 0000	04/04/24 2131	CSM
Surrogate: 4-Bromofluorobenzene	99.0	Limit: 80-116	% Rec	1		04/04/24 0000	04/04/24 2131	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		04/04/24 0845	04/04/24 2333	RVV
Arsenic, total	0.0887	0.0040	mg/L	4		04/04/24 0845	04/04/24 2333	RVV
Barium, total	0.837	0.0040	mg/L	4		04/04/24 0845	04/04/24 2333	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2333	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/04/24 0845	04/04/24 2333	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/04/24 0845	04/04/24 2333	RVV
Cobalt, total	0.0046	0.0004	mg/L	4		04/04/24 0845	04/04/24 2333	RVV
Copper, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2333	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2333	RVV
Nickel, total	0.0098	0.0040	mg/L	4		04/04/24 0845	04/04/24 2333	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2333	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2333	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/04/24 0845	04/04/24 2333	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/04/24 0845	04/04/24 2333	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/04/24 0845	04/04/24 2333	RVV

Microbac Laboratories, Inc., Newton

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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	MW-14	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 13:10
Lab Sample ID:	1HD0315-13		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
Bromomethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
Chloroethane	1.9	1.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
Acetone	<10.0	10.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
Chloroform	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
Benzene	2.6	1.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
Dibromomethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
Toluene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
Chlorobenzene	1.2	1.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
Xylenes, total	<2.0	2.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
Styrene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
Bromoform	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM

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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	MW-14	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 13:10
Lab Sample ID:	1HD0315-13		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
1,4-Dichlorobenzene	3.6	1.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2153	CSM
Surrogate: Dibromofluoromethane	94.9	Limit: 80-126	% Rec	1		04/04/24 0000	04/04/24 2153	CSM
Surrogate: Dibromofluoromethane	94.9	Limit: 75-136	% Rec	1		04/04/24 0000	04/04/24 2153	CSM
Surrogate: 1,2-Dichloroethane-d4	97.7	Limit: 63-138	% Rec	1		04/04/24 0000	04/04/24 2153	CSM
Surrogate: 1,2-Dichloroethane-d4	97.7	Limit: 61-142	% Rec	1		04/04/24 0000	04/04/24 2153	CSM
Surrogate: Toluene-d8	99.0	Limit: 87-116	% Rec	1		04/04/24 0000	04/04/24 2153	CSM
Surrogate: Toluene-d8	99.0	Limit: 82-121	% Rec	1		04/04/24 0000	04/04/24 2153	CSM
Surrogate: 4-Bromofluorobenzene	98.6	Limit: 85-111	% Rec	1		04/04/24 0000	04/04/24 2153	CSM
Surrogate: 4-Bromofluorobenzene	98.6	Limit: 80-116	% Rec	1		04/04/24 0000	04/04/24 2153	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		04/04/24 0845	04/04/24 2339	RVV
Arsenic, total	0.0461	0.0040	mg/L	4		04/04/24 0845	04/04/24 2339	RVV
Barium, total	0.812	0.0040	mg/L	4		04/04/24 0845	04/04/24 2339	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2339	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/04/24 0845	04/04/24 2339	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/04/24 0845	04/04/24 2339	RVV
Cobalt, total	0.0208	0.0004	mg/L	4		04/04/24 0845	04/04/24 2339	RVV
Copper, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2339	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2339	RVV
Nickel, total	0.0308	0.0040	mg/L	4		04/04/24 0845	04/04/24 2339	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2339	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2339	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/04/24 0845	04/04/24 2339	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/04/24 0845	04/04/24 2339	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/04/24 0845	04/04/24 2339	RVV

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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	MW-29	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 13:59
Lab Sample ID:	1HD0315-14		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
Bromomethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
Chloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
Acetone	<10.0	10.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
Chloroform	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
Benzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
Dibromomethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
Toluene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
Xylenes, total	<2.0	2.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
Styrene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
Bromoform	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM

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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID: MW-29	Collected By: Whipple, Todd
Sample Matrix: Aqueous	Collection Date: 04/02/2024 13:59
Lab Sample ID: 1HD0315-14	

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2216	CSM
Surrogate: Dibromofluoromethane	93.9	Limit: 80-126	% Rec	1		04/04/24 0000	04/04/24 2216	CSM
Surrogate: Dibromofluoromethane	93.9	Limit: 75-136	% Rec	1		04/04/24 0000	04/04/24 2216	CSM
Surrogate: 1,2-Dichloroethane-d4	96.9	Limit: 61-142	% Rec	1		04/04/24 0000	04/04/24 2216	CSM
Surrogate: 1,2-Dichloroethane-d4	96.9	Limit: 63-138	% Rec	1		04/04/24 0000	04/04/24 2216	CSM
Surrogate: Toluene-d8	98.8	Limit: 82-121	% Rec	1		04/04/24 0000	04/04/24 2216	CSM
Surrogate: Toluene-d8	98.8	Limit: 87-116	% Rec	1		04/04/24 0000	04/04/24 2216	CSM
Surrogate: 4-Bromofluorobenzene	98.4	Limit: 80-116	% Rec	1		04/04/24 0000	04/04/24 2216	CSM
Surrogate: 4-Bromofluorobenzene	98.4	Limit: 85-111	% Rec	1		04/04/24 0000	04/04/24 2216	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		04/04/24 0845	04/04/24 2345	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2345	RVV
Barium, total	0.0622	0.0040	mg/L	4		04/04/24 0845	04/04/24 2345	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2345	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/04/24 0845	04/04/24 2345	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/04/24 0845	04/04/24 2345	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		04/04/24 0845	04/04/24 2345	RVV
Copper, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2345	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2345	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2345	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2345	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/04/24 2345	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/04/24 0845	04/04/24 2345	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/04/24 0845	04/04/24 2345	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/04/24 0845	04/04/24 2345	RVV



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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	MW-31R	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 15:12
Lab Sample ID:	1HD0315-15		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
Bromomethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
Chloroethane	3.5	1.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
Acetone	<10.0	10.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
trans-1,2-Dichloroethylene	2.5	1.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
1,1-Dichloroethane	3.3	1.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
cis-1,2-Dichloroethylene	19.9	1.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
Chloroform	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
Benzene	2.1	1.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
Dibromomethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
Toluene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
Chlorobenzene	21.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
Ethylbenzene	1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
Xylenes, total	<2.0	2.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
Styrene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
Bromoform	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM

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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	MW-31R	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 15:12
Lab Sample ID:	1HD0315-15		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
1,4-Dichlorobenzene	14.5	1.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2239	CSM
Surrogate: Dibromofluoromethane	92.8	Limit: 75-136	% Rec	1		04/04/24 0000	04/04/24 2239	CSM
Surrogate: Dibromofluoromethane	92.8	Limit: 80-126	% Rec	1		04/04/24 0000	04/04/24 2239	CSM
Surrogate: 1,2-Dichloroethane-d4	95.8	Limit: 61-142	% Rec	1		04/04/24 0000	04/04/24 2239	CSM
Surrogate: 1,2-Dichloroethane-d4	95.8	Limit: 63-138	% Rec	1		04/04/24 0000	04/04/24 2239	CSM
Surrogate: Toluene-d8	98.8	Limit: 87-116	% Rec	1		04/04/24 0000	04/04/24 2239	CSM
Surrogate: Toluene-d8	98.8	Limit: 82-121	% Rec	1		04/04/24 0000	04/04/24 2239	CSM
Surrogate: 4-Bromofluorobenzene	98.3	Limit: 80-116	% Rec	1		04/04/24 0000	04/04/24 2239	CSM
Surrogate: 4-Bromofluorobenzene	98.3	Limit: 85-111	% Rec	1		04/04/24 0000	04/04/24 2239	CSM

Determination of Base/Neutral Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3520C/EPA 8270C								
Bis(2-Ethylhexyl) Phthalate	<6	6	ug/L	1		04/09/24 1055	04/17/24 1808	EPP
Surrogate: Nitrobenzene-d5	98.9	Limit: 29-130	% Rec	1		04/09/24 1055	04/17/24 1808	EPP
Surrogate: 2-Fluorobiphenyl	77.6	Limit: 23-113	% Rec	1		04/09/24 1055	04/17/24 1808	EPP
Surrogate: Terphenyl-d14	86.5	Limit: 27-141	% Rec	1		04/09/24 1055	04/17/24 1808	EPP

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		04/04/24 0845	04/05/24 0004	RVV
Arsenic, total	0.0378	0.0040	mg/L	4		04/04/24 0845	04/05/24 0004	RVV
Barium, total	1.81	0.0040	mg/L	4		04/04/24 0845	04/05/24 0004	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/05/24 0004	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/04/24 0845	04/05/24 0004	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/04/24 0845	04/05/24 0004	RVV
Cobalt, total	0.0206	0.0004	mg/L	4		04/04/24 0845	04/05/24 0004	RVV
Copper, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/05/24 0004	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/05/24 0004	RVV
Nickel, total	0.0342	0.0040	mg/L	4		04/04/24 0845	04/05/24 0004	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/05/24 0004	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/05/24 0004	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/04/24 0845	04/05/24 0004	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/04/24 0845	04/05/24 0004	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/04/24 0845	04/05/24 0004	RVV

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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	MW-33	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 16:07
Lab Sample ID:	1HD0315-16		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
Bromomethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
Chloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
Acetone	<10.0	10.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
Chloroform	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
Benzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
Dibromomethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
Toluene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
Xylenes, total	<2.0	2.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
Styrene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
Bromoform	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM

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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	MW-33	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 16:07
Lab Sample ID:	1HD0315-16		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2302	CSM
Surrogate: Dibromofluoromethane	94.2	Limit: 80-126	% Rec	1		04/04/24 0000	04/04/24 2302	CSM
Surrogate: Dibromofluoromethane	94.2	Limit: 75-136	% Rec	1		04/04/24 0000	04/04/24 2302	CSM
Surrogate: 1,2-Dichloroethane-d4	97.5	Limit: 63-138	% Rec	1		04/04/24 0000	04/04/24 2302	CSM
Surrogate: 1,2-Dichloroethane-d4	97.5	Limit: 61-142	% Rec	1		04/04/24 0000	04/04/24 2302	CSM
Surrogate: Toluene-d8	98.5	Limit: 82-121	% Rec	1		04/04/24 0000	04/04/24 2302	CSM
Surrogate: Toluene-d8	98.5	Limit: 87-116	% Rec	1		04/04/24 0000	04/04/24 2302	CSM
Surrogate: 4-Bromofluorobenzene	98.8	Limit: 85-111	% Rec	1		04/04/24 0000	04/04/24 2302	CSM
Surrogate: 4-Bromofluorobenzene	98.8	Limit: 80-116	% Rec	1		04/04/24 0000	04/04/24 2302	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		04/04/24 0845	04/05/24 0010	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/05/24 0010	RVV
Barium, total	0.105	0.0040	mg/L	4		04/04/24 0845	04/05/24 0010	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/05/24 0010	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/04/24 0845	04/05/24 0010	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/04/24 0845	04/05/24 0010	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		04/04/24 0845	04/05/24 0010	RVV
Copper, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/05/24 0010	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/05/24 0010	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/05/24 0010	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/05/24 0010	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/05/24 0010	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/04/24 0845	04/05/24 0010	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/04/24 0845	04/05/24 0010	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/04/24 0845	04/05/24 0010	RVV



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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	MW-35R	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 14:19
Lab Sample ID:	1HD0315-17		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
Bromomethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
Chloroethane	2.1	1.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
Acetone	<10.0	10.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
Chloroform	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
Benzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
Dibromomethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
Toluene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
Xylenes, total	<2.0	2.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
Styrene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
Bromoform	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM

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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	MW-35R	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 14:19
Lab Sample ID:	1HD0315-17		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2325	CSM
Surrogate: Dibromofluoromethane	94.0	Limit: 75-136	% Rec	1		04/04/24 0000	04/04/24 2325	CSM
Surrogate: Dibromofluoromethane	94.0	Limit: 80-126	% Rec	1		04/04/24 0000	04/04/24 2325	CSM
Surrogate: 1,2-Dichloroethane-d4	96.8	Limit: 63-138	% Rec	1		04/04/24 0000	04/04/24 2325	CSM
Surrogate: 1,2-Dichloroethane-d4	96.8	Limit: 61-142	% Rec	1		04/04/24 0000	04/04/24 2325	CSM
Surrogate: Toluene-d8	98.7	Limit: 87-116	% Rec	1		04/04/24 0000	04/04/24 2325	CSM
Surrogate: Toluene-d8	98.7	Limit: 82-121	% Rec	1		04/04/24 0000	04/04/24 2325	CSM
Surrogate: 4-Bromofluorobenzene	98.6	Limit: 85-111	% Rec	1		04/04/24 0000	04/04/24 2325	CSM
Surrogate: 4-Bromofluorobenzene	98.6	Limit: 80-116	% Rec	1		04/04/24 0000	04/04/24 2325	CSM

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

Bis(2-Ethylhexyl) Phthalate	<6	6	ug/L	1		04/09/24 1055	04/17/24 1833	EPP
Surrogate: Nitrobenzene-d5	101	Limit: 29-130	% Rec	1		04/09/24 1055	04/17/24 1833	EPP
Surrogate: 2-Fluorobiphenyl	84.7	Limit: 23-113	% Rec	1		04/09/24 1055	04/17/24 1833	EPP
Surrogate: Terphenyl-d14	72.3	Limit: 27-141	% Rec	1		04/09/24 1055	04/17/24 1833	EPP

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

Antimony, total	<0.0020	0.0020	mg/L	4		04/04/24 0845	04/05/24 0016	RVV
Arsenic, total	0.0184	0.0040	mg/L	4		04/04/24 0845	04/05/24 0016	RVV
Barium, total	1.59	0.0040	mg/L	4		04/04/24 0845	04/05/24 0016	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/05/24 0016	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/04/24 0845	04/05/24 0016	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/04/24 0845	04/05/24 0016	RVV
Cobalt, total	0.0089	0.0004	mg/L	4		04/04/24 0845	04/05/24 0016	RVV
Copper, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/05/24 0016	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/05/24 0016	RVV
Nickel, total	0.0256	0.0040	mg/L	4		04/04/24 0845	04/05/24 0016	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/05/24 0016	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/05/24 0016	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/04/24 0845	04/05/24 0016	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/04/24 0845	04/05/24 0016	RVV
Zinc, total	0.0223	0.0200	mg/L	4		04/04/24 0845	04/05/24 0016	RVV



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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	MW-211	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 15:43
Lab Sample ID:	1HD0315-18		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
Bromomethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
Chloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
Acetone	<10.0	10.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
Chloroform	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
Benzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
Dibromomethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
Toluene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
Chlorobenzene	4.4	1.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
Xylenes, total	<2.0	2.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
Styrene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
Bromoform	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM

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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	MW-211	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 15:43
Lab Sample ID:	1HD0315-18		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/04/24 0000	04/04/24 2348	CSM
Surrogate: Dibromofluoromethane	94.8	Limit: 75-136	% Rec	1		04/04/24 0000	04/04/24 2348	CSM
Surrogate: Dibromofluoromethane	94.8	Limit: 80-126	% Rec	1		04/04/24 0000	04/04/24 2348	CSM
Surrogate: 1,2-Dichloroethane-d4	97.3	Limit: 61-142	% Rec	1		04/04/24 0000	04/04/24 2348	CSM
Surrogate: 1,2-Dichloroethane-d4	97.3	Limit: 63-138	% Rec	1		04/04/24 0000	04/04/24 2348	CSM
Surrogate: Toluene-d8	98.1	Limit: 82-121	% Rec	1		04/04/24 0000	04/04/24 2348	CSM
Surrogate: Toluene-d8	98.1	Limit: 87-116	% Rec	1		04/04/24 0000	04/04/24 2348	CSM
Surrogate: 4-Bromofluorobenzene	97.9	Limit: 85-111	% Rec	1		04/04/24 0000	04/04/24 2348	CSM
Surrogate: 4-Bromofluorobenzene	97.9	Limit: 80-116	% Rec	1		04/04/24 0000	04/04/24 2348	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		04/04/24 0845	04/05/24 0022	RVV
Arsenic, total	0.0186	0.0040	mg/L	4		04/04/24 0845	04/05/24 0022	RVV
Barium, total	0.306	0.0040	mg/L	4		04/04/24 0845	04/05/24 0022	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/05/24 0022	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/04/24 0845	04/05/24 0022	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/04/24 0845	04/05/24 0022	RVV
Cobalt, total	0.0125	0.0004	mg/L	4		04/04/24 0845	04/05/24 0022	RVV
Copper, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/05/24 0022	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/05/24 0022	RVV
Nickel, total	0.0300	0.0040	mg/L	4		04/04/24 0845	04/05/24 0022	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/05/24 0022	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/05/24 0022	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/04/24 0845	04/05/24 0022	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/04/24 0845	04/05/24 0022	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/04/24 0845	04/05/24 0022	RVV

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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	GU-3	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 10:13
Lab Sample ID:	1HD0315-19		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
Bromomethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
Chloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
Acetone	<10.0	10.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
Chloroform	<1.0	1.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
Benzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
Dibromomethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
Toluene	<1.0	1.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
Xylenes, total	<2.0	2.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
Styrene	<1.0	1.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
Bromoform	<1.0	1.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM

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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	GU-3	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 10:13
Lab Sample ID:	1HD0315-19		

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		04/04/24 0000	04/05/24 0011	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/04/24 0000	04/05/24 0011	CSM
Surrogate: Dibromofluoromethane	94.9	Limit: 80-126	% Rec	1		04/04/24 0000	04/05/24 0011	CSM
Surrogate: Dibromofluoromethane	94.9	Limit: 75-136	% Rec	1		04/04/24 0000	04/05/24 0011	CSM
Surrogate: 1,2-Dichloroethane-d4	96.3	Limit: 63-138	% Rec	1		04/04/24 0000	04/05/24 0011	CSM
Surrogate: 1,2-Dichloroethane-d4	96.3	Limit: 61-142	% Rec	1		04/04/24 0000	04/05/24 0011	CSM
Surrogate: Toluene-d8	98.4	Limit: 82-121	% Rec	1		04/04/24 0000	04/05/24 0011	CSM
Surrogate: Toluene-d8	98.4	Limit: 87-116	% Rec	1		04/04/24 0000	04/05/24 0011	CSM
Surrogate: 4-Bromofluorobenzene	97.8	Limit: 85-111	% Rec	1		04/04/24 0000	04/05/24 0011	CSM
Surrogate: 4-Bromofluorobenzene	97.8	Limit: 80-116	% Rec	1		04/04/24 0000	04/05/24 0011	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		04/04/24 0845	04/05/24 0028	RVV
Arsenic, total	0.0063	0.0040	mg/L	4		04/04/24 0845	04/05/24 0028	RVV
Barium, total	0.201	0.0040	mg/L	4		04/04/24 0845	04/05/24 0028	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/05/24 0028	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/04/24 0845	04/05/24 0028	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/04/24 0845	04/05/24 0028	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		04/04/24 0845	04/05/24 0028	RVV
Copper, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/05/24 0028	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/05/24 0028	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/05/24 0028	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/05/24 0028	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/05/24 0028	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/04/24 0845	04/05/24 0028	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/04/24 0845	04/05/24 0028	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/04/24 0845	04/05/24 0028	RVV



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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	Tile ACM-1	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 13:00
Lab Sample ID:	1HD0315-20		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
Bromomethane	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
Chloroethane	2.3	1.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
Acetone	<10.0	10.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
1,1-Dichloroethane	1.6	1.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
Chloroform	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
Benzene	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
Dibromomethane	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
Toluene	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
Chlorobenzene	3.7	1.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
Xylenes, total	<2.0	2.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
Styrene	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
Bromoform	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM

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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID: Tile ACM-1	Collected By: Whipple, Todd
Sample Matrix: Aqueous	Collection Date: 04/02/2024 13:00
Lab Sample ID: 1HD0315-20	

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/05/24 0000	04/05/24 1317	CSM
Surrogate: Dibromofluoromethane	92.3	Limit: 75-136	% Rec	1		04/05/24 0000	04/05/24 1317	CSM
Surrogate: Dibromofluoromethane	92.3	Limit: 80-126	% Rec	1		04/05/24 0000	04/05/24 1317	CSM
Surrogate: 1,2-Dichloroethane-d4	95.2	Limit: 61-142	% Rec	1		04/05/24 0000	04/05/24 1317	CSM
Surrogate: 1,2-Dichloroethane-d4	95.2	Limit: 63-138	% Rec	1		04/05/24 0000	04/05/24 1317	CSM
Surrogate: Toluene-d8	97.4	Limit: 82-121	% Rec	1		04/05/24 0000	04/05/24 1317	CSM
Surrogate: Toluene-d8	97.4	Limit: 87-116	% Rec	1		04/05/24 0000	04/05/24 1317	CSM
Surrogate: 4-Bromofluorobenzene	98.5	Limit: 80-116	% Rec	1		04/05/24 0000	04/05/24 1317	CSM
Surrogate: 4-Bromofluorobenzene	98.5	Limit: 85-111	% Rec	1		04/05/24 0000	04/05/24 1317	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		04/04/24 0845	04/05/24 0035	RVV
Arsenic, total	0.0267	0.0040	mg/L	4		04/04/24 0845	04/05/24 0035	RVV
Barium, total	0.307	0.0040	mg/L	4		04/04/24 0845	04/05/24 0035	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/05/24 0035	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/04/24 0845	04/05/24 0035	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/04/24 0845	04/05/24 0035	RVV
Cobalt, total	0.0034	0.0004	mg/L	4		04/04/24 0845	04/05/24 0035	RVV
Copper, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/05/24 0035	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/05/24 0035	RVV
Nickel, total	0.0170	0.0040	mg/L	4		04/04/24 0845	04/05/24 0035	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/05/24 0035	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/04/24 0845	04/05/24 0035	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/04/24 0845	04/05/24 0035	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/04/24 0845	04/05/24 0035	RVV
Zinc, total	0.0266	0.0200	mg/L	4		04/04/24 0845	04/05/24 0035	RVV

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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	PECS-1	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 14:38
Lab Sample ID:	1HD0315-21		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
Bromomethane	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
Chloroethane	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
Acetone	<10.0	10.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
Chloroform	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
Benzene	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
Dibromomethane	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
Toluene	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
Xylenes, total	<2.0	2.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
Styrene	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
Bromoform	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM

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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	PECS-1	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 14:38
Lab Sample ID:	1HD0315-21		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/05/24 0000	04/05/24 1340	CSM
Surrogate: Dibromofluoromethane	92.2	Limit: 75-136	% Rec	1		04/05/24 0000	04/05/24 1340	CSM
Surrogate: Dibromofluoromethane	92.2	Limit: 80-126	% Rec	1		04/05/24 0000	04/05/24 1340	CSM
Surrogate: 1,2-Dichloroethane-d4	95.2	Limit: 61-142	% Rec	1		04/05/24 0000	04/05/24 1340	CSM
Surrogate: 1,2-Dichloroethane-d4	95.2	Limit: 63-138	% Rec	1		04/05/24 0000	04/05/24 1340	CSM
Surrogate: Toluene-d8	98.4	Limit: 82-121	% Rec	1		04/05/24 0000	04/05/24 1340	CSM
Surrogate: Toluene-d8	98.4	Limit: 87-116	% Rec	1		04/05/24 0000	04/05/24 1340	CSM
Surrogate: 4-Bromofluorobenzene	97.8	Limit: 80-116	% Rec	1		04/05/24 0000	04/05/24 1340	CSM
Surrogate: 4-Bromofluorobenzene	97.8	Limit: 85-111	% Rec	1		04/05/24 0000	04/05/24 1340	CSM

Client Sample ID:	MW-7A North	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 16:27
Lab Sample ID:	1HD0315-22		

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Arsenic, total	0.0045	0.0040	mg/L	4		04/08/24 0845	04/08/24 2356	RVV

Client Sample ID:	MW-7B Northwest	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024 16:42
Lab Sample ID:	1HD0315-23		

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Arsenic, total	0.107	0.0040	mg/L	4		04/08/24 0845	04/09/24 0002	RVV



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CERTIFICATE OF ANALYSIS

1HD0315

Client Sample ID:	Field Duplicate	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/02/2024
Lab Sample ID:	1HD0315-24		

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		04/08/24 0845	04/09/24 0008	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		04/08/24 0845	04/09/24 0008	RVV
Barium, total	0.109	0.0040	mg/L	4		04/08/24 0845	04/09/24 0008	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		04/08/24 0845	04/09/24 0008	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		04/08/24 0845	04/09/24 0008	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		04/08/24 0845	04/09/24 0008	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		04/08/24 0845	04/09/24 0008	RVV
Copper, total	<0.0040	0.0040	mg/L	4		04/08/24 0845	04/09/24 0008	RVV
Lead, total	<0.0040	0.0040	mg/L	4		04/08/24 0845	04/09/24 0008	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		04/08/24 0845	04/09/24 0008	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		04/08/24 0845	04/09/24 0008	RVV
Silver, total	<0.0040	0.0040	mg/L	4		04/08/24 0845	04/09/24 0008	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		04/08/24 0845	04/09/24 0008	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		04/08/24 0845	04/09/24 0008	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		04/08/24 0845	04/09/24 0008	RVV



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CERTIFICATE OF ANALYSIS

1HD0315

Batch Log Summary

Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	1HD0290	1HD0290-BLK1	
		1HD0290-BS1	
		1HD0315-01	MW-36 (B)
		1HD0290-MS1	1HD0315-01
		1HD0290-MSD1	1HD0315-01
		1HD0290-PS1	1HD0315-01
		1HD0315-02	MW-37 (B)
		1HD0315-03	MW-39 (B)
		1HD0315-04	MW-40 (B)
		1HD0315-05	MW-47 (B)
		1HD0315-06	MW-48A
		1HD0315-07	MW-49A
		1HD0315-08	MW-50
		1HD0315-09	MW-51
		1HD0315-10	MW-7
		1HD0315-11	MW-9
		1HD0315-12	MW-13R
		1HD0315-13	MW-14
		1HD0315-14	MW-29
		1HD0315-15	MW-31R
1HD0315-16	MW-33		
1HD0315-17	MW-35R		
1HD0315-18	MW-211		
1HD0315-19	GU-3		
1HD0315-20	Tile ACM-1		

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260B	1HD0359	1HD0359-BS1	
		1HD0359-BSD1	
		1HD0359-BLK1	
		1HD0315-01	MW-36 (B)
		1HD0315-02	MW-37 (B)
		1HD0315-03	MW-39 (B)
		1HD0315-04	MW-40 (B)
		1HD0315-05	MW-47 (B)
		1HD0315-06	MW-48A
		1HD0315-07	MW-49A
		1HD0315-08	MW-50
		1HD0315-09	MW-51
1HD0315-10	MW-7		



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CERTIFICATE OF ANALYSIS

1HD0315

EPA 8260B	1HD0359	1HD0315-11	MW-9
		1HD0315-12	MW-13R
		1HD0315-13	MW-14
		1HD0315-14	MW-29
		1HD0315-15	MW-31R
		1HD0315-16	MW-33
		1HD0315-17	MW-35R
		1HD0315-18	MW-211
		1HD0315-19	GU-3
		1HD0359-MS1	1HD0315-01
		1HD0359-MSD1	1HD0315-01

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260B	1HD0408	1HD0408-BS1	
		1HD0408-BSD1	
		1HD0408-BLK1	
		1HD0315-20	Tile ACM-1
		1HD0315-21	PECS-1
		1HD0408-MS1	1HD0315-21
		1HD0408-MSD1	1HD0315-21

Method	Batch	Laboratory ID	Client / Source ID
EPA 9010B	1HD0415	1HD0415-BS1	
		1HD0415-MS1	1HD0315-11
		1HD0415-BLK1	
		1HD0415-MSD1	1HD0315-11
		1HD0315-11	MW-9

Method	Batch	Laboratory ID	Client / Source ID
EPA 376.2	1HD0417	1HD0315-11	MW-9
		1HD0417-MSD1	1HD0315-11
		1HD0417-MS1	1HD0315-11
		1HD0417-BS1	
		1HD0417-BLK1	

Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	1HD0422	1HD0422-BLK1	
		1HD0422-BS1	
		1HD0315-22	MW-7A North
		1HD0315-23	MW-7B Northwest
		1HD0315-24	Field Duplicate
		1HD0422-MS1	1HD0545-01
		1HD0422-MSD1	1HD0545-01
		1HD0422-PS1	1HD0545-01



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CERTIFICATE OF ANALYSIS

1HD0315

Method	Batch	Laboratory ID	Client / Source ID
EPA 8270C	1HD0444	1HD0444-BLK1	
		1HD0444-BS1	
		1HD0444-BSD1	
		1HD0315-11	MW-9
Method	Batch	Laboratory ID	Client / Source ID
EPA 8151A	1HD0468	1HD0468-BLK1	
		1HD0315-11	MW-9
		1HD0468-BS1	
		1HD0468-BSD1	
Method	Batch	Laboratory ID	Client / Source ID
EPA 8081	1HD0488	1HD0488-BLK1	
		1HD0488-BS1	
		1HD0488-BSD1	
		1HD0315-11	MW-9
Method	Batch	Laboratory ID	Client / Source ID
EPA 8082	1HD0489	1HD0489-BLK1	
		1HD0489-BS1	
		1HD0489-BSD1	
		1HD0315-11	MW-9
Method	Batch	Laboratory ID	Client / Source ID
EPA 8141	1HD0490	1HD0490-BLK1	
		1HD0315-11	MW-9
		1HD0490-BS1	
		1HD0490-BSD1	
Method	Batch	Laboratory ID	Client / Source ID
EPA 8260B	1HD0497	1HD0497-BS1	
		1HD0497-BSD1	
		1HD0497-BLK1	
		1HD0315-11	MW-9
		1HD0497-MS1	1HD0545-01
		1HD0497-MSD1	1HD0545-01
Method	Batch	Laboratory ID	Client / Source ID
EPA 8270C	1HD0535	1HD0535-BLK1	
		1HD0535-BS1	
		1HD0535-BSD1	
		1HD0315-15	MW-31R
		1HD0315-17	MW-35R



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CERTIFICATE OF ANALYSIS

1HD0315

Method	Batch	Laboratory ID	Client / Source ID
EPA 7470A	1HD0568	1HD0568-BLK1	
		1HD0568-BS1	
		1HD0568-MS1	1HD0160-03
		1HD0568-MSD1	1HD0160-03
		1HD0315-11	MW-9

Method	Batch	Laboratory ID	Client / Source ID
EPA 8015C	1HD0875	1HD0875-BS1	
		1HD0875-BLK1	
		1HD0315-11	MW-9
		1HD0875-MS1	1HD0193-01
		1HD0875-MSD1	1HD0193-01

Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	1HD1478	1HD1478-BLK1	
		1HD1478-BS1	
		1HD1478-MS1	1HD0315-03RE3
		1HD1478-MSD1	1HD0315-03RE3
		1HD1478-PS1	1HD0315-03RE3

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 1HD0359 - EPA 5030B - EPA 8260B										

Blank (1HD0359-BLK1)				Prepared: 04/04/24 00:00 Analyzed: 04/04/24 10:53						
Dichlorodifluoromethane	<1.0	1.0	ug/L							
Chloromethane	<1.0	1.0	ug/L							
Chloromethane	<1.0	1.0	ug/L							
Vinyl Chloride	<1.0	1.0	ug/L							
Vinyl Chloride	<1.0	1.0	ug/L							
Bromomethane	<1.0	1.0	ug/L							
Bromomethane	<1.0	1.0	ug/L							
Chloroethane	<1.0	1.0	ug/L							
Chloroethane	<1.0	1.0	ug/L							
Trichlorofluoromethane	<1.0	1.0	ug/L							
Trichlorofluoromethane	<1.0	1.0	ug/L							
Acrolein	<10.0	10.0	ug/L							
1,1-Dichloroethylene	<1.0	1.0	ug/L							
1,1-Dichloroethylene	<1.0	1.0	ug/L							
Acetone	<10.0	10.0	ug/L							
Acetone	<10.0	10.0	ug/L							
Methyl Iodide	<2.0	2.0	ug/L							
Methyl Iodide	<1.0	1.0	ug/L							



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HD0315

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0359 - EPA 5030B - EPA 8260B										
Blank (1HD0359-BLK1)										
Prepared: 04/04/24 00:00 Analyzed: 04/04/24 10:53										
Carbon Disulfide	<1.0	1.0	ug/L							
Carbon Disulfide	<1.0	1.0	ug/L							
Acetonitrile	<10.0	10.0	ug/L							
Methylene Chloride	<5.0	5.0	ug/L							
Methylene Chloride	<5.0	5.0	ug/L							
Acrylonitrile	<5.0	5.0	ug/L							
Acrylonitrile	<5.0	5.0	ug/L							
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L							
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L							
1,1-Dichloroethane	<1.0	1.0	ug/L							
1,1-Dichloroethane	<1.0	1.0	ug/L							
Vinyl Acetate	<5.0	5.0	ug/L							
Vinyl Acetate	<5.0	5.0	ug/L							
2,2-Dichloropropane	<1.0	1.0	ug/L							
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L							
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L							
2-Butanone (MEK)	<5.0	5.0	ug/L							
2-Butanone (MEK)	<10.0	10.0	ug/L							
Bromochloromethane	<1.0	1.0	ug/L							
Bromochloromethane	<1.0	1.0	ug/L							
Chloroform	<1.0	1.0	ug/L							
Chloroform	<1.0	1.0	ug/L							
1,1,1-Trichloroethane	<1.0	1.0	ug/L							
1,1,1-Trichloroethane	<1.0	1.0	ug/L							
1,1-Dichloropropene	<1.0	1.0	ug/L							
Carbon Tetrachloride	<1.0	1.0	ug/L							
Carbon Tetrachloride	<1.0	1.0	ug/L							
Benzene	<1.0	1.0	ug/L							
Benzene	<1.0	1.0	ug/L							
1,2-Dichloroethane	<1.0	1.0	ug/L							
1,2-Dichloroethane	<1.0	1.0	ug/L							
Trichloroethylene	<1.0	1.0	ug/L							
Trichloroethylene	<1.0	1.0	ug/L							
1,2-Dichloropropane	<1.0	1.0	ug/L							
1,2-Dichloropropane	<1.0	1.0	ug/L							
Dibromomethane	<1.0	1.0	ug/L							
Dibromomethane	<1.0	1.0	ug/L							
Bromodichloromethane	<1.0	1.0	ug/L							
Bromodichloromethane	<1.0	1.0	ug/L							
cis-1,3-Dichloropropene	<1.0	1.0	ug/L							
cis-1,3-Dichloropropene	<1.0	1.0	ug/L							
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L							
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L							

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CERTIFICATE OF ANALYSIS

1HD0315

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0359 - EPA 5030B - EPA 8260B										
Blank (1HD0359-BLK1)										
Prepared: 04/04/24 00:00 Analyzed: 04/04/24 10:53										
Toluene	<1.0	1.0	ug/L							
Toluene	<1.0	1.0	ug/L							
trans-1,3-Dichloropropene	<1.0	1.0	ug/L							
trans-1,3-Dichloropropene	<1.0	1.0	ug/L							
Ethyl Methacrylate	<10.0	10.0	ug/L							
1,1,2-Trichloroethane	<1.0	1.0	ug/L							
1,1,2-Trichloroethane	<1.0	1.0	ug/L							
Tetrachloroethylene	<1.0	1.0	ug/L							
Tetrachloroethylene	<1.0	1.0	ug/L							
1,3-Dichloropropane	<1.0	1.0	ug/L							
2-Hexanone (MBK)	<5.0	5.0	ug/L							
2-Hexanone (MBK)	<5.0	5.0	ug/L							
Dibromochloromethane	<1.0	1.0	ug/L							
Dibromochloromethane	<1.0	1.0	ug/L							
1,2-Dibromoethane	<1.0	1.0	ug/L							
1,2-Dibromoethane	<1.0	1.0	ug/L							
Chlorobenzene	<1.0	1.0	ug/L							
Chlorobenzene	<1.0	1.0	ug/L							
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L							
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L							
Ethylbenzene	<1.0	1.0	ug/L							
Ethylbenzene	<1.0	1.0	ug/L							
Xylenes, total	<2.0	2.0	ug/L							
Xylenes, total	<2.0	2.0	ug/L							
Styrene	<1.0	1.0	ug/L							
Styrene	<1.0	1.0	ug/L							
Bromoform	<1.0	1.0	ug/L							
Bromoform	<1.0	1.0	ug/L							
1,2,3-Trichloropropane	<1.0	1.0	ug/L							
1,2,3-Trichloropropane	<1.0	1.0	ug/L							
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L							
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L							
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L							
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L							
1,3-Dichlorobenzene	<1.0	1.0	ug/L							
1,4-Dichlorobenzene	<1.0	1.0	ug/L							
1,4-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dibromo-3-chloropropane	<1.0	1.0	ug/L							
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L							
1,2,4-Trichlorobenzene	<1.0	1.0	ug/L							

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CERTIFICATE OF ANALYSIS

1HD0315

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0359 - EPA 5030B - EPA 8260B										

Blank (1HD0359-BLK1)

Prepared: 04/04/24 00:00 Analyzed: 04/04/24 10:53

Surrogate: Dibromofluoromethane	46.0		ug/L	50.2		91.7	80-126			
Surrogate: Dibromofluoromethane	46.0		ug/L	50.2		91.7	80-126			
Surrogate: Dibromofluoromethane	46.0		ug/L	50.2		91.7	75-136			
Surrogate: 1,2-Dichloroethane-d4	47.6		ug/L	50.1		95.1	63-138			
Surrogate: 1,2-Dichloroethane-d4	47.6		ug/L	50.1		95.1	63-138			
Surrogate: 1,2-Dichloroethane-d4	47.6		ug/L	50.1		95.1	63-138			
Surrogate: 1,2-Dichloroethane-d4	47.6		ug/L	50.1		95.1	61-142			
Surrogate: Toluene-d8	49.7		ug/L	50.4		98.7	87-116			
Surrogate: Toluene-d8	49.7		ug/L	50.4		98.7	87-116			
Surrogate: Toluene-d8	49.7		ug/L	50.4		98.7	87-116			
Surrogate: Toluene-d8	49.7		ug/L	50.4		98.7	82-121			
Surrogate: 4-Bromofluorobenzene	49.6		ug/L	50.1		98.9	85-111			
Surrogate: 4-Bromofluorobenzene	49.6		ug/L	50.1		98.9	85-111			
Surrogate: 4-Bromofluorobenzene	49.6		ug/L	50.1		98.9	85-111			
Surrogate: 4-Bromofluorobenzene	49.6		ug/L	50.1		98.9	80-116			

LCS (1HD0359-BS1)

Prepared: 04/04/24 00:00 Analyzed: 04/04/24 09:44

Dichlorodifluoromethane	34.13	1.0	ug/L	31.6		108	44-139			
Chloromethane	35.67	1.0	ug/L	30.6		116	56-152			
Chloromethane	35.67	1.0	ug/L	30.6		116	63-155			
Vinyl Chloride	29.82	1.0	ug/L	30.2		98.7	62-151			
Vinyl Chloride	29.82	1.0	ug/L	30.2		98.7	70-154			
Bromomethane	33.01	1.0	ug/L	28.8		115	61-162			
Bromomethane	33.01	1.0	ug/L	28.8		115	52-176			
Chloroethane	33.39	1.0	ug/L	31.6		106	69-138			
Chloroethane	33.39	1.0	ug/L	31.6		106	72-148			
Trichlorofluoromethane	28.72	1.0	ug/L	32.6		88.1	70-143			
Trichlorofluoromethane	28.72	1.0	ug/L	32.6		88.1	70-152			
Acrolein	89.12	10.0	ug/L	100		88.9	27-144			
1,1-Dichloroethylene	52.21	1.0	ug/L	50.0		104	76-140			
1,1-Dichloroethylene	52.21	1.0	ug/L	50.0		104	70-148			
Acetone	109.8	10.0	ug/L	102		108	51-156			
Acetone	109.8	10.0	ug/L	102		108	43-172			
Methyl Iodide	101.1	2.0	ug/L	99.7		101	81-166			
Methyl Iodide	101.1	1.0	ug/L	99.7		101	69-170			
Carbon Disulfide	91.47	1.0	ug/L	101		90.6	76-147			
Carbon Disulfide	91.47	1.0	ug/L	101		90.6	72-162			
Acetonitrile	201.4	10.0	ug/L	101		200	46-156			QS-02
Methylene Chloride	48.21	5.0	ug/L	50.0		96.4	67-139			
Methylene Chloride	48.21	5.0	ug/L	50.0		96.4	68-142			
Acrylonitrile	98.75	5.0	ug/L	100		98.4	67-144			
Acrylonitrile	98.75	5.0	ug/L	100		98.4	67-144			
trans-1,2-Dichloroethylene	49.52	1.0	ug/L	50.0		99.0	72-135			
trans-1,2-Dichloroethylene	49.52	1.0	ug/L	50.0		99.0	66-148			
1,1-Dichloroethane	48.06	1.0	ug/L	50.0		96.1	72-129			

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CERTIFICATE OF ANALYSIS

1HD0315

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0359 - EPA 5030B - EPA 8260B										
LCS (1HD0359-BS1)										
				Prepared: 04/04/24 00:00 Analyzed: 04/04/24 09:44						
1,1-Dichloroethane	48.06	1.0	ug/L	50.0		96.1	66-143			
Vinyl Acetate	90.07	5.0	ug/L	102		88.4	24-144			
Vinyl Acetate	90.07	5.0	ug/L	102		88.4	43-153			
2,2-Dichloropropane	42.63	1.0	ug/L	50.0		85.3	64-131			
cis-1,2-Dichloroethylene	59.15	1.0	ug/L	49.5		120	81-137			
cis-1,2-Dichloroethylene	59.15	1.0	ug/L	49.5		120	71-149			
2-Butanone (MEK)	95.08	5.0	ug/L	103		92.0	47-149			
2-Butanone (MEK)	95.08	10.0	ug/L	103		92.0	52-159			
Bromochloromethane	50.92	1.0	ug/L	50.0		102	75-138			
Bromochloromethane	50.92	1.0	ug/L	50.0		102	69-143			
Chloroform	48.54	1.0	ug/L	50.0		97.1	78-131			
Chloroform	48.54	1.0	ug/L	50.0		97.1	69-144			
1,1,1-Trichloroethane	40.31	1.0	ug/L	50.0		80.7	67-121			
1,1,1-Trichloroethane	40.31	1.0	ug/L	50.0		80.7	62-129			
1,1-Dichloropropene	47.25	1.0	ug/L	50.0		94.5	80-131			
Carbon Tetrachloride	43.42	1.0	ug/L	50.0		86.8	71-131			
Carbon Tetrachloride	43.42	1.0	ug/L	50.0		86.8	63-141			
Benzene	50.55	1.0	ug/L	50.0		101	77-130			
Benzene	50.55	1.0	ug/L	50.0		101	71-134			
1,2-Dichloroethane	48.02	1.0	ug/L	50.0		96.0	76-126			
1,2-Dichloroethane	48.02	1.0	ug/L	50.0		96.0	72-132			
Trichloroethylene	47.89	1.0	ug/L	50.0		95.8	80-124			
Trichloroethylene	47.89	1.0	ug/L	50.0		95.8	71-135			
1,2-Dichloropropane	51.01	1.0	ug/L	50.0		102	81-125			
1,2-Dichloropropane	51.01	1.0	ug/L	50.0		102	69-136			
Dibromomethane	52.05	1.0	ug/L	50.0		104	84-134			
Dibromomethane	52.05	1.0	ug/L	50.0		104	73-147			
Bromodichloromethane	45.61	1.0	ug/L	50.0		91.2	78-121			
Bromodichloromethane	45.61	1.0	ug/L	50.0		91.2	68-129			
cis-1,3-Dichloropropene	47.66	1.0	ug/L	50.3		94.7	78-120			
cis-1,3-Dichloropropene	47.66	1.0	ug/L	50.3		94.7	65-134			
4-Methyl-2-pentanone (MIBK)	101.4	5.0	ug/L	101		100	67-143			
4-Methyl-2-pentanone (MIBK)	101.4	5.0	ug/L	101		100	58-147			
Toluene	49.28	1.0	ug/L	50.0		98.6	77-130			
Toluene	49.28	1.0	ug/L	50.0		98.6	72-133			
trans-1,3-Dichloropropene	45.84	1.0	ug/L	50.4		90.9	77-123			
trans-1,3-Dichloropropene	45.84	1.0	ug/L	50.4		90.9	67-130			
Ethyl Methacrylate	99.46	10.0	ug/L	101		98.9	52-148			
1,1,2-Trichloroethane	49.33	1.0	ug/L	50.0		98.7	78-124			
1,1,2-Trichloroethane	49.33	1.0	ug/L	50.0		98.7	69-135			
Tetrachloroethylene	47.04	1.0	ug/L	50.0		94.1	73-124			
Tetrachloroethylene	47.04	1.0	ug/L	50.0		94.1	69-130			
1,3-Dichloropropane	54.19	1.0	ug/L	50.0		108	78-131			

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CERTIFICATE OF ANALYSIS

1HD0315

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0359 - EPA 5030B - EPA 8260B										
LCS (1HD0359-BS1)										
				Prepared: 04/04/24 00:00 Analyzed: 04/04/24 09:44						
2-Hexanone (MBK)	104.3	5.0	ug/L	103		101	57-145			
2-Hexanone (MBK)	104.3	5.0	ug/L	103		101	55-144			
Dibromochloromethane	48.39	1.0	ug/L	49.5		97.8	78-126			
Dibromochloromethane	48.39	1.0	ug/L	49.5		97.8	73-127			
1,2-Dibromoethane	49.34	1.0	ug/L	50.0		98.7	69-126			
1,2-Dibromoethane	49.34	1.0	ug/L	50.0		98.7	67-132			
Chlorobenzene	50.31	1.0	ug/L	50.0		101	76-120			
Chlorobenzene	50.31	1.0	ug/L	50.0		101	72-123			
1,1,1,2-Tetrachloroethane	48.97	1.0	ug/L	50.0		97.9	81-122			
1,1,1,2-Tetrachloroethane	48.97	1.0	ug/L	50.0		97.9	73-127			
Ethylbenzene	47.97	1.0	ug/L	50.0		95.9	74-121			
Ethylbenzene	47.97	1.0	ug/L	50.0		95.9	71-127			
Xylenes, total	142.5	2.0	ug/L	150		95.0	75-122			
Xylenes, total	142.5	2.0	ug/L	150		95.0	74-127			
Styrene	48.08	1.0	ug/L	50.0		96.2	76-119			
Styrene	48.08	1.0	ug/L	50.0		96.2	66-126			
Bromoform	47.92	1.0	ug/L	50.0		95.8	74-127			
Bromoform	47.92	1.0	ug/L	50.0		95.8	68-130			
1,2,3-Trichloropropane	50.98	1.0	ug/L	50.0		102	73-125			
1,2,3-Trichloropropane	50.98	1.0	ug/L	50.0		102	63-136			
trans-1,4-Dichloro-2-butene	86.87	5.0	ug/L	104		83.6	55-135			
trans-1,4-Dichloro-2-butene	86.87	5.0	ug/L	104		83.6	54-134			
1,1,2,2-Tetrachloroethane	50.12	1.0	ug/L	49.8		101	58-133			
1,1,2,2-Tetrachloroethane	50.12	1.0	ug/L	49.8		101	61-131			
1,3-Dichlorobenzene	47.78	1.0	ug/L	50.0		95.6	70-125			
1,4-Dichlorobenzene	48.61	1.0	ug/L	50.0		97.2	69-128			
1,4-Dichlorobenzene	48.61	1.0	ug/L	50.0		97.2	70-129			
1,2-Dichlorobenzene	47.75	1.0	ug/L	50.0		95.5	70-125			
1,2-Dichlorobenzene	47.75	1.0	ug/L	50.0		95.5	69-126			
1,2-Dibromo-3-chloropropane	47.70	1.0	ug/L	50.0		95.4	54-147			
1,2-Dibromo-3-chloropropane	47.70	5.0	ug/L	50.0		95.4	50-143			
1,2,4-Trichlorobenzene	48.94	1.0	ug/L	50.0		97.9	55-149			
Surrogate: Dibromofluoromethane	46.9		ug/L	50.2		93.6	80-126			
Surrogate: Dibromofluoromethane	46.9		ug/L	50.2		93.6	80-126			
Surrogate: Dibromofluoromethane	46.9		ug/L	50.2		93.6	75-136			
Surrogate: 1,2-Dichloroethane-d4	46.9		ug/L	50.1		93.7	63-138			
Surrogate: 1,2-Dichloroethane-d4	46.9		ug/L	50.1		93.7	63-138			
Surrogate: 1,2-Dichloroethane-d4	46.9		ug/L	50.1		93.7	63-138			
Surrogate: 1,2-Dichloroethane-d4	46.9		ug/L	50.1		93.7	61-142			
Surrogate: Toluene-d8	50.2		ug/L	50.4		99.6	87-116			
Surrogate: Toluene-d8	50.2		ug/L	50.4		99.6	87-116			
Surrogate: Toluene-d8	50.2		ug/L	50.4		99.6	87-116			
Surrogate: Toluene-d8	50.2		ug/L	50.4		99.6	82-121			
Surrogate: 4-Bromofluorobenzene	50.5		ug/L	50.1		101	85-111			

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CERTIFICATE OF ANALYSIS

1HD0315

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0359 - EPA 5030B - EPA 8260B										
LCS (1HD0359-BS1)										
				Prepared: 04/04/24 00:00 Analyzed: 04/04/24 09:44						
Surrogate: 4-Bromofluorobenzene	50.5		ug/L	50.1		101	85-111			
Surrogate: 4-Bromofluorobenzene	50.5		ug/L	50.1		101	85-111			
Surrogate: 4-Bromofluorobenzene	50.5		ug/L	50.1		101	80-116			
LCS Dup (1HD0359-BS1)										
				Prepared: 04/04/24 00:00 Analyzed: 04/04/24 10:07						
Dichlorodifluoromethane	31.06	1.0	ug/L	31.6		98.3	44-139	9.42	30	
Chloromethane	33.07	1.0	ug/L	30.6		108	56-152	7.56	30	
Chloromethane	33.07	1.0	ug/L	30.6		108	63-155	7.56	24	
Vinyl Chloride	27.42	1.0	ug/L	30.2		90.7	62-151	8.39	28	
Vinyl Chloride	27.42	1.0	ug/L	30.2		90.7	70-154	8.39	25	
Bromomethane	31.06	1.0	ug/L	28.8		108	61-162	6.09	28	
Bromomethane	31.06	1.0	ug/L	28.8		108	52-176	6.09	27	
Chloroethane	30.94	1.0	ug/L	31.6		97.8	69-138	7.62	29	
Chloroethane	30.94	1.0	ug/L	31.6		97.8	72-148	7.62	25	
Trichlorofluoromethane	26.62	1.0	ug/L	32.6		81.6	70-143	7.59	27	
Trichlorofluoromethane	26.62	1.0	ug/L	32.6		81.6	70-152	7.59	26	
Acrolein	87.35	10.0	ug/L	100		87.1	27-144	2.01	30	
1,1-Dichloroethylene	48.08	1.0	ug/L	50.0		96.2	76-140	8.24	30	
1,1-Dichloroethylene	48.08	1.0	ug/L	50.0		96.2	70-148	8.24	24	
Acetone	109.0	10.0	ug/L	102		107	51-156	0.686	30	
Acetone	109.0	10.0	ug/L	102		107	43-172	0.686	30	
Methyl Iodide	94.58	2.0	ug/L	99.7		94.9	81-166	6.62	29	
Methyl Iodide	94.58	1.0	ug/L	99.7		94.9	69-170	6.62	30	
Carbon Disulfide	83.87	1.0	ug/L	101		83.0	76-147	8.67	27	
Carbon Disulfide	83.87	1.0	ug/L	101		83.0	72-162	8.67	24	
Acetonitrile	196.6	10.0	ug/L	101		195	46-156	2.41	30	QS-02
Methylene Chloride	46.67	5.0	ug/L	50.0		93.3	67-139	3.25	26	
Methylene Chloride	46.67	5.0	ug/L	50.0		93.3	68-142	3.25	21	
Acrylonitrile	97.82	5.0	ug/L	100		97.5	67-144	0.946	24	
Acrylonitrile	97.82	5.0	ug/L	100		97.5	67-144	0.946	24	
trans-1,2-Dichloroethylene	46.29	1.0	ug/L	50.0		92.6	72-135	6.74	28	
trans-1,2-Dichloroethylene	46.29	1.0	ug/L	50.0		92.6	66-148	6.74	27	
1,1-Dichloroethane	45.43	1.0	ug/L	50.0		90.9	72-129	5.63	26	
1,1-Dichloroethane	45.43	1.0	ug/L	50.0		90.9	66-143	5.63	24	
Vinyl Acetate	98.41	5.0	ug/L	102		96.6	24-144	8.85	30	
Vinyl Acetate	98.41	5.0	ug/L	102		96.6	43-153	8.85	30	
2,2-Dichloropropane	39.37	1.0	ug/L	50.0		78.7	64-131	7.95	26	
cis-1,2-Dichloroethylene	56.07	1.0	ug/L	49.5		113	81-137	5.35	27	
cis-1,2-Dichloroethylene	56.07	1.0	ug/L	49.5		113	71-149	5.35	26	
2-Butanone (MEK)	92.85	5.0	ug/L	103		89.9	47-149	2.37	30	
2-Butanone (MEK)	92.85	10.0	ug/L	103		89.9	52-159	2.37	27	
Bromochloromethane	50.17	1.0	ug/L	50.0		100	75-138	1.48	24	
Bromochloromethane	50.17	1.0	ug/L	50.0		100	69-143	1.48	23	

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CERTIFICATE OF ANALYSIS

1HD0315

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0359 - EPA 5030B - EPA 8260B										
LCS Dup (1HD0359-BSD1)										
				Prepared: 04/04/24 00:00 Analyzed: 04/04/24 10:07						
Chloroform	46.11	1.0	ug/L	50.0		92.2	78-131	5.13	27	
Chloroform	46.11	1.0	ug/L	50.0		92.2	69-144	5.13	23	
1,1,1-Trichloroethane	36.96	1.0	ug/L	50.0		74.0	67-121	8.67	28	
1,1,1-Trichloroethane	36.96	1.0	ug/L	50.0		74.0	62-129	8.67	24	
1,1-Dichloropropene	43.77	1.0	ug/L	50.0		87.5	80-131	7.65	30	
Carbon Tetrachloride	40.16	1.0	ug/L	50.0		80.3	71-131	7.80	28	
Carbon Tetrachloride	40.16	1.0	ug/L	50.0		80.3	63-141	7.80	25	
Benzene	47.70	1.0	ug/L	50.0		95.4	77-130	5.80	25	
Benzene	47.70	1.0	ug/L	50.0		95.4	71-134	5.80	24	
1,2-Dichloroethane	47.74	1.0	ug/L	50.0		95.5	76-126	0.585	24	
1,2-Dichloroethane	47.74	1.0	ug/L	50.0		95.5	72-132	0.585	24	
Trichloroethylene	44.44	1.0	ug/L	50.0		88.9	80-124	7.47	27	
Trichloroethylene	44.44	1.0	ug/L	50.0		88.9	71-135	7.47	24	
1,2-Dichloropropane	49.30	1.0	ug/L	50.0		98.6	81-125	3.41	25	
1,2-Dichloropropane	49.30	1.0	ug/L	50.0		98.6	69-136	3.41	24	
Dibromomethane	52.07	1.0	ug/L	50.0		104	84-134	0.0384	23	
Dibromomethane	52.07	1.0	ug/L	50.0		104	73-147	0.0384	25	
Bromodichloromethane	43.86	1.0	ug/L	50.0		87.7	78-121	3.91	25	
Bromodichloromethane	43.86	1.0	ug/L	50.0		87.7	68-129	3.91	22	
cis-1,3-Dichloropropene	46.81	1.0	ug/L	50.3		93.0	78-120	1.80	26	
cis-1,3-Dichloropropene	46.81	1.0	ug/L	50.3		93.0	65-134	1.80	23	
4-Methyl-2-pentanone (MIBK)	100.3	5.0	ug/L	101		98.9	67-143	1.10	26	
4-Methyl-2-pentanone (MIBK)	100.3	5.0	ug/L	101		98.9	58-147	1.10	27	
Toluene	46.45	1.0	ug/L	50.0		92.9	77-130	5.91	27	
Toluene	46.45	1.0	ug/L	50.0		92.9	72-133	5.91	24	
trans-1,3-Dichloropropene	45.55	1.0	ug/L	50.4		90.3	77-123	0.635	28	
trans-1,3-Dichloropropene	45.55	1.0	ug/L	50.4		90.3	67-130	0.635	24	
Ethyl Methacrylate	99.63	10.0	ug/L	101		99.0	52-148	0.171	30	
1,1,2-Trichloroethane	49.57	1.0	ug/L	50.0		99.1	78-124	0.485	24	
1,1,2-Trichloroethane	49.57	1.0	ug/L	50.0		99.1	69-135	0.485	23	
Tetrachloroethylene	43.69	1.0	ug/L	50.0		87.4	73-124	7.38	26	
Tetrachloroethylene	43.69	1.0	ug/L	50.0		87.4	69-130	7.38	25	
1,3-Dichloropropane	54.14	1.0	ug/L	50.0		108	78-131	0.0923	24	
2-Hexanone (MBK)	103.4	5.0	ug/L	103		100	57-145	0.780	30	
2-Hexanone (MBK)	103.4	5.0	ug/L	103		100	55-144	0.780	25	
Dibromochloromethane	48.16	1.0	ug/L	49.5		97.3	78-126	0.476	23	
Dibromochloromethane	48.16	1.0	ug/L	49.5		97.3	73-127	0.476	22	
1,2-Dibromoethane	49.51	1.0	ug/L	50.0		99.0	69-126	0.344	22	
1,2-Dibromoethane	49.51	1.0	ug/L	50.0		99.0	67-132	0.344	24	
Chlorobenzene	48.00	1.0	ug/L	50.0		96.0	76-120	4.70	25	
Chlorobenzene	48.00	1.0	ug/L	50.0		96.0	72-123	4.70	23	
1,1,1,2-Tetrachloroethane	47.36	1.0	ug/L	50.0		94.7	81-122	3.34	23	
1,1,1,2-Tetrachloroethane	47.36	1.0	ug/L	50.0		94.7	73-127	3.34	24	

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CERTIFICATE OF ANALYSIS

1HD0315

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1HD0359 - EPA 5030B - EPA 8260B

LCS Dup (1HD0359-BSD1)

Prepared: 04/04/24 00:00 Analyzed: 04/04/24 10:07

Ethylbenzene	44.92	1.0	ug/L	50.0		89.8	74-121	6.57	27	
Ethylbenzene	44.92	1.0	ug/L	50.0		89.8	71-127	6.57	26	
Xylenes, total	134.7	2.0	ug/L	150		89.8	75-122	5.64	26	
Xylenes, total	134.7	2.0	ug/L	150		89.8	74-127	5.64	25	
Styrene	46.05	1.0	ug/L	50.0		92.1	76-119	4.31	26	
Styrene	46.05	1.0	ug/L	50.0		92.1	66-126	4.31	23	
Bromoform	47.16	1.0	ug/L	50.0		94.3	74-127	1.60	22	
Bromoform	47.16	1.0	ug/L	50.0		94.3	68-130	1.60	23	
1,2,3-Trichloropropane	50.84	1.0	ug/L	50.0		102	73-125	0.275	20	
1,2,3-Trichloropropane	50.84	1.0	ug/L	50.0		102	63-136	0.275	24	
trans-1,4-Dichloro-2-butene	86.19	5.0	ug/L	104		83.0	55-135	0.786	26	
trans-1,4-Dichloro-2-butene	86.19	5.0	ug/L	104		83.0	54-134	0.786	27	
1,1,2,2-Tetrachloroethane	49.74	1.0	ug/L	49.8		99.8	58-133	0.761	28	
1,1,2,2-Tetrachloroethane	49.74	1.0	ug/L	49.8		99.8	61-131	0.761	29	
1,3-Dichlorobenzene	45.81	1.0	ug/L	50.0		91.6	70-125	4.21	27	
1,4-Dichlorobenzene	47.20	1.0	ug/L	50.0		94.4	69-128	2.94	29	
1,4-Dichlorobenzene	47.20	1.0	ug/L	50.0		94.4	70-129	2.94	24	
1,2-Dichlorobenzene	47.09	1.0	ug/L	50.0		94.2	70-125	1.39	25	
1,2-Dichlorobenzene	47.09	1.0	ug/L	50.0		94.2	69-126	1.39	26	
1,2-Dibromo-3-chloropropane	47.63	1.0	ug/L	50.0		95.3	54-147	0.147	29	
1,2-Dibromo-3-chloropropane	47.63	5.0	ug/L	50.0		95.3	50-143	0.147	30	
1,2,4-Trichlorobenzene	48.13	1.0	ug/L	50.0		96.3	55-149	1.67	30	

Surrogate: Dibromofluoromethane	46.9		ug/L	50.2		93.5	80-126			
Surrogate: Dibromofluoromethane	46.9		ug/L	50.2		93.5	80-126			
Surrogate: Dibromofluoromethane	46.9		ug/L	50.2		93.5	75-136			
Surrogate: 1,2-Dichloroethane-d4	46.6		ug/L	50.1		93.2	63-138			
Surrogate: 1,2-Dichloroethane-d4	46.6		ug/L	50.1		93.2	63-138			
Surrogate: 1,2-Dichloroethane-d4	46.6		ug/L	50.1		93.2	63-138			
Surrogate: 1,2-Dichloroethane-d4	46.6		ug/L	50.1		93.2	61-142			
Surrogate: Toluene-d8	50.1		ug/L	50.4		99.4	87-116			
Surrogate: Toluene-d8	50.1		ug/L	50.4		99.4	87-116			
Surrogate: Toluene-d8	50.1		ug/L	50.4		99.4	87-116			
Surrogate: Toluene-d8	50.1		ug/L	50.4		99.4	82-121			
Surrogate: 4-Bromofluorobenzene	50.2		ug/L	50.1		100	85-111			
Surrogate: 4-Bromofluorobenzene	50.2		ug/L	50.1		100	85-111			
Surrogate: 4-Bromofluorobenzene	50.2		ug/L	50.1		100	85-111			
Surrogate: 4-Bromofluorobenzene	50.2		ug/L	50.1		100	80-116			

Matrix Spike (1HD0359-MS1)

Source: 1HD0315-01

Prepared: 04/04/24 00:00 Analyzed: 04/05/24 00:57

Dichlorodifluoromethane	337.9	10.0	ug/L	316	ND	107	47-137			
Chloromethane	355.1	10.0	ug/L	306	ND	116	49-154			
Chloromethane	355.1	10.0	ug/L	306	ND	116	61-152			
Vinyl Chloride	301.0	10.0	ug/L	302	ND	99.6	61-152			
Vinyl Chloride	301.0	10.0	ug/L	302	ND	99.6	66-149			
Bromomethane	313.8	10.0	ug/L	288	ND	109	47-168			

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CERTIFICATE OF ANALYSIS

1HD0315

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0359 - EPA 5030B - EPA 8260B										
Matrix Spike (1HD0359-MS1)	Source: 1HD0315-01			Prepared: 04/04/24 00:00 Analyzed: 04/05/24 00:57						
Bromomethane	313.8	10.0	ug/L	288	ND	109	43-171			
Chloroethane	331.8	10.0	ug/L	316	ND	105	61-148			
Chloroethane	331.8	10.0	ug/L	316	ND	105	69-148			
Trichlorofluoromethane	288.7	10.0	ug/L	326	ND	88.5	73-147			
Trichlorofluoromethane	288.7	10.0	ug/L	326	ND	88.5	62-163			
Acrolein	603.4	100	ug/L	1000	ND	60.2	20-164			
1,1-Dichloroethylene	523.1	10.0	ug/L	500	ND	105	68-153			
1,1-Dichloroethylene	523.1	10.0	ug/L	500	ND	105	70-148			
Acetone	999.9	100	ug/L	1020	ND	98.0	45-175			
Acetone	999.9	100	ug/L	1020	ND	98.0	45-173			
Methyl Iodide	1008	20.0	ug/L	997	ND	101	79-167			
Methyl Iodide	1008	10.0	ug/L	997	ND	101	62-167			
Carbon Disulfide	883.6	10.0	ug/L	1010	ND	87.5	72-156			
Carbon Disulfide	883.6	10.0	ug/L	1010	ND	87.5	71-163			
Acetonitrile	1970	100	ug/L	1010	ND	196	38-166			QS-02
Methylene Chloride	478.8	50.0	ug/L	500	ND	95.8	64-143			
Methylene Chloride	478.8	50.0	ug/L	500	ND	95.8	69-140			
Acrylonitrile	957.2	50.0	ug/L	1000	ND	95.4	58-151			
Acrylonitrile	957.2	50.0	ug/L	1000	ND	95.4	58-151			
trans-1,2-Dichloroethylene	490.2	10.0	ug/L	500	ND	98.0	65-145			
trans-1,2-Dichloroethylene	490.2	10.0	ug/L	500	ND	98.0	69-144			
1,1-Dichloroethane	478.3	10.0	ug/L	500	ND	95.7	68-136			
1,1-Dichloroethane	478.3	10.0	ug/L	500	ND	95.7	70-138			
Vinyl Acetate	941.6	50.0	ug/L	1020	ND	92.4	58-143			
Vinyl Acetate	941.6	50.0	ug/L	1020	ND	92.4	58-142			
2,2-Dichloropropane	315.3	10.0	ug/L	500	ND	63.1	50-118			
cis-1,2-Dichloroethylene	564.9	10.0	ug/L	495	ND	114	67-153			
cis-1,2-Dichloroethylene	564.9	10.0	ug/L	495	ND	114	68-151			
2-Butanone (MEK)	916.2	50.0	ug/L	1030	ND	88.7	52-159			
2-Butanone (MEK)	916.2	100	ug/L	1030	ND	88.7	50-160			
Bromochloromethane	514.0	10.0	ug/L	500	ND	103	61-151			
Bromochloromethane	514.0	10.0	ug/L	500	ND	103	65-143			
Chloroform	478.2	10.0	ug/L	500	ND	95.6	77-132			
Chloroform	478.2	10.0	ug/L	500	ND	95.6	71-143			
1,1,1-Trichloroethane	397.2	10.0	ug/L	500	ND	79.5	71-118			
1,1,1-Trichloroethane	397.2	10.0	ug/L	500	ND	79.5	63-133			
1,1-Dichloropropene	473.4	10.0	ug/L	500	ND	94.7	82-128			
Carbon Tetrachloride	424.5	10.0	ug/L	500	ND	84.9	71-133			
Carbon Tetrachloride	424.5	10.0	ug/L	500	ND	84.9	63-142			
Benzene	503.2	10.0	ug/L	500	ND	101	81-125			
Benzene	503.2	10.0	ug/L	500	ND	101	69-133			
1,2-Dichloroethane	476.1	10.0	ug/L	500	ND	95.2	75-125			
1,2-Dichloroethane	476.1	10.0	ug/L	500	ND	95.2	63-138			

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CERTIFICATE OF ANALYSIS

1HD0315

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0359 - EPA 5030B - EPA 8260B										
Matrix Spike (1HD0359-MS1)	Source: 1HD0315-01			Prepared: 04/04/24 00:00 Analyzed: 04/05/24 00:57						
Trichloroethylene	481.4	10.0	ug/L	500	ND	96.3	83-120			
Trichloroethylene	481.4	10.0	ug/L	500	ND	96.3	71-133			
1,2-Dichloropropane	503.7	10.0	ug/L	500	ND	101	80-124			
1,2-Dichloropropane	503.7	10.0	ug/L	500	ND	101	69-132			
Dibromomethane	519.1	10.0	ug/L	500	ND	104	84-131			
Dibromomethane	519.1	10.0	ug/L	500	ND	104	70-147			
Bromodichloromethane	440.6	10.0	ug/L	500	ND	88.1	79-118			
Bromodichloromethane	440.6	10.0	ug/L	500	ND	88.1	67-130			
cis-1,3-Dichloropropene	442.0	10.0	ug/L	503	ND	87.8	75-116			
cis-1,3-Dichloropropene	442.0	10.0	ug/L	503	ND	87.8	61-126			
4-Methyl-2-pentanone (MIBK)	980.9	50.0	ug/L	1010	ND	96.7	65-149			
4-Methyl-2-pentanone (MIBK)	980.9	50.0	ug/L	1010	ND	96.7	55-147			
Toluene	488.4	10.0	ug/L	500	ND	97.7	82-123			
Toluene	488.4	10.0	ug/L	500	ND	97.7	71-133			
trans-1,3-Dichloropropene	420.1	10.0	ug/L	504	ND	83.3	75-117			
trans-1,3-Dichloropropene	420.1	10.0	ug/L	504	ND	83.3	63-124			
Ethyl Methacrylate	967.9	100	ug/L	1010	ND	96.2	73-135			
1,1,2-Trichloroethane	493.5	10.0	ug/L	500	ND	98.7	77-122			
1,1,2-Trichloroethane	493.5	10.0	ug/L	500	ND	98.7	69-133			
Tetrachloroethylene	462.9	10.0	ug/L	500	ND	92.6	74-120			
Tetrachloroethylene	462.9	10.0	ug/L	500	ND	92.6	70-124			
1,3-Dichloropropane	530.6	10.0	ug/L	500	ND	106	80-127			
2-Hexanone (MBK)	979.5	50.0	ug/L	1030	ND	94.8	57-150			
2-Hexanone (MBK)	979.5	50.0	ug/L	1030	ND	94.8	53-141			
Dibromochloromethane	460.7	10.0	ug/L	495	ND	93.1	80-120			
Dibromochloromethane	460.7	10.0	ug/L	495	ND	93.1	74-122			
1,2-Dibromoethane	485.9	10.0	ug/L	500	ND	97.2	67-125			
1,2-Dibromoethane	485.9	10.0	ug/L	500	ND	97.2	66-127			
Chlorobenzene	490.4	10.0	ug/L	500	ND	98.1	81-113			
Chlorobenzene	490.4	10.0	ug/L	500	ND	98.1	76-116			
1,1,1,2-Tetrachloroethane	473.8	10.0	ug/L	500	ND	94.8	80-119			
1,1,1,2-Tetrachloroethane	473.8	10.0	ug/L	500	ND	94.8	77-121			
Ethylbenzene	470.3	10.0	ug/L	500	ND	94.1	78-114			
Ethylbenzene	470.3	10.0	ug/L	500	ND	94.1	73-124			
Xylenes, total	1399	20.0	ug/L	1500	ND	93.3	77-116			
Xylenes, total	1399	20.0	ug/L	1500	ND	93.3	75-123			
Styrene	464.8	10.0	ug/L	500	ND	93.0	78-114			
Styrene	464.8	10.0	ug/L	500	ND	93.0	70-120			
Bromoform	445.4	10.0	ug/L	500	ND	89.1	69-125			
Bromoform	445.4	10.0	ug/L	500	ND	89.1	70-124			
1,2,3-Trichloropropane	501.1	10.0	ug/L	500	ND	100	72-125			
1,2,3-Trichloropropane	501.1	10.0	ug/L	500	ND	100	62-135			
trans-1,4-Dichloro-2-butene	759.7	50.0	ug/L	1040	ND	73.1	48-131			

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CERTIFICATE OF ANALYSIS

1HD0315

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0359 - EPA 5030B - EPA 8260B										
Matrix Spike (1HD0359-MS1)	Source: 1HD0315-01			Prepared: 04/04/24 00:00 Analyzed: 04/05/24 00:57						
trans-1,4-Dichloro-2-butene	759.7	50.0	ug/L	1040	ND	73.1	50-120			
1,1,2,2-Tetrachloroethane	467.0	10.0	ug/L	498	ND	93.7	51-138			
1,1,2,2-Tetrachloroethane	467.0	10.0	ug/L	498	ND	93.7	63-126			
1,3-Dichlorobenzene	451.4	10.0	ug/L	500	ND	90.3	70-122			
1,4-Dichlorobenzene	464.7	10.0	ug/L	500	ND	92.9	70-124			
1,4-Dichlorobenzene	464.7	10.0	ug/L	500	ND	92.9	72-119			
1,2-Dichlorobenzene	456.4	10.0	ug/L	500	ND	91.3	68-123			
1,2-Dichlorobenzene	456.4	10.0	ug/L	500	ND	91.3	71-117			
1,2-Dibromo-3-chloropropane	425.7	10.0	ug/L	500	ND	85.1	46-149			
1,2-Dibromo-3-chloropropane	425.7	50.0	ug/L	500	ND	85.1	49-134			
1,2,4-Trichlorobenzene	453.6	10.0	ug/L	500	ND	90.7	60-137			
Surrogate: Dibromofluoromethane	470		ug/L	502		93.7	80-126			
Surrogate: Dibromofluoromethane	470		ug/L	502		93.7	80-126			
Surrogate: Dibromofluoromethane	470		ug/L	502		93.7	75-136			
Surrogate: 1,2-Dichloroethane-d4	466		ug/L	501		93.0	63-138			
Surrogate: 1,2-Dichloroethane-d4	466		ug/L	501		93.0	63-138			
Surrogate: 1,2-Dichloroethane-d4	466		ug/L	501		93.0	63-138			
Surrogate: 1,2-Dichloroethane-d4	466		ug/L	501		93.0	61-142			
Surrogate: Toluene-d8	503		ug/L	504		99.9	87-116			
Surrogate: Toluene-d8	503		ug/L	504		99.9	87-116			
Surrogate: Toluene-d8	503		ug/L	504		99.9	87-116			
Surrogate: Toluene-d8	503		ug/L	504		99.9	82-121			
Surrogate: 4-Bromofluorobenzene	506		ug/L	501		101	85-111			
Surrogate: 4-Bromofluorobenzene	506		ug/L	501		101	85-111			
Surrogate: 4-Bromofluorobenzene	506		ug/L	501		101	85-111			
Surrogate: 4-Bromofluorobenzene	506		ug/L	501		101	80-116			
Matrix Spike Dup (1HD0359-MSD1)	Source: 1HD0315-01			Prepared: 04/04/24 00:00 Analyzed: 04/05/24 01:20						
Dichlorodifluoromethane	317.2	10.0	ug/L	316	ND	100	47-137	6.32	20	
Chloromethane	330.1	10.0	ug/L	306	ND	108	49-154	7.30	25	
Chloromethane	330.1	10.0	ug/L	306	ND	108	61-152	7.30	26	
Vinyl Chloride	283.4	10.0	ug/L	302	ND	93.8	61-152	6.02	24	
Vinyl Chloride	283.4	10.0	ug/L	302	ND	93.8	66-149	6.02	23	
Bromomethane	303.9	10.0	ug/L	288	ND	106	47-168	3.21	30	
Bromomethane	303.9	10.0	ug/L	288	ND	106	43-171	3.21	29	
Chloroethane	312.9	10.0	ug/L	316	ND	98.9	61-148	5.86	29	
Chloroethane	312.9	10.0	ug/L	316	ND	98.9	69-148	5.86	25	
Trichlorofluoromethane	273.3	10.0	ug/L	326	ND	83.8	73-147	5.48	24	
Trichlorofluoromethane	273.3	10.0	ug/L	326	ND	83.8	62-163	5.48	25	
Acrolein	631.1	100	ug/L	1000	ND	63.0	20-164	4.49	24	
1,1-Dichloroethylene	488.8	10.0	ug/L	500	ND	97.8	68-153	6.78	21	
1,1-Dichloroethylene	488.8	10.0	ug/L	500	ND	97.8	70-148	6.78	22	
Acetone	964.8	100	ug/L	1020	ND	94.6	45-175	3.57	23	
Acetone	964.8	100	ug/L	1020	ND	94.6	45-173	3.57	30	
Methyl Iodide	952.1	20.0	ug/L	997	ND	95.5	79-167	5.70	14	



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HD0315

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0359 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1HD0359-MSD1)	Source: 1HD0315-01			Prepared: 04/04/24 00:00 Analyzed: 04/05/24 01:20						
Methyl Iodide	952.1	10.0	ug/L	997	ND	95.5	62-167	5.70	24	
Carbon Disulfide	844.8	10.0	ug/L	1010	ND	83.6	72-156	4.49	19	
Carbon Disulfide	844.8	10.0	ug/L	1010	ND	83.6	71-163	4.49	22	
Acetonitrile	1846	100	ug/L	1010	ND	184	38-166	6.49	20	QS-02
Methylene Chloride	459.5	50.0	ug/L	500	ND	91.9	64-143	4.11	19	
Methylene Chloride	459.5	50.0	ug/L	500	ND	91.9	69-140	4.11	19	
Acrylonitrile	937.6	50.0	ug/L	1000	ND	93.4	58-151	2.07	15	
Acrylonitrile	937.6	50.0	ug/L	1000	ND	93.4	58-151	2.07	15	
trans-1,2-Dichloroethylene	461.6	10.0	ug/L	500	ND	92.3	65-145	6.01	18	
trans-1,2-Dichloroethylene	461.6	10.0	ug/L	500	ND	92.3	69-144	6.01	22	
1,1-Dichloroethane	452.6	10.0	ug/L	500	ND	90.5	68-136	5.52	17	
1,1-Dichloroethane	452.6	10.0	ug/L	500	ND	90.5	70-138	5.52	20	
Vinyl Acetate	938.9	50.0	ug/L	1020	ND	92.1	58-143	0.287	14	
Vinyl Acetate	938.9	50.0	ug/L	1020	ND	92.1	58-142	0.287	24	
2,2-Dichloropropane	302.1	10.0	ug/L	500	ND	60.4	50-118	4.28	17	
cis-1,2-Dichloroethylene	542.2	10.0	ug/L	495	ND	110	67-153	4.10	22	
cis-1,2-Dichloroethylene	542.2	10.0	ug/L	495	ND	110	68-151	4.10	22	
2-Butanone (MEK)	885.1	50.0	ug/L	1030	ND	85.7	52-159	3.45	28	
2-Butanone (MEK)	885.1	100	ug/L	1030	ND	85.7	50-160	3.45	23	
Bromochloromethane	491.5	10.0	ug/L	500	ND	98.3	61-151	4.48	27	
Bromochloromethane	491.5	10.0	ug/L	500	ND	98.3	65-143	4.48	22	
Chloroform	455.6	10.0	ug/L	500	ND	91.1	77-132	4.84	17	
Chloroform	455.6	10.0	ug/L	500	ND	91.1	71-143	4.84	21	
1,1,1-Trichloroethane	372.5	10.0	ug/L	500	ND	74.5	71-118	6.42	15	
1,1,1-Trichloroethane	372.5	10.0	ug/L	500	ND	74.5	63-133	6.42	23	
1,1-Dichloropropene	442.2	10.0	ug/L	500	ND	88.4	82-128	6.82	16	
Carbon Tetrachloride	403.1	10.0	ug/L	500	ND	80.6	71-133	5.17	14	
Carbon Tetrachloride	403.1	10.0	ug/L	500	ND	80.6	63-142	5.17	22	
Benzene	479.9	10.0	ug/L	500	ND	96.0	81-125	4.74	12	
Benzene	479.9	10.0	ug/L	500	ND	96.0	69-133	4.74	18	
1,2-Dichloroethane	466.0	10.0	ug/L	500	ND	93.2	75-125	2.14	13	
1,2-Dichloroethane	466.0	10.0	ug/L	500	ND	93.2	63-138	2.14	20	
Trichloroethylene	458.5	10.0	ug/L	500	ND	91.7	83-120	4.87	11	
Trichloroethylene	458.5	10.0	ug/L	500	ND	91.7	71-133	4.87	23	
1,2-Dichloropropane	491.5	10.0	ug/L	500	ND	98.3	80-124	2.45	11	
1,2-Dichloropropane	491.5	10.0	ug/L	500	ND	98.3	69-132	2.45	20	
Dibromomethane	506.8	10.0	ug/L	500	ND	101	84-131	2.40	13	
Dibromomethane	506.8	10.0	ug/L	500	ND	101	70-147	2.40	22	
Bromodichloromethane	427.4	10.0	ug/L	500	ND	85.5	79-118	3.04	11	
Bromodichloromethane	427.4	10.0	ug/L	500	ND	85.5	67-130	3.04	21	
cis-1,3-Dichloropropene	435.0	10.0	ug/L	503	ND	86.4	75-116	1.60	11	
cis-1,3-Dichloropropene	435.0	10.0	ug/L	503	ND	86.4	61-126	1.60	21	
4-Methyl-2-pentanone (MIBK)	959.4	50.0	ug/L	1010	ND	94.6	65-149	2.22	14	

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CERTIFICATE OF ANALYSIS

1HD0315

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0359 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1HD0359-MSD1)	Source: 1HD0315-01			Prepared: 04/04/24 00:00 Analyzed: 04/05/24 01:20						
4-Methyl-2-pentanone (MIBK)	959.4	50.0	ug/L	1010	ND	94.6	55-147	2.22	23	
Toluene	465.2	10.0	ug/L	500	ND	93.0	82-123	4.87	12	
Toluene	465.2	10.0	ug/L	500	ND	93.0	71-133	4.87	19	
trans-1,3-Dichloropropene	417.1	10.0	ug/L	504	ND	82.7	75-117	0.717	11	
trans-1,3-Dichloropropene	417.1	10.0	ug/L	504	ND	82.7	63-124	0.717	21	
Ethyl Methacrylate	947.3	100	ug/L	1010	ND	94.2	73-135	2.15	10	
1,1,2-Trichloroethane	484.4	10.0	ug/L	500	ND	96.9	77-122	1.86	11	
1,1,2-Trichloroethane	484.4	10.0	ug/L	500	ND	96.9	69-133	1.86	19	
Tetrachloroethylene	441.2	10.0	ug/L	500	ND	88.2	74-120	4.80	17	
Tetrachloroethylene	441.2	10.0	ug/L	500	ND	88.2	70-124	4.80	24	
1,3-Dichloropropane	528.3	10.0	ug/L	500	ND	106	80-127	0.434	13	
2-Hexanone (MBK)	968.5	50.0	ug/L	1030	ND	93.8	57-150	1.13	17	
2-Hexanone (MBK)	968.5	50.0	ug/L	1030	ND	93.8	53-141	1.13	24	
Dibromochloromethane	462.2	10.0	ug/L	495	ND	93.4	80-120	0.325	12	
Dibromochloromethane	462.2	10.0	ug/L	495	ND	93.4	74-122	0.325	21	
1,2-Dibromoethane	478.6	10.0	ug/L	500	ND	95.7	67-125	1.51	12	
1,2-Dibromoethane	478.6	10.0	ug/L	500	ND	95.7	66-127	1.51	23	
Chlorobenzene	476.5	10.0	ug/L	500	ND	95.3	81-113	2.88	14	
Chlorobenzene	476.5	10.0	ug/L	500	ND	95.3	76-116	2.88	21	
1,1,1,2-Tetrachloroethane	468.4	10.0	ug/L	500	ND	93.7	80-119	1.15	15	
1,1,1,2-Tetrachloroethane	468.4	10.0	ug/L	500	ND	93.7	77-121	1.15	25	
Ethylbenzene	450.4	10.0	ug/L	500	ND	90.1	78-114	4.32	14	
Ethylbenzene	450.4	10.0	ug/L	500	ND	90.1	73-124	4.32	20	
Xylenes, total	1347	20.0	ug/L	1500	ND	89.8	77-116	3.82	13	
Xylenes, total	1347	20.0	ug/L	1500	ND	89.8	75-123	3.82	20	
Styrene	454.5	10.0	ug/L	500	ND	90.9	78-114	2.24	12	
Styrene	454.5	10.0	ug/L	500	ND	90.9	70-120	2.24	23	
Bromoform	443.3	10.0	ug/L	500	ND	88.7	69-125	0.473	14	
Bromoform	443.3	10.0	ug/L	500	ND	88.7	70-124	0.473	22	
1,2,3-Trichloropropane	493.5	10.0	ug/L	500	ND	98.7	72-125	1.53	18	
1,2,3-Trichloropropane	493.5	10.0	ug/L	500	ND	98.7	62-135	1.53	28	
trans-1,4-Dichloro-2-butene	760.5	50.0	ug/L	1040	ND	73.2	48-131	0.105	17	
trans-1,4-Dichloro-2-butene	760.5	50.0	ug/L	1040	ND	73.2	50-120	0.105	26	
1,1,2,2-Tetrachloroethane	467.4	10.0	ug/L	498	ND	93.8	51-138	0.0856	30	
1,1,2,2-Tetrachloroethane	467.4	10.0	ug/L	498	ND	93.8	63-126	0.0856	24	
1,3-Dichlorobenzene	444.3	10.0	ug/L	500	ND	88.9	70-122	1.59	30	
1,4-Dichlorobenzene	456.5	10.0	ug/L	500	ND	91.3	70-124	1.78	28	
1,4-Dichlorobenzene	456.5	10.0	ug/L	500	ND	91.3	72-119	1.78	24	
1,2-Dichlorobenzene	451.4	10.0	ug/L	500	ND	90.3	68-123	1.10	29	
1,2-Dichlorobenzene	451.4	10.0	ug/L	500	ND	90.3	71-117	1.10	24	
1,2-Dibromo-3-chloropropane	435.4	10.0	ug/L	500	ND	87.1	46-149	2.25	30	
1,2-Dibromo-3-chloropropane	435.4	50.0	ug/L	500	ND	87.1	49-134	2.25	28	
1,2,4-Trichlorobenzene	461.7	10.0	ug/L	500	ND	92.3	60-137	1.77	30	

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CERTIFICATE OF ANALYSIS

1HD0315

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0359 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1HD0359-MSD1)	Source: 1HD0315-01			Prepared: 04/04/24 00:00 Analyzed: 04/05/24 01:20						
Surrogate: Dibromofluoromethane	468		ug/L	502		93.2	80-126			
Surrogate: Dibromofluoromethane	468		ug/L	502		93.2	80-126			
Surrogate: Dibromofluoromethane	468		ug/L	502		93.2	75-136			
Surrogate: 1,2-Dichloroethane-d4	465		ug/L	501		92.8	63-138			
Surrogate: 1,2-Dichloroethane-d4	465		ug/L	501		92.8	63-138			
Surrogate: 1,2-Dichloroethane-d4	465		ug/L	501		92.8	63-138			
Surrogate: 1,2-Dichloroethane-d4	465		ug/L	501		92.8	61-142			
Surrogate: Toluene-d8	504		ug/L	504		100	87-116			
Surrogate: Toluene-d8	504		ug/L	504		100	87-116			
Surrogate: Toluene-d8	504		ug/L	504		100	87-116			
Surrogate: Toluene-d8	504		ug/L	504		100	82-121			
Surrogate: 4-Bromofluorobenzene	509		ug/L	501		101	85-111			
Surrogate: 4-Bromofluorobenzene	509		ug/L	501		101	85-111			
Surrogate: 4-Bromofluorobenzene	509		ug/L	501		101	85-111			
Surrogate: 4-Bromofluorobenzene	509		ug/L	501		101	80-116			

Batch 1HD0408 - EPA 5030B - EPA 8260B

Blank (1HD0408-BLK1)	Prepared: 04/05/24 00:00 Analyzed: 04/05/24 10:58									
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							

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CERTIFICATE OF ANALYSIS

1HD0315

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1HD0408 - EPA 5030B - EPA 8260B

Blank (1HD0408-BLK1)

Prepared: 04/05/24 00:00 Analyzed: 04/05/24 10:58

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	46.8		ug/L	50.2		93.2	80-126			
Surrogate: Dibromofluoromethane	46.8		ug/L	50.2		93.2	75-136			
Surrogate: 1,2-Dichloroethane-d4	48.0		ug/L	50.1		95.8	63-138			
Surrogate: 1,2-Dichloroethane-d4	48.0		ug/L	50.1		95.8	61-142			
Surrogate: Toluene-d8	49.4		ug/L	50.4		98.0	87-116			
Surrogate: Toluene-d8	49.4		ug/L	50.4		98.0	82-121			
Surrogate: 4-Bromofluorobenzene	49.1		ug/L	50.1		97.9	85-111			
Surrogate: 4-Bromofluorobenzene	49.1		ug/L	50.1		97.9	80-116			

LCS (1HD0408-BS1)

Prepared: 04/05/24 00:00 Analyzed: 04/05/24 09:49

Chloromethane	35.33	1.0	ug/L	30.6		115	63-155			
Vinyl Chloride	29.62	1.0	ug/L	30.2		98.0	70-154			
Bromomethane	31.82	1.0	ug/L	28.8		110	52-176			
Chloroethane	33.58	1.0	ug/L	31.6		106	72-148			
Trichlorofluoromethane	28.46	1.0	ug/L	32.6		87.3	70-152			
1,1-Dichloroethylene	52.21	1.0	ug/L	50.0		104	70-148			
Acetone	100.5	10.0	ug/L	102		98.5	43-172			
Methyl Iodide	102.6	1.0	ug/L	99.7		103	69-170			
Carbon Disulfide	91.29	1.0	ug/L	101		90.4	72-162			
Methylene Chloride	48.99	5.0	ug/L	50.0		98.0	68-142			
Acrylonitrile	98.94	5.0	ug/L	100		98.6	67-144			
trans-1,2-Dichloroethylene	50.39	1.0	ug/L	50.0		101	66-148			
1,1-Dichloroethane	49.20	1.0	ug/L	50.0		98.4	66-143			



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HD0315

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1HD0408 - EPA 5030B - EPA 8260B

LCS (1HD0408-BS1)

Prepared: 04/05/24 00:00 Analyzed: 04/05/24 09:49

Vinyl Acetate	106.6	5.0	ug/L	102		105	43-153			
cis-1,2-Dichloroethylene	51.21	1.0	ug/L	49.5		104	71-149			
2-Butanone (MEK)	105.2	10.0	ug/L	103		102	52-159			
Bromochloromethane	52.93	1.0	ug/L	50.0		106	69-143			
Chloroform	49.54	1.0	ug/L	50.0		99.1	69-144			
1,1,1-Trichloroethane	40.32	1.0	ug/L	50.0		80.7	62-129			
Carbon Tetrachloride	43.17	1.0	ug/L	50.0		86.3	63-141			
Benzene	51.55	1.0	ug/L	50.0		103	71-134			
1,2-Dichloroethane	49.24	1.0	ug/L	50.0		98.5	72-132			
Trichloroethylene	49.25	1.0	ug/L	50.0		98.5	71-135			
1,2-Dichloropropane	52.22	1.0	ug/L	50.0		104	69-136			
Dibromomethane	53.88	1.0	ug/L	50.0		108	73-147			
Bromodichloromethane	46.03	1.0	ug/L	50.0		92.1	68-129			
cis-1,3-Dichloropropene	48.80	1.0	ug/L	50.3		97.0	65-134			
4-Methyl-2-pentanone (MIBK)	101.6	5.0	ug/L	101		100	58-147			
Toluene	50.12	1.0	ug/L	50.0		100	72-133			
trans-1,3-Dichloropropene	46.67	1.0	ug/L	50.4		92.6	67-130			
1,1,2-Trichloroethane	50.78	1.0	ug/L	50.0		102	69-135			
Tetrachloroethylene	47.79	1.0	ug/L	50.0		95.6	69-130			
2-Hexanone (MBK)	104.7	5.0	ug/L	103		101	55-144			
Dibromochloromethane	49.28	1.0	ug/L	49.5		99.6	73-127			
1,2-Dibromoethane	50.70	1.0	ug/L	50.0		101	67-132			
Chlorobenzene	51.28	1.0	ug/L	50.0		103	72-123			
1,1,1,2-Tetrachloroethane	49.86	1.0	ug/L	50.0		99.7	73-127			
Ethylbenzene	48.46	1.0	ug/L	50.0		96.9	71-127			
Xylenes, total	144.8	2.0	ug/L	150		96.6	74-127			
Styrene	48.66	1.0	ug/L	50.0		97.3	66-126			
Bromoform	46.85	1.0	ug/L	50.0		93.7	68-130			
1,2,3-Trichloropropane	51.50	1.0	ug/L	50.0		103	63-136			
trans-1,4-Dichloro-2-butene	87.14	5.0	ug/L	104		83.9	54-134			
1,1,2,2-Tetrachloroethane	50.39	1.0	ug/L	49.8		101	61-131			
1,4-Dichlorobenzene	49.38	1.0	ug/L	50.0		98.8	70-129			
1,2-Dichlorobenzene	48.63	1.0	ug/L	50.0		97.3	69-126			
1,2-Dibromo-3-chloropropane	47.65	5.0	ug/L	50.0		95.3	50-143			

Surrogate: Dibromofluoromethane	47.0		ug/L	50.2		93.8	80-126			
Surrogate: Dibromofluoromethane	47.0		ug/L	50.2		93.8	75-136			
Surrogate: 1,2-Dichloroethane-d4	46.9		ug/L	50.1		93.7	63-138			
Surrogate: 1,2-Dichloroethane-d4	46.9		ug/L	50.1		93.7	61-142			
Surrogate: Toluene-d8	50.2		ug/L	50.4		99.7	87-116			
Surrogate: Toluene-d8	50.2		ug/L	50.4		99.7	82-121			
Surrogate: 4-Bromofluorobenzene	50.2		ug/L	50.1		100	85-111			
Surrogate: 4-Bromofluorobenzene	50.2		ug/L	50.1		100	80-116			

LCS Dup (1HD0408-BSD1)

Prepared: 04/05/24 00:00 Analyzed: 04/05/24 10:12



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HD0315

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0408 - EPA 5030B - EPA 8260B										
LCS Dup (1HD0408-BSD1)										
				Prepared: 04/05/24 00:00 Analyzed: 04/05/24 10:12						
Chloromethane	32.20	1.0	ug/L	30.6		105	63-155	9.27	24	
Vinyl Chloride	26.74	1.0	ug/L	30.2		88.5	70-154	10.2	25	
Bromomethane	30.72	1.0	ug/L	28.8		107	52-176	3.52	27	
Chloroethane	30.38	1.0	ug/L	31.6		96.0	72-148	10.0	25	
Trichlorofluoromethane	25.61	1.0	ug/L	32.6		78.5	70-152	10.5	26	
1,1-Dichloroethylene	47.21	1.0	ug/L	50.0		94.4	70-148	10.1	24	
Acetone	102.4	10.0	ug/L	102		100	43-172	1.95	30	
Methyl Iodide	94.24	1.0	ug/L	99.7		94.5	69-170	8.47	30	
Carbon Disulfide	82.59	1.0	ug/L	101		81.8	72-162	10.0	24	
Methylene Chloride	46.20	5.0	ug/L	50.0		92.4	68-142	5.86	21	
Acrylonitrile	93.96	5.0	ug/L	100		93.6	67-144	5.16	24	
trans-1,2-Dichloroethylene	46.03	1.0	ug/L	50.0		92.1	66-148	9.04	27	
1,1-Dichloroethane	45.30	1.0	ug/L	50.0		90.6	66-143	8.25	24	
Vinyl Acetate	107.3	5.0	ug/L	102		105	43-153	0.673	30	
cis-1,2-Dichloroethylene	48.28	1.0	ug/L	49.5		97.6	71-149	5.89	26	
2-Butanone (MEK)	99.79	10.0	ug/L	103		96.6	52-159	5.25	27	
Bromochloromethane	49.88	1.0	ug/L	50.0		99.8	69-143	5.93	23	
Chloroform	45.82	1.0	ug/L	50.0		91.6	69-144	7.80	23	
1,1,1-Trichloroethane	36.72	1.0	ug/L	50.0		73.5	62-129	9.35	24	
Carbon Tetrachloride	39.46	1.0	ug/L	50.0		78.9	63-141	8.98	25	
Benzene	48.25	1.0	ug/L	50.0		96.5	71-134	6.61	24	
1,2-Dichloroethane	46.56	1.0	ug/L	50.0		93.1	72-132	5.59	24	
Trichloroethylene	45.69	1.0	ug/L	50.0		91.4	71-135	7.50	24	
1,2-Dichloropropane	49.43	1.0	ug/L	50.0		98.9	69-136	5.49	24	
Dibromomethane	51.70	1.0	ug/L	50.0		103	73-147	4.13	25	
Bromodichloromethane	43.78	1.0	ug/L	50.0		87.6	68-129	5.01	22	
cis-1,3-Dichloropropene	46.14	1.0	ug/L	50.3		91.7	65-134	5.60	23	
4-Methyl-2-pentanone (MIBK)	97.43	5.0	ug/L	101		96.1	58-147	4.23	27	
Toluene	46.79	1.0	ug/L	50.0		93.6	72-133	6.87	24	
trans-1,3-Dichloropropene	44.64	1.0	ug/L	50.4		88.5	67-130	4.45	24	
1,1,2-Trichloroethane	49.01	1.0	ug/L	50.0		98.0	69-135	3.55	23	
Tetrachloroethylene	43.62	1.0	ug/L	50.0		87.2	69-130	9.12	25	
2-Hexanone (MBK)	99.59	5.0	ug/L	103		96.4	55-144	5.00	25	
Dibromochloromethane	46.74	1.0	ug/L	49.5		94.4	73-127	5.29	22	
1,2-Dibromoethane	48.21	1.0	ug/L	50.0		96.4	67-132	5.03	24	
Chlorobenzene	47.57	1.0	ug/L	50.0		95.1	72-123	7.51	23	
1,1,1,2-Tetrachloroethane	46.60	1.0	ug/L	50.0		93.2	73-127	6.76	24	
Ethylbenzene	44.79	1.0	ug/L	50.0		89.6	71-127	7.87	26	
Xylenes, total	134.6	2.0	ug/L	150		89.7	74-127	7.31	25	
Styrene	45.49	1.0	ug/L	50.0		91.0	66-126	6.73	23	
Bromoform	44.94	1.0	ug/L	50.0		89.9	68-130	4.16	23	
1,2,3-Trichloropropane	49.27	1.0	ug/L	50.0		98.5	63-136	4.43	24	
trans-1,4-Dichloro-2-butene	82.73	5.0	ug/L	104		79.6	54-134	5.19	27	



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HD0315

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0408 - EPA 5030B - EPA 8260B										
LCS Dup (1HD0408-BSD1)				Prepared: 04/05/24 00:00 Analyzed: 04/05/24 10:12						
1,1,2,2-Tetrachloroethane	47.47	1.0	ug/L	49.8		95.2	61-131	5.97	29	
1,4-Dichlorobenzene	46.05	1.0	ug/L	50.0		92.1	70-129	6.98	24	
1,2-Dichlorobenzene	45.62	1.0	ug/L	50.0		91.2	69-126	6.39	26	
1,2-Dibromo-3-chloropropane	44.98	5.0	ug/L	50.0		90.0	50-143	5.76	30	
<i>Surrogate: Dibromofluoromethane</i>	46.4		ug/L	50.2		92.5	80-126			
<i>Surrogate: Dibromofluoromethane</i>	46.4		ug/L	50.2		92.5	75-136			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	46.2		ug/L	50.1		92.2	63-138			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	46.2		ug/L	50.1		92.2	61-142			
<i>Surrogate: Toluene-d8</i>	50.4		ug/L	50.4		100	87-116			
<i>Surrogate: Toluene-d8</i>	50.4		ug/L	50.4		100	82-121			
<i>Surrogate: 4-Bromofluorobenzene</i>	50.3		ug/L	50.1		100	85-111			
<i>Surrogate: 4-Bromofluorobenzene</i>	50.3		ug/L	50.1		100	80-116			
Matrix Spike (1HD0408-MS1)		Source: 1HD0315-21		Prepared: 04/05/24 00:00 Analyzed: 04/05/24 14:26						
Chloromethane	333.8	10.0	ug/L	306	ND	109	61-152			
Vinyl Chloride	274.5	10.0	ug/L	302	ND	90.8	66-149			
Bromomethane	315.0	10.0	ug/L	288	ND	109	43-171			
Chloroethane	320.3	10.0	ug/L	316	ND	101	69-148			
Trichlorofluoromethane	242.4	10.0	ug/L	326	ND	74.3	62-163			
1,1-Dichloroethylene	480.5	10.0	ug/L	500	ND	96.1	70-148			
Acetone	1070	100	ug/L	1020	ND	105	45-173			
Methyl Iodide	990.0	10.0	ug/L	997	ND	99.3	62-167			
Carbon Disulfide	836.2	10.0	ug/L	1010	ND	82.8	71-163			
Methylene Chloride	474.1	50.0	ug/L	500	ND	94.8	69-140			
Acrylonitrile	972.0	50.0	ug/L	1000	ND	96.9	58-151			
trans-1,2-Dichloroethylene	478.5	10.0	ug/L	500	ND	95.7	69-144			
1,1-Dichloroethane	471.4	10.0	ug/L	500	ND	94.3	70-138			
Vinyl Acetate	1106	50.0	ug/L	1020	ND	109	58-142			
cis-1,2-Dichloroethylene	492.4	10.0	ug/L	495	ND	99.5	68-151			
2-Butanone (MEK)	1081	100	ug/L	1030	ND	105	50-160			
Bromochloromethane	509.0	10.0	ug/L	500	ND	102	65-143			
Chloroform	476.3	10.0	ug/L	500	ND	95.3	71-143			
1,1,1-Trichloroethane	379.7	10.0	ug/L	500	ND	76.0	63-133			
Carbon Tetrachloride	400.2	10.0	ug/L	500	ND	80.0	63-142			
Benzene	502.6	10.0	ug/L	500	ND	101	69-133			
1,2-Dichloroethane	479.9	10.0	ug/L	500	ND	96.0	63-138			
Trichloroethylene	467.1	10.0	ug/L	500	ND	93.4	71-133			
1,2-Dichloropropane	504.3	10.0	ug/L	500	ND	101	69-132			
Dibromomethane	523.7	10.0	ug/L	500	ND	105	70-147			
Bromodichloromethane	443.4	10.0	ug/L	500	ND	88.7	67-130			
cis-1,3-Dichloropropene	460.7	10.0	ug/L	503	ND	91.5	61-126			
4-Methyl-2-pentanone (MIBK)	978.7	50.0	ug/L	1010	ND	96.5	55-147			
Toluene	487.0	10.0	ug/L	500	ND	97.4	71-133			
trans-1,3-Dichloropropene	440.4	10.0	ug/L	504	ND	87.3	63-124			

Microbac Laboratories, Inc., Newton

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Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HD0315

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0408 - EPA 5030B - EPA 8260B										
Matrix Spike (1HD0408-MS1)	Source: 1HD0315-21			Prepared: 04/05/24 00:00 Analyzed: 04/05/24 14:26						
1,1,2-Trichloroethane	492.1	10.0	ug/L	500	ND	98.4	69-133			
Tetrachloroethylene	456.6	10.0	ug/L	500	ND	91.3	70-124			
2-Hexanone (MBK)	1016	50.0	ug/L	1030	ND	98.3	53-141			
Dibromochloromethane	474.3	10.0	ug/L	495	ND	95.8	74-122			
1,2-Dibromoethane	494.4	10.0	ug/L	500	ND	98.9	66-127			
Chlorobenzene	496.2	10.0	ug/L	500	ND	99.2	76-116			
1,1,1,2-Tetrachloroethane	481.1	10.0	ug/L	500	ND	96.2	77-121			
Ethylbenzene	470.9	10.0	ug/L	500	ND	94.2	73-124			
Xylenes, total	1407	20.0	ug/L	1500	ND	93.8	75-123			
Styrene	473.7	10.0	ug/L	500	ND	94.7	70-120			
Bromoform	457.0	10.0	ug/L	500	ND	91.4	70-124			
1,2,3-Trichloropropane	504.7	10.0	ug/L	500	ND	101	62-135			
trans-1,4-Dichloro-2-butene	734.6	50.0	ug/L	1040	ND	70.7	50-120			
1,1,2,2-Tetrachloroethane	488.9	10.0	ug/L	498	ND	98.1	63-126			
1,4-Dichlorobenzene	473.5	10.0	ug/L	500	ND	94.7	72-119			
1,2-Dichlorobenzene	462.4	10.0	ug/L	500	ND	92.5	71-117			
1,2-Dibromo-3-chloropropane	449.5	50.0	ug/L	500	ND	89.9	49-134			
<i>Surrogate: Dibromofluoromethane</i>	463		ug/L	502		92.3	80-126			
<i>Surrogate: Dibromofluoromethane</i>	463		ug/L	502		92.3	75-136			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	465		ug/L	501		92.8	63-138			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	465		ug/L	501		92.8	61-142			
<i>Surrogate: Toluene-d8</i>	501		ug/L	504		99.5	87-116			
<i>Surrogate: Toluene-d8</i>	501		ug/L	504		99.5	82-121			
<i>Surrogate: 4-Bromofluorobenzene</i>	504		ug/L	501		100	85-111			
<i>Surrogate: 4-Bromofluorobenzene</i>	504		ug/L	501		100	80-116			
Matrix Spike Dup (1HD0408-MSD1)	Source: 1HD0315-21			Prepared: 04/05/24 00:00 Analyzed: 04/05/24 14:49						
Chloromethane	321.2	10.0	ug/L	306	ND	105	61-152	3.85	26	
Vinyl Chloride	259.6	10.0	ug/L	302	ND	85.9	66-149	5.58	23	
Bromomethane	290.9	10.0	ug/L	288	ND	101	43-171	7.96	29	
Chloroethane	308.5	10.0	ug/L	316	ND	97.5	69-148	3.75	25	
Trichlorofluoromethane	226.1	10.0	ug/L	326	ND	69.3	62-163	6.96	25	
1,1-Dichloroethylene	474.8	10.0	ug/L	500	ND	95.0	70-148	1.19	22	
Acetone	993.5	100	ug/L	1020	ND	97.4	45-173	7.44	30	
Methyl Iodide	930.0	10.0	ug/L	997	ND	93.3	62-167	6.25	24	
Carbon Disulfide	838.1	10.0	ug/L	1010	ND	83.0	71-163	0.227	22	
Methylene Chloride	450.8	50.0	ug/L	500	ND	90.2	69-140	5.04	19	
Acrylonitrile	909.6	50.0	ug/L	1000	ND	90.6	58-151	6.63	15	
trans-1,2-Dichloroethylene	457.7	10.0	ug/L	500	ND	91.5	69-144	4.44	22	
1,1-Dichloroethane	448.8	10.0	ug/L	500	ND	89.8	70-138	4.91	20	
Vinyl Acetate	1048	50.0	ug/L	1020	ND	103	58-142	5.34	24	
cis-1,2-Dichloroethylene	454.4	10.0	ug/L	495	ND	91.8	68-151	8.03	22	
2-Butanone (MEK)	995.4	100	ug/L	1030	ND	96.4	50-160	8.28	23	
Bromochloromethane	478.5	10.0	ug/L	500	ND	95.7	65-143	6.18	22	



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HD0315

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0408 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1HD0408-MSD1)	Source: 1HD0315-21			Prepared: 04/05/24 00:00 Analyzed: 04/05/24 14:49						
Chloroform	449.3	10.0	ug/L	500	ND	89.9	71-143	5.83	21	
1,1,1-Trichloroethane	361.0	10.0	ug/L	500	ND	72.2	63-133	5.05	23	
Carbon Tetrachloride	380.4	10.0	ug/L	500	ND	76.1	63-142	5.07	22	
Benzene	480.6	10.0	ug/L	500	ND	96.1	69-133	4.48	18	
1,2-Dichloroethane	459.5	10.0	ug/L	500	ND	91.9	63-138	4.34	20	
Trichloroethylene	448.9	10.0	ug/L	500	ND	89.8	71-133	3.97	23	
1,2-Dichloropropane	480.4	10.0	ug/L	500	ND	96.1	69-132	4.85	20	
Dibromomethane	498.8	10.0	ug/L	500	ND	99.8	70-147	4.87	22	
Bromodichloromethane	423.1	10.0	ug/L	500	ND	84.6	67-130	4.69	21	
cis-1,3-Dichloropropene	440.0	10.0	ug/L	503	ND	87.4	61-126	4.60	21	
4-Methyl-2-pentanone (MIBK)	949.6	50.0	ug/L	1010	ND	93.6	55-147	3.02	23	
Toluene	462.8	10.0	ug/L	500	ND	92.6	71-133	5.10	19	
trans-1,3-Dichloropropene	420.7	10.0	ug/L	504	ND	83.4	63-124	4.58	21	
1,1,2-Trichloroethane	470.5	10.0	ug/L	500	ND	94.1	69-133	4.49	19	
Tetrachloroethylene	438.8	10.0	ug/L	500	ND	87.8	70-124	3.98	24	
2-Hexanone (MBK)	1008	50.0	ug/L	1030	ND	97.6	53-141	0.741	24	
Dibromochloromethane	454.9	10.0	ug/L	495	ND	91.9	74-122	4.18	21	
1,2-Dibromoethane	470.9	10.0	ug/L	500	ND	94.2	66-127	4.87	23	
Chlorobenzene	473.7	10.0	ug/L	500	ND	94.7	76-116	4.64	21	
1,1,1,2-Tetrachloroethane	460.9	10.0	ug/L	500	ND	92.2	77-121	4.29	25	
Ethylbenzene	450.7	10.0	ug/L	500	ND	90.1	73-124	4.38	20	
Xylenes, total	1344	20.0	ug/L	1500	ND	89.6	75-123	4.55	20	
Styrene	450.3	10.0	ug/L	500	ND	90.1	70-120	5.06	23	
Bromoform	436.8	10.0	ug/L	500	ND	87.4	70-124	4.52	22	
1,2,3-Trichloropropane	486.1	10.0	ug/L	500	ND	97.2	62-135	3.75	28	
trans-1,4-Dichloro-2-butene	733.8	50.0	ug/L	1040	ND	70.6	50-120	0.109	26	
1,1,2,2-Tetrachloroethane	477.9	10.0	ug/L	498	ND	95.9	63-126	2.28	24	
1,4-Dichlorobenzene	455.4	10.0	ug/L	500	ND	91.1	72-119	3.90	24	
1,2-Dichlorobenzene	446.9	10.0	ug/L	500	ND	89.4	71-117	3.41	24	
1,2-Dibromo-3-chloropropane	438.4	50.0	ug/L	500	ND	87.7	49-134	2.50	28	
<i>Surrogate: Dibromofluoromethane</i>	463		ug/L	502		92.4	80-126			
<i>Surrogate: Dibromofluoromethane</i>	463		ug/L	502		92.4	75-136			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	457		ug/L	501		91.2	63-138			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	457		ug/L	501		91.2	61-142			
<i>Surrogate: Toluene-d8</i>	500		ug/L	504		99.2	87-116			
<i>Surrogate: Toluene-d8</i>	500		ug/L	504		99.2	82-121			
<i>Surrogate: 4-Bromofluorobenzene</i>	505		ug/L	501		101	85-111			
<i>Surrogate: 4-Bromofluorobenzene</i>	505		ug/L	501		101	80-116			

Batch 1HD0497 - EPA 5030B - EPA 8260B

Blank (1HD0497-BLK1)		Prepared: 04/08/24 00:00 Analyzed: 04/08/24 10:51								
Allyl chloride	<1.0	1.0	ug/L							
Chloroprene	<1.0	1.0	ug/L							

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CERTIFICATE OF ANALYSIS

1HD0315

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0497 - EPA 5030B - EPA 8260B										
Blank (1HD0497-BLK1)										
				Prepared: 04/08/24 00:00 Analyzed: 04/08/24 10:51						
Methacrylonitrile	<1.0	1.0	ug/L							
Methyl Methacrylate	<1.0	1.0	ug/L							
Propionitrile	<10.0	10.0	ug/L							
<i>Surrogate: Dibromofluoromethane</i>	46.0		ug/L	50.2		91.8	80-126			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	47.0		ug/L	50.1		93.8	63-138			
<i>Surrogate: Toluene-d8</i>	49.7		ug/L	50.4		98.7	87-116			
<i>Surrogate: 4-Bromofluorobenzene</i>	49.4		ug/L	50.1		98.5	85-111			
LCS (1HD0497-BS1)										
				Prepared: 04/08/24 00:00 Analyzed: 04/08/24 09:42						
Allyl chloride	27.41	1.0	ug/L	35.7		76.7	76-134			
Chloroprene	48.38	1.0	ug/L	50.0		96.8	74-141			
Methacrylonitrile	56.52	1.0	ug/L	64.3		88.0	73-143			
Methyl Methacrylate	54.55	1.0	ug/L	57.3		95.2	72-123			
Propionitrile	83.08	10.0	ug/L	50.0		166	50-151			QS-02
<i>Surrogate: Dibromofluoromethane</i>	45.9		ug/L	50.2		91.4	80-126			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	45.3		ug/L	50.1		90.5	63-138			
<i>Surrogate: Toluene-d8</i>	50.3		ug/L	50.4		99.9	87-116			
<i>Surrogate: 4-Bromofluorobenzene</i>	50.1		ug/L	50.1		100	85-111			
LCS Dup (1HD0497-BSD1)										
				Prepared: 04/08/24 00:00 Analyzed: 04/08/24 10:05						
Allyl chloride	27.10	1.0	ug/L	35.7		75.8	76-134	1.14	30	QS-01
Chloroprene	46.43	1.0	ug/L	50.0		92.9	74-141	4.11	30	
Methacrylonitrile	56.61	1.0	ug/L	64.3		88.1	73-143	0.159	30	
Methyl Methacrylate	53.25	1.0	ug/L	57.3		92.9	72-123	2.41	30	
Propionitrile	79.47	10.0	ug/L	50.0		159	50-151	4.44	30	QS-02
<i>Surrogate: Dibromofluoromethane</i>	45.4		ug/L	50.2		90.5	80-126			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	45.3		ug/L	50.1		90.5	63-138			
<i>Surrogate: Toluene-d8</i>	49.5		ug/L	50.4		98.2	87-116			
<i>Surrogate: 4-Bromofluorobenzene</i>	50.6		ug/L	50.1		101	85-111			
Matrix Spike (1HD0497-MS1)										
		Source: 1HD0545-01		Prepared: 04/08/24 00:00 Analyzed: 04/08/24 20:31						
Allyl chloride	229.3	10.0	ug/L	357	ND	64.2	60-140			
Chloroprene	432.5	10.0	ug/L	500	ND	86.5	60-140			
Methacrylonitrile	491.0	10.0	ug/L	643	ND	76.4	60-140			
Methyl Methacrylate	493.6	10.0	ug/L	573	ND	86.1	60-140			
Propionitrile	707.8	100	ug/L	500	ND	142	60-140			QS-02
<i>Surrogate: Dibromofluoromethane</i>	432		ug/L	502		86.0	80-126			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	443		ug/L	501		88.4	63-138			
<i>Surrogate: Toluene-d8</i>	509		ug/L	504		101	87-116			
<i>Surrogate: 4-Bromofluorobenzene</i>	521		ug/L	501		104	85-111			
Matrix Spike Dup (1HD0497-MSD1)										
		Source: 1HD0545-01		Prepared: 04/08/24 00:00 Analyzed: 04/08/24 20:54						
Allyl chloride	226.1	10.0	ug/L	357	ND	63.3	60-140	1.41	30	
Chloroprene	410.2	10.0	ug/L	500	ND	82.0	60-140	5.29	30	

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CERTIFICATE OF ANALYSIS

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Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0497 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1HD0497-MSD1)	Source: 1HD0545-01			Prepared: 04/08/24 00:00 Analyzed: 04/08/24 20:54						
Methacrylonitrile	487.3	10.0	ug/L	643	ND	75.8	60-140	0.756	30	
Methyl Methacrylate	497.5	10.0	ug/L	573	ND	86.8	60-140	0.787	30	
Propionitrile	682.8	100	ug/L	500	ND	137	60-140	3.60	30	

<i>Surrogate: Dibromofluoromethane</i>	442		ug/L	502		88.0	80-126			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	448		ug/L	501		89.5	63-138			
<i>Surrogate: Toluene-d8</i>	515		ug/L	504		102	87-116			
<i>Surrogate: 4-Bromofluorobenzene</i>	525		ug/L	501		105	85-111			

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

Blank (1HD0875-BLK1)	Prepared: 04/15/24 08:30 Analyzed: 04/15/24 16:51									
Isobutanol	<1.0	1.0	mg/L							
LCS (1HD0875-BS1)	Prepared: 04/15/24 08:30 Analyzed: 04/15/24 14:19									
Isobutanol	27.31	1.0	mg/L	26.0		105	40-135			

Matrix Spike (1HD0875-MS1)	Source: 1HD0193-01 Prepared: 04/15/24 08:30 Analyzed: 04/15/24 22:12									
Isobutanol	27.26	1.0	mg/L	26.0	ND	105	63-135			

Matrix Spike Dup (1HD0875-MSD1)	Source: 1HD0193-01 Prepared: 04/15/24 08:30 Analyzed: 04/15/24 22:43									
Isobutanol	26.89	1.0	mg/L	26.0	ND	103	63-135	1.35	30	

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

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

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

LCS Dup (1HD0535-BSD1)	Prepared: 04/09/24 10:55 Analyzed: 04/17/24 15:16									
Bis(2-Ethylhexyl) Phthalate	26.8	6	ug/L	25.0		107	33-184	28.9	30	
<i>Surrogate: Nitrobenzene-d5</i>	24.9		ug/L	30.0		83.0	38-115			



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

LCS Dup (1HD0535-BSD1)

Prepared: 04/09/24 10:55 Analyzed: 04/17/24 15:16

Surrogate: 2-Fluorobiphenyl	24.0		ug/L	28.8		83.3	33-110			
Surrogate: Terphenyl-d14	23.2		ug/L	28.8		80.4	30-142			

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

Blank (1HD0444-BLK1)

Prepared: 04/08/24 10:24 Analyzed: 04/17/24 15:41

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

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Determination of	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Base/Neutral/Acid Extractable Compounds										
Batch 1HD0444 - 3520C BNA Cont Liq - EPA 8270C										
Blank (1HD0444-BLK1)				Prepared: 04/08/24 10:24 Analyzed: 04/17/24 15:41						
2-Methylnaphthalene	<8	8	ug/L							
Isosafrole	<8	8	ug/L							
1,2,4,5-Tetrachlorobenzene	<8	8	ug/L							
Hexachlorocyclopentadiene	<8	8	ug/L							
2,4,6-Trichlorophenol	<8	8	ug/L							
2,4,5-Trichlorophenol	<8	8	ug/L							
Safrole	<8	8	ug/L							
2-Chloronaphthalene	<8	8	ug/L							
2-Nitroaniline	<8	8	ug/L							
1,4-Naphthoquinone	<8	8	ug/L							
Dimethylphthalate	<8	8	ug/L							
1,3-Dinitrobenzene	<8	8	ug/L							
1,2-Dinitrobenzene	<8	8	ug/L							
2,6-Dinitrotoluene	<8	8	ug/L							
Acenaphthylene	<8	8	ug/L							
3-Nitroaniline	<8	8	ug/L							
Acenaphthene	<8	8	ug/L							
2,4-Dinitrophenol	<8	8	ug/L							
4-Nitrophenol	<8	8	ug/L							
Dibenzofuran	<8	8	ug/L							
2,4-Dinitrotoluene	<8	8	ug/L							
2,3,4,6-Tetrachlorophenol	<8	8	ug/L							
Pentachlorobenzene	<8	8	ug/L							
1-Naphthylamine	<8	8	ug/L							
2-Naphthylamine	<8	8	ug/L							
Diethyl Phthalate	<8	8	ug/L							
Fluorene	<8	8	ug/L							
4-Chlorophenyl Phenyl Ether	<8	8	ug/L							
4-Nitroaniline	<8	8	ug/L							
5-Nitro-o-toluidine	<8	8	ug/L							
4,6-Dinitro-2-methylphenol	<8	8	ug/L							
N-Nitrosodiphenylamine	<8	8	ug/L							
Diphenylamine	<8	8	ug/L							
Azobenzene	<8	8	ug/L							
Diallate	<8	8	ug/L							
1,3,5-Trinitrobenzene	<8	8	ug/L							
Phenacetin	<8	8	ug/L							
4-Bromophenyl Phenyl Ether	<8	8	ug/L							
4-Aminobiphenyl	<8	8	ug/L							
Pentachlorophenol	<8	8	ug/L							
Pronamide	<8	8	ug/L							
Pentachloronitrobenzene (PCNB)	<8	8	ug/L							

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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	%REC Limits	RPD	RPD Limit	Notes
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Batch 1HD0444 - 3520C BNA Cont Liq - EPA 8270C

Blank (1HD0444-BLK1)

Prepared: 04/08/24 10:24 Analyzed: 04/17/24 15:41

Phenanthrene	<8	8	ug/L							
Anthracene	<8	8	ug/L							
Di-n-butyl Phthalate	<8	8	ug/L							
Methapyrilene	<8	8	ug/L							
Fluoranthene	<8	8	ug/L							
Isodrin	<8	8	ug/L							
Chlorobenzilate	<8	8	ug/L							
Pyrene	<8	8	ug/L							
p-(Dimethylamino)azobenzene	<8	8	ug/L							
3,3-Dimethylbenzidine	<8	8	ug/L							
Butyl Benzyl Phthalate	<8	8	ug/L							
Benzo(a)anthracene	<8	8	ug/L							
Chrysene	<8	8	ug/L							
Bis(2-Ethylhexyl) Phthalate	6.1	6	ug/L							QB-02
Kepone	<8	8	ug/L							
3,3'-Dichlorobenzidine	<8	8	ug/L							
2-Acetylaminofluorene	<8	8	ug/L							
Di-n-octyl Phthalate	<8	8	ug/L							
Benzo(b)Fluoranthene	<8	8	ug/L							
7,12-Dimethylbenz [a] anthracene	<8	8	ug/L							
Benzo(k)Fluoranthene	<8	8	ug/L							
Benzo(a)Pyrene	<8	8	ug/L							
3-Methylcholanthrene	<8	8	ug/L							
Dibenzo(a,h)anthracene	<8	8	ug/L							
Indeno(1,2,3-cd)Pyrene	<8	8	ug/L							
Benzo(g,h,i)perylene	<8	8	ug/L							

Surrogate: 2-Fluorophenol	23.4		ug/L	29.6		79.2	24-136
Surrogate: Phenol-d6	23.8		ug/L	30.5		78.1	15-140
Surrogate: Nitrobenzene-d5	28.6		ug/L	30.0		95.1	29-130
Surrogate: 2-Fluorobiphenyl	22.2		ug/L	28.8		77.0	23-113
Surrogate: 2,4,6-Tribromophenol	24.4		ug/L	29.7		82.2	15-139
Surrogate: Terphenyl-d14	27.8		ug/L	28.8		96.3	27-141

LCS (1HD0444-BS1)

Prepared: 04/08/24 10:24 Analyzed: 04/17/24 16:05

N-Nitrosodimethylamine	20.8	8	ug/L	21.4		97.5	36-138
Methyl Methanesulfonate	42.5	8	ug/L	50.0		85.0	22-114
N-Nitrosodiethylamine	37.4	8	ug/L	50.0		74.9	52-114
N-Nitrosomethylethylamine	55.0	8	ug/L	50.0		110	36-120
Ethyl Methanesulfonate	36.5	8	ug/L	50.0		72.9	46-110
Phenol	19.2	8	ug/L	21.4		89.9	50-112
Bis(2-Chloroethyl) Ether	22.1	8	ug/L	21.4		103	39-151
2-Chlorophenol	18.2	8	ug/L	21.4		85.1	56-116
Benzyl Alcohol	24.6	8	ug/L	21.4		115	13-158

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CERTIFICATE OF ANALYSIS

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Determination of	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Base/Neutral/Acid Extractable Compounds										
Batch 1HD0444 - 3520C BNA Cont Liq - EPA 8270C										
LCS (1HD0444-BS1)										
				Prepared: 04/08/24 10:24 Analyzed: 04/17/24 16:05						
2-Methylphenol (o-Cresol)	19.4	8	ug/L	21.4		90.7	53-131			
Bis[2-Chloroisopropyl]ether	18.5	8	ug/L	21.4		86.6	50-121			
n-Nitroso-di-n-propylamine	22.9	8	ug/L	21.4		107	50-138			
N-Nitrosopyrrolidine	40.3	8	ug/L	50.0		80.7	31-118			
Acetophenone	45.9	8	ug/L	50.0		91.7	45-104			
o-Toluidine	20.0	8	ug/L	50.0		40.0	10-163			
(3 & 4)-Methylphenol	22.6	8	ug/L	21.4		106	30-164			
Hexachloroethane	10.2	8	ug/L	21.4		47.6	10-110			
Nitrobenzene	25.0	8	ug/L	21.4		117	47-134			
N-Nitrosopiperidine	40.5	8	ug/L	50.0		81.0	51-122			
Isophorone	23.9	8	ug/L	21.4		112	54-128			
2-Nitrophenol	21.8	8	ug/L	21.4		102	54-117			
2,4-Dimethylphenol	25.8	8	ug/L	21.4		121	52-118			QS-02
Bis (2-Chloroethoxy) Methane	12.3	8	ug/L	21.4		57.5	13-132			
2,4-Dichlorophenol	20.6	8	ug/L	21.4		96.0	58-114			
Naphthalene	14.6	8	ug/L	21.4		68.4	37-116			
2,6-Dichlorophenol	42.2	8	ug/L	50.0		84.3	52-129			
Hexachloropropene	17.9	8	ug/L	50.0		35.8	14-110			
Hexachlorobutadiene	<8	8	ug/L	21.4		32.2	14-110			
N-Nitrosodi-n-butylamine	44.9	8	ug/L	50.0		89.8	40-135			
4-Chloro-3-methylphenol	26.9	8	ug/L	21.4		126	57-136			
2-Methylnaphthalene	15.6	8	ug/L	21.4		72.8	44-111			
Isosafrole	36.2	8	ug/L	50.0		72.5	49-107			
1,2,4,5-Tetrachlorobenzene	23.1	8	ug/L	50.0		46.2	42-110			
2,4,6-Trichlorophenol	21.8	8	ug/L	21.4		102	55-120			
2,4,5-Trichlorophenol	22.2	8	ug/L	21.4		104	55-121			
Safrole	28.7	8	ug/L	50.0		57.4	40-118			
2-Chloronaphthalene	20.8	8	ug/L	21.4		97.4	47-127			
2-Nitroaniline	21.9	8	ug/L	21.4		102	36-143			
1,4-Naphthoquinone	40.7	8	ug/L	50.0		81.4	43-152			
Dimethylphthalate	22.4	8	ug/L	21.4		105	59-128			
1,3-Dinitrobenzene	20.7	8	ug/L	21.4		96.9	63-125			
1,2-Dinitrobenzene	21.1	8	ug/L	21.4		98.6	63-123			
2,6-Dinitrotoluene	21.6	8	ug/L	21.4		101	60-127			
Acenaphthylene	16.4	8	ug/L	21.4		76.6	49-113			
Acenaphthene	19.4	8	ug/L	21.4		90.6	50-119			
2,4-Dinitrophenol	16.3	8	ug/L	21.4		76.1	27-157			
4-Nitrophenol	30.4	8	ug/L	21.4		142	49-154			
Dibenzofuran	19.1	8	ug/L	21.4		89.1	56-121			
2,4-Dinitrotoluene	22.3	8	ug/L	21.4		104	53-138			
2,3,4,6-Tetrachlorophenol	19.0	8	ug/L	21.4		88.6	47-132			
Pentachlorobenzene	38.9	8	ug/L	50.0		77.7	41-125			

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CERTIFICATE OF ANALYSIS

1HD0315

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0444 - 3520C BNA Cont Liq - EPA 8270C									
LCS (1HD0444-BS1)				Prepared: 04/08/24 10:24 Analyzed: 04/17/24 16:05					
Diethyl Phthalate	25.5	8	ug/L	21.4		119 53-138			
Fluorene	20.0	8	ug/L	21.4		93.4 54-125			
4-Chlorophenyl Phenyl Ether	19.1	8	ug/L	21.4		89.1 51-122			
4-Nitroaniline	10.4	8	ug/L	21.4		48.5 10-136			
5-Nitro-o-toluidine	9.0	8	ug/L	50.0		17.9 10-145			
4,6-Dinitro-2-methylphenol	20.7	8	ug/L	21.4		96.7 49-137			
Diphenylamine	15.3	8	ug/L	21.4		71.7 35-151			
Azobenzene	16.5	8	ug/L	21.4		77.3 16-156			
Diallate	51.3	8	ug/L	50.0		103 54-132			
1,3,5-Trinitrobenzene	44.5	8	ug/L	50.0		89.0 57-173			
Phenacetin	41.6	8	ug/L	50.0		83.2 55-121			
4-Bromophenyl Phenyl Ether	19.5	8	ug/L	21.4		91.0 53-122			
Pentachlorophenol	13.4	8	ug/L	21.4		62.4 18-152			
Pronamide	41.0	8	ug/L	50.0		82.0 42-122			
Pentachloronitrobenzene (PCNB)	59.8	8	ug/L	50.0		120 50-128			
Phenanthrene	20.6	8	ug/L	21.4		96.3 59-131			
Anthracene	18.9	8	ug/L	21.4		88.4 59-127			
Di-n-butyl Phthalate	25.3	8	ug/L	21.4		118 64-148			
Fluoranthene	21.6	8	ug/L	21.4		101 62-132			
Isodrin	42.2	8	ug/L	50.0		84.5 46-130			
Chlorobenzilate	45.8	8	ug/L	50.0		91.6 48-150			
Pyrene	20.5	8	ug/L	21.4		95.8 58-135			
p-(Dimethylamino)azobenzene	8.3	8	ug/L	50.0		16.6 28-146			QS-03
Butyl Benzyl Phthalate	24.4	8	ug/L	21.4		114 52-150			
Benzo(a)anthracene	19.8	8	ug/L	21.4		92.7 58-131			
Chrysene	20.4	8	ug/L	21.4		95.5 59-131			
Bis(2-Ethylhexyl) Phthalate	40.0	6	ug/L	21.4		187 33-184			QS-02
Kepon	80.2	8	ug/L	50.0		160 10-134			QS-02
2-Acetylaminofluorene	51.9	8	ug/L	50.0		104 47-166			
Di-n-octyl Phthalate	28.3	8	ug/L	21.4		132 48-162			
Benzo(b)Fluoranthene	21.6	8	ug/L	21.4		101 50-146			
7,12-Dimethylbenz [a] anthracene	32.4	8	ug/L	50.0		64.7 22-155			
Benzo(k)Fluoranthene	21.5	8	ug/L	21.4		101 54-144			
Benzo(a)Pyrene	20.1	8	ug/L	21.4		93.8 39-148			
3-Methylcholanthrene	26.0	8	ug/L	50.0		51.9 34-118			
Dibenzo(a,h)anthracene	20.8	8	ug/L	21.4		97.5 46-153			
Indeno(1,2,3-cd)Pyrene	20.8	8	ug/L	21.4		97.2 48-152			
Benzo(g,h,i)perylene	20.2	8	ug/L	21.4		94.6 47-161			
Surrogate: 2-Fluorophenol	20.2		ug/L	29.6		68.3 24-136			
Surrogate: Phenol-d6	21.6		ug/L	30.5		70.9 15-140			
Surrogate: Nitrobenzene-d5	30.6		ug/L	30.0		102 38-115			
Surrogate: 2-Fluorobiphenyl	24.3		ug/L	28.8		84.4 33-110			

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CERTIFICATE OF ANALYSIS

1HD0315

Determination of	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Base/Neutral/Acid Extractable Compounds										
Batch 1HD0444 - 3520C BNA Cont Liq - EPA 8270C										
LCS (1HD0444-BS1)										
Prepared: 04/08/24 10:24 Analyzed: 04/17/24 16:05										
Surrogate: 2,4,6-Tribromophenol	25.7		ug/L	29.7		86.6	15-139			
Surrogate: Terphenyl-d14	26.3		ug/L	28.8		91.3	30-142			
LCS Dup (1HD0444-BSD1)										
Prepared: 04/08/24 10:24 Analyzed: 04/17/24 16:30										
N-Nitrosodimethylamine	19.6	8	ug/L	21.4		91.6	36-138	6.23	30	
Methyl Methanesulfonate	41.1	8	ug/L	50.0		82.1	22-114	3.47	23	
N-Nitrosodiethylamine	35.8	8	ug/L	50.0		71.5	52-114	4.62	18	
N-Nitrosomethylethylamine	52.1	8	ug/L	50.0		104	36-120	5.41	22	
Ethyl Methanesulfonate	33.6	8	ug/L	50.0		67.3	46-110	8.02	24	
Phenol	19.2	8	ug/L	21.4		89.5	50-112	0.469	28	
Bis(2-Chloroethyl) Ether	21.0	8	ug/L	21.4		98.0	39-151	5.48	30	
2-Chlorophenol	17.8	8	ug/L	21.4		83.0	56-116	2.50	22	
Benzyl Alcohol	22.6	8	ug/L	21.4		105	13-158	8.77	30	
2-Methylphenol (o-Cresol)	18.1	8	ug/L	21.4		84.8	53-131	6.76	25	
Bis[2-Chloroisopropyl]ether	17.1	8	ug/L	21.4		80.1	50-121	7.79	25	
n-Nitroso-di-n-propylamine	20.0	8	ug/L	21.4		93.5	50-138	13.5	30	
N-Nitrosopyrrolidine	35.5	8	ug/L	50.0		71.1	31-118	12.7	30	
Acetophenone	41.4	8	ug/L	50.0		82.8	45-104	10.3	30	
o-Toluidine	17.7	8	ug/L	50.0		35.4	10-163	12.0	30	
(3 & 4)-Methylphenol	20.0	8	ug/L	21.4		93.6	30-164	12.1	30	
Hexachloroethane	10.7	8	ug/L	21.4		50.2	10-110	5.16	37	
Nitrobenzene	22.0	8	ug/L	21.4		103	47-134	13.0	28	
N-Nitrosopiperidine	33.4	8	ug/L	50.0		66.8	51-122	19.2	30	
Isophorone	19.6	8	ug/L	21.4		91.6	54-128	19.9	22	
2-Nitrophenol	19.0	8	ug/L	21.4		89.0	54-117	13.2	21	
2,4-Dimethylphenol	22.0	8	ug/L	21.4		103	52-118	16.0	23	
Bis (2-Chloroethoxy) Methane	15.9	8	ug/L	21.4		74.1	13-132	25.3	30	
2,4-Dichlorophenol	18.9	8	ug/L	21.4		88.3	58-114	8.37	20	
Naphthalene	14.1	8	ug/L	21.4		65.9	37-116	3.83	17	
2,6-Dichlorophenol	38.8	8	ug/L	50.0		77.7	52-129	8.22	16	
Hexachloropropene	15.2	8	ug/L	50.0		30.5	14-110	16.1	29	
Hexachlorobutadiene	<8	8	ug/L	21.4		36.5	14-110	12.5	29	
N-Nitrosodi-n-butylamine	36.1	8	ug/L	50.0		72.3	40-135	21.6	23	
4-Chloro-3-methylphenol	26.0	8	ug/L	21.4		122	57-136	3.06	18	
2-Methylnaphthalene	14.9	8	ug/L	21.4		69.8	44-111	4.20	20	
Isosafrole	34.6	8	ug/L	50.0		69.2	49-107	4.60	12	
1,2,4,5-Tetrachlorobenzene	22.2	8	ug/L	50.0		44.4	42-110	3.97	30	
2,4,6-Trichlorophenol	21.0	8	ug/L	21.4		97.9	55-120	3.79	15	
2,4,5-Trichlorophenol	22.8	8	ug/L	21.4		107	55-121	2.94	16	
Safrole	32.4	8	ug/L	50.0		64.8	40-118	12.1	30	
2-Chloronaphthalene	20.0	8	ug/L	21.4		93.5	47-127	4.11	17	
2-Nitroaniline	22.2	8	ug/L	21.4		104	36-143	1.41	30	

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CERTIFICATE OF ANALYSIS

1HD0315

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0444 - 3520C BNA Cont Liq - EPA 8270C										
LCS Dup (1HD0444-BSD1)				Prepared: 04/08/24 10:24 Analyzed: 04/17/24 16:30						
1,4-Naphthoquinone	60.2	8	ug/L	50.0		120	43-152	38.6	30	QR-02
Dimethylphthalate	22.6	8	ug/L	21.4		106	59-128	0.666	15	
1,3-Dinitrobenzene	22.9	8	ug/L	21.4		107	63-125	10.1	14	
1,2-Dinitrobenzene	23.8	8	ug/L	21.4		111	63-123	12.1	18	
2,6-Dinitrotoluene	21.8	8	ug/L	21.4		102	60-127	0.737	13	
Acenaphthylene	17.4	8	ug/L	21.4		81.5	49-113	6.21	23	
Acenaphthene	18.9	8	ug/L	21.4		88.3	50-119	2.51	16	
2,4-Dinitrophenol	17.3	8	ug/L	21.4		80.7	27-157	5.90	23	
4-Nitrophenol	31.8	8	ug/L	21.4		149	49-154	4.47	28	
Dibenzofuran	18.9	8	ug/L	21.4		88.5	56-121	0.684	18	
2,4-Dinitrotoluene	23.0	8	ug/L	21.4		107	53-138	3.05	18	
2,3,4,6-Tetrachlorophenol	20.2	8	ug/L	21.4		94.6	47-132	6.58	29	
Pentachlorobenzene	37.8	8	ug/L	50.0		75.6	41-125	2.79	22	
Diethyl Phthalate	26.4	8	ug/L	21.4		123	53-138	3.66	18	
Fluorene	20.0	8	ug/L	21.4		93.7	54-125	0.300	14	
4-Chlorophenyl Phenyl Ether	19.0	8	ug/L	21.4		88.9	51-122	0.210	15	
4-Nitroaniline	11.2	8	ug/L	21.4		52.4	10-136	7.87	30	
5-Nitro-o-toluidine	10.7	8	ug/L	50.0		21.4	10-145	17.4	30	
4,6-Dinitro-2-methylphenol	23.8	8	ug/L	21.4		111	49-137	14.2	16	
Diphenylamine	17.6	8	ug/L	21.4		82.3	35-151	13.8	30	
Azobenzene	20.8	8	ug/L	21.4		97.2	16-156	22.8	30	
Diallate	58.7	8	ug/L	50.0		117	54-132	13.4	25	
1,3,5-Trinitrobenzene	51.3	8	ug/L	50.0		103	57-173	14.2	30	
Phenacetin	49.4	8	ug/L	50.0		98.9	55-121	17.2	30	
4-Bromophenyl Phenyl Ether	20.7	8	ug/L	21.4		96.7	53-122	6.18	16	
Pentachlorophenol	14.3	8	ug/L	21.4		66.7	18-152	6.66	30	
Pronamide	51.4	8	ug/L	50.0		103	42-122	22.4	30	
Pentachloronitrobenzene (PCNB)	66.0	8	ug/L	50.0		132	50-128	9.86	18	QS-02
Phenanthrene	22.4	8	ug/L	21.4		105	59-131	8.41	16	
Anthracene	21.4	8	ug/L	21.4		99.9	59-127	12.2	16	
Di-n-butyl Phthalate	28.8	8	ug/L	21.4		135	64-148	12.9	30	
Fluoranthene	25.3	8	ug/L	21.4		118	62-132	15.7	16	
Isodrin	50.5	8	ug/L	50.0		101	46-130	17.8	29	
Chlorobenzilate	50.7	8	ug/L	50.0		101	48-150	10.1	30	
Pyrene	23.8	8	ug/L	21.4		111	58-135	15.1	18	
p-(Dimethylamino)azobenzene	37.7	8	ug/L	50.0		75.4	28-146	128	30	QR-02
Butyl Benzyl Phthalate	28.4	8	ug/L	21.4		133	52-150	15.4	30	
Benzo(a)anthracene	22.6	8	ug/L	21.4		106	58-131	13.1	30	
Chrysene	23.2	8	ug/L	21.4		109	59-131	12.9	30	
Bis(2-Ethylhexyl) Phthalate	48.1	6	ug/L	21.4		225	33-184	18.2	30	QS-02
Kepone	85.6	8	ug/L	50.0		171	10-134	6.42	30	QS-02
2-Acetylaminofluorene	55.3	8	ug/L	50.0		111	47-166	6.44	30	

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CERTIFICATE OF ANALYSIS

1HD0315

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0444 - 3520C BNA Cont Liq - EPA 8270C										
LCS Dup (1HD0444-BSD1)										
				Prepared: 04/08/24 10:24 Analyzed: 04/17/24 16:30						
Di-n-octyl Phthalate	30.7	8	ug/L	21.4		144	48-162	8.27	30	
Benzo(b)Fluoranthene	24.2	8	ug/L	21.4		113	50-146	11.3	30	
7,12-Dimethylbenz [a] anthracene	42.4	8	ug/L	50.0		84.7	22-155	26.8	30	
Benzo(k)Fluoranthene	24.0	8	ug/L	21.4		112	54-144	10.6	30	
Benzo(a)Pyrene	22.7	8	ug/L	21.4		106	39-148	12.3	30	
3-Methylcholanthrene	32.7	8	ug/L	50.0		65.3	34-118	22.9	30	
Dibenzo(a,h)anthracene	23.9	8	ug/L	21.4		112	46-153	13.6	30	
Indeno(1,2,3-cd)Pyrene	23.8	8	ug/L	21.4		111	48-152	13.7	30	
Benzo(g,h,i)perylene	22.2	8	ug/L	21.4		104	47-161	9.05	30	

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

Determination of Organophosphorus Insecticides	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0490 - 3510C NP/OC Sep Fnl - EPA 8141										
Blank (1HD0490-BLK1)										
				Prepared: 04/08/24 16:09 Analyzed: 04/19/24 02:04						
O,O,O-Triethyl phosphorothioate	<0.4	0.4	ug/L							
Thionazin	<0.4	0.4	ug/L							
Phorate	<0.4	0.4	ug/L							
Dimethoate	<0.4	0.4	ug/L							
Disulfoton	<0.4	0.4	ug/L							
Methyl Parathion	<0.4	0.4	ug/L							
Parathion	<0.4	0.4	ug/L							
Famphur	<0.4	0.4	ug/L							

Surrogate: 2-Nitro-m-xylene	ND		ug/L	8.34			38-122			A-01
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LCS (1HD0490-BS1)										
				Prepared: 04/08/24 16:09 Analyzed: 04/19/24 05:55						
O,O,O-Triethyl phosphorothioate	3.33	0.4	ug/L	4.02		82.8	42-115			
Thionazin	3.34	0.4	ug/L	4.03		82.7	28-118			
Phorate	3.32	0.4	ug/L	4.03		82.4	18-159			
Dimethoate	4.13	0.4	ug/L	4.03		103	43-155			
Disulfoton	3.18	0.4	ug/L	4.03		78.9	37-126			
Methyl Parathion	3.67	0.4	ug/L	4.04		90.8	28-145			
Parathion	3.20	0.4	ug/L	4.00		80.1	52-121			
Famphur	3.56	0.4	ug/L	4.02		88.7	44-144			



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CERTIFICATE OF ANALYSIS

1HD0315

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

LCS (1HD0490-BS1) Prepared: 04/08/24 16:09 Analyzed: 04/19/24 05:55

Surrogate: 2-Nitro-m-xylene 6.62 ug/L 8.34 79.3 38-122

LCS Dup (1HD0490-BSD1) Prepared: 04/08/24 16:09 Analyzed: 04/19/24 06:53

O,O,O-Triethyl phosphorothioate	3.20	0.4	ug/L	4.02		79.4	42-115	4.14	30	
Thionazin	3.38	0.4	ug/L	4.03		83.8	28-118	1.34	30	
Phorate	3.25	0.4	ug/L	4.03		80.6	18-159	2.28	30	
Dimethoate	4.10	0.4	ug/L	4.03		102	43-155	0.729	22	
Disulfoton	3.08	0.4	ug/L	4.03		76.3	37-126	3.36	30	
Methyl Parathion	3.34	0.4	ug/L	4.04		82.7	28-145	9.42	28	
Parathion	3.00	0.4	ug/L	4.00		75.0	52-121	6.61	26	
Famphur	3.53	0.4	ug/L	4.02		87.8	44-144	0.987	28	

Surrogate: 2-Nitro-m-xylene 6.04 ug/L 8.34 72.5 38-122

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

Blank (1HD0468-BLK1) Prepared: 04/08/24 13:16 Analyzed: 04/17/24 08:40

2,4-D	<2.0	2.0	ug/L							
2,4,5-TP (Silvex)	<0.5	0.5	ug/L							
2,4,5-T	<0.5	0.5	ug/L							
Dinoseb	<0.5	0.5	ug/L							

Surrogate: 2,5-Dichlorobenzoic Acid 1.58 ug/L 2.02 78.0 31-116

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

2,4-D	<2.0	2.0	ug/L	2.30		46.5	16-161			
2,4,5-TP (Silvex)	0.56	0.5	ug/L	1.15		48.3	35-141			
2,4,5-T	0.57	0.5	ug/L	1.15		49.6	54-149			QS-03
Dinoseb	0.53	0.5	ug/L	2.30		23.0	10-133			

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

LCS Dup (1HD0468-BSD1) Prepared: 04/08/24 13:16 Analyzed: 04/17/24 11:24

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

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



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CERTIFICATE OF ANALYSIS

1HD0315

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

Blank (1HD0488-BLK1)

Prepared: 04/08/24 16:08 Analyzed: 04/17/24 15:49

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

Surrogate: Tetrachloro-m-xylene

0.508

ug/L

0.600

84.7

10-121

LCS (1HD0488-BS1)

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

Alpha-BHC	0.244	0.05	ug/L	0.250		97.6	33-123		
Gamma-BHC [Lindane]	0.241	0.05	ug/L	0.250		96.6	34-120		
Beta-BHC	0.237	0.05	ug/L	0.250		94.9	33-125		
Heptachlor	0.242	0.05	ug/L	0.250		97.0	32-117		
Delta-BHC	0.279	0.05	ug/L	0.250		111	24-140		
Aldrin	0.197	0.05	ug/L	0.250		78.8	29-122		
Heptachlor Epoxide	0.237	0.05	ug/L	0.250		94.8	37-137		
Endosulfan I	0.249	0.05	ug/L	0.250		99.7	27-141		
4,4'-DDE	0.226	0.05	ug/L	0.250		90.5	38-147		
Dieldrin	0.227	0.05	ug/L	0.250		91.0	32-137		
Endrin	0.339	0.05	ug/L	0.250		136	25-142		
4,4'-DDD	0.238	0.05	ug/L	0.250		95.1	43-146		
Endosulfan II	0.245	0.05	ug/L	0.250		98.2	36-140		
4,4'-DDT	0.303	0.05	ug/L	0.250		121	39-140		
Endrin Aldehyde	0.232	0.05	ug/L	0.250		92.8	17-150		
Endosulfan Sulfate	0.257	0.05	ug/L	0.250		103	41-135		
Methoxychlor	0.340	0.05	ug/L	0.250		136	40-148		

Surrogate: Tetrachloro-m-xylene

0.462

ug/L

0.600

77.0

10-121

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Determination of	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Determination of Organochlorine Insecticides & Metabolites										
Batch 1HD0488 - 3510C NP/OC Sep Fnl - EPA 8081										
LCS Dup (1HD0488-BSD1)										
Prepared: 04/08/24 16:08 Analyzed: 04/17/24 16:18										
Alpha-BHC	0.245	0.05	ug/L	0.250		98.2	33-123	0.589	30	
Gamma-BHC [Lindane]	0.241	0.05	ug/L	0.250		96.2	34-120	0.353	30	
Beta-BHC	0.236	0.05	ug/L	0.250		94.3	33-125	0.596	30	
Heptachlor	0.250	0.05	ug/L	0.250		100	32-117	3.05	30	
Delta-BHC	0.275	0.05	ug/L	0.250		110	24-140	1.25	30	
Aldrin	0.211	0.05	ug/L	0.250		84.6	29-122	7.05	30	
Heptachlor Epoxide	0.240	0.05	ug/L	0.250		95.9	37-137	1.16	30	
Endosulfan I	0.251	0.05	ug/L	0.250		100	27-141	0.630	30	
4,4'-DDE	0.233	0.05	ug/L	0.250		93.3	38-147	3.04	30	
Dieldrin	0.231	0.05	ug/L	0.250		92.5	32-137	1.70	30	
Endrin	0.341	0.05	ug/L	0.250		137	25-142	0.520	30	
4,4'-DDD	0.239	0.05	ug/L	0.250		95.8	43-146	0.763	30	
Endosulfan II	0.246	0.05	ug/L	0.250		98.5	36-140	0.317	30	
4,4'-DDT	0.302	0.05	ug/L	0.250		121	39-140	0.300	30	
Endrin Aldehyde	0.231	0.05	ug/L	0.250		92.5	17-150	0.363	30	
Endosulfan Sulfate	0.256	0.05	ug/L	0.250		102	41-135	0.349	30	
Methoxychlor	0.340	0.05	ug/L	0.250		136	40-148	0.0854	30	

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

Determination of	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Determination of Polychlorinated Biphenyls (PCB)										
Batch 1HD0489 - 3510C NP/OC Sep Fnl - EPA 8082										
Blank (1HD0489-BLK1)										
Prepared: 04/08/24 16:09 Analyzed: 04/17/24 15:49										
Arochlor 1016	<0.20	0.20	ug/L							
Arochlor 1221	<0.20	0.20	ug/L							
Arochlor 1232	<0.20	0.20	ug/L							
Arochlor 1242	<0.20	0.20	ug/L							
Arochlor 1248	<0.20	0.20	ug/L							
Arochlor 1254	<0.20	0.20	ug/L							
Arochlor 1260	<0.20	0.20	ug/L							

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

Determination of	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
LCS (1HD0489-BS1)										
Prepared: 04/08/24 16:09 Analyzed: 04/17/24 16:33										
Arochlor 1016	1.892	0.20	ug/L	2.60		72.8	25-126			
Arochlor 1260	2.406	0.20	ug/L	2.60		92.5	29-142			
Surrogate: Tetrachloro-m-xylene	0.501		ug/L	0.600		83.5	38-121			
Surrogate: Decachlorobiphenyl	ND		ug/L	0.600			25-119			S-GC



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

LCS Dup (1HD0489-BSD1) Prepared: 04/08/24 16:09 Analyzed: 04/17/24 16:48										
Arochlor 1016	2.023	0.20	ug/L	2.60		77.8	25-126	6.68	30	
Arochlor 1260	2.460	0.20	ug/L	2.60		94.6	29-142	2.22	30	
Surrogate: Tetrachloro-m-xylene	0.522		ug/L	0.600		87.0	38-121			
Surrogate: Decachlorobiphenyl	0.116		ug/L	0.600		19.3	25-119			S-GC

Determination of	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Conventional Chemistry Parameters										
Batch 1HD0415 - Wet Chem Preparation - EPA 9010B										

Blank (1HD0415-BLK1) Prepared: 04/08/24 08:25 Analyzed: 04/08/24 15:45										
Cyanide, total	<0.005	0.005	mg/L							
LCS (1HD0415-BS1) Prepared: 04/08/24 08:25 Analyzed: 04/08/24 15:45										
Cyanide, total	0.0324	0.005	mg/L	0.0300		108	66-136			
Matrix Spike (1HD0415-MS1) Source: 1HD0315-11 Prepared: 04/08/24 08:25 Analyzed: 04/08/24 15:45										
Cyanide, total	0.0312	0.005	mg/L	0.0300	ND	104	59-153			
Matrix Spike Dup (1HD0415-MSD1) Source: 1HD0315-11 Prepared: 04/08/24 08:25 Analyzed: 04/08/24 15:45										
Cyanide, total	0.0322	0.005	mg/L	0.0300	ND	107	59-153	3.20	30	

Batch 1HD0417 - Wet Chem Preparation - EPA 376.2										
Blank (1HD0417-BLK1) Prepared: 04/08/24 08:27 Analyzed: 04/08/24 16:27										
Sulfide, total	<0.10	0.10	mg/L							
LCS (1HD0417-BS1) Prepared: 04/08/24 08:27 Analyzed: 04/08/24 16:27										
Sulfide, total	0.175	0.10	mg/L	0.31		55.6	59-110			QS-01
Matrix Spike (1HD0417-MS1) Source: 1HD0315-11 Prepared: 04/08/24 08:27 Analyzed: 04/08/24 16:27										
Sulfide, total	0.580	0.30	mg/L	0.94	ND	61.4	50-150			
Matrix Spike Dup (1HD0417-MSD1) Source: 1HD0315-11 Prepared: 04/08/24 08:27 Analyzed: 04/08/24 16:27										
Sulfide, total	0.473	0.30	mg/L	0.94	ND	50.0	50-150	20.4	30	

Determination of	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Total Metals										
Batch 1HD0290 - EPA 3005A Total Recoverable Metals - EPA 6020A										

Blank (1HD0290-BLK1) Prepared: 04/04/24 08:45 Analyzed: 04/04/24 21:43										
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							



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CERTIFICATE OF ANALYSIS

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Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0290 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1HD0290-BLK1)										
Prepared: 04/04/24 08:45 Analyzed: 04/04/24 21:43										
Chromium, total	<0.0080	0.0080	mg/L							
Cobalt, total	<0.0004	0.0004	mg/L							
Copper, total	<0.0040	0.0040	mg/L							
Lead, total	<0.0040	0.0040	mg/L							
Nickel, total	<0.0040	0.0040	mg/L							
Selenium, total	<0.0040	0.0040	mg/L							
Silver, total	<0.0040	0.0040	mg/L							
Thallium, total	<0.0020	0.0020	mg/L							
Tin, total	<0.0200	0.0200	mg/L							
Vanadium, total	<0.0200	0.0200	mg/L							
Zinc, total	<0.0200	0.0200	mg/L							
LCS (1HD0290-BS1)										
Prepared: 04/04/24 08:45 Analyzed: 04/04/24 21:49										
Antimony, total	0.0935	0.0020	mg/L	0.100		93.5	80-120			
Arsenic, total	0.0945	0.0040	mg/L	0.100		94.5	80-120			
Barium, total	0.101	0.0040	mg/L	0.100		101	80-120			
Beryllium, total	0.0997	0.0040	mg/L	0.100		99.7	80-120			
Cadmium, total	0.0959	0.0008	mg/L	0.100		95.9	80-120			
Chromium, total	0.0928	0.0080	mg/L	0.100		92.8	80-120			
Cobalt, total	0.0975	0.0004	mg/L	0.100		97.5	80-120			
Copper, total	0.0973	0.0040	mg/L	0.100		97.3	80-120			
Lead, total	0.0955	0.0040	mg/L	0.100		95.5	80-120			
Nickel, total	0.0964	0.0040	mg/L	0.100		96.4	80-120			
Selenium, total	0.0934	0.0040	mg/L	0.100		93.4	80-120			
Silver, total	0.0973	0.0040	mg/L	0.100		97.3	80-120			
Thallium, total	0.0944	0.0020	mg/L	0.100		94.4	80-120			
Tin, total	0.0957	0.0200	mg/L	0.100		95.7	80-120			
Vanadium, total	0.0958	0.0200	mg/L	0.100		95.8	80-120			
Zinc, total	0.101	0.0200	mg/L	0.100		101	80-120			
Matrix Spike (1HD0290-MS1)										
Source: 1HD0315-01 Prepared: 04/04/24 08:45 Analyzed: 04/04/24 22:01										
Antimony, total	0.0957	0.0020	mg/L	0.100	ND	95.7	75-125			
Arsenic, total	0.0975	0.0040	mg/L	0.100	0.0024	95.2	75-125			
Barium, total	0.305	0.0040	mg/L	0.100	0.200	105	75-125			
Beryllium, total	0.0975	0.0040	mg/L	0.100	ND	97.5	75-125			
Cadmium, total	0.0957	0.0008	mg/L	0.100	ND	95.7	75-125			
Chromium, total	0.0941	0.0080	mg/L	0.100	0.0010	93.1	75-125			
Cobalt, total	0.0976	0.0004	mg/L	0.100	ND	97.6	75-125			
Copper, total	0.0947	0.0040	mg/L	0.100	0.0025	92.2	75-125			
Lead, total	0.0940	0.0040	mg/L	0.100	ND	94.0	75-125			
Nickel, total	0.0967	0.0040	mg/L	0.100	ND	96.7	75-125			
Selenium, total	0.0944	0.0040	mg/L	0.100	ND	94.4	75-125			
Silver, total	0.0978	0.0040	mg/L	0.100	ND	97.8	75-125			
Thallium, total	0.0949	0.0020	mg/L	0.100	0.0003	94.6	75-125			
Tin, total	0.0977	0.0200	mg/L	0.100	ND	97.7	75-125			



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CERTIFICATE OF ANALYSIS

1HD0315

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0290 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Matrix Spike (1HD0290-MS1) Source: 1HD0315-01 Prepared: 04/04/24 08:45 Analyzed: 04/04/24 22:01										
Vanadium, total	0.0990	0.0200	mg/L	0.100	ND	99.0	75-125			
Zinc, total	0.100	0.0200	mg/L	0.100	ND	100	75-125			
Matrix Spike Dup (1HD0290-MSD1) Source: 1HD0315-01 Prepared: 04/04/24 08:45 Analyzed: 04/04/24 22:07										
Antimony, total	0.0960	0.0020	mg/L	0.100	ND	96.0	75-125	0.322	20	
Arsenic, total	0.0986	0.0040	mg/L	0.100	0.0024	96.3	75-125	1.15	20	
Barium, total	0.313	0.0040	mg/L	0.100	0.200	112	75-125	2.38	20	
Beryllium, total	0.0971	0.0040	mg/L	0.100	ND	97.1	75-125	0.474	20	
Cadmium, total	0.0938	0.0008	mg/L	0.100	ND	93.8	75-125	1.94	20	
Chromium, total	0.0935	0.0080	mg/L	0.100	0.0010	92.5	75-125	0.626	20	
Cobalt, total	0.0990	0.0004	mg/L	0.100	ND	99.0	75-125	1.50	20	
Copper, total	0.0963	0.0040	mg/L	0.100	0.0025	93.8	75-125	1.71	20	
Lead, total	0.0945	0.0040	mg/L	0.100	ND	94.5	75-125	0.523	20	
Nickel, total	0.0979	0.0040	mg/L	0.100	ND	97.9	75-125	1.27	20	
Selenium, total	0.0922	0.0040	mg/L	0.100	ND	92.2	75-125	2.33	20	
Silver, total	0.0976	0.0040	mg/L	0.100	ND	97.6	75-125	0.199	20	
Thallium, total	0.0948	0.0020	mg/L	0.100	0.0003	94.6	75-125	0.0426	20	
Tin, total	0.0974	0.0200	mg/L	0.100	ND	97.4	75-125	0.324	20	
Vanadium, total	0.0999	0.0200	mg/L	0.100	ND	99.9	75-125	0.965	20	
Zinc, total	0.0985	0.0200	mg/L	0.100	ND	98.5	75-125	1.53	20	
Post Spike (1HD0290-PS1) Source: 1HD0315-01 Prepared: 04/04/24 08:45 Analyzed: 04/04/24 22:13										
Antimony, total	0.0756		mg/L	0.0800	0.0001	94.4	80-120			
Arsenic, total	0.0802		mg/L	0.0800	0.0023	97.3	80-120			
Barium, total	0.277		mg/L	0.0800	0.196	101	80-120			
Beryllium, total	0.0761		mg/L	0.0800	0.000007	95.2	80-120			
Cadmium, total	0.0765		mg/L	0.0800	0.00001	95.6	80-120			
Chromium, total	0.0759		mg/L	0.0800	0.0009	93.7	80-120			
Cobalt, total	0.0802		mg/L	0.0800	0.0002	100	80-120			
Copper, total	0.0780		mg/L	0.0800	0.0025	94.4	80-120			
Lead, total	0.0759		mg/L	0.0800	0.0001	94.7	80-120			
Nickel, total	0.0789		mg/L	0.0800	0.0008	97.6	80-120			
Selenium, total	0.0733		mg/L	0.0800	0.0001	91.5	80-120			
Silver, total	0.0796		mg/L	0.0800	0.0003	99.1	80-120			
Thallium, total	0.0771		mg/L	0.0800	0.0003	96.0	80-120			
Tin, total	0.0776		mg/L	0.0800	-0.000005	97.0	75-125			
Vanadium, total	0.0814		mg/L	0.0800	0.0061	94.2	80-120			
Zinc, total	0.0782		mg/L	0.0800	0.0030	94.0	80-120			
Batch 1HD0422 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1HD0422-BLK1) Prepared: 04/08/24 08:45 Analyzed: 04/08/24 23:31										
Antimony, total	<0.0020	0.0020	mg/L							
Arsenic, total	<0.0040	0.0040	mg/L							
Barium, total	<0.0040	0.0040	mg/L							
Beryllium, total	<0.0040	0.0040	mg/L							



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CERTIFICATE OF ANALYSIS

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Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0422 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1HD0422-BLK1)										
Prepared: 04/08/24 08:45 Analyzed: 04/08/24 23:31										
Cadmium, total	<0.0008	0.0008	mg/L							
Chromium, total	<0.0080	0.0080	mg/L							
Cobalt, total	<0.0004	0.0004	mg/L							
Copper, total	<0.0040	0.0040	mg/L							
Lead, total	<0.0040	0.0040	mg/L							
Nickel, total	<0.0040	0.0040	mg/L							
Selenium, total	<0.0040	0.0040	mg/L							
Silver, total	<0.0040	0.0040	mg/L							
Thallium, total	<0.0020	0.0020	mg/L							
Vanadium, total	<0.0200	0.0200	mg/L							QB-12
Zinc, total	<0.0200	0.0200	mg/L							
LCS (1HD0422-BS1)										
Prepared: 04/08/24 08:45 Analyzed: 04/08/24 23:38										
Antimony, total	0.0976	0.0020	mg/L	0.100		97.6	80-120			
Arsenic, total	0.0975	0.0040	mg/L	0.100		97.5	80-120			
Barium, total	0.106	0.0040	mg/L	0.100		106	80-120			
Beryllium, total	0.103	0.0040	mg/L	0.100		103	80-120			
Cadmium, total	0.0969	0.0008	mg/L	0.100		96.9	80-120			
Chromium, total	0.0961	0.0080	mg/L	0.100		96.1	80-120			
Cobalt, total	0.0986	0.0004	mg/L	0.100		98.6	80-120			
Copper, total	0.0955	0.0040	mg/L	0.100		95.5	80-120			
Lead, total	0.0991	0.0040	mg/L	0.100		99.1	80-120			
Nickel, total	0.0967	0.0040	mg/L	0.100		96.7	80-120			
Selenium, total	0.0963	0.0040	mg/L	0.100		96.3	80-120			
Silver, total	0.102	0.0040	mg/L	0.100		102	80-120			
Thallium, total	0.0985	0.0020	mg/L	0.100		98.5	80-120			
Vanadium, total	0.109	0.0200	mg/L	0.100		109	80-120			
Zinc, total	0.0958	0.0200	mg/L	0.100		95.8	80-120			
Matrix Spike (1HD0422-MS1)										
Source: 1HD0545-01 Prepared: 04/08/24 08:45 Analyzed: 04/09/24 00:33										
Antimony, total	0.0978	0.0020	mg/L	0.100	ND	97.8	75-125			
Arsenic, total	0.0990	0.0040	mg/L	0.100	0.0023	96.7	75-125			
Barium, total	0.150	0.0040	mg/L	0.100	0.0401	109	75-125			
Beryllium, total	0.0950	0.0040	mg/L	0.100	ND	95.0	75-125			
Cadmium, total	0.0948	0.0008	mg/L	0.100	0.0014	93.4	75-125			
Chromium, total	0.0953	0.0080	mg/L	0.100	0.0009	94.4	75-125			
Cobalt, total	0.0993	0.0004	mg/L	0.100	0.0003	99.0	75-125			
Copper, total	0.0949	0.0040	mg/L	0.100	0.0020	92.8	75-125			
Lead, total	0.0972	0.0040	mg/L	0.100	ND	97.2	75-125			
Nickel, total	0.0994	0.0040	mg/L	0.100	0.0037	95.6	75-125			
Selenium, total	0.0954	0.0040	mg/L	0.100	ND	95.4	75-125			
Silver, total	0.100	0.0040	mg/L	0.100	ND	100	75-125			
Thallium, total	0.0982	0.0020	mg/L	0.100	ND	98.2	75-125			
Vanadium, total	0.103	0.0200	mg/L	0.100	ND	103	75-125			
Zinc, total	0.0998	0.0200	mg/L	0.100	ND	99.8	75-125			



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HD0315

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD0422 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Matrix Spike Dup (1HD0422-MSD1) Source: 1HD0545-01 Prepared: 04/08/24 08:45 Analyzed: 04/09/24 00:39										
Antimony, total	0.0990	0.0020	mg/L	0.100	ND	99.0	75-125	1.24	20	
Arsenic, total	0.0991	0.0040	mg/L	0.100	0.0023	96.8	75-125	0.0533	20	
Barium, total	0.150	0.0040	mg/L	0.100	0.0401	110	75-125	0.106	20	
Beryllium, total	0.0964	0.0040	mg/L	0.100	ND	96.4	75-125	1.51	20	
Cadmium, total	0.0976	0.0008	mg/L	0.100	0.0014	96.2	75-125	2.91	20	
Chromium, total	0.0955	0.0080	mg/L	0.100	0.0009	94.6	75-125	0.208	20	
Cobalt, total	0.0989	0.0004	mg/L	0.100	0.0003	98.6	75-125	0.377	20	
Copper, total	0.0945	0.0040	mg/L	0.100	0.0020	92.5	75-125	0.387	20	
Lead, total	0.0979	0.0040	mg/L	0.100	ND	97.9	75-125	0.716	20	
Nickel, total	0.0993	0.0040	mg/L	0.100	0.0037	95.5	75-125	0.0902	20	
Selenium, total	0.0945	0.0040	mg/L	0.100	ND	94.5	75-125	0.989	20	
Silver, total	0.101	0.0040	mg/L	0.100	ND	101	75-125	0.473	20	
Thallium, total	0.0984	0.0020	mg/L	0.100	ND	98.4	75-125	0.202	20	
Vanadium, total	0.104	0.0200	mg/L	0.100	ND	104	75-125	0.544	20	
Zinc, total	0.100	0.0200	mg/L	0.100	ND	100	75-125	0.654	20	
Post Spike (1HD0422-PS1) Source: 1HD0545-01 Prepared: 04/08/24 08:45 Analyzed: 04/09/24 00:45										
Antimony, total	0.0762		mg/L	0.0800	0.0003	95.0	80-120			
Arsenic, total	0.0777		mg/L	0.0800	0.0023	94.3	80-120			
Barium, total	0.120		mg/L	0.0800	0.0393	101	80-120			
Beryllium, total	0.0736		mg/L	0.0800	-0.00003	92.0	80-120			
Cadmium, total	0.0749		mg/L	0.0800	0.0014	91.9	80-120			
Chromium, total	0.0742		mg/L	0.0800	0.0008	91.7	80-120			
Cobalt, total	0.0767		mg/L	0.0800	0.0003	95.5	80-120			
Copper, total	0.0739		mg/L	0.0800	0.0020	89.9	80-120			
Lead, total	0.0753		mg/L	0.0800	0.0002	93.9	80-120			
Nickel, total	0.0786		mg/L	0.0800	0.0037	93.6	80-120			
Selenium, total	0.0718		mg/L	0.0800	0.0005	89.1	80-120			
Silver, total	0.0784		mg/L	0.0800	0.0004	97.5	80-120			
Thallium, total	0.0764		mg/L	0.0800	-0.0001	95.5	80-120			
Vanadium, total	0.0842		mg/L	0.0800	0.0101	92.6	80-120			
Zinc, total	0.0779		mg/L	0.0800	0.0094	85.6	80-120			
Batch 1HD0568 - EPA 7470A Hg Water - EPA 7470A										
Blank (1HD0568-BLK1) Prepared: 04/09/24 15:33 Analyzed: 04/10/24 16:03										
Mercury, total	<0.00050	0.00050	mg/L							
LCS (1HD0568-BS1) Prepared: 04/09/24 15:33 Analyzed: 04/10/24 16:05										
Mercury, total	0.00256	0.00050	mg/L	0.00250		102	80-120			
Matrix Spike (1HD0568-MS1) Source: 1HD0160-03 Prepared: 04/09/24 15:33 Analyzed: 04/10/24 16:09										
Mercury, total	0.00263	0.00050	mg/L	0.00250	ND	105	75-125			
Matrix Spike Dup (1HD0568-MSD1) Source: 1HD0160-03 Prepared: 04/09/24 15:33 Analyzed: 04/10/24 16:12										
Mercury, total	0.00249	0.00050	mg/L	0.00250	ND	99.5	75-125	5.64	20	



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HD0315

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1478 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1HD1478-BLK1) Prepared: 04/24/24 16:10 Analyzed: 04/26/24 01:29										
Copper, total	<0.0040	0.0040	mg/L							
LCS (1HD1478-BS1) Prepared: 04/24/24 16:10 Analyzed: 04/26/24 01:47										
Copper, total	0.105	0.0040	mg/L	0.100		105	80-120			
Matrix Spike (1HD1478-MS1) Source: 1HD0315-03RE3 Prepared: 04/24/24 16:10 Analyzed: 04/26/24 02:00										
Copper, total	0.251	0.0040	mg/L	0.100	0.135	116	75-125			
Matrix Spike Dup (1HD1478-MSD1) Source: 1HD0315-03RE3 Prepared: 04/24/24 16:10 Analyzed: 04/26/24 02:06										
Copper, total	0.339	0.0040	mg/L	0.100	0.135	204	75-125	29.8	20	QM-07
Post Spike (1HD1478-PS1) Source: 1HD0315-03RE3 Prepared: 04/24/24 16:10 Analyzed: 04/26/24 02:12										
Copper, total	0.214		mg/L	0.0800	0.135	98.3	80-120			

Definitions

- A-01:** Surrogate not added to batch blank.
- QB-02:** The method blank contains analyte at a concentration above the MRL; however, sample concentration was less than the MRL or less than the applicable action level.
- QB-12:** The analyte was found in the blank at a concentration greater than one-half the reporting limit. However, the concentration of the analyte in the blank was less than the reporting limit so the data was accepted.
- QM-07:** The spike recovery and/or RPD was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
- QR-02:** The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
- QS-01:** The blank spike recovery and/or blank spike duplicate recovery were outside the established acceptance limits. Batch was accepted based on acceptable MS/MSD/RPD results.
- QS-02:** The spike recovery for this QC sample exceeded established acceptance limits. However, all samples were below the reporting and/or regulatory limit so the data is acceptable.
- QS-03:** The blank spike recovery was below established acceptance limits.
- RL:** Reporting Limit
- RPD:** Relative Percent Difference
- S-GC:** Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 0.5°C

Cooler Inspection Checklist

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



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HD0315

Report Comments

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

Reviewed and Approved By:

A rectangular box containing a handwritten signature in black ink that reads "Heather Murphy".

Heather Murphy
Customer Relationship Specialist
heather.murphy@microbac.com
04/29/24 09:39



SITE INFORMATION

Sampler: TODD WHIPPLE

Project: RWMA Sanitary Landfill - New Regs
6006

REPORT TO

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

INVOICE TO

Harm Jass
Rural Inwa Waste Mgt Association
20400 M Avenue
Elkura, IA 50627

SPECIAL INSTRUCTIONS

None

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

LAB USE ONLY

Work Order IHD0315

Temperature 8.6°C

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-36 (B)	Water	GRAB	<u>4/2/24</u>	<u>8:38</u>	<u>7</u>	Indfill-app1-voc-group Indfill-app1-metals-6020	<u>01</u>
-001	MW-37 (B)	Water	GRAB	<u>4/2/24</u>	<u>8:49</u>	<u>7</u>	Indfill-app1-voc-group Indfill-app1-metals-6020	<u>02</u>
-001	MW-39 (B)	Water	GRAB	<u>4/2/24</u>	<u>8:10</u>	<u>7</u>	Indfill-app1-voc-group Indfill-app1-metals-6020	<u>03</u>
-001	MW-40 (B)	Water	GRAB	<u>4/2/24</u>	<u>9:12</u>	<u>7</u>	Indfill-app1-voc-group Indfill-app1-metals-6020	<u>04</u>
-001	MW-47 (B)	Water	GRAB	<u>4/2/24</u>	<u>9:54</u>	<u>7</u>	Indfill-app1-voc-group Indfill-app1-metals-6020	<u>05</u>
-001	MW-48A	Water	GRAB	<u>4/2/24</u>	<u>10:48</u>	<u>7</u>	Indfill-app1-voc-group Indfill-app1-metals-6020	<u>06</u>
-001	MW-49A	Water	GRAB	<u>4/2/24</u>	<u>11:28</u>	<u>7</u>	Indfill-app1-voc-group Indfill-app1-metals-6020	<u>07</u>

Relinquished By [Signature] Date/Time 4/3/24

Relinquished By _____ Date/Time _____
Received for Lab By Maher Date/Time 4/3/24 10:10

Received By _____ Date/Time _____

Remarks:



SITE INFORMATION

Sampler:

TODD WHIPPLE

Project:

RWMA Sanitary Landfill - New Regs
8006

REPORT TO

Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50248

INVOICE TO

Harm Jass
Rural Inwa Waste Mgt Association
20499 M Avenue
Elmora, IA 50627

SPECIAL INSTRUCTIONS

None

Turn Around Time

Standard RUSH, need by ___/___/___

LAB USE ONLY

Work Order

1HDO315

Temperature

0.6°C

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-50	Water	GRAB	<u>4/2/24</u>	<u>10:24</u>	<u>7</u>	Indfill-app1-voc-group	Indfill-app1-metals-6020	<u>08</u>
-001	MW-51	Water	GRAB	<u>4/2/24</u>	<u>11:09</u>	<u>7</u>	Indfill-app1-voc-group	Indfill-app1-metals-6020	<u>09</u>
-001	MW-7	Water	GRAB	<u>4/2/24</u>	<u>14:49</u>	<u>7</u>	Indfill-app1-voc-group	Indfill-app1-metals-6020	<u>10</u>
-001	MW-9	Water	GRAB	<u>4/2/24</u>	<u>17:02</u>	<u>17</u>	Indfill-app2-inorg-6020	Indfill-app2-org	<u>11</u>
-001	MW-13R	Water	GRAB	<u>4/2/24</u>	<u>13:37</u>	<u>7</u>	Indfill-app1-voc-group	Indfill-app1-metals-6020	<u>12</u>
-001	MW-14	Water	GRAB	<u>4/2/24</u>	<u>13:10</u>	<u>7</u>	Indfill-app1-voc-group	Indfill-app1-metals-6020	<u>B</u>
-001	MW-29	Water	GRAB	<u>4/2/24</u>	<u>13:59</u>	<u>7</u>	Indfill-app1-voc-group	Indfill-app1-metals-6020	<u>14</u>

Todd Whipple 4/3/24
Relinquished By Date/Time

Maher 4/3/24 10:10
Relinquished By Date/Time

Received By Date/Time

Received for Lab By Date/Time

Remarks:

600 East 17th Street So
Newton, IA 50208
541-792-9454



1 H D 0 3 1 5

HLW Engineering
PM: Heather Murphy

SITE INFORMATION

Sampler: Todd Whipple

Project: RWMA Sanitary Landfill - New Regs
6006

REPORT TO

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

INVOICE TO

Harm Jass
Rural Iowa Waste Mgt Association
20488 M Avenue
Eldora, IA 50627

SPECIAL INSTRUCTIONS

None

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

LAB USE ONLY

Work Order 1HD0315

Temperature 0-8°C

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-31R	Water	GRAB	<u>4/2/24</u>	<u>15:12</u>	<u>8</u>	8270-110 Indfill-app1-voc-group Indfill-app1-metals-6020	<u>15</u>
-001	MW-33	Water	GRAB	<u>4/2/24</u>	<u>16:07</u>	<u>7</u>	Indfill-app1-voc-group Indfill-app1-metals-6020	<u>16</u>
-001	MW-35R	Water	GRAB	<u>4/2/24</u>	<u>14:19</u>	<u>8</u>	8270-110 Indfill-app1-voc-group Indfill-app1-metals-6020	<u>17</u>
-001	MW-211	Water	GRAB	<u>4/2/24</u>	<u>15:43</u>	<u>7</u>	Indfill-app1-voc-group Indfill-app1-metals-6020	<u>18</u>
-001	GU-1 Submerged	Water	GRAB	<u>4/2/24</u>	<u>—</u>	<u>0</u>	Indfill-app1-voc-group Indfill-app1-metals-6020	<u>—</u>
-001	GU-2 Submerged	Water	GRAB	<u>4/2/24</u>	<u>—</u>	<u>0</u>	Indfill-app1-voc-group Indfill-app1-metals-6020	<u>—</u>
-001	GU-3	Water	GRAB	<u>4/2/24</u>	<u>10:13</u>	<u>7</u>	Indfill-app1-voc-group Indfill-app1-metals-6020	<u>19</u>

Relinquished By [Signature] Date/Time 4/3/24

Relinquished By _____ Date/Time _____
Received for Lab By Maker Date/Time 4/3/24 10:10

Remarks:

Received By _____ Date/Time _____

600 East 17th Street South
Newton, IA 50208
541-792-9454



1 H D 0 3 1 5

HLW Engineering
PM: Heather Murphy

SITE INFORMATION

Sampler: _____

Project: _____
RWMMA Sanitary Landfill - New Regs
6006

REPORT TO

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

INVOICE TO

Harm Jass
Rural Iowa Waste Mgt Association
20488 M Avenue
Eldora, IA 50627

SPECIAL INSTRUCTIONS

None

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

LAB USE ONLY

Work Order: IHD0315

Temperature: 0.6°C

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	Tile ACM-1	Water	GRAB	4/2/24	13:00	7	Indfill-app1-voc-group Indfil-app1-metals-6020	20
-001	PECS-1	Water	GRAB	4/2/24	14:38	6	Indfill-app1-voc-group	21
-001	MW-7A North	Water	GRAB	4/2/24	16:27	1	as-t-6020	22
-001	MW-7B Northwest	Water	GRAB	4/2/24	16:42	1	as-t-6020	23
-001	Field Duplicate	Water	GRAB	4/2/24	✓	1	Indfill-app1-voc-group Indfil-app1-metals-6020	24

Relinquished By: Todd Whipple Date/Time: 4/3/24

Received By: _____ Date/Time: _____

Relinquished By: _____ Date/Time: _____

Received for Lab By: Maher Date/Time: 4/3/24 10:10

Remarks:



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ1078

Project Description

6006

For:

Todd Whipple

HLW Engineering

204 West Broad St

Story City, IA 50248

Heather Murphy

Customer Relationship Specialist

Thursday, October 31, 2024

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

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

Microbac Laboratories, Inc.

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



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ1078

HLW Engineering

Todd Whipple
204 West Broad St
Story City, IA 50248

Project Name: 6006

Project / PO Number: N/A
Received: 10/11/2024
Reported: 10/31/2024

Case Narrative

Amended Report October 31, 2024: The cu-t-6020 result originally reported for sample 1HJ1078-04 was not correct due to analysis error. The corrected result is included in this report.

Tammy McDermott
Quality Assurance Specialist

Sample Summary Report

Table with 7 columns: Sample Name, Laboratory ID, Client Matrix, Sample Type, Sample Begin, Sample Taken, Lab Received. Rows include MW-36 (B) through Field Duplicate.



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ1078

Analytical Testing Parameters

Client Sample ID:	MW-36 (B)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/10/2024 9:45
Lab Sample ID:	1HJ1078-01		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
Chloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
Acetone	<10.0	10.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		10/22/24 0000	10/22/24 1744	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
Chloroform	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
Benzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
Toluene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
Styrene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF

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CERTIFICATE OF ANALYSIS

1HJ1078

Client Sample ID:	MW-36 (B)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/10/2024 9:45
Lab Sample ID:	1HJ1078-01		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Bromoform	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1521	BDF
Surrogate: Dibromofluoromethane	98.5	Limit: 57-134	% Rec	1		10/16/24 0000	10/16/24 1521	BDF
Surrogate: Dibromofluoromethane	97.0	Limit: 75-136	% Rec	1		10/22/24 0000	10/22/24 1744	CSM
Surrogate: Dibromofluoromethane	98.5	Limit: 75-136	% Rec	1		10/16/24 0000	10/16/24 1521	BDF
Surrogate: 1,2-Dichloroethane-d4	101	Limit: 61-142	% Rec	1		10/16/24 0000	10/16/24 1521	BDF
Surrogate: 1,2-Dichloroethane-d4	101	Limit: 53-140	% Rec	1		10/16/24 0000	10/16/24 1521	BDF
Surrogate: 1,2-Dichloroethane-d4	103	Limit: 61-142	% Rec	1		10/22/24 0000	10/22/24 1744	CSM
Surrogate: Toluene-d8	97.7	Limit: 86-114	% Rec	1		10/16/24 0000	10/16/24 1521	BDF
Surrogate: Toluene-d8	94.4	Limit: 82-121	% Rec	1		10/22/24 0000	10/22/24 1744	CSM
Surrogate: Toluene-d8	97.7	Limit: 82-121	% Rec	1		10/16/24 0000	10/16/24 1521	BDF
Surrogate: 4-Bromofluorobenzene	97.0	Limit: 80-116	% Rec	1		10/16/24 0000	10/16/24 1521	BDF
Surrogate: 4-Bromofluorobenzene	97.0	Limit: 78-121	% Rec	1		10/16/24 0000	10/16/24 1521	BDF
Surrogate: 4-Bromofluorobenzene	97.0	Limit: 80-116	% Rec	1		10/22/24 0000	10/22/24 1744	CSM

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		10/14/24 1603	10/15/24 1852	RVV
Arsenic, total	0.0040	0.0040	mg/L	4		10/14/24 1603	10/15/24 1852	RVV
Barium, total	0.329	0.0040	mg/L	4		10/14/24 1603	10/15/24 1852	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/14/24 1603	10/15/24 1852	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/14/24 1603	10/15/24 1852	RVV
Chromium, total	0.0136	0.0080	mg/L	4		10/14/24 1603	10/15/24 1852	RVV
Cobalt, total	0.0076	0.0004	mg/L	4		10/14/24 1603	10/15/24 1852	RVV
Copper, total	0.0192	0.0040	mg/L	4		10/14/24 1603	10/15/24 1852	RVV
Lead, total	0.0044	0.0040	mg/L	4		10/14/24 1603	10/15/24 1852	RVV
Nickel, total	0.0215	0.0040	mg/L	4		10/14/24 1603	10/15/24 1852	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/14/24 1603	10/15/24 1852	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/14/24 1603	10/15/24 1852	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/14/24 1603	10/15/24 1852	RVV
Vanadium, total	0.0224	0.0200	mg/L	4		10/14/24 1603	10/15/24 1852	RVV
Zinc, total	0.0380	0.0200	mg/L	4		10/14/24 1603	10/15/24 1852	RVV



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CERTIFICATE OF ANALYSIS

1HJ1078

Client Sample ID:	MW-37 (B)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/10/2024 9:55
Lab Sample ID:	1HJ1078-02		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
Chloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
Acetone	<10.0	10.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		10/22/24 0000	10/22/24 1807	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
Chloroform	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
Benzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
Toluene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
Styrene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
Bromoform	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF

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CERTIFICATE OF ANALYSIS

1HJ1078

Client Sample ID:	MW-37 (B)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/10/2024 9:55
Lab Sample ID:	1HJ1078-02		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1544	BDF
Surrogate: Dibromofluoromethane	96.1	Limit: 75-136	% Rec	1		10/22/24 0000	10/22/24 1807	CSM
Surrogate: Dibromofluoromethane	98.0	Limit: 57-134	% Rec	1		10/16/24 0000	10/16/24 1544	BDF
Surrogate: Dibromofluoromethane	98.0	Limit: 75-136	% Rec	1		10/16/24 0000	10/16/24 1544	BDF
Surrogate: 1,2-Dichloroethane-d4	99.5	Limit: 61-142	% Rec	1		10/16/24 0000	10/16/24 1544	BDF
Surrogate: 1,2-Dichloroethane-d4	102	Limit: 61-142	% Rec	1		10/22/24 0000	10/22/24 1807	CSM
Surrogate: 1,2-Dichloroethane-d4	99.5	Limit: 53-140	% Rec	1		10/16/24 0000	10/16/24 1544	BDF
Surrogate: Toluene-d8	94.7	Limit: 82-121	% Rec	1		10/22/24 0000	10/22/24 1807	CSM
Surrogate: Toluene-d8	98.4	Limit: 86-114	% Rec	1		10/16/24 0000	10/16/24 1544	BDF
Surrogate: Toluene-d8	98.4	Limit: 82-121	% Rec	1		10/16/24 0000	10/16/24 1544	BDF
Surrogate: 4-Bromofluorobenzene	97.1	Limit: 80-116	% Rec	1		10/16/24 0000	10/16/24 1544	BDF
Surrogate: 4-Bromofluorobenzene	96.1	Limit: 80-116	% Rec	1		10/22/24 0000	10/22/24 1807	CSM
Surrogate: 4-Bromofluorobenzene	97.1	Limit: 78-121	% Rec	1		10/16/24 0000	10/16/24 1544	BDF

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		10/16/24 0803	10/16/24 1738	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1738	RVV
Barium, total	0.0676	0.0040	mg/L	4		10/16/24 0803	10/16/24 1738	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1738	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/16/24 0803	10/16/24 1738	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/16/24 0803	10/16/24 1738	RVV
Cobalt, total	0.0044	0.0004	mg/L	4		10/16/24 0803	10/16/24 1738	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1738	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1738	RVV
Nickel, total	0.0187	0.0040	mg/L	4		10/16/24 0803	10/16/24 1738	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1738	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1738	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/16/24 0803	10/16/24 1738	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/16/24 0803	10/16/24 1738	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/16/24 0803	10/16/24 1738	RVV



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CERTIFICATE OF ANALYSIS

1HJ1078

Client Sample ID:	MW-39 (B)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/10/2024 9:27
Lab Sample ID:	1HJ1078-03		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
Chloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
Acetone	<10.0	10.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		10/22/24 0000	10/22/24 1829	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
Chloroform	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
Benzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
Toluene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
Styrene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
Bromoform	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF

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CERTIFICATE OF ANALYSIS

1HJ1078

Client Sample ID:	MW-39 (B)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/10/2024 9:27
Lab Sample ID:	1HJ1078-03		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1607	BDF
Surrogate: Dibromofluoromethane	95.6	Limit: 75-136	% Rec	1		10/22/24 0000	10/22/24 1829	CSM
Surrogate: Dibromofluoromethane	97.6	Limit: 75-136	% Rec	1		10/16/24 0000	10/16/24 1607	BDF
Surrogate: Dibromofluoromethane	97.6	Limit: 57-134	% Rec	1		10/16/24 0000	10/16/24 1607	BDF
Surrogate: 1,2-Dichloroethane-d4	101	Limit: 61-142	% Rec	1		10/16/24 0000	10/16/24 1607	BDF
Surrogate: 1,2-Dichloroethane-d4	103	Limit: 61-142	% Rec	1		10/22/24 0000	10/22/24 1829	CSM
Surrogate: 1,2-Dichloroethane-d4	101	Limit: 53-140	% Rec	1		10/16/24 0000	10/16/24 1607	BDF
Surrogate: Toluene-d8	94.6	Limit: 82-121	% Rec	1		10/22/24 0000	10/22/24 1829	CSM
Surrogate: Toluene-d8	98.4	Limit: 82-121	% Rec	1		10/16/24 0000	10/16/24 1607	BDF
Surrogate: Toluene-d8	98.4	Limit: 86-114	% Rec	1		10/16/24 0000	10/16/24 1607	BDF
Surrogate: 4-Bromofluorobenzene	97.3	Limit: 80-116	% Rec	1		10/16/24 0000	10/16/24 1607	BDF
Surrogate: 4-Bromofluorobenzene	98.5	Limit: 80-116	% Rec	1		10/22/24 0000	10/22/24 1829	CSM
Surrogate: 4-Bromofluorobenzene	97.3	Limit: 78-121	% Rec	1		10/16/24 0000	10/16/24 1607	BDF

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		10/16/24 0803	10/16/24 1803	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1803	RVV
Barium, total	0.253	0.0040	mg/L	4		10/16/24 0803	10/16/24 1803	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1803	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/16/24 0803	10/16/24 1803	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/16/24 0803	10/16/24 1803	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		10/16/24 0803	10/16/24 1803	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1803	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1803	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1803	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1803	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1803	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/16/24 0803	10/16/24 1803	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/16/24 0803	10/16/24 1803	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/16/24 0803	10/16/24 1803	RVV



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CERTIFICATE OF ANALYSIS

1HJ1078

Client Sample ID:	MW-40 (B)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/10/2024 10:15
Lab Sample ID:	1HJ1078-04		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
Chloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
Acetone	<10.0	10.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		10/22/24 0000	10/22/24 1852	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
Chloroform	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
Benzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
Toluene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
Styrene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
Bromoform	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF

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CERTIFICATE OF ANALYSIS

1HJ1078

Client Sample ID:	MW-40 (B)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/10/2024 10:15
Lab Sample ID:	1HJ1078-04		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1629	BDF
Surrogate: Dibromofluoromethane	98.1	Limit: 57-134	% Rec	1		10/16/24 0000	10/16/24 1629	BDF
Surrogate: Dibromofluoromethane	96.8	Limit: 75-136	% Rec	1		10/22/24 0000	10/22/24 1852	CSM
Surrogate: Dibromofluoromethane	98.1	Limit: 75-136	% Rec	1		10/16/24 0000	10/16/24 1629	BDF
Surrogate: 1,2-Dichloroethane-d4	104	Limit: 61-142	% Rec	1		10/22/24 0000	10/22/24 1852	CSM
Surrogate: 1,2-Dichloroethane-d4	100	Limit: 53-140	% Rec	1		10/16/24 0000	10/16/24 1629	BDF
Surrogate: 1,2-Dichloroethane-d4	100	Limit: 61-142	% Rec	1		10/16/24 0000	10/16/24 1629	BDF
Surrogate: Toluene-d8	98.2	Limit: 82-121	% Rec	1		10/16/24 0000	10/16/24 1629	BDF
Surrogate: Toluene-d8	98.2	Limit: 86-114	% Rec	1		10/16/24 0000	10/16/24 1629	BDF
Surrogate: Toluene-d8	94.9	Limit: 82-121	% Rec	1		10/22/24 0000	10/22/24 1852	CSM
Surrogate: 4-Bromofluorobenzene	96.9	Limit: 78-121	% Rec	1		10/16/24 0000	10/16/24 1629	BDF
Surrogate: 4-Bromofluorobenzene	98.2	Limit: 80-116	% Rec	1		10/22/24 0000	10/22/24 1852	CSM
Surrogate: 4-Bromofluorobenzene	96.9	Limit: 80-116	% Rec	1		10/16/24 0000	10/16/24 1629	BDF

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		10/16/24 0803	10/16/24 1821	RVV
Arsenic, total	0.0043	0.0040	mg/L	4		10/16/24 0803	10/16/24 1821	RVV
Barium, total	0.0342	0.0040	mg/L	4		10/16/24 0803	10/16/24 1821	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1821	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/16/24 0803	10/16/24 1821	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/16/24 0803	10/16/24 1821	RVV
Cobalt, total	0.0058	0.0004	mg/L	4		10/16/24 0803	10/16/24 1821	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/30/24 1122	10/31/24 1102	JAR
Lead, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1821	RVV
Nickel, total	0.0154	0.0040	mg/L	4		10/16/24 0803	10/16/24 1821	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1821	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1821	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/16/24 0803	10/16/24 1821	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/16/24 0803	10/16/24 1821	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/16/24 0803	10/16/24 1821	RVV



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CERTIFICATE OF ANALYSIS

1HJ1078

Client Sample ID:	MW-47 (B)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/10/2024 10:45
Lab Sample ID:	1HJ1078-05		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
Chloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
Acetone	<10.0	10.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1954	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
Chloroform	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
Benzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
Toluene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
Styrene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
Bromoform	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF

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CERTIFICATE OF ANALYSIS

1HJ1078

Client Sample ID:	MW-47 (B)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/10/2024 10:45
Lab Sample ID:	1HJ1078-05		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1652	BDF
Surrogate: Dibromofluoromethane	97.2	Limit: 75-136	% Rec	1		10/16/24 0000	10/16/24 1652	BDF
Surrogate: Dibromofluoromethane	97.2	Limit: 57-134	% Rec	1		10/16/24 0000	10/16/24 1652	BDF
Surrogate: Dibromofluoromethane	93.3	Limit: 75-136	% Rec	1		10/17/24 0000	10/17/24 1954	CSM
Surrogate: 1,2-Dichloroethane-d4	99.2	Limit: 53-140	% Rec	1		10/16/24 0000	10/16/24 1652	BDF
Surrogate: 1,2-Dichloroethane-d4	95.1	Limit: 61-142	% Rec	1		10/17/24 0000	10/17/24 1954	CSM
Surrogate: 1,2-Dichloroethane-d4	99.2	Limit: 61-142	% Rec	1		10/16/24 0000	10/16/24 1652	BDF
Surrogate: Toluene-d8	97.7	Limit: 82-121	% Rec	1		10/16/24 0000	10/16/24 1652	BDF
Surrogate: Toluene-d8	93.4	Limit: 82-121	% Rec	1		10/17/24 0000	10/17/24 1954	CSM
Surrogate: Toluene-d8	97.7	Limit: 86-114	% Rec	1		10/16/24 0000	10/16/24 1652	BDF
Surrogate: 4-Bromofluorobenzene	97.7	Limit: 80-116	% Rec	1		10/16/24 0000	10/16/24 1652	BDF
Surrogate: 4-Bromofluorobenzene	97.7	Limit: 78-121	% Rec	1		10/16/24 0000	10/16/24 1652	BDF
Surrogate: 4-Bromofluorobenzene	101	Limit: 80-116	% Rec	1		10/17/24 0000	10/17/24 1954	CSM

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		10/16/24 0803	10/16/24 1827	RVV
Arsenic, total	0.0883	0.0040	mg/L	4		10/16/24 0803	10/16/24 1827	RVV
Barium, total	0.426	0.0040	mg/L	4		10/16/24 0803	10/16/24 1827	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1827	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/16/24 0803	10/16/24 1827	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/16/24 0803	10/16/24 1827	RVV
Cobalt, total	0.0008	0.0004	mg/L	4		10/16/24 0803	10/16/24 1827	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1827	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1827	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1827	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1827	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1827	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/16/24 0803	10/16/24 1827	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/16/24 0803	10/16/24 1827	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/16/24 0803	10/16/24 1827	RVV



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CERTIFICATE OF ANALYSIS

1HJ1078

Client Sample ID:	MW-48A	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/10/2024 11:47
Lab Sample ID:	1HJ1078-06		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
Chloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
Acetone	<10.0	10.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2016	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
Chloroform	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
Benzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
Toluene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
Styrene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
Bromoform	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF



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CERTIFICATE OF ANALYSIS

1HJ1078

Client Sample ID:	MW-48A	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/10/2024 11:47
Lab Sample ID:	1HJ1078-06		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1715	BDF
Surrogate: Dibromofluoromethane	97.4	Limit: 57-134	% Rec	1		10/16/24 0000	10/16/24 1715	BDF
Surrogate: Dibromofluoromethane	92.2	Limit: 75-136	% Rec	1		10/17/24 0000	10/17/24 2016	CSM
Surrogate: Dibromofluoromethane	97.4	Limit: 75-136	% Rec	1		10/16/24 0000	10/16/24 1715	BDF
Surrogate: 1,2-Dichloroethane-d4	99.7	Limit: 53-140	% Rec	1		10/16/24 0000	10/16/24 1715	BDF
Surrogate: 1,2-Dichloroethane-d4	94.0	Limit: 61-142	% Rec	1		10/17/24 0000	10/17/24 2016	CSM
Surrogate: 1,2-Dichloroethane-d4	99.7	Limit: 61-142	% Rec	1		10/16/24 0000	10/16/24 1715	BDF
Surrogate: Toluene-d8	98.4	Limit: 86-114	% Rec	1		10/16/24 0000	10/16/24 1715	BDF
Surrogate: Toluene-d8	92.3	Limit: 82-121	% Rec	1		10/17/24 0000	10/17/24 2016	CSM
Surrogate: Toluene-d8	98.4	Limit: 82-121	% Rec	1		10/16/24 0000	10/16/24 1715	BDF
Surrogate: 4-Bromofluorobenzene	97.0	Limit: 78-121	% Rec	1		10/16/24 0000	10/16/24 1715	BDF
Surrogate: 4-Bromofluorobenzene	98.6	Limit: 80-116	% Rec	1		10/17/24 0000	10/17/24 2016	CSM
Surrogate: 4-Bromofluorobenzene	97.0	Limit: 80-116	% Rec	1		10/16/24 0000	10/16/24 1715	BDF

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		10/16/24 0803	10/16/24 1833	RVV
Arsenic, total	0.0183	0.0040	mg/L	4		10/16/24 0803	10/16/24 1833	RVV
Barium, total	0.205	0.0040	mg/L	4		10/16/24 0803	10/16/24 1833	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1833	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/16/24 0803	10/16/24 1833	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/16/24 0803	10/16/24 1833	RVV
Cobalt, total	0.0006	0.0004	mg/L	4		10/16/24 0803	10/16/24 1833	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1833	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1833	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1833	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1833	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1833	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/16/24 0803	10/16/24 1833	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/16/24 0803	10/16/24 1833	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/16/24 0803	10/16/24 1833	RVV

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CERTIFICATE OF ANALYSIS

1HJ1078

Client Sample ID:	MW-49A	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/10/2024 12:17
Lab Sample ID:	1HJ1078-07		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
Vinyl Chloride	1.8	1.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
Chloroethane	2.4	1.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
Acetone	<10.0	10.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2039	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
cis-1,2-Dichloroethylene	1.8	1.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
Chloroform	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
Benzene	2.4	1.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
Toluene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
Styrene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
Bromoform	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF

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CERTIFICATE OF ANALYSIS

1HJ1078

Client Sample ID: MW-49A	Collected By: Whipple, Todd
Sample Matrix: Aqueous	Collection Date: 10/10/2024 12:17
Lab Sample ID: 1HJ1078-07	

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1738	BDF
Surrogate: Dibromofluoromethane	96.6	Limit: 75-136	% Rec	1		10/16/24 0000	10/16/24 1738	BDF
Surrogate: Dibromofluoromethane	89.6	Limit: 75-136	% Rec	1		10/17/24 0000	10/17/24 2039	CSM
Surrogate: Dibromofluoromethane	96.6	Limit: 57-134	% Rec	1		10/16/24 0000	10/16/24 1738	BDF
Surrogate: 1,2-Dichloroethane-d4	91.9	Limit: 61-142	% Rec	1		10/17/24 0000	10/17/24 2039	CSM
Surrogate: 1,2-Dichloroethane-d4	98.6	Limit: 53-140	% Rec	1		10/16/24 0000	10/16/24 1738	BDF
Surrogate: 1,2-Dichloroethane-d4	98.6	Limit: 61-142	% Rec	1		10/16/24 0000	10/16/24 1738	BDF
Surrogate: Toluene-d8	96.8	Limit: 82-121	% Rec	1		10/16/24 0000	10/16/24 1738	BDF
Surrogate: Toluene-d8	96.8	Limit: 86-114	% Rec	1		10/16/24 0000	10/16/24 1738	BDF
Surrogate: Toluene-d8	92.6	Limit: 82-121	% Rec	1		10/17/24 0000	10/17/24 2039	CSM
Surrogate: 4-Bromofluorobenzene	97.7	Limit: 80-116	% Rec	1		10/16/24 0000	10/16/24 1738	BDF
Surrogate: 4-Bromofluorobenzene	101	Limit: 80-116	% Rec	1		10/17/24 0000	10/17/24 2039	CSM
Surrogate: 4-Bromofluorobenzene	97.7	Limit: 78-121	% Rec	1		10/16/24 0000	10/16/24 1738	BDF

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		10/16/24 0803	10/16/24 1840	RVV
Arsenic, total	0.0505	0.0040	mg/L	4		10/16/24 0803	10/16/24 1840	RVV
Barium, total	0.616	0.0040	mg/L	4		10/16/24 0803	10/16/24 1840	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1840	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/16/24 0803	10/16/24 1840	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/16/24 0803	10/16/24 1840	RVV
Cobalt, total	0.0102	0.0004	mg/L	4		10/16/24 0803	10/16/24 1840	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1840	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1840	RVV
Nickel, total	0.0456	0.0040	mg/L	4		10/16/24 0803	10/16/24 1840	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1840	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1840	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/16/24 0803	10/16/24 1840	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/16/24 0803	10/16/24 1840	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/16/24 0803	10/16/24 1840	RVV



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CERTIFICATE OF ANALYSIS

1HJ1078

Client Sample ID:	MW-50	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/10/2024 11:14
Lab Sample ID:	1HJ1078-08		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
Chloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
Acetone	<10.0	10.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2102	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
Chloroform	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
Benzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
Toluene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
Styrene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
Bromoform	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF

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CERTIFICATE OF ANALYSIS

1HJ1078

Client Sample ID: MW-50	Collected By: Whipple, Todd
Sample Matrix: Aqueous	Collection Date: 10/10/2024 11:14
Lab Sample ID: 1HJ1078-08	

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1801	BDF
Surrogate: Dibromofluoromethane	97.5	Limit: 75-136	% Rec	1		10/16/24 0000	10/16/24 1801	BDF
Surrogate: Dibromofluoromethane	90.3	Limit: 75-136	% Rec	1		10/17/24 0000	10/17/24 2102	CSM
Surrogate: Dibromofluoromethane	97.5	Limit: 57-134	% Rec	1		10/16/24 0000	10/16/24 1801	BDF
Surrogate: 1,2-Dichloroethane-d4	92.4	Limit: 61-142	% Rec	1		10/17/24 0000	10/17/24 2102	CSM
Surrogate: 1,2-Dichloroethane-d4	98.7	Limit: 53-140	% Rec	1		10/16/24 0000	10/16/24 1801	BDF
Surrogate: 1,2-Dichloroethane-d4	98.7	Limit: 61-142	% Rec	1		10/16/24 0000	10/16/24 1801	BDF
Surrogate: Toluene-d8	98.4	Limit: 82-121	% Rec	1		10/16/24 0000	10/16/24 1801	BDF
Surrogate: Toluene-d8	98.4	Limit: 86-114	% Rec	1		10/16/24 0000	10/16/24 1801	BDF
Surrogate: Toluene-d8	92.5	Limit: 82-121	% Rec	1		10/17/24 0000	10/17/24 2102	CSM
Surrogate: 4-Bromofluorobenzene	96.7	Limit: 78-121	% Rec	1		10/16/24 0000	10/16/24 1801	BDF
Surrogate: 4-Bromofluorobenzene	102	Limit: 80-116	% Rec	1		10/17/24 0000	10/17/24 2102	CSM
Surrogate: 4-Bromofluorobenzene	96.7	Limit: 80-116	% Rec	1		10/16/24 0000	10/16/24 1801	BDF

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		10/16/24 0803	10/16/24 1846	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1846	RVV
Barium, total	0.253	0.0040	mg/L	4		10/16/24 0803	10/16/24 1846	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1846	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/16/24 0803	10/16/24 1846	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/16/24 0803	10/16/24 1846	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		10/16/24 0803	10/16/24 1846	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1846	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1846	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1846	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1846	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1846	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/16/24 0803	10/16/24 1846	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/16/24 0803	10/16/24 1846	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/16/24 0803	10/16/24 1846	RVV



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CERTIFICATE OF ANALYSIS

1HJ1078

Client Sample ID:	MW-51	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/10/2024 12:06
Lab Sample ID:	1HJ1078-09		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
Chloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
Acetone	<10.0	10.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2124	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
Chloroform	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
Benzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
Toluene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
Styrene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
Bromoform	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF

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CERTIFICATE OF ANALYSIS

1HJ1078

Client Sample ID:	MW-51	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/10/2024 12:06
Lab Sample ID:	1HJ1078-09		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1823	BDF
Surrogate: Dibromofluoromethane	95.9	Limit: 57-134	% Rec	1		10/16/24 0000	10/16/24 1823	BDF
Surrogate: Dibromofluoromethane	95.9	Limit: 75-136	% Rec	1		10/16/24 0000	10/16/24 1823	BDF
Surrogate: Dibromofluoromethane	89.2	Limit: 75-136	% Rec	1		10/17/24 0000	10/17/24 2124	CSM
Surrogate: 1,2-Dichloroethane-d4	99.1	Limit: 53-140	% Rec	1		10/16/24 0000	10/16/24 1823	BDF
Surrogate: 1,2-Dichloroethane-d4	92.2	Limit: 61-142	% Rec	1		10/17/24 0000	10/17/24 2124	CSM
Surrogate: 1,2-Dichloroethane-d4	99.1	Limit: 61-142	% Rec	1		10/16/24 0000	10/16/24 1823	BDF
Surrogate: Toluene-d8	98.2	Limit: 86-114	% Rec	1		10/16/24 0000	10/16/24 1823	BDF
Surrogate: Toluene-d8	93.4	Limit: 82-121	% Rec	1		10/17/24 0000	10/17/24 2124	CSM
Surrogate: Toluene-d8	98.2	Limit: 82-121	% Rec	1		10/16/24 0000	10/16/24 1823	BDF
Surrogate: 4-Bromofluorobenzene	96.5	Limit: 78-121	% Rec	1		10/16/24 0000	10/16/24 1823	BDF
Surrogate: 4-Bromofluorobenzene	98.8	Limit: 80-116	% Rec	1		10/17/24 0000	10/17/24 2124	CSM
Surrogate: 4-Bromofluorobenzene	96.5	Limit: 80-116	% Rec	1		10/16/24 0000	10/16/24 1823	BDF

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		10/16/24 0803	10/16/24 1852	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1852	RVV
Barium, total	0.436	0.0040	mg/L	4		10/16/24 0803	10/16/24 1852	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1852	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/16/24 0803	10/16/24 1852	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/16/24 0803	10/16/24 1852	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		10/16/24 0803	10/16/24 1852	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1852	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1852	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1852	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1852	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1852	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/16/24 0803	10/16/24 1852	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/16/24 0803	10/16/24 1852	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/16/24 0803	10/16/24 1852	RVV



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CERTIFICATE OF ANALYSIS

1HJ1078

Client Sample ID:	MW-7	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/10/2024 13:55
Lab Sample ID:	1HJ1078-10		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
Chloroethane	1.7	1.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
Acetone	<10.0	10.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
Chloroform	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
Benzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
Toluene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
Styrene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
Bromoform	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF

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CERTIFICATE OF ANALYSIS

1HJ1078

Client Sample ID: MW-7	Collected By: Whipple, Todd
Sample Matrix: Aqueous	Collection Date: 10/10/2024 13:55
Lab Sample ID: 1HJ1078-10	

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1517	BDF
Surrogate: Dibromofluoromethane	91.0	Limit: 75-136	% Rec	1		10/16/24 0000	10/16/24 1517	BDF
Surrogate: Dibromofluoromethane	91.0	Limit: 57-134	% Rec	1		10/16/24 0000	10/16/24 1517	BDF
Surrogate: 1,2-Dichloroethane-d4	92.1	Limit: 53-140	% Rec	1		10/16/24 0000	10/16/24 1517	BDF
Surrogate: 1,2-Dichloroethane-d4	92.1	Limit: 61-142	% Rec	1		10/16/24 0000	10/16/24 1517	BDF
Surrogate: Toluene-d8	92.4	Limit: 86-114	% Rec	1		10/16/24 0000	10/16/24 1517	BDF
Surrogate: Toluene-d8	92.4	Limit: 82-121	% Rec	1		10/16/24 0000	10/16/24 1517	BDF
Surrogate: 4-Bromofluorobenzene	101	Limit: 78-121	% Rec	1		10/16/24 0000	10/16/24 1517	BDF
Surrogate: 4-Bromofluorobenzene	101	Limit: 80-116	% Rec	1		10/16/24 0000	10/16/24 1517	BDF

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		10/16/24 0803	10/16/24 1858	RVV
Arsenic, total	0.215	0.0040	mg/L	4		10/16/24 0803	10/16/24 1858	RVV
Barium, total	0.343	0.0040	mg/L	4		10/16/24 0803	10/16/24 1858	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1858	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/16/24 0803	10/16/24 1858	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/16/24 0803	10/16/24 1858	RVV
Cobalt, total	0.0038	0.0004	mg/L	4		10/16/24 0803	10/16/24 1858	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1858	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1858	RVV
Nickel, total	0.0074	0.0040	mg/L	4		10/16/24 0803	10/16/24 1858	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1858	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1858	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/16/24 0803	10/16/24 1858	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/16/24 0803	10/16/24 1858	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/16/24 0803	10/16/24 1858	RVV



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CERTIFICATE OF ANALYSIS

1HJ1078

Client Sample ID:	MW-9	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/10/2024 13:01
Lab Sample ID:	1HJ1078-11		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
Chloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
Acetone	<10.0	10.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
Chloroform	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
Benzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
Toluene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
Styrene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
Bromoform	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF

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CERTIFICATE OF ANALYSIS

1HJ1078

Client Sample ID:	MW-9	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/10/2024 13:01
Lab Sample ID:	1HJ1078-11		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1539	BDF
Surrogate: Dibromofluoromethane	92.1	Limit: 75-136	% Rec	1		10/16/24 0000	10/16/24 1539	BDF
Surrogate: Dibromofluoromethane	92.1	Limit: 57-134	% Rec	1		10/16/24 0000	10/16/24 1539	BDF
Surrogate: 1,2-Dichloroethane-d4	93.9	Limit: 53-140	% Rec	1		10/16/24 0000	10/16/24 1539	BDF
Surrogate: 1,2-Dichloroethane-d4	93.9	Limit: 61-142	% Rec	1		10/16/24 0000	10/16/24 1539	BDF
Surrogate: Toluene-d8	94.1	Limit: 82-121	% Rec	1		10/16/24 0000	10/16/24 1539	BDF
Surrogate: Toluene-d8	94.1	Limit: 86-114	% Rec	1		10/16/24 0000	10/16/24 1539	BDF
Surrogate: 4-Bromofluorobenzene	101	Limit: 78-121	% Rec	1		10/16/24 0000	10/16/24 1539	BDF
Surrogate: 4-Bromofluorobenzene	101	Limit: 80-116	% Rec	1		10/16/24 0000	10/16/24 1539	BDF

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		10/16/24 0803	10/16/24 1904	RVV
Arsenic, total	0.0143	0.0040	mg/L	4		10/16/24 0803	10/16/24 1904	RVV
Barium, total	0.185	0.0040	mg/L	4		10/16/24 0803	10/16/24 1904	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1904	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/16/24 0803	10/16/24 1904	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/16/24 0803	10/16/24 1904	RVV
Cobalt, total	0.0066	0.0004	mg/L	4		10/16/24 0803	10/16/24 1904	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1904	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1904	RVV
Nickel, total	0.0161	0.0040	mg/L	4		10/16/24 0803	10/16/24 1904	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1904	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1904	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/16/24 0803	10/16/24 1904	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/16/24 0803	10/16/24 1904	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/16/24 0803	10/16/24 1904	RVV



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CERTIFICATE OF ANALYSIS

1HJ1078

Client Sample ID:	MW-13R	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/10/2024 9:07
Lab Sample ID:	1HJ1078-12		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
Chloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
Acetone	<10.0	10.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
Chloroform	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
Benzene	2.8	1.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
Toluene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
Chlorobenzene	43.4	1.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
Styrene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
Bromoform	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF

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CERTIFICATE OF ANALYSIS

1HJ1078

Client Sample ID:	MW-13R	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/10/2024 9:07
Lab Sample ID:	1HJ1078-12		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
1,4-Dichlorobenzene	1.8	1.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1602	BDF
Surrogate: Dibromofluoromethane	90.5	Limit: 75-136	% Rec	1		10/16/24 0000	10/16/24 1602	BDF
Surrogate: Dibromofluoromethane	90.5	Limit: 57-134	% Rec	1		10/16/24 0000	10/16/24 1602	BDF
Surrogate: 1,2-Dichloroethane-d4	93.2	Limit: 53-140	% Rec	1		10/16/24 0000	10/16/24 1602	BDF
Surrogate: 1,2-Dichloroethane-d4	93.2	Limit: 61-142	% Rec	1		10/16/24 0000	10/16/24 1602	BDF
Surrogate: Toluene-d8	93.9	Limit: 82-121	% Rec	1		10/16/24 0000	10/16/24 1602	BDF
Surrogate: Toluene-d8	93.9	Limit: 86-114	% Rec	1		10/16/24 0000	10/16/24 1602	BDF
Surrogate: 4-Bromofluorobenzene	103	Limit: 80-116	% Rec	1		10/16/24 0000	10/16/24 1602	BDF
Surrogate: 4-Bromofluorobenzene	103	Limit: 78-121	% Rec	1		10/16/24 0000	10/16/24 1602	BDF

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		10/16/24 0803	10/16/24 1910	RVV
Arsenic, total	0.192	0.0040	mg/L	4		10/16/24 0803	10/16/24 1910	RVV
Barium, total	0.575	0.0040	mg/L	4		10/16/24 0803	10/16/24 1910	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1910	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/16/24 0803	10/16/24 1910	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/16/24 0803	10/16/24 1910	RVV
Cobalt, total	0.0036	0.0004	mg/L	4		10/16/24 0803	10/16/24 1910	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1910	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1910	RVV
Nickel, total	0.0095	0.0040	mg/L	4		10/16/24 0803	10/16/24 1910	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1910	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1910	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/16/24 0803	10/16/24 1910	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/16/24 0803	10/16/24 1910	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/16/24 0803	10/16/24 1910	RVV



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CERTIFICATE OF ANALYSIS

1HJ1078

Client Sample ID:	MW-14	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/10/2024 8:45
Lab Sample ID:	1HJ1078-13		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
Chloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
Acetone	<10.0	10.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
Chloroform	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
Benzene	1.6	1.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
Toluene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
Chlorobenzene	1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
Styrene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
Bromoform	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF

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CERTIFICATE OF ANALYSIS

1HJ1078

Client Sample ID: MW-14	Collected By: Whipple, Todd
Sample Matrix: Aqueous	Collection Date: 10/10/2024 8:45
Lab Sample ID: 1HJ1078-13	

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
1,4-Dichlorobenzene	3.3	1.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/16/24 0000	10/16/24 1625	BDF
Surrogate: Dibromofluoromethane	91.8	Limit: 57-134	% Rec	1		10/16/24 0000	10/16/24 1625	BDF
Surrogate: Dibromofluoromethane	91.8	Limit: 75-136	% Rec	1		10/16/24 0000	10/16/24 1625	BDF
Surrogate: 1,2-Dichloroethane-d4	94.3	Limit: 53-140	% Rec	1		10/16/24 0000	10/16/24 1625	BDF
Surrogate: 1,2-Dichloroethane-d4	94.3	Limit: 61-142	% Rec	1		10/16/24 0000	10/16/24 1625	BDF
Surrogate: Toluene-d8	93.5	Limit: 86-114	% Rec	1		10/16/24 0000	10/16/24 1625	BDF
Surrogate: Toluene-d8	93.5	Limit: 82-121	% Rec	1		10/16/24 0000	10/16/24 1625	BDF
Surrogate: 4-Bromofluorobenzene	100	Limit: 78-121	% Rec	1		10/16/24 0000	10/16/24 1625	BDF
Surrogate: 4-Bromofluorobenzene	100	Limit: 80-116	% Rec	1		10/16/24 0000	10/16/24 1625	BDF

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		10/16/24 0803	10/16/24 1916	RVV
Arsenic, total	0.0919	0.0040	mg/L	4		10/16/24 0803	10/16/24 1916	RVV
Barium, total	0.575	0.0040	mg/L	4		10/16/24 0803	10/16/24 1916	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1916	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/16/24 0803	10/16/24 1916	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/16/24 0803	10/16/24 1916	RVV
Cobalt, total	0.0099	0.0004	mg/L	4		10/16/24 0803	10/16/24 1916	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1916	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1916	RVV
Nickel, total	0.0077	0.0040	mg/L	4		10/16/24 0803	10/16/24 1916	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1916	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1916	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/16/24 0803	10/16/24 1916	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/16/24 0803	10/16/24 1916	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/16/24 0803	10/16/24 1916	RVV

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CERTIFICATE OF ANALYSIS

1HJ1078

Client Sample ID:	MW-29	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/10/2024 14:15
Lab Sample ID:	1HJ1078-14		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
Bromomethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
Chloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
Acetone	<10.0	10.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
Acrylonitrile	<5.0	5.0	ug/L	1	Q12	10/17/24 0000	10/17/24 1801	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
Chloroform	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
Benzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
Dibromomethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
Toluene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
Xylenes, total	<2.0	2.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
Styrene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
Bromoform	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM

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CERTIFICATE OF ANALYSIS

1HJ1078

Client Sample ID:	MW-29	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/10/2024 14:15
Lab Sample ID:	1HJ1078-14		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 1801	CSM
Surrogate: Dibromofluoromethane	90.7	Limit: 75-136	% Rec	1		10/17/24 0000	10/17/24 1801	CSM
Surrogate: Dibromofluoromethane	90.7	Limit: 57-134	% Rec	1	Q12	10/17/24 0000	10/17/24 1801	CSM
Surrogate: 1,2-Dichloroethane-d4	91.0	Limit: 53-140	% Rec	1	Q12	10/17/24 0000	10/17/24 1801	CSM
Surrogate: 1,2-Dichloroethane-d4	91.0	Limit: 61-142	% Rec	1		10/17/24 0000	10/17/24 1801	CSM
Surrogate: Toluene-d8	93.4	Limit: 82-121	% Rec	1		10/17/24 0000	10/17/24 1801	CSM
Surrogate: Toluene-d8	93.4	Limit: 86-114	% Rec	1	Q12	10/17/24 0000	10/17/24 1801	CSM
Surrogate: 4-Bromofluorobenzene	101	Limit: 78-121	% Rec	1	Q12	10/17/24 0000	10/17/24 1801	CSM
Surrogate: 4-Bromofluorobenzene	101	Limit: 80-116	% Rec	1		10/17/24 0000	10/17/24 1801	CSM

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		10/16/24 0803	10/16/24 1935	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1935	RVV
Barium, total	0.0977	0.0040	mg/L	4		10/16/24 0803	10/16/24 1935	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1935	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/16/24 0803	10/16/24 1935	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/16/24 0803	10/16/24 1935	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		10/16/24 0803	10/16/24 1935	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1935	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1935	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1935	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1935	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1935	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/16/24 0803	10/16/24 1935	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/16/24 0803	10/16/24 1935	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/16/24 0803	10/16/24 1935	RVV



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CERTIFICATE OF ANALYSIS

1HJ1078

Client Sample ID:	MW-31R	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/10/2024 12:35
Lab Sample ID:	1HJ1078-15		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
Bromomethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
Chloroethane	2.6	1.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
Acetone	<10.0	10.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
trans-1,2-Dichloroethylene	1.8	1.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
1,1-Dichloroethane	3.1	1.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
cis-1,2-Dichloroethylene	16.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
Chloroform	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
Benzene	2.3	1.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
Dibromomethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
Toluene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
Chlorobenzene	26.1	1.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
Ethylbenzene	2.8	1.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
Xylenes, total	<2.0	2.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
Styrene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
Bromoform	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM

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CERTIFICATE OF ANALYSIS

1HJ1078

Client Sample ID:	MW-31R	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/10/2024 12:35
Lab Sample ID:	1HJ1078-15		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
1,4-Dichlorobenzene	16.6	1.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 1824	CSM
Surrogate: Dibromofluoromethane	90.2	Limit: 75-136	% Rec	1		10/17/24 0000	10/17/24 1824	CSM
Surrogate: Dibromofluoromethane	90.2	Limit: 57-134	% Rec	1		10/17/24 0000	10/17/24 1824	CSM
Surrogate: 1,2-Dichloroethane-d4	91.6	Limit: 61-142	% Rec	1		10/17/24 0000	10/17/24 1824	CSM
Surrogate: 1,2-Dichloroethane-d4	91.6	Limit: 53-140	% Rec	1		10/17/24 0000	10/17/24 1824	CSM
Surrogate: Toluene-d8	93.6	Limit: 82-121	% Rec	1		10/17/24 0000	10/17/24 1824	CSM
Surrogate: Toluene-d8	93.6	Limit: 86-114	% Rec	1		10/17/24 0000	10/17/24 1824	CSM
Surrogate: 4-Bromofluorobenzene	101	Limit: 80-116	% Rec	1		10/17/24 0000	10/17/24 1824	CSM
Surrogate: 4-Bromofluorobenzene	101	Limit: 78-121	% Rec	1		10/17/24 0000	10/17/24 1824	CSM

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		10/16/24 0803	10/16/24 1941	RVV
Arsenic, total	0.0227	0.0040	mg/L	4		10/16/24 0803	10/16/24 1941	RVV
Barium, total	1.01	0.0040	mg/L	4		10/16/24 0803	10/16/24 1941	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1941	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/16/24 0803	10/16/24 1941	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/16/24 0803	10/16/24 1941	RVV
Cobalt, total	0.0146	0.0004	mg/L	4		10/16/24 0803	10/16/24 1941	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1941	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1941	RVV
Nickel, total	0.0227	0.0040	mg/L	4		10/16/24 0803	10/16/24 1941	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1941	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1941	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/16/24 0803	10/16/24 1941	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/16/24 0803	10/16/24 1941	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/16/24 0803	10/16/24 1941	RVV

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CERTIFICATE OF ANALYSIS

1HJ1078

Client Sample ID:	MW-33	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/10/2024 13:18
Lab Sample ID:	1HJ1078-16		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
Bromomethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
Chloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
Acetone	<10.0	10.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
Chloroform	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
Benzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
Dibromomethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
Toluene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
Xylenes, total	<2.0	2.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
Styrene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
Bromoform	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM

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CERTIFICATE OF ANALYSIS

1HJ1078

Client Sample ID:	MW-33	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/10/2024 13:18
Lab Sample ID:	1HJ1078-16		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 1846	CSM
Surrogate: Dibromofluoromethane	91.2	Limit: 57-134	% Rec	1		10/17/24 0000	10/17/24 1846	CSM
Surrogate: Dibromofluoromethane	91.2	Limit: 75-136	% Rec	1		10/17/24 0000	10/17/24 1846	CSM
Surrogate: 1,2-Dichloroethane-d4	93.0	Limit: 53-140	% Rec	1		10/17/24 0000	10/17/24 1846	CSM
Surrogate: 1,2-Dichloroethane-d4	93.0	Limit: 61-142	% Rec	1		10/17/24 0000	10/17/24 1846	CSM
Surrogate: Toluene-d8	92.8	Limit: 86-114	% Rec	1		10/17/24 0000	10/17/24 1846	CSM
Surrogate: Toluene-d8	92.8	Limit: 82-121	% Rec	1		10/17/24 0000	10/17/24 1846	CSM
Surrogate: 4-Bromofluorobenzene	101	Limit: 78-121	% Rec	1		10/17/24 0000	10/17/24 1846	CSM
Surrogate: 4-Bromofluorobenzene	101	Limit: 80-116	% Rec	1		10/17/24 0000	10/17/24 1846	CSM

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		10/16/24 0803	10/16/24 1947	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1947	RVV
Barium, total	0.239	0.0040	mg/L	4		10/16/24 0803	10/16/24 1947	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1947	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/16/24 0803	10/16/24 1947	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/16/24 0803	10/16/24 1947	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		10/16/24 0803	10/16/24 1947	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1947	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1947	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1947	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1947	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1947	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/16/24 0803	10/16/24 1947	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/16/24 0803	10/16/24 1947	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/16/24 0803	10/16/24 1947	RVV

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CERTIFICATE OF ANALYSIS

1HJ1078

Client Sample ID:	MW-211	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/10/2024 12:48
Lab Sample ID:	1HJ1078-17		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
Bromomethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
Chloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
Acetone	<10.0	10.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
Chloroform	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
Benzene	1.2	1.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
Dibromomethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
Toluene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
Chlorobenzene	4.7	1.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
Xylenes, total	<2.0	2.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
Styrene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
Bromoform	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM

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CERTIFICATE OF ANALYSIS

1HJ1078

Client Sample ID:	MW-211	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/10/2024 12:48
Lab Sample ID:	1HJ1078-17		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 1909	CSM
Surrogate: Dibromofluoromethane	90.4	Limit: 57-134	% Rec	1		10/17/24 0000	10/17/24 1909	CSM
Surrogate: Dibromofluoromethane	90.4	Limit: 75-136	% Rec	1		10/17/24 0000	10/17/24 1909	CSM
Surrogate: 1,2-Dichloroethane-d4	93.2	Limit: 53-140	% Rec	1		10/17/24 0000	10/17/24 1909	CSM
Surrogate: 1,2-Dichloroethane-d4	93.2	Limit: 61-142	% Rec	1		10/17/24 0000	10/17/24 1909	CSM
Surrogate: Toluene-d8	94.7	Limit: 82-121	% Rec	1		10/17/24 0000	10/17/24 1909	CSM
Surrogate: Toluene-d8	94.7	Limit: 86-114	% Rec	1		10/17/24 0000	10/17/24 1909	CSM
Surrogate: 4-Bromofluorobenzene	99.3	Limit: 78-121	% Rec	1		10/17/24 0000	10/17/24 1909	CSM
Surrogate: 4-Bromofluorobenzene	99.3	Limit: 80-116	% Rec	1		10/17/24 0000	10/17/24 1909	CSM

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		10/16/24 0803	10/16/24 1953	RVV
Arsenic, total	0.0617	0.0040	mg/L	4		10/16/24 0803	10/16/24 1953	RVV
Barium, total	0.339	0.0040	mg/L	4		10/16/24 0803	10/16/24 1953	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1953	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/16/24 0803	10/16/24 1953	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/16/24 0803	10/16/24 1953	RVV
Cobalt, total	0.0129	0.0004	mg/L	4		10/16/24 0803	10/16/24 1953	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1953	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1953	RVV
Nickel, total	0.0330	0.0040	mg/L	4		10/16/24 0803	10/16/24 1953	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1953	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1953	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/16/24 0803	10/16/24 1953	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/16/24 0803	10/16/24 1953	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/16/24 0803	10/16/24 1953	RVV



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CERTIFICATE OF ANALYSIS

1HJ1078

Client Sample ID:	GU-3	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/10/2024
Lab Sample ID:	1HJ1078-18		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
Bromomethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
Chloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
Acetone	<10.0	10.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
Chloroform	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
Benzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
Dibromomethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
Toluene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
Xylenes, total	<2.0	2.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
Styrene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
Bromoform	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM

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CERTIFICATE OF ANALYSIS

1HJ1078

Client Sample ID:	GU-3	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/10/2024
Lab Sample ID:	1HJ1078-18		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 1931	CSM
Surrogate: Dibromofluoromethane	92.3	Limit: 75-136	% Rec	1		10/17/24 0000	10/17/24 1931	CSM
Surrogate: Dibromofluoromethane	92.3	Limit: 57-134	% Rec	1		10/17/24 0000	10/17/24 1931	CSM
Surrogate: 1,2-Dichloroethane-d4	95.0	Limit: 53-140	% Rec	1		10/17/24 0000	10/17/24 1931	CSM
Surrogate: 1,2-Dichloroethane-d4	95.0	Limit: 61-142	% Rec	1		10/17/24 0000	10/17/24 1931	CSM
Surrogate: Toluene-d8	94.2	Limit: 82-121	% Rec	1		10/17/24 0000	10/17/24 1931	CSM
Surrogate: Toluene-d8	94.2	Limit: 86-114	% Rec	1		10/17/24 0000	10/17/24 1931	CSM
Surrogate: 4-Bromofluorobenzene	99.5	Limit: 80-116	% Rec	1		10/17/24 0000	10/17/24 1931	CSM
Surrogate: 4-Bromofluorobenzene	99.5	Limit: 78-121	% Rec	1		10/17/24 0000	10/17/24 1931	CSM

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		10/16/24 0803	10/16/24 1959	RVV
Arsenic, total	0.0074	0.0040	mg/L	4		10/16/24 0803	10/16/24 1959	RVV
Barium, total	0.184	0.0040	mg/L	4		10/16/24 0803	10/16/24 1959	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1959	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/16/24 0803	10/16/24 1959	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/16/24 0803	10/16/24 1959	RVV
Cobalt, total	0.0008	0.0004	mg/L	4		10/16/24 0803	10/16/24 1959	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1959	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1959	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1959	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1959	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 1959	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/16/24 0803	10/16/24 1959	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/16/24 0803	10/16/24 1959	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/16/24 0803	10/16/24 1959	RVV

Client Sample ID:	MW-7A North	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/10/2024 13:35
Lab Sample ID:	1HJ1078-19		

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Arsenic, total	0.0067	0.0040	mg/L	4		10/16/24 0803	10/16/24 2005	RVV



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CERTIFICATE OF ANALYSIS

1HJ1078

Client Sample ID:	MW-7B Northwest	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/10/2024 13:42
Lab Sample ID:	1HJ1078-20		

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Arsenic, total	0.673	0.0040	mg/L	4		10/16/24 0803	10/16/24 2011	RVV

Client Sample ID:	Field Duplicate	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/10/2024
Lab Sample ID:	1HJ1078-21		

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		10/16/24 0803	10/16/24 2017	RVV
Arsenic, total	0.0046	0.0040	mg/L	4		10/16/24 0803	10/16/24 2017	RVV
Barium, total	0.0341	0.0040	mg/L	4		10/16/24 0803	10/16/24 2017	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 2017	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/16/24 0803	10/16/24 2017	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/16/24 0803	10/16/24 2017	RVV
Cobalt, total	0.0055	0.0004	mg/L	4		10/16/24 0803	10/16/24 2017	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 2017	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/29/24 1758	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/29/24 1752	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 2017	RVV
Nickel, total	0.0140	0.0040	mg/L	4		10/16/24 0803	10/16/24 2017	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 2017	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/16/24 0803	10/16/24 2017	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/16/24 0803	10/16/24 2017	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/16/24 0803	10/16/24 2017	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/16/24 0803	10/16/24 2017	RVV



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CERTIFICATE OF ANALYSIS

1HJ1078

Batch Log Summary

Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	1HJ0834	1HJ0834-BLK1	
		1HJ0834-MS1	1HJ1077-01
		1HJ0834-MSD1	1HJ1077-01
		1HJ1078-01	MW-36 (B)
		1HJ0834-BS1	
		1HJ0834-MSD1	1HJ1077-01
		1HJ0834-PS1	1HJ1077-01

Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	1HJ0910	1HJ0910-BLK1	
		1HJ0910-BS1	
		1HJ1078-02	MW-37 (B)
		1HJ0910-MS1	1HJ1078-02
		1HJ0910-MSD1	1HJ1078-02
		1HJ0910-PS1	1HJ1078-02
		1HJ1078-03	MW-39 (B)
		1HJ1078-04	MW-40 (B)
		1HJ1078-05	MW-47 (B)
		1HJ1078-06	MW-48A
		1HJ1078-07	MW-49A
		1HJ1078-08	MW-50
		1HJ1078-09	MW-51
		1HJ1078-10	MW-7
		1HJ1078-11	MW-9
		1HJ1078-12	MW-13R
		1HJ1078-13	MW-14
		1HJ1078-14	MW-29
		1HJ1078-15	MW-31R
		1HJ1078-16	MW-33
		1HJ1078-17	MW-211
1HJ1078-18	GU-3		
1HJ1078-19	MW-7A North		
1HJ1078-20	MW-7B Northwest		
1HJ1078-21	Field Duplicate		
1HJ1078-21RE1	Field Duplicate		
1HJ1078-21RE2	Field Duplicate		

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260B	1HJ1047	1HJ1047-BS1	
		1HJ1047-BSD1	



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CERTIFICATE OF ANALYSIS

1HJ1078

EPA 8260B	1HJ1047	1HJ1047-BLK1	
		1HJ1078-01	MW-36 (B)
		1HJ1078-01	MW-36 (B)
		1HJ1078-02	MW-37 (B)
		1HJ1078-02	MW-37 (B)
		1HJ1078-03	MW-39 (B)
		1HJ1078-03	MW-39 (B)
		1HJ1078-04	MW-40 (B)
		1HJ1078-04	MW-40 (B)
		1HJ1078-05	MW-47 (B)
		1HJ1078-05	MW-47 (B)
		1HJ1078-06	MW-48A
		1HJ1078-06	MW-48A
		1HJ1078-07	MW-49A
		1HJ1078-07	MW-49A
		1HJ1078-08	MW-50
		1HJ1078-08	MW-50
		1HJ1078-09	MW-51
		1HJ1078-09	MW-51
		1HJ1047-MS1	1HJ1038-07
		1HJ1047-MSD1	1HJ1038-07

Method	Batch	Laboratory ID	Client / Source ID
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EPA 8260B	1HJ1146	1HJ1146-BS1	
		1HJ1146-BSD1	
		1HJ1146-BLK1	
		1HJ1146-MS1	1HJ1078-08RE1
		1HJ1146-MSD1	1HJ1078-08RE1
		1HJ1078-14	MW-29
		1HJ1078-14	MW-29
		1HJ1078-15	MW-31R
		1HJ1078-16	MW-33
		1HJ1078-17	MW-211
		1HJ1078-18	GU-3
		1HJ1078-05RE1	MW-47 (B)
		1HJ1078-06RE1	MW-48A
		1HJ1078-07RE1	MW-49A
		1HJ1078-08RE1	MW-50
		1HJ1078-09RE1	MW-51

Method	Batch	Laboratory ID	Client / Source ID
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EPA 8260B	1HJ1195	1HJ1195-BS1	
		1HJ1195-BSD1	



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CERTIFICATE OF ANALYSIS

1HJ1078

EPA 8260B	1HJ1195	1HJ1195-BLK1	
		1HJ1078-10	MW-7
		1HJ1078-11	MW-9
		1HJ1078-12	MW-13R
		1HJ1078-13	MW-14

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260B	1HJ1355	1HJ1355-BS1	
		1HJ1355-BSD1	
		1HJ1355-BLK1	
		1HJ1078-01RE1	MW-36 (B)
		1HJ1078-02RE1	MW-37 (B)
		1HJ1078-03RE1	MW-39 (B)
		1HJ1078-04RE1	MW-40 (B)
		1HJ1355-MS1	1HJ1617-04
		1HJ1355-MSD1	1HJ1617-04
		1HJ1355-BS2	
		1HJ1355-BSD2	
		1HJ1355-BLK2	
		1HJ1355-MS2	1HJ1633-01
		1HJ1355-MSD2	1HJ1633-01

Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	1HJ1786	1HJ1786-BLK1	
		1HJ1786-BS1	
		1HJ1786-MS1	1HJ2157-01
		1HJ1786-MSD1	1HJ2157-01
		1HJ1786-PS1	1HJ2157-01
		1HJ1078-04RE3	MW-40 (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 1HJ1047 - EPA 5030B - EPA 8260B										
Blank (1HJ1047-BLK1) Prepared: 10/16/24 00:00 Analyzed: 10/16/24 11:55										
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							



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ1078

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1047 - EPA 5030B - EPA 8260B										
Blank (1HJ1047-BLK1)										
Prepared: 10/16/24 00:00 Analyzed: 10/16/24 11:55										
Methylene Chloride	<5.0	5.0	ug/L							
Acrylonitrile	<5.0	5.0	ug/L							
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L							
1,1-Dichloroethane	<1.0	1.0	ug/L							
Vinyl Acetate	<5.0	5.0	ug/L							
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L							
2-Butanone (MEK)	<10.0	10.0	ug/L							
Bromochloromethane	<1.0	1.0	ug/L							
Chloroform	<1.0	1.0	ug/L							
1,1,1-Trichloroethane	<1.0	1.0	ug/L							
Carbon Tetrachloride	<1.0	1.0	ug/L							
Benzene	<1.0	1.0	ug/L							
1,2-Dichloroethane	<1.0	1.0	ug/L							
Trichloroethylene	<1.0	1.0	ug/L							
1,2-Dichloropropane	<1.0	1.0	ug/L							
Dibromomethane	<1.0	1.0	ug/L							
Bromodichloromethane	<1.0	1.0	ug/L							
cis-1,3-Dichloropropene	<1.0	1.0	ug/L							
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L							
Toluene	<1.0	1.0	ug/L							
trans-1,3-Dichloropropene	<1.0	1.0	ug/L							
1,1,2-Trichloroethane	<1.0	1.0	ug/L							
Tetrachloroethylene	<1.0	1.0	ug/L							
2-Hexanone (MBK)	<5.0	5.0	ug/L							
Dibromochloromethane	<1.0	1.0	ug/L							
1,2-Dibromoethane	<1.0	1.0	ug/L							
Chlorobenzene	<1.0	1.0	ug/L							
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L							
Ethylbenzene	<1.0	1.0	ug/L							
Xylenes, total	<2.0	2.0	ug/L							
Styrene	<1.0	1.0	ug/L							
Bromoform	<1.0	1.0	ug/L							
1,2,3-Trichloropropane	<1.0	1.0	ug/L							
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L							
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L							
1,4-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L							

Surrogate: Dibromofluoromethane	50.3	ug/L	50.2	100	57-134
Surrogate: Dibromofluoromethane	50.3	ug/L	50.2	100	75-136
Surrogate: 1,2-Dichloroethane-d4	51.0	ug/L	50.4	101	53-140
Surrogate: 1,2-Dichloroethane-d4	51.0	ug/L	50.4	101	61-142
Surrogate: Toluene-d8	49.7	ug/L	50.5	98.4	86-114

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CERTIFICATE OF ANALYSIS

1HJ1078

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1047 - EPA 5030B - EPA 8260B										
Blank (1HJ1047-BLK1)										
				Prepared: 10/16/24 00:00 Analyzed: 10/16/24 11:55						
Surrogate: Toluene-d8	49.7		ug/L	50.5		98.4	82-121			
Surrogate: 4-Bromofluorobenzene	48.8		ug/L	50.2		97.3	78-121			
Surrogate: 4-Bromofluorobenzene	48.8		ug/L	50.2		97.3	80-116			
LCS (1HJ1047-BS1)										
				Prepared: 10/16/24 00:00 Analyzed: 10/16/24 10:47						
Chloromethane	24.81	1.0	ug/L	30.0		82.7	63-155			
Vinyl Chloride	24.67	1.0	ug/L	30.0		82.2	70-154			
Bromomethane	25.24	1.0	ug/L	30.0		84.1	52-176			
Chloroethane	29.29	1.0	ug/L	30.0		97.6	72-148			
Trichlorofluoromethane	26.71	1.0	ug/L	30.0		89.0	70-152			
1,1-Dichloroethylene	48.31	1.0	ug/L	50.0		96.6	70-148			
Acetone	95.84	10.0	ug/L	101		94.7	43-172			
Methyl Iodide	104.1	1.0	ug/L	102		102	69-170			
Methylene Chloride	50.85	5.0	ug/L	50.0		102	68-142			
Acrylonitrile	95.89	5.0	ug/L	100		95.5	56-135			
trans-1,2-Dichloroethylene	48.79	1.0	ug/L	50.0		97.6	66-148			
1,1-Dichloroethane	48.91	1.0	ug/L	50.0		97.8	66-143			
Vinyl Acetate	106.8	5.0	ug/L	100		107	43-153			
cis-1,2-Dichloroethylene	48.17	1.0	ug/L	50.0		96.3	71-149			
2-Butanone (MEK)	95.20	10.0	ug/L	102		93.5	52-159			
Bromochloromethane	46.95	1.0	ug/L	50.0		93.9	69-143			
Chloroform	45.77	1.0	ug/L	50.0		91.5	69-144			
1,1,1-Trichloroethane	48.10	1.0	ug/L	50.0		96.2	62-129			
Carbon Tetrachloride	50.94	1.0	ug/L	50.0		102	63-141			
Benzene	46.30	1.0	ug/L	50.0		92.6	71-134			
1,2-Dichloroethane	46.89	1.0	ug/L	50.0		93.8	72-132			
Trichloroethylene	46.66	1.0	ug/L	50.0		93.3	71-135			
1,2-Dichloropropane	48.28	1.0	ug/L	50.0		96.6	69-136			
Dibromomethane	50.22	1.0	ug/L	50.0		100	73-147			
Bromodichloromethane	49.25	1.0	ug/L	50.0		98.5	68-129			
cis-1,3-Dichloropropene	46.59	1.0	ug/L	50.0		93.2	65-134			
4-Methyl-2-pentanone (MIBK)	104.4	5.0	ug/L	100		104	58-147			
Toluene	45.45	1.0	ug/L	50.0		90.9	72-133			
trans-1,3-Dichloropropene	48.12	1.0	ug/L	50.0		96.2	67-130			
1,1,2-Trichloroethane	48.32	1.0	ug/L	50.0		96.6	69-135			
Tetrachloroethylene	47.11	1.0	ug/L	50.0		94.2	69-130			
2-Hexanone (MBK)	105.4	5.0	ug/L	99.3		106	55-144			
Dibromochloromethane	49.49	1.0	ug/L	50.0		99.0	73-127			
1,2-Dibromoethane	48.07	1.0	ug/L	50.0		96.1	67-132			
Chlorobenzene	46.02	1.0	ug/L	50.0		92.0	72-123			
1,1,1,2-Tetrachloroethane	48.26	1.0	ug/L	50.0		96.5	73-127			
Ethylbenzene	47.35	1.0	ug/L	50.0		94.7	71-127			
Xylenes, total	144.6	2.0	ug/L	150		96.4	74-127			

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CERTIFICATE OF ANALYSIS

1HJ1078

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1047 - EPA 5030B - EPA 8260B										
LCS (1HJ1047-BS1)										
				Prepared: 10/16/24 00:00 Analyzed: 10/16/24 10:47						
Styrene	50.17	1.0	ug/L	50.0		100	66-126			
Bromoform	49.02	1.0	ug/L	50.0		98.0	68-130			
1,2,3-Trichloropropane	50.08	1.0	ug/L	50.0		100	63-136			
trans-1,4-Dichloro-2-butene	92.77	5.0	ug/L	103		90.2	54-134			
1,1,2,2-Tetrachloroethane	48.71	1.0	ug/L	50.0		97.4	61-131			
1,4-Dichlorobenzene	45.31	1.0	ug/L	50.0		90.6	70-129			
1,2-Dichlorobenzene	47.43	1.0	ug/L	50.0		94.9	69-126			
1,2-Dibromo-3-chloropropane	51.43	5.0	ug/L	50.0		103	50-143			
<i>Surrogate: Dibromofluoromethane</i>	50.6		ug/L	50.2		101	57-134			
<i>Surrogate: Dibromofluoromethane</i>	50.6		ug/L	50.2		101	75-136			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	50.4		ug/L	50.4		100	53-140			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	50.4		ug/L	50.4		100	61-142			
<i>Surrogate: Toluene-d8</i>	50.3		ug/L	50.5		99.7	86-114			
<i>Surrogate: Toluene-d8</i>	50.3		ug/L	50.5		99.7	82-121			
<i>Surrogate: 4-Bromofluorobenzene</i>	50.1		ug/L	50.2		99.9	78-121			
<i>Surrogate: 4-Bromofluorobenzene</i>	50.1		ug/L	50.2		99.9	80-116			
LCS Dup (1HJ1047-BSD1)										
				Prepared: 10/16/24 00:00 Analyzed: 10/16/24 11:09						
Chloromethane	23.87	1.0	ug/L	30.0		79.6	63-155	3.86	24	
Vinyl Chloride	23.96	1.0	ug/L	30.0		79.9	70-154	2.92	25	
Bromomethane	24.72	1.0	ug/L	30.0		82.4	52-176	2.08	27	
Chloroethane	28.58	1.0	ug/L	30.0		95.3	72-148	2.45	25	
Trichlorofluoromethane	25.64	1.0	ug/L	30.0		85.5	70-152	4.09	26	
1,1-Dichloroethylene	46.16	1.0	ug/L	50.0		92.3	70-148	4.55	24	
Acetone	109.2	10.0	ug/L	101		108	43-172	13.0	30	
Methyl Iodide	102.4	1.0	ug/L	102		100	69-170	1.71	30	
Methylene Chloride	50.36	5.0	ug/L	50.0		101	68-142	0.968	21	
Acrylonitrile	98.75	5.0	ug/L	100		98.4	56-135	2.94	16	
trans-1,2-Dichloroethylene	47.09	1.0	ug/L	50.0		94.2	66-148	3.55	27	
1,1-Dichloroethane	48.22	1.0	ug/L	50.0		96.4	66-143	1.42	24	
Vinyl Acetate	105.9	5.0	ug/L	100		106	43-153	0.893	30	
cis-1,2-Dichloroethylene	47.17	1.0	ug/L	50.0		94.3	71-149	2.10	26	
2-Butanone (MEK)	108.2	10.0	ug/L	102		106	52-159	12.8	27	
Bromochloromethane	46.92	1.0	ug/L	50.0		93.8	69-143	0.0639	23	
Chloroform	45.14	1.0	ug/L	50.0		90.3	69-144	1.39	23	
1,1,1-Trichloroethane	46.48	1.0	ug/L	50.0		93.0	62-129	3.43	24	
Carbon Tetrachloride	50.08	1.0	ug/L	50.0		100	63-141	1.70	25	
Benzene	45.09	1.0	ug/L	50.0		90.2	71-134	2.65	24	
1,2-Dichloroethane	45.75	1.0	ug/L	50.0		91.5	72-132	2.46	24	
Trichloroethylene	45.50	1.0	ug/L	50.0		91.0	71-135	2.52	24	
1,2-Dichloropropane	47.75	1.0	ug/L	50.0		95.5	69-136	1.10	24	
Dibromomethane	49.92	1.0	ug/L	50.0		99.8	73-147	0.599	25	
Bromodichloromethane	49.06	1.0	ug/L	50.0		98.1	68-129	0.387	22	
cis-1,3-Dichloropropene	46.54	1.0	ug/L	50.0		93.1	65-134	0.107	23	

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CERTIFICATE OF ANALYSIS

1HJ1078

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1HJ1047 - EPA 5030B - EPA 8260B

LCS Dup (1HJ1047-BSD1)

Prepared: 10/16/24 00:00 Analyzed: 10/16/24 11:09

4-Methyl-2-pentanone (MIBK)	103.9	5.0	ug/L	100		104	58-147	0.490	27	
Toluene	44.57	1.0	ug/L	50.0		89.1	72-133	1.96	24	
trans-1,3-Dichloropropene	48.10	1.0	ug/L	50.0		96.2	67-130	0.0416	24	
1,1,2-Trichloroethane	48.10	1.0	ug/L	50.0		96.2	69-135	0.456	23	
Tetrachloroethylene	45.13	1.0	ug/L	50.0		90.3	69-130	4.29	25	
2-Hexanone (MBK)	104.6	5.0	ug/L	99.3		105	55-144	0.676	25	
Dibromochloromethane	49.72	1.0	ug/L	50.0		99.4	73-127	0.464	22	
1,2-Dibromoethane	48.14	1.0	ug/L	50.0		96.3	67-132	0.146	24	
Chlorobenzene	45.20	1.0	ug/L	50.0		90.4	72-123	1.80	23	
1,1,1,2-Tetrachloroethane	48.03	1.0	ug/L	50.0		96.1	73-127	0.478	24	
Ethylbenzene	46.49	1.0	ug/L	50.0		93.0	71-127	1.83	26	
Xylenes, total	142.1	2.0	ug/L	150		94.7	74-127	1.80	25	
Styrene	49.55	1.0	ug/L	50.0		99.1	66-126	1.24	23	
Bromoform	49.66	1.0	ug/L	50.0		99.3	68-130	1.30	23	
1,2,3-Trichloropropane	50.22	1.0	ug/L	50.0		100	63-136	0.279	24	
trans-1,4-Dichloro-2-butene	91.02	5.0	ug/L	103		88.5	54-134	1.90	27	
1,1,2,2-Tetrachloroethane	49.11	1.0	ug/L	50.0		98.2	61-131	0.818	29	
1,4-Dichlorobenzene	44.92	1.0	ug/L	50.0		89.8	70-129	0.864	24	
1,2-Dichlorobenzene	47.12	1.0	ug/L	50.0		94.2	69-126	0.656	26	
1,2-Dibromo-3-chloropropane	52.66	5.0	ug/L	50.0		105	50-143	2.36	30	

Surrogate: Dibromofluoromethane	50.8		ug/L	50.2		101	57-134			
Surrogate: Dibromofluoromethane	50.8		ug/L	50.2		101	75-136			
Surrogate: 1,2-Dichloroethane-d4	50.8		ug/L	50.4		101	53-140			
Surrogate: 1,2-Dichloroethane-d4	50.8		ug/L	50.4		101	61-142			
Surrogate: Toluene-d8	50.3		ug/L	50.5		99.6	86-114			
Surrogate: Toluene-d8	50.3		ug/L	50.5		99.6	82-121			
Surrogate: 4-Bromofluorobenzene	50.4		ug/L	50.2		101	78-121			
Surrogate: 4-Bromofluorobenzene	50.4		ug/L	50.2		101	80-116			

Matrix Spike (1HJ1047-MS1)

Source: 1HJ1038-07

Prepared: 10/16/24 00:00 Analyzed: 10/16/24 21:25

Chloromethane	218.5	10.0	ug/L	300	ND	72.8	61-152			
Vinyl Chloride	237.9	10.0	ug/L	300	ND	79.3	66-149			
Bromomethane	198.6	10.0	ug/L	300	ND	66.2	43-171			
Chloroethane	278.0	10.0	ug/L	300	ND	92.7	69-148			
Trichlorofluoromethane	259.4	10.0	ug/L	300	ND	86.5	62-163			
1,1-Dichloroethylene	467.6	10.0	ug/L	500	ND	93.5	70-148			
Acetone	985.5	100	ug/L	1010	ND	97.4	45-173			
Methyl Iodide	984.6	10.0	ug/L	1020	ND	96.7	62-167			
Methylene Chloride	469.4	50.0	ug/L	500	ND	93.9	69-140			
Acrylonitrile	920.3	50.0	ug/L	1000	ND	91.7	38-147			
trans-1,2-Dichloroethylene	453.2	10.0	ug/L	500	ND	90.6	69-144			
1,1-Dichloroethane	452.6	10.0	ug/L	500	ND	90.5	70-138			
Vinyl Acetate	962.0	50.0	ug/L	1000	ND	96.2	58-142			
cis-1,2-Dichloroethylene	438.6	10.0	ug/L	500	ND	87.7	68-151			



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CERTIFICATE OF ANALYSIS

1HJ1078

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1047 - EPA 5030B - EPA 8260B										
Matrix Spike (1HJ1047-MS1)	Source: 1HJ1038-07			Prepared: 10/16/24 00:00 Analyzed: 10/16/24 21:25						
2-Butanone (MEK)	961.8	100	ug/L	1020	ND	94.5	50-160			
Bromochloromethane	438.4	10.0	ug/L	500	ND	87.7	65-143			
Chloroform	424.2	10.0	ug/L	500	ND	84.8	71-143			
1,1,1-Trichloroethane	456.9	10.0	ug/L	500	ND	91.4	63-133			
Carbon Tetrachloride	470.6	10.0	ug/L	500	ND	94.1	63-142			
Benzene	446.5	10.0	ug/L	500	ND	89.3	69-133			
1,2-Dichloroethane	447.3	10.0	ug/L	500	ND	89.5	63-138			
Trichloroethylene	453.6	10.0	ug/L	500	ND	90.7	71-133			
1,2-Dichloropropane	458.8	10.0	ug/L	500	ND	91.8	69-132			
Dibromomethane	479.6	10.0	ug/L	500	ND	95.9	70-147			
Bromodichloromethane	465.7	10.0	ug/L	500	ND	93.1	67-130			
cis-1,3-Dichloropropene	416.8	10.0	ug/L	500	ND	83.4	61-126			
4-Methyl-2-pentanone (MIBK)	1003	50.0	ug/L	1000	ND	100	55-147			
Toluene	438.0	10.0	ug/L	500	ND	87.6	71-133			
trans-1,3-Dichloropropene	437.1	10.0	ug/L	500	ND	87.4	63-124			
1,1,2-Trichloroethane	461.9	10.0	ug/L	500	ND	92.4	69-133			
Tetrachloroethylene	467.6	10.0	ug/L	500	ND	93.5	70-124			
2-Hexanone (MBK)	1035	50.0	ug/L	993	ND	104	53-141			
Dibromochloromethane	474.0	10.0	ug/L	500	ND	94.8	74-122			
1,2-Dibromoethane	467.7	10.0	ug/L	500	ND	93.5	66-127			
Chlorobenzene	452.1	10.0	ug/L	500	ND	90.4	76-116			
1,1,1,2-Tetrachloroethane	470.4	10.0	ug/L	500	ND	94.1	77-121			
Ethylbenzene	469.8	10.0	ug/L	500	ND	94.0	73-124			
Xylenes, total	1417	20.0	ug/L	1500	ND	94.5	75-123			
Styrene	488.1	10.0	ug/L	500	ND	97.6	70-120			
Bromoform	469.2	10.0	ug/L	500	ND	93.8	70-124			
1,2,3-Trichloropropane	490.2	10.0	ug/L	500	ND	98.0	62-135			
trans-1,4-Dichloro-2-butene	850.5	50.0	ug/L	1030	ND	82.7	50-120			
1,1,2,2-Tetrachloroethane	478.3	10.0	ug/L	500	ND	95.7	63-126			
1,4-Dichlorobenzene	440.6	10.0	ug/L	500	ND	88.1	72-119			
1,2-Dichlorobenzene	462.9	10.0	ug/L	500	ND	92.6	71-117			
1,2-Dibromo-3-chloropropane	503.8	50.0	ug/L	500	ND	101	49-134			
<i>Surrogate: Dibromofluoromethane</i>	483		ug/L	502		96.3	57-134			
<i>Surrogate: Dibromofluoromethane</i>	483		ug/L	502		96.3	75-136			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	485		ug/L	504		96.4	53-140			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	485		ug/L	504		96.4	61-142			
<i>Surrogate: Toluene-d8</i>	494		ug/L	505		97.8	86-114			
<i>Surrogate: Toluene-d8</i>	494		ug/L	505		97.8	82-121			
<i>Surrogate: 4-Bromofluorobenzene</i>	501		ug/L	502		99.9	78-121			
<i>Surrogate: 4-Bromofluorobenzene</i>	501		ug/L	502		99.9	80-116			
Matrix Spike Dup (1HJ1047-MSD1)	Source: 1HJ1038-07			Prepared: 10/16/24 00:00 Analyzed: 10/16/24 21:48						
Chloromethane	216.2	10.0	ug/L	300	ND	72.1	61-152	1.06	26	
Vinyl Chloride	229.1	10.0	ug/L	300	ND	76.4	66-149	3.77	23	

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CERTIFICATE OF ANALYSIS

1HJ1078

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1047 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1HJ1047-MSD1)	Source: 1HJ1038-07			Prepared: 10/16/24 00:00 Analyzed: 10/16/24 21:48						
Bromomethane	208.6	10.0	ug/L	300	ND	69.5	43-171	4.91	29	
Chloroethane	268.6	10.0	ug/L	300	ND	89.5	69-148	3.44	25	
Trichlorofluoromethane	252.6	10.0	ug/L	300	ND	84.2	62-163	2.66	25	
1,1-Dichloroethylene	445.8	10.0	ug/L	500	ND	89.2	70-148	4.77	22	
Acetone	928.2	100	ug/L	1010	ND	91.7	45-173	5.99	30	
Methyl Iodide	977.3	10.0	ug/L	1020	ND	95.9	62-167	0.744	24	
Methylene Chloride	460.3	50.0	ug/L	500	ND	92.1	69-140	1.96	19	
Acrylonitrile	889.8	50.0	ug/L	1000	ND	88.6	38-147	3.37	30	
trans-1,2-Dichloroethylene	435.2	10.0	ug/L	500	ND	87.0	69-144	4.05	22	
1,1-Dichloroethane	440.3	10.0	ug/L	500	ND	88.1	70-138	2.76	20	
Vinyl Acetate	954.2	50.0	ug/L	1000	ND	95.4	58-142	0.814	24	
cis-1,2-Dichloroethylene	427.5	10.0	ug/L	500	ND	85.5	68-151	2.56	22	
2-Butanone (MEK)	929.3	100	ug/L	1020	ND	91.3	50-160	3.44	23	
Bromochloromethane	425.5	10.0	ug/L	500	ND	85.1	65-143	2.99	22	
Chloroform	412.0	10.0	ug/L	500	ND	82.4	71-143	2.92	21	
1,1,1-Trichloroethane	445.0	10.0	ug/L	500	ND	89.0	63-133	2.64	23	
Carbon Tetrachloride	460.6	10.0	ug/L	500	ND	92.1	63-142	2.15	22	
Benzene	434.0	10.0	ug/L	500	ND	86.8	69-133	2.84	18	
1,2-Dichloroethane	437.6	10.0	ug/L	500	ND	87.5	63-138	2.19	20	
Trichloroethylene	438.8	10.0	ug/L	500	ND	87.8	71-133	3.32	23	
1,2-Dichloropropane	451.3	10.0	ug/L	500	ND	90.3	69-132	1.65	20	
Dibromomethane	474.0	10.0	ug/L	500	ND	94.8	70-147	1.17	22	
Bromodichloromethane	458.3	10.0	ug/L	500	ND	91.7	67-130	1.60	21	
cis-1,3-Dichloropropene	411.7	10.0	ug/L	500	ND	82.3	61-126	1.23	21	
4-Methyl-2-pentanone (MIBK)	996.5	50.0	ug/L	1000	ND	99.6	55-147	0.630	23	
Toluene	428.4	10.0	ug/L	500	ND	85.7	71-133	2.22	19	
trans-1,3-Dichloropropene	432.0	10.0	ug/L	500	ND	86.4	63-124	1.17	21	
1,1,2-Trichloroethane	457.5	10.0	ug/L	500	ND	91.5	69-133	0.957	19	
Tetrachloroethylene	451.1	10.0	ug/L	500	ND	90.2	70-124	3.59	24	
2-Hexanone (MBK)	1017	50.0	ug/L	993	ND	102	53-141	1.72	24	
Dibromochloromethane	462.4	10.0	ug/L	500	ND	92.5	74-122	2.48	21	
1,2-Dibromoethane	462.5	10.0	ug/L	500	ND	92.5	66-127	1.12	23	
Chlorobenzene	431.6	10.0	ug/L	500	ND	86.3	76-116	4.64	21	
1,1,1,2-Tetrachloroethane	457.1	10.0	ug/L	500	ND	91.4	77-121	2.87	25	
Ethylbenzene	451.2	10.0	ug/L	500	ND	90.2	73-124	4.04	20	
Xylenes, total	1363	20.0	ug/L	1500	ND	90.9	75-123	3.88	20	
Styrene	472.2	10.0	ug/L	500	ND	94.4	70-120	3.31	23	
Bromoform	470.2	10.0	ug/L	500	ND	94.0	70-124	0.213	22	
1,2,3-Trichloropropane	485.3	10.0	ug/L	500	ND	97.1	62-135	1.00	28	
trans-1,4-Dichloro-2-butene	828.9	50.0	ug/L	1030	ND	80.6	50-120	2.57	26	
1,1,2,2-Tetrachloroethane	474.9	10.0	ug/L	500	ND	95.0	63-126	0.713	24	
1,4-Dichlorobenzene	429.9	10.0	ug/L	500	ND	86.0	72-119	2.46	24	
1,2-Dichlorobenzene	452.2	10.0	ug/L	500	ND	90.4	71-117	2.34	24	

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CERTIFICATE OF ANALYSIS

1HJ1078

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1047 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1HJ1047-MSD1)	Source: 1HJ1038-07			Prepared: 10/16/24 00:00 Analyzed: 10/16/24 21:48						
1,2-Dibromo-3-chloropropane	501.4	50.0	ug/L	500	ND	100	49-134	0.478	28	
Surrogate: Dibromofluoromethane	479		ug/L	502		95.4	57-134			
Surrogate: Dibromofluoromethane	479		ug/L	502		95.4	75-136			
Surrogate: 1,2-Dichloroethane-d4	487		ug/L	504		96.7	53-140			
Surrogate: 1,2-Dichloroethane-d4	487		ug/L	504		96.7	61-142			
Surrogate: Toluene-d8	500		ug/L	505		99.0	86-114			
Surrogate: Toluene-d8	500		ug/L	505		99.0	82-121			
Surrogate: 4-Bromofluorobenzene	504		ug/L	502		100	78-121			
Surrogate: 4-Bromofluorobenzene	504		ug/L	502		100	80-116			

Batch 1HJ1146 - EPA 5030B - EPA 8260B

Blank (1HJ1146-BLK1)			Prepared: 10/17/24 00:00 Analyzed: 10/17/24 13:32							
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							

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Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1146 - EPA 5030B - EPA 8260B										
Blank (1HJ1146-BLK1)										
				Prepared: 10/17/24 00:00 Analyzed: 10/17/24 13:32						
Tetrachloroethylene	<1.0	1.0	ug/L							
2-Hexanone (MBK)	<5.0	5.0	ug/L							
Dibromochloromethane	<1.0	1.0	ug/L							
1,2-Dibromoethane	<1.0	1.0	ug/L							
Chlorobenzene	<1.0	1.0	ug/L							
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L							
Ethylbenzene	<1.0	1.0	ug/L							
Xylenes, total	<2.0	2.0	ug/L							
Styrene	<1.0	1.0	ug/L							
Bromoform	<1.0	1.0	ug/L							
1,2,3-Trichloropropane	<1.0	1.0	ug/L							
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L							
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L							
1,4-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L							
<i>Surrogate: Dibromofluoromethane</i>	44.0		ug/L	50.2		87.5	57-134			
<i>Surrogate: Dibromofluoromethane</i>	44.0		ug/L	50.2		87.5	75-136			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	45.5		ug/L	50.4		90.4	53-140			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	45.5		ug/L	50.4		90.4	61-142			
<i>Surrogate: Toluene-d8</i>	46.9		ug/L	50.5		93.0	86-114			
<i>Surrogate: Toluene-d8</i>	46.9		ug/L	50.5		93.0	82-121			
<i>Surrogate: 4-Bromofluorobenzene</i>	50.1		ug/L	50.2		99.9	78-121			
<i>Surrogate: 4-Bromofluorobenzene</i>	50.1		ug/L	50.2		99.9	80-116			
LCS (1HJ1146-BS1)										
				Prepared: 10/17/24 00:00 Analyzed: 10/17/24 12:24						
Chloromethane	22.04	1.0	ug/L	30.0		73.5	63-155			
Vinyl Chloride	19.71	1.0	ug/L	30.0		65.7	70-154			Q3
Bromomethane	23.31	1.0	ug/L	30.0		77.7	52-176			
Chloroethane	23.94	1.0	ug/L	30.0		79.8	72-148			
Trichlorofluoromethane	23.41	1.0	ug/L	30.0		78.0	70-152			
1,1-Dichloroethylene	42.38	1.0	ug/L	50.0		84.8	70-148			
Acetone	87.12	10.0	ug/L	101		86.1	43-172			
Methyl Iodide	89.97	1.0	ug/L	102		88.3	69-170			
Carbon Disulfide	66.12	1.0	ug/L	103		64.4	72-162			Q3
Methylene Chloride	42.80	5.0	ug/L	50.0		85.6	68-142			
Acrylonitrile	73.55	5.0	ug/L	100		73.3	56-135			
trans-1,2-Dichloroethylene	43.34	1.0	ug/L	50.0		86.7	66-148			
1,1-Dichloroethane	43.49	1.0	ug/L	50.0		87.0	66-143			
Vinyl Acetate	90.62	5.0	ug/L	100		90.6	43-153			
cis-1,2-Dichloroethylene	43.49	1.0	ug/L	50.0		87.0	71-149			
2-Butanone (MEK)	84.55	10.0	ug/L	102		83.1	52-159			
Bromochloromethane	41.28	1.0	ug/L	50.0		82.6	69-143			
Chloroform	43.42	1.0	ug/L	50.0		86.8	69-144			

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Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1HJ1146 - EPA 5030B - EPA 8260B

LCS (1HJ1146-BS1)

Prepared: 10/17/24 00:00 Analyzed: 10/17/24 12:24

1,1,1-Trichloroethane	44.99	1.0	ug/L	50.0		90.0	62-129			
Carbon Tetrachloride	45.81	1.0	ug/L	50.0		91.6	63-141			
Benzene	48.90	1.0	ug/L	50.0		97.8	71-134			
1,2-Dichloroethane	50.00	1.0	ug/L	50.0		100	72-132			
Trichloroethylene	48.26	1.0	ug/L	50.0		96.5	71-135			
1,2-Dichloropropane	47.00	1.0	ug/L	50.0		94.0	69-136			
Dibromomethane	47.94	1.0	ug/L	50.0		95.9	73-147			
Bromodichloromethane	47.18	1.0	ug/L	50.0		94.4	68-129			
cis-1,3-Dichloropropene	45.37	1.0	ug/L	50.0		90.7	65-134			
4-Methyl-2-pentanone (MIBK)	92.21	5.0	ug/L	100		92.1	58-147			
Toluene	47.48	1.0	ug/L	50.0		95.0	72-133			
trans-1,3-Dichloropropene	47.00	1.0	ug/L	50.0		94.0	67-130			
1,1,2-Trichloroethane	46.90	1.0	ug/L	50.0		93.8	69-135			
Tetrachloroethylene	53.06	1.0	ug/L	50.0		106	69-130			
2-Hexanone (MBK)	91.96	5.0	ug/L	99.3		92.6	55-144			
Dibromochloromethane	50.07	1.0	ug/L	50.0		100	73-127			
1,2-Dibromoethane	49.23	1.0	ug/L	50.0		98.5	67-132			
Chlorobenzene	49.33	1.0	ug/L	50.0		98.7	72-123			
1,1,1,2-Tetrachloroethane	51.55	1.0	ug/L	50.0		103	73-127			
Ethylbenzene	51.68	1.0	ug/L	50.0		103	71-127			
Xylenes, total	151.4	2.0	ug/L	150		101	74-127			
Styrene	51.75	1.0	ug/L	50.0		104	66-126			
Bromoform	50.94	1.0	ug/L	50.0		102	68-130			
1,2,3-Trichloropropane	50.33	1.0	ug/L	50.0		101	63-136			
trans-1,4-Dichloro-2-butene	90.69	5.0	ug/L	103		88.2	54-134			
1,1,2,2-Tetrachloroethane	48.37	1.0	ug/L	50.0		96.7	61-131			
1,4-Dichlorobenzene	48.28	1.0	ug/L	50.0		96.6	70-129			
1,2-Dichlorobenzene	49.05	1.0	ug/L	50.0		98.1	69-126			
1,2-Dibromo-3-chloropropane	47.32	5.0	ug/L	50.0		94.6	50-143			

Surrogate: Dibromofluoromethane	43.9		ug/L	50.2		87.4	57-134			
Surrogate: Dibromofluoromethane	43.9		ug/L	50.2		87.4	75-136			
Surrogate: 1,2-Dichloroethane-d4	44.5		ug/L	50.4		88.3	53-140			
Surrogate: 1,2-Dichloroethane-d4	44.5		ug/L	50.4		88.3	61-142			
Surrogate: Toluene-d8	48.6		ug/L	50.5		96.3	86-114			
Surrogate: Toluene-d8	48.6		ug/L	50.5		96.3	82-121			
Surrogate: 4-Bromofluorobenzene	49.9		ug/L	50.2		99.5	78-121			
Surrogate: 4-Bromofluorobenzene	49.9		ug/L	50.2		99.5	80-116			

LCS Dup (1HJ1146-BSD1)

Prepared: 10/17/24 00:00 Analyzed: 10/17/24 12:47

Chloromethane	20.77	1.0	ug/L	30.0		69.2	63-155	5.93	24	
Vinyl Chloride	18.33	1.0	ug/L	30.0		61.1	70-154	7.26	25	Q3
Bromomethane	21.94	1.0	ug/L	30.0		73.1	52-176	6.06	27	
Chloroethane	22.36	1.0	ug/L	30.0		74.5	72-148	6.83	25	
Trichlorofluoromethane	21.96	1.0	ug/L	30.0		73.2	70-152	6.39	26	

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1HJ1078

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1146 - EPA 5030B - EPA 8260B										
LCS Dup (1HJ1146-BSD1)				Prepared: 10/17/24 00:00 Analyzed: 10/17/24 12:47						
1,1-Dichloroethylene	39.63	1.0	ug/L	50.0		79.3	70-148	6.71	24	
Acetone	83.77	10.0	ug/L	101		82.8	43-172	3.92	30	
Methyl Iodide	87.15	1.0	ug/L	102		85.5	69-170	3.18	30	
Carbon Disulfide	62.34	1.0	ug/L	103		60.7	72-162	5.89	24	Q3
Methylene Chloride	40.90	5.0	ug/L	50.0		81.8	68-142	4.54	21	
Acrylonitrile	71.48	5.0	ug/L	100		71.2	56-135	2.85	16	
trans-1,2-Dichloroethylene	41.35	1.0	ug/L	50.0		82.7	66-148	4.70	27	
1,1-Dichloroethane	41.05	1.0	ug/L	50.0		82.1	66-143	5.77	24	
Vinyl Acetate	88.51	5.0	ug/L	100		88.5	43-153	2.36	30	
cis-1,2-Dichloroethylene	41.23	1.0	ug/L	50.0		82.5	71-149	5.34	26	
2-Butanone (MEK)	82.57	10.0	ug/L	102		81.1	52-159	2.37	27	
Bromochloromethane	39.42	1.0	ug/L	50.0		78.8	69-143	4.61	23	
Chloroform	42.01	1.0	ug/L	50.0		84.0	69-144	3.30	23	
1,1,1-Trichloroethane	42.17	1.0	ug/L	50.0		84.3	62-129	6.47	24	
Carbon Tetrachloride	43.63	1.0	ug/L	50.0		87.3	63-141	4.87	25	
Benzene	47.77	1.0	ug/L	50.0		95.5	71-134	2.34	24	
1,2-Dichloroethane	49.28	1.0	ug/L	50.0		98.6	72-132	1.45	24	
Trichloroethylene	47.60	1.0	ug/L	50.0		95.2	71-135	1.38	24	
1,2-Dichloropropane	46.40	1.0	ug/L	50.0		92.8	69-136	1.28	24	
Dibromomethane	48.60	1.0	ug/L	50.0		97.2	73-147	1.37	25	
Bromodichloromethane	47.34	1.0	ug/L	50.0		94.7	68-129	0.339	22	
cis-1,3-Dichloropropene	45.81	1.0	ug/L	50.0		91.6	65-134	0.965	23	
4-Methyl-2-pentanone (MIBK)	93.40	5.0	ug/L	100		93.3	58-147	1.28	27	
Toluene	46.62	1.0	ug/L	50.0		93.2	72-133	1.83	24	
trans-1,3-Dichloropropene	47.30	1.0	ug/L	50.0		94.6	67-130	0.636	24	
1,1,2-Trichloroethane	47.82	1.0	ug/L	50.0		95.6	69-135	1.94	23	
Tetrachloroethylene	52.04	1.0	ug/L	50.0		104	69-130	1.94	25	
2-Hexanone (MBK)	89.46	5.0	ug/L	99.3		90.1	55-144	2.76	25	
Dibromochloromethane	49.84	1.0	ug/L	50.0		99.7	73-127	0.460	22	
1,2-Dibromoethane	48.85	1.0	ug/L	50.0		97.7	67-132	0.775	24	
Chlorobenzene	48.81	1.0	ug/L	50.0		97.6	72-123	1.06	23	
1,1,1,2-Tetrachloroethane	51.08	1.0	ug/L	50.0		102	73-127	0.916	24	
Ethylbenzene	50.11	1.0	ug/L	50.0		100	71-127	3.08	26	
Xylenes, total	148.2	2.0	ug/L	150		98.8	74-127	2.12	25	
Styrene	51.63	1.0	ug/L	50.0		103	66-126	0.232	23	
Bromoform	50.91	1.0	ug/L	50.0		102	68-130	0.0589	23	
1,2,3-Trichloropropane	49.63	1.0	ug/L	50.0		99.3	63-136	1.40	24	
trans-1,4-Dichloro-2-butene	89.77	5.0	ug/L	103		87.3	54-134	1.02	27	
1,1,2,2-Tetrachloroethane	47.67	1.0	ug/L	50.0		95.3	61-131	1.46	29	
1,4-Dichlorobenzene	49.48	1.0	ug/L	50.0		99.0	70-129	2.45	24	
1,2-Dichlorobenzene	50.70	1.0	ug/L	50.0		101	69-126	3.31	26	
1,2-Dibromo-3-chloropropane	47.58	5.0	ug/L	50.0		95.2	50-143	0.548	30	



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CERTIFICATE OF ANALYSIS

1HJ1078

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1HJ1146 - EPA 5030B - EPA 8260B

LCS Dup (1HJ1146-BSD1)

Prepared: 10/17/24 00:00 Analyzed: 10/17/24 12:47

Surrogate: Dibromofluoromethane	42.8		ug/L	50.2		85.3	57-134			
Surrogate: Dibromofluoromethane	42.8		ug/L	50.2		85.3	75-136			
Surrogate: 1,2-Dichloroethane-d4	43.2		ug/L	50.4		85.8	53-140			
Surrogate: 1,2-Dichloroethane-d4	43.2		ug/L	50.4		85.8	61-142			
Surrogate: Toluene-d8	49.0		ug/L	50.5		97.0	86-114			
Surrogate: Toluene-d8	49.0		ug/L	50.5		97.0	82-121			
Surrogate: 4-Bromofluorobenzene	50.1		ug/L	50.2		99.9	78-121			
Surrogate: 4-Bromofluorobenzene	50.1		ug/L	50.2		99.9	80-116			

Matrix Spike (1HJ1146-MS1)

Source: 1HJ1078-08RE1 Prepared: 10/17/24 00:00 Analyzed: 10/17/24 16:53

Chloromethane	225.5	10.0	ug/L	300	ND	75.2	61-152			
Vinyl Chloride	210.2	10.0	ug/L	300	ND	70.1	66-149			
Bromomethane	239.1	10.0	ug/L	300	ND	79.7	43-171			
Chloroethane	243.7	10.0	ug/L	300	ND	81.2	69-148			
Trichlorofluoromethane	248.4	10.0	ug/L	300	ND	82.8	62-163			
1,1-Dichloroethylene	431.5	10.0	ug/L	500	ND	86.3	70-148			
Acetone	805.9	100	ug/L	1010	ND	79.6	45-173			
Methyl Iodide	900.3	10.0	ug/L	1020	ND	88.4	62-167			
Carbon Disulfide	664.5	10.0	ug/L	1030	ND	64.7	71-163			M2
Methylene Chloride	470.1	50.0	ug/L	500	ND	94.0	69-140			
Acrylonitrile	617.8	50.0	ug/L	1000	ND	61.5	38-147			
trans-1,2-Dichloroethylene	429.9	10.0	ug/L	500	ND	86.0	69-144			
1,1-Dichloroethane	422.0	10.0	ug/L	500	ND	84.4	70-138			
Vinyl Acetate	798.4	50.0	ug/L	1000	ND	79.8	58-142			
cis-1,2-Dichloroethylene	415.4	10.0	ug/L	500	ND	83.1	68-151			
2-Butanone (MEK)	620.4	100	ug/L	1020	ND	60.9	50-160			
Bromochloromethane	396.5	10.0	ug/L	500	ND	79.3	65-143			
Chloroform	429.6	10.0	ug/L	500	ND	85.9	71-143			
1,1,1-Trichloroethane	430.4	10.0	ug/L	500	ND	86.1	63-133			
Carbon Tetrachloride	438.3	10.0	ug/L	500	ND	87.7	63-142			
Benzene	463.9	10.0	ug/L	500	ND	92.8	69-133			
1,2-Dichloroethane	461.9	10.0	ug/L	500	ND	92.4	63-138			
Trichloroethylene	455.7	10.0	ug/L	500	ND	91.1	71-133			
1,2-Dichloropropane	440.8	10.0	ug/L	500	ND	88.2	69-132			
Dibromomethane	431.3	10.0	ug/L	500	ND	86.3	70-147			
Bromodichloromethane	443.1	10.0	ug/L	500	ND	88.6	67-130			
cis-1,3-Dichloropropene	427.1	10.0	ug/L	500	ND	85.4	61-126			
4-Methyl-2-pentanone (MIBK)	713.1	50.0	ug/L	1000	ND	71.2	55-147			
Toluene	440.5	10.0	ug/L	500	ND	88.1	71-133			
trans-1,3-Dichloropropene	429.1	10.0	ug/L	500	ND	85.8	63-124			
1,1,2-Trichloroethane	422.5	10.0	ug/L	500	ND	84.5	69-133			
Tetrachloroethylene	507.8	10.0	ug/L	500	ND	102	70-124			
2-Hexanone (MBK)	718.3	50.0	ug/L	993	ND	72.3	53-141			
Dibromochloromethane	458.4	10.0	ug/L	500	ND	91.7	74-122			

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CERTIFICATE OF ANALYSIS

1HJ1078

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1146 - EPA 5030B - EPA 8260B										
Matrix Spike (1HJ1146-MS1) Source: 1HJ1078-08RE1 Prepared: 10/17/24 00:00 Analyzed: 10/17/24 16:53										
1,2-Dibromoethane	443.5	10.0	ug/L	500	ND	88.7	66-127			
Chlorobenzene	464.6	10.0	ug/L	500	ND	92.9	76-116			
1,1,1,2-Tetrachloroethane	491.0	10.0	ug/L	500	ND	98.2	77-121			
Ethylbenzene	485.6	10.0	ug/L	500	ND	97.1	73-124			
Xylenes, total	1433	20.0	ug/L	1500	ND	95.5	75-123			
Styrene	486.4	10.0	ug/L	500	ND	97.3	70-120			
Bromoform	433.3	10.0	ug/L	500	ND	86.7	70-124			
1,2,3-Trichloropropane	393.6	10.0	ug/L	500	ND	78.7	62-135			
trans-1,4-Dichloro-2-butene	694.5	50.0	ug/L	1030	ND	67.6	50-120			
1,1,1,2-Tetrachloroethane	396.6	10.0	ug/L	500	ND	79.3	63-126			
1,4-Dichlorobenzene	457.0	10.0	ug/L	500	ND	91.4	72-119			
1,2-Dichlorobenzene	462.4	10.0	ug/L	500	ND	92.5	71-117			
1,2-Dibromo-3-chloropropane	345.8	50.0	ug/L	500	ND	69.2	49-134			
<i>Surrogate: Dibromofluoromethane</i>	443		ug/L	502		88.2	57-134			
<i>Surrogate: Dibromofluoromethane</i>	443		ug/L	502		88.2	75-136			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	434		ug/L	504		86.1	53-140			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	434		ug/L	504		86.1	61-142			
<i>Surrogate: Toluene-d8</i>	477		ug/L	505		94.6	86-114			
<i>Surrogate: Toluene-d8</i>	477		ug/L	505		94.6	82-121			
<i>Surrogate: 4-Bromofluorobenzene</i>	494		ug/L	502		98.5	78-121			
<i>Surrogate: 4-Bromofluorobenzene</i>	494		ug/L	502		98.5	80-116			
Matrix Spike Dup (1HJ1146-MSD1) Source: 1HJ1078-08RE1 Prepared: 10/17/24 00:00 Analyzed: 10/17/24 17:16										
Chloromethane	201.8	10.0	ug/L	300	ND	67.3	61-152	11.1	26	
Vinyl Chloride	186.1	10.0	ug/L	300	ND	62.0	66-149	12.2	23	M2
Bromomethane	217.1	10.0	ug/L	300	ND	72.4	43-171	9.64	29	
Chloroethane	221.4	10.0	ug/L	300	ND	73.8	69-148	9.59	25	
Trichlorofluoromethane	222.9	10.0	ug/L	300	ND	74.3	62-163	10.8	25	
1,1-Dichloroethylene	401.7	10.0	ug/L	500	ND	80.3	70-148	7.15	22	
Acetone	1011	100	ug/L	1010	ND	99.9	45-173	22.6	30	
Methyl Iodide	871.2	10.0	ug/L	1020	ND	85.5	62-167	3.29	24	
Carbon Disulfide	625.0	10.0	ug/L	1030	ND	60.9	71-163	6.13	22	M2
Methylene Chloride	461.0	50.0	ug/L	500	ND	92.2	69-140	1.95	19	
Acrylonitrile	728.5	50.0	ug/L	1000	ND	72.6	38-147	16.4	30	
trans-1,2-Dichloroethylene	414.1	10.0	ug/L	500	ND	82.8	69-144	3.74	22	
1,1-Dichloroethane	418.5	10.0	ug/L	500	ND	83.7	70-138	0.833	20	
Vinyl Acetate	861.9	50.0	ug/L	1000	ND	86.2	58-142	7.65	24	
cis-1,2-Dichloroethylene	420.4	10.0	ug/L	500	ND	84.1	68-151	1.20	22	
2-Butanone (MEK)	845.9	100	ug/L	1020	ND	83.1	50-160	30.8	23	R1
Bromochloromethane	411.0	10.0	ug/L	500	ND	82.2	65-143	3.59	22	
Chloroform	433.2	10.0	ug/L	500	ND	86.6	71-143	0.834	21	
1,1,1-Trichloroethane	425.1	10.0	ug/L	500	ND	85.0	63-133	1.24	23	
Carbon Tetrachloride	445.2	10.0	ug/L	500	ND	89.0	63-142	1.56	22	
Benzene	469.4	10.0	ug/L	500	ND	93.9	69-133	1.18	18	

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CERTIFICATE OF ANALYSIS

1HJ1078

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1146 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1HJ1146-MSD1) Source: 1HJ1078-08RE1 Prepared: 10/17/24 00:00 Analyzed: 10/17/24 17:16										
1,2-Dichloroethane	482.1	10.0	ug/L	500	ND	96.4	63-138	4.28	20	
Trichloroethylene	462.7	10.0	ug/L	500	ND	92.5	71-133	1.52	23	
1,2-Dichloropropane	457.7	10.0	ug/L	500	ND	91.5	69-132	3.76	20	
Dibromomethane	464.8	10.0	ug/L	500	ND	93.0	70-147	7.48	22	
Bromodichloromethane	458.4	10.0	ug/L	500	ND	91.7	67-130	3.39	21	
cis-1,3-Dichloropropene	442.6	10.0	ug/L	500	ND	88.5	61-126	3.56	21	
4-Methyl-2-pentanone (MIBK)	918.4	50.0	ug/L	1000	ND	91.7	55-147	25.2	23	R1
Toluene	457.3	10.0	ug/L	500	ND	91.5	71-133	3.74	19	
trans-1,3-Dichloropropene	464.1	10.0	ug/L	500	ND	92.8	63-124	7.84	21	
1,1,2-Trichloroethane	461.8	10.0	ug/L	500	ND	92.4	69-133	8.89	19	
Tetrachloroethylene	501.7	10.0	ug/L	500	ND	100	70-124	1.21	24	
2-Hexanone (MBK)	931.2	50.0	ug/L	993	ND	93.8	53-141	25.8	24	R1
Dibromochloromethane	483.5	10.0	ug/L	500	ND	96.7	74-122	5.33	21	
1,2-Dibromoethane	481.8	10.0	ug/L	500	ND	96.4	66-127	8.28	23	
Chlorobenzene	477.1	10.0	ug/L	500	ND	95.4	76-116	2.65	21	
1,1,1,2-Tetrachloroethane	497.9	10.0	ug/L	500	ND	99.6	77-121	1.40	25	
Ethylbenzene	486.1	10.0	ug/L	500	ND	97.2	73-124	0.103	20	
Xylenes, total	1448	20.0	ug/L	1500	ND	96.6	75-123	1.08	20	
Styrene	502.0	10.0	ug/L	500	ND	100	70-120	3.16	23	
Bromoform	497.7	10.0	ug/L	500	ND	99.5	70-124	13.8	22	
1,2,3-Trichloropropane	481.2	10.0	ug/L	500	ND	96.2	62-135	20.0	28	
trans-1,4-Dichloro-2-butene	890.9	50.0	ug/L	1030	ND	86.7	50-120	24.8	26	
1,1,2,2-Tetrachloroethane	478.3	10.0	ug/L	500	ND	95.7	63-126	18.7	24	
1,4-Dichlorobenzene	469.0	10.0	ug/L	500	ND	93.8	72-119	2.59	24	
1,2-Dichlorobenzene	474.8	10.0	ug/L	500	ND	95.0	71-117	2.65	24	
1,2-Dibromo-3-chloropropane	458.8	50.0	ug/L	500	ND	91.8	49-134	28.1	28	R1
Surrogate: Dibromofluoromethane	441		ug/L	502		87.8	57-134			
Surrogate: Dibromofluoromethane	441		ug/L	502		87.8	75-136			
Surrogate: 1,2-Dichloroethane-d4	441		ug/L	504		87.6	53-140			
Surrogate: 1,2-Dichloroethane-d4	441		ug/L	504		87.6	61-142			
Surrogate: Toluene-d8	489		ug/L	505		96.9	86-114			
Surrogate: Toluene-d8	489		ug/L	505		96.9	82-121			
Surrogate: 4-Bromofluorobenzene	498		ug/L	502		99.2	78-121			
Surrogate: 4-Bromofluorobenzene	498		ug/L	502		99.2	80-116			

Batch 1HJ1195 - EPA 5030B - EPA 8260B

Blank (1HJ1195-BLK1) Prepared: 10/16/24 00:00 Analyzed: 10/16/24 11:00										
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							

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CERTIFICATE OF ANALYSIS

1HJ1078

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1195 - EPA 5030B - EPA 8260B										
Blank (1HJ1195-BLK1)										
				Prepared: 10/16/24 00:00 Analyzed: 10/16/24 11:00						
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							
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

45.6

ug/L

50.2

90.9

57-134

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Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1195 - EPA 5030B - EPA 8260B										
Blank (1HJ1195-BLK1)										
				Prepared: 10/16/24 00:00 Analyzed: 10/16/24 11:00						
Surrogate: Dibromofluoromethane	45.6		ug/L	50.2		90.9	75-136			
Surrogate: 1,2-Dichloroethane-d4	46.9		ug/L	50.4		93.2	53-140			
Surrogate: 1,2-Dichloroethane-d4	46.9		ug/L	50.4		93.2	61-142			
Surrogate: Toluene-d8	46.9		ug/L	50.5		93.0	86-114			
Surrogate: Toluene-d8	46.9		ug/L	50.5		93.0	82-121			
Surrogate: 4-Bromofluorobenzene	50.8		ug/L	50.2		101	78-121			
Surrogate: 4-Bromofluorobenzene	50.8		ug/L	50.2		101	80-116			
LCS (1HJ1195-BS1)										
				Prepared: 10/16/24 00:00 Analyzed: 10/16/24 09:52						
Chloromethane	24.52	1.0	ug/L	30.0		81.7	63-155			
Vinyl Chloride	21.53	1.0	ug/L	30.0		71.8	70-154			
Bromomethane	24.48	1.0	ug/L	30.0		81.6	52-176			
Chloroethane	25.53	1.0	ug/L	30.0		85.1	72-148			
Trichlorofluoromethane	24.55	1.0	ug/L	30.0		81.8	70-152			
1,1-Dichloroethylene	44.57	1.0	ug/L	50.0		89.1	70-148			
Acetone	96.78	10.0	ug/L	101		95.6	43-172			
Methyl Iodide	96.61	1.0	ug/L	102		94.8	69-170			
Carbon Disulfide	72.53	1.0	ug/L	103		70.6	72-162			Q8
Methylene Chloride	46.46	5.0	ug/L	50.0		92.9	68-142			
Acrylonitrile	83.32	5.0	ug/L	100		83.0	56-135			
trans-1,2-Dichloroethylene	46.33	1.0	ug/L	50.0		92.7	66-148			
1,1-Dichloroethane	47.02	1.0	ug/L	50.0		94.0	66-143			
Vinyl Acetate	98.19	5.0	ug/L	100		98.2	43-153			
cis-1,2-Dichloroethylene	47.06	1.0	ug/L	50.0		94.1	71-149			
2-Butanone (MEK)	98.49	10.0	ug/L	102		96.7	52-159			
Bromochloromethane	46.67	1.0	ug/L	50.0		93.3	69-143			
Chloroform	46.92	1.0	ug/L	50.0		93.8	69-144			
1,1,1-Trichloroethane	46.33	1.0	ug/L	50.0		92.7	62-129			
Carbon Tetrachloride	47.23	1.0	ug/L	50.0		94.5	63-141			
Benzene	50.95	1.0	ug/L	50.0		102	71-134			
1,2-Dichloroethane	52.59	1.0	ug/L	50.0		105	72-132			
Trichloroethylene	49.86	1.0	ug/L	50.0		99.7	71-135			
1,2-Dichloropropane	50.82	1.0	ug/L	50.0		102	69-136			
Dibromomethane	51.07	1.0	ug/L	50.0		102	73-147			
Bromodichloromethane	50.09	1.0	ug/L	50.0		100	68-129			
cis-1,3-Dichloropropene	49.29	1.0	ug/L	50.0		98.6	65-134			
4-Methyl-2-pentanone (MIBK)	102.8	5.0	ug/L	100		103	58-147			
Toluene	49.19	1.0	ug/L	50.0		98.4	72-133			
trans-1,3-Dichloropropene	50.89	1.0	ug/L	50.0		102	67-130			
1,1,2-Trichloroethane	50.94	1.0	ug/L	50.0		102	69-135			
Tetrachloroethylene	52.96	1.0	ug/L	50.0		106	69-130			
2-Hexanone (MBK)	101.6	5.0	ug/L	99.3		102	55-144			
Dibromochloromethane	52.25	1.0	ug/L	50.0		104	73-127			
1,2-Dibromoethane	52.75	1.0	ug/L	50.0		106	67-132			

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CERTIFICATE OF ANALYSIS

1HJ1078

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1195 - EPA 5030B - EPA 8260B										
LCS (1HJ1195-BS1)										
				Prepared: 10/16/24 00:00 Analyzed: 10/16/24 09:52						
Chlorobenzene	51.61	1.0	ug/L	50.0		103	72-123			
1,1,1,2-Tetrachloroethane	53.73	1.0	ug/L	50.0		107	73-127			
Ethylbenzene	53.44	1.0	ug/L	50.0		107	71-127			
Xylenes, total	155.4	2.0	ug/L	150		104	74-127			
Styrene	53.77	1.0	ug/L	50.0		108	66-126			
Bromoform	53.23	1.0	ug/L	50.0		106	68-130			
1,2,3-Trichloropropane	52.75	1.0	ug/L	50.0		106	63-136			
trans-1,4-Dichloro-2-butene	97.32	5.0	ug/L	103		94.7	54-134			
1,1,1,2-Tetrachloroethane	52.90	1.0	ug/L	50.0		106	61-131			
1,4-Dichlorobenzene	51.54	1.0	ug/L	50.0		103	70-129			
1,2-Dichlorobenzene	52.50	1.0	ug/L	50.0		105	69-126			
1,2-Dibromo-3-chloropropane	51.11	5.0	ug/L	50.0		102	50-143			
<i>Surrogate: Dibromofluoromethane</i>	<i>45.1</i>		<i>ug/L</i>	<i>50.2</i>		<i>89.8</i>	<i>57-134</i>			
<i>Surrogate: Dibromofluoromethane</i>	<i>45.1</i>		<i>ug/L</i>	<i>50.2</i>		<i>89.8</i>	<i>75-136</i>			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>45.4</i>		<i>ug/L</i>	<i>50.4</i>		<i>90.2</i>	<i>53-140</i>			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>45.4</i>		<i>ug/L</i>	<i>50.4</i>		<i>90.2</i>	<i>61-142</i>			
<i>Surrogate: Toluene-d8</i>	<i>48.9</i>		<i>ug/L</i>	<i>50.5</i>		<i>96.8</i>	<i>86-114</i>			
<i>Surrogate: Toluene-d8</i>	<i>48.9</i>		<i>ug/L</i>	<i>50.5</i>		<i>96.8</i>	<i>82-121</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>49.4</i>		<i>ug/L</i>	<i>50.2</i>		<i>98.5</i>	<i>78-121</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>49.4</i>		<i>ug/L</i>	<i>50.2</i>		<i>98.5</i>	<i>80-116</i>			
LCS Dup (1HJ1195-BSD1)										
				Prepared: 10/16/24 00:00 Analyzed: 10/16/24 10:14						
Chloromethane	24.34	1.0	ug/L	30.0		81.1	63-155	0.737	24	
Vinyl Chloride	21.95	1.0	ug/L	30.0		73.2	70-154	1.93	25	
Bromomethane	25.18	1.0	ug/L	30.0		83.9	52-176	2.82	27	
Chloroethane	26.01	1.0	ug/L	30.0		86.7	72-148	1.86	25	
Trichlorofluoromethane	25.31	1.0	ug/L	30.0		84.4	70-152	3.05	26	
1,1-Dichloroethylene	45.52	1.0	ug/L	50.0		91.0	70-148	2.11	24	
Acetone	97.73	10.0	ug/L	101		96.6	43-172	0.977	30	
Methyl Iodide	97.86	1.0	ug/L	102		96.1	69-170	1.29	30	
Carbon Disulfide	73.99	1.0	ug/L	103		72.0	72-162	1.99	24	
Methylene Chloride	46.48	5.0	ug/L	50.0		93.0	68-142	0.0430	21	
Acrylonitrile	83.01	5.0	ug/L	100		82.7	56-135	0.373	16	
trans-1,2-Dichloroethylene	46.95	1.0	ug/L	50.0		93.9	66-148	1.33	27	
1,1-Dichloroethane	47.74	1.0	ug/L	50.0		95.5	66-143	1.52	24	
Vinyl Acetate	97.92	5.0	ug/L	100		97.9	43-153	0.275	30	
cis-1,2-Dichloroethylene	47.10	1.0	ug/L	50.0		94.2	71-149	0.0850	26	
2-Butanone (MEK)	95.73	10.0	ug/L	102		94.0	52-159	2.84	27	
Bromochloromethane	46.34	1.0	ug/L	50.0		92.7	69-143	0.710	23	
Chloroform	47.33	1.0	ug/L	50.0		94.7	69-144	0.870	23	
1,1,1-Trichloroethane	46.81	1.0	ug/L	50.0		93.6	62-129	1.03	24	
Carbon Tetrachloride	48.27	1.0	ug/L	50.0		96.5	63-141	2.18	25	
Benzene	52.58	1.0	ug/L	50.0		105	71-134	3.15	24	
1,2-Dichloroethane	52.21	1.0	ug/L	50.0		104	72-132	0.725	24	



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ1078

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1195 - EPA 5030B - EPA 8260B										
LCS Dup (1HJ1195-BSD1)										
				Prepared: 10/16/24 00:00 Analyzed: 10/16/24 10:14						
Trichloroethylene	51.35	1.0	ug/L	50.0		103	71-135	2.94	24	
1,2-Dichloropropane	51.79	1.0	ug/L	50.0		104	69-136	1.89	24	
Dibromomethane	51.38	1.0	ug/L	50.0		103	73-147	0.605	25	
Bromodichloromethane	50.83	1.0	ug/L	50.0		102	68-129	1.47	22	
cis-1,3-Dichloropropene	50.05	1.0	ug/L	50.0		100	65-134	1.53	23	
4-Methyl-2-pentanone (MIBK)	106.5	5.0	ug/L	100		106	58-147	3.49	27	
Toluene	50.57	1.0	ug/L	50.0		101	72-133	2.77	24	
trans-1,3-Dichloropropene	50.44	1.0	ug/L	50.0		101	67-130	0.888	24	
1,1,2-Trichloroethane	51.24	1.0	ug/L	50.0		102	69-135	0.587	23	
Tetrachloroethylene	54.14	1.0	ug/L	50.0		108	69-130	2.20	25	
2-Hexanone (MBK)	104.3	5.0	ug/L	99.3		105	55-144	2.63	25	
Dibromochloromethane	51.73	1.0	ug/L	50.0		103	73-127	1.00	22	
1,2-Dibromoethane	52.47	1.0	ug/L	50.0		105	67-132	0.532	24	
Chlorobenzene	52.21	1.0	ug/L	50.0		104	72-123	1.16	23	
1,1,1,2-Tetrachloroethane	53.81	1.0	ug/L	50.0		108	73-127	0.149	24	
Ethylbenzene	54.13	1.0	ug/L	50.0		108	71-127	1.28	26	
Xylenes, total	160.1	2.0	ug/L	150		107	74-127	3.00	25	
Styrene	55.31	1.0	ug/L	50.0		111	66-126	2.82	23	
Bromoform	53.41	1.0	ug/L	50.0		107	68-130	0.338	23	
1,2,3-Trichloropropane	53.07	1.0	ug/L	50.0		106	63-136	0.605	24	
trans-1,4-Dichloro-2-butene	98.13	5.0	ug/L	103		95.5	54-134	0.829	27	
1,1,2,2-Tetrachloroethane	52.17	1.0	ug/L	50.0		104	61-131	1.39	29	
1,4-Dichlorobenzene	51.82	1.0	ug/L	50.0		104	70-129	0.542	24	
1,2-Dichlorobenzene	53.09	1.0	ug/L	50.0		106	69-126	1.12	26	
1,2-Dibromo-3-chloropropane	51.96	5.0	ug/L	50.0		104	50-143	1.65	30	
Surrogate: Dibromofluoromethane	44.7		ug/L	50.2		89.1	57-134			
Surrogate: Dibromofluoromethane	44.7		ug/L	50.2		89.1	75-136			
Surrogate: 1,2-Dichloroethane-d4	45.4		ug/L	50.4		90.1	53-140			
Surrogate: 1,2-Dichloroethane-d4	45.4		ug/L	50.4		90.1	61-142			
Surrogate: Toluene-d8	49.4		ug/L	50.5		97.8	86-114			
Surrogate: Toluene-d8	49.4		ug/L	50.5		97.8	82-121			
Surrogate: 4-Bromofluorobenzene	49.4		ug/L	50.2		98.5	78-121			
Surrogate: 4-Bromofluorobenzene	49.4		ug/L	50.2		98.5	80-116			

Batch 1HJ1355 - EPA 5030B - EPA 8260B

Blank (1HJ1355-BLK1)										
				Prepared: 10/22/24 00:00 Analyzed: 10/22/24 11:05						
Chloromethane	<1.0	1.0	ug/L							
Vinyl Chloride	<1.0	1.0	ug/L							
Bromomethane	<1.0	1.0	ug/L							
Chloroethane	<1.0	1.0	ug/L							
Trichlorofluoromethane	<1.0	1.0	ug/L							
1,1-Dichloroethylene	<1.0	1.0	ug/L							
Acetone	<10.0	10.0	ug/L							



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CERTIFICATE OF ANALYSIS

1HJ1078

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1355 - EPA 5030B - EPA 8260B										
Blank (1HJ1355-BLK1)										
Prepared: 10/22/24 00:00 Analyzed: 10/22/24 11:05										
Methyl Iodide	<1.0	1.0	ug/L							
Carbon Disulfide	<1.0	1.0	ug/L							
Methylene Chloride	<5.0	5.0	ug/L							
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L							
1,1-Dichloroethane	<1.0	1.0	ug/L							
Vinyl Acetate	<5.0	5.0	ug/L							
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L							
2-Butanone (MEK)	<10.0	10.0	ug/L							
Bromochloromethane	<1.0	1.0	ug/L							
Chloroform	<1.0	1.0	ug/L							
1,1,1-Trichloroethane	<1.0	1.0	ug/L							
Carbon Tetrachloride	<1.0	1.0	ug/L							
Benzene	<1.0	1.0	ug/L							
1,2-Dichloroethane	<1.0	1.0	ug/L							
Trichloroethylene	<1.0	1.0	ug/L							
1,2-Dichloropropane	<1.0	1.0	ug/L							
Dibromomethane	<1.0	1.0	ug/L							
Bromodichloromethane	<1.0	1.0	ug/L							
cis-1,3-Dichloropropene	<1.0	1.0	ug/L							
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L							
Toluene	<1.0	1.0	ug/L							
trans-1,3-Dichloropropene	<1.0	1.0	ug/L							
1,1,2-Trichloroethane	<1.0	1.0	ug/L							
Tetrachloroethylene	<1.0	1.0	ug/L							
2-Hexanone (MBK)	<5.0	5.0	ug/L							
Dibromochloromethane	<1.0	1.0	ug/L							
1,2-Dibromoethane	<1.0	1.0	ug/L							
Chlorobenzene	<1.0	1.0	ug/L							
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L							
Ethylbenzene	<1.0	1.0	ug/L							
Xylenes, total	<2.0	2.0	ug/L							
Styrene	<1.0	1.0	ug/L							
Bromoform	<1.0	1.0	ug/L							
1,2,3-Trichloropropane	<1.0	1.0	ug/L							
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L							
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L							
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	49.7	ug/L	50.2	99.0	75-136
Surrogate: 1,2-Dichloroethane-d4	53.4	ug/L	50.4	106	61-142
Surrogate: Toluene-d8	47.5	ug/L	50.5	94.2	82-121
Surrogate: 4-Bromofluorobenzene	49.8	ug/L	50.2	99.2	80-116



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CERTIFICATE OF ANALYSIS

1HJ1078

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1355 - EPA 5030B - EPA 8260B										
Blank (1HJ1355-BLK2)										
				Prepared: 10/22/24 00:00 Analyzed: 10/23/24 00:08						
Chloromethane	<1.0	1.0	ug/L							
Vinyl Chloride	<1.0	1.0	ug/L							
Bromomethane	<1.0	1.0	ug/L							
Chloroethane	<1.0	1.0	ug/L							
Trichlorofluoromethane	<1.0	1.0	ug/L							
1,1-Dichloroethylene	<1.0	1.0	ug/L							
Acetone	<10.0	10.0	ug/L							
Methyl Iodide	<1.0	1.0	ug/L							
Carbon Disulfide	<1.0	1.0	ug/L							
Methylene Chloride	<5.0	5.0	ug/L							
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L							
1,1-Dichloroethane	<1.0	1.0	ug/L							
Vinyl Acetate	<5.0	5.0	ug/L							
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L							
2-Butanone (MEK)	<10.0	10.0	ug/L							
Bromochloromethane	<1.0	1.0	ug/L							
Chloroform	<1.0	1.0	ug/L							
1,1,1-Trichloroethane	<1.0	1.0	ug/L							
Carbon Tetrachloride	<1.0	1.0	ug/L							
Benzene	<1.0	1.0	ug/L							
1,2-Dichloroethane	<1.0	1.0	ug/L							
Trichloroethylene	<1.0	1.0	ug/L							
1,2-Dichloropropane	<1.0	1.0	ug/L							
Dibromomethane	<1.0	1.0	ug/L							
Bromodichloromethane	<1.0	1.0	ug/L							
cis-1,3-Dichloropropene	<1.0	1.0	ug/L							
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L							
Toluene	<1.0	1.0	ug/L							
trans-1,3-Dichloropropene	<1.0	1.0	ug/L							
1,1,2-Trichloroethane	<1.0	1.0	ug/L							
Tetrachloroethylene	<1.0	1.0	ug/L							
2-Hexanone (MBK)	<5.0	5.0	ug/L							
Dibromochloromethane	<1.0	1.0	ug/L							
1,2-Dibromoethane	<1.0	1.0	ug/L							
Chlorobenzene	<1.0	1.0	ug/L							
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L							
Ethylbenzene	<1.0	1.0	ug/L							
Xylenes, total	<2.0	2.0	ug/L							
Styrene	<1.0	1.0	ug/L							
Bromoform	<1.0	1.0	ug/L							
1,2,3-Trichloropropane	<1.0	1.0	ug/L							
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L							
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L							

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CERTIFICATE OF ANALYSIS

1HJ1078

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1355 - EPA 5030B - EPA 8260B										
Blank (1HJ1355-BLK2)										
				Prepared: 10/22/24 00:00 Analyzed: 10/23/24 00:08						
1,4-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L							
<i>Surrogate: Dibromofluoromethane</i>	47.7		ug/L	50.2		95.0	75-136			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	51.7		ug/L	50.4		103	61-142			
<i>Surrogate: Toluene-d8</i>	47.4		ug/L	50.5		93.8	82-121			
<i>Surrogate: 4-Bromofluorobenzene</i>	49.6		ug/L	50.2		98.8	80-116			
LCS (1HJ1355-BS1)										
				Prepared: 10/22/24 00:00 Analyzed: 10/22/24 09:57						
Chloromethane	33.57	1.0	ug/L	30.3		111	63-155			
Vinyl Chloride	31.86	1.0	ug/L	30.2		105	70-154			
Bromomethane	37.63	1.0	ug/L	30.1		125	52-176			
Chloroethane	28.28	1.0	ug/L	30.3		93.3	72-148			
Trichlorofluoromethane	26.16	1.0	ug/L	30.3		86.3	70-152			
1,1,1-Dichloroethylene	51.06	1.0	ug/L	50.1		102	70-148			
Acetone	114.7	10.0	ug/L	100		115	43-172			
Methyl Iodide	109.1	1.0	ug/L	100		109	69-170			
Carbon Disulfide	76.66	1.0	ug/L	100		76.7	72-162			
Methylene Chloride	52.22	5.0	ug/L	50.1		104	68-142			
trans-1,2-Dichloroethylene	52.85	1.0	ug/L	50.1		106	66-148			
1,1-Dichloroethane	52.98	1.0	ug/L	50.1		106	66-143			
Vinyl Acetate	104.3	5.0	ug/L	156		67.0	43-153			
cis-1,2-Dichloroethylene	52.78	1.0	ug/L	50.4		105	71-149			
2-Butanone (MEK)	109.4	10.0	ug/L	100		109	52-159			
Bromochloromethane	53.71	1.0	ug/L	50.4		107	69-143			
Chloroform	52.28	1.0	ug/L	50.1		104	69-144			
1,1,1-Trichloroethane	51.21	1.0	ug/L	50.1		102	62-129			
Carbon Tetrachloride	52.02	1.0	ug/L	50.1		104	63-141			
Benzene	52.98	1.0	ug/L	50.4		105	71-134			
1,2-Dichloroethane	57.23	1.0	ug/L	50.1		114	72-132			
Trichloroethylene	51.21	1.0	ug/L	50.1		102	71-135			
1,2-Dichloropropane	52.16	1.0	ug/L	50.1		104	69-136			
Dibromomethane	54.27	1.0	ug/L	50.4		108	73-147			
Bromodichloromethane	52.75	1.0	ug/L	50.1		105	68-129			
cis-1,3-Dichloropropene	50.66	1.0	ug/L	50.1		101	65-134			
4-Methyl-2-pentanone (MIBK)	111.6	5.0	ug/L	100		112	58-147			
Toluene	51.15	1.0	ug/L	50.5		101	72-133			
trans-1,3-Dichloropropene	51.90	1.0	ug/L	50.1		104	67-130			
1,1,2-Trichloroethane	51.52	1.0	ug/L	50.1		103	69-135			
Tetrachloroethylene	52.63	1.0	ug/L	50.1		105	69-130			
2-Hexanone (MBK)	109.3	5.0	ug/L	100		109	55-144			
Dibromochloromethane	53.17	1.0	ug/L	50.1		106	73-127			
1,2-Dibromoethane	53.07	1.0	ug/L	50.2		106	67-132			

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CERTIFICATE OF ANALYSIS

1HJ1078

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1355 - EPA 5030B - EPA 8260B										
LCS (1HJ1355-BS1)										
				Prepared: 10/22/24 00:00 Analyzed: 10/22/24 09:57						
Chlorobenzene	52.05	1.0	ug/L	50.1		104	72-123			
1,1,1,2-Tetrachloroethane	54.73	1.0	ug/L	50.3		109	73-127			
Ethylbenzene	54.58	1.0	ug/L	50.2		109	71-127			
Xylenes, total	160.4	2.0	ug/L	151		106	74-127			
Styrene	54.79	1.0	ug/L	50.4		109	66-126			
Bromoform	51.81	1.0	ug/L	50.1		103	68-130			
1,2,3-Trichloropropane	51.78	1.0	ug/L	50.3		103	63-136			
trans-1,4-Dichloro-2-butene	102.6	5.0	ug/L	100		103	54-134			
1,1,2,2-Tetrachloroethane	53.02	1.0	ug/L	50.1		106	61-131			
1,4-Dichlorobenzene	50.94	1.0	ug/L	50.1		102	70-129			
1,2-Dichlorobenzene	52.10	1.0	ug/L	50.1		104	69-126			
1,2-Dibromo-3-chloropropane	44.67	5.0	ug/L	50.1		89.1	50-143			
<i>Surrogate: Dibromofluoromethane</i>	<i>49.9</i>		<i>ug/L</i>	<i>50.2</i>		<i>99.4</i>	<i>75-136</i>			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>52.1</i>		<i>ug/L</i>	<i>50.4</i>		<i>103</i>	<i>61-142</i>			
<i>Surrogate: Toluene-d8</i>	<i>49.8</i>		<i>ug/L</i>	<i>50.5</i>		<i>98.8</i>	<i>82-121</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>49.4</i>		<i>ug/L</i>	<i>50.2</i>		<i>98.4</i>	<i>80-116</i>			
LCS (1HJ1355-BS2)										
				Prepared: 10/22/24 00:00 Analyzed: 10/22/24 23:01						
Chloromethane	29.08	1.0	ug/L	30.3		95.9	63-155			
Vinyl Chloride	27.21	1.0	ug/L	30.2		90.0	70-154			
Bromomethane	31.91	1.0	ug/L	30.1		106	52-176			
Chloroethane	24.50	1.0	ug/L	30.3		80.8	72-148			
Trichlorofluoromethane	22.69	1.0	ug/L	30.3		74.9	70-152			
1,1-Dichloroethylene	44.10	1.0	ug/L	50.1		88.0	70-148			
Acetone	116.6	10.0	ug/L	100		117	43-172			
Methyl Iodide	94.09	1.0	ug/L	100		94.1	69-170			
Methylene Chloride	45.89	5.0	ug/L	50.1		91.6	68-142			
trans-1,2-Dichloroethylene	47.04	1.0	ug/L	50.1		93.9	66-148			
1,1-Dichloroethane	47.44	1.0	ug/L	50.1		94.7	66-143			
Vinyl Acetate	94.40	5.0	ug/L	156		60.6	43-153			
cis-1,2-Dichloroethylene	47.40	1.0	ug/L	50.4		94.1	71-149			
2-Butanone (MEK)	104.5	10.0	ug/L	100		104	52-159			
Bromochloromethane	48.94	1.0	ug/L	50.4		97.1	69-143			
Chloroform	47.13	1.0	ug/L	50.1		94.1	69-144			
1,1,1-Trichloroethane	45.49	1.0	ug/L	50.1		90.8	62-129			
Carbon Tetrachloride	45.94	1.0	ug/L	50.1		91.7	63-141			
Benzene	50.43	1.0	ug/L	50.4		100	71-134			
1,2-Dichloroethane	55.60	1.0	ug/L	50.1		111	72-132			
Trichloroethylene	48.69	1.0	ug/L	50.1		97.2	71-135			
1,2-Dichloropropane	50.84	1.0	ug/L	50.1		101	69-136			
Dibromomethane	52.43	1.0	ug/L	50.4		104	73-147			
Bromodichloromethane	50.34	1.0	ug/L	50.1		101	68-129			
cis-1,3-Dichloropropene	48.04	1.0	ug/L	50.1		95.9	65-134			

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CERTIFICATE OF ANALYSIS

1HJ1078

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1355 - EPA 5030B - EPA 8260B										
LCS (1HJ1355-BS2)										
				Prepared: 10/22/24 00:00 Analyzed: 10/22/24 23:01						
4-Methyl-2-pentanone (MIBK)	114.6	5.0	ug/L	100		115	58-147			
Toluene	48.88	1.0	ug/L	50.5		96.8	72-133			
trans-1,3-Dichloropropene	49.81	1.0	ug/L	50.1		99.5	67-130			
1,1,2-Trichloroethane	49.95	1.0	ug/L	50.1		99.7	69-135			
Tetrachloroethylene	49.35	1.0	ug/L	50.1		98.5	69-130			
2-Hexanone (MBK)	113.9	5.0	ug/L	100		114	55-144			
Dibromochloromethane	51.11	1.0	ug/L	50.1		102	73-127			
1,2-Dibromoethane	52.32	1.0	ug/L	50.2		104	67-132			
Chlorobenzene	49.79	1.0	ug/L	50.1		99.4	72-123			
1,1,1,2-Tetrachloroethane	52.40	1.0	ug/L	50.3		104	73-127			
Ethylbenzene	52.33	1.0	ug/L	50.2		104	71-127			
Xylenes, total	152.5	2.0	ug/L	151		101	74-127			
Styrene	52.43	1.0	ug/L	50.4		104	66-126			
Bromoform	50.61	1.0	ug/L	50.1		101	68-130			
1,2,3-Trichloropropane	52.68	1.0	ug/L	50.3		105	63-136			
trans-1,4-Dichloro-2-butene	100.9	5.0	ug/L	100		101	54-134			
1,1,2,2-Tetrachloroethane	53.13	1.0	ug/L	50.1		106	61-131			
1,4-Dichlorobenzene	48.61	1.0	ug/L	50.1		97.0	70-129			
1,2-Dichlorobenzene	49.77	1.0	ug/L	50.1		99.4	69-126			
1,2-Dibromo-3-chloropropane	46.69	5.0	ug/L	50.1		93.1	50-143			
Surrogate: Dibromofluoromethane	47.2		ug/L	50.2		94.0	75-136			
Surrogate: 1,2-Dichloroethane-d4	49.5		ug/L	50.4		98.3	61-142			
Surrogate: Toluene-d8	49.8		ug/L	50.5		98.7	82-121			
Surrogate: 4-Bromofluorobenzene	50.1		ug/L	50.2		99.9	80-116			
LCS Dup (1HJ1355-BSD1)										
				Prepared: 10/22/24 00:00 Analyzed: 10/22/24 10:20						
Chloromethane	31.48	1.0	ug/L	30.3		104	63-155	6.43	24	
Vinyl Chloride	29.84	1.0	ug/L	30.2		98.6	70-154	6.55	25	
Bromomethane	34.68	1.0	ug/L	30.1		115	52-176	8.16	27	
Chloroethane	26.57	1.0	ug/L	30.3		87.6	72-148	6.24	25	
Trichlorofluoromethane	24.32	1.0	ug/L	30.3		80.2	70-152	7.29	26	
1,1-Dichloroethylene	47.51	1.0	ug/L	50.1		94.8	70-148	7.20	24	
Acetone	111.6	10.0	ug/L	100		112	43-172	2.69	30	
Methyl Iodide	104.9	1.0	ug/L	100		105	69-170	3.95	30	
Carbon Disulfide	71.74	1.0	ug/L	100		71.7	72-162	6.63	24	S
Methylene Chloride	49.68	5.0	ug/L	50.1		99.2	68-142	4.99	21	
trans-1,2-Dichloroethylene	49.89	1.0	ug/L	50.1		99.6	66-148	5.76	27	
1,1-Dichloroethane	50.16	1.0	ug/L	50.1		100	66-143	5.47	24	
Vinyl Acetate	101.0	5.0	ug/L	156		64.9	43-153	3.16	30	
cis-1,2-Dichloroethylene	50.08	1.0	ug/L	50.4		99.5	71-149	5.25	26	
2-Butanone (MEK)	102.7	10.0	ug/L	100		103	52-159	6.31	27	
Bromochloromethane	51.18	1.0	ug/L	50.4		102	69-143	4.82	23	
Chloroform	49.86	1.0	ug/L	50.1		99.6	69-144	4.74	23	

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CERTIFICATE OF ANALYSIS

1HJ1078

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1HJ1355 - EPA 5030B - EPA 8260B

LCS Dup (1HJ1355-BSD1)

Prepared: 10/22/24 00:00 Analyzed: 10/22/24 10:20

1,1,1-Trichloroethane	48.43	1.0	ug/L	50.1		96.6	62-129	5.58	24	
Carbon Tetrachloride	49.02	1.0	ug/L	50.1		97.9	63-141	5.94	25	
Benzene	50.72	1.0	ug/L	50.4		101	71-134	4.36	24	
1,2-Dichloroethane	55.65	1.0	ug/L	50.1		111	72-132	2.80	24	
Trichloroethylene	49.14	1.0	ug/L	50.1		98.1	71-135	4.13	24	
1,2-Dichloropropane	50.25	1.0	ug/L	50.1		100	69-136	3.73	24	
Dibromomethane	52.42	1.0	ug/L	50.4		104	73-147	3.47	25	
Bromodichloromethane	50.53	1.0	ug/L	50.1		101	68-129	4.30	22	
cis-1,3-Dichloropropene	49.03	1.0	ug/L	50.1		97.9	65-134	3.27	23	
4-Methyl-2-pentanone (MIBK)	109.9	5.0	ug/L	100		110	58-147	1.48	27	
Toluene	48.80	1.0	ug/L	50.5		96.7	72-133	4.70	24	
trans-1,3-Dichloropropene	50.55	1.0	ug/L	50.1		101	67-130	2.64	24	
1,1,2-Trichloroethane	50.13	1.0	ug/L	50.1		100	69-135	2.73	23	
Tetrachloroethylene	49.92	1.0	ug/L	50.1		99.6	69-130	5.29	25	
2-Hexanone (MBK)	106.0	5.0	ug/L	100		106	55-144	3.02	25	
Dibromochloromethane	50.87	1.0	ug/L	50.1		102	73-127	4.42	22	
1,2-Dibromoethane	51.52	1.0	ug/L	50.2		103	67-132	2.96	24	
Chlorobenzene	49.91	1.0	ug/L	50.1		99.7	72-123	4.20	23	
1,1,1,2-Tetrachloroethane	52.38	1.0	ug/L	50.3		104	73-127	4.39	24	
Ethylbenzene	52.00	1.0	ug/L	50.2		104	71-127	4.84	26	
Xylenes, total	153.2	2.0	ug/L	151		101	74-127	4.59	25	
Styrene	52.46	1.0	ug/L	50.4		104	66-126	4.34	23	
Bromoform	50.15	1.0	ug/L	50.1		100	68-130	3.26	23	
1,2,3-Trichloropropane	50.73	1.0	ug/L	50.3		101	63-136	2.05	24	
trans-1,4-Dichloro-2-butene	99.63	5.0	ug/L	100		99.6	54-134	2.95	27	
1,1,2,2-Tetrachloroethane	51.28	1.0	ug/L	50.1		102	61-131	3.34	29	
1,4-Dichlorobenzene	49.53	1.0	ug/L	50.1		98.8	70-129	2.81	24	
1,2-Dichlorobenzene	50.64	1.0	ug/L	50.1		101	69-126	2.84	26	
1,2-Dibromo-3-chloropropane	45.00	5.0	ug/L	50.1		89.8	50-143	0.736	30	

Surrogate: Dibromofluoromethane	50.2		ug/L	50.2		100	75-136			
Surrogate: 1,2-Dichloroethane-d4	52.2		ug/L	50.4		104	61-142			
Surrogate: Toluene-d8	50.0		ug/L	50.5		99.0	82-121			
Surrogate: 4-Bromofluorobenzene	49.9		ug/L	50.2		99.4	80-116			

LCS Dup (1HJ1355-BSD2)

Prepared: 10/22/24 00:00 Analyzed: 10/22/24 23:23

Chloromethane	30.71	1.0	ug/L	30.3		101	63-155	5.45	24	
Vinyl Chloride	28.82	1.0	ug/L	30.2		95.3	70-154	5.75	25	
Bromomethane	32.93	1.0	ug/L	30.1		109	52-176	3.15	27	
Chloroethane	26.09	1.0	ug/L	30.3		86.1	72-148	6.29	25	
Trichlorofluoromethane	24.13	1.0	ug/L	30.3		79.6	70-152	6.15	26	
1,1-Dichloroethylene	46.79	1.0	ug/L	50.1		93.3	70-148	5.92	24	
Acetone	114.9	10.0	ug/L	100		115	43-172	1.43	30	
Methyl Iodide	99.97	1.0	ug/L	100		100	69-170	6.06	30	

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CERTIFICATE OF ANALYSIS

1HJ1078

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1355 - EPA 5030B - EPA 8260B										
LCS Dup (1HJ1355-BSD2)										
				Prepared: 10/22/24 00:00 Analyzed: 10/22/24 23:23						
Methylene Chloride	47.98	5.0	ug/L	50.1		95.8	68-142	4.45	21	
trans-1,2-Dichloroethylene	49.63	1.0	ug/L	50.1		99.1	66-148	5.36	27	
1,1-Dichloroethane	49.54	1.0	ug/L	50.1		98.9	66-143	4.33	24	
Vinyl Acetate	96.42	5.0	ug/L	156		61.9	43-153	2.12	30	
cis-1,2-Dichloroethylene	49.70	1.0	ug/L	50.4		98.7	71-149	4.74	26	
2-Butanone (MEK)	102.5	10.0	ug/L	100		103	52-159	1.90	27	
Bromochloromethane	50.70	1.0	ug/L	50.4		101	69-143	3.53	23	
Chloroform	49.23	1.0	ug/L	50.1		98.3	69-144	4.36	23	
1,1,1-Trichloroethane	47.79	1.0	ug/L	50.1		95.4	62-129	4.93	24	
Carbon Tetrachloride	48.48	1.0	ug/L	50.1		96.8	63-141	5.38	25	
Benzene	53.03	1.0	ug/L	50.4		105	71-134	5.03	24	
1,2-Dichloroethane	58.60	1.0	ug/L	50.1		117	72-132	5.25	24	
Trichloroethylene	50.92	1.0	ug/L	50.1		102	71-135	4.48	24	
1,2-Dichloropropane	52.85	1.0	ug/L	50.1		106	69-136	3.88	24	
Dibromomethane	53.93	1.0	ug/L	50.4		107	73-147	2.82	25	
Bromodichloromethane	52.53	1.0	ug/L	50.1		105	68-129	4.26	22	
cis-1,3-Dichloropropene	49.95	1.0	ug/L	50.1		99.7	65-134	3.90	23	
4-Methyl-2-pentanone (MIBK)	113.3	5.0	ug/L	100		113	58-147	1.14	27	
Toluene	51.29	1.0	ug/L	50.5		102	72-133	4.81	24	
trans-1,3-Dichloropropene	51.27	1.0	ug/L	50.1		102	67-130	2.89	24	
1,1,2-Trichloroethane	51.40	1.0	ug/L	50.1		103	69-135	2.86	23	
Tetrachloroethylene	51.29	1.0	ug/L	50.1		102	69-130	3.86	25	
2-Hexanone (MBK)	108.9	5.0	ug/L	100		109	55-144	4.52	25	
Dibromochloromethane	52.05	1.0	ug/L	50.1		104	73-127	1.82	22	
1,2-Dibromoethane	52.70	1.0	ug/L	50.2		105	67-132	0.724	24	
Chlorobenzene	51.95	1.0	ug/L	50.1		104	72-123	4.25	23	
1,1,1,2-Tetrachloroethane	53.49	1.0	ug/L	50.3		106	73-127	2.06	24	
Ethylbenzene	54.56	1.0	ug/L	50.2		109	71-127	4.17	26	
Xylenes, total	158.8	2.0	ug/L	151		105	74-127	4.02	25	
Styrene	54.10	1.0	ug/L	50.4		107	66-126	3.14	23	
Bromoform	50.66	1.0	ug/L	50.1		101	68-130	0.0987	23	
1,2,3-Trichloropropane	52.37	1.0	ug/L	50.3		104	63-136	0.590	24	
trans-1,4-Dichloro-2-butene	100.2	5.0	ug/L	100		100	54-134	0.676	27	
1,1,2,2-Tetrachloroethane	53.17	1.0	ug/L	50.1		106	61-131	0.0753	29	
1,4-Dichlorobenzene	50.24	1.0	ug/L	50.1		100	70-129	3.30	24	
1,2-Dichlorobenzene	51.54	1.0	ug/L	50.1		103	69-126	3.49	26	
1,2-Dibromo-3-chloropropane	45.39	5.0	ug/L	50.1		90.5	50-143	2.82	30	
Surrogate: Dibromofluoromethane	47.1		ug/L	50.2		93.7	75-136			
Surrogate: 1,2-Dichloroethane-d4	49.9		ug/L	50.4		99.0	61-142			
Surrogate: Toluene-d8	50.3		ug/L	50.5		99.6	82-121			
Surrogate: 4-Bromofluorobenzene	50.0		ug/L	50.2		99.7	80-116			
Matrix Spike (1HJ1355-MS1)	Source: 1HJ1617-04		Prepared: 10/22/24 00:00 Analyzed: 10/22/24 21:30							



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CERTIFICATE OF ANALYSIS

1HJ1078

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1355 - EPA 5030B - EPA 8260B										
Matrix Spike (1HJ1355-MS1)	Source: 1HJ1617-04			Prepared: 10/22/24 00:00 Analyzed: 10/22/24 21:30						
Chloromethane	324.6	10.0	ug/L	303	ND	107	61-152			
Vinyl Chloride	301.7	10.0	ug/L	302	ND	99.7	66-149			
Bromomethane	309.7	10.0	ug/L	301	ND	103	43-171			
Chloroethane	258.7	10.0	ug/L	303	ND	85.3	69-148			
Trichlorofluoromethane	247.4	10.0	ug/L	303	ND	81.6	62-163			
1,1-Dichloroethylene	462.5	10.0	ug/L	501	ND	92.3	70-148			
Acetone	1159	100	ug/L	1000	ND	116	45-173			
Methyl Iodide	924.2	10.0	ug/L	1000	ND	92.4	62-167			
Carbon Disulfide	695.9	10.0	ug/L	1000	ND	69.6	71-163			M2
Methylene Chloride	462.2	50.0	ug/L	501	ND	92.2	69-140			
trans-1,2-Dichloroethylene	480.0	10.0	ug/L	501	ND	95.8	69-144			
1,1-Dichloroethane	471.5	10.0	ug/L	501	ND	94.1	70-138			
Vinyl Acetate	942.3	50.0	ug/L	1560	ND	60.5	58-142			
cis-1,2-Dichloroethylene	473.8	10.0	ug/L	504	ND	94.1	68-151			
2-Butanone (MEK)	1008	100	ug/L	1000	ND	101	50-160			
Bromochloromethane	480.3	10.0	ug/L	504	ND	95.3	65-143			
Chloroform	465.8	10.0	ug/L	501	ND	93.0	71-143			
1,1,1-Trichloroethane	461.2	10.0	ug/L	501	ND	92.0	63-133			
Carbon Tetrachloride	467.1	10.0	ug/L	501	ND	93.3	63-142			
Benzene	500.9	10.0	ug/L	504	ND	99.3	69-133			
1,2-Dichloroethane	545.7	10.0	ug/L	501	ND	109	63-138			
Trichloroethylene	481.7	10.0	ug/L	501	ND	96.2	71-133			
1,2-Dichloropropane	493.0	10.0	ug/L	501	ND	98.4	69-132			
Dibromomethane	513.5	10.0	ug/L	504	ND	102	70-147			
Bromodichloromethane	495.7	10.0	ug/L	501	ND	99.0	67-130			
cis-1,3-Dichloropropene	467.2	10.0	ug/L	501	ND	93.3	61-126			
4-Methyl-2-pentanone (MIBK)	1094	50.0	ug/L	1000	ND	109	55-147			
Toluene	477.2	10.0	ug/L	505	ND	94.5	71-133			
trans-1,3-Dichloropropene	479.1	10.0	ug/L	501	ND	95.7	63-124			
1,1,2-Trichloroethane	496.8	10.0	ug/L	501	ND	99.2	69-133			
Tetrachloroethylene	496.4	10.0	ug/L	501	ND	99.1	70-124			
2-Hexanone (MBK)	1076	50.0	ug/L	1000	ND	108	53-141			
Dibromochloromethane	493.7	10.0	ug/L	501	ND	98.6	74-122			
1,2-Dibromoethane	506.1	10.0	ug/L	502	ND	101	66-127			
Chlorobenzene	488.0	10.0	ug/L	501	ND	97.4	76-116			
1,1,1,2-Tetrachloroethane	510.3	10.0	ug/L	503	ND	101	77-121			
Ethylbenzene	515.0	10.0	ug/L	502	ND	103	73-124			
Xylenes, total	1500	20.0	ug/L	1510	ND	99.3	75-123			
Styrene	512.2	10.0	ug/L	504	ND	102	70-120			
Bromoform	486.4	10.0	ug/L	501	ND	97.1	70-124			
1,2,3-Trichloropropane	505.2	10.0	ug/L	503	ND	100	62-135			
trans-1,4-Dichloro-2-butene	980.9	50.0	ug/L	1000	ND	98.1	50-120			
1,1,2,2-Tetrachloroethane	503.5	10.0	ug/L	501	ND	100	63-126			

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CERTIFICATE OF ANALYSIS

1HJ1078

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1355 - EPA 5030B - EPA 8260B										
Matrix Spike (1HJ1355-MS1)	Source: 1HJ1617-04			Prepared: 10/22/24 00:00 Analyzed: 10/22/24 21:30						
1,4-Dichlorobenzene	468.5	10.0	ug/L	501	ND	93.5	72-119			
1,2-Dichlorobenzene	484.2	10.0	ug/L	501	ND	96.7	71-117			
1,2-Dibromo-3-chloropropane	431.1	50.0	ug/L	501	ND	86.0	49-134			
<i>Surrogate: Dibromofluoromethane</i>	469		ug/L	502		93.3	75-136			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	492		ug/L	504		97.7	61-142			
<i>Surrogate: Toluene-d8</i>	498		ug/L	505		98.7	82-121			
<i>Surrogate: 4-Bromofluorobenzene</i>	500		ug/L	502		99.7	80-116			
Matrix Spike (1HJ1355-MS2)	Source: 1HJ1633-01			Prepared: 10/22/24 00:00 Analyzed: 10/22/24 08:04						
Chloromethane	343.5	10.0	ug/L	303	ND	113	61-152			
Vinyl Chloride	324.7	10.0	ug/L	302	ND	107	66-149			
Bromomethane	302.5	10.0	ug/L	301	ND	100	43-171			
Chloroethane	276.1	10.0	ug/L	303	ND	91.1	69-148			
Trichlorofluoromethane	265.2	10.0	ug/L	303	ND	87.5	62-163			
1,1-Dichloroethylene	497.4	10.0	ug/L	501	ND	99.2	70-148			
Acetone	1254	100	ug/L	1000	ND	125	45-173			
Methyl Iodide	884.6	10.0	ug/L	1000	ND	88.5	62-167			
Methylene Chloride	483.5	50.0	ug/L	501	ND	96.5	69-140			
trans-1,2-Dichloroethylene	512.1	10.0	ug/L	501	ND	102	69-144			
1,1-Dichloroethane	500.1	10.0	ug/L	501	ND	99.8	70-138			
Vinyl Acetate	947.6	50.0	ug/L	1560	ND	60.8	58-142			
cis-1,2-Dichloroethylene	478.9	10.0	ug/L	504	ND	95.1	68-151			
2-Butanone (MEK)	1062	100	ug/L	1000	ND	106	50-160			
Bromochloromethane	501.9	10.0	ug/L	504	ND	99.6	65-143			
Chloroform	488.7	10.0	ug/L	501	ND	97.6	71-143			
1,1,1-Trichloroethane	483.0	10.0	ug/L	501	ND	96.4	63-133			
Carbon Tetrachloride	495.1	10.0	ug/L	501	ND	98.8	63-142			
Benzene	533.9	10.0	ug/L	504	ND	106	69-133			
1,2-Dichloroethane	568.6	10.0	ug/L	501	ND	114	63-138			
Trichloroethylene	509.8	10.0	ug/L	501	ND	102	71-133			
1,2-Dichloropropane	518.2	10.0	ug/L	501	ND	103	69-132			
Dibromomethane	531.1	10.0	ug/L	504	ND	105	70-147			
Bromodichloromethane	518.8	10.0	ug/L	501	ND	104	67-130			
cis-1,3-Dichloropropene	467.6	10.0	ug/L	501	ND	93.4	61-126			
4-Methyl-2-pentanone (MIBK)	1175	50.0	ug/L	1000	ND	118	55-147			
Toluene	508.7	10.0	ug/L	505	ND	101	71-133			
trans-1,3-Dichloropropene	478.6	10.0	ug/L	501	ND	95.6	63-124			
1,1,2-Trichloroethane	509.2	10.0	ug/L	501	ND	102	69-133			
Tetrachloroethylene	516.7	10.0	ug/L	501	ND	103	70-124			
2-Hexanone (MBK)	1149	50.0	ug/L	1000	ND	115	53-141			
Dibromochloromethane	514.5	10.0	ug/L	501	ND	103	74-122			
1,2-Dibromoethane	524.5	10.0	ug/L	502	ND	104	66-127			
Chlorobenzene	511.2	10.0	ug/L	501	ND	102	76-116			

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CERTIFICATE OF ANALYSIS

1HJ1078

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1355 - EPA 5030B - EPA 8260B										
Matrix Spike (1HJ1355-MS2)	Source: 1HJ1633-01			Prepared: 10/22/24 00:00 Analyzed: 10/23/24 08:04						
1,1,1,2-Tetrachloroethane	528.1	10.0	ug/L	503	ND	105	77-121			
Ethylbenzene	543.3	10.0	ug/L	502	ND	108	73-124			
Xylenes, total	1584	20.0	ug/L	1510	ND	105	75-123			
Styrene	537.3	10.0	ug/L	504	ND	107	70-120			
Bromoform	502.3	10.0	ug/L	501	ND	100	70-124			
1,2,3-Trichloropropane	542.0	10.0	ug/L	503	ND	108	62-135			
trans-1,4-Dichloro-2-butene	961.2	50.0	ug/L	1000	ND	96.1	50-120			
1,1,1,2-Tetrachloroethane	540.0	10.0	ug/L	501	ND	108	63-126			
1,4-Dichlorobenzene	491.4	10.0	ug/L	501	ND	98.0	72-119			
1,2-Dichlorobenzene	507.4	10.0	ug/L	501	ND	101	71-117			
1,2-Dibromo-3-chloropropane	467.9	50.0	ug/L	501	ND	93.3	49-134			
<i>Surrogate: Dibromofluoromethane</i>	468		ug/L	502		93.3	75-136			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	499		ug/L	504		99.1	61-142			
<i>Surrogate: Toluene-d8</i>	502		ug/L	505		99.4	82-121			
<i>Surrogate: 4-Bromofluorobenzene</i>	500		ug/L	502		99.6	80-116			
Matrix Spike Dup (1HJ1355-MSD1)	Source: 1HJ1617-04			Prepared: 10/22/24 00:00 Analyzed: 10/22/24 21:53						
Chloromethane	324.4	10.0	ug/L	303	ND	107	61-152	0.0616	26	
Vinyl Chloride	309.5	10.0	ug/L	302	ND	102	66-149	2.55	23	
Bromomethane	331.1	10.0	ug/L	301	ND	110	43-171	6.68	29	
Chloroethane	264.9	10.0	ug/L	303	ND	87.4	69-148	2.37	25	
Trichlorofluoromethane	253.9	10.0	ug/L	303	ND	83.8	62-163	2.59	25	
1,1-Dichloroethylene	477.1	10.0	ug/L	501	ND	95.2	70-148	3.11	22	
Acetone	1142	100	ug/L	1000	ND	114	45-173	1.46	30	
Methyl Iodide	988.7	10.0	ug/L	1000	ND	98.9	62-167	6.74	24	
Carbon Disulfide	710.0	10.0	ug/L	1000	ND	71.0	71-163	2.01	22	
Methylene Chloride	462.7	50.0	ug/L	501	ND	92.3	69-140	0.108	19	
trans-1,2-Dichloroethylene	489.0	10.0	ug/L	501	ND	97.6	69-144	1.86	22	
1,1-Dichloroethane	483.6	10.0	ug/L	501	ND	96.5	70-138	2.53	20	
Vinyl Acetate	954.5	50.0	ug/L	1560	ND	61.3	58-142	1.29	24	
cis-1,2-Dichloroethylene	487.0	10.0	ug/L	504	ND	96.7	68-151	2.75	22	
2-Butanone (MEK)	1020	100	ug/L	1000	ND	102	50-160	1.24	23	
Bromochloromethane	486.8	10.0	ug/L	504	ND	96.6	65-143	1.34	22	
Chloroform	476.3	10.0	ug/L	501	ND	95.1	71-143	2.23	21	
1,1,1-Trichloroethane	477.9	10.0	ug/L	501	ND	95.4	63-133	3.56	23	
Carbon Tetrachloride	489.4	10.0	ug/L	501	ND	97.7	63-142	4.66	22	
Benzene	516.3	10.0	ug/L	504	ND	102	69-133	3.03	18	
1,2-Dichloroethane	545.3	10.0	ug/L	501	ND	109	63-138	0.0733	20	
Trichloroethylene	497.0	10.0	ug/L	501	ND	99.2	71-133	3.13	23	
1,2-Dichloropropane	501.2	10.0	ug/L	501	ND	100	69-132	1.65	20	
Dibromomethane	514.0	10.0	ug/L	504	ND	102	70-147	0.0973	22	
Bromodichloromethane	501.3	10.0	ug/L	501	ND	100	67-130	1.12	21	
cis-1,3-Dichloropropene	477.0	10.0	ug/L	501	ND	95.2	61-126	2.08	21	

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Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1355 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1HJ1355-MSD1) Source: 1HJ1617-04 Prepared: 10/22/24 00:00 Analyzed: 10/22/24 21:53										
4-Methyl-2-pentanone (MIBK)	1107	50.0	ug/L	1000	ND	111	55-147	1.15	23	
Toluene	494.7	10.0	ug/L	505	ND	98.0	71-133	3.60	19	
trans-1,3-Dichloropropene	486.4	10.0	ug/L	501	ND	97.1	63-124	1.51	21	
1,1,2-Trichloroethane	491.7	10.0	ug/L	501	ND	98.2	69-133	1.03	19	
Tetrachloroethylene	507.2	10.0	ug/L	501	ND	101	70-124	2.15	24	
2-Hexanone (MBK)	1078	50.0	ug/L	1000	ND	108	53-141	0.204	24	
Dibromochloromethane	495.2	10.0	ug/L	501	ND	98.9	74-122	0.303	21	
1,2-Dibromoethane	505.5	10.0	ug/L	502	ND	101	66-127	0.119	23	
Chlorobenzene	496.0	10.0	ug/L	501	ND	99.0	76-116	1.63	21	
1,1,1,2-Tetrachloroethane	516.0	10.0	ug/L	503	ND	102	77-121	1.11	25	
Ethylbenzene	531.7	10.0	ug/L	502	ND	106	73-124	3.19	20	
Xylenes, total	1540	20.0	ug/L	1510	ND	102	75-123	2.64	20	
Styrene	518.9	10.0	ug/L	504	ND	103	70-120	1.30	23	
Bromoform	487.0	10.0	ug/L	501	ND	97.2	70-124	0.123	22	
1,2,3-Trichloropropane	505.8	10.0	ug/L	503	ND	100	62-135	0.119	28	
trans-1,4-Dichloro-2-butene	978.5	50.0	ug/L	1000	ND	97.8	50-120	0.245	26	
1,1,2,2-Tetrachloroethane	515.7	10.0	ug/L	501	ND	103	63-126	2.39	24	
1,4-Dichlorobenzene	483.9	10.0	ug/L	501	ND	96.5	72-119	3.23	24	
1,2-Dichlorobenzene	495.3	10.0	ug/L	501	ND	98.9	71-117	2.27	24	
1,2-Dibromo-3-chloropropane	440.1	50.0	ug/L	501	ND	87.8	49-134	2.07	28	
Surrogate: Dibromofluoromethane	472		ug/L	502		94.0	75-136			
Surrogate: 1,2-Dichloroethane-d4	500		ug/L	504		99.4	61-142			
Surrogate: Toluene-d8	501		ug/L	505		99.3	82-121			
Surrogate: 4-Bromofluorobenzene	496		ug/L	502		98.9	80-116			
Matrix Spike Dup (1HJ1355-MSD2) Source: 1HJ1633-01 Prepared: 10/22/24 00:00 Analyzed: 10/23/24 08:26										
Chloromethane	327.6	10.0	ug/L	303	ND	108	61-152	4.74	26	
Vinyl Chloride	307.4	10.0	ug/L	302	ND	102	66-149	5.47	23	
Bromomethane	317.8	10.0	ug/L	301	ND	106	43-171	4.93	29	
Chloroethane	268.4	10.0	ug/L	303	ND	88.5	69-148	2.83	25	
Trichlorofluoromethane	251.4	10.0	ug/L	303	ND	83.0	62-163	5.34	25	
1,1-Dichloroethylene	477.4	10.0	ug/L	501	ND	95.2	70-148	4.10	22	
Acetone	1207	100	ug/L	1000	ND	121	45-173	3.84	30	
Methyl Iodide	967.6	10.0	ug/L	1000	ND	96.8	62-167	8.96	24	
Methylene Chloride	472.5	50.0	ug/L	501	ND	94.3	69-140	2.30	19	
trans-1,2-Dichloroethylene	492.2	10.0	ug/L	501	ND	98.3	69-144	3.96	22	
1,1-Dichloroethane	493.4	10.0	ug/L	501	ND	98.5	70-138	1.35	20	
Vinyl Acetate	946.7	50.0	ug/L	1560	ND	60.8	58-142	0.0950	24	
cis-1,2-Dichloroethylene	475.5	10.0	ug/L	504	ND	94.4	68-151	0.712	22	
2-Butanone (MEK)	1046	100	ug/L	1000	ND	105	50-160	1.51	23	
Bromochloromethane	502.8	10.0	ug/L	504	ND	99.8	65-143	0.179	22	
Chloroform	484.2	10.0	ug/L	501	ND	96.7	71-143	0.925	21	
1,1,1-Trichloroethane	477.8	10.0	ug/L	501	ND	95.3	63-133	1.08	23	

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CERTIFICATE OF ANALYSIS

1HJ1078

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1355 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1HJ1355-MSD2)	Source: 1HJ1633-01			Prepared: 10/22/24 00:00 Analyzed: 10/23/24 08:26						
Carbon Tetrachloride	486.6	10.0	ug/L	501	ND	97.1	63-142	1.73	22	
Benzene	525.0	10.0	ug/L	504	ND	104	69-133	1.68	18	
1,2-Dichloroethane	571.8	10.0	ug/L	501	ND	114	63-138	0.561	20	
Trichloroethylene	506.5	10.0	ug/L	501	ND	101	71-133	0.649	23	
1,2-Dichloropropane	519.4	10.0	ug/L	501	ND	104	69-132	0.231	20	
Dibromomethane	538.6	10.0	ug/L	504	ND	107	70-147	1.40	22	
Bromodichloromethane	518.9	10.0	ug/L	501	ND	104	67-130	0.0193	21	
cis-1,3-Dichloropropene	473.7	10.0	ug/L	501	ND	94.6	61-126	1.30	21	
4-Methyl-2-pentanone (MIBK)	1165	50.0	ug/L	1000	ND	117	55-147	0.854	23	
Toluene	503.6	10.0	ug/L	505	ND	99.8	71-133	1.01	19	
trans-1,3-Dichloropropene	488.9	10.0	ug/L	501	ND	97.6	63-124	2.13	21	
1,1,2-Trichloroethane	513.7	10.0	ug/L	501	ND	103	69-133	0.880	19	
Tetrachloroethylene	509.7	10.0	ug/L	501	ND	102	70-124	1.36	24	
2-Hexanone (MBK)	1132	50.0	ug/L	1000	ND	113	53-141	1.53	24	
Dibromochloromethane	516.0	10.0	ug/L	501	ND	103	74-122	0.291	21	
1,2-Dibromoethane	523.5	10.0	ug/L	502	ND	104	66-127	0.191	23	
Chlorobenzene	510.9	10.0	ug/L	501	ND	102	76-116	0.0587	21	
1,1,1,2-Tetrachloroethane	525.7	10.0	ug/L	503	ND	104	77-121	0.455	25	
Ethylbenzene	540.3	10.0	ug/L	502	ND	108	73-124	0.554	20	
Xylenes, total	1583	20.0	ug/L	1510	ND	105	75-123	0.0316	20	
Styrene	540.7	10.0	ug/L	504	ND	107	70-120	0.631	23	
Bromoform	506.4	10.0	ug/L	501	ND	101	70-124	0.813	22	
1,2,3-Trichloropropane	535.8	10.0	ug/L	503	ND	106	62-135	1.15	28	
trans-1,4-Dichloro-2-butene	955.3	50.0	ug/L	1000	ND	95.5	50-120	0.616	26	
1,1,2,2-Tetrachloroethane	542.7	10.0	ug/L	501	ND	108	63-126	0.499	24	
1,4-Dichlorobenzene	489.8	10.0	ug/L	501	ND	97.7	72-119	0.326	24	
1,2-Dichlorobenzene	505.3	10.0	ug/L	501	ND	101	71-117	0.415	24	
1,2-Dibromo-3-chloropropane	462.9	50.0	ug/L	501	ND	92.3	49-134	1.07	28	
Surrogate: Dibromofluoromethane	467		ug/L	502		93.1	75-136			
Surrogate: 1,2-Dichloroethane-d4	500		ug/L	504		99.2	61-142			
Surrogate: Toluene-d8	498		ug/L	505		98.7	82-121			
Surrogate: 4-Bromofluorobenzene	504		ug/L	502		100	80-116			

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ0834 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1HJ0834-BLK1)	Prepared: 10/14/24 16:03 Analyzed: 10/15/24 17:02									
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							



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Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ0834 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1HJ0834-BLK1)										
				Prepared: 10/14/24 16:03 Analyzed: 10/15/24 17:02						
Chromium, total	<0.0080	0.0080	mg/L							
Cobalt, total	<0.0004	0.0004	mg/L							
Copper, total	<0.0040	0.0040	mg/L							
Lead, total	<0.0040	0.0040	mg/L							
Nickel, total	<0.0040	0.0040	mg/L							
Selenium, total	<0.0040	0.0040	mg/L							
Silver, total	<0.0040	0.0040	mg/L							
Thallium, total	<0.0020	0.0020	mg/L							
Vanadium, total	<0.0200	0.0200	mg/L							
Zinc, total	<0.0200	0.0200	mg/L							
LCS (1HJ0834-BS1)										
				Prepared: 10/14/24 16:03 Analyzed: 10/16/24 11:38						
Antimony, total	0.0959	0.0020	mg/L	0.100		95.9	80-120			
Arsenic, total	0.0960	0.0040	mg/L	0.100		96.0	80-120			
Barium, total	0.107	0.0040	mg/L	0.100		107	80-120			
Beryllium, total	0.0991	0.0040	mg/L	0.100		99.1	80-120			
Cadmium, total	0.0943	0.0008	mg/L	0.100		94.3	80-120			
Chromium, total	0.102	0.0080	mg/L	0.100		102	80-120			
Cobalt, total	0.102	0.0004	mg/L	0.100		102	80-120			
Copper, total	0.104	0.0040	mg/L	0.100		104	80-120			
Lead, total	0.0877	0.0040	mg/L	0.100		87.7	80-120			
Nickel, total	0.101	0.0040	mg/L	0.100		101	80-120			
Selenium, total	0.0875	0.0040	mg/L	0.100		87.5	80-120			
Silver, total	0.0931	0.0040	mg/L	0.100		93.1	80-120			
Thallium, total	0.0876	0.0020	mg/L	0.100		87.6	80-120			
Vanadium, total	0.0981	0.0200	mg/L	0.100		98.1	80-120			
Zinc, total	0.103	0.0200	mg/L	0.100		103	80-120			
Matrix Spike (1HJ0834-MS1)										
			Source: 1HJ1077-01		Prepared: 10/14/24 16:03 Analyzed: 10/15/24 17:20					
Antimony, total	0.0936	0.0020	mg/L	0.100	ND	93.6	75-125			
Arsenic, total	0.0903	0.0040	mg/L	0.100	0.0011	89.3	75-125			
Barium, total	0.212	0.0040	mg/L	0.100	0.113	98.7	75-125			
Beryllium, total	0.0963	0.0040	mg/L	0.100	ND	96.3	75-125			
Cadmium, total	0.0878	0.0008	mg/L	0.100	ND	87.8	75-125			
Chromium, total	0.0925	0.0080	mg/L	0.100	0.0006	92.5	75-125			
Cobalt, total	0.0953	0.0004	mg/L	0.100	0.0003	95.0	75-125			
Copper, total	0.0879	0.0040	mg/L	0.100	ND	87.9	75-125			
Lead, total	0.0903	0.0040	mg/L	0.100	ND	90.3	75-125			
Nickel, total	0.0929	0.0040	mg/L	0.100	0.0018	91.2	75-125			
Selenium, total	0.0850	0.0040	mg/L	0.100	ND	85.0	75-125			
Silver, total	0.0925	0.0040	mg/L	0.100	ND	92.5	75-125			
Thallium, total	0.0852	0.0020	mg/L	0.100	ND	85.2	75-125			
Vanadium, total	0.0935	0.0200	mg/L	0.100	ND	93.5	75-125			
Zinc, total	0.0990	0.0200	mg/L	0.100	ND	99.0	75-125			
Matrix Spike Dup (1HJ0834-MSD1)										
			Source: 1HJ1077-01		Prepared: 10/14/24 16:03 Analyzed: 10/16/24 11:44					

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CERTIFICATE OF ANALYSIS

1HJ1078

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ0834 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Matrix Spike Dup (1HJ0834-MSD1) Source: 1HJ1077-01 Prepared: 10/14/24 16:03 Analyzed: 10/16/24 11:44										
Antimony, total	0.0912	0.0020	mg/L	0.100	ND	91.2	75-125	2.64	20	
Arsenic, total	0.0899	0.0040	mg/L	0.100	0.0011	88.8	75-125	0.487	20	
Barium, total	0.213	0.0040	mg/L	0.100	0.113	99.7	75-125	0.457	20	
Beryllium, total	0.0976	0.0040	mg/L	0.100	ND	97.6	75-125	1.35	20	
Cadmium, total	0.0888	0.0008	mg/L	0.100	ND	88.8	75-125	1.09	20	
Chromium, total	0.0938	0.0080	mg/L	0.100	0.0006	93.8	75-125	1.37	20	
Cobalt, total	0.0942	0.0004	mg/L	0.100	0.0003	93.9	75-125	1.16	20	
Copper, total	0.0926	0.0040	mg/L	0.100	ND	92.6	75-125	5.27	20	
Lead, total	0.0839	0.0040	mg/L	0.100	ND	83.9	75-125	7.37	20	
Nickel, total	0.0904	0.0040	mg/L	0.100	0.0018	88.6	75-125	2.78	20	
Selenium, total	0.0830	0.0040	mg/L	0.100	ND	83.0	75-125	2.32	20	
Silver, total	0.111	0.0040	mg/L	0.100	ND	111	75-125	18.6	20	
Thallium, total	0.0847	0.0020	mg/L	0.100	ND	84.7	75-125	0.635	20	
Vanadium, total	0.0984	0.0200	mg/L	0.100	ND	98.4	75-125	5.11	20	
Zinc, total	0.0993	0.0200	mg/L	0.100	ND	99.3	75-125	0.321	20	
Post Spike (1HJ0834-PS1) Source: 1HJ1077-01 Prepared: 10/14/24 16:03 Analyzed: 10/16/24 11:50										
Antimony, total	0.0725		mg/L	0.0800	0.0002	90.3	80-120			
Arsenic, total	0.0733		mg/L	0.0800	0.0010	90.4	80-120			
Barium, total	0.186		mg/L	0.0800	0.111	94.3	80-120			
Beryllium, total	0.0761		mg/L	0.0800	0.000009	95.1	80-120			
Cadmium, total	0.0718		mg/L	0.0800	0.000005	89.7	80-120			
Chromium, total	0.0733		mg/L	0.0800	0.0006	91.0	80-120			
Cobalt, total	0.0753		mg/L	0.0800	0.0003	93.8	80-120			
Copper, total	0.0740		mg/L	0.0800	0.0009	91.4	80-120			
Lead, total	0.0684		mg/L	0.0800	0.0000008	85.4	80-120			
Nickel, total	0.0746		mg/L	0.0800	0.0017	91.1	80-120			
Selenium, total	0.0686		mg/L	0.0800	0.0006	85.0	80-120			
Silver, total	0.0705		mg/L	0.0800	0.000006	88.0	80-120			
Thallium, total	0.0679		mg/L	0.0800	0.0001	84.7	80-120			
Vanadium, total	0.0803		mg/L	0.0800	0.0042	95.1	80-120			
Zinc, total	0.0816		mg/L	0.0800	0.0113	87.9	80-120			
Batch 1HJ0910 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1HJ0910-BLK1) Prepared: 10/16/24 08:03 Analyzed: 10/16/24 17:26										
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							



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ1078

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ0910 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1HJ0910-BLK1) Prepared: 10/16/24 08:03 Analyzed: 10/16/24 17:26										
Nickel, total	<0.0040	0.0040	mg/L							
Selenium, total	<0.0040	0.0040	mg/L							
Silver, total	<0.0040	0.0040	mg/L							
Thallium, total	<0.0020	0.0020	mg/L							
Vanadium, total	<0.0200	0.0200	mg/L							
Zinc, total	<0.0200	0.0200	mg/L							
LCS (1HJ0910-BS1) Prepared: 10/16/24 08:03 Analyzed: 10/16/24 17:32										
Antimony, total	0.0964	0.0020	mg/L	0.100		96.4	80-120			
Arsenic, total	0.0971	0.0040	mg/L	0.100		97.1	80-120			
Barium, total	0.107	0.0040	mg/L	0.100		107	80-120			
Beryllium, total	0.0997	0.0040	mg/L	0.100		99.7	80-120			
Cadmium, total	0.0940	0.0008	mg/L	0.100		94.0	80-120			
Chromium, total	0.0965	0.0080	mg/L	0.100		96.5	80-120			
Cobalt, total	0.100	0.0004	mg/L	0.100		100	80-120			
Copper, total	0.0978	0.0040	mg/L	0.100		97.8	80-120			
Lead, total	0.0981	0.0040	mg/L	0.100		98.1	80-120			
Nickel, total	0.0983	0.0040	mg/L	0.100		98.3	80-120			
Selenium, total	0.0932	0.0040	mg/L	0.100		93.2	80-120			
Silver, total	0.0974	0.0040	mg/L	0.100		97.4	80-120			
Thallium, total	0.0909	0.0020	mg/L	0.100		90.9	80-120			
Vanadium, total	0.0962	0.0200	mg/L	0.100		96.2	80-120			
Zinc, total	0.0959	0.0200	mg/L	0.100		95.9	80-120			
Matrix Spike (1HJ0910-MS1) Source: 1HJ1078-02 Prepared: 10/16/24 08:03 Analyzed: 10/16/24 17:44										
Antimony, total	0.0964	0.0020	mg/L	0.100	ND	96.4	75-125			
Arsenic, total	0.0990	0.0040	mg/L	0.100	0.0021	96.9	75-125			
Barium, total	0.176	0.0040	mg/L	0.100	0.0676	109	75-125			
Beryllium, total	0.0987	0.0040	mg/L	0.100	ND	98.7	75-125			
Cadmium, total	0.0932	0.0008	mg/L	0.100	0.0003	93.0	75-125			
Chromium, total	0.0930	0.0080	mg/L	0.100	0.0013	91.7	75-125			
Cobalt, total	0.101	0.0004	mg/L	0.100	0.0044	96.9	75-125			
Copper, total	0.0938	0.0040	mg/L	0.100	0.0031	90.6	75-125			
Lead, total	0.0936	0.0040	mg/L	0.100	ND	93.6	75-125			
Nickel, total	0.116	0.0040	mg/L	0.100	0.0187	97.5	75-125			
Selenium, total	0.0899	0.0040	mg/L	0.100	ND	89.9	75-125			
Silver, total	0.0939	0.0040	mg/L	0.100	ND	93.9	75-125			
Thallium, total	0.0889	0.0020	mg/L	0.100	0.0003	88.6	75-125			
Vanadium, total	0.0993	0.0200	mg/L	0.100	ND	99.3	75-125			
Zinc, total	0.0996	0.0200	mg/L	0.100	ND	99.6	75-125			
Matrix Spike Dup (1HJ0910-MSD1) Source: 1HJ1078-02 Prepared: 10/16/24 08:03 Analyzed: 10/16/24 17:51										
Antimony, total	0.0940	0.0020	mg/L	0.100	ND	94.0	75-125	2.52	20	
Arsenic, total	0.0948	0.0040	mg/L	0.100	0.0021	92.7	75-125	4.32	20	
Barium, total	0.170	0.0040	mg/L	0.100	0.0676	102	75-125	3.67	20	
Beryllium, total	0.0933	0.0040	mg/L	0.100	ND	93.3	75-125	5.56	20	



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CERTIFICATE OF ANALYSIS

1HJ1078

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ0910 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Matrix Spike Dup (1HJ0910-MSD1) Source: 1HJ1078-02 Prepared: 10/16/24 08:03 Analyzed: 10/16/24 17:51										
Cadmium, total	0.0898	0.0008	mg/L	0.100	0.0003	89.5	75-125	3.73	20	
Chromium, total	0.0899	0.0080	mg/L	0.100	0.0013	88.6	75-125	3.40	20	
Cobalt, total	0.101	0.0004	mg/L	0.100	0.0044	96.6	75-125	0.318	20	
Copper, total	0.0899	0.0040	mg/L	0.100	0.0031	86.8	75-125	4.16	20	
Lead, total	0.0911	0.0040	mg/L	0.100	ND	91.1	75-125	2.74	20	
Nickel, total	0.113	0.0040	mg/L	0.100	0.0187	93.9	75-125	3.11	20	
Selenium, total	0.0865	0.0040	mg/L	0.100	ND	86.5	75-125	3.85	20	
Silver, total	0.0916	0.0040	mg/L	0.100	ND	91.6	75-125	2.42	20	
Thallium, total	0.0853	0.0020	mg/L	0.100	0.0003	85.0	75-125	4.15	20	
Vanadium, total	0.0965	0.0200	mg/L	0.100	ND	96.5	75-125	2.82	20	
Zinc, total	0.0952	0.0200	mg/L	0.100	ND	95.2	75-125	4.47	20	
Post Spike (1HJ0910-PS1) Source: 1HJ1078-02 Prepared: 10/16/24 08:03 Analyzed: 10/16/24 17:57										
Antimony, total	0.0745		mg/L	0.0800	0.0004	92.6	80-120			
Arsenic, total	0.0775		mg/L	0.0800	0.0021	94.3	80-120			
Barium, total	0.140		mg/L	0.0800	0.0663	92.3	80-120			
Beryllium, total	0.0746		mg/L	0.0800	0.00002	93.3	80-120			
Cadmium, total	0.0698		mg/L	0.0800	0.0003	87.0	80-120			
Chromium, total	0.0708		mg/L	0.0800	0.0013	87.0	80-120			
Cobalt, total	0.0809		mg/L	0.0800	0.0043	95.7	80-120			
Copper, total	0.0744		mg/L	0.0800	0.0031	89.2	80-120			
Lead, total	0.0730		mg/L	0.0800	0.0001	91.1	80-120			
Nickel, total	0.0934		mg/L	0.0800	0.0184	93.8	80-120			
Selenium, total	0.0688		mg/L	0.0800	0.0009	84.8	80-120			
Silver, total	0.0737		mg/L	0.0800	0.0003	91.8	80-120			
Thallium, total	0.0683		mg/L	0.0800	0.0003	85.0	80-120			
Vanadium, total	0.0781		mg/L	0.0800	0.0047	91.7	80-120			
Zinc, total	0.0800		mg/L	0.0800	0.0125	84.4	80-120			
Batch 1HJ1786 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1HJ1786-BLK1) Prepared: 10/30/24 11:22 Analyzed: 10/30/24 22:38										
Copper, total	<0.0040	0.0040	mg/L							
LCS (1HJ1786-BS1) Prepared: 10/30/24 11:22 Analyzed: 10/30/24 22:44										
Copper, total	0.0993	0.0040	mg/L	0.100		99.3	80-120			
Matrix Spike (1HJ1786-MS1) Source: 1HJ2157-01 Prepared: 10/30/24 11:22 Analyzed: 10/30/24 23:09										
Copper, total	0.287	0.0040	mg/L	0.100	0.281	6.42	75-125			M
Matrix Spike Dup (1HJ1786-MSD1) Source: 1HJ2157-01 Prepared: 10/30/24 11:22 Analyzed: 10/30/24 23:15										
Copper, total	0.276	0.0040	mg/L	0.100	0.281	NR	75-125	4.08	20	M
Post Spike (1HJ1786-PS1) Source: 1HJ2157-01 Prepared: 10/30/24 11:22 Analyzed: 10/30/24 23:33										
Copper, total	0.0042		mg/L	0.0800	0.275	NR	80-120			M



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CERTIFICATE OF ANALYSIS

1HJ1078

Definitions

- M:** Matrix interference is present.
- M2:** Matrix spike recovery is below acceptance limits.
- Q12:** Analysis of acrolein and/or acrylonitrile was performed from a sample that was field preserved to pH < 2, which is less than the pH range of 4-5 specified in the test method and required for NPDES compliance per 40CFR Part 136.
- Q3:** LCS recovery is below acceptance limits. The reported value is estimated.
- 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
- S:** Spike recovery outside of acceptance limits.

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 4.1°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
10/31/24 15:40



CHAIN OF C

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Newton, IA 50208
641-792-8451



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HLW Engineering
PM: Heather Murphy

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SITE INFORMATION

Sampler: TODA WHIPPLE

Project: RIWMA Sanitary Landfill - New Regs
6006

REPORT TO

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

INVOICE TO

Harm Jass
Rural Iowa Waste Mgt. Association
20488 M Avenue
Eldora, IA 50627

SPECIAL INSTRUCTIONS

None

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

LAB USE ONLY

Work Order 1HJ1078

Temperature 4.1

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-36 (B)	Aqueous	GRAB	10/10/24	9:45	7	Indfil-app1-voc-group Indfil-app1-metals-6020	01
-001	MW-37 (B)	Aqueous	GRAB	10/10/24	9:55	7	Indfil-app1-voc-group Indfil-app1-metals-6020	02
-001	MW-39 (B)	Aqueous	GRAB	10/10/24	9:27	7	Indfil-app1-voc-group Indfil-app1-metals-6020	03
-001	MW-40 (B)	Aqueous	GRAB	10/10/24	10:15	7	Indfil-app1-voc-group Indfil-app1-metals-6020	04
-001	MW-47 (B)	Aqueous	GRAB	10/10/24	10:45	7	Indfil-app1-voc-group Indfil-app1-metals-6020	05
-001	MW-48A	Aqueous	GRAB	10/10/24	11:47	7	Indfil-app1-voc-group Indfil-app1-metals-6020	06
-001	MW-49A	Aqueous	GRAB	10/10/24	12:17	7	Indfil-app1-voc-group Indfil-app1-metals-6020	07

Relinquished By Toda Whipple Date/Time 10/11/24

Relinquished By _____ Date/Time _____

Received By _____ Date/Time _____

Received for Lab By Schuber Date/Time 10/11/24 10:30

Remarks:



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600 East 17th Street S
Newton, IA 50208
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HLW Engineering
PM: Heather Murphy

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SITE INFORMATION

Sampler: Todd Whipple
Project: RIWMA Sanitary Landfill - New Regs
6006

REPORT TO

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

INVOICE TO

Harm Jass
Rural Iowa Waste Mgt. Association
20488 M Avenue
Eldora, IA 50627

SPECIAL INSTRUCTIONS

None

Turn Around Time

Standard RUSH, need by ___/___/___

LAB USE ONLY

Work Order 1HJ1078
Temperature 4.1
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-50	Aqueous	GRAB	10/10/24	11:14	7	Indfil-app1-voc-group Indfil-app1-metals-6020	08
-001	MW-51	Aqueous	GRAB	10/10/24	12:06	7	Indfil-app1-voc-group Indfil-app1-metals-6020	09
-001	MW-7	Aqueous	GRAB	10/10/24	13:55	7	Indfil-app1-voc-group Indfil-app1-metals-6020	10
-001	MW-9	Aqueous	GRAB	10/10/24	13:01	7	Indfil-app1-voc-group Indfil-app1-metals-6020	11
-001	MW-13R	Aqueous	GRAB	10/10/24	9:07	7	Indfil-app1-voc-group Indfil-app1-metals-6020	12
-001	MW-14	Aqueous	GRAB	10/10/24	8:45	7	Indfil-app1-voc-group Indfil-app1-metals-6020	13
-001	MW-29	Aqueous	GRAB	10/10/24	14:15	7	Indfil-app1-voc-group Indfil-app1-metals-6020	14

Todd Whipple 10/11/24
Relinquished By Date/Time

Heather Murphy 10/11/24 10:30
Received for Lab By Date/Time

Remarks:

Received By Date/Time

Original - Lab Copy Yellow - Sampler Copy



CHAIN OF

600 East 17th Street
Newton, IA 50208
641-792-8451



1 H J 1 0 7 8

HLW Engineering
PM: Heather Murphy

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SITE INFORMATION

Sampler: TODD WHIPPLE
Project: RIWMA Sanitary Landfill - New Regs
6006

REPORT TO

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

INVOICE TO

Harm Jass
Rural Iowa Waste Mgt. Association
20488 M Avenue
Eldora, IA 50627

SPECIAL INSTRUCTIONS

None

Turn Around Time

Standard RUSH, need by ___/___/___

LAB USE ONLY

Work Order 1HJ1078
Temperature 4.1
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-31R	Aqueous	GRAB	10/10/24	12:35	7	Indfil-app1-voc-group Indfil-app1-metals-6020	15
-001	MW-33	Aqueous	GRAB	10/10/24	13:18	7	Indfil-app1-voc-group Indfil-app1-metals-6020	16
-001	MW-35R DRY	Aqueous	GRAB	10/10/24	—	0	Indfil-app1-voc-group Indfil-app1-metals-6020	—
-001	MW-211	Aqueous	GRAB	10/10/24	12:48	7	Indfil-app1-voc-group Indfil-app1-metals-6020	17
-001	GU-1 DRY	Aqueous	GRAB	10/10/24	—	0	Indfil-app1-voc-group Indfil-app1-metals-6020	—
-001	GU-2 DRY	Aqueous	GRAB	10/10/24	—	0	Indfil-app1-voc-group Indfil-app1-metals-6020	—
-001	GU-3	Aqueous	GRAB	10/10/24	—	7	Indfil-app1-voc-group Indfil-app1-metals-6020	18

Todd Whipple 10/11/24
Relinquished By Date/Time

Relinquished By Date/Time

Received By Date/Time

Schuber 10/11/24 10:30
Received for Lab By Date/Time

Remarks:

Original - Lab Copy Yellow - Sampler Copy



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Newton, IA 50208
641-792-8451



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HLW Engineering
PM: Heather Murphy

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SITE INFORMATION

Sampler: TODD WHIPPLE
Project: RIWMA Sanitary Landfill - New Regs
6006

REPORT TO

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

INVOICE TO

Harm Jass
Rural Iowa Waste Mgt. Association
20488 M Avenue
Eldora, IA 50627

SPECIAL INSTRUCTIONS

None

Turn Around Time

Standard RUSH, need by ___/___/___

LAB USE ONLY

Work Order 1451078

Temperature 4.1

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	Tile ACM-1 <u>Dry</u>	Aqueous	GRAB	<u>10/10/24</u>	<u>—</u>	<u>0</u>	Indfll-app1-voc-group Indfll-app1-metals-6020	<u>—</u>
-001	PECS-1 <u>Dry</u>	Aqueous	GRAB	<u>10/10/24</u>	<u>—</u>	<u>0</u>	Indfll-app1-voc-group	<u>—</u>
-001	MW-7A North	Aqueous	GRAB	<u>10/10/24</u>	<u>13:35</u>	<u>1</u>	ms-t-6020	<u>19</u>
-001	MW-7B Northwest	Aqueous	GRAB	<u>10/10/24</u>	<u>13:42</u>	<u>1</u>	ms-t-6020	<u>20</u>
-001	Field Duplicate	Aqueous	GRAB	<u>10/10/24</u>	<u>✓</u>	<u>1</u>	ms-t-6020 Indfll-app1-metals-6020	<u>21</u>

Relinquished By Todd Whipple Date/Time 10/11/24

Relinquished By _____ Date/Time _____

Received By _____ Date/Time _____

Received for Lab By Schuba Date/Time 10/30

Remarks:

Original - Lab Copy Yellow - Sampler Copy

Appendix D

Turbidity Summary

RIMWA (Rural Iowa) Sanitary Landfill

Field Turbidity Over Time

No-Purge Sampling

	10/23/14	1/8/15	3/31/15	7/8/15	11/5/15	4/21/16	10/17/16	1/9/17	4/21/17	7/12/17	10/16/17	1/12/18
<u>Well</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>	<u>NTU</u>	<u>NTU</u>
7	5.38		7.19		3.25	18.50	2.79		16.70		0.32	
7A						3.73	6.80		1.26		0.82	
7B						1000.00	73.30	183.00	12.20		24.73	
9	1.51		4.75		8.26	1.50	1.16		10.70		3.99	
13R	3.89		6.42		42.50	98.00	5.95		12.80		1.80	
14	0.91		13.04		3.25	4.54	7.16	69.60	9.81	1.45	93.27	27.95
29	2		0.12		0.45	2.61	1.35		0.71		1.63	
31R	1.62		2.25		12.10	1.86	4.33		57.70		0.64	
33	2.56		1.67		0.67	1.29	0.72		1.12		0.50	
35R							5.80	4.34	1.07		1.13	
36				27.90		8.04	3.09		35.70		7.18	
37	1.23	2.92	0.67	1.11	0.34	1.55	10.30		0.70		0.15	
39	1.6	3.29	0.41	0.62	2.44	1.42	2.28		0.49		0.16	
40	2.18	2.54	0.85	1.55	0.79	2.29	1.10		2.64		0.45	
47	14.4		67.72	153.00	22.40	820.00	186.00		383.00		128.00	
48A	426		11.01		55.80	6.98	7.95		15.60		23.29	
49A	1.62		0.87		1.85	32.10	4.44	6.64	4.08		0.37	
50	1.04		15.33		3.77	11.80	1.57		6.61		1.77	18.98
51	5.39	70.00	90.25		33.00	233.00	5.59		481.00	4.70	0.88	
211	3.31		4.18		6.10	26.00	2.96		28.30		6.11	
Tile ACM-1												
PECS-1												
GU-3						2.65	1.02		1.13		9.95	
Max	426.00	70.00	90.25	153.00	55.80	1000.00	186.00	183.00	481.00	4.70	128.00	27.95
Min	0.91	2.54	0.12	0.62	0.34	1.29	0.72	4.34	0.49	1.45	0.15	18.98
Median	2.09	3.11	4.47	1.55	3.51	5.76	4.33	38.12	9.81	3.08	1.63	23.47
Average	29.67	19.69	14.17	36.84	12.31	113.89	15.98	65.90	51.59	3.08	14.63	23.47

RIMWA (Rur

Field Turbidity O

No-Purge Sai

	4/24/18	7/5/18	10/25/18	4/15/19	10/7/19	4/22/20	7/10/20	10/1/20	4/8/21	7/1/21	10/29/21	1/2/22
<u>Well</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>	<u>NTU</u>	<u>NTU</u>
7	0.80		2.01	3.68	1.79	3.22		1.51	11.45		2.69	
7A	2.89		0.82	1.02	1.75	1.84		1.50	12.05		4.08	
7B	30.89		6.43	47.37	35.45	50.30		73.81	145.00		16.31	
9	18.21		1.57	2.13	1.69	212.00		19.84	8.81		25.52	
13R	21.78		7.56	30.50	2.41	70.00		3.38	23.80		2.73	
14	10.55		7.57	9.26	2.27	7.68		14.23	79.88		1.48	
29	0.75	1.72	1.44	0.83	1.13	4.45		12.86	1.77		1.26	
31R	41.17		20.81	13.35	1.44	16.90		4.18	9.85		1.94	
33	0.51		0.49	1.44	1.01	1.61		3.46	1.57		1.36	
35R	1.75		2.84	1.07	1.39	2.87		1.26	1.53		12.67	
36	63.51		4.08	2.12	3.66	79.70		2.10	1.11		2.42	
37	0.46		0.82	0.71	0.74	0.96		1.41	1.19		1.14	
39	1.06		0.38	0.87	0.78	3.83		1.15	1.46		1.33	
40	0.75		1.92	1.38	0.94	0.76		2.71	1.54		15.97	
47	682.10		25.32	75.75	7.72	548.00		6.80	129.40		7.88	
48A	664.00		4.07	10.98	39.26	40.60		116.70	49.74		37.58	
49A	8.67		0.87	30.17	1.39	6.95		1.21	3.21		12.66	
50	2.20	6.02	1.83	2.70	1.41	4.55		1.16	4.99		2.90	
51	224.20	6.56	8.88	131.30	20.74	311.00	18.60	4.67	130.50		6.11	71.30
211	82.36		4.93	60.63	28.36	437.00		11.36	34.32		3.66	
Tile ACM-1			1.33	5.56	13.03	43.70					6.20	
PECS-1				1.75	1.77				2.27			
GU-3		1.77	9.47	1.55	1.17	4.90		0.90	1.02	12.20	2.05	
Max	682.10	6.56	25.32	131.30	39.26	548.00	18.60	116.70	145.00	12.20	37.58	71.30
Min	0.46	1.72	0.38	0.71	0.74	0.76	18.60	0.90	1.02	12.20	1.14	71.30
Median	9.61	3.90	2.43	2.70	1.75	7.32	18.60	3.38	6.90	12.20	3.28	71.30
Average	92.93	4.02	5.25	18.96	7.45	84.22	18.60	13.63	29.84	12.20	7.72	71.30

RIMWA (Rur

Field Turbidity O

No-Purge Sai

	4/25/22	10/17/22	4/10/23	10/27/23	4/2/24	10/10/24	Max	Min	Ave	Std Dev
<u>Well</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>				
7	23.43	9.68	111.00	7.13	88.52	5.68	111.00	0.32	15.56	28.89
7A	5.78	5.54	4.55	1.90	8.52	2.26	12.05	0.82	3.73	3.06
7B	138.90	19.49	59.10	423.40	46.04	597.80	1000.00	6.43	157.03	254.60
9	6.79	1.44	111.00	2.70	3.33	3.33	212.00	1.16	21.44	49.69
13R	68.60	1.68	38.90	4.80	7.30	3.41	98.00	1.68	21.82	27.33
14	28.77	2.23	124.00	7.23	3.44	2.80	124.00	0.91	22.18	33.66
29	1.64	3.09	4.98		4.44	3.01	12.86	0.12	2.49	2.73
31R	10.18	4.31	15.40	9.48	3.96	3.10	57.70	0.64	11.27	14.19
33	1.27	1.11	0.93	4.49	2.63	2.40	4.49	0.49	1.56	1.03
35R	2.33	4.62	9.99	10.05	17.09		17.09	1.07	4.81	4.79
36	202.90	12.52	5.64	2.60	2.79	69.31	202.90	1.11	28.23	49.24
37	1.79	5.00	4.63	84.67	2.69	4.14	84.67	0.15	5.62	17.38
39	1.32	0.99	1.42	1.76	1.96	2.24	3.83	0.16	1.45	0.92
40	6.17	7.24	7.45	5.88	1.69	4.27	15.97	0.45	3.18	3.51
47	114.90	24.04	78.40	8.44	42.52	37.81	820.00	6.80	161.98	232.34
48A	458.90	242.30	1000.00	74.53	33.33	50.95	1000.00	4.07	160.46	263.18
49A	2.13	1.29	32.60	6.47	4.31	2.90	32.60	0.37	7.58	10.23
50	2.15	2.50	10.40	2.65	4.30	2.47	18.98	1.04	4.92	4.78
51	94.80	13.01	206.00	13.11	91.72	57.97	481.00	0.88	89.78	116.81
211	200.00	9.68	20.20	14.95	4.05	14.62	437.00	2.96	47.77	99.55
Tile ACM-1	3.40				2.74		43.70	1.33	10.85	14.97
PECS-1	1.01				2.15		2.27	1.01	1.79	0.49
GU-3	1.24		22.50	1.49	1.33	6.27	22.50	0.90	4.59	5.72
Max	458.90	242.30	1000.00	423.40	91.72	597.80				
Min	1.01	0.99	0.93	1.49	1.33	2.24				
Median	6.17	4.81	20.20	6.80	4.05	3.78				
Average	59.93	18.59	89.00	34.39	16.56	43.84				

Appendix E

Running Summary of Prediction Limit Exceedances

Spring 2013		Fall 2013	
MW-47	arsenic	MW-47	arsenic
MW-49A	nickel	MW-49A	benzene
	chromium		chloroethane
	lead		vinyl chloride
	chloroethane		
MW-7	arsenic	MW-7	arsenic
	1,1-dichloroethane		chloroethane
	benzene		
	chloroethane		
	cis-1,2-dichloroethene		
MW-13R	barium	MW-13R	arsenic
	benzene		nickel
	chlorobenzene		1,1-dichloroethane
	cis-1,2-dichloroethene		benzene
	trans-1,2-dichloroethene		chlorobenzene
			cis-1,2-dichloroethene
			toluene
			trans-1,2-dichloroethene
MW-14	nickel	MW-14	nickel
	1,1-dichloroethane		1,1-dichloroethane
	1,4-dichlorobenzene		1,4-dichlorobenzene
	benzene		benzene
	chloroethane		chloroethane
	cis-1,2-dichloroethene		cis-1,2-dichloroethene
	vinyl chloride		
MW-211	1,1-dichloroethane	MW-211	1,1-dichloroethane
	benzene		chlorobenzene
	chlorobenzene		cis-1,2-dichloroethene
	chloroethane		
	cis-1,2-dichloroethene		
MW-31R	1,1-dichloroethane	MW-31R	1,1-dichloroethane
	benzene		1,4-dichlorobenzene
	chloroethane		benzene
	cis-1,2-dichloroethene		chloroethane
	trans-1,2-dichloroethene		cis-1,2-dichloroethene
	vinyl chloride		trans-1,2-dichloroethene
	bis(2-ethylhexyl)phthalate		vinyl chloride
	dichlorodifluoromethane		
MW-35	1,1-dichloroethane	MW-35	1,1-dichloroethane

Spring 2014		Fall 2014	
MW-47	arsenic	MW-47	arsenic
MW-48A	arsenic	MW-48A	arsenic
MW-49A	arsenic	MW-49A	arsenic
	cobalt		barium
	copper		benzene
	nickel		chloroethane
	benzene		vinyl chloride
	chloroethane		
	vinyl chloride		
MW-50*	None	MW-50*	barium
MW-51*	None	MW-51*	barium
MW-7	arsenic	MW-7	arsenic
	chloroethane		barium
	cis-1,2-dichloroethene		chloroethane
MW-13R	arsenic	MW-13R	arsenic
	barium		barium
	cobalt		cobalt
	nickel		1,2-dichloropropene
	acetone		benzene
	benzene		chlorobenzene
	chlorobenzene		cis-1,2-dichloroethene
	cis-1,2-dichloroethene		trans-1,2-dichloroethene
	toluene		vinyl chloride
	trans-1,2-dichloroethene		
	vinyl chloride		
MW-14	cobalt	MW-14	arsenic
	nickel		barium
	1,1-dichloroethane		cobalt
	1,4-dichlorobenzene		1,1-dichloroethane
	benzene		1,4-dichlorobenzene
	chloroethane		benzene
	cis-1,2-dichloroethene		chloroethane
	vinyl chloride		cis-1,2-dichloroethene
MW-211	1,1-dichloroethane	MW-211	arsenic
	chlorobenzene		cobalt
	chloroethane		benzene
	cis-1,2-dichloroethene		chlorobenzene
			chloroethane
			cis-1,2-dichloroethene
MW-31R	barium	MW-31R	barium
	1,1-dichloroethane		1,1-dichloroethane
	benzene		benzene
	chlorobenzene		chloroethane
	chloroethane		cis-1,2-dichloroethene
	cis-1,2-dichloroethene		trans-1,2-dichloroethene
	trans-1,2-dichloroethene		vinyl chloride
	vinyl chloride		bis(2-ethylhexyl)phthalate
	dichlorodifluoromethane		dichlorodifluoromethane
MW-35	1,1-dichloroethane	MW-35	1,1-dichloroethane
			barium

Spring 2015		Fall 2015	
MW-48A	arsenic	MW-48A	None
MW-49A	arsenic	MW-49A	cobalt
	barium		benzene
	cobalt		chloroethane
	benzene		cis-1,2-dichloroethene
	chloroethane		
	vinyl chloride		
	dichlorodifluoromethane		
MW-50	barium	MW-50	None
MW-51	barium	MW-51	None
MW-7	arsenic	MW-7	arsenic
			chloroethane
MW-13R	arsenic	MW-13R	1,2-dichloropropene
	barium		1,4-dichlorobenzene
	cobalt		benzene
	nickel		chlorobenzene
	benzene		cis-1,2-dichloroethene
	chlorobenzene		toluene
	cis-1,2-dichloroethene		trans-1,2-dichloroethene
	vinyl chloride		vinyl chloride
MW-14	barium	MW-14	barium
	cobalt		cobalt
	1,1-dichloroethane		1,1-dichloroethane
	1,4-dichlorobenzene		1,4-dichlorobenzene
			chloroethane
			cis-1,2-dichloroethene
MW-211	arsenic	MW-211	cobalt
	cobalt		chlorobenzene
	nickel		chloroethane
	chloroethane		cis-1,2-dichloroethene
	cis-1,2-dichloroethene		
MW-31R	barium	MW-31R	barium
	1,1-dichloroethane		1,1-dichloroethane
	benzene		1,4-dichlorobenzene
	chlorobenzene		benzene
	cis-1,2-dichloroethene		chlorobenzene
	trans-1,2-dichloroethene		chloroethane
	cis-1,2-dichloroethene		cis-1,2-dichloroethene
	vinyl chloride		trans-1,2-dichloroethene
			vinyl chloride
MW-35	selenium	MW-35	Removed
	1,1-dichloroethane		

Spring 2016		Fall 2016	
MW-49A	cobalt	MW-49A	benzene
	nickel		chloroethane
	benzene		
	chloroethane		
MW-7	arsenic	MW-7	arsenic
	chloroethane		chloroethane
			1,1-dichloroethane
			cis-1,2-dichloroethene
			vinyl chloride
MW-9	None	MW-9	chloroethane
MW-13R	arsenic	MW-13R	arsenic
	barium		barium
	cobalt		nickel
	nickel		1,4-dichlorobenzene
	1,4-dichlorobenzene		benzene
	benzene		chlorobenzene
	chlorobenzene		cis-1,2-dichloroethene
MW-14	nickel	MW-14	1,1-dichloroethane
	1,1-dichloroethane		1,4-dichlorobenzene
			cis-1,2-dichloroethene
MW-211	nickel	MW-211	cobalt
	chlorobenzene		nickel
	chloroethane		1,1-dichloroethane
	cis-1,2-dichloroethene		chlorobenzene
			chloroethane
			cis-1,2-dichloroethene
MW-31R	barium	MW-31R	barium
	1,1-dichloroethane		cobalt
	1,4-dichlorobenzene		1,1-dichloroethane
	benzene		1,4-dichlorobenzene
	chlorobenzene		benzene
	chloroethane		chlorobenzene
	cis-1,2-dichloroethene		chloroethane
	trans-1,2-dichloroethene		cis-1,2-dichloroethene
	vinyl chloride		trans-1,2-dichloroethene
			vinyl chloride
MW-35R	Not installed	MW-35R	barium
			nickel
			1,1-dichloroethane
			benzene
			chloroethane
			cis-1,2-dichloroethene
			vinyl chloride

Spring 2017		Fall 2017	
MW-49A	nickel	MW-49A	benzene
	benzene		chloroethane
	chloroethane		vinyl chloride
MW-7	arsenic	MW-7	arsenic
	chloroethane		chloroethane
MW-9	None	MW-9	1,1-dichloroethane
			chloroethane
MW-13R	arsenic	MW-13R	arsenic
	barium		barium
	nickel		cobalt
	1,4-dichlorobenzene		1,4-dichlorobenzene
	benzene		benzene
	chlorobenzene		bis(2-ethylhexyl)phthalate
			chlorobenzene
			cis-1,2-dichloroethene
			toluene
MW-14	None	MW-14	barium
			1,4-dichlorobenzene
			benzene
			bis(2-ethylhexyl)phthalate
MW-211	nickel	MW-211	cobalt
	1,1-dichloroethane		nickel
	benzene		1,1-dichloroethane
	chlorobenzene		chlorobenzene
	chloroethane		chloroethane
	cis-1,2-dichloroethene		cis-1,2-dichloroethene
MW-31R	barium	MW-31R	barium
	1,1-dichloroethane		1,1-dichloroethane
	1,4-dichlorobenzene		1,4-dichlorobenzene
	benzene		benzene
	chlorobenzene		chlorobenzene
	chloroethane		cis-1,2-dichloroethene
	cis-1,2-dichloroethene		trans-1,2-dichloroethene
	trans-1,2-dichloroethene		
	vinyl chloride		
MW-35R	barium	MW-35R	barium
	nickel		nickel
	1,1-dichloroethane		1,1-dichloroethane
	chloroethane		benzene
	cis-1,2-dichloroethene		chloroethane
	vinyl chloride		cis-1,2-dichloroethene

Spring 2018		Fall 2018	
MW-48A	arsenic	MW-48A	none
MW-49A	barium	MW-49A	benzene
	cobalt		chloroethane
	nickel		
	benzene		
	chloroethane		
	vinyl chloride		
MW-7	copper	MW-7	none
MW-9	none	MW-9	none
MW-13R	arsenic	MW-13R	barium
	barium		1,4-dichlorobenzene
	cobalt		benzene
	nickel		chlorobenzene
	1,4-dichlorobenzene		
	benzene		
	chlorobenzene		
MW-14	barium	MW-14	chlorobenzene
	cobalt		
MW-211	cobalt	MW-211	nickel
	nickel		chlorobenzene
	1,1-dichloroethane		
	benzene		
	chlorobenzene		
	chloroethane		
	cis-1,2-dichloroethene		
MW-31R	barium	MW-31R	barium
	cobalt		cobalt
	1,1-dichloroethane		1,4-dichlorobenzene
	1,4-dichlorobenzene		chlorobenzene
	benzene		chloroethane
	chlorobenzene		cis-1,2-dichloroethene
	chloroethane		
	cis-1,2-dichloroethene		
	trans-1,2-dichloroethene		
	vinyl chloride		
MW-35R	barium	MW-35R	barium
	nickel		nickel
	1,1-dichloroethane		1,1-dichloroethane
	benzene		cis-1,2-dichloroethene
	chloroethane		
	cis-1,2-dichloroethene		
	vinyl chloride		

Spring 2019		Fall 2019	
MW-48A	none	MW-48A	none
MW-49A	cobalt nickel benzene chloroethane	MW-49A	benzene
MW-7	arsenic 1,1-dichloroethane chloroethane	MW-7	none
MW-9	none	MW-9	chloroethane
MW-13R	barium cobalt 1,4-dichlorobenzene benzene chlorobenzene	MW-13R	barium benzene chlorobenzene
MW-14	cobalt benzene chloroethane ethylbenzene	MW-14	barium chloroethane
MW-211	cobalt nickel benzene chlorobenzene	MW-211	arsenic cobalt chlorobenzene
MW-31R	barium cobalt nickel 1,1-dichloroethane 1,4-dichlorobenzene benzene chlorobenzene chloroethane cis-1,2-dichloroethene trans-1,2-dichloroethene	MW-31R	barium cobalt 1,1-dichloroethane 1,4-dichlorobenzene chlorobenzene chloroethane cis-1,2-dichloroethene trans-1,2-dichloroethene
MW-35R	barium nickel 1,1-dichloroethane chloroethane cis-1,2-dichloroethene	MW-35R	barium nickel 1,1-dichloroethane chloroethane cis-1,2-dichloroethene

Spring 2020		Fall 2020	
MW-48A	none	MW-48A	none
MW-49A	barium cobalt nickel benzene chloroethane	MW-49A	cobalt nickel benzene chloroethane cis-1,2-dichloroethene
MW-7	1,1-dichloroethane chloroethane	MW-7	arsenic chloroethane
MW-9	cobalt	MW-9	cobalt nickel chloroethane
MW-13R	arsenic barium cobalt nickel 1,4-dichlorobenzene benzene chlorobenzene	MW-13R	arsenic barium cobalt nickel 1,4-dichlorobenzene benzene chlorobenzene
MW-14	none	MW-14	barium cobalt 1,1-dichloroethane 1,4-dichlorobenzene chloroethane
MW-211	arsenic cobalt nickel chlorobenzene	MW-211	cobalt nickel chlorobenzene
MW-31R	barium cobalt nickel 1,1-dichloroethane 1,4-dichlorobenzene benzene chlorobenzene chloroethane cis-1,2-dichloroethene trans-1,2-dichloroethene	MW-31R	barium cobalt nickel 1,1-dichloroethane 1,4-dichlorobenzene benzene chlorobenzene chloroethane cis-1,2-dichloroethene trans-1,2-dichloroethene
MW-35R	barium nickel 1,1-dichloroethane chloroethane cis-1,2-dichloroethene	MW-35R	barium nickel 1,1-dichloroethane chloroethane cis-1,2-dichloroethene vinyl chloride

Spring 2021		Fall 2021	
MW-48A	none	MW-48A	none
MW-49A	cobalt nickel benzene chloroethane cis-1,2-dichloroethene vinyl chloride	MW-49A	acetone benzene chloroethane cis-1,2-dichloroethene vinyl chloride
MW-51	none	MW-51	zinc*
MW-7	arsenic 1,1-dichloroethane chloroethane	MW-7	arsenic
MW-9	cobalt	MW-9	none
MW-13R	arsenic barium cobalt 1,4-dichlorobenzene benzene chlorobenzene	MW-13R	arsenic 1,4-dichlorobenzene benzene chlorobenzene
MW-14	barium cobalt nickel 1,1-dichloroethane 1,4-dichlorobenzene chloroethane	MW-14	cobalt 1,1-dichloroethane 1,4-dichlorobenzene benzene chloroethane
MW-211	cobalt nickel benzene chlorobenzene	MW-211	cobalt nickel chlorobenzene
MW-31R	cobalt nickel 1,1-dichloroethane 1,4-dichlorobenzene benzene chlorobenzene chloroethane cis-1,2-dichloroethene trans-1,2-dichloroethene	MW-31R	cobalt nickel 1,1-dichloroethane 1,4-dichlorobenzene benzene chlorobenzene chloroethane cis-1,2-dichloroethene trans-1,2-dichloroethene
MW-35R	barium cobalt nickel 1,1-dichloroethane chloroethane cis-1,2-dichloroethene	MW-35R	cobalt nickel 1,1-dichloroethane chloroethane cis-1,2-dichloroethene

* a verification resample will be collected prior to 1/29/22.

Spring 2022		Fall 2022	
MW-48A	selenium	MW-48A	arsenic
MW-49A	cobalt nickel acetone benzene chloroethane cis-1,2-dichloroethene vinyl chloride	MW-49A	cobalt copper nickel benzene chloroethane cis-1,2-dichloroethene vinyl chloride
MW-7	arsenic 1,1-dichloroethane benzene chloroethane	MW-7	arsenic bis(2-ethylhexyl)phthalate - NO chloroethane
MW-9	none	MW-9	benzene
MW-13R	arsenic cobalt 1,4-dichlorobenzene benzene chlorobenzene	MW-13R	arsenic 1,4-dichlorobenzene benzene bis(2-ethylhexyl)phthalate - NO chlorobenzene cis-1,2-dichloroethene
MW-14	cobalt 1,4-dichlorobenzene	MW-14	cobalt 1,4-dichlorobenzene benzene bis(2-ethylhexyl)phthalate - NO chloroethane
MW-211	arsenic cobalt nickel benzene chlorobenzene	MW-211	cobalt nickel chlorobenzene
MW-31R	cobalt nickel 1,1-dichloroethane 1,4-dichlorobenzene benzene chlorobenzene chloroethane cis-1,2-dichloroethene trans-1,2-dichloroethene	MW-31R	cobalt nickel 1,1-dichloroethane 1,4-dichlorobenzene benzene chlorobenzene chloroethane cis-1,2-dichloroethene trans-1,2-dichloroethene
MW-35R	nickel 1,1-dichloroethane chloroethane cis-1,2-dichloroethene	MW-35R	nickel bis(2-ethylhexyl)phthalate chloroethane

Spring 2023		Fall 2023	
MW-48A	arsenic	MW-48A	none
	lead		
MW-49A	cobalt	MW-49A	cobalt
	copper		nickel
	nickel		benzene
	benzene		chloroethane
	chloroethane		cis-1,2-dichloroethene
	cis-1,2-dichloroethene		vinyl chloride
	vinyl chloride		
MW-7	arsenic	MW-7	arsenic
	chloroethane		chloroethane
MW-9	none	MW-9	arsenic
			1,1-dichloroethane
MW-13R	arsenic	MW-13R	1,4-dichlorobenzene
	1,4-dichlorobenzene		benzene
	benzene		chlorobenzene
	chlorobenzene		cis-1,2-dichloroethene
MW-14	cobalt	MW-14	1,4-dichlorobenzene
	1,4-dichlorobenzene		benzene
	benzene		chlorobenzene
	chloroethane		cis-1,2-dichloroethene
MW-211	arsenic	MW-211	none
	nickel		
	chlorobenzene		
MW-31R	cobalt	MW-31R	cobalt
	nickel		zinc
	1,1-dichloroethane		1,1-dichloroethane
	1,4-dichlorobenzene		1,4-dichlorobenzene
	benzene		benzene
	chlorobenzene		chlorobenzene
	chloroethane		chloroethane
	cis-1,2-dichloroethene		cis-1,2-dichloroethene
	trans-1,2-dichloroethene		trans-1,2-dichloroethene
			bis(2-ethylhexyl)phthalate <i>(not verified)</i>
			Disulfoton <i>(not verified)</i>
MW-35R	nickel	MW-35R	barium
	1,1-dichloroethane		zinc
	bis(2-ethylhexyl)phthalate		bis(2-ethylhexyl)phthalate
	chloroethane		chloroethane

Spring 2024		Fall 2024	
MW-48A	none	MW-48A	none
MW-49A	cobalt nickel benzene chloroethane cis-1,2-dichloroethene vinyl chloride	MW-49A	nickel benzene chloroethane cis-1,2-dichloroethene vinyl chloride
MW-7	arsenic	MW-7	arsenic chloroethane
MW-9	none	MW-9	none
MW-13R	1,4-dichlorobenzene benzene chlorobenzene	MW-13R	arsenic 1,4-dichlorobenzene benzene chlorobenzene
MW-14	cobalt 1,4-dichlorobenzene benzene chloroethane	MW-14	arsenic 1,4-dichlorobenzene benzene
MW-211	cobalt chlorobenzene	MW-211	cobalt nickel benzene chlorobenzene
MW-31R	cobalt nickel 1,1-dichloroethane 1,4-dichlorobenzene benzene chlorobenzene chloroethane cis-1,2-dichloroethene trans-1,2-dichloroethene	MW-31R	cobalt 1,1-dichloroethane 1,4-dichlorobenzene benzene chlorobenzene chloroethane cis-1,2-dichloroethene trans-1,2-dichloroethene
MW-35R	chloroethane	MW-35R	Dry

Appendix F

Assessment Monitoring Results

3+4-methyl phenol (ug/L) - full Appendix II sample is indicated by green highlight

Date	MW48A	MW49A	MW7	MW-9	MW13R	MW14	MW31R	MW35R	MW211
6/22/09	NT	<8	NT	NT	NT	NT	NT	NT	NT
2/23/10	<8	<8	NT	NT	NT	NT	NT	NT	NT
4/12/10	<8	<8	NT	NT	NT	NT	NT	NT	NT
4/20/12	NT	NT	<8	NT	<8	<8	NT	<8	<8
10/17/12	NT	NT	<8	NT	<8	<8	NT	<8	<8
4/3/13	NT	NT	NT	NT	NT	NT	<8	NT	NT
10/9/13	NT	NT	NT	NT	NT	NT	<8	NT	NT
4/15/14	NT	NT	NT	NT	NT	NT	NT	NT	NT
10/23/14	NT	NT	NT	NT	NT	NT	NT	NT	NT
4/1/15	<8	<8	NT	NT	NT	NT	NT	NT	NT
11/5/15	NT	NT	NT	NT	NT	NT	NT	NT	NT
4/21/16	NT	NT	NT	NT	NT	NT	NT	NT	NT
10/17/16	NT	NT	NT	NT	NT	NT	NT	NT	NT
4/21/17	NT	NT	NT	NT	NT	NT	NT	NT	NT
10/16/17	NT	NT	<8	NT	12.0	<8	NT	<11	<8
4/24/18	NT	NT	NT	<8	<10	NT	NT	NT	NT
10/25/18	NT	NT	NT	NT	<10	NT	<8	NT	NT
4/15/19	NT	NT	NT	<8	<10	NT	NT	NT	NT
10/7/2019	NT	NT	NT	NT	<10	NT	NT	NT	NT
4/22/2020	<8	<8	NT	NT	<10	NT	NT	NT	NT
10/1/2020	NT	NT	NT	NT	<10	NT	NT	NT	NT
4/8/2021	NT	NT	NT	NT	<10	NT	NT	NT	NT
10/29/2021	NT	NT	NT	NT	<10	NT	NT	NT	NT
4/25/2022	NT	NT	NT	NT	<10	NT	NT	NT	NT
10/17/2022	NT	NT	<8	NT	<8	<8	NT	<8	<8
4/10/2023	NT	NT	NT	NT	NT	NT	NT	NT	NT
10/27/2023	NT	NT	NT	NT	NT	NT	<8	NT	NT
4/2/2024	NT	NT	NT	<8	NT	NT	NT	NT	NT
10/10/2024	NT	NT	NT	NT	NT	NT	NT	NT	NT

Full Appendix II sample collection events are highlighted green.

Appendix G

1995 Site Remedial Action System Evaluation

EVALUATION OF THE 1995 SRAMP & THE 2018 CORRECTIVE ACTION SYSTEM

Closed Landfill

In 1994 and 1995 VOC impacts to three (3) wells (MW-9, MW-31, and MW-14) required Groundwater Quality Assessment activities. On July 12, 1995 an Assessment was submitted to the IDNR (Doc #4800).

The limits of the impact were determined in the adjacent landowner properties to the north and south of the site (north of MW-9 and south of MW-14). The limit of impact to the east of MW-31 was determined on property owned by RIWMA. MW-31 was replaced by MW-31R on April 16, 2012 to accommodate development in the RCRA Subtitle D Expansion Trenches 1-3.

A Remedial Action leachate collection toe drain was constructed along the entire north, west, and east sides of the original landfill (see Figure 1 attached). Additionally, existing tile lines in the vicinity of MW-9 were connected to the leachate collection toe drain system. The system was not constructed on the south side of the site in 1995. A separate remedial system was installed on the south side of the Original Landfill in 2018 near MW-13R and MW-14.

Monitoring wells MW-7, MW-9, MW-31R, MW-33, MW-35R, MW-49A, and MW-211 are located immediately adjacent to the various pipe trenches that comprise the 1995 leachate collection toe drain (SRAMP) along the north, west, and east sides of the closed landfill.

The assessment south of MW-14 (Doc #4800) did not detect any VOC compounds in the step-out wells placed 50 ft from the impacted well. The step-out wells MW-14-1, MW-14-2, and MW-14-3 were plugged December 10, 1995 (Doc # 50234) and the well abandonment forms are incorporated in the current permit.

Monitoring wells MW-13R and MW-14 are located immediately adjacent to the pipe alignment that comprise the 2018 Corrective Measures along the south side of the closed landfill.

On the north side (MW-9) VOC's were detected in the step-out wells. The Remedial leachate collection toe drain system was demonstrated to be effective at reducing impacts detected at step-out wells MW-9-1, MW-9-2, and MW-9-3. The MW-9 series step-out wells located in the farm field north of the site were plugged December 8, 1998 based on approval received in Permit Amendment #1 (Doc # 4833) to the 1998 Permit. The well abandonment forms are incorporated in the current permit. There are no SSL recorded in MW-9.

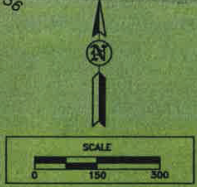
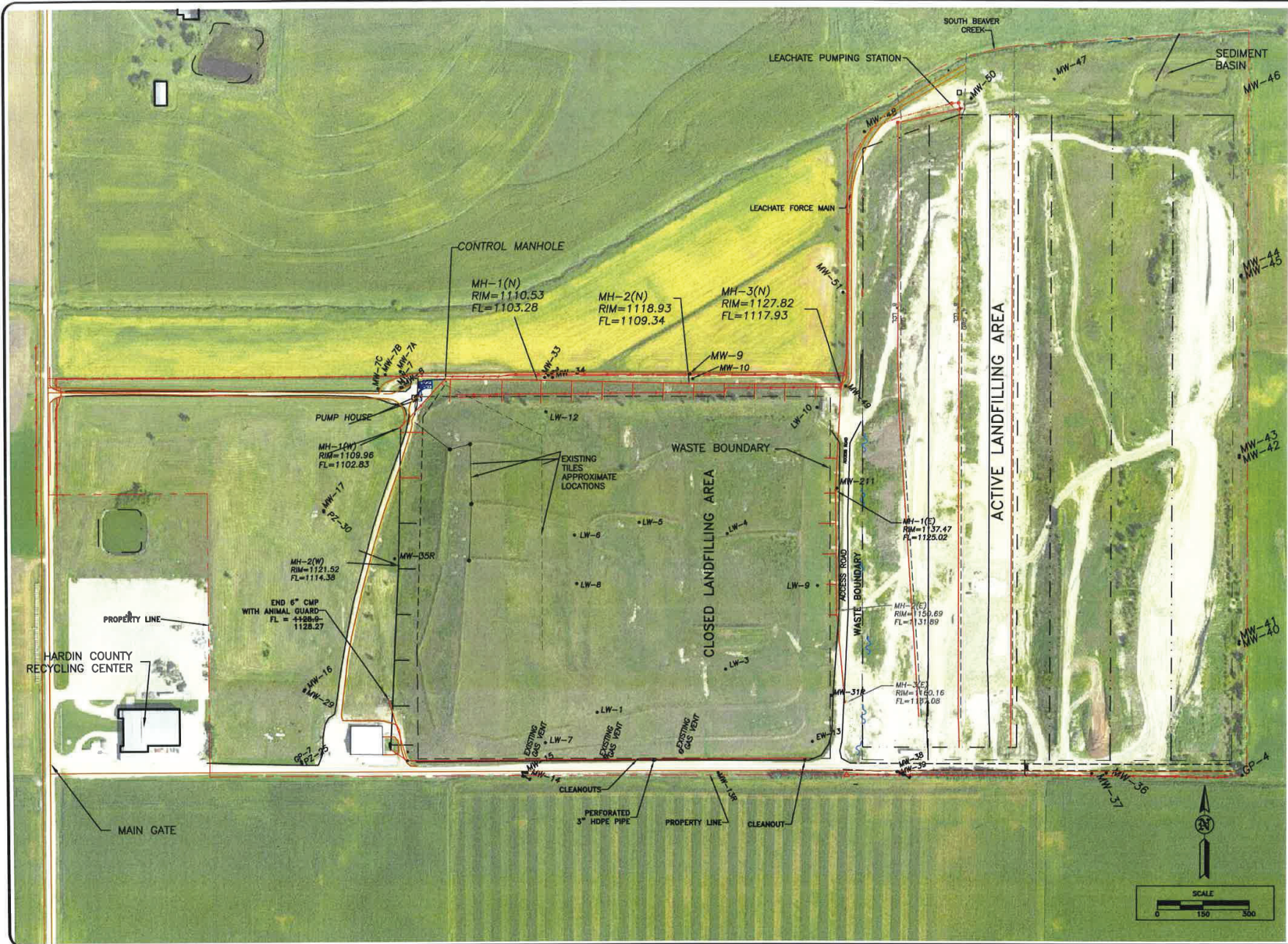
On the east side MW-31 was replaced by MW-31R in 2012. MW-31R was located significantly west of MW-31 and is placed near the waste boundary of the original landfill. Further, MW-31R is situated between the waste mass and the remedial action leachate collection system line that is east of the original landfill (see attached map). MW-31R has demonstrated on-going impacts by both VOC and inorganic compounds since installation.

There is a cobalt SSL recorded at MW-31R which is attributed to the placement of the well immediately adjacent to the waste boundary and along the flow-path from waste boundary to the remedial action leachate collection system lying east of MW-31R. The 1995 SRAMP is determined to be successful, however, MW-31R is not located to effectively demonstrate that. Site features (the main access road and the RCRA Subtitle D Expansion Trenches 1-3) preclude relocation of MW-31R to the east beyond the remedial action leachate collection system.

MW-49A is located southeast of the waste boundary of the original landfill and west of the waste boundary of the RCRA Subtitle D Landfill. Groundwater in the vicinity of MW-49A is from the closed landfill southeast toward MW-49A. MW-49A has demonstrated on-going impacts by both VOC and inorganic compounds since installation, but the cobalt and vinyl chloride concentrations have increased at MW-49A in recent years. There is now a cobalt and vinyl chloride SSL recorded at MW-49A. The 1995 Leachate Collection Toe Drain system was vented in 2024 utilizing grated manhole covers in lieu of the solid locking covers originally installed in 1995.

Gas vents will be installed in the waste mass immediately north of MW-13R and MW-14 in 2025. Gas monitoring of the vents will be initiated upon completion of construction of the passive vents.

Site Remedial Action/Leachate Collection Toe Drain System Map



RECORD DRAWING

FIGURE: 1

NO.	DATE
1	8/31/18
DRAWN	PROJECT NO.
JGH	6006-17A
	DATE
	4/18/18

AERIAL VIEW
 GROUNDWATER COLLECTION PIPING
 RURAL IOWA SANITARY LANDFILL
 ELDORA, IOWA

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



Appendix H

Corrective Action Monitoring Plan (CAMP) Water Quality Summary Tables

CAMP
Annual Water Quality Report
Rural Iowa Sanitary Landfill
Permit No.42-SDP-01-72P

Exceeds GWPS Key

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	GWPS Limit (ug/L)
ACM Tile 1	arsenic	10/25/2018	---	89.3
ACM Tile 1	arsenic	4/15/2019	63.1	89.3
ACM Tile 1	arsenic	10/7/2019	44.0	89.3
ACM Tile 1	arsenic	4/22/2020	88.3	89.3
ACM Tile 1	arsenic	10/1/2020	Dry	89.3
ACM Tile 1	arsenic	4/8/2021	Dry	89.3
ACM Tile 1	arsenic	10/29/2021	57.6	89.3
ACM Tile 1	arsenic	4/25/2022	38.1	89.3
ACM Tile 1	arsenic	10/17/2022	Dry	89.3
ACM Tile 1	arsenic	4/10/2023	No Metals	89.3
ACM Tile 1	arsenic	10/27/2023	Dry	89.3
ACM Tile 1	arsenic	4/2/2024	26.7	89.3
ACM Tile 1	arsenic	10/10/2024	Dry	89.3

CAMP
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Rural Iowa Sanitary Landfill
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Exceeds GWPS

 Key

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	GWPS Limit (ug/L)
ACM Tile 1	cobalt	10/25/2018	---	12.4
ACM Tile 1	cobalt	4/15/2019	8.3	12.4
ACM Tile 1	cobalt	10/7/2019	6.1	12.4
ACM Tile 1	cobalt	4/22/2020	13.7	12.4
ACM Tile 1	cobalt	10/1/2020	Dry	12.4
ACM Tile 1	cobalt	4/8/2021	Dry	12.4
ACM Tile 1	cobalt	10/29/2021	7.2	12.4
ACM Tile 1	cobalt	4/25/2022	4.4	12.4
ACM Tile 1	cobalt	10/17/2022	Dry	12.4
ACM Tile 1	cobalt	4/10/2023	No Metals	12.4
ACM Tile 1	cobalt	10/27/2023	Dry	12.4
ACM Tile 1	cobalt	4/2/2024	3.4	12.4
ACM Tile 1	cobalt	10/10/2024	Dry	12.4

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Exceeds GWPS

 Key

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	GWPS Limit (ug/L)
ACM Tile 1	1,1-dichloroethane	10/25/2018	3.6	140
ACM Tile 1	1,1-dichloroethane	4/15/2019	3.8	140
ACM Tile 1	1,1-dichloroethane	10/7/2019	4.7	140
ACM Tile 1	1,1-dichloroethane	4/22/2020	14.4	140
ACM Tile 1	1,1-dichloroethane	10/1/2020	Dry	140
ACM Tile 1	1,1-dichloroethane	4/8/2021	Dry	140
ACM Tile 1	1,1-dichloroethane	10/29/2021	<1.0	140
ACM Tile 1	1,1-dichloroethane	4/25/2022	2.9	140
ACM Tile 1	1,1-dichloroethane	10/17/2022	Dry	140
ACM Tile 1	1,1-dichloroethane	4/10/2023	4.8	140
ACM Tile 1	1,1-dichloroethane	10/27/2023	Dry	140
ACM Tile 1	1,1-dichloroethane	4/2/2024	1.6	140
ACM Tile 1	1,1-dichloroethane	10/10/2024	Dry	140

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Exceeds GWPS

 Key

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	GWPS Limit (ug/L)
ACM Tile 1	1,4-dichlorobenzene	10/25/2018	<1.0	75
ACM Tile 1	1,4-dichlorobenzene	4/15/2019	3.6	75
ACM Tile 1	1,4-dichlorobenzene	10/7/2019	3.3	75
ACM Tile 1	1,4-dichlorobenzene	4/22/2020	<1.0	75
ACM Tile 1	1,4-dichlorobenzene	10/1/2020	Dry	75
ACM Tile 1	1,4-dichlorobenzene	4/8/2021	Dry	75
ACM Tile 1	1,4-dichlorobenzene	10/29/2021	<1.0	75
ACM Tile 1	1,4-dichlorobenzene	4/25/2022	1.1	75
ACM Tile 1	1,4-dichlorobenzene	10/17/2022	Dry	75
ACM Tile 1	1,4-dichlorobenzene	4/10/2023	1.8	75
ACM Tile 1	1,4-dichlorobenzene	10/27/2023	Dry	75
ACM Tile 1	1,4-dichlorobenzene	4/2/2024	<1.0	75
ACM Tile 1	1,4-dichlorobenzene	10/10/2024	Dry	75

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Exceeds GWPS

 Key

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	GWPS Limit (ug/L)
ACM Tile 1	Benzene	10/25/2018	<1.0	5
ACM Tile 1	Benzene	4/15/2019	2.0	5
ACM Tile 1	Benzene	10/7/2019	1.3	5
ACM Tile 1	Benzene	4/22/2020	2.0	5
ACM Tile 1	Benzene	10/1/2020	Dry	5
ACM Tile 1	Benzene	4/8/2021	Dry	5
ACM Tile 1	Benzene	10/29/2021	<1.0	5
ACM Tile 1	Benzene	4/25/2022	1.8	5
ACM Tile 1	Benzene	10/17/2022	Dry	5
ACM Tile 1	Benzene	4/10/2023	1.6	5
ACM Tile 1	Benzene	10/27/2023	Dry	5
ACM Tile 1	Benzene	4/2/2024	<1.0	5
ACM Tile 1	Benzene	10/10/2024	Dry	5

CAMP
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Exceeds GWPS

 Key

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	GWPS Limit (ug/L)
ACM Tile 1	chlorobenzene	10/25/2018	16.6	100.00
ACM Tile 1	chlorobenzene	4/15/2019	13.8	100.00
ACM Tile 1	chlorobenzene	10/7/2019	7.4	100.00
ACM Tile 1	chlorobenzene	4/22/2020	4.6	100.00
ACM Tile 1	chlorobenzene	10/1/2020	Dry	100.00
ACM Tile 1	chlorobenzene	4/8/2021	Dry	100.00
ACM Tile 1	chlorobenzene	10/29/2021	<1.0	100.00
ACM Tile 1	chlorobenzene	4/25/2022	7.9	100.00
ACM Tile 1	chlorobenzene	10/17/2022	Dry	100.00
ACM Tile 1	chlorobenzene	4/10/2023	7.8	100.00
ACM Tile 1	chlorobenzene	10/27/2023	Dry	100.00
ACM Tile 1	chlorobenzene	4/2/2024	3.7	100.00
ACM Tile 1	chlorobenzene	10/10/2024	Dry	100.00

CAMP
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Rural Iowa Sanitary Landfill
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Exceeds GWPS

 Key

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	GWPS Limit (ug/L)
ACM Tile 1	chloroethane	10/25/2018	5.8	2,800.00
ACM Tile 1	chloroethane	4/15/2019	5.0	2,800.00
ACM Tile 1	chloroethane	10/7/2019	9.8	2,800.00
ACM Tile 1	chloroethane	4/22/2020	12.2	2,800.00
ACM Tile 1	chloroethane	10/1/2020	Dry	2,800.00
ACM Tile 1	chloroethane	4/8/2021	Dry	2,800.00
ACM Tile 1	chloroethane	10/29/2021	2.6	2,800.00
ACM Tile 1	chloroethane	4/25/2022	3.7	2,800.00
ACM Tile 1	chloroethane	10/17/2022	Dry	2,800.00
ACM Tile 1	chloroethane	4/10/2023	5.1	2,800.00
ACM Tile 1	chloroethane	10/27/2023	Dry	2,800.00
ACM Tile 1	chloroethane	4/2/2024	2.3	2,800.00
ACM Tile 1	chloroethane	10/10/2024	Dry	2,800.00

CAMP
Annual Water Quality Report
Rural Iowa Sanitary Landfill
Permit No.42-SDP-01-72P

Exceeds GWPS

 Key

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	GWPS Limit (ug/L)
ACM Tile 1	Cis-1,2DCE	10/25/2018	3.0	70
ACM Tile 1	Cis-1,2DCE	4/15/2019	2.8	70
ACM Tile 1	Cis-1,2DCE	10/7/2019	4.2	70
ACM Tile 1	Cis-1,2DCE	4/22/2020	6.3	70
ACM Tile 1	Cis-1,2DCE	10/1/2020	Dry	70
ACM Tile 1	Cis-1,2DCE	4/8/2021	Dry	70
ACM Tile 1	Cis-1,2DCE	10/29/2021	<1.0	70
ACM Tile 1	Cis-1,2DCE	4/25/2022	1.3	70
ACM Tile 1	Cis-1,2DCE	10/17/2022	Dry	70
ACM Tile 1	Cis-1,2DCE	4/10/2023	2.0	70
ACM Tile 1	Cis-1,2DCE	10/27/2023	Dry	70
ACM Tile 1	Cis-1,2DCE	4/2/2024	<1.0	70
ACM Tile 1	Cis-1,2DCE	10/10/2024	Dry	70

CAMP
Annual Water Quality Report
Rural Iowa Sanitary Landfill
Permit No.42-SDP-01-72P

Exceeds GWPS

 Key

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	GWPS Limit (ug/L)
ACM Tile 1	ethylbenzene	10/25/2018	<1.0	700
ACM Tile 1	ethylbenzene	4/15/2019	<1.0	700
ACM Tile 1	ethylbenzene	10/7/2019	1.9	700
ACM Tile 1	ethylbenzene	4/22/2020	<1.0	700
ACM Tile 1	ethylbenzene	10/1/2020	Dry	700
ACM Tile 1	ethylbenzene	4/8/2021	Dry	700
ACM Tile 1	ethylbenzene	10/29/2021	<1.0	700
ACM Tile 1	ethylbenzene	4/25/2022	1.6	700
ACM Tile 1	ethylbenzene	10/17/2022	Dry	700
ACM Tile 1	ethylbenzene	4/10/2023	<1.0	700
ACM Tile 1	ethylbenzene	10/27/2023	Dry	700
ACM Tile 1	ethylbenzene	4/2/2024	<1.0	700
ACM Tile 1	ethylbenzene	10/10/2024	Dry	700

CAMP
Annual Water Quality Report
Rural Iowa Sanitary Landfill
Permit No.42-SDP-01-72P

Exceeds GWPS

 Key

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	GWPS Limit (ug/L)
ACM Tile 1	toluene	10/25/2018	<1.0	1000
ACM Tile 1	toluene	4/15/2019	<1.0	1000
ACM Tile 1	toluene	10/7/2019	1.7	1000
ACM Tile 1	toluene	4/22/2020	<1.0	1000
ACM Tile 1	toluene	10/1/2020	Dry	1000
ACM Tile 1	toluene	4/8/2021	Dry	1000
ACM Tile 1	toluene	10/29/2021	<1.0	1000
ACM Tile 1	toluene	4/25/2022	<1.0	1000
ACM Tile 1	toluene	10/17/2022	Dry	1000
ACM Tile 1	toluene	4/10/2023	<1.0	1000
ACM Tile 1	toluene	10/27/2023	Dry	1000
ACM Tile 1	toluene	4/2/2024	<1.0	1000
ACM Tile 1	toluene	10/10/2024	Dry	1000

CAMP
Annual Water Quality Report
Rural Iowa Sanitary Landfill
Permit No.42-SDP-01-72P

Exceeds GWPS Key

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	GWPS Limit (ug/L)
ACM Tile 1	Vinyl Chloride	10/25/2018	<1.0	2
ACM Tile 1	Vinyl Chloride	4/15/2019	<1.0	2
ACM Tile 1	Vinyl Chloride	10/7/2019	2.0	2
ACM Tile 1	Vinyl Chloride	4/22/2020	1.8	2
ACM Tile 1	Vinyl Chloride	10/1/2020	Dry	2
ACM Tile 1	Vinyl Chloride	4/8/2021	Dry	2
ACM Tile 1	Vinyl Chloride	10/29/2021	<1.0	2
ACM Tile 1	Vinyl Chloride	4/25/2022	<1.0	2
ACM Tile 1	Vinyl Chloride	10/17/2022	Dry	2
ACM Tile 1	Vinyl Chloride	4/10/2023	1.0	2
ACM Tile 1	Vinyl Chloride	10/27/2023	Dry	2
ACM Tile 1	Vinyl Chloride	4/2/2024	<1.0	2
ACM Tile 1	Vinyl Chloride	10/10/2024	Dry	2

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.

CAMP
Annual Water Quality Report
Rural Iowa Sanitary Landfill
Permit No.42-SDP-01-72P

Detection above MRL

 Key

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	GWPS Limit (ug/L)
PECS -1	1,1-dichloroethane	10/25/2018	Dry	140
PECS -1	1,1-dichloroethane	4/15/2019	<1.0	140
PECS -1	1,1-dichloroethane	10/7/2019	<1.0	140
PECS -1	1,1-dichloroethane	4/22/2020	Dry	140
PECS -1	1,1-dichloroethane	10/1/2020	Dry	140
PECS -1	1,1-dichloroethane	4/8/2021	<1.0	140
PECS -1	1,1-dichloroethane	10/29/2021	<1.0	140
PECS -1	1,1-dichloroethane	4/25/2022	<1.0	140
PECS -1	1,1-dichloroethane	10/17/2022	Dry	140
PECS -1	1,1-dichloroethane	4/10/2023	<1.0	140
PECS -1	1,1-dichloroethane	10/27/2023	Dry	140
PECS -1	1,1-dichloroethane	4/2/2024	<1.0	140
PECS -1	1,1-dichloroethane	10/10/2024	Dry	140

CAMP
Annual Water Quality Report
Rural Iowa Sanitary Landfill
Permit No.42-SDP-01-72P

Detection above MRL

 Key

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	GWPS Limit (ug/L)
PECS -1	1,4-dichlorobenzene	10/25/2018	Dry	75
PECS -1	1,4-dichlorobenzene	4/15/2019	<1.0	75
PECS -1	1,4-dichlorobenzene	10/7/2019	<1.0	75
PECS -1	1,4-dichlorobenzene	4/22/2020	Dry	75
PECS -1	1,4-dichlorobenzene	10/1/2020	Dry	75
PECS -1	1,4-dichlorobenzene	4/8/2021	<1.0	75
PECS -1	1,4-dichlorobenzene	10/29/2021	<1.0	75
PECS -1	1,4-dichlorobenzene	4/25/2022	<1.0	75
PECS -1	1,4-dichlorobenzene	10/17/2022	Dry	75
PECS -1	1,4-dichlorobenzene	4/10/2023	<1.0	75
PECS -1	1,4-dichlorobenzene	10/27/2023	Dry	75
PECS -1	1,4-dichlorobenzene	4/2/2024	<1.0	75
PECS -1	1,4-dichlorobenzene	10/10/2024	Dry	75

CAMP
Annual Water Quality Report
Rural Iowa Sanitary Landfill
Permit No.42-SDP-01-72P

Detection above MRL

 Key

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	GWPS Limit (ug/L)
PECS -1	Benzene	10/25/2018	Dry	5
PECS -1	Benzene	4/15/2019	<1.0	5
PECS -1	Benzene	10/7/2019	<1.0	5
PECS -1	Benzene	4/22/2020	Dry	5
PECS -1	Benzene	10/1/2020	Dry	5
PECS -1	Benzene	4/8/2021	<1.0	5
PECS -1	Benzene	10/29/2021	<1.0	5
PECS -1	Benzene	4/25/2022	<1.0	5
PECS -1	Benzene	10/17/2022	Dry	5
PECS -1	Benzene	4/10/2023	<1.0	5
PECS -1	Benzene	10/27/2023	Dry	5
PECS -1	Benzene	4/2/2024	<1.0	5
PECS -1	Benzene	10/10/2024	Dry	5

CAMP
Annual Water Quality Report
Rural Iowa Sanitary Landfill
Permit No.42-SDP-01-72P

Detection above MRL

 Key

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	GWPS Limit (ug/L)
PECS -1	chlorobenzene	10/25/2018	Dry	100.00
PECS -1	chlorobenzene	4/15/2019	<1.0	100.00
PECS -1	chlorobenzene	10/7/2019	<1.0	100.00
PECS -1	chlorobenzene	4/22/2020	Dry	100.00
PECS -1	chlorobenzene	10/1/2020	Dry	100.00
PECS -1	chlorobenzene	4/8/2021	<1.0	100.00
PECS -1	chlorobenzene	10/29/2021	<1.0	100.00
PECS -1	chlorobenzene	4/25/2022	<1.0	100.00
PECS -1	chlorobenzene	10/17/2022	Dry	100.00
PECS -1	chlorobenzene	4/10/2023	<1.0	100.00
PECS -1	chlorobenzene	10/27/2023	Dry	100.00
PECS -1	chlorobenzene	4/2/2024	<1.0	100.00
PECS -1	chlorobenzene	10/10/2024	Dry	100.00

CAMP
Annual Water Quality Report
Rural Iowa Sanitary Landfill
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Detection above MRL

 Key

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	GWPS Limit (ug/L)
PECS -1	chloroethane	10/25/2018	Dry	2,800.00
PECS -1	chloroethane	4/15/2019	<1.0	2,800.00
PECS -1	chloroethane	10/7/2019	<1.0	2,800.00
PECS -1	chloroethane	4/22/2020	Dry	2,800.00
PECS -1	chloroethane	10/1/2020	Dry	2,800.00
PECS -1	chloroethane	4/8/2021	<1.0	2,800.00
PECS -1	chloroethane	10/29/2021	<1.0	2,800.00
PECS -1	chloroethane	4/25/2022	<1.0	2,800.00
PECS -1	chloroethane	10/17/2022	Dry	2,800.00
PECS -1	chloroethane	4/10/2023	<1.0	2,800.00
PECS -1	chloroethane	10/27/2023	Dry	2,800.00
PECS -1	chloroethane	4/2/2024	<1.0	2,800.00
PECS -1	chloroethane	10/10/2024	Dry	2,800.00

CAMP
Annual Water Quality Report
Rural Iowa Sanitary Landfill
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Detection above MRL

 Key

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	GWPS Limit (ug/L)
PECS -1	Cis-1,2DCE	10/25/2018	Dry	70
PECS -1	Cis-1,2DCE	4/15/2019	<1.0	70
PECS -1	Cis-1,2DCE	10/7/2019	<1.0	70
PECS -1	Cis-1,2DCE	4/22/2020	Dry	70
PECS -1	Cis-1,2DCE	10/1/2020	Dry	70
PECS -1	Cis-1,2DCE	4/8/2021	<1.0	70
PECS -1	Cis-1,2DCE	10/29/2021	<1.0	70
PECS -1	Cis-1,2DCE	4/25/2022	<1.0	70
PECS -1	Cis-1,2DCE	10/17/2022	Dry	70
PECS -1	Cis-1,2DCE	4/10/2023	<1.0	70
PECS -1	Cis-1,2DCE	10/27/2023	Dry	70
PECS -1	Cis-1,2DCE	4/2/2024	<1.0	70
PECS -1	Cis-1,2DCE	10/10/2024	Dry	70

CAMP
Annual Water Quality Report
Rural Iowa Sanitary Landfill
Permit No.42-SDP-01-72P

Detection above MRL

 Key

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	GWPS Limit (ug/L)
PECS -1	ethylbenzene	10/25/2018	Dry	700
PECS -1	ethylbenzene	4/15/2019	<1.0	700
PECS -1	ethylbenzene	10/7/2019	<1.0	700
PECS -1	ethylbenzene	4/22/2020	Dry	700
PECS -1	ethylbenzene	10/1/2020	Dry	700
PECS -1	ethylbenzene	4/8/2021	<1.0	700
PECS -1	ethylbenzene	10/29/2021	<1.0	700
PECS -1	ethylbenzene	4/25/2022	<1.0	700
PECS -1	ethylbenzene	10/17/2022	Dry	700
PECS -1	ethylbenzene	4/10/2023	<1.0	700
PECS -1	ethylbenzene	10/27/2023	Dry	700
PECS -1	ethylbenzene	4/2/2024	<1.0	700
PECS -1	ethylbenzene	10/10/2024	Dry	700

CAMP
Annual Water Quality Report
Rural Iowa Sanitary Landfill
Permit No.42-SDP-01-72P

Detection above MRL

 Key

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	GWPS Limit (ug/L)
PECS -1	toluene	10/25/2018	Dry	1000
PECS -1	toluene	4/15/2019	<1.0	1000
PECS -1	toluene	10/7/2019	<1.0	1000
PECS -1	toluene	4/22/2020	Dry	1000
PECS -1	toluene	10/1/2020	Dry	1000
PECS -1	toluene	4/8/2021	<1.0	1000
PECS -1	toluene	10/29/2021	<1.0	1000
PECS -1	toluene	4/25/2022	<1.0	1000
PECS -1	toluene	10/17/2022	Dry	1000
PECS -1	toluene	4/10/2023	<1.0	1000
PECS -1	toluene	10/27/2023	Dry	1000
PECS -1	toluene	4/2/2024	<1.0	1000
PECS -1	toluene	10/10/2024	Dry	1000

CAMP
Annual Water Quality Report
Rural Iowa Sanitary Landfill
Permit No.42-SDP-01-72P

Detection above MRL

 Key

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	GWPS Limit (ug/L)
PECS -1	Vinyl Chloride	10/25/2018	Dry	2
PECS -1	Vinyl Chloride	4/15/2019	<1.0	2
PECS -1	Vinyl Chloride	10/7/2019	<1.0	2
PECS -1	Vinyl Chloride	4/22/2020	Dry	2
PECS -1	Vinyl Chloride	10/1/2020	Dry	2
PECS -1	Vinyl Chloride	4/8/2021	<1.0	2
PECS -1	Vinyl Chloride	10/29/2021	<1.0	2
PECS -1	Vinyl Chloride	4/25/2022	<1.0	2
PECS -1	Vinyl Chloride	10/17/2022	Dry	2
PECS -1	Vinyl Chloride	4/10/2023	<1.0	2
PECS -1	Vinyl Chloride	10/27/2023	Dry	2
PECS -1	Vinyl Chloride	4/2/2024	<1.0	2
PECS -1	Vinyl Chloride	10/10/2024	Dry	2

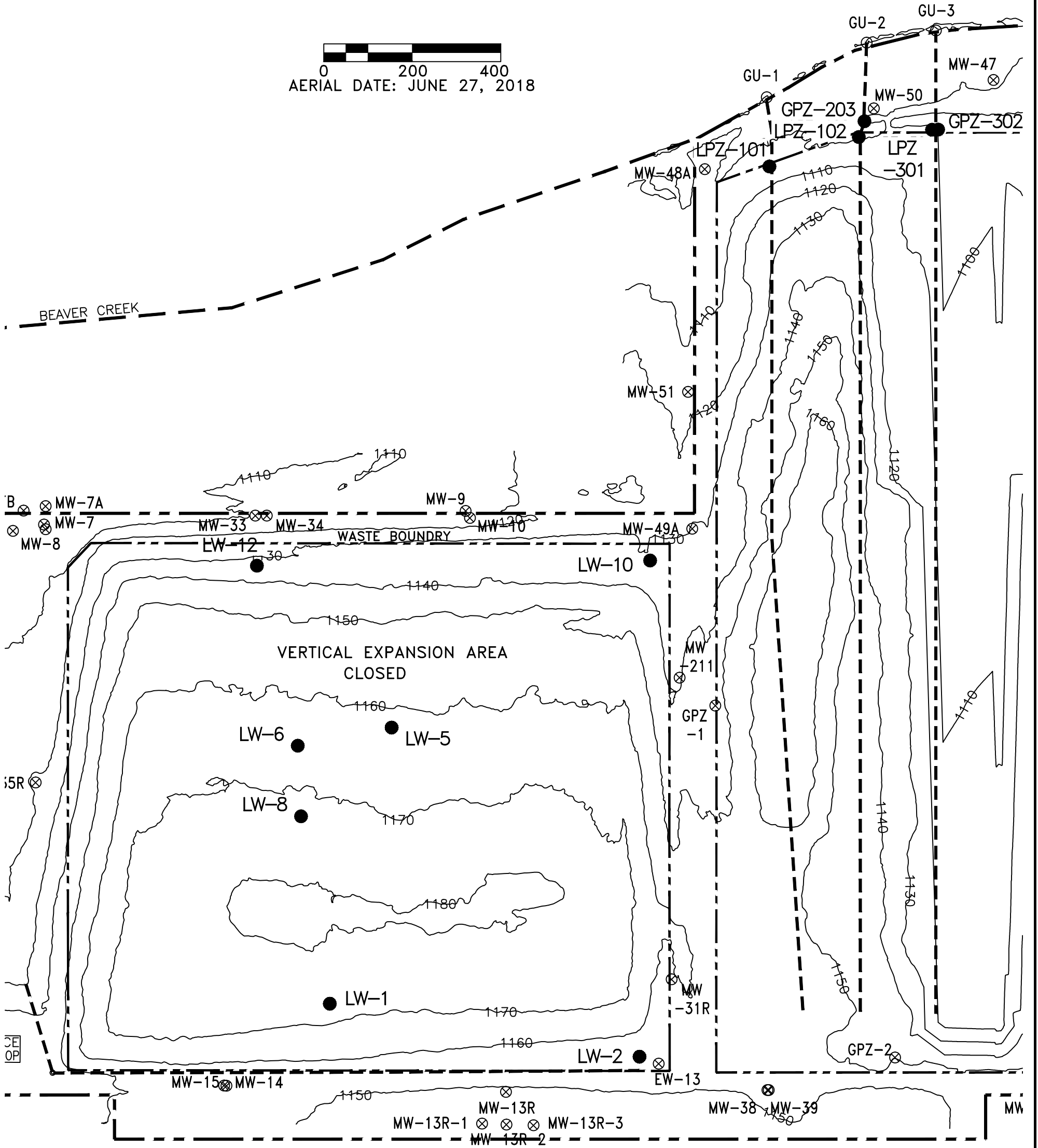
Bold GWPS = A Site Specific GWPS that is equal to the Prediction Limit. All other GWPS are IAC 567-137 Statewide Standards for Protected Groundwater.

Appendix I

Leachate Collection System Information & Map



0 200 400
AERIAL DATE: JUNE 27, 2018



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

LEACHATE MONITORING SYSTEM PLAN

RURAL IOWA SANITARY LANDFILL
ELDORA, IOWA

FIGURE: 1

REVISION	NO.	DATE
DRAWN DRA	PROJECT NO. 6006	DATE 12-18-24

Appendix I.1 – Treatment Agreements



**IOWA DEPARTMENT OF NATURAL RESOURCES
TREATMENT AGREEMENT FORM**

DNR USE ONLY
NPDES NO.
IND. CONT. AGREEMENT NO.
REPLACES AGREEMENT NO.

NOTICE

A properly executed Treatment Agreement must be submitted by the industrial user not less than one hundred eighty (180) days before the new significant industrial user proposes to discharge into a wastewater disposal system. Any proposed expansion, production increase, or process modification that may result in any change to a previous Treatment Agreement requires execution of a new Treatment Agreement.

SIGNIFICANT INDUSTRIAL USER		SYSTEM RECEIVING WASTE	
NAME Rural Iowa Waste Management Association		NAME City of Alden	
MAILING ADDRESS 20488 M Avenue, Eldora, Iowa 50627		MAILING ADDRESS 1018 Water Street, Box 26, Alden, IA 50006	
AUTHORIZED REPRESENTATIVE Dan Aastrup	PHONE NO. 641/858/5904	AUTHORIZED REPRESENTATIVE Andy Jass	PHONE NO. 641/859/3344

CERTIFICATION OF INDUSTRIAL USER

I am the duly authorized representative for the significant industrial user identified above and state that the proposed discharge to the system receiving waste identified above shall not exceed the quantities listed on page two of this form after:

EFFECTIVE DATE September 1, 2019

I further assure that notice of any anticipated increase in pollutants contributed shall be given to the owner of the system identified above sufficiently in advance of such increase to allow this contributor to submit a new treatment agreement to the Department of Natural Resources no later than sixty days in advance of the increase or change.

TYPED OR PRINTED NAME	TITLE	SIGNATURE	DATE
Dan Aastrup	Director	<i>Dan Aastrup</i>	8/22/2019

CERTIFICATION OF SYSTEM RECEIVING WASTE

I am the duly authorized representative for the facility owner named above and state that the owner agrees to accept the discharge described on page two from the contractor identified above, and accepts responsibility for providing treatment of the volume and quantities described on the reverse in accordance with the provisions of Chapter 455B, Code of Iowa, and the rules of the Department of Natural Resources. This agreement is conditioned on the industrial contributor complying with all applicable standards and requirements of the Department of Natural Resources and the United State Environmental Protection Agency. This agreement is entered for the purpose of identifying pollutants contributed and limiting the quantity contributed, and shall not otherwise be construed to affect local ordinances, sewer service agreements or fee systems entered into between the parties.

This agreement may be modified or terminated by the owner of the disposal system if additional pollutants or additional quantities or volumes of pollutants are contributed other than identified on the reverse, or because of any condition that requires either a temporary or permanent reduction or elimination of the accepted contribution.

TYPED OR PRINTED NAME	TITLE	SIGNATURE	DATE
Jeff Fiscus	Mayor		



10. Payment

A. General Compensation

The City of Alden shall be paid \$0.05 by Rural Iowa Waste Management Association for each gallon of Leachate delivered to and treated by the City's Wastewater Treatment Facility.

B. Penalty Fees

Rural Iowa Waste Management Association shall pay the City of Alden penalty fees for violations of the Treatment Agreement in accordance with the following schedule:

1.	For each wastewater parameter (including pH) not tested at least one (1) time each month	\$100
2.	For exceeding Average Flow Limit	\$100
3.	For exceeding Maximum flow Limits	\$200
4.	For exceeding Average BOD5 Loading Limit	\$200
5.	For exceeding Maximum BOD5 Loading Limit	\$400
6.	For exceeding Average TSS Loading Limit	\$200
7.	For exceeding Maximum TSS Loading Limit	\$400
8.	For exceeding Average Ammonia Nitrogen Loading Limit	\$100
9.	For exceeding Maximum Ammonia Nitrogen Loading Limit	\$200
10.	For exceeding Average Oil & Grease Concentration Limit	\$100
11.	For exceeding Maximum Oil & Grease Concentration Limit	\$200

IOWA DEPARTMENT OF NATURAL RESOURCES
National Pollutant Discharge Elimination System (NPDES) Permit

OWNER NAME & ADDRESS
CITY OF ALDEN
1018 WATER STREET
PO BOX 26
ALDEN, IA 50006-0026

FACILITY NAME & ADDRESS
ALDEN CITY OF STP
INTERSECTION OF 135TH STREET &
G AVENUE
ALDEN, IA 50006-0026

Section 19, T89N, R21W
Hardin County

IOWA NPDES PERMIT NUMBER: 4213001
DATE OF ISSUANCE: 03/01/2020
DATE OF EXPIRATION: 02/28/2025

**YOU ARE REQUIRED TO FILE FOR RENEWAL
OF THIS PERMIT BY:** 09/01/2024
EPA NUMBER: IA0034339

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 this department within 30 days of your receipt of this permit.

Any existing, unexpired Iowa operation permit or Iowa NPDES permit previously issued by the department for the facility identified above is revoked by the issuance of this permit. This provision does not apply to any authorization to discharge under the terms and conditions of a general permit issued by the department or to any permit issued exclusively for the discharge of stormwater.

FOR THE DEPARTMENT OF NATURAL RESOURCES

By _____

Ryan Olive
NPDES Section
Environmental Services Division

Facility Name: ALDEN CITY OF STP

Permit Number: 4213001

Outfall No.: 001 CONTROLLED DISCHARGE FROM A THREE CELL WASTE STABILIZATION LAGOON.

Receiving Stream: IOWA RIVER

Route of Flow: IOWA RIVER

Class A1 waters are primary contact recreational use waters in which recreational or other uses may result in prolonged and direct contact with the water, involving considerable risks of ingesting water in quantities sufficient to pose a health hazard. Such activities would include, but not be limited to, swimming, diving, water skiing, and water contact recreational canoeing.

Waters designated Class B(WW1) are those in which temperature, flow and other habitat characteristics are suitable to maintain warm water game fish populations along with a resident aquatic community that includes a variety of native nongame fish and invertebrates species. These waters generally include border rivers, large interior rivers, and the lower segments of medium-size tributary streams.

Waters designated Class HH are those in which fish are routinely harvested for human consumption or waters both designated as a drinking water supply and in which fish are routinely harvested for human consumption.

Outfall No.: 002 BYPASS FROM LIFT STATION AT CENTER STREET AND WATER STREET

Receiving Stream: IOWA RIVER

Route of Flow: IOWA RIVER

Class A1 waters are primary contact recreational use waters in which recreational or other uses may result in prolonged and direct contact with the water, involving considerable risks of ingesting water in quantities sufficient to pose a health hazard. Such activities would include, but not be limited to, swimming, diving, water skiing, and water contact recreational canoeing.

Waters designated Class B(WW1) are those in which temperature, flow and other habitat characteristics are suitable to maintain warm water game fish populations along with a resident aquatic community that includes a variety of native nongame fish and invertebrates species. These waters generally include border rivers, large interior rivers, and the lower segments of medium-size tributary streams.

Waters designated Class HH are those in which fish are routinely harvested for human consumption or waters both designated as a drinking water supply and in which fish are routinely harvested for human consumption.

Bypasses from any portion of a treatment facility or from a sanitary sewer collection system designed to carry only sewage are prohibited.

Facility Name: ALDEN CITY OF STP
 Permit Number: 4213001

Effluent Limitations:

You are prohibited from discharging pollutants except in compliance with the following effluent limitations:

001 CONTROLLED DISCHARGE FROM A THREE CELL WASTE STABILIZATION LAGOON.

Outfall: 001 Effective Dates: 03/01/2020 to 02/28/2025

Parameter	Season	Limit Type	Limits
CBOD5			
	Yearly	7 Day Average	40 MG/L
	Yearly	30 Day Average	25 MG/L
TOTAL SUSPENDED SOLIDS			
	Yearly	7 Day Average	120 MG/L
	Yearly	30 Day Average	80 MG/L
PH			
	Yearly	Daily Maximum	9.0 STD UNITS
	Yearly	Daily Minimum	6.5 STD UNITS

Facility Name: ALDEN CITY OF STP

Permit Number: 4213001

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) Chapter 63 of the rules provides you with further explanation of your monitoring requirements.
- (d) You are required to report all data including calculated results needed to determine compliance with the limitations contained in 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. Also, flow data shall be reported in million gallons per day (MGD).
- (e) Results of all monitoring shall be recorded on forms provided by, or approved by, the department, and submitted to the department by the fifteenth day following the close of the reporting period.
- (f) Results of all monitoring shall be recorded on forms provided by, or approved by, the department, and shall be submitted to the appropriate regional field office of the department by the fifteenth day following the close of the reporting period. Your reporting period is on a MONTHLY basis, ending on the last day of each reporting period.

Facility Name: ALDEN CITY OF STP
 Permit Number: 4213001

Outfall	Wastewater Parameter	Sample Frequency	Sample Type	Monitoring Location
The following monitoring requirements shall be in effect from 03/01/2020 to 02/28/2025				
001	BIOCHEMICAL OXYGEN DEMAND (BOD5)	1 EVERY 3 MONTHS	24 HOUR COMPOSITE	RAW WASTE
001	FLOW	7/WEEK OR DAILY	24 HOUR TOTAL	RAW WASTE
001	PH	1 EVERY 3 MONTHS	GRAB	RAW WASTE
001	TOTAL SUSPENDED SOLIDS	1 EVERY 3 MONTHS	24 HOUR COMPOSITE	RAW WASTE
001	CBOD5	PRIOR TO DISCHARGE	GRAB	PRE-DISCHARGE SAMPLE
001	TOTAL SUSPENDED SOLIDS	PRIOR TO DISCHARGE	GRAB	PRE-DISCHARGE SAMPLE
001	AMMONIA NITROGEN (N)	TWICE PER DRAWDOWN	GRAB	FINAL EFFLUENT
001	CBOD5	TWICE PER DRAWDOWN	GRAB	FINAL EFFLUENT
001	E. COLI	TWICE PER DRAWDOWN	GRAB	FINAL EFFLUENT
001	FLOW	DAILY DURING DRAWDOWN	INSTANTANEOUS	FINAL EFFLUENT
001	PH	1/WEEK DURING DRAWDOWN	GRAB	FINAL EFFLUENT
001	TOTAL SUSPENDED SOLIDS	TWICE PER DRAWDOWN	GRAB	FINAL EFFLUENT
001	CELL DEPTH	2 TIMES PER WEEK	MEASUREMENT	CELL 3 CONTENTS
001	CELL DEPTH	2 TIMES PER WEEK	MEASUREMENT	CELL 2 CONTENTS
001	CELL DEPTH	2 TIMES PER WEEK	MEASUREMENT	CELL 1 CONTENTS

Facility Name: ALDEN CITY OF STP

Permit Number: 4213001

Special Monitoring Requirements

Outfall # Description

001 E. COLI

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.

Facility Name: ALDEN CITY OF STP
 Permit Number: 4213001

Significant Industrial User Discharges:

Significant Industrial User: RURAL IOWA WASTE MANAGEMENT ASSOCIATION LANDFILL

Outfall # Outfall Description

001 LANDFILL LEACHATE TRANSPORTED AND DISCHARGED BY
 5-5000 GALLON/LOAD TANK TRUCK TO DESIGNATED LOCATION

Significant Industrial User Effluent Limitations

You are prohibited from discharging pollutants except in compliance with the following effluent limitations:

RURAL IOWA WASTE MANAGEMENT ASSOCIATION LANDFILL		
Outfall: 001 Effective Dates: 03/01/2020 to 02/28/2025		
<u>Parameter</u>	<u>Season</u>	<u>Limit Type</u>
FLOW		
	Yearly	30 Day Average
	Yearly	DAILY MAXIMUM
		0.018 MGD
		0.018 MGD
BIOCHEMICAL OXYGEN DEMAND (BOD5)		
	Yearly	30 Day Average
	Yearly	DAILY MAXIMUM
		79 LBS/DAY
		347 LBS/DAY
TOTAL SUSPENDED SOLIDS		
	Yearly	30 Day Average
	Yearly	DAILY MAXIMUM
		60 LBS/DAY
		80 LBS/DAY
AMMONIA NITROGEN (N)		
	Yearly	30 Day Average
	Yearly	DAILY MAXIMUM
		15 LBS/DAY
		24 LBS/DAY
OIL AND GREASE		
	Yearly	30 Day Average
	Yearly	DAILY MAXIMUM
		25 MG/L
		100 MG/L
PH		
	Yearly	DAILY MAXIMUM
	Yearly	DAILY MINIMUM
		9.0 STD UNITS
		6.0 STD UNITS

Facility Name: ALDEN CITY OF STP
Permit Number: 4213001

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) Chapter 63 of the rules provides you with further explanation of your monitoring requirements.
- (d) You are required to report all data including calculated results needed to determine compliance with the limitations contained in 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. Also, flow data shall be reported in million gallons per day (MGD).
- (e) Results of all monitoring shall be recorded on forms provided by, or approved by, the department, and submitted to the department by the fifteenth day following the close of the reporting period.
- (f) Results of all monitoring shall be recorded on forms provided by, or approved by, the department, and shall be submitted to the appropriate regional field office of the department by the fifteenth day following the close of the reporting period. Your reporting period is on a MONTHLY basis, ending on the last day of each reporting period.

Facility Name: ALDEN CITY OF STP
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RURAL IOWA WASTE MANAGEMENT ASSOCIATION LANDFILL

Outfall	Wastewater Parameter	Sample Frequency	Sample Type	Monitoring Location
001	AMMONIA NITROGEN (N)	1 EVERY MONTH	GRAB	PRIOR TO DISCHARGE TO CITY SEWER
001	BIOCHEMICAL OXYGEN DEMAND (BOD5)	1 EVERY MONTH	GRAB	PRIOR TO DISCHARGE TO CITY SEWER
001	FLOW	1 EVERY BATCH	24 HOUR TOTAL	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	SANITARY LANDFILL LEACHATE	1 EVERY 12 MONTHS	GRAB	PRIOR TO DISCHARGE TO CITY SEWER
001	TOTAL SUSPENDED SOLIDS	1 EVERY MONTH	GRAB	PRIOR TO DISCHARGE TO CITY SEWER

Facility Name: ALDEN CITY OF STP
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ADDITIONAL MONITORING REQUIREMENTS – RURAL IOWA WASTE MANAGEMENT ASSOCIATION LANDFILL

The permittee shall analyze a representative sample of the leachate discharge from the Rural Iowa Waste Management Association Landfill at least annually for each of the pollutants listed below. Also, the permittee shall monitor the volume of waste discharged and BOD₅, TSS, pH, ammonia nitrogen and oil & grease at the frequencies specified on page 9 of this permit.

Conventional Pollutants and Metals	Volatile Compounds	Acid Extractable Compounds
Biochemical Oxygen Demand (BOD ₅)	Method of Analysis: EPA Methods 624 or 1624	Method of Analysis: EPA Methods 625 or 1625
Total Organic Carbon	Chloromethane (methyl chloride)	2-Chlorophenol
Total Dissolved Solids	Bromomethane (methyl bromide)	2-Nitrophenol
Total Suspended Solids	Vinyl chloride	2,4-Dimethylphenol
Ammonia Nitrogen	Chloroethane (ethyl chloride)	Benzoic acid
pH	Methylene chloride (dichloromethane)	2,4-Dichlorophenol
Arsenic, Total (as As)	1,1-Dichloroethene (1,1-dichloroethylene)	4-Chloro-3-methylphenol
Barium, Total (as Ba)	1,1-Dichloroethane	2,4,6-Trichlorophenol
Cadmium, Total (as Cd)	1,2-Dichloroethene (1,2-dichloroethylene)	2,4,5-Trichlorophenol
Chromium, Total (as Cr)	Chloroform	2,4-Dinitrophenol
Copper, Total (as Cu)	1,2-Dichloroethane	4-Nitrophenol
Iron, Total (as Fe)	1,1,1-Trichloroethane (methyl chloroform)	4,6-Dinitro-2-methylphenol
Lead, Total (as Pb)	Carbon tetrachloride	Pentachlorophenol
Mercury, Total (as Hg)	Bromodichloromethane	
Nickel, Total (as Ni)	1,1,2,2-Tetrachloroethane	
Selenium, Total (as Se)	1,2-Dichloropropane	
Silver, Total (as Ag)	1,3-Dichloropropene	
Zinc, Total (as Zn)	Trichloroethene	
	Dibromochloromethane	
	1,1,2-Trichloroethane	
	Benzene	
	2-Chloroethyl vinyl ether	
	Bromoform	
	Tetrachloroethene	
	Toluene	
	Chlorobenzene	
	Ethylbenzene	

Facility Name: ALDEN CITY OF STP
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Chlorinated Hydrocarbon Insecticides	Base/Neutral Compounds	Base/Neutral Compounds - continued
<u>Methods of Analysis: EPA Methods 608 or 625</u> Beta BHC Delta BHC Gamma BHC Heptachlor Aldrin Heptachlor epoxide Endosulfan Dieldrin 4,4'-DDE Endrin Endosulfan II 4,4'-DDD Endosulfan sulfate 4,4'-DDT Endrin aldehyde Chlordane Toxaphene	<u>Methods of Analysis: EPA Methods 625 or 1625</u> bis (2-chloroethyl) ether 1,3-Dichlorobenzene 1,4-Dichlorobenzene Benzyl alcohol 1,2-Dichlorobenzene bis (2-chloroisopropyl) ether N-Nitroso-dipropylamine Hexachloroethane Nitrobenzene Isophorone bis (2-chloroethoxy) methane 1,2,4-Trichlorobenzene Naphthalene Hexachlorobutadiene Hexachlorocyclopentadiene 2-Chloronaphthalene Dimethyl phthalate Acenaphthylene Acenaphthene Dibenzofuran 2,4-Dinitrotoluene 2,6-Dinitrotoluene Diethyl phthalate 4-Chlorophenyl phenyl ether Fluorene N-Nitrosodiphenylamine 4-Bromophenyl phenyl ether Hexachlorobenzene Phenanthrene Anthracene	Di-n-butyl phthalate Fluoranthene Pyrene Butyl benzyl phthalate 3,3'-Dichlorobenzidine Benzo (a) anthracene bis (2-ethylhexyl) phthalate Chrysene Di-n-octyl phthalate Benzo (b) fluoranthene Benzo (k) fluoranthene Benzo (a) pyrene Indeno (1,2,3-cd) pyrene Dibenz (a,h) anthracene Benzo (g,h,i) perylene
Polychlorinated Biphenyls		
<u>Methods of Analysis: EPA Methods 608 or 625</u> Arochlor-1016 Arochlor-1221 Arochlor-1232 Arochlor-1242 Arochlor-1248 Arochlor-1254 Arochlor-1260		

Facility Name: ALDEN CITY OF STP

Permit Number: 4213001

Design Capacity

Design: 1

The design capacity for the treatment works is specified in Construction Permit Number 96-217-S, issued Friday, April 26, 1996. The treatment plant is designed to treat:

- * An average dry weather (ADW) flow of 0.1030 Million Gallons Per Day (MGD).
- * An average wet weather (AWW) flow of 0.2000 Million Gallons Per Day (MGD).
- * A maximum wet weather (MWW) flow of 0.4500 Million Gallons Per Day (MGD).
- * A design 5-day biochemical oxygen demand (BOD5) load of 232 lbs/day.

Operator Certification Type/Grade: WL/IL

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).

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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: ALDEN CITY OF STP

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Controlled Discharge Lagoon Operation and Sampling Procedures

OPERATION REQUIREMENTS

Continuous discharge of wastewater from this facility is prohibited. The treatment plant must be operated using a storage/drawdown mode of operating. Wastewater must be stored for approximately 180 days after which time the water level is to be lowered to make room for the next storage period. Acceptable discharge periods are April 15th through June 15th and October 1st through December 21st. Lagoon drawdown shall occur during these periods except in emergency situations. The permittee is required to contact the local DNR Field Office and obtain prior approval if there is a need to discharge during other times of the year, when stream flows are low or if the effluent limitations specified in this permit will not be met. Lagoon drawdown at a rate greater than 10 times the 180 day AWW design flow is prohibited.

PRE-DISCHARGE SAMPLING

The permittee is responsible for complying with the limits contained in this permit. Therefore, a grab sample of the lagoon cell contents collected at a point near the outlet structure shall be analyzed at least two weeks prior to an anticipated discharge to demonstrate that the wastewater is of such quality to meet the effluent limitations in the permit. The permittee must have the sample analyzed for 5-day carbonaceous biochemical oxygen demand (CBOD5) and total suspended solids (TSS). The results must be compared with the 30-day average effluent limits. If the results are less than the 30-day average limits, the permittee may isolate the final cell and draw down the lagoon cell. If the pre-discharge sample results exceed the 30-day average effluent limits for either CBOD5 or TSS, the permittee must contact the local DNR Field Office for guidance before beginning to discharge.

Report pre-discharge sample results in the spaces provided on the monthly operation report form.

EFFLUENT SAMPLING

The permittee must collect and analyze a sample of the final effluent on the third day after discharge begins for all parameters for which monitoring of the final effluent is specified on the page titled MONITORING AND REPORTING REQUIREMENTS. Subsequent samples shall be taken at the specified frequencies. For final effluent samples that are required to be taken twice during drawdown, the first sample shall be taken the third day after the drawdown begins, and the second sample shall be taken between three (3) and five (5) days before the drawdown ends. Report the results on the discharge monitoring report (DMR) form in the columns provided for effluent monitoring. The results must be reported for the days the samples were collected, not for the days the sample results were received from the laboratory.

Revised: April 10, 2013

Facility Name: ALDEN CITY OF STP
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MAJOR CONTRIBUTING INDUSTRIES LIMITATIONS, MONITORING AND REPORTING REQUIREMENTS

1. You are required to notify the department, in writing, of any of the following:
 - (a) 180 days prior to the introduction of pollutants to your facility from a significant industrial user. A significant industrial user means an industrial user of a treatment works that:
 - (1) Discharges an average of 25,000 gallons per day or more of process wastewater excluding sanitary, noncontact cooling and boiler blowdown wastewater;
 - (2) Contributes a process waste stream which makes up five percent or more of the average dry weather hydraulic or organic capacity of the publicly-owned treatment works;
 - (3) Is subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N; or
 - (4) Is designated by the department as a significant industrial user on the basis that the contributing industry, either singly or in combination with other contributing industries, has a reasonable potential for adversely affecting the operation of or effluent quality from the publicly-owned treatment works or for violating any pretreatment standards or requirements.
 - (b) 60 days prior to a proposed expansion, production increase or process modification that may result in the discharge of a new pollutant or a discharge in excess of limitations stated in the existing treatment agreement.
 - (c) 10 days prior to any commitment by you to accept waste from any new significant industrial user. Your written notification must include a new or revised treatment agreement in accordance with rule 64.3(5)(455B).
2. You shall require all users of your facility to comply with Sections 204(b), 307 and 308 of the Clean Water Act.

Section 204(b) requires that all users of the treatment works constructed with funds provided under Sections 201(g) or 601 of the Act to pay their proportionate share of the costs of operation, maintenance and replacement of the treatment works.

Section 307 of the Act requires users to comply with pretreatment standards promulgated by EPA for pollutants that would cause interference with the treatment process or would pass through the treatment works.

Section 308 of the Act requires users to allow access at reasonable times to state and EPA inspectors for the purpose of sampling the discharge and reviewing and copying records.
3. You shall limit and monitor pollutants for each significant industrial user as required elsewhere in this permit, and submit sample results to the department monthly. Your report shall be submitted by the fifteenth day of the following month.

Revised: June 16, 2009 CAC

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(i)(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)“f”}*

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 recurrence 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)“f”}*

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.
- Bypasses from any portion of a treatment facility or from a sanitary sewer collection system designed to carry only sewage are prohibited.
 - 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:
 - Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and
 - 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
 - The permittee submitted notices as required by paragraph (d) of this section.
 - 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).
 - Reporting bypasses. Bypasses shall be reported in accordance with 567 IAC 63.6.

22. UPSET PROVISION

- 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.
- 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.

- 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:
 - An upset occurred and that the permittee can identify the cause(s) of the upset;
 - The permitted facility was at the time being properly operated;
 - The permittee submitted notice of the upset to the Department in accordance with 567 IAC 63.6(3); and
 - The permittee complied with any remedial measures required in accordance with 567 IAC 63.6(6)"b".
- 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.



**DES MOINES METROPOLITAN
WASTEWATER RECLAMATION AUTHORITY**

CITY OF DES MOINES, OPERATING CONTRACTOR

September 23, 2021

Dan Aastrup
Rural Iowa Waste Management
20488 M Ave
Eldora, IA 50627

RE: Hauled Waste Discharge Permit No. B10160

Dear Mr. Aastrup:

Enclosed is your Hauled Waste Discharge Permit for the Rural Iowa Waste Management facility in Eldora, IA. This permit is effective until the expiration date; however, an annual permit fee will be due.

Please keep us informed of any changes that may affect your facility's hauled waste discharge frequency or characteristics. Questions should be directed to Paul Ebert, in Industrial Pretreatment, at 515/323-8133.

Sincerely,

Larry Hare
WRF Treatment Manager
WRA Wastewater Reclamation Facility

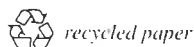
LH/ajf

Enc: Hauled Wastewater Discharge Permit

CC: T. Whipple, HLW Engineering, 204 W. Broad St, PO Box 314, Story City, IA 50248
File

WORKING TOGETHER FOR CLEAN WATER

Phone 515/323-8000 • Fax 515/323-8050 • www.dmmwra.org
3000 Vandalia Road • Des Moines, Iowa 50317-1346





**DES MOINES METROPOLITAN
WASTEWATER RECLAMATION AUTHORITY**

CITY OF DES MOINES, OPERATING CONTRACTOR

**DES MOINES METROPOLITAN WASTEWATER RECLAMATION AUTHORITY
HAULED WASTE DISCHARGE PERMIT
PERMIT NO. B10160**

In accordance with the provisions of the Municipal Code of Des Moines, Chapter 118, Article III known as the Industrial Waste Ordinance,

Rural Iowa Waste Management
20488 M Ave
Eldora, IA 50627

is hereby authorized to deliver wastewater from the RCRA Subtitle D non-hazardous landfill via a properly licensed and maintained tank truck to the Des Moines Metropolitan Wastewater Reclamation Facility in accordance with the conditions set forth in this permit. Compliance with this permit does not relieve the industrial user of its obligations to comply with all applicable pretreatment regulations, standards, requirements, or laws that are or may become effective during the term of this permit.

Noncompliance with any term or condition of this permit shall constitute a violation of the City of Des Moines Industrial Waste Ordinance.

EFFECTIVE DATE: October 1, 2021

EXPIRATION DATE: September 30, 2025

RENEWAL DATE: June 30, 2025

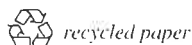
The industrial user must file an application for permit renewal 90 days prior to the expiration date.

Scott Hutchens, P.E., WRA Director
City of Des Moines
WRA Wastewater Reclamation Facility

REVISED: August 12, 2021

WORKING TOGETHER FOR CLEAN WATER

Phone 515/323-8000 • Fax 515/323-8050 • www.dmmwra.org
3000 Vandalia Road • Des Moines, Iowa 50317-1346



PART 1 - REQUIREMENTS RELATING TO TRUCKED WASTES

The Des Moines Metropolitan Wastewater Reclamation Authority (WRA) will accept process wastewater from the Industrial User (IU) under the following terms:

A. Process Wastewater Characteristics and Volume

1. The pH of any load must not be less than 5.0 S.U. or greater than 12.0 S.U.
2. The COD of any load delivered to the headworks (Structure 07) must not exceed 100,000 mg/L.
3. The Arsenic Daily Maximum concentration of any load shall not exceed 0.38 mg/L, and the Total Daily Loading of Arsenic shall not exceed 0.014 lbs/day.
4. Total Toxic Organics (TTO) will be monitored routinely by the WRA. TTOs are sum of all volatile organic compounds detected using EPA Method 624.
5. The number of truck loads delivered to the Des Moines Metropolitan Wastewater Reclamation Facility (WRF) shall not exceed five (5) per day. The IU may request an increase in writing. The WRA reserves the right to further restrict the volume of leachate per day in order to meet pollutant loading limits for the WRF as identified in Chapter 118-343.
6. Hauled waste shall be delivered to the headworks (Structure 07) at the WRF, unless directed otherwise by WRA personnel.
7. Only landfill leachate wastewater is allowed by truck without advanced notice to and permission from the WRA Director.

B. Treatment Charges

1. Charges must cover 150% of the costs incurred by the WRA to handle and treat the wastewater as determined by the WRA Director, as well as 100% of the costs to analyze the wastewater.
2. Charges are billed monthly with NET 30 terms payable to CITY OF DES MOINES and mailed to

City of Des Moines Treasurer's Office
P.O. Box 1633
Des Moines, IA 50306-1633
3. Treatment charges for waste loads disposed of at the headworks (Structure 07) shall be \$0.0724/gallon or \$0.00868/lb. (subject to annual rate increases, given 30-days' notice).
4. Reevaluation of charges:
 - (a) Charges will be reevaluated on February 1st and annually thereafter at a minimum.
 - (b) Charges may be reevaluated at the request of the IU or by the WRA at any time due to waste characteristic changes in the process wastewater.
 - (c) Changes in treatment charges are effective after 30-days' notice to the IU.

C. Sampling & Analysis

1. WRA Sampling & Analysis
 - (a) The WRA may, at a minimum, perform daily sampling and measurement of pH, O&G, COD, TSS, TKN, %TS, %VS at the cost provided for in Chapter 118-352. The cost will be assessed to the IU and included in the charges in Part 1, B.1. above.
 - (b) The WRA will perform other sampling and analysis at the expense of the IU as necessary to accurately assess charges and pollutant loadings.
 - (c) Samples shall be taken from the tank truck at the WRF prior to discharge or mixing with any other waste.
2. IU Sampling & Analysis
 - (a) The IU shall perform an annual scan of priority pollutants and report results to the WRA.
 - (b) Such scan does not eliminate the need for the WRA to perform its normal sampling and analysis.
 - (c) Samples shall be taken from the leachate collection vessel used to fill tank trucks for transport to the WRF.

D. Hours of Operation

1. The WRA will accept trucked waste 24/7 if drivers are familiar with the WRF manifesting, scaling, and unloading processes.
2. The WRA has the right to restrict hours as necessary and restrict truck driver access as necessary. Additional costs to provide service will be charged to the IU.

E. Termination of this Permit

1. This permit may be terminated by the IU by making a written request to the WRA providing 30-days' advanced notice.
2. This permit may be terminated by the WRA for any reason by providing 30-days' advanced written notice to the IU.
3. Delivery of wastes may be immediately suspended by the WRA if acceptance of this wastewater causes, or is anticipated to cause, interference, pass through of pollutants, or violation of any environmental permit held by the WRA.

F. Automatic Permit Extension

Expired permits shall remain effective and enforceable until the permit is reissued unless the IU is notified of permit termination by the WRA Director. (Chapter 118-372)

G. Damages

Anyone delivering or discharging wastes to the WRF whose waste causes upset, interference, or pass through is liable for the costs incurred by such incident and to penalties as allowed under city, state, and federal law.

H. Spill Control Plan

When required to do so by the WRA, the IU shall develop a Spill Control Plan to address potential spills or slugs.

PART 2 – REPORTING REQUIREMENTS

A. Monitoring Reports

The WRA will provide the IU with routine reports of the concentration of pollutants in the IU's effluent which are being monitored as described above.

1. Semi-Annual Reports

A certification statement, signed by an Authorized Representative, which uses the language required by federal law (40 CFR 403.12(l)), must be returned to the WRA every six (6) months. The industry is certifying that information it has submitted to the WRA is true and accurate. Those with TTO limits in wastewater discharge permits have an additional certifying statement regarding use and disposal of these substances. The IU shall submit a semi-annual report to the WRA as follows:

<u>Semi-Annual</u>	<u>Periods Covered</u>
1st Half	January – June
2nd Half	July - December

Semi-Annual Report Format

- (a) Identifying information.
- (b) Measurement of pollutants for any samples collected by the IU, per Chapter 118-377(5).
- (c) Certification and signature by IU.
- (d) Compliance schedule (as required).
- (e) Additional monitoring (as required).

2. Reports - Additional Monitoring

If the IU monitors any permitted pollutant from the sample location identified in Part 1.C more frequently than required by this permit, using test procedures prescribed in 40 CFR Part 136, the results of such monitoring shall be submitted to the WRA. Such monitoring results shall be summarized and reported to the WRA as part of the semi-annual report.

B. Accidental Discharge Report

The IU shall notify the WRA immediately of all discharges that could cause problems to the POTW, including any slug loadings, as outlined in Chapter 118-349. Formal written notification discussing circumstances and remedies shall be submitted to the WRA within five (5) days of the occurrence. The following procedures shall be followed:

1. Accidental discharges that contain pollutants that exceed the permitted limit by 5x or that exceed a designated slug discharge concentration shall be reported immediately.
2. Accidental discharges that may cause permanent damage to treatment system shall be reported immediately. These discharges include, but are not limited to, pollutants that may cause a fire or explosion hazard, pH of less than 4.0 or greater than 13.0 for, any pollutant in a concentration that would increase the atmosphere in the POTW above the LC50 for human exposure, and any pollutant that may increase the concentration in the influent to the WRF enough to decrease treatment efficiency.

3. The IU shall notify the WRA immediately by telephone at 515/323-8000 or 8133. The notification shall include the name of the person making the call, telephone number where said person can be reached, location of discharge, date and time thereof, type of waste, including concentration and volume, and corrective action taken.

The party making the call shall be available by phone for a minimum of fifteen (15) minutes after the notification is made. This is so that a member of the WRA may contact the industry representative for more information, if necessary.

4. Within five (5) days following an accidental discharge, the IU shall submit to the WRA a detailed written report. The report shall specify:
 - (a) Description of the upset, slug or accidental discharge, the cause thereof, and the impact on the IU's compliance status. The description should also include location of discharge, type, concentration and volume of waste.
 - (b) Duration of noncompliance, including exact dates and times of noncompliance, and if the noncompliance continues, the time by which compliance is reasonably expected to occur.
 - (c) All steps taken or to be taken to reduce, eliminate and prevent recurrence of such a slug discharge, accidental discharge, or other condition of noncompliance.

C. Anticipated Noncompliance

The IU shall give advance notice to the WRA of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

D. Signatory Requirements

1. All applications and reports submitted to the WRA must contain the following certification statement and be signed by an authorized representative of the IU as defined below:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Authorized Representative means:

- (a) An executive officer of a corporation.
- (b) A general partner of a partnership.
- (c) The proprietor of a proprietorship.
- (d) The conservator, trustee, attorney in fact, receiver or other person or agent authorized in law and in fact to act on behalf of IUs which are not corporations, partnerships, or proprietorships or on behalf of other entities which must legally act through an agent.
- (e) Any other authorized representative of (a), (b), (c), or (d) above if the authorization specifies either an individual or a position having responsibility for the overall operation of the facility from which the discharge originates, such as the position of plant manager or a position of equivalent responsibility, or having overall responsibility for environmental matters for the company and the written authorization is submitted to the WRA Director.
- (f) Any other person authorized by law to act on behalf of any entity.

2. If an authorization under paragraph (d) of this subpart is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, or overall responsibility for the environmental matters for the company, a new authorization satisfying the requirements of paragraph (d) of this subpart must be submitted to the WRA prior to or together with any reports to be signed by an authorized representative.

E. Wastewater Reclamation Authority Address and Phone Number

All reports, applications and correspondence shall be submitted to the following address:

Des Moines Metropolitan Wastewater Reclamation Authority
Attention: Pretreatment Department
3000 Vandalia Road
Des Moines, IA 50317

Telephone notification shall be to WRA - 515/323-8000 or 8133.

PART 3 - GENERAL CONDITIONS

The EPA in 40 CFR 403 requires wastewater treatment plants with pretreatment authority to have the following authority over all dischargers:

A. Duty to Comply

You must comply with the terms, conditions, and limits of this permit and of city ordinance. (Chapters 118-321 and 118-376)

B. Duty to Mitigate

The IU shall take all reasonable steps to minimize, correct, or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting the WRF, collection system, human health or environment. (Chapter 118-349)

C. Changes Resulting in New or Increase Pollutants

New or increased contributions of pollutants or changes in the nature of pollutant discharged to the WRF, whether due to changes in production, activity, flow or construction, shall require ninety (90) days prior approval by the WRA Director. (Chapter 118-370(11))

D. Permit Transfer

The IU shall not reassign or transfer this permit. New owners must apply for a new wastewater discharge permit sixty (60) days prior to a change of ownership. (Chapter 118-374)

E. Inspection of Premises, Records, Equipment, Methods and Discharges

You must permit authorized representatives of the WRA to inspect and sample in accordance with Chapter 118-405.

F. Confidential Information

No information shall be confidential except as specified in Chapters 118-381 and 118-382.

G. Dilution

The IU shall not increase the use of potable or process water or, in any way, attempt to dilute a discharge as a partial or complete substitute for adequate treatment to achieve compliance with limitations contained in this permit.

H. Annual Publication

A list of all permitted users which significantly violated pretreatment standards or requirements (including permit requirements) during the twelve (12) previous months shall be annually published in the largest daily newspaper within the service area. (Chapter 118-396)

I. Civil and Criminal Penalties

Violation of pretreatment standards and requirements, administrative orders, or compliance schedules may subject the IU to civil and criminal penalties contained in Chapter 118-400 and Iowa Code 364.22(1).

Appendix I.2- Leachate Volumes Transported

Leachate Disposal - Alden
Rural Iowa Sanitary Landfill
2024

JANUARY		FEBRUARY		MARCH		APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER		OCTOBER		NOVEMBER		DECEMBER		
Date	Gallons	Date	Gallons	Date	Gallons	Date	Gallons	Date	Gallons	Date	Gallons	Date	Gallons	Date	Gallons	Date	Gallons	Date	Gallons	Date	Gallons	Date	Gallons	
1/25/24	2,900	2/1/24	2,900	3/1/24	2,900	4/1/24	4,350	5/1/24	7,250	6/3/24	5,800	7/1/24	5,800	8/1/24	11,600	9/3/24	5,800	10/1/24	2,900	11/4/24	2,900	12/2/24	5,800	
1/26/24	2,900	2/2/24	2,900	3/5/24	5,800	4/2/24	4,350	5/2/24	7,250	6/4/24	5,800	7/2/24	5,800	8/2/24	11,600	9/4/24	5,800	10/2/24	2,900	11/5/24	2,900	12/5/24	5,800	
		2/5/24	2,900	3/12/24	5,800	4/5/24	4,350	5/3/24	7,250	6/5/24	5,800	7/3/24	5,800	8/5/24	11,600	9/10/24	5,800	10/3/24	2,900	11/9/24	2,900	12/11/24	5,800	
		2/6/24	2,900	3/19/24	5,800	4/8/24	4,350	5/6/24	7,250	6/6/24	5,800	7/8/24	5,800	8/6/24	11,600	9/16/24	5,800	10/4/24	2,900	11/7/24	2,900	12/12/24	5,800	
		2/8/24	2,900	3/20/24	5,800	4/9/24	4,350	5/7/24	7,250	6/7/24	5,800	7/9/24	2,900	8/7/24	1,934	9/17/24	5,800	10/7/24	2,900	11/11/24	2,900	12/16/24	5,800	
		2/9/24	2,900	3/21/24	5,800	4/15/24	4,350	5/8/24	7,250	6/8/24	5,800	7/10/24	5,800	8/9/24	11,600	9/18/24	5,800	10/8/24	2,900	11/12/24	2,900	12/17/24	5,800	
		2/12/24	2,900	3/22/24	5,800	4/17/24	4,350	5/9/24	5,800	6/10/24	5,800	7/11/24	5,800	8/12/24	5,800	9/19/24	5,800	10/9/24	2,900	11/13/24	2,900	12/23/24	5,800	
		2/13/24	2,900	3/27/24	5,800	4/18/24	4,350	5/10/24	5,800	6/11/24	5,800	7/12/24	5,800	8/15/24	5,800			10/10/24	2,900	11/18/24	2,900	12/24/24	5,800	
		2/14/24	2,900			4/19/24	4,350	5/11/24	5,800	6/12/24	5,800	7/18/24	5,800	8/22/24	11,600			10/15/24	2,900	11/19/24	2,900	12/26/24	5,800	
		2/15/24	2,900			4/20/24	4,350	5/12/24	5,800	6/13/24	5,800	7/19/24	5,800	8/23/24	5,800			10/16/24	2,900	11/20/24	2,900	12/27/24	5,800	
		2/19/24	2,900			4/22/24	4,350	5/13/24	7,250	6/14/24	5,800	7/22/24	11,600	8/29/24	11,600			10/17/24	2,900	11/21/24	2,900	12/30/24	5,800	
		2/20/24	2,900			4/23/24	4,350	5/14/24	7,250	6/17/24	5,800	7/23/24	11,600					10/18/24	2,900	11/22/24	2,900	12/31/24	5,800	
		2/22/24	2,900			4/24/24	4,350	5/15/24	7,250	6/18/24	5,800	7/24/24	11,600					10/28/24	2,900	11/25/24	2,900			
		2/23/24	2,900			4/25/24	4,350	5/16/24	7,250	6/19/24	5,800	7/25/24	11,600					10/30/24	2,900	11/26/24	2,900			
		2/29/24	2,900			4/26/24	4,350	5/17/24	7,250	6/20/24	5,800	7/26/24	11,600					10/31/24	2,900	11/27/24	2,900			
						4/29/24	5,800	5/20/24	5,800	6/21/24	5,800	7/29/24	11,600							11/29/24	2,900			
						4/30/24	7,250	5/21/24	7,250	6/24/24	5,800	7/30/24	11,600											
								5/22/24	7,250	6/25/24	5,800	7/31/24	11,600											
								5/23/24	5,800	6/26/24	5,800													
								5/24/24	5,800	6/27/24	5,800													
								5/25/24	5,800	6/28/24	5,800													
								5/27/24	7,250															
								5/28/24	7,250															
								5/29/24	7,250															
								5/30/24	7,250															
								5/31/24	5,800															
TOTAL	5,800		43,500		43,500		78,300		175,450		121,800		147,900		100,534		40,600		43,500		46,400		69,600	916,884 Gallons

Appendix I.3- Leachate Testing

Water Analysis



Submitted By: EW50627701
 RURAL IOWA LANDFILL
 20488 M Ave
 Eldora, IA 50627

Laboratory Sample #
 CV24102 - CV24104
 8170-02 - 8170-04
 Information Sheet #
 WW0325-2

Date Received:
 03/25/2024

Date Reported:
 04/01/2024

IA Lab ID Number 061
 EPA Lab ID Number 46
 NPDES

Test Name (Contaminant ID)	Method	Results	Units	LOQ	Dilution Factor	Prep Date	Test Date	Analyst
Sample #: CV24102 Type: GRAB Collector:		Sample Location: LEACHATE TANK Date/Time Collected: 03/25/2024 01:43 PM			Collection Point: Sample Date:			
pH (1925)	EPA 150.1	8.5	S.U.	NA	NA	NA	03/25/24	MEF
Total Suspended Solids	USGS I 3765-85	328	mg/L	4.000	NA	NA	03/29/24	JSP
Biochemical Oxygen Demand (5 day)	SM5210 B	80	mg/L	4 LOD	1	03/27/24	04/01/24	MEF
Sample #: CV24103 Type: GRAB Collector:		Sample Location: LEACHATE TANK Date/Time Collected: 03/25/2024 01:43 PM			Collection Point: Sample Date:			
Oil and Grease (HEM)	EPA 1664A	12	mg/L	5.0	NA	NA	03/29/24	SO
Sample #: CV24104 Type: GRAB Collector:		Sample Location: LEACHATE TANK Date/Time Collected: 03/25/2024 01:43 PM			Collection Point: Sample Date:			
Ammonia (1003)	ATP Case No. N08-0004	344	mg/L	4.1450	25	NA	03/29/24 10:41AM	CB

Report Authorized by:  Date: 04/01/2024

LOQ units are the same as Result units and are adjusted to reflect dilution.

LOQ = Limit of Quantitation
 RL = Reporting Limit
 NA = Not Applicable

DISCLAIMER: The results issued on this report only reflect the analysis of the sample(s) submitted at our lab and may not be construed as an endorsement of the sampling method employed. This report shall not be reproduced except in full, without written approval of the laboratory. The accuracy of these results are limited by the integrity of the sample and the accuracy of the test method. Reports are kept on file for five years.

Water Analysis



Submitted By: EW50627701
 RURAL IOWA LANDFILL
 20488 M Ave
 Eldora, IA 50627

Laboratory Sample #
 CV84338 - CV84340
 0770-01 - 0770-03
 Information Sheet #
 WW0429-1

Date Received:
 04/29/2024

Date Reported:
 05/06/2024

IA Lab ID Number 061
 EPA Lab ID Number 46
 NPDES

Test Name (Contaminant ID)	Method	Results	Units	LOQ	Dilution Factor	Prep Date	Test Date	Analyst
Sample #: CV84338 Type: GRAB Collector: HARM JASS		Sample Location: LEACHATE TANK Date/Time Collected: 04/29/2024 08:20 AM			Collection Point: Sample Date:			
Biochemical Oxygen Demand (5 day)	SM5210 B	152	mg/L	20 LOD	1	04/30/24	05/05/24	JSP/SNS
pH (1925)	EPA 150.1	7.8	S.U.	NA	NA	NA	04/29/24	MEF
Total Suspended Solids	USGS I 3765-85	384	mg/L	4.000	NA	NA	05/06/24	JSP
Sample #: CV84340 Type: GRAB Collector: HARM JASS		Sample Location: LEACHATE TANK Date/Time Collected: 04/29/2024 08:20 AM			Collection Point: Sample Date:			
Oil and Grease (HEM)	EPA 1664A	<5.0	mg/L	5.0	NA	NA	05/03/24	SO

Report Authorized by: _____

Date: 05/06/2024

LOQ units are the same as Result units and are adjusted to reflect dilution.

LOQ = Limit of Quantitation

RL = Reporting Limit

NA = Not Applicable

DISCLAIMER: The results issued on this report only reflect the analysis of the sample(s) submitted at our lab and may not be construed as an endorsement of the sampling method employed. This report shall not be reproduced except in full, without written approval of the laboratory. The accuracy of these results are limited by the integrity of the sample and the accuracy of the test method. Reports are kept on file for five years.

Water Analysis



Submitted By: EW50627701
RURAL IOWA LANDFILL
20488 M Ave
Eldora, IA 50627

Laboratory Sample #
CV84339
0770-02
Information Sheet #
WW0429-2

Date Received:
04/29/2024

Date Reported:
04/29/2024

IA Lab ID Number 061
EPA Lab ID Number 46
NPDES

Test Name (Contaminant ID)	Method	Results	Units	LOQ	Dilution Factor	Prep Date	Test Date	Analyst
Sample #: CV84339 Type: GRAB Collector: HARM JASS		Sample Location: LEACHATE TANK Date/Time Collected: 04/29/2024 08:20 AM			Collection Point: Sample Date:			
Ammonia (1003)	ATP Case No. N08-0004	224	mg/L	1.6580	10	NA	04/29/24 01:25PM	CB

Report Authorized by:

Date: 04/29/2024

LOQ units are the same as Result units and are adjusted to reflect dilution.

LOQ = Limit of Quantitation

RL = Reporting Limit

NA = Not Applicable

DISCLAIMER: The results issued on this report only reflect the analysis of the sample(s) submitted at our lab and may not be construed as an endorsement of the sampling method employed. This report shall not be reproduced except in full, without written approval of the laboratory. The accuracy of these results are limited by the integrity of the sample and the accuracy of the test method. Reports are kept on file for five years.

Water Analysis



Submitted By: EW50627701
RURAL IOWA LANDFILL
20488 M Ave
Eldora, IA 50627

Laboratory Sample #
CW34986
3070-03
Information Sheet #
WW0531-3

Date Received:
05/31/2024

Date Reported:
06/03/2024

IA Lab ID Number 061
EPA Lab ID Number 46
NPDES

Test Name (Contaminant ID)	Method	Results	Units	LOQ	Dilution Factor	Prep Date	Test Date	Analyst
Sample #: CW34986 Type: GRAB Collector: HARM JASS		Sample Location: LEACHATE TANK Date/Time Collected: 05/31/2024 08:05 AM				Collection Point: Sample Date:		
Ammonia (1003)	ATP Case No. N08-0004	257	mg/L	1.6580	10	NA	05/31/24 12:26PM	CB

Report Authorized by:

Date: 06/03/2024

LOQ units are the same as Result units and are adjusted to reflect dilution.

LOQ = Limit of Quantitation

RL = Reporting Limit

NA = Not Applicable

DISCLAIMER: The results issued on this report only reflect the analysis of the sample(s) submitted at our lab and may not be construed as an endorsement of the sampling method employed. This report shall not be reproduced except in full, without written approval of the laboratory. The accuracy of these results are limited by the integrity of the sample and the accuracy of the test method. Reports are kept on file for five years.

Water Analysis



Submitted By: EW50627701
 RURAL IOWA LANDFILL
 20488 M Ave
 Eldora, IA 50627

Laboratory Sample #
 CW34985 - CW34987
 3070-02 - 3070-04
 Information Sheet #
 WW0531-2

Date Received:
 05/31/2024

Date Reported:
 06/11/2024

IA Lab ID Number 061
 EPA Lab ID Number 46
 NPDES

Test Name (Contaminant ID)	Method	Results	Units	LOQ	Dilution Factor	Prep Date	Test Date	Analyst
Sample #: CW34985 Type: GRAB Collector: HARM JASS		Sample Location: LEACHATE TANK Date/Time Collected: 05/31/2024 08:05 AM			Collection Point: Sample Date:			
Biochemical Oxygen Demand (5 day)	SM5210 B	14	mg/L	3 LOD	1	06/05/24	06/10/24	SNS/JSP
pH (1925)	EPA 150.1	7.8	S.U.	NA	NA	NA	05/31/24	JSP
Total Suspended Solids	USGS I 3765-85	173	mg/L	4.000	NA	NA	06/04/24	JSP
Sample #: CW34987 Type: GRAB Collector: HARM JASS		Sample Location: LEACHATE TANK Date/Time Collected: 05/31/2024 08:05 AM			Collection Point: Sample Date:			
Oil and Grease (HEM)	EPA 1664A	<5.0	mg/L	5.0	NA	NA	06/05/24	SO

Report Authorized by:

Date: 06/11/2024

LOQ units are the same as Result units and are adjusted to reflect dilution.

LOQ = Limit of Quantitation

RL = Reporting Limit

NA = Not Applicable

DISCLAIMER: The results issued on this report only reflect the analysis of the sample(s) submitted at our lab and may not be construed as an endorsement of the sampling method employed. This report shall not be reproduced except in full, without written approval of the laboratory. The accuracy of these results are limited by the integrity of the sample and the accuracy of the test method. Reports are kept on file for five years.

Water Analysis



Submitted By: **EW50627701**
RURAL IOWA LANDFILL
 20488 M Ave
 Eldora, IA 50627

Laboratory Sample #
DB61505 - DB61507
5770-01 - 5770-03
 Information Sheet #
WW1202-1

Date Received:
12/02/2024

Date Reported:
12/10/2024

IA Lab ID Number **061** NPDES
 EPA Lab ID Number **46**

Test Name (Contaminant ID)	Method	Results	Units	LOQ	Dilution Factor	Prep Date	Test Date	Analyst
Sample #: DB61505 Type: GRAB Collector:		Sample Location: LEACHATE TANK Date/Time Collected: 11/29/2024 03:00 PM			Collection Point: Sample Date:			
Biochemical Oxygen Demand (5 day)	SM5210 B	29	mg/L	4 LOD	1	12/04/24	12/09/24	JSP
pH (1925)	EPA 150.1	7.85	S.U.	NA	NA	NA	12/02/24	JSP
Total Suspended Solids	USGS I 3765-85	54	mg/L	4.000	NA	NA	12/09/24	JSP
Sample #: DB61506 Type: GRAB Collector:		Sample Location: LEACHATE TANK Date/Time Collected: 11/29/2024 03:00 PM			Collection Point: Sample Date:			
Ammonia (1003)	ATP Case No. N08-0004	191	mg/L	1.6580	10	NA	12/03/24 12:26PM	CB
Sample #: DB61507 Type: GRAB Collector:		Sample Location: LEACHATE TANK Date/Time Collected: 11/29/2024 03:00 PM			Collection Point: Sample Date:			
Oil and Grease (HEM)	EPA 1664A	<5.0	mg/L	5.0	NA	NA	12/05/24	SO

Report Authorized by: Kate Olson Date: 12/10/2024

LOQ units are the same as Result units and are adjusted to reflect dilution.

LOQ = Limit of Quantitation

RL = Reporting Limit

NA = Not Applicable

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Water Analysis



Submitted By: EW50627701
 RURAL IOWA LANDFILL
 20488 M Ave
 Eldora, IA 50627

Laboratory Sample #
 DC36671 - DC36673
 7570-01 - 7570-03
 Information Sheet #
 WW1230-1

Date Received:
 12/30/2024

Date Reported:
 01/13/2025

IA Lab ID Number 061
 EPA Lab ID Number 46
 NPDES

Test Name (Contaminant ID)	Method	Results	Units	LOQ	Dilution Factor	Prep Date	Test Date	Analyst
Sample #: DC36671 Type: GRAB Collector: UNKNOWN		Sample Location: UNKNOWN Date/Time Collected: 12/30/2024 08:00 AM			Collection Point: UNKNOWN Sample Date:			
Biochemical Oxygen Demand (5 day)	SM5210 B	151	mg/L	20 LOD	1	01/07/25	01/12/25	MEF
pH (1925)	EPA 150.1	7.18	S.U.	NA	NA	NA	12/30/24	JSP
Total Suspended Solids	USGS I 3765-85	65	mg/L	4.000	NA	NA	01/06/25	JSP
Sample #: DC36672 Type: GRAB Collector: UNKNOWN		Sample Location: UNKNOWN Date/Time Collected: 12/30/2024 08:00 AM			Collection Point: UNKNOWN Sample Date:			
Ammonia (1003)	ATP Case No. N08-0004	217	mg/L	4.1450	25	NA	12/31/24 01:44PM	CB
Sample #: DC36673 Type: GRAB Collector: UNKNOWN		Sample Location: UNKNOWN Date/Time Collected: 12/30/2024 08:00 AM			Collection Point: UNKNOWN Sample Date:			
Oil and Grease (HEM)	EPA 1664A	7.5	mg/L	5.0	NA	NA	12/31/24	SO

Report Authorized by: Kate Olson Date: 01/13/2025

LOQ units are the same as Result units and are adjusted to reflect dilution.

LOQ = Limit of Quantitation
 RL = Reporting Limit
 NA = Not Applicable

DISCLAIMER: The results issued on this report only reflect the analysis of the sample(s) submitted at our lab and may not be construed as an endorsement of the sampling method employed. This report shall not be reproduced except in full, without written approval of the laboratory. The accuracy of these results are limited by the integrity of the sample and the accuracy of the test method. Reports are kept on file for five years.



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ1874

Project Description

Annual Leachate

For:

Todd Whipple

HLW Engineering

204 West Broad St

Story City, IA 50248

Heather Murphy

Customer Relationship Specialist

Wednesday, November 13, 2024

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

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

Microbac Laboratories, Inc.

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



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ1874

HLW Engineering

Todd Whipple
204 West Broad St
Story City, IA 50248

Project Name: Annual Leachate

Project / PO Number: N/A
Received: 10/23/2024
Reported: 11/13/2024

Sample Summary Report

<u>Sample Name</u>	<u>Laboratory ID</u>	<u>Client Matrix</u>	<u>Sample Type</u>	<u>Sample Begin</u>	<u>Sample Taken</u>	<u>Lab Received</u>
Leachate	1HJ1874-01	Aqueous	GRAB		10/22/24 09:00	10/23/24 10:20



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ1874

Analytical Testing Parameters

Client Sample ID:	Leachate	Collected By:	unknown
Sample Matrix:	Aqueous	Collection Date:	10/22/2024 9:00
Lab Sample ID:	1HJ1874-01		

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 624.1								
Chloromethane	<1.0	1.0	ug/L	1		10/29/24 0000	10/29/24 1449	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		10/29/24 0000	10/29/24 1449	CSM
Bromomethane	<1.0	1.0	ug/L	1		10/29/24 0000	10/29/24 1449	CSM
Chloroethane	<1.0	1.0	ug/L	1		10/29/24 0000	10/29/24 1449	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/29/24 0000	10/29/24 1449	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/29/24 0000	10/29/24 1449	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/29/24 0000	10/29/24 1449	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/29/24 0000	10/29/24 1449	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/29/24 0000	10/29/24 1449	CSM
Chloroform	<1.0	1.0	ug/L	1		10/29/24 0000	10/29/24 1449	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/29/24 0000	10/29/24 1449	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/29/24 0000	10/29/24 1449	CSM
Benzene	<1.0	1.0	ug/L	1		10/29/24 0000	10/29/24 1449	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/29/24 0000	10/29/24 1449	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		10/29/24 0000	10/29/24 1449	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/29/24 0000	10/29/24 1449	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		10/29/24 0000	10/29/24 1449	CSM
2-Chloroethylvinyl ether	<10.0	10.0	ug/L	1		10/29/24 0000	10/29/24 1449	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/29/24 0000	10/29/24 1449	CSM
Toluene	<1.0	1.0	ug/L	1		10/29/24 0000	10/29/24 1449	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/29/24 0000	10/29/24 1449	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/29/24 0000	10/29/24 1449	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/29/24 0000	10/29/24 1449	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		10/29/24 0000	10/29/24 1449	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		10/29/24 0000	10/29/24 1449	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		10/29/24 0000	10/29/24 1449	CSM
Bromoform	<1.0	1.0	ug/L	1		10/29/24 0000	10/29/24 1449	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/29/24 0000	10/29/24 1449	CSM
Surrogate: Dibromofluoromethane	103	Limit: 59-123	% Rec	1		10/29/24 0000	10/29/24 1449	CSM
Surrogate: 1,2-Dichloroethane-d4	108	Limit: 56-130	% Rec	1		10/29/24 0000	10/29/24 1449	CSM
Surrogate: Toluene-d8	95.3	Limit: 85-113	% Rec	1		10/29/24 0000	10/29/24 1449	CSM
Surrogate: 4-Bromofluorobenzene	102	Limit: 82-112	% Rec	1		10/29/24 0000	10/29/24 1449	CSM

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 625.1								
Bis(2-Chloroethyl) Ether	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
2-Chlorophenol	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
1,3-Dichlorobenzene	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
1,4-Dichlorobenzene	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
Benzyl Alcohol	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ1874

Client Sample ID:	Leachate	Collected By:	unknown
Sample Matrix:	Aqueous	Collection Date:	10/22/2024 9:00
Lab Sample ID:	1HJ1874-01		

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
1,2-Dichlorobenzene	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
Bis[2-Chloroisopropyl]ether	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
n-Nitroso-di-n-propylamine	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
Hexachloroethane	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
Nitrobenzene	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
Isophorone	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
2-Nitrophenol	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
2,4-Dimethylphenol	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
Bis (2-Chloroethoxy) Methane	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
Benzoic acid	<500	500	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
2,4-Dichlorophenol	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
1,2,4-Trichlorobenzene	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
Naphthalene	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
Hexachlorobutadiene	<200	200	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
4-Chloro-3-methylphenol	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
Hexachlorocyclopentadiene	<200	200	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
2,4,6-Trichlorophenol	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
2,4,5-Trichlorophenol	<500	500	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
2-Chloronaphthalene	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
Dimethylphthalate	<150	150	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
Acenaphthylene	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
2,6-Dinitrotoluene	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
Acenaphthene	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
2,4-Dinitrophenol	<200	200	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
Dibenzofuran	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
2,4-Dinitrotoluene	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
4-Nitrophenol	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
Diethyl Phthalate	<300	300	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
Fluorene	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
4-Chlorophenyl Phenyl Ether	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
4,6-Dinitro-2-methylphenol	<200	200	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
N-Nitrosodiphenylamine	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
4-Bromophenyl Phenyl Ether	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
Hexachlorobenzene	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
Pentachlorophenol	<200	200	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
Phenanthrene	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
Anthracene	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
Di-n-butyl Phthalate	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
Fluoranthene	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
Pyrene	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
Butyl Benzyl Phthalate	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
Benzo(a)anthracene	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
Chrysene	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP

Microbac Laboratories, Inc., Newton

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



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ1874

Client Sample ID:	Leachate	Collected By:	unknown
Sample Matrix:	Aqueous	Collection Date:	10/22/2024 9:00
Lab Sample ID:	1HJ1874-01		

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Bis(2-Ethylhexyl) Phthalate	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
Di-n-octyl Phthalate	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
Indeno(1,2,3-cd)Pyrene	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
3,3'-Dichlorobenzidine	<200	200	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
Benzo(b)Fluoranthene	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
Benzo(k)Fluoranthene	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
Benzo(a)Pyrene	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
Dibenzo(a,h)anthracene	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
Benzo(g,h,i)perylene	<100	100	ug/L	1		10/24/24 1233	10/25/24 2030	EPP
Surrogate: 2-Fluorophenol	92.2	Limit: 16-140	% Rec	1		10/24/24 1233	10/25/24 2030	EPP
Surrogate: Phenol-d6	100	Limit: 13-147	% Rec	1		10/24/24 1233	10/25/24 2030	EPP
Surrogate: Nitrobenzene-d5	93.2	Limit: 17-150	% Rec	1		10/24/24 1233	10/25/24 2030	EPP
Surrogate: 2-Fluorobiphenyl	91.0	Limit: 15-134	% Rec	1		10/24/24 1233	10/25/24 2030	EPP
Surrogate: 2,4,6-Tribromophenol	96.4	Limit: 20-158	% Rec	1		10/24/24 1233	10/25/24 2030	EPP
Surrogate: Terphenyl-dl4	92.9	Limit: 12-157	% Rec	1		10/24/24 1233	10/25/24 2030	EPP

Determination of Organochlorine Insecticides & PCBs	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 608.3 GC-ECD								
Gamma-BHC [Lindane]	<0.50	0.50	ug/L	1		10/24/24 1002	10/28/24 1902	EPP
Beta-BHC	<0.50	0.50	ug/L	1		10/24/24 1002	10/28/24 1902	EPP
Heptachlor	<0.50	0.50	ug/L	1		10/24/24 1002	10/28/24 1902	EPP
Delta-BHC	<0.50	0.50	ug/L	1		10/24/24 1002	10/28/24 1902	EPP
Aldrin	<0.50	0.50	ug/L	1		10/24/24 1002	10/28/24 1902	EPP
Heptachlor Epoxide	<0.50	0.50	ug/L	1		10/24/24 1002	10/28/24 1902	EPP
Endosulfan I	<0.50	0.50	ug/L	1		10/24/24 1002	10/28/24 1902	EPP
4,4'-DDE	<0.50	0.50	ug/L	1		10/24/24 1002	10/28/24 1902	EPP
Dieldrin	<0.50	0.50	ug/L	1		10/24/24 1002	10/28/24 1902	EPP
Endrin	<0.50	0.50	ug/L	1		10/24/24 1002	10/28/24 1902	EPP
4,4'-DDD	<0.50	0.50	ug/L	1		10/24/24 1002	10/28/24 1902	EPP
Endosulfan II	<0.50	0.50	ug/L	1		10/24/24 1002	10/28/24 1902	EPP
4,4'-DDT	<0.50	0.50	ug/L	1		10/24/24 1002	10/28/24 1902	EPP
Endrin Aldehyde	<0.50	0.50	ug/L	1		10/24/24 1002	10/28/24 1902	EPP
Endosulfan Sulfate	<0.50	0.50	ug/L	1		10/24/24 1002	10/28/24 1902	EPP
Chlordane	<1.00	1.00	ug/L	1		10/24/24 1002	10/28/24 1902	EPP
Toxaphene	<2.00	2.00	ug/L	1		10/24/24 1002	10/28/24 1902	EPP
Arochlor 1016	<2.00	2.00	ug/L	1		10/24/24 1002	10/28/24 1902	EPP
Arochlor 1221	<2.00	2.00	ug/L	1		10/24/24 1002	10/28/24 1902	EPP
Arochlor 1232	<2.00	2.00	ug/L	1		10/24/24 1002	10/28/24 1902	EPP
Arochlor 1242	<2.00	2.00	ug/L	1		10/24/24 1002	10/28/24 1902	EPP
Arochlor 1248	<2.00	2.00	ug/L	1		10/24/24 1002	10/28/24 1902	EPP
Arochlor 1254	<2.00	2.00	ug/L	1		10/24/24 1002	10/28/24 1902	EPP
Arochlor 1260	<2.00	2.00	ug/L	1		10/24/24 1002	10/28/24 1902	EPP
Surrogate: Decachlorobiphenyl	0	Limit: 12-130	% Rec	1	S5	10/24/24 1002	10/28/24 1902	EPP



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ1874

Client Sample ID:	Leachate	Collected By:	unknown
Sample Matrix:	Aqueous	Collection Date:	10/22/2024 9:00
Lab Sample ID:	1HJ1874-01		

Determination of Organochlorine Insecticides & PCBs	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
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Surrogate: Tetrachloro-m-xylene	0	Limit: 31-116	% Rec	1	S5	10/24/24 1002	10/28/24 1902	EPP
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Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
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5310B

Total Organic Carbon	88.0	5.00	mg/L	10		11/06/24 0000	11/07/24 1525	CSM
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EPA 1664A

Oil and Grease	<4	4	mg/L	1		11/01/24 0753	11/05/24 0735	RDH
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EPA 351.2, Rv. 2 (1993)

Nitrogen, Kjeldahl, total	493	25.0	mg/L	10		11/04/24 1447	11/12/24 0840	AKK
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SM 4500-H+ B-2011

pH	8.6	0.5	pH	1	H4	10/24/24 1431	10/25/24 0837	BSS
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SM 5210 B-2016

BOD (5 day)	31	6	mg/L	3		10/23/24 1733	10/23/24 2028	MND
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TIMBERLINE

Method Notes: A9

Nitrogen, Ammonia	483	10.0	mg/L	100		10/28/24 1015	10/28/24 1605	RAF
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USGS I-1750-85

Total Dissolved Solids (TDS)	7670	5	mg/L	1		10/29/24 0852	10/29/24 1130	MEAH
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USGS I-3765-85

Total Suspended Solids (TSS)	4390	1	mg/L	1	H	10/29/24 0756	10/30/24 0910	MEAH
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Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
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200.7

Iron, total	5.66	0.100	mg/L	1		10/23/24 1544	10/25/24 0221	JAR
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245.1

Mercury, total	<0.00050	0.00050	mg/L	1		10/29/24 1509	10/30/24 1525	JAR
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EPA 200.8, Rv. 5.4 (1994)

Arsenic, total	0.0385	0.0020	mg/L	4		10/24/24 0751	10/24/24 2233	RVV
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Barium, total	0.909	0.0020	mg/L	4		10/24/24 0751	10/24/24 2233	RVV
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Cadmium, total	<0.0002	0.0002	mg/L	4		10/24/24 0751	10/24/24 2233	RVV
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Chromium, total	0.0500	0.0020	mg/L	4		10/24/24 0751	10/24/24 2233	RVV
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Copper, total	0.0045	0.0020	mg/L	4		10/24/24 0751	10/24/24 2233	RVV
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Lead, total	0.0025	0.0008	mg/L	4		10/24/24 0751	10/24/24 2233	RVV
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Nickel, total	0.184	0.0040	mg/L	4		10/24/24 0751	10/24/24 2233	RVV
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Selenium, total	<0.0040	0.0040	mg/L	4		10/24/24 0751	10/24/24 2233	RVV
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Silver, total	<0.0020	0.0020	mg/L	4		10/24/24 0751	10/24/24 2233	RVV
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Zinc, total	0.870	0.0200	mg/L	4		10/24/24 0751	10/24/24 2233	RVV
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CERTIFICATE OF ANALYSIS

1HJ1874

Batch Log Summary

Method	Batch	Laboratory ID	Client / Source ID
200.7	1HJ1432	1HJ1432-BLK1	
		1HJ1432-BS1	
		1HJ1432-MS1	1HJ1347-01
		1HJ1432-MSD1	1HJ1347-01
		1HJ1432-PS1	1HJ1347-01
		1HJ1874-01	Leachate

Method	Batch	Laboratory ID	Client / Source ID
SM 5210 B-2016	1HJ1453	1HJ1453-BLK1	
		1HJ1453-SRM1	
		1HJ1453-DUP1	1HJ1781-02
		1HJ1874-01	Leachate

Method	Batch	Laboratory ID	Client / Source ID
EPA 200.8, Rv. 5.4 (1994)	1HJ1459	1HJ1459-BLK1	
		1HJ1459-BS1	
		1HJ1459-MS1	1HJ1689-02
		1HJ1459-MSD1	1HJ1689-02
		1HJ1874-01	Leachate
		1HJ1459-PS1	1HJ1689-02

Method	Batch	Laboratory ID	Client / Source ID
EPA 608.3 GC-ECD	1HJ1484	1HJ1484-BLK1	
		1HJ1484-BS1	
		1HJ1484-BSD1	
		1HJ1874-01	Leachate

Method	Batch	Laboratory ID	Client / Source ID
EPA 625.1	1HJ1512	1HJ1512-BLK1	
		1HJ1512-BS1	
		1HJ1512-BSD1	
		1HJ1512-SRM1	
		1HJ1874-01	Leachate

Method	Batch	Laboratory ID	Client / Source ID
SM 4500-H+ B-2011	1HJ1536	1HJ1536-SRM1	
		1HJ1874-01	Leachate
		1HJ1536-SRM2	
		1HJ1536-DUP1	1HJ1874-01

Method	Batch	Laboratory ID	Client / Source ID
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CERTIFICATE OF ANALYSIS

1HJ1874

TIMBERLINE	1HJ1641	1HJ1641-BLK1	
		1HJ1641-BS1	
		1HJ1641-MS1	1HJ1876-01
		1HJ1641-MSD1	1HJ1876-01
		1HJ1874-01	Leachate

Method	Batch	Laboratory ID	Client / Source ID
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USGS I-3765-85	1HJ1690	1HJ1874-01	Leachate
		1HJ1690-BS1	
		1HJ1690-BLK1	
		1HJ1690-DUP1	1HJ1859-01

Method	Batch	Laboratory ID	Client / Source ID
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USGS I-1750-85	1HJ1701	1HJ1701-BLK1	
		1HJ1701-DUP1	1HJ1889-01
		1HJ1701-BS1	
		1HJ1874-01	Leachate

Method	Batch	Laboratory ID	Client / Source ID
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245.1	1HJ1758	1HJ1758-BLK1	
		1HJ1758-BS1	
		1HJ1758-MS1	1HJ1746-04
		1HJ1758-MSD1	1HJ1746-04
		1HJ1874-01	Leachate

Method	Batch	Laboratory ID	Client / Source ID
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EPA 624.1	1HJ1776	1HJ1776-BS1	
		1HJ1776-BSD1	
		1HJ1776-BLK1	
		1HJ1874-01	Leachate
		1HJ1874-01	Leachate
		1HJ1776-BS2	
		1HJ1776-BSD2	
		1HJ1776-BLK2	
		1HJ1776-MS1	1HJ1549-02RE1
		1HJ1776-MSD1	1HJ1549-02RE1
		1HJ1776-MS2	1HJ1617-12RE1
		1HJ1776-MSD2	1HJ1617-12RE1

Method	Batch	Laboratory ID	Client / Source ID
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EPA 351.2, Rv. 2 (1993)	1HJ1897	1HJ1897-BLK1	
		1HJ1897-BS1	
		1HJ1897-MS1	1HJ1873-02
		1HJ1897-MSD1	1HJ1873-02



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1HJ1874

Method	Batch	Laboratory ID	Client / Source ID
EPA 1664A	1HK0005	1HJ1874-01	Leachate
		1HK0005-BS1	
		1HK0005-DUP1	1HJ2266-01
		1HK0005-BLK1	

Method	Batch	Laboratory ID	Client / Source ID
EPA 351.2, Rv. 2 (1993)	1HK0126	1HK0126-BLK1	
		1HK0126-BS1	
		1HK0126-MS1	1HK0072-01
		1HK0126-MSD1	1HK0072-01
		1HJ1874-01RE2	Leachate

Method	Batch	Laboratory ID	Client / Source ID
5310B	1HK0381	1HJ1874-01	Leachate
		1HK0381-BSD1	
		1HK0381-MS1	2HJ0921-02
		1HK0381-MSD1	2HJ0921-02
		1HK0381-BLK1	
1HK0381-BS1			

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 1HJ1776 - EPA 5030B - EPA 624.1										

Blank (1HJ1776-BLK1)	Result	RL	Units	Prepared: 10/29/24 00:00 Analyzed: 10/29/24 11:40						
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							



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ1874

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1776 - EPA 5030B - EPA 624.1										
Blank (1HJ1776-BLK1)										
Prepared: 10/29/24 00:00 Analyzed: 10/29/24 11:40										
cis-1,3-Dichloropropene	<1.0	1.0	ug/L							
Toluene	<1.0	1.0	ug/L							
trans-1,3-Dichloropropene	<1.0	1.0	ug/L							
1,1,2-Trichloroethane	<1.0	1.0	ug/L							
Tetrachloroethylene	<1.0	1.0	ug/L							
Dibromochloromethane	<1.0	1.0	ug/L							
Chlorobenzene	<1.0	1.0	ug/L							
Ethylbenzene	<1.0	1.0	ug/L							
Bromoform	<1.0	1.0	ug/L							
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L							
<i>Surrogate: Dibromofluoromethane</i>	51.4		ug/L	50.2		102	59-123			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	53.5		ug/L	50.4		106	56-130			
<i>Surrogate: Toluene-d8</i>	47.7		ug/L	50.5		94.6	85-113			
<i>Surrogate: 4-Bromofluorobenzene</i>	50.7		ug/L	50.2		101	82-112			
Blank (1HJ1776-BLK2)										
Prepared: 10/29/24 00:00 Analyzed: 10/29/24 22:51										
Chloromethane	<1.0	1.0	ug/L							
Vinyl Chloride	<1.0	1.0	ug/L							
Bromomethane	<1.0	1.0	ug/L							
Chloroethane	<1.0	1.0	ug/L							
1,1-Dichloroethylene	<1.0	1.0	ug/L							
Methylene Chloride	<5.0	5.0	ug/L							
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L							
1,1-Dichloroethane	<1.0	1.0	ug/L							
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L							
Chloroform	<1.0	1.0	ug/L							
1,1,1-Trichloroethane	<1.0	1.0	ug/L							
Carbon Tetrachloride	<1.0	1.0	ug/L							
Benzene	<1.0	1.0	ug/L							
1,2-Dichloroethane	<1.0	1.0	ug/L							
Trichloroethylene	<1.0	1.0	ug/L							
1,2-Dichloropropane	<1.0	1.0	ug/L							
Bromodichloromethane	<1.0	1.0	ug/L							
2-Chloroethylvinyl ether	<10.0	10.0	ug/L							
cis-1,3-Dichloropropene	<1.0	1.0	ug/L							
Toluene	<1.0	1.0	ug/L							
trans-1,3-Dichloropropene	<1.0	1.0	ug/L							
1,1,2-Trichloroethane	<1.0	1.0	ug/L							
Tetrachloroethylene	<1.0	1.0	ug/L							
Dibromochloromethane	<1.0	1.0	ug/L							
Chlorobenzene	<1.0	1.0	ug/L							
Ethylbenzene	<1.0	1.0	ug/L							
Bromoform	<1.0	1.0	ug/L							

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CERTIFICATE OF ANALYSIS

1HJ1874

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1776 - EPA 5030B - EPA 624.1										
Blank (1HJ1776-BLK2)				Prepared: 10/29/24 00:00 Analyzed: 10/29/24 22:51						
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L							
Surrogate: Dibromofluoromethane	49.0		ug/L	50.2		97.7	59-123			
Surrogate: 1,2-Dichloroethane-d4	52.6		ug/L	50.4		104	56-130			
Surrogate: Toluene-d8	48.1		ug/L	50.5		95.4	85-113			
Surrogate: 4-Bromofluorobenzene	50.2		ug/L	50.2		100	82-112			
LCS (1HJ1776-BS1)				Prepared: 10/29/24 00:00 Analyzed: 10/29/24 10:31						
Chloromethane	37.48	1.0	ug/L	30.3		124	5-205			
Vinyl Chloride	38.88	1.0	ug/L	30.2		129	5-195			
Bromomethane	45.69	1.0	ug/L	30.1		152	15-185			
Chloroethane	31.86	1.0	ug/L	30.3		105	40-160			
1,1-Dichloroethylene	52.76	1.0	ug/L	50.1		105	50-150			
Methylene Chloride	51.28	5.0	ug/L	50.1		102	60-140			
trans-1,2-Dichloroethylene	53.71	1.0	ug/L	50.1		107	70-130			
1,1-Dichloroethane	52.78	1.0	ug/L	50.1		105	70-130			
cis-1,2-Dichloroethylene	52.85	1.0	ug/L	50.4		105	57-148			
2-Butanone (MEK)	81.45	10.0	ug/L	100		81.4	44-134			
Chloroform	51.62	1.0	ug/L	50.1		103	70-135			
1,1,1-Trichloroethane	51.84	1.0	ug/L	50.1		103	70-130			
Carbon Tetrachloride	51.87	1.0	ug/L	50.1		104	70-130			
Benzene	52.43	1.0	ug/L	50.4		104	65-135			
1,2-Dichloroethane	53.46	1.0	ug/L	50.1		107	70-130			
Trichloroethylene	50.58	1.0	ug/L	50.1		101	65-135			
1,2-Dichloropropane	50.03	1.0	ug/L	50.1		99.9	35-165			
Dibromomethane	48.33	1.0	ug/L	50.4		96.0	71-139			
Bromodichloromethane	49.72	1.0	ug/L	50.1		99.3	65-135			
2-Chloroethylvinyl ether	87.62	10.0	ug/L	101		87.1	5-225			
cis-1,3-Dichloropropene	48.87	1.0	ug/L	50.1		97.6	25-175			
Toluene	50.20	1.0	ug/L	50.5		99.5	70-130			
trans-1,3-Dichloropropene	47.49	1.0	ug/L	50.1		94.8	50-150			
1,1,2-Trichloroethane	47.00	1.0	ug/L	50.1		93.8	70-130			
Tetrachloroethylene	51.84	1.0	ug/L	50.1		103	70-130			
Dibromochloromethane	48.64	1.0	ug/L	50.1		97.1	70-135			
Chlorobenzene	50.52	1.0	ug/L	50.1		101	65-135			
Ethylbenzene	52.56	1.0	ug/L	50.2		105	60-140			
Xylenes, total	151.2	2.0	ug/L	151		100	79-126			
Bromoform	44.86	1.0	ug/L	50.1		89.5	70-130			
1,1,2,2-Tetrachloroethane	44.11	1.0	ug/L	50.1		88.0	60-140			
1,3-Dichlorobenzene	47.62	1.0	ug/L	50.1		95.1	70-130			
1,4-Dichlorobenzene	48.10	1.0	ug/L	50.1		96.0	65-135			
1,2-Dichlorobenzene	47.02	1.0	ug/L	50.1		93.9	65-135			
Surrogate: Dibromofluoromethane	50.8		ug/L	50.2		101	59-123			
Surrogate: 1,2-Dichloroethane-d4	50.9		ug/L	50.4		101	56-130			

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CERTIFICATE OF ANALYSIS

1HJ1874

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1776 - EPA 5030B - EPA 624.1										
LCS (1HJ1776-BS1)										
				Prepared: 10/29/24 00:00 Analyzed: 10/29/24 10:31						
Surrogate: Toluene-d8	49.4		ug/L	50.5		97.8	85-113			
Surrogate: 4-Bromofluorobenzene	49.5		ug/L	50.2		98.6	82-112			
LCS (1HJ1776-BS2)										
				Prepared: 10/29/24 00:00 Analyzed: 10/29/24 21:42						
Chloromethane	35.52	1.0	ug/L	30.3		117	5-205			
Vinyl Chloride	35.68	1.0	ug/L	30.2		118	5-195			
Bromomethane	37.39	1.0	ug/L	30.1		124	15-185			
Chloroethane	30.92	1.0	ug/L	30.3		102	40-160			
1,1-Dichloroethylene	50.28	1.0	ug/L	50.1		100	50-150			
Methylene Chloride	50.70	5.0	ug/L	50.1		101	60-140			
trans-1,2-Dichloroethylene	52.94	1.0	ug/L	50.1		106	70-130			
1,1-Dichloroethane	53.48	1.0	ug/L	50.1		107	70-130			
cis-1,2-Dichloroethylene	52.69	1.0	ug/L	50.4		105	57-148			
2-Butanone (MEK)	105.5	10.0	ug/L	100		106	44-134			
Chloroform	52.67	1.0	ug/L	50.1		105	70-135			
1,1,1-Trichloroethane	52.39	1.0	ug/L	50.1		105	70-130			
Carbon Tetrachloride	52.47	1.0	ug/L	50.1		105	70-130			
Benzene	55.45	1.0	ug/L	50.4		110	65-135			
1,2-Dichloroethane	58.07	1.0	ug/L	50.1		116	70-130			
Trichloroethylene	53.18	1.0	ug/L	50.1		106	65-135			
1,2-Dichloropropane	54.25	1.0	ug/L	50.1		108	35-165			
Dibromomethane	52.85	1.0	ug/L	50.4		105	71-139			
Bromodichloromethane	52.93	1.0	ug/L	50.1		106	65-135			
2-Chloroethylvinyl ether	100.8	10.0	ug/L	101		100	5-225			
cis-1,3-Dichloropropene	50.92	1.0	ug/L	50.1		102	25-175			
Toluene	53.60	1.0	ug/L	50.5		106	70-130			
trans-1,3-Dichloropropene	50.90	1.0	ug/L	50.1		102	50-150			
1,1,2-Trichloroethane	52.12	1.0	ug/L	50.1		104	70-130			
Tetrachloroethylene	52.44	1.0	ug/L	50.1		105	70-130			
Dibromochloromethane	52.21	1.0	ug/L	50.1		104	70-135			
Chlorobenzene	52.81	1.0	ug/L	50.1		105	65-135			
Ethylbenzene	55.56	1.0	ug/L	50.2		111	60-140			
Xylenes, total	161.2	2.0	ug/L	151		107	79-126			
Bromoform	50.67	1.0	ug/L	50.1		101	70-130			
1,1,2,2-Tetrachloroethane	53.52	1.0	ug/L	50.1		107	60-140			
1,3-Dichlorobenzene	49.00	1.0	ug/L	50.1		97.8	70-130			
1,4-Dichlorobenzene	49.72	1.0	ug/L	50.1		99.2	65-135			
1,2-Dichlorobenzene	49.61	1.0	ug/L	50.1		99.0	65-135			
Surrogate: Dibromofluoromethane	48.6		ug/L	50.2		96.8	59-123			
Surrogate: 1,2-Dichloroethane-d4	50.5		ug/L	50.4		100	56-130			
Surrogate: Toluene-d8	50.2		ug/L	50.5		99.4	85-113			
Surrogate: 4-Bromofluorobenzene	49.9		ug/L	50.2		99.5	82-112			

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CERTIFICATE OF ANALYSIS

1HJ1874

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1776 - EPA 5030B - EPA 624.1										
LCS Dup (1HJ1776-BSD1)										
Prepared: 10/29/24 00:00 Analyzed: 10/29/24 10:54										
Chloromethane	33.09	1.0	ug/L	30.3		109	5-205	12.4	19	
Vinyl Chloride	34.75	1.0	ug/L	30.2		115	5-195	11.2	26	
Bromomethane	41.50	1.0	ug/L	30.1		138	15-185	9.61	20	
Chloroethane	28.90	1.0	ug/L	30.3		95.3	40-160	9.74	22	
1,1-Dichloroethylene	48.43	1.0	ug/L	50.1		96.6	50-150	8.56	19	
Methylene Chloride	49.90	5.0	ug/L	50.1		99.6	60-140	2.73	17	
trans-1,2-Dichloroethylene	51.38	1.0	ug/L	50.1		103	70-130	4.43	17	
1,1-Dichloroethane	51.34	1.0	ug/L	50.1		102	70-130	2.77	17	
cis-1,2-Dichloroethylene	52.90	1.0	ug/L	50.4		105	57-148	0.0946	21	
2-Butanone (MEK)	104.6	10.0	ug/L	100		105	44-134	24.8	30	
Chloroform	51.35	1.0	ug/L	50.1		103	70-135	0.524	17	
1,1,1-Trichloroethane	51.43	1.0	ug/L	50.1		103	70-130	0.794	30	
Carbon Tetrachloride	52.04	1.0	ug/L	50.1		104	70-130	0.327	19	
Benzene	52.24	1.0	ug/L	50.4		104	65-135	0.363	17	
1,2-Dichloroethane	54.95	1.0	ug/L	50.1		110	70-130	2.75	15	
Trichloroethylene	50.76	1.0	ug/L	50.1		101	65-135	0.355	18	
1,2-Dichloropropane	50.87	1.0	ug/L	50.1		102	35-165	1.67	17	
Dibromomethane	51.48	1.0	ug/L	50.4		102	71-139	6.31	27	
Bromodichloromethane	50.77	1.0	ug/L	50.1		101	65-135	2.09	14	
2-Chloroethylvinyl ether	98.97	10.0	ug/L	101		98.4	5-225	12.2	26	
cis-1,3-Dichloropropene	50.35	1.0	ug/L	50.1		101	25-175	2.98	30	
Toluene	51.10	1.0	ug/L	50.5		101	70-130	1.78	17	
trans-1,3-Dichloropropene	50.42	1.0	ug/L	50.1		101	50-150	5.99	20	
1,1,2-Trichloroethane	50.73	1.0	ug/L	50.1		101	70-130	7.63	18	
Tetrachloroethylene	51.84	1.0	ug/L	50.1		103	70-130	0.00	16	
Dibromochloromethane	51.42	1.0	ug/L	50.1		103	70-135	5.56	13	
Chlorobenzene	51.33	1.0	ug/L	50.1		102	65-135	1.59	18	
Ethylbenzene	53.24	1.0	ug/L	50.2		106	60-140	1.29	17	
Xylenes, total	154.7	2.0	ug/L	151		102	79-126	2.25	18	
Bromoform	50.44	1.0	ug/L	50.1		101	70-130	11.7	21	
1,1,2,2-Tetrachloroethane	51.48	1.0	ug/L	50.1		103	60-140	15.4	30	
1,3-Dichlorobenzene	48.11	1.0	ug/L	50.1		96.1	70-130	1.02	15	
1,4-Dichlorobenzene	49.14	1.0	ug/L	50.1		98.0	65-135	2.14	15	
1,2-Dichlorobenzene	48.66	1.0	ug/L	50.1		97.1	65-135	3.43	15	
Surrogate: Dibromofluoromethane	50.4		ug/L	50.2		100	59-123			
Surrogate: 1,2-Dichloroethane-d4	52.0		ug/L	50.4		103	56-130			
Surrogate: Toluene-d8	49.4		ug/L	50.5		97.9	85-113			
Surrogate: 4-Bromofluorobenzene	50.4		ug/L	50.2		100	82-112			
LCS Dup (1HJ1776-BSD2)										
Prepared: 10/29/24 00:00 Analyzed: 10/29/24 22:05										
Chloromethane	32.28	1.0	ug/L	30.3		106	5-205	9.56	19	
Vinyl Chloride	32.28	1.0	ug/L	30.2		107	5-195	10.0	26	
Bromomethane	35.51	1.0	ug/L	30.1		118	15-185	5.16	20	

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1HJ1874

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1HJ1776 - EPA 5030B - EPA 624.1

LCS Dup (1HJ1776-BSD2)

Prepared: 10/29/24 00:00 Analyzed: 10/29/24 22:05

Chloroethane	28.14	1.0	ug/L	30.3		92.8	40-160	9.41	22	
1,1-Dichloroethylene	46.35	1.0	ug/L	50.1		92.5	50-150	8.13	19	
Methylene Chloride	48.46	5.0	ug/L	50.1		96.7	60-140	4.52	17	
trans-1,2-Dichloroethylene	49.62	1.0	ug/L	50.1		99.1	70-130	6.47	17	
1,1-Dichloroethane	50.86	1.0	ug/L	50.1		102	70-130	5.02	17	
cis-1,2-Dichloroethylene	50.26	1.0	ug/L	50.4		99.8	57-148	4.72	21	
2-Butanone (MEK)	107.5	10.0	ug/L	100		107	44-134	1.84	30	
Chloroform	50.54	1.0	ug/L	50.1		101	70-135	4.13	17	
1,1,1-Trichloroethane	48.92	1.0	ug/L	50.1		97.6	70-130	6.85	30	
Carbon Tetrachloride	49.06	1.0	ug/L	50.1		97.9	70-130	6.72	19	
Benzene	53.00	1.0	ug/L	50.4		105	65-135	4.52	17	
1,2-Dichloroethane	56.15	1.0	ug/L	50.1		112	70-130	3.36	15	
Trichloroethylene	50.42	1.0	ug/L	50.1		101	65-135	5.33	18	
1,2-Dichloropropane	53.17	1.0	ug/L	50.1		106	35-165	2.01	17	
Dibromomethane	52.58	1.0	ug/L	50.4		104	71-139	0.512	27	
Bromodichloromethane	51.61	1.0	ug/L	50.1		103	65-135	2.53	14	
2-Chloroethylvinyl ether	101.6	10.0	ug/L	101		101	5-225	0.781	26	
cis-1,3-Dichloropropene	50.24	1.0	ug/L	50.1		100	25-175	1.34	30	
Toluene	51.69	1.0	ug/L	50.5		102	70-130	3.63	17	
trans-1,3-Dichloropropene	50.11	1.0	ug/L	50.1		100	50-150	1.56	20	
1,1,2-Trichloroethane	51.63	1.0	ug/L	50.1		103	70-130	0.945	18	
Tetrachloroethylene	49.68	1.0	ug/L	50.1		99.2	70-130	5.41	16	
Dibromochloromethane	51.52	1.0	ug/L	50.1		103	70-135	1.33	13	
Chlorobenzene	51.62	1.0	ug/L	50.1		103	65-135	2.28	18	
Ethylbenzene	53.40	1.0	ug/L	50.2		106	60-140	3.96	17	
Xylenes, total	155.4	2.0	ug/L	151		103	79-126	3.69	18	
Bromoform	50.73	1.0	ug/L	50.1		101	70-130	0.118	21	
1,1,2,2-Tetrachloroethane	54.25	1.0	ug/L	50.1		108	60-140	1.35	30	
1,3-Dichlorobenzene	47.80	1.0	ug/L	50.1		95.4	70-130	2.48	15	
1,4-Dichlorobenzene	48.63	1.0	ug/L	50.1		97.0	65-135	2.22	15	
1,2-Dichlorobenzene	48.76	1.0	ug/L	50.1		97.3	65-135	1.73	15	

Surrogate: Dibromofluoromethane	47.4		ug/L	50.2		94.4	59-123			
Surrogate: 1,2-Dichloroethane-d4	50.8		ug/L	50.4		101	56-130			
Surrogate: Toluene-d8	50.5		ug/L	50.5		100	85-113			
Surrogate: 4-Bromofluorobenzene	50.3		ug/L	50.2		100	82-112			

Matrix Spike (1HJ1776-MS1)

Source: 1HJ1549-02RE1 Prepared: 10/29/24 00:00 Analyzed: 10/30/24 06:53

Chloromethane	342.5	10.0	ug/L	303	ND	113	5-273			
Vinyl Chloride	340.2	10.0	ug/L	302	ND	112	5-251			
Bromomethane	352.3	10.0	ug/L	301	ND	117	5-242			
Chloroethane	295.3	10.0	ug/L	303	ND	97.4	14-230			
1,1-Dichloroethylene	489.5	10.0	ug/L	501	ND	97.7	5-235			
Methylene Chloride	490.7	50.0	ug/L	501	ND	97.9	5-221			

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Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1776 - EPA 5030B - EPA 624.1										
Matrix Spike (1HJ1776-MS1) Source: 1HJ1549-02RE1 Prepared: 10/29/24 00:00 Analyzed: 10/30/24 06:53										
trans-1,2-Dichloroethylene	517.0	10.0	ug/L	501	ND	103	54-156			
1,1-Dichloroethane	518.2	10.0	ug/L	501	ND	103	59-155			
cis-1,2-Dichloroethylene	499.1	10.0	ug/L	504	ND	99.1	42-168			
2-Butanone (MEK)	1050	100	ug/L	1000	ND	105	57-133			
Chloroform	504.5	10.0	ug/L	501	ND	101	51-138			
1,1,1-Trichloroethane	504.5	10.0	ug/L	501	ND	101	52-162			
Carbon Tetrachloride	505.6	10.0	ug/L	501	ND	101	70-140			
Benzene	546.6	10.0	ug/L	504	ND	108	37-151			
1,2-Dichloroethane	567.7	10.0	ug/L	501	ND	113	59-155			
Trichloroethylene	521.9	10.0	ug/L	501	ND	104	70-157			
1,2-Dichloropropane	540.4	10.0	ug/L	501	ND	108	5-210			
Dibromomethane	523.4	10.0	ug/L	504	ND	104	62-141			
Bromodichloromethane	522.7	10.0	ug/L	501	ND	104	35-155			
2-Chloroethylvinyl ether	1036	100	ug/L	1010	ND	103	5-305			
cis-1,3-Dichloropropene	489.8	10.0	ug/L	501	ND	97.8	5-227			
Toluene	526.1	10.0	ug/L	505	ND	104	47-150			
trans-1,3-Dichloropropene	484.9	10.0	ug/L	501	ND	96.8	17-183			
1,1,2-Trichloroethane	514.8	10.0	ug/L	501	ND	103	52-150			
Tetrachloroethylene	509.0	10.0	ug/L	501	ND	102	64-148			
Dibromochloromethane	515.9	10.0	ug/L	501	ND	103	53-149			
Chlorobenzene	520.5	10.0	ug/L	501	ND	104	37-160			
Ethylbenzene	543.3	10.0	ug/L	502	ND	108	79-119			
Xylenes, total	1573	20.0	ug/L	1510	ND	104	80-120			
Bromoform	496.8	10.0	ug/L	501	ND	99.1	45-169			
1,1,2,2-Tetrachloroethane	530.9	10.0	ug/L	501	ND	106	46-157			
1,3-Dichlorobenzene	482.6	10.0	ug/L	501	ND	96.4	59-156			
1,4-Dichlorobenzene	490.4	10.0	ug/L	501	ND	97.8	18-190			
1,2-Dichlorobenzene	492.7	10.0	ug/L	501	ND	98.4	18-190			
Surrogate: Dibromofluoromethane	474		ug/L	502		94.3	59-123			
Surrogate: 1,2-Dichloroethane-d4	499		ug/L	504		99.2	56-130			
Surrogate: Toluene-d8	505		ug/L	505		100	85-113			
Surrogate: 4-Bromofluorobenzene	499		ug/L	502		99.4	82-112			
Matrix Spike (1HJ1776-MS2) Source: 1HJ1617-12RE1 Prepared: 10/29/24 00:00 Analyzed: 10/30/24 07:38										
Chloromethane	322.9	10.0	ug/L	303	ND	106	5-273			
Vinyl Chloride	324.4	10.0	ug/L	302	ND	107	5-251			
Bromomethane	337.0	10.0	ug/L	301	ND	112	5-242			
Chloroethane	278.4	10.0	ug/L	303	ND	91.8	14-230			
1,1-Dichloroethylene	464.5	10.0	ug/L	501	ND	92.7	5-235			
Methylene Chloride	461.8	50.0	ug/L	501	ND	92.2	5-221			
trans-1,2-Dichloroethylene	495.6	10.0	ug/L	501	ND	98.9	54-156			
1,1-Dichloroethane	497.9	10.0	ug/L	501	ND	99.4	59-155			
cis-1,2-Dichloroethylene	481.9	10.0	ug/L	504	ND	95.7	42-168			



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CERTIFICATE OF ANALYSIS

1HJ1874

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1776 - EPA 5030B - EPA 624.1										
Matrix Spike (1HJ1776-MS2) Source: 1HJ1617-12RE1 Prepared: 10/29/24 00:00 Analyzed: 10/30/24 07:38										
2-Butanone (MEK)	1014	100	ug/L	1000	ND	101	57-133			
Chloroform	489.3	10.0	ug/L	501	ND	97.7	51-138			
1,1,1-Trichloroethane	486.8	10.0	ug/L	501	ND	97.1	52-162			
Carbon Tetrachloride	489.5	10.0	ug/L	501	ND	97.7	70-140			
Benzene	525.4	10.0	ug/L	504	ND	104	37-151			
1,2-Dichloroethane	555.9	10.0	ug/L	501	ND	111	59-155			
Trichloroethylene	504.8	10.0	ug/L	501	ND	101	70-157			
1,2-Dichloropropane	517.8	10.0	ug/L	501	ND	103	5-210			
Dibromomethane	501.0	10.0	ug/L	504	ND	99.5	62-141			
Bromodichloromethane	502.7	10.0	ug/L	501	ND	100	35-155			
2-Chloroethylvinyl ether	<100	100	ug/L	1010	ND		5-305			Q11
cis-1,3-Dichloropropene	467.1	10.0	ug/L	501	ND	93.3	5-227			
Toluene	511.0	10.0	ug/L	505	ND	101	47-150			
trans-1,3-Dichloropropene	470.4	10.0	ug/L	501	ND	93.9	17-183			
1,1,2-Trichloroethane	498.2	10.0	ug/L	501	ND	99.5	52-150			
Tetrachloroethylene	496.6	10.0	ug/L	501	ND	99.1	64-148			
Dibromochloromethane	499.5	10.0	ug/L	501	ND	99.8	53-149			
Chlorobenzene	502.9	10.0	ug/L	501	ND	100	37-160			
Ethylbenzene	529.9	10.0	ug/L	502	ND	106	79-119			
Xylenes, total	1533	20.0	ug/L	1510	ND	101	80-120			
Bromoform	484.5	10.0	ug/L	501	ND	96.7	45-169			
1,1,2,2-Tetrachloroethane	517.9	10.0	ug/L	501	ND	103	46-157			
1,3-Dichlorobenzene	471.3	10.0	ug/L	501	ND	94.1	59-156			
1,4-Dichlorobenzene	480.7	10.0	ug/L	501	ND	95.9	18-190			
1,2-Dichlorobenzene	476.0	10.0	ug/L	501	ND	95.0	18-190			
Surrogate: Dibromofluoromethane	470		ug/L	502		93.7	59-123			
Surrogate: 1,2-Dichloroethane-d4	491		ug/L	504		97.5	56-130			
Surrogate: Toluene-d8	503		ug/L	505		99.6	85-113			
Surrogate: 4-Bromofluorobenzene	507		ug/L	502		101	82-112			
Matrix Spike Dup (1HJ1776-MSD1) Source: 1HJ1549-02RE1 Prepared: 10/29/24 00:00 Analyzed: 10/30/24 07:16										
Chloromethane	319.5	10.0	ug/L	303	ND	105	5-273	6.95	60	
Vinyl Chloride	316.8	10.0	ug/L	302	ND	105	5-251	7.12	66	
Bromomethane	334.0	10.0	ug/L	301	ND	111	5-242	5.33	61	
Chloroethane	274.6	10.0	ug/L	303	ND	90.6	14-230	7.26	78	
1,1-Dichloroethylene	454.1	10.0	ug/L	501	ND	90.6	5-235	7.50	32	
Methylene Chloride	471.4	50.0	ug/L	501	ND	94.1	5-221	4.01	60	
trans-1,2-Dichloroethylene	484.2	10.0	ug/L	501	ND	96.7	54-156	6.55	45	
1,1-Dichloroethane	493.7	10.0	ug/L	501	ND	98.5	59-155	4.84	40	
cis-1,2-Dichloroethylene	480.6	10.0	ug/L	504	ND	95.5	42-168	3.78	28	
2-Butanone (MEK)	1056	100	ug/L	1000	ND	106	57-133	0.636	30	
Chloroform	491.3	10.0	ug/L	501	ND	98.1	51-138	2.65	54	
1,1,1-Trichloroethane	479.8	10.0	ug/L	501	ND	95.7	52-162	5.02	36	

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1HJ1874

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1776 - EPA 5030B - EPA 624.1										
Matrix Spike Dup (1HJ1776-MSD1) Source: 1HJ1549-02RE1 Prepared: 10/29/24 00:00 Analyzed: 10/30/24 07:16										
Carbon Tetrachloride	480.6	10.0	ug/L	501	ND	95.9	70-140	5.07	41	
Benzene	523.6	10.0	ug/L	504	ND	104	37-151	4.30	61	
1,2-Dichloroethane	560.7	10.0	ug/L	501	ND	112	59-155	1.24	49	
Trichloroethylene	499.2	10.0	ug/L	501	ND	99.7	70-157	4.45	48	
1,2-Dichloropropane	525.0	10.0	ug/L	501	ND	105	5-210	2.89	55	
Dibromomethane	520.4	10.0	ug/L	504	ND	103	62-141	0.575	11	
Bromodichloromethane	515.8	10.0	ug/L	501	ND	103	35-155	1.33	56	
2-Chloroethylvinyl ether	1037	100	ug/L	1010	ND	103	5-305	0.0675	71	
cis-1,3-Dichloropropene	480.3	10.0	ug/L	501	ND	95.9	5-227	1.96	58	
Toluene	508.2	10.0	ug/L	505	ND	101	47-150	3.46	41	
trans-1,3-Dichloropropene	485.5	10.0	ug/L	501	ND	97.0	17-183	0.124	86	
1,1,2-Trichloroethane	514.2	10.0	ug/L	501	ND	103	52-150	0.117	45	
Tetrachloroethylene	490.3	10.0	ug/L	501	ND	97.9	64-148	3.74	39	
Dibromochloromethane	510.1	10.0	ug/L	501	ND	102	53-149	1.13	50	
Chlorobenzene	505.1	10.0	ug/L	501	ND	101	37-160	3.00	53	
Ethylbenzene	527.0	10.0	ug/L	502	ND	105	79-119	3.05	63	
Xylenes, total	1528	20.0	ug/L	1510	ND	101	80-120	2.95	12	
Bromoform	503.7	10.0	ug/L	501	ND	101	45-169	1.38	42	
1,1,2,2-Tetrachloroethane	535.7	10.0	ug/L	501	ND	107	46-157	0.900	61	
1,3-Dichlorobenzene	476.5	10.0	ug/L	501	ND	95.1	59-156	1.27	43	
1,4-Dichlorobenzene	484.9	10.0	ug/L	501	ND	96.7	18-190	1.13	57	
1,2-Dichlorobenzene	483.6	10.0	ug/L	501	ND	96.5	18-190	1.86	57	
<i>Surrogate: Dibromofluoromethane</i>	<i>468</i>		<i>ug/L</i>	<i>502</i>		<i>93.2</i>	<i>59-123</i>			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>494</i>		<i>ug/L</i>	<i>504</i>		<i>98.1</i>	<i>56-130</i>			
<i>Surrogate: Toluene-d8</i>	<i>503</i>		<i>ug/L</i>	<i>505</i>		<i>99.6</i>	<i>85-113</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>506</i>		<i>ug/L</i>	<i>502</i>		<i>101</i>	<i>82-112</i>			
Matrix Spike Dup (1HJ1776-MSD2) Source: 1HJ1617-12RE1 Prepared: 10/29/24 00:00 Analyzed: 10/30/24 08:01										
Chloromethane	323.3	10.0	ug/L	303	ND	107	5-273	0.124	60	
Vinyl Chloride	319.3	10.0	ug/L	302	ND	106	5-251	1.58	66	
Bromomethane	338.2	10.0	ug/L	301	ND	112	5-242	0.355	61	
Chloroethane	280.3	10.0	ug/L	303	ND	92.5	14-230	0.680	78	
1,1-Dichloroethylene	452.8	10.0	ug/L	501	ND	90.3	5-235	2.55	32	
Methylene Chloride	466.8	50.0	ug/L	501	ND	93.2	5-221	1.08	60	
trans-1,2-Dichloroethylene	480.8	10.0	ug/L	501	ND	96.0	54-156	3.03	45	
1,1-Dichloroethane	487.4	10.0	ug/L	501	ND	97.3	59-155	2.13	40	
cis-1,2-Dichloroethylene	470.9	10.0	ug/L	504	ND	93.5	42-168	2.31	28	
2-Butanone (MEK)	1003	100	ug/L	1000	ND	100	57-133	1.17	30	
Chloroform	479.7	10.0	ug/L	501	ND	95.8	51-138	1.98	54	
1,1,1-Trichloroethane	477.3	10.0	ug/L	501	ND	95.2	52-162	1.97	36	
Carbon Tetrachloride	478.6	10.0	ug/L	501	ND	95.5	70-140	2.25	41	
Benzene	514.4	10.0	ug/L	504	ND	102	37-151	2.12	61	
1,2-Dichloroethane	544.0	10.0	ug/L	501	ND	109	59-155	2.16	49	

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CERTIFICATE OF ANALYSIS

1HJ1874

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1776 - EPA 5030B - EPA 624.1										
Matrix Spike Dup (1HJ1776-MSD2) Source: 1HJ1617-12RE1 Prepared: 10/29/24 00:00 Analyzed: 10/30/24 08:01										
Trichloroethylene	494.0	10.0	ug/L	501	ND	98.6	70-157	2.16	48	
1,2-Dichloropropane	514.6	10.0	ug/L	501	ND	103	5-210	0.620	55	
Dibromomethane	505.8	10.0	ug/L	504	ND	100	62-141	0.954	11	
Bromodichloromethane	500.1	10.0	ug/L	501	ND	99.8	35-155	0.519	56	
2-Chloroethylvinyl ether	<100	100	ug/L	1010	ND		5-305		71	Q11
cis-1,3-Dichloropropene	463.5	10.0	ug/L	501	ND	92.5	5-227	0.774	58	
Toluene	500.1	10.0	ug/L	505	ND	99.1	47-150	2.16	41	
trans-1,3-Dichloropropene	473.9	10.0	ug/L	501	ND	94.6	17-183	0.741	86	
1,1,2-Trichloroethane	506.2	10.0	ug/L	501	ND	101	52-150	1.59	45	
Tetrachloroethylene	482.6	10.0	ug/L	501	ND	96.3	64-148	2.86	39	
Dibromochloromethane	502.1	10.0	ug/L	501	ND	100	53-149	0.519	50	
Chlorobenzene	496.2	10.0	ug/L	501	ND	99.1	37-160	1.34	53	
Ethylbenzene	518.5	10.0	ug/L	502	ND	103	79-119	2.17	63	
Xylenes, total	1507	20.0	ug/L	1510	ND	99.7	80-120	1.74	12	
Bromoform	494.6	10.0	ug/L	501	ND	98.7	45-169	2.06	42	
1,1,2,2-Tetrachloroethane	520.0	10.0	ug/L	501	ND	104	46-157	0.405	61	
1,3-Dichlorobenzene	456.6	10.0	ug/L	501	ND	91.2	59-156	3.17	43	
1,4-Dichlorobenzene	462.3	10.0	ug/L	501	ND	92.2	18-190	3.90	57	
1,2-Dichlorobenzene	472.6	10.0	ug/L	501	ND	94.3	18-190	0.717	57	

Surrogate: Dibromofluoromethane	474		ug/L	502		94.3	59-123			
Surrogate: 1,2-Dichloroethane-d4	498		ug/L	504		98.9	56-130			
Surrogate: Toluene-d8	501		ug/L	505		99.2	85-113			
Surrogate: 4-Bromofluorobenzene	512		ug/L	502		102	82-112			

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1512 - EPA 625 BNA - EPA 625.1										

Blank (1HJ1512-BLK1) Prepared: 10/24/24 12:33 Analyzed: 10/25/24 18:28										
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							



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CERTIFICATE OF ANALYSIS

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Determination of	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Base/Neutral/Acid Extractable Compounds										
Batch 1HJ1512 - EPA 625 BNA - EPA 625.1										
Blank (1HJ1512-BLK1)				Prepared: 10/24/24 12:33 Analyzed: 10/25/24 18:28						
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							
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							

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CERTIFICATE OF ANALYSIS

1HJ1874

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1512 - EPA 625 BNA - EPA 625.1									
Blank (1HJ1512-BLK1)				Prepared: 10/24/24 12:33 Analyzed: 10/25/24 18:28					
Benzo(a)Pyrene	<10	10	ug/L						
Dibenzo(a,h)anthracene	<10	10	ug/L						
Benzo(g,h,i)perylene	<10	10	ug/L						
<i>Surrogate: 2-Fluorophenol</i>	27.5		ug/L	30.9		88.9	16-140		
<i>Surrogate: Phenol-d6</i>	29.6		ug/L	29.4		101	13-147		
<i>Surrogate: Nitrobenzene-d5</i>	28.3		ug/L	30.8		91.6	17-150		
<i>Surrogate: 2-Fluorobiphenyl</i>	25.8		ug/L	29.3		88.0	15-134		
<i>Surrogate: 2,4,6-Tribromophenol</i>	30.2		ug/L	30.1		100	20-158		
<i>Surrogate: Terphenyl-d14</i>	31.1		ug/L	30.9		101	12-157		
LCS (1HJ1512-BS1)				Prepared: 10/24/24 12:33 Analyzed: 10/25/24 18:52					
Bis(2-Chloroethyl) Ether	21.0	10	ug/L	20.0		105	35-113		
2-Chlorophenol	20.8	10	ug/L	20.0		104	41-117		
1,3-Dichlorobenzene	14.7	10	ug/L	20.0		73.7	18-95		
1,4-Dichlorobenzene	15.2	10	ug/L	20.0		76.0	18-99		
Benzyl Alcohol	21.4	10	ug/L	20.0		107	10-125		
1,2-Dichlorobenzene	16.5	10	ug/L	20.0		82.6	20-100		
Bis[2-Chloroisopropyl]ether	21.3	10	ug/L	20.0		107	36-121		
n-Nitroso-di-n-propylamine	20.6	10	ug/L	20.0		103	43-120		
Hexachloroethane	15.1	10	ug/L	20.0		75.4	13-95		
Nitrobenzene	18.5	10	ug/L	20.0		92.4	47-121		
Isophorone	18.6	10	ug/L	20.0		92.8	48-118		
2-Nitrophenol	18.4	10	ug/L	20.0		92.1	47-118		
2,4-Dimethylphenol	17.7	10	ug/L	20.0		88.4	46-122		
Bis (2-Chloroethoxy) Methane	18.3	10	ug/L	20.0		91.6	33-118		
2,4-Dichlorophenol	20.6	10	ug/L	20.0		103	47-122		
1,2,4-Trichlorobenzene	15.4	10	ug/L	20.0		77.0	24-101		
Naphthalene	17.8	10	ug/L	20.0		89.2	36-106		
Hexachlorobutadiene	<20	20	ug/L	20.0		59.2	10-97		
4-Chloro-3-methylphenol	20.6	10	ug/L	20.0		103	50-126		
Hexachlorocyclopentadiene	<20	20	ug/L	20.0		69.7	10-107		
2,4,6-Trichlorophenol	19.8	10	ug/L	20.0		99.0	45-125		
2,4,5-Trichlorophenol	<50	50	ug/L	20.0		101	50-121		
2-Chloronaphthalene	16.7	10	ug/L	20.0		83.4	32-114		
Dimethylphthalate	19.5	15	ug/L	20.0		97.7	59-121		
Acenaphthylene	15.9	10	ug/L	20.0		79.4	42-112		
2,6-Dinitrotoluene	19.7	10	ug/L	20.0		98.4	59-120		
Acenaphthene	17.4	10	ug/L	20.0		87.2	43-115		
2,4-Dinitrophenol	21.0	20	ug/L	20.0		105	37-158		
Dibenzofuran	17.6	10	ug/L	20.0		88.2	49-108		
2,4-Dinitrotoluene	20.3	10	ug/L	20.0		102	59-125		
4-Nitrophenol	18.9	10	ug/L	20.0		94.5	39-149		
Diethyl Phthalate	<30	30	ug/L	20.0		103	61-125		

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CERTIFICATE OF ANALYSIS

1HJ1874

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
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Batch 1HJ1512 - EPA 625 BNA - EPA 625.1

LCS (1HJ1512-BS1)

Prepared: 10/24/24 12:33 Analyzed: 10/25/24 18:52

Fluorene	17.9	10	ug/L	20.0		89.3	49-117		
4-Chlorophenyl Phenyl Ether	17.6	10	ug/L	20.0		88.1	46-119		
4,6-Dinitro-2-methylphenol	<20	20	ug/L	20.0		90.2	47-135		
N-Nitrosodiphenylamine	18.5	10	ug/L	20.0		92.6	29-136		
4-Bromophenyl Phenyl Ether	17.8	10	ug/L	20.0		88.8	44-127		
Hexachlorobenzene	17.6	10	ug/L	20.0		88.0	47-122		
Pentachlorophenol	<20	20	ug/L	20.0		93.0	30-139		
Phenanthrene	18.0	10	ug/L	20.0		89.8	50-124		
Anthracene	17.5	10	ug/L	20.0		87.4	50-124		
Di-n-butyl Phthalate	19.7	10	ug/L	20.0		98.4	51-134		
Fluoranthene	18.3	10	ug/L	20.0		91.6	52-128		
Pyrene	20.9	10	ug/L	20.0		104	49-132		
Butyl Benzyl Phthalate	20.5	10	ug/L	20.0		103	49-135		
Benzo(a)anthracene	18.3	10	ug/L	20.0		91.4	51-127		
Chrysene	19.0	10	ug/L	20.0		94.8	51-128		
Bis(2-Ethylhexyl) Phthalate	21.0	10	ug/L	20.0		105	45-148		
Di-n-octyl Phthalate	23.3	10	ug/L	20.0		116	35-165		
Indeno(1,2,3-cd)Pyrene	19.2	10	ug/L	20.0		96.2	38-148		
Benzo(b)Fluoranthene	21.3	10	ug/L	20.0		106	22-167		
Benzo(k)Fluoranthene	19.9	10	ug/L	20.0		99.4	27-168		
Benzo(a)Pyrene	19.7	10	ug/L	20.0		98.4	37-151		
Dibenzo(a,h)anthracene	19.2	10	ug/L	20.0		96.2	30-156		
Benzo(g,h,i)perylene	18.2	10	ug/L	20.0		91.2	38-145		

Surrogate: 2-Fluorophenol	28.4		ug/L	30.9		91.7	16-140		
Surrogate: Phenol-d6	31.5		ug/L	29.4		107	13-147		
Surrogate: Nitrobenzene-d5	26.8		ug/L	30.8		87.0	17-150		
Surrogate: 2-Fluorobiphenyl	25.7		ug/L	29.3		87.9	15-134		
Surrogate: 2,4,6-Tribromophenol	31.3		ug/L	30.1		104	20-158		
Surrogate: Terphenyl-d14	32.0		ug/L	30.9		103	12-157		

LCS Dup (1HJ1512-BSD1)

Prepared: 10/24/24 12:33 Analyzed: 10/25/24 19:16

Bis(2-Chloroethyl) Ether	18.9	10	ug/L	20.0		94.7	35-113	10.4	30
2-Chlorophenol	19.8	10	ug/L	20.0		99.0	41-117	4.97	30
1,3-Dichlorobenzene	15.6	10	ug/L	20.0		78.0	18-95	5.73	30
1,4-Dichlorobenzene	16.4	10	ug/L	20.0		82.0	18-99	7.47	30
Benzyl Alcohol	20.6	10	ug/L	20.0		103	10-125	3.85	30
1,2-Dichlorobenzene	17.0	10	ug/L	20.0		85.0	20-100	2.74	30
Bis[2-Chloroisopropyl]ether	20.7	10	ug/L	20.0		104	36-121	3.00	30
n-Nitroso-di-n-propylamine	19.5	10	ug/L	20.0		97.4	43-120	5.45	30
Hexachloroethane	15.1	10	ug/L	20.0		75.6	13-95	0.331	30
Nitrobenzene	19.2	10	ug/L	20.0		96.1	47-121	3.87	30
Isophorone	18.7	10	ug/L	20.0		93.4	48-118	0.591	30
2-Nitrophenol	19.2	10	ug/L	20.0		96.0	47-118	4.15	30

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CERTIFICATE OF ANALYSIS

1HJ1874

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1512 - EPA 625 BNA - EPA 625.1										
LCS Dup (1HJ1512-BSD1)										
				Prepared: 10/24/24 12:33 Analyzed: 10/25/24 19:16						
2,4-Dimethylphenol	17.1	10	ug/L	20.0		85.6	46-122	3.33	30	
Bis (2-Chloroethoxy) Methane	18.6	10	ug/L	20.0		93.0	33-118	1.41	30	
2,4-Dichlorophenol	19.6	10	ug/L	20.0		98.1	47-122	5.02	30	
1,2,4-Trichlorobenzene	16.6	10	ug/L	20.0		83.0	24-101	7.56	30	
Naphthalene	18.2	10	ug/L	20.0		90.8	36-106	1.83	30	
Hexachlorobutadiene	<20	20	ug/L	20.0		66.8	10-97	12.2	30	
4-Chloro-3-methylphenol	18.7	10	ug/L	20.0		93.6	50-126	9.71	27	
Hexachlorocyclopentadiene	<20	20	ug/L	20.0		80.8	10-107	14.8	30	
2,4,6-Trichlorophenol	20.9	10	ug/L	20.0		105	45-125	5.40	30	
2,4,5-Trichlorophenol	<50	50	ug/L	20.0		103	50-121	2.79	25	
2-Chloronaphthalene	18.3	10	ug/L	20.0		91.4	32-114	9.10	30	
Dimethylphthalate	20.1	15	ug/L	20.0		100	59-121	2.83	30	
Acenaphthylene	17.0	10	ug/L	20.0		85.1	42-112	6.99	30	
2,6-Dinitrotoluene	20.5	10	ug/L	20.0		102	59-120	3.99	20	
Acenaphthene	18.5	10	ug/L	20.0		92.4	43-115	5.79	30	
2,4-Dinitrophenol	21.3	20	ug/L	20.0		107	37-158	1.23	30	
Dibenzofuran	18.6	10	ug/L	20.0		93.1	49-108	5.46	26	
2,4-Dinitrotoluene	20.6	10	ug/L	20.0		103	59-125	1.08	30	
4-Nitrophenol	19.4	10	ug/L	20.0		96.8	39-149	2.35	30	
Diethyl Phthalate	<30	30	ug/L	20.0		104	61-125	1.21	30	
Fluorene	18.5	10	ug/L	20.0		92.4	49-117	3.47	30	
4-Chlorophenyl Phenyl Ether	18.4	10	ug/L	20.0		91.8	46-119	4.06	30	
4,6-Dinitro-2-methylphenol	<20	20	ug/L	20.0		94.7	47-135	4.87	30	
N-Nitrosodiphenylamine	19.4	10	ug/L	20.0		96.8	29-136	4.43	30	
4-Bromophenyl Phenyl Ether	19.3	10	ug/L	20.0		96.7	44-127	8.46	30	
Hexachlorobenzene	18.9	10	ug/L	20.0		94.4	47-122	7.07	30	
Pentachlorophenol	<20	20	ug/L	20.0		95.2	30-139	2.39	30	
Phenanthrene	19.1	10	ug/L	20.0		95.6	50-124	6.20	30	
Anthracene	18.8	10	ug/L	20.0		94.0	50-124	7.17	30	
Di-n-butyl Phthalate	20.4	10	ug/L	20.0		102	51-134	3.84	30	
Fluoranthene	19.7	10	ug/L	20.0		98.5	52-128	7.20	30	
Pyrene	20.7	10	ug/L	20.0		104	49-132	0.721	30	
Butyl Benzyl Phthalate	20.6	10	ug/L	20.0		103	49-135	0.0974	30	
Benzo(a)anthracene	19.5	10	ug/L	20.0		97.5	51-127	6.46	30	
Chrysene	20.3	10	ug/L	20.0		102	51-128	7.03	30	
Bis(2-Ethylhexyl) Phthalate	21.1	10	ug/L	20.0		106	45-148	0.712	30	
Di-n-octyl Phthalate	22.6	10	ug/L	20.0		113	35-165	2.92	30	
Indeno(1,2,3-cd)Pyrene	19.8	10	ug/L	20.0		99.0	38-148	2.87	30	
Benzo(b)Fluoranthene	21.9	10	ug/L	20.0		110	22-167	2.96	30	
Benzo(k)Fluoranthene	20.0	10	ug/L	20.0		100	27-168	0.702	30	
Benzo(a)Pyrene	20.3	10	ug/L	20.0		102	37-151	3.30	30	
Dibenzo(a,h)anthracene	19.8	10	ug/L	20.0		98.8	30-156	2.67	30	

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1HJ1874

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1512 - EPA 625 BNA - EPA 625.1										
LCS Dup (1HJ1512-BSD1)				Prepared: 10/24/24 12:33 Analyzed: 10/25/24 19:16						
Benzo(g,h,i)perylene	18.6	10	ug/L	20.0		93.0	38-145	1.95	30	
Surrogate: 2-Fluorophenol	28.1		ug/L	30.9		90.8	16-140			
Surrogate: Phenol-d6	28.3		ug/L	29.4		96.2	13-147			
Surrogate: Nitrobenzene-d5	28.3		ug/L	30.8		91.9	17-150			
Surrogate: 2-Fluorobiphenyl	27.9		ug/L	29.3		95.2	15-134			
Surrogate: 2,4,6-Tribromophenol	31.4		ug/L	30.1		105	20-158			
Surrogate: Terphenyl-d14	31.4		ug/L	30.9		102	12-157			
Reference (1HJ1512-SRM1)				Prepared: 10/24/24 12:33 Analyzed: 10/25/24 19:41						
Bis(2-Chloroethyl) Ether	20.3	10	ug/L	20.0		101	80-120			
2-Chlorophenol	21.3	10	ug/L	20.0		106	80-120			
1,3-Dichlorobenzene	20.1	10	ug/L	20.0		100	80-120			
1,4-Dichlorobenzene	20.2	10	ug/L	20.0		101	80-120			
Benzyl Alcohol	21.6	10	ug/L	20.0		108	80-120			
1,2-Dichlorobenzene	20.9	10	ug/L	20.0		105	80-120			
Bis[2-Chloroisopropyl]ether	21.2	10	ug/L	20.0		106	80-120			
n-Nitroso-di-n-propylamine	22.2	10	ug/L	20.0		111	80-120			
Hexachloroethane	20.6	10	ug/L	20.0		103	80-120			
Nitrobenzene	19.1	10	ug/L	20.0		95.6	80-120			
Isophorone	20.1	10	ug/L	20.0		101	80-120			
2-Nitrophenol	20.1	10	ug/L	20.0		101	80-120			
2,4-Dimethylphenol	18.6	10	ug/L	20.0		92.8	80-120			
Bis (2-Chloroethoxy) Methane	19.5	10	ug/L	20.0		97.4	80-120			
2,4-Dichlorophenol	21.0	10	ug/L	20.0		105	80-120			
1,2,4-Trichlorobenzene	20.1	10	ug/L	20.0		100	80-120			
Naphthalene	19.5	10	ug/L	20.0		97.4	80-120			
Hexachlorobutadiene	20.7	20	ug/L	20.0		103	80-120			
4-Chloro-3-methylphenol	21.3	10	ug/L	20.0		106	80-120			
Hexachlorocyclopentadiene	20.6	20	ug/L	20.0		103	80-120			
2,4,6-Trichlorophenol	21.5	10	ug/L	20.0		108	80-120			
2,4,5-Trichlorophenol	<50	50	ug/L	20.0		110	80-120			
2-Chloronaphthalene	20.4	10	ug/L	20.0		102	80-120			
Dimethylphthalate	21.2	15	ug/L	20.0		106	80-120			
Acenaphthylene	19.2	10	ug/L	20.0		96.2	80-120			
2,6-Dinitrotoluene	21.4	10	ug/L	20.0		107	80-120			
Acenaphthene	21.2	10	ug/L	20.0		106	80-120			
2,4-Dinitrophenol	22.0	20	ug/L	20.0		110	80-120			
Dibenzofuran	20.9	10	ug/L	20.0		104	80-120			
2,4-Dinitrotoluene	21.4	10	ug/L	20.0		107	80-120			
4-Nitrophenol	18.9	10	ug/L	20.0		94.4	80-120			
Diethyl Phthalate	<30	30	ug/L	20.0		109	80-120			
Fluorene	20.7	10	ug/L	20.0		103	80-120			
4-Chlorophenyl Phenyl Ether	21.4	10	ug/L	20.0		107	80-120			

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1HJ1874

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1HJ1512 - EPA 625 BNA - EPA 625.1

Reference (1HJ1512-SRM1) Prepared: 10/24/24 12:33 Analyzed: 10/25/24 19:41

4,6-Dinitro-2-methylphenol	20.4	20	ug/L	20.0		102	80-120			
N-Nitrosodiphenylamine	21.4	10	ug/L	20.0		107	80-120			
4-Bromophenyl Phenyl Ether	22.3	10	ug/L	20.0		112	80-120			
Hexachlorobenzene	21.8	10	ug/L	20.0		109	80-120			
Pentachlorophenol	20.7	20	ug/L	20.0		103	80-120			
Phenanthrene	20.6	10	ug/L	20.0		103	80-120			
Anthracene	20.7	10	ug/L	20.0		104	80-120			
Di-n-butyl Phthalate	21.6	10	ug/L	20.0		108	80-120			
Fluoranthene	20.8	10	ug/L	20.0		104	80-120			
Pyrene	22.1	10	ug/L	20.0		111	80-120			
Butyl Benzyl Phthalate	21.9	10	ug/L	20.0		110	80-120			
Benzo(a)anthracene	20.6	10	ug/L	20.0		103	80-120			
Chrysene	21.4	10	ug/L	20.0		107	80-120			
Bis(2-Ethylhexyl) Phthalate	21.8	10	ug/L	20.0		109	80-120			
Di-n-octyl Phthalate	22.1	10	ug/L	20.0		110	80-120			
Indeno(1,2,3-cd)Pyrene	21.5	10	ug/L	20.0		107	80-120			
3,3'-Dichlorobenzidine	<20	20	ug/L	20.0		91.2	80-120			
Benzo(b)Fluoranthene	22.2	10	ug/L	20.0		111	80-120			
Benzo(k)Fluoranthene	20.6	10	ug/L	20.0		103	80-120			
Benzo(a)Pyrene	21.9	10	ug/L	20.0		110	80-120			
Dibenzo(a,h)anthracene	21.2	10	ug/L	20.0		106	80-120			
Benzo(g,h,i)perylene	20.1	10	ug/L	20.0		101	80-120			
Surrogate: 2-Fluorophenol	29.5		ug/L	30.9		95.5	16-140			
Surrogate: Phenol-d6	31.3		ug/L	29.4		107	13-147			
Surrogate: Nitrobenzene-d5	28.0		ug/L	30.8		90.7	17-150			
Surrogate: 2-Fluorobiphenyl	28.9		ug/L	29.3		98.6	15-134			
Surrogate: 2,4,6-Tribromophenol	31.6		ug/L	30.1		105	20-158			
Surrogate: Terphenyl-d14	32.0		ug/L	30.9		104	12-157			

Determination of Organochlorine Insecticides & PCBs	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1HJ1484 - EPA 608 OC/PCB - EPA 608.3 GC-ECD

Blank (1HJ1484-BLK1) Prepared: 10/24/24 10:02 Analyzed: 10/28/24 17:33

Gamma-BHC [Lindane]	<0.05	0.05	ug/L							
Beta-BHC	<0.05	0.05	ug/L							
Heptachlor	<0.05	0.05	ug/L							
Delta-BHC	<0.05	0.05	ug/L							
Aldrin	<0.05	0.05	ug/L							
Heptachlor Epoxide	<0.05	0.05	ug/L							
Endosulfan I	<0.05	0.05	ug/L							



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Determination of	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Determination of Organochlorine Insecticides & PCBs										
Batch 1HJ1484 - EPA 608 OC/PCB - EPA 608.3 GC-ECD										
Blank (1HJ1484-BLK1)										
Prepared: 10/24/24 10:02 Analyzed: 10/28/24 17:33										
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							
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							
<i>Surrogate: Tetrachloro-m-xylene</i>	0.466		ug/L	0.600		77.6	31-116			
LCS (1HJ1484-BS1)										
Prepared: 10/24/24 10:02 Analyzed: 10/28/24 17:47										
Gamma-BHC [Lindane]	0.272	0.05	ug/L	0.250		109	44-124			
Beta-BHC	0.230	0.05	ug/L	0.250		92.1	56-122			
Heptachlor	0.277	0.05	ug/L	0.250		111	57-124			
Delta-BHC	0.293	0.05	ug/L	0.250		117	53-138			
Aldrin	0.236	0.05	ug/L	0.250		94.4	53-114			
Heptachlor Epoxide	0.273	0.05	ug/L	0.250		109	61-128			
Endosulfan I	0.287	0.05	ug/L	0.250		115	60-124			
4,4'-DDE	0.261	0.05	ug/L	0.250		105	59-122			
Dieldrin	0.256	0.05	ug/L	0.250		103	52-119			
Endrin	0.209	0.05	ug/L	0.250		83.6	45-152			
4,4'-DDD	0.268	0.05	ug/L	0.250		107	59-127			
Endosulfan II	0.277	0.05	ug/L	0.250		111	57-130			
4,4'-DDT	0.277	0.05	ug/L	0.250		111	55-143			
Endrin Aldehyde	0.263	0.05	ug/L	0.250		105	55-139			
Endosulfan Sulfate	0.253	0.05	ug/L	0.250		101	64-123			
<i>Surrogate: Tetrachloro-m-xylene</i>	0.448		ug/L	0.600		74.7	31-116			
LCS Dup (1HJ1484-BSD1)										
Prepared: 10/24/24 10:02 Analyzed: 10/28/24 17:59										
Gamma-BHC [Lindane]	0.273	0.05	ug/L	0.250		109	44-124	0.200	30	
Beta-BHC	0.224	0.05	ug/L	0.250		89.5	56-122	2.89	30	
Heptachlor	0.288	0.05	ug/L	0.250		115	57-124	3.85	30	
Delta-BHC	0.293	0.05	ug/L	0.250		117	53-138	0.0461	30	



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CERTIFICATE OF ANALYSIS

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Determination of Organochlorine Insecticides & PCBs	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1484 - EPA 608 OC/PCB - EPA 608.3 GC-ECD									
LCS Dup (1HJ1484-BSD1)				Prepared: 10/24/24 10:02 Analyzed: 10/28/24 17:59					
Aldrin	0.244	0.05	ug/L	0.250		97.6 53-114	3.34	30	
Heptachlor Epoxide	0.275	0.05	ug/L	0.250		110 61-128	0.591	30	
Endosulfan I	0.283	0.05	ug/L	0.250		113 60-124	1.28	30	
4,4'-DDE	0.266	0.05	ug/L	0.250		106 59-122	1.73	30	
Dieldrin	0.260	0.05	ug/L	0.250		104 52-119	1.20	30	
Endrin	0.213	0.05	ug/L	0.250		85.3 45-152	1.97	30	
4,4'-DDD	0.273	0.05	ug/L	0.250		109 59-127	1.79	30	
Endosulfan II	0.280	0.05	ug/L	0.250		112 57-130	1.14	30	
4,4'-DDT	0.285	0.05	ug/L	0.250		114 55-143	2.63	30	
Endrin Aldehyde	0.271	0.05	ug/L	0.250		108 55-139	3.03	30	
Endosulfan Sulfate	0.257	0.05	ug/L	0.250		103 64-123	1.63	30	

Surrogate: Tetrachloro-m-xylene 0.464 ug/L 0.600 77.3 31-116

Determination of Conventional Chemistry Parameters	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1453 - General Prep Micro - SM 5210 B-2016									
Blank (1HJ1453-BLK1)				Prepared: 10/23/24 17:33 Analyzed: 10/23/24 19:14					
BOD (5 day)	<2	2	mg/L						K1
Duplicate (1HJ1453-DUP1)				Source: 1HJ1781-02 Prepared: 10/23/24 17:33 Analyzed: 10/23/24 20:25					
BOD (5 day)	<6	6	mg/L		ND			30	
Reference (1HJ1453-SRM1)				Prepared: 10/23/24 17:33 Analyzed: 10/23/24 19:29					
BOD (5 day)	217	100	mg/L	198		109 84.6-115.4			

Batch 1HJ1536 - Wet Chem Preparation - SM 4500-H+ B-2011									
Duplicate (1HJ1536-DUP1)				Source: 1HJ1874-01 Prepared: 10/24/24 14:31 Analyzed: 10/25/24 08:37					
pH	8.6	0.5	pH		8.6		0.0698	10	
Reference (1HJ1536-SRM1)				Prepared: 10/24/24 14:31 Analyzed: 10/25/24 08:37					
pH	7.0	0.5	pH	7.00		99.8 98.6-101.4			
Reference (1HJ1536-SRM2)				Prepared: 10/24/24 14:31 Analyzed: 10/25/24 08:37					
pH	7.0	0.5	pH	7.00		101 98.6-101.4			

Batch 1HJ1641 - General Prep HPLC/IC - TIMBERLINE									
Blank (1HJ1641-BLK1)				Prepared: 10/28/24 10:15 Analyzed: 10/28/24 14:51					
Nitrogen, Ammonia	<0.10	0.10	mg/L						
LCS (1HJ1641-BS1)				Prepared: 10/28/24 10:15 Analyzed: 10/28/24 14:53					
Nitrogen, Ammonia	5.56	0.10	mg/L	5.06		110 90-114			



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CERTIFICATE OF ANALYSIS

1HJ1874

Determination of Conventional Chemistry Parameters	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1641 - General Prep HPLC/IC - TIMBERLINE										
Matrix Spike (1HJ1641-MS1)	Source: 1HJ1876-01		Prepared: 10/28/24 10:15 Analyzed: 10/28/24 14:56							
Nitrogen, Ammonia	5.83	0.10	mg/L	5.06	ND	115	84-115			
Matrix Spike Dup (1HJ1641-MSD1)	Source: 1HJ1876-01		Prepared: 10/28/24 10:15 Analyzed: 10/28/24 14:58							
Nitrogen, Ammonia	5.94	0.10	mg/L	5.06	ND	118	84-115	1.87	20	M1
Batch 1HJ1690 - Wet Chem Preparation - USGS I-3765-85										
Blank (1HJ1690-BLK1)			Prepared: 10/29/24 07:56 Analyzed: 10/30/24 09:10							
Total Suspended Solids (TSS)	<1	1	mg/L							
LCS (1HJ1690-BS1)			Prepared: 10/29/24 07:56 Analyzed: 10/30/24 09:10							
Total Suspended Solids (TSS)	13.4	1	mg/L	15.0		89.3	71-110			
Duplicate (1HJ1690-DUP1)	Source: 1HJ1859-01		Prepared: 10/29/24 07:56 Analyzed: 10/30/24 09:10							
Total Suspended Solids (TSS)	63.3	1	mg/L		58.0			8.79	30	
Batch 1HJ1701 - Wet Chem Preparation - USGS I-1750-85										
Blank (1HJ1701-BLK1)			Prepared: 10/29/24 08:52 Analyzed: 10/29/24 11:30							
Total Dissolved Solids (TDS)	<5	5	mg/L							
LCS (1HJ1701-BS1)			Prepared: 10/29/24 08:52 Analyzed: 10/29/24 11:30							
Total Dissolved Solids (TDS)	97	5	mg/L	100		96.7	79-114			
Duplicate (1HJ1701-DUP1)	Source: 1HJ1889-01		Prepared: 10/29/24 08:52 Analyzed: 10/29/24 11:30							
Total Dissolved Solids (TDS)	1790	5	mg/L		1670			7.06	24	
Batch 1HJ1897 - Wet Chem Preparation - EPA 351.2, Rv. 2 (1993)										
Blank (1HJ1897-BLK1)			Prepared: 10/31/24 16:39 Analyzed: 11/04/24 15:11							
Nitrogen, Kjeldahl, total	<1.00	1.00	mg/L							
LCS (1HJ1897-BS1)			Prepared: 10/31/24 16:39 Analyzed: 11/04/24 15:12							
Nitrogen, Kjeldahl, total	21.8	1.00	mg/L	20.0		109	90-110			
Matrix Spike (1HJ1897-MS1)	Source: 1HJ1873-02		Prepared: 10/31/24 16:39 Analyzed: 11/04/24 15:14							
Nitrogen, Kjeldahl, total	54.4	2.50	mg/L	50.0	ND	109	90-110			
Matrix Spike Dup (1HJ1897-MSD1)	Source: 1HJ1873-02		Prepared: 10/31/24 16:39 Analyzed: 11/04/24 15:15							
Nitrogen, Kjeldahl, total	58.7	2.50	mg/L	50.0	ND	117	90-110	7.61	10	M1
Batch 1HK0005 - Wet Chem Preparation - EPA 1664A										
Blank (1HK0005-BLK1)			Prepared: 11/01/24 07:53 Analyzed: 11/05/24 07:35							
Oil and Grease	<4	4	mg/L							
LCS (1HK0005-BS1)			Prepared: 11/01/24 07:53 Analyzed: 11/05/24 07:35							
Oil and Grease	32.5	4	mg/L	40.0		81.2	78-114			
Duplicate (1HK0005-DUP1)	Source: 1HJ2266-01		Prepared: 11/01/24 07:53 Analyzed: 11/05/24 07:35							
Oil and Grease	15.7	4	mg/L		12.2			25.0	18	R1



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CERTIFICATE OF ANALYSIS

1HJ1874

Determination of	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Determination of Conventional Chemistry Parameters										
Batch 1HK0126 - Wet Chem Preparation - EPA 351.2, Rv. 2 (1993)										
Blank (1HK0126-BLK1)				Prepared: 11/04/24 14:47 Analyzed: 11/08/24 14:20						
Nitrogen, Kjeldahl, total	<1.00	1.00	mg/L							
LCS (1HK0126-BS1)				Prepared: 11/04/24 14:47 Analyzed: 11/08/24 14:21						
Nitrogen, Kjeldahl, total	21.5	1.00	mg/L	20.0		107	90-110			
Matrix Spike (1HK0126-MS1)				Source: 1HK0072-01 Prepared: 11/04/24 14:47 Analyzed: 11/08/24 14:23						
Nitrogen, Kjeldahl, total	54.7	2.50	mg/L	50.0	1.75	106	90-110			
Matrix Spike Dup (1HK0126-MSD1)				Source: 1HK0072-01 Prepared: 11/04/24 14:47 Analyzed: 11/08/24 14:24						
Nitrogen, Kjeldahl, total	55.0	2.50	mg/L	50.0	1.75	107	90-110	0.584	10	
Batch 1HK0381 - TOC/DOC - 5310B										
Blank (1HK0381-BLK1)				Prepared: 11/06/24 00:00 Analyzed: 11/07/24 15:25						
Total Organic Carbon	<0.50	0.50	mg/L							
LCS (1HK0381-BS1)				Prepared: 11/06/24 00:00 Analyzed: 11/07/24 15:25						
Total Organic Carbon	5.26	0.50	mg/L	5.00		105	89-116			
LCS Dup (1HK0381-BSD1)				Prepared: 11/06/24 00:00 Analyzed: 11/07/24 15:25						
Total Organic Carbon	5.32	0.50	mg/L	5.00		106	89-116	1.13	10	
Matrix Spike (1HK0381-MS1)				Source: 2HJ0921-02 Prepared: 11/06/24 00:00 Analyzed: 11/07/24 15:25						
Total Organic Carbon	5.20	0.50	mg/L	5.00	0.35	97.0	50-133			
Matrix Spike Dup (1HK0381-MSD1)				Source: 2HJ0921-02 Prepared: 11/06/24 00:00 Analyzed: 11/07/24 15:25						
Total Organic Carbon	5.28	0.50	mg/L	5.00	0.35	98.6	50-133	1.53	10	
Determination of Total Metals										
Batch 1HJ1432 - EPA 200.2 Total ICP-OES (200.7) - 200.7										
Blank (1HJ1432-BLK1)				Prepared: 10/23/24 15:44 Analyzed: 10/25/24 00:12						
Iron, total	<0.100	0.100	mg/L							
LCS (1HJ1432-BS1)				Prepared: 10/23/24 15:44 Analyzed: 10/25/24 00:17						
Iron, total	2.18	0.100	mg/L	2.20		99.2	85-115			
Matrix Spike (1HJ1432-MS1)				Source: 1HJ1347-01 Prepared: 10/23/24 15:44 Analyzed: 10/25/24 00:35						
Iron, total	2.09	0.100	mg/L	2.20	ND	95.1	70-130			
Matrix Spike Dup (1HJ1432-MSD1)				Source: 1HJ1347-01 Prepared: 10/23/24 15:44 Analyzed: 10/25/24 00:45						
Iron, total	2.14	0.100	mg/L	2.20	ND	97.2	70-130	2.16	20	
Post Spike (1HJ1432-PS1)				Source: 1HJ1347-01 Prepared: 10/23/24 15:44 Analyzed: 10/25/24 00:54						
Iron, total	9.30		mg/L	8.80	-0.040	106	85-115			
Batch 1HJ1459 - EPA 200.2 Total ICP-MS - EPA 200.8, Rv. 5.4 (1994)										
Blank (1HJ1459-BLK1)				Prepared: 10/24/24 07:51 Analyzed: 10/24/24 20:19						
Arsenic, total	<0.0020	0.0020	mg/L							



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CERTIFICATE OF ANALYSIS

1HJ1874

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1459 - EPA 200.2 Total ICP-MS - EPA 200.8, Rv. 5.4 (1994)										
Blank (1HJ1459-BLK1) Prepared: 10/24/24 07:51 Analyzed: 10/24/24 20:19										
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 (1HJ1459-BS1) Prepared: 10/24/24 07:51 Analyzed: 10/24/24 20:25										
Arsenic, total	0.0978	0.0020	mg/L	0.100		97.8	85-115			
Barium, total	0.108	0.0020	mg/L	0.100		108	85-115			
Cadmium, total	0.0951	0.0002	mg/L	0.100		95.1	85-115			
Chromium, total	0.0967	0.0020	mg/L	0.100		96.7	85-115			
Copper, total	0.101	0.0020	mg/L	0.100		101	85-115			
Lead, total	0.0995	0.0008	mg/L	0.100		99.5	85-115			
Nickel, total	0.102	0.0040	mg/L	0.100		102	85-115			
Selenium, total	0.0990	0.0040	mg/L	0.100		99.0	85-115			
Silver, total	0.0995	0.0020	mg/L	0.100		99.5	85-115			
Zinc, total	0.0982	0.0200	mg/L	0.100		98.2	85-115			
Matrix Spike (1HJ1459-MS1) Source: 1HJ1689-02 Prepared: 10/24/24 07:51 Analyzed: 10/24/24 20:49										
Arsenic, total	0.104	0.0020	mg/L	0.100	0.0059	98.1	70-130			
Barium, total	0.178	0.0020	mg/L	0.100	0.0808	97.4	70-130			
Cadmium, total	0.0914	0.0002	mg/L	0.100	ND	91.4	70-130			
Chromium, total	0.0973	0.0020	mg/L	0.100	0.0056	91.7	70-130			
Copper, total	0.123	0.0020	mg/L	0.100	0.0338	89.6	70-130			
Lead, total	0.0929	0.0008	mg/L	0.100	ND	92.9	70-130			
Nickel, total	0.104	0.0040	mg/L	0.100	0.0076	96.0	70-130			
Selenium, total	0.0940	0.0040	mg/L	0.100	0.0017	92.3	70-130			
Silver, total	0.0935	0.0020	mg/L	0.100	ND	93.5	70-130			
Zinc, total	0.110	0.0200	mg/L	0.100	0.0248	85.0	70-130			
Matrix Spike Dup (1HJ1459-MSD1) Source: 1HJ1689-02 Prepared: 10/24/24 07:51 Analyzed: 10/24/24 21:08										
Arsenic, total	0.104	0.0020	mg/L	0.100	0.0059	98.1	70-130	0.0273	20	
Barium, total	0.177	0.0020	mg/L	0.100	0.0808	96.1	70-130	0.686	20	
Cadmium, total	0.0904	0.0002	mg/L	0.100	ND	90.4	70-130	1.12	20	
Chromium, total	0.0969	0.0020	mg/L	0.100	0.0056	91.3	70-130	0.377	20	
Copper, total	0.121	0.0020	mg/L	0.100	0.0338	87.7	70-130	1.58	20	
Lead, total	0.0918	0.0008	mg/L	0.100	ND	91.8	70-130	1.13	20	
Nickel, total	0.102	0.0040	mg/L	0.100	0.0076	94.4	70-130	1.58	20	
Selenium, total	0.0970	0.0040	mg/L	0.100	0.0017	95.3	70-130	3.15	20	
Silver, total	0.0941	0.0020	mg/L	0.100	ND	94.1	70-130	0.622	20	
Zinc, total	0.109	0.0200	mg/L	0.100	0.0248	84.1	70-130	0.786	20	
Post Spike (1HJ1459-PS1) Source: 1HJ1689-02 Prepared: 10/24/24 07:51 Analyzed: 10/25/24 11:00										

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CERTIFICATE OF ANALYSIS

1HJ1874

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1459 - EPA 200.2 Total ICP-MS - EPA 200.8, Rv. 5.4 (1994)										
Post Spike (1HJ1459-PS1) Source: 1HJ1689-02 Prepared: 10/24/24 07:51 Analyzed: 10/25/24 11:00										
Arsenic, total	0.0822		mg/L	0.0800	0.0058	95.5	70-130			
Barium, total	0.143		mg/L	0.0800	0.0792	79.1	70-130			
Cadmium, total	0.0711		mg/L	0.0800	-0.00002	88.8	70-130			
Chromium, total	0.0808		mg/L	0.0800	0.0054	94.3	70-130			
Copper, total	0.102		mg/L	0.0800	0.0331	85.9	70-130			
Lead, total	0.0696		mg/L	0.0800	0.0003	86.5	70-130			
Nickel, total	0.0812		mg/L	0.0800	0.0074	92.2	70-130			
Selenium, total	0.0708		mg/L	0.0800	0.0017	86.4	70-130			
Silver, total	0.0716		mg/L	0.0800	0.00004	89.5	70-130			
Zinc, total	0.0885		mg/L	0.0800	0.0243	80.3	70-130			

Batch 1HJ1758 - EPA 7470A Hg Water - 245.1

Blank (1HJ1758-BLK1) Prepared: 10/29/24 15:09 Analyzed: 10/30/24 15:07										
Mercury, total	<0.00050	0.00050	mg/L							
LCS (1HJ1758-BS1) Prepared: 10/29/24 15:09 Analyzed: 10/30/24 15:09										
Mercury, total	0.00248	0.00050	mg/L	0.00250		99.2	85-115			
Matrix Spike (1HJ1758-MS1) Source: 1HJ1746-04 Prepared: 10/29/24 15:09 Analyzed: 10/30/24 15:21										
Mercury, total	0.00253	0.00050	mg/L	0.00250	ND	101	70-130			
Matrix Spike Dup (1HJ1758-MSD1) Source: 1HJ1746-04 Prepared: 10/29/24 15:09 Analyzed: 10/30/24 15:23										
Mercury, total	0.00262	0.00050	mg/L	0.00250	ND	105	70-130	3.61	10	

Definitions

- A9:** Sample was improperly preserved.
- H:** Sample was analyzed past holding time.
- 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.
- M1:** Matrix spike recovery is above acceptance limits.
- Q11:** Analysis of 2-chloroethyl vinyl ether was performed from a sample that was field preserved to pH < 2 with HCl. Acid preservation is not allowed for this parameter by the test method or for NPDES compliance per 40CFR Part 136.
- R1:** Duplicate RPD is outside acceptance criteria.
- RL:** Reporting Limit
- RPD:** Relative Percent Difference
- S5:** Surrogate recovery is outside of acceptance limits. There is no sample available for reanalysis.

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 1.6°C

Cooler Inspection Checklist

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



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ1874

Report Comments

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

Reviewed and Approved By:

A rectangular box containing a handwritten signature in black ink that reads "Heather Murphy".

Heather Murphy
Customer Relationship Specialist
heather.murphy@microbac.com
11/13/24 13:57

CHAIN OF CUSTODY RECORD



600 East 17th Street Sc
 Newton, IA 50208
 641-792-9451



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SITE INFORMATION

Sampler:
 Project: RIWMA Annual Leachate
 Annual Leachate

REPORT TO

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

Harm Jass
 HLW Engineering
 204 West Broad St
 Story City, IA 50248

HLW Engineering
 PM: Heather Murphy

SPECIAL INSTRUCTIONS

None

Turn Around Time

Standard RUSH, need by ___/___/___

LAB USE ONLY

Work Order 1HJ1874
 Temperature 11.6
 Turn-Cooler: No

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

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses	Lab Sample Number
-001	Leachate	Aqueous	GRAB	<u>10/22/24</u>		<u>16</u>	608-107 • 624-105 • ag-t-200.8 • ba-t-200.8 • cd-t-200.8 • cu-t-200.8 • hg-t-245.1 • ni-t-200.8 • pb-t-200.8 • se-t-200.8 • tkm-351.2 • tss-i-3765-85 • 624@dibromochloromethane 625-116 • as-t-200.8 • bod-5210 • cr-t-200.8 • fe-t-200.7 • nh3-timberline • og-t-1664 • ph-4500 • trs-i-1750-85 • toc-5310b • zn-t-200.8 •	<u>01</u>

[Signature] 10/23/24
 Relinquished By Date/Time

[Signature] 10/23/2024 10:20
 Relinquished By Date/Time
[Signature] 10/23/2024 10:20
 Received for Lab By Date/Time

Received By Date/Time

Remarks:

Original - Lab Copy Yellow - Sampler Copy