2024 ANNUAL GROUNDWATER QUALITY REPORT

FOR THE
MARSHALL COUNTY SANITARY LANDFILL
64-SDP-2-75P
MARSHALLTOWN, IOWA

by:

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Certification

Prepared by: ________________________________ Date: 1-22-2025

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Section 1.0 Background Information

1.1 Report Format

Table 1 through Table 17 are attached to this report and satisfy the IDNR requirement to provide the tables to meet the IDNR format requirements included in Special Provision 4i of Revised Permit #5, dated August 14, 2024 (Doc #110693).

1.2 Report Priority

No special priority is requested related to the review of this document.

A groundwater characterization study was performed in the vicinity of MW-96R and was submitted to IDNR on January 17, 2024 (Doc #108834). The study identified an alternate source for the elevated concentrations of arsenic and cobalt at MW-96R. The elevated arsenic and cobalt are not attributed to a landfill or landfill gas source. This study was approved in the IDNR Letter dated May 28, 2024 (Doc #110151) and MW-96R is herein designated a downgradient point of compliance well in detection monitoring.

1.3 Period of Report Coverage

Water quality data includes a running compilation of data beginning in March, 2008. Statistical evaluations herein are based only upon the "no-purge" data collected October 16, 2014 through the most recent. The 2024 data collection events occurred January 25, 2024 (verification sampling); April 16, 2024; July 18, 2024 (verification sampling); and October 15, 2024.

1.4 Current Site Map

Figure 1 is attached illustrating the current site features and monitoring locations.

1.5 Site Status and Applicable Rules

<u>Site Location</u>

The Marshall County Sanitary Landfill is located in SE1/4 Section 31, T84N, R18W and the west 970 feet of SW1/4 Sections 32, T84N, R18W, and part of the NW1/4 Section 5, T83N R18W, and part of the NE1/4 Section 5, T83N R18W. The site encompasses approximately 388 acres. The facility is situated on Marshalltown Boulevard approximately 1 mile southwest of the corporate limits of Marshalltown, Iowa. The facility operates under the Iowa Department of Natural Resources (IDNR) Permit Number 64-SDP-2-75P.

<u>Landfill Layout</u>

The site is situated in the uplands between the Iowa River valley to the north and the Linn Creek alluvial valley to the south. Expansion Areas are designated Area B-1, B-2, B-3, and B-4, and Areas C/D. Areas B-1, B-2, B-3, and Area C/D are closed. Area B-4 is the active RCRA Subtitle D landfill expansion area.

<u>Applicable Rules</u>

Iowa Administrative Code (IAC) 567-113 is applicable to the site due to the contiguous nature of the closed Areas B-1, B-2, B-3, C/D and the active area (B-4).

1.6 Summary of Hydrologic Monitoring System Plan (HMSP)

The approved HMSP includes fifteen (15) monitoring wells, a tile line discharge pipe (SRAMP-B), and a discharge point from a Passive Engineered Conveyance System (PECS-B). MW-66, MW-85, MW-98, and MW-99 are the designated background/upgradient wells for the facility. The Site Plan and the approved monitoring network is illustrated on Figure 1. The current HMSP is summarized in Table 1. The HMSP Implementation Schedule for 2025 is itemized in Table 2.

MONITORING WELL MAINTENANCE PERFORMANCE REEVALUATION

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

High & Low Water Levels

Current year water elevation data is included on Table 4. Historic water elevation data (1992 to 2024) is included in the Table 4A Supplement. The maximum depth to water and the minimum depth to water are included in the tables. A Water Table Contour Map (Figure 2) dated October, 2024 is included with this report. The Water Table Contour Map illustrates the water table surface and the effects of the topography.

Review of the October 15, 2025 water elevation data indicates that the readings generally represent a low water table condition within the historic water table surface elevation range.

Well Depth & Sedimentation

Well depth measurements were made on October 15, 2024. Review of the well depth data included on Table 4 indicate that well sedimentation is estimated to be 1.1 foot, or less, at all site monitoring wells. Based on this recorded data, recharge to the individual wells is sufficient to promote collection of representative water quality samples and the wells are functioning as intended.

Well Recharge Rates & Chemistry

The monitoring wells included in the HMSP were installed at various times between 1989 and 2022. Monitoring Well Maintenance Performance Reevaluations (MWMPR's) were completed every five (5) years in accordance with previous rules (June, 1996; May, 2001; and March, 2006). The MWMPR's were submitted to IDNR. All reports concluded that the integrity of all monitoring wells was intact, and that no changes in monitoring system were recommended.

Monitoring well recharge reevaluation is now due biennially according to 113.10(2)f. Field recovery data for April 16, 2024 is recorded on Table 4. Review of the recorded field data on IDNR Form 542-1322 for April 16, 2024, indicate that water levels within each well generally recover (fully or in excess of 90%) within 8 hours following purging. MW-95 required longer than 8 hours, but less than 24 hours to recover. Well recovery information indicates that recharge to the individual wells remained sufficient to promote collection of representative water quality samples and the wells were functioning as intended. Monitoring well recharge reevaluation is due biennially according to 113.10(2)"f", and should be evaluated again in 2026.

A Groundwater Contour Map (Figure 2) dated October 15, 2024 is attached. Review of the map confirms little change in the water table surface since 2017 when Subarea B-4-7 was constructed.

Based on the apparent static condition of the water table across the site, the conclusions of the Monitoring Well Maintenance Performance Reevaluation, 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. Further, the wells are interpreted to be appropriately located to detect any impact, should it occur. No changes or modifications to the site monitoring wells are recommended.

MW-66 was dry in October, 2017 following the completion of the groundwater underdrain system in Subarea B-4-7 and remained dry through 2024. MW-66 is expected to remain dry permanently. MW-66 has performed as a background well for the facility. Since there are no background well spacing requirements in rule, the well may, or may not, be replaced in the future, dependent upon needs. The available background data from MW-66 will be maintained in the background data pool going forward.

MW-96 was plugged on July 13, 2020 to make way for road improvements at the site. The well abandonment records (Doc #98067) were approved on September 30, 2020 (Doc #98549). MW-96 was replaced with MW-96R, constructed October 23, 2020. Construction documentation was submitted to IDNR on November 6, 2020 (Doc #98866). MW-96R is in the HMSP with the initial sampling event completed in April, 2021.

Alternate Source – MW-96R
As discussed previously in this report, an alternate source for the elevated metals at MW-96R has been documented (Doc # 108834) and was approved by IDNR on May 28, 2024 (Doc #110151).

Based on the identified alternate source, Statistically Significant Increases (SSI) and/or Statistically Significant Levels (SSL) for inorganic compounds will be identified if both the interwell prediction limit and the intrawell control limit are exceeded at MW-96R.

An insufficient number of data points are currently on record for a robust background at MW-96R. The database for MW-96R will increase with time. The minimum complete intrawell data set for all inorganic compounds at MW-96R will be achieved in 2027.

Section 2.0 Reporting Period Monitoring Activities

Table 1 and Table 2 include information related to the Monitoring Activities at this facility. A summary of all well testing beginning March 28, 2008 is included in the Table 2A Supplement.

Field sampling information for the April 16 2024 and October 15, 2024 sampling episodes is included on the field forms (IDNR Form 542-1322) in Appendix A.

A comprehensive summary of Analytical Results for the episodes between March 28, 2008 and October 15, 2024 is included in Table 9. A summary of the Appendix II sample collection events at each well is included on Table 2.

2.1 Current Detection Monitoring Activities

Background wells MW-66, MW-85, MW-98, and MW-99; and downgradient monitoring wells MW-87, MW-89, MW-93, MW-95, MW-96R, MW-97, and tile line SRAMP-B are the wells/points on site that remain in detection monitoring.

2.2 Current Assessment Monitoring Activities

Monitoring well MW-91 is included in the assessment monitoring program.

The full Appendix II parameter list is analyzed on an approved five (5) year frequency at all assessment wells. Approval of the five (5) year frequency is included in Special Provision 4.f. of Revised Permit #1, dated September 7, 2022 (Doc #103965).

The most recent full Appendix II sampling was completed in 2023 at MW-91.

The IDNR Letter dated August 23, 2017 (Doc #90171) approved a five (5) year frequency for the ongoing bis (2-ethylhexyl) phthalate testing (corresponds to the approved frequency of the Full Appendix II sample collection events).

2.3 Passive Engineered Conveyance Structure (PECS) Monitoring

The SRAMP diversion tile line near Area B-2 is discharged into a PECS (Figure 3). The tile line end where sampling is performed is designated SRAMP-B. The discharge from the PECS is designated as sampling point PECS-B. Note that the SRAMP tile line (SRAMP-B) and the associated PECS (PECS-B) are commonly recorded as being dry.

2.4 Supplemental Monitoring Points

Monitoring wells MW-49, MW-54, MW-81, and MW-94 are supplemental monitoring points within the Corrective Action Monitoring System (Figure 4). Sampling frequency is semi-annually at MW-49, MW-54, MW-81, and MW-94 for Appendix I compounds, and annually for dissolved methane, ethane, ethene and for alkalinity and pH.

2.5 Correction Action Monitoring Activities

Leachate Well LW-75 and Passive Gas Vents 1-27 are the Corrective Action Monitoring Points (CAMP). Sampling frequency at LW-75 is annually with analysis for Appendix I VOC, total arsenic, total cobalt, ammonia (as nitrogen), sulfate, chloride, TDS, BOD5, dissolved methane, ethane, ethene, alkalinity, and pH. The passive gas vents are monitored quarterly for percent lower explosive limit (%LEL).

Section 3.0 Data Evaluation and Summary

Statistical Evaluations are prepared by Otter Creek Environmental Services for the Spring and Fall monitoring episodes. The Groundwater Statistics Report for the Marshall County Sanitary Landfill, First Semi-Annual Monitoring Event in 2024, dated May, 2024 is included in Appendix B.1. The Groundwater Statistics Report for the Marshall County Sanitary Landfill, Second Semi-Annual Monitoring Event in 2024, dated November, 2024 is included in Appendix B.2.

The Analytical Reports for the laboratory testing from 2024 (January 25, 2024 (verification sampling); April 16, 2024; July 18, 2024 (verification sampling); and October 15, 2024) sampling events are included in Appendix C.

QUALITY ASSURANCE/QUALITY CONTROL

A blind duplicate sample was collected at MW-96R during the April 16, 2024 sampling episode. A blind duplicate was collected at MW-95 during the October 15, 2024 sampling episode.

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

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

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

The results of the blind duplicate and the monitoring well results (April 16, 2024 and October 15, 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 # 80716). A TSS and Field Turbidity Evaluation Report was prepared and submitted on February 24, 2015 (Doc# 82541), and was approved by IDNR in the September 30, 2015 IDNR Response Letter (Doc #84311). The approved TSS and Field Turbidity Evaluation Report includes a requirement to evaluate and sort data within the background data pool and retain only data that is validated as appropriate.

The background data has been limited to only the data collected by "no-purge" sample collection methods since October 2014. A summary of the field turbidity data at each well associated with the "no-purge" sample collection events is included in Appendix D. No events occurred during sampling in 2024 that induced mechanically increased turbidity. The turbidity values recorded are representative of the natural formation during each sample collection event and all samples are deemed appropriate for use in evaluating the site.

Upgradient Data, Table 1, Attachment B, to the November 2024 Statistical Evaluation Report (Appendix B.2) includes a summary of the background data. The calculated Prediction Limits are summarized on Table 5. Table 5 also included the calculated Control Limits utilized in the intrawell evaluations at MW-93 and MW-96R.

Outlier testing is applied to the background data pool to identify and remove extreme values. Dixon's Test Outliers 1% Significance Level, Table 6, Attachment B, to the November 2024 Statistical Evaluation Report (Appendix B.2) includes a summary of the outlier testing results.

SITE SPECIFIC GWPS

Review of the inorganic Prediction Limits in Table 5 indicates that the prediction limit for cobalt (currently 5.9879 ug/L) calculated from the background data exceeds the published IAC 567, Chapter 137 Statewide Standard (2.1 ug/L). The Site-Specific GWPS should not be set lower than the Site Prediction Limit calculated from the site background data. *For this report, the published IAC 567, Chapter 137 Statewide Standards are used as the GWPS, except for cobalt, where the Site Specific GWPS of 5.9879 ug/L is utilized. The Site Specific GWPS for cobalt is equivalent to the Site Prediction Limits.*

Note also that the Intrawell Control Limits calculated for inorganic compounds at MW-93 and MW-96R typically exceed the published IAC 567, Chapter 137 Statewide Standards.

STATISTICALLY SIGNIFICANT INCREASES (SSI)/EXCEEDANCES OF LIMITS

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

Since the Prediction limit for VOC is set at the laboratory Method Reporting Limit, any VOC detection is recorded as an SSI. Table 6 is a summary of all compounds at site monitoring wells that have exceeded a *current* prediction limit (in 2024). There are no prediction limit exceedance recorded in the current detection monitoring system wells. MW-66, MW-85, MW-98, MW-99, MW-87, MW-89, MW-91, MW-95, MW-97, and SRAMP-B remain in the detection monitoring system. There were prediction limit exceedances recorded at MW-93 and MW-96R in 2024.

However, MW-93 and MW-96R are evaluated by intrawell statistical methods in addition to the interwell statistical methods. Interwell prediction limit exceedances at MW-93 and MW-96R are not considered to be SSI, unless the intrawell control limits for MW-93 and MW-96R are also exceeded. There are *no exceedances* of the intrawell control limit at MW-93 or MW-96R. Therefore, no SSI are recorded at MW-93 or MW-96R.

This method of a two (2) part statistical evaluation (interwell and intrawell) where an SSI is identified only when both the interwell prediction limit and the intrawell control limit are exceeded is explicitly approved for MW-96R in the IDNR Letter dated May 28, 2024 (Doc #110151). The same method of evaluation is also applied at MW-93 which was approved for intrawell statistical evaluation on June 1, 2020 (Doc #97844).

The prediction limit versus results evaluations are included in Table 7. SSI are highlighted in light brown on Table 7. Historically, SSI are recorded at MW-91 and MW-91 is included in the assessment monitoring program.

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

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

Intrawell Statistical Evaluations
MW-93 and MW-96R are evaluated by Intrawell statistical methods for inorganics. Any detected VOC would be considered an SSI. To date both MW-93 and MW-96R are free of VOC detections.

MW-93 is the lagoon monitoring point and is determined to be situated in a distinct hydrogeological setting at the site. Intrawell statisitical evaluations have been ongoing at MW-93 based on data collected since October 16, 2014. The background dataset is robust and includes 13 data points at MW-93.

MW-96R is a downgradient point of compliance well, also situated in a unique hydrogeologic setting. The subsurface environment at MW-96R is documented to be low pH with reducing conditions. The subsurface environment is documented to be free of indications of direct landfill impacts or landfill gas impacts. The subsurface environment is identified as an alternate source of the elevated inorganics at MW-96R. Intrawell statistics are employed at MW-96R in order to evaluate the natural concentrations of inorganic compounds.

Based on the Intrawell Statistical Evaluations at MW-93 and MW-96R, there are no control limit exceedances and no SSI are identified at MW-93 or MW-96R. Table 7A includes summary data related to the intrawell evaluations at MW-93 and MW-96R.

Time Series Trends - Source Area
The Supplemental Wells MW-49, MW-54, MW-81, and MW-94 are not evaluated by interwell or intrawell statistical methods. Instead, ongoing time series trend analyses of the Supplemental

Wells is utilized to track changes in the source area. Time series graphs are included in Appendix B.3. Any significant increasing or decreasing trends are noted on the respective graphs.

ASSESSMENT MONITORING

The full Appendix II (assessment) monitoring events have historically been completed at MW-49, MW-54, MW-81, MW-87, MW-89, MW-91, MW-93, MW-94, and MW-96R. Bis (2 ethylhexyl) phthalate was the only Appendix II compound detected (beyond the Appendix I list).

Full Appendix II List Assessment Monitoring is required on a five (5) year frequency as approved by Special Provision 4.f. of the Revised Permit #4, dated October 25, 2023 (Doc #108057). The most recent full Appendix II sampling event occurred in 2023, as summarized in Table 2.

The list of assessment monitoring compounds that were historically required in those years when full Appendix II was not performed consists of the Appendix I compounds plus bis (2 ethylhexyl) in accordance with 113.10(6)"d"(2). The IDNR Letter dated August 23, 2017 (Doc #90171) approved a five (5) year frequency for the ongoing bis (2-ethylhexyl) phthalate testing (corresponds to the approved frequency of the Full Appendix II sample collection events).

A summary of bis(2-ethylhexyl) phthalate testing to date is presented in Appendix F. The full Appendix II sampling episodes are highlighted in green in the tables in Appendix F.

STATISTICALLY SIGNIFICANT LEVELS (SSL)

The compounds with detections that exceed site prediction limits (see summary in Tables 6 & 7) are utilized to calculate the Confidence Interval (the 95% lower confidence limits (LCL) and the 95% upper control limits (UCL)) in accordance with the 2009 Unified Guidance for Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities by US EPA. The 95% LCL values are compared to applicable GWPS. Any 95% LCL value that exceeds an applicable GWPS is recorded as an SSL. All wells with a recorded SSL require the plume of impact to be defined in the horizontal and vertical directions and require completion of an Assessment of Corrective Action (ACM). *Note that there are no SSL recorded at any point of compliance (POC) or at any attenuation zone point of compliance (AZPOC) well.*

ACM, CORRECTIVE ACTION PLAN, CORRECTIVE ACTION MONITORING

Completed exposure pathways have not been identified and the findings of the approved Human Health Risk Assessment (1995) are unchanged.

The impact(s) have been delineated in the horizontal and vertical extent, with an Assessment of Corrective Measures Report submitted December 19, 2012 (Doc #75392) and revised and submitted on July 20, 2017 (Doc #90008), with an Amendment to the ACM submitted May 23, 2019 (Doc #95276). Delineation Reports in the vicinity of MW-94 were submitted December 18, 2013 (Doc #78985) and January 28, 2016 (Doc #85296).

Corrective Measures activities related to MW-49, MW-54, MW-81, and MW-94 were constructed in July, 2017. The corrective measure incorporated twenty-seven (27) passive vents through the landfill cap in Subarea B-3.

The selected remedy is monitored natural attenuation coupled with passive landfill gas vents 1-27 (Figure 4). The December 18, 2019 Corrective Action Plan (CAP), Doc #96631, was approved by IDNR on May 19, 2020 (Doc #97777) and is incorporated into Revised Permit #4, dated October 25, 2023 (Doc #108057).

Evaluation of CAMP point LW-75
Available leachate quality data is summarized in Table 14. To date there are no discernable trends in data. It is noted that the VOC concentrations detected in 2023 and 2024 appear higher than the previous years' results. The assumption is that any trends in data will be identified as additional data is gathered over time. As previously documented, leachate quality differs remarkably from the water quality in perimeter groundwater wells.

Evaluation of CAMP Passive Gas Vent Performance
The methane concentrations as % LEL were recorded quarterly at each of the twenty-seven (27) vents in the cap of Area B-3 (Figure 1). The results are included on Table 15. Note that there is not an enforceable level for vented landfill gas in rule.

Gas continues to vent from the closed landfill. Trend lines are included on the graphs included with Table 15. No site-wide downward trends in gas concentrations are observed based on the available data.

Evaluation of CAMP Methane, Ethane, Ethene, Alkalinity, and pH Monitoring
Dissolved methane, ethane and ethene along with alkalinity and pH testing are performed annually at Supplemental Wells MW-49, MW-54, MW-81, and MW-94, and at leachate well LW-75 (Table 16).

The annual CAMP sampling for the permanent gases began in 2020 and sufficient data is not yet available to determine trends in Methane, Ethane, Ethene, Alkalinity, and pH. The annual testing will again be performed in 2025.

PROGRESS TOWARDS REMEDY COMPLETION

The December 18, 2019 Corrective Action Plan (CAP), Doc #96631, was approved by IDNR on May 19, 2020 (Doc #97777) for the monitored natural attenuation. The supplemental wells (MW-49, MW-54, MW-81, and MW-94) within the plume continue to demonstrate impact (see Time Series Plots in Appendix B.3. However, impact at the AZPOC wells (MW-91, MW-89, MW-87, and MW-97, respectively) has not been detected to date (beginning April 14, 2016). Impact is defined as any concentration exceeding an applicable GWPS. Table 17 is included to visually demonstrate the findings at the AZPOC wells. The remedy has been demonstrated to be complete and properly performing since Spring, 2023 (upon completion of the 3-year demonstration (May, 2020 to May, 2023)).

Section 4.0 Leachate Collection System Performance Evaluation

Leachate System

Leachate level measurements are competed monthly. The measurements for 2024 are summarized in Table 12.

Area B-4 LCP

Area B-4 consists of all EPA Subtitle D compliant disposal areas constructed to date. The leachate collection systems in Subareas B-4-1 and B-4-2 were completed in October, 1995 and October, 1996, respectively. The leachate collection system in Subarea B-4-3 was completed in October, 2001. The leachate collection system in Subarea B-4-4 was completed and approved for acceptance of waste on September 11, 2002. The leachate collection system in the 2008 Abutment Area was completed and approved for acceptance of waste on October 14, 2008. The leachate collection systems in Subarea B-4-5/B-4-6 were completed and approved for acceptance of waste on October 6, 2010 (Phase I) and July 22, 2011 (Phase II). The leachate collection system in the Area B4-3,4,5 Abutment Liner was completed and approved for acceptance of waste on August 6, 2013. The leachate collection system in Subarea B-4-7 was completed and approved for acceptance of waste on August 28, 2017. Maps illustrating all Area B-4 leachate collection lines and all Area B-4 groundwater diversion lines (all connected to the LCP) are included in Appendix G.1. Note that the groundwater collection lines along the east and west side of the pond were modified as illustrated in Figure 3 of the report and on the Figure in Appendix G.1.

Two (2) leachate head monitoring points were constructed in Subarea B-4-6 in September, 2010. One (1) was constructed on the landfill base (LPZ-101), while the other was constructed in the leachate pipe backfill along the leachate pipe at the low point (LPZ-102). An additional leachate head monitoring point was constructed in Subarea B-4-7 in 2017 (LPZ-106). LPZ-106 was constructed on the landfill base. The locations of the leachate head monitoring points are included on the Figure 1 in Appendix G.1. Note that these leachate head monitoring points are located on the downgradient end of the Subtitle D disposal areas. The leachate head monitoring point measurements are included in Table 12. The data indicates that liquid levels in each monitoring point are well below the 12-inch maximum limit.

Groundwater Separation – Area B-4

Special Provision X.4.h in Revised Permit #5, dated August 14, 2024 (Doc #110693) requires semi-annual measurement of liquid levels in GPZ-105. The 2024 summary of measurements is included in Table 4. The liquid level in GPZ-105 in 2024 indicates acceptable separation between the landfill liner and the water table.

Area B-1, B-2, B-3, and C/D LCP

Leachate head level data collected in 2024 is included in Table 12. Leachate head level data collected since October 1992 is attached (Appendix G.2). A Map illustrating the location of the leachate wells is also included in Appendix G.2. Landfill base elevations at leachate monitoring points is recorded as:

LHMW-73 = 963.69
LHMW-75 = 1004.52
LHMW-78 = 965.76
LHMW-79 = 987.27

LHMW-73, located nearest to the leachate collection system (toe drain). The leachate head level at LHMW-73 is relatively static over time. In 2024, the head on the liner was between 0.40 feet and 0.44 feet above the landfill base elevation (963.69).

LHMW-75 is located in Area B-3. Existing leachate elevation data between 2001 and 2024 indicates a relatively static condition with approximately 10 to 17 feet of leachate thickness.

LHMW-78 and LHMW-79, situated in the former wet weather area (Area C/D), exhibit static trends in head levels. The variations in the water table appear to represent sub-seasonal fluctuations in the leachate surface. Based on October, 2024 measurements, 8.52 feet and 8.66 feet of liquid are measured in LHMW-78 and LHMW-79, respectively.

Based on water levels in perimeter MW's, the groundwater table is above the Area B landfill base on the north side, and more than 5 feet below the landfill base on the south side as a result of the leachate/groundwater collection system. It appears that the leachate collection toe drain south of Area B-1 controls the water surface and effectively lowers the water table in the vicinity of the leachate collection line.

A Human Health Risk Assessment was completed for the Marshall County Landfill on June 27, 1995. Based on the low-risk designation, the Solid Waste Management Commission of Marshall County applied for an exemption to additional leachate collection system requirements (June 27, 1995) in Areas B-1, B-2, and B-3. This exemption was approved in the March 1, 1996 Permit.

Leachate Treatment and Testing

Leachate is pumped to the City of Marshalltown Sanitary Sewer System for treatment and disposal in accordance with the pretreatment agreement between the City of Marshalltown and the Solid Waste Management Commission of Marshall County (Appendix G.3). Between January 1, 2024 and December 31, 2024, approximately 3,057,064 gallons of leachate were discharged to the Marshalltown POTW (Appendix G.4). Discharge occurred as two (2) separate events, the first in April (1,257,168 gallons) and the second in August/September (1,799.896 gallons). Chemical analysis of the waste stream as required by the pretreatment agreement is included in Appendix G.5.

Leachate Recirculation

A Leachate Recirculation Operation Plan was submitted to IDNR on April 9, 2019 (Doc #94860). Leachate recirculation was approved in Special Provision X.5 of Permit Revision #7 dated April 18, 2019. As per the approved Leachate Recirculation Operation Plan, leachate levels in LPZ-101 and LPZ-106 were measured weekly during recirculation operations. In 2024 approximately 780,000 gallons of leachate were recirculated using a tank wagon. The "Daily/Weekly Leachate Recirculation Logs" are included in Appendix G.6.

Leachate Line Cleaning

The leachate gravity collection and conveyance lines throughout the system in Area B were cleaned in August, 2024. IAC 567-113.7(5)b(5) requires that the leachate collection lines be cleaned every three (3) years. In accordance with rule, the next leachate line cleaning is scheduled for 2027.

Performance Evaluation

No modifications to the leachate collection system are recommended for 2025.

Section 5.0 Gas Monitoring

Explosive gas monitoring is conducted per 113.9(2) and Special Provision 6 of the Revised Permit #5, dated August 14, 2024 (Doc #110693). Gas Monitoring was performed quarterly in 2024 and will continue on a quarterly frequency moving forward. The following monitoring points are included in the approved GMSP, as illustrated on Figure 1.

Scale Pit -	ambient air/subsurface sump
Scale House -	indoor air
Electronics Shed -	indoor air
Garage -	indoor air
Shop -	indoor air
Cold shop -	indoor air
GP-1 -	subsurface
GP-2 -	subsurface
GP-3 -	subsurface
GP-4 -	subsurface
GP-5 -	subsurface
GP-6 -	subsurface
GP-7 -	subsurface
GP-8 (MW-213) -	subsurface
GU-2 -	underdrain
GU-3 -	underdrain

A summary table of gas monitoring is included as Table 13. Explosive gas concentrations are recorded as percent lower explosive limit (%LEL) and were below actionable levels during the monitoring episodes.

Section 6.0 Conclusions & Recommendations

Continue detection, assessment, and corrective action monitoring in accordance with the current HMSP and the CAMP.

The Corrective Action Plan appears to be functioning as intended. Evaluation of the CAP indicates that the water quality concentrations of concern at the AZPOC wells have been below the 95% UCL since the remedy was constructed in July, 2017 (Table 7). No GWPS have been exceeded for three (3) years since the remedy was selected per 113.10(8). The remedy is considered completed.

Water quality in the Supplemental Wells is also relatively unchanged since last year.

Leachate quality trends at LW-75 and gas quality trends measured at Passive Gas Vents do not yet demonstrate clear trends based on the limited data. Likewise, insufficient data is available to evaluate dissolved methane, alkalinity, and pH in the Supplemental Wells and leachate well LW-75. To date, ethane and ethene are undetected.

Figures

SITE PLAN WITH SUBSURFACE GAS PROBE LOCATIONS

MARSHALL COUNTY SANITARY LANDFILL
MARSHALLTOWN, IOWA

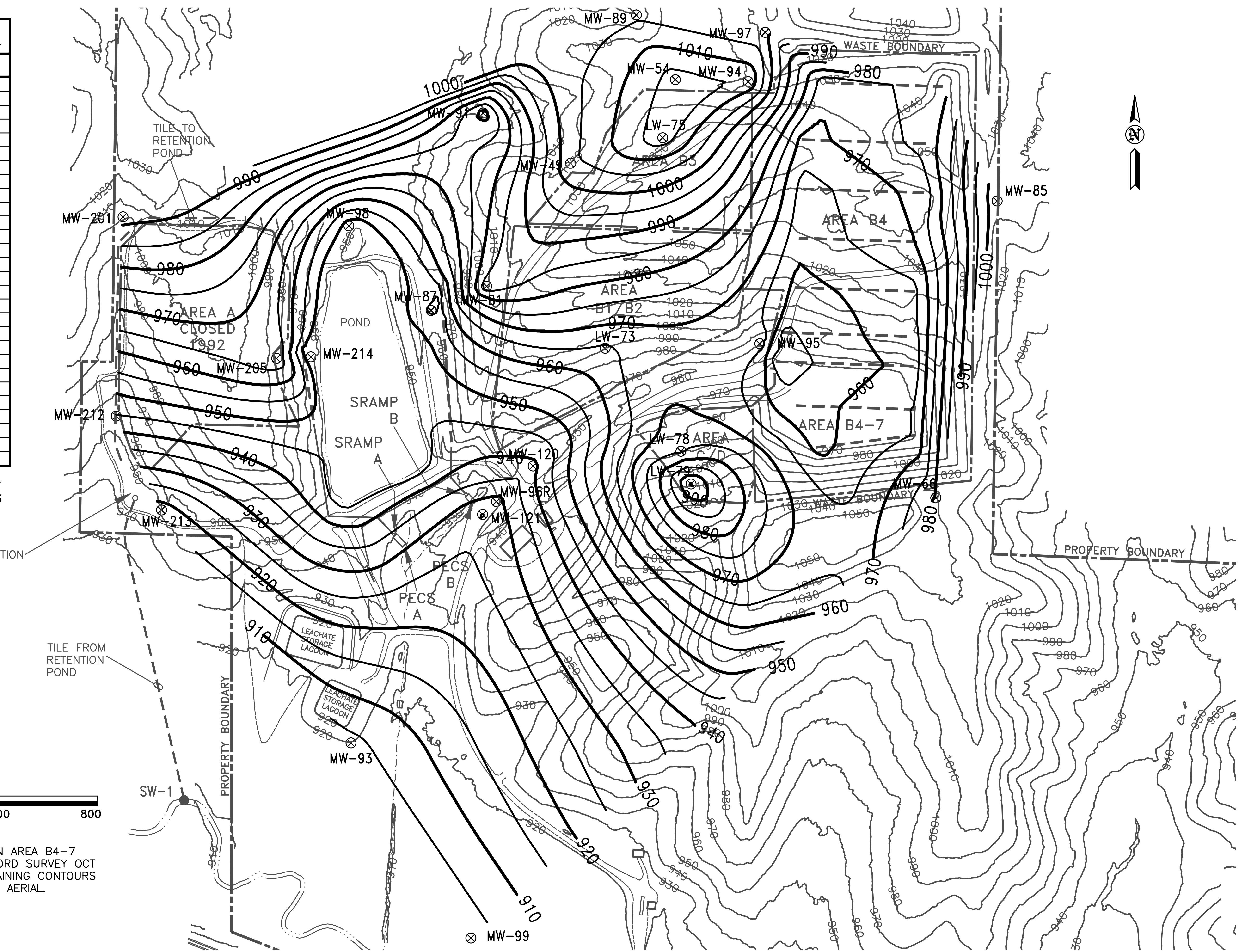
FIGURE: 1

REVISION	NO.	DATE
DRAWN DRA	PROJECT NO. 6003	DATE 1-8-25

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 15, 2024	
WELL	ELEV.
MW-49	1003.60
MW-54	1017.43
MW-66	<980.54
MW-81	988.16
MW-85	1003.89
MW-87	956.22
MW-89	1004.04
MW-91	967.07
MW-93	903.49
MW-94	1014.89
MW-95	968.14
MW-96R	928.04
MW-97	1001.23
MW-98	946.48
MW-99	902.24
MW-120	938.58
MW-121	924.83
MW-201	991.92
MW-205	969.37
MW-212	944.65
MW-213	917.45
MW-214	945.51
LW-73	964.09
LW-75	1018.35
LW-78	974.28
LW-79	995.93

NOTE: ELEVATION OF MW-66 REPRESENTS THE BOTTOM OF A DRY WELL.



0 200 400 800

CONTOURS WITHIN AREA B4-7 FROM BASE RECORD SURVEY OCT 16, 2017. REMAINING CONTOURS FROM SEP, 2017 AERIAL.

GROUNDWATER CONTOUR MAP

MARSHALL COUNTY SANITARY LANDFILL
MARSHALLTOWN, IOWA

FIGURE: 2

REVISION	NO.	DATE
DRAWN DRA	PROJECT NO. 6003	DATE 1-8-25

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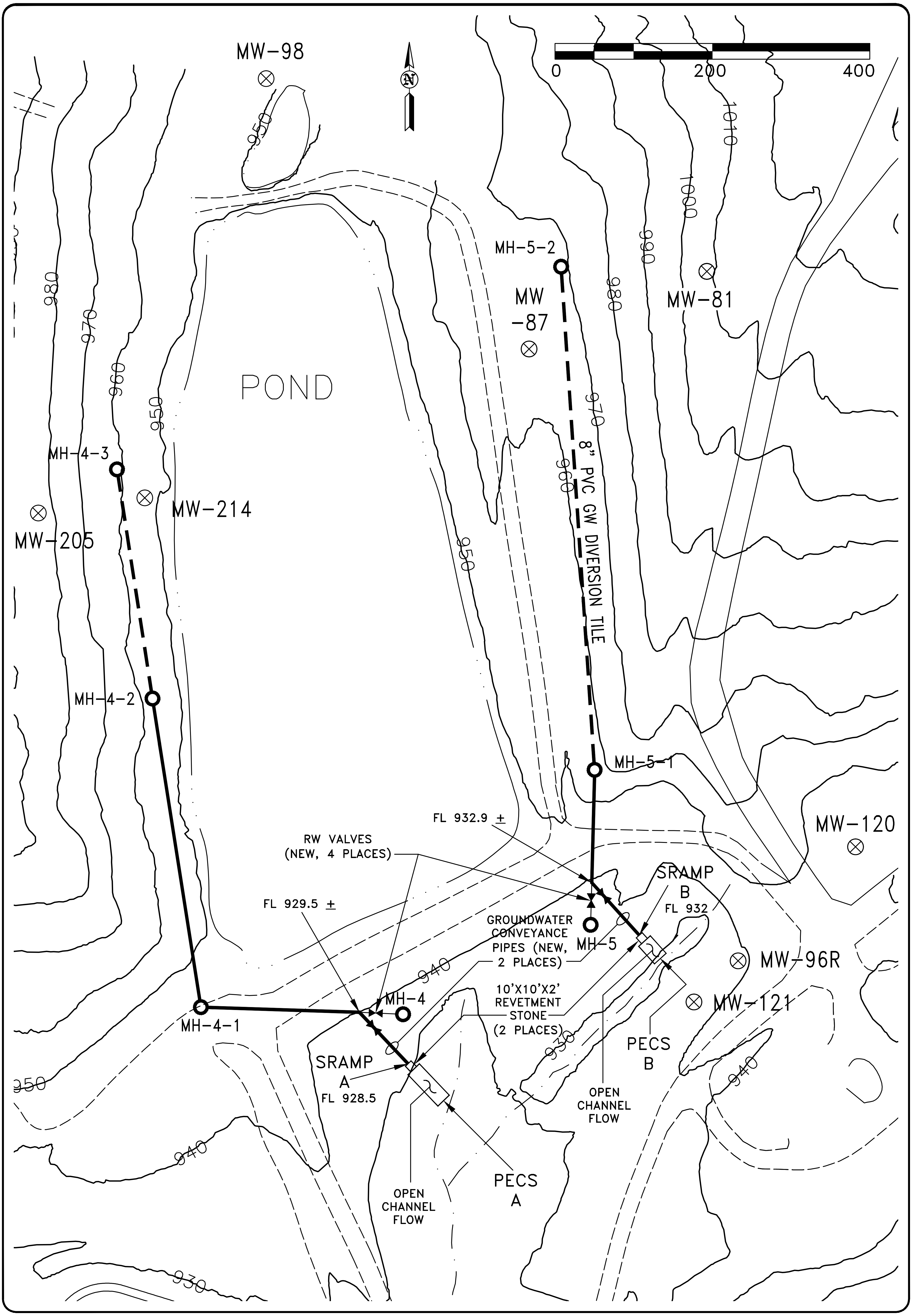

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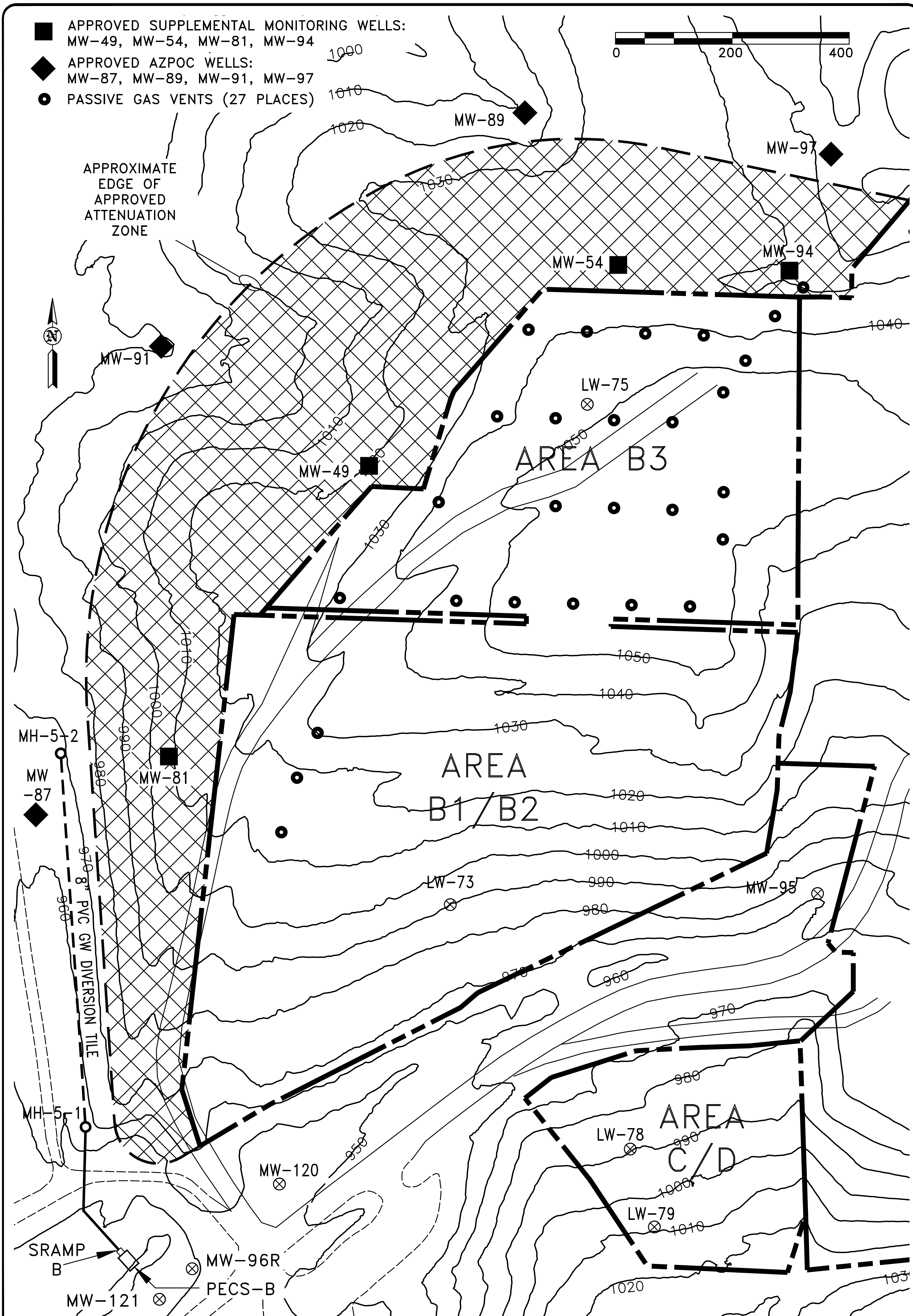
SRAMP-B & PECS-B LOCATION MAP

MARSHALL COUNTY SANITARY LANDFILL
MARSHALLTOWN, IOWA

FIGURE:	3	
REVISION	NO.	DATE
DRAWN DRA	PROJECT NO. 6003	DATE 1-8-25



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CORRECTIVE ACTION PLAN MAP

MARSHALL COUNTY SANITARY LANDFILL
MARSHALLTOWN, IOWA

FIGURE: 4		
REVISION	NO.	DATE
DRAWN DRA	PROJECT NO. 6003	DATE 1-8-25

ARSENIC		
WELL	GWPS	ug/L
MW-81	10.0	6.0
MW-87	10.0	<4.0
MW-49	10.0	520
MW-91	10.0	<4.0
MW-54	10.0	5.4
MW-89	10.0	<4.0
MW-94	10.0	75.8
MW-96R	10.0	6.6
MW-97	10.0	<4.0
SRAMP-B	10.0	<4.0

SRAMP B COLLECTED 4/18/2024.
SAMPLES TAKEN 10/15/2024.

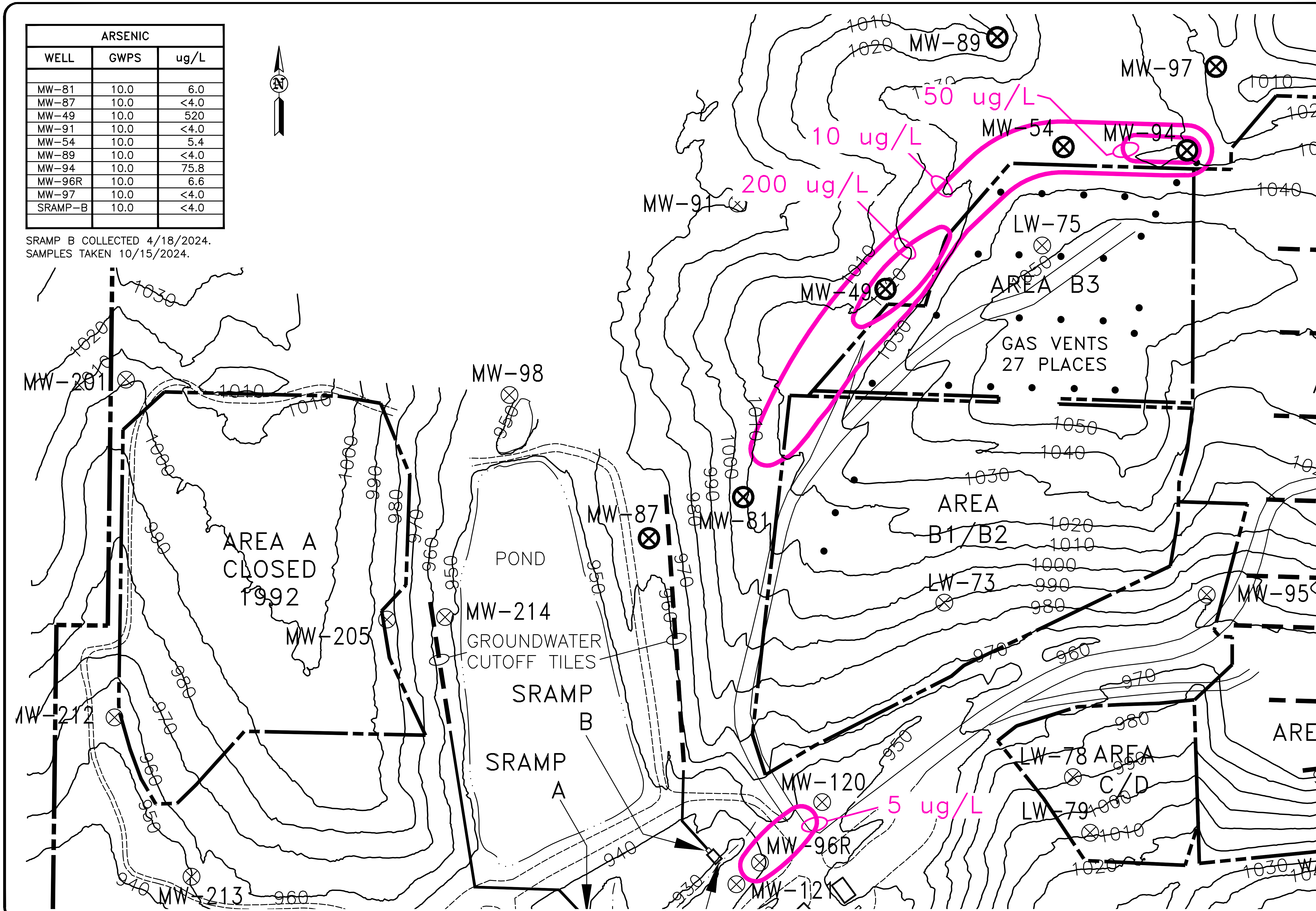

FIGURE: 5

ISO-CONTOUR MAP
ARSENIC
MARSHALL COUNTY SANITARY LANDFILL
MARSHALLTOWN, IOWA

NO.	REVISION	DATE

PROJECT NO.	DRAWN	DATE
6003	DRA	1-8-25

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COBALT		
WELL	GWPS	ug/L
MW-81	6.0	8.2
MW-87	6.0	<0.4
MW-49	6.0	66.9
MW-91	6.0	<0.4
MW-54	6.0	9.9
MW-89	6.0	<0.4
MW-94	6.0	8.8
MW-96R	6.0	10.5
MW-97	6.0	<0.4
SRAMP-B	6.0	<0.4

SRAMP B COLLECTED 4/18/2024.
SAMPLES TAKEN 10/15/2024.

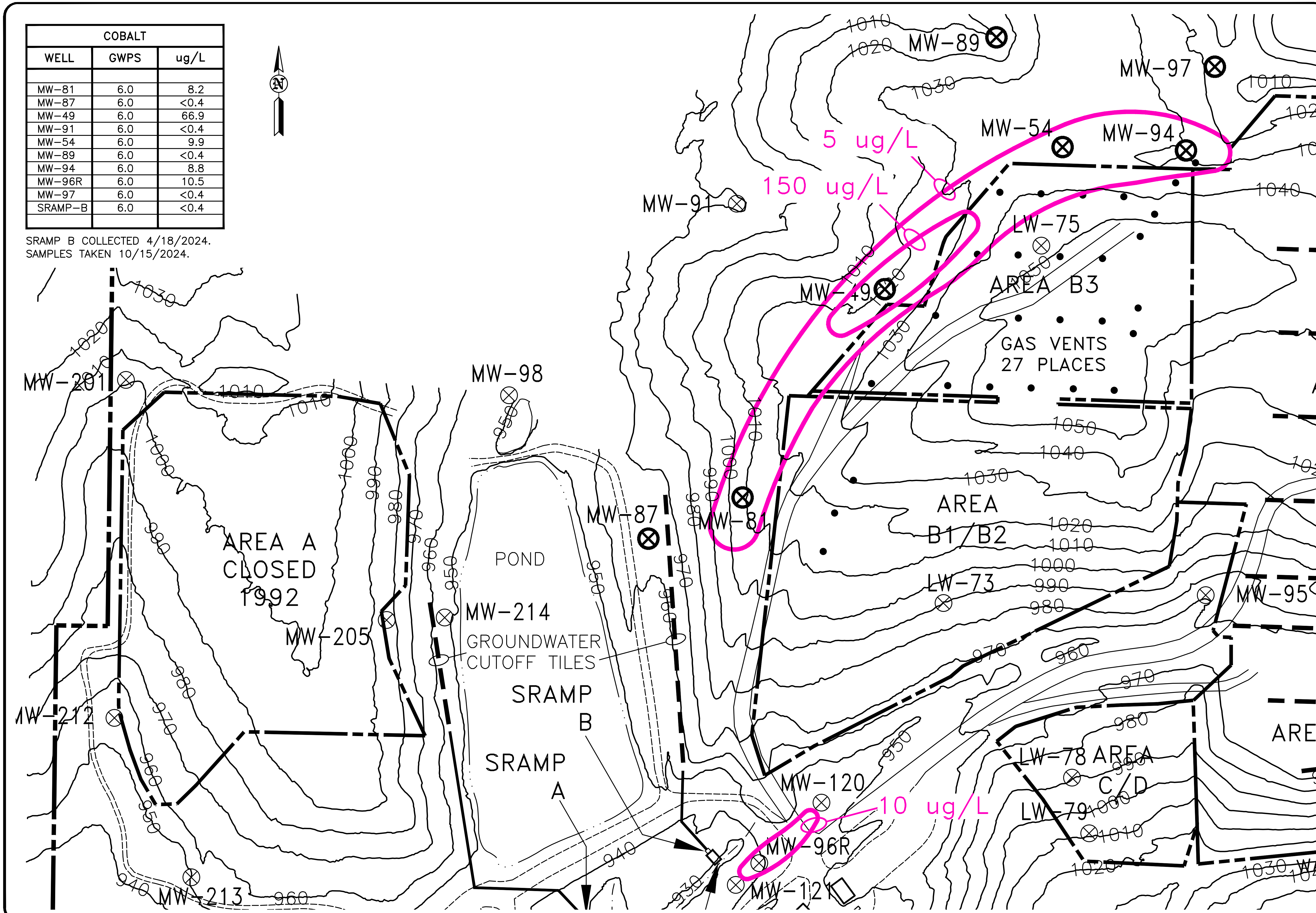

FIGURE: 6

REVISION	NO.	DATE
DRAWN DRA	PROJECT NO. 6003	DATE 1-8-25

ISO-CONTOUR MAP
COBALT
MARSHALL COUNTY SANITARY LANDFILL
MARSHALLTOWN, IOWA

HLW Engineering Group
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CIS-1,2-DICHLOROETHENE		
WELL	GWPS	ug/L
MW-81	70.0	127
MW-87	70.0	<1
MW-49	70.0	<1
MW-91	70.0	<1
MW-54	70.0	<1
MW-89	70.0	<1
MW-94	70.0	6.0
MW-96R	70.0	<1
MW-97	70.0	<1
SRAMP-B	70.0	<1

SRAMP B COLLECTED 4/18/2024.
REMAINING SAMPLES TAKEN 10/15/2024.

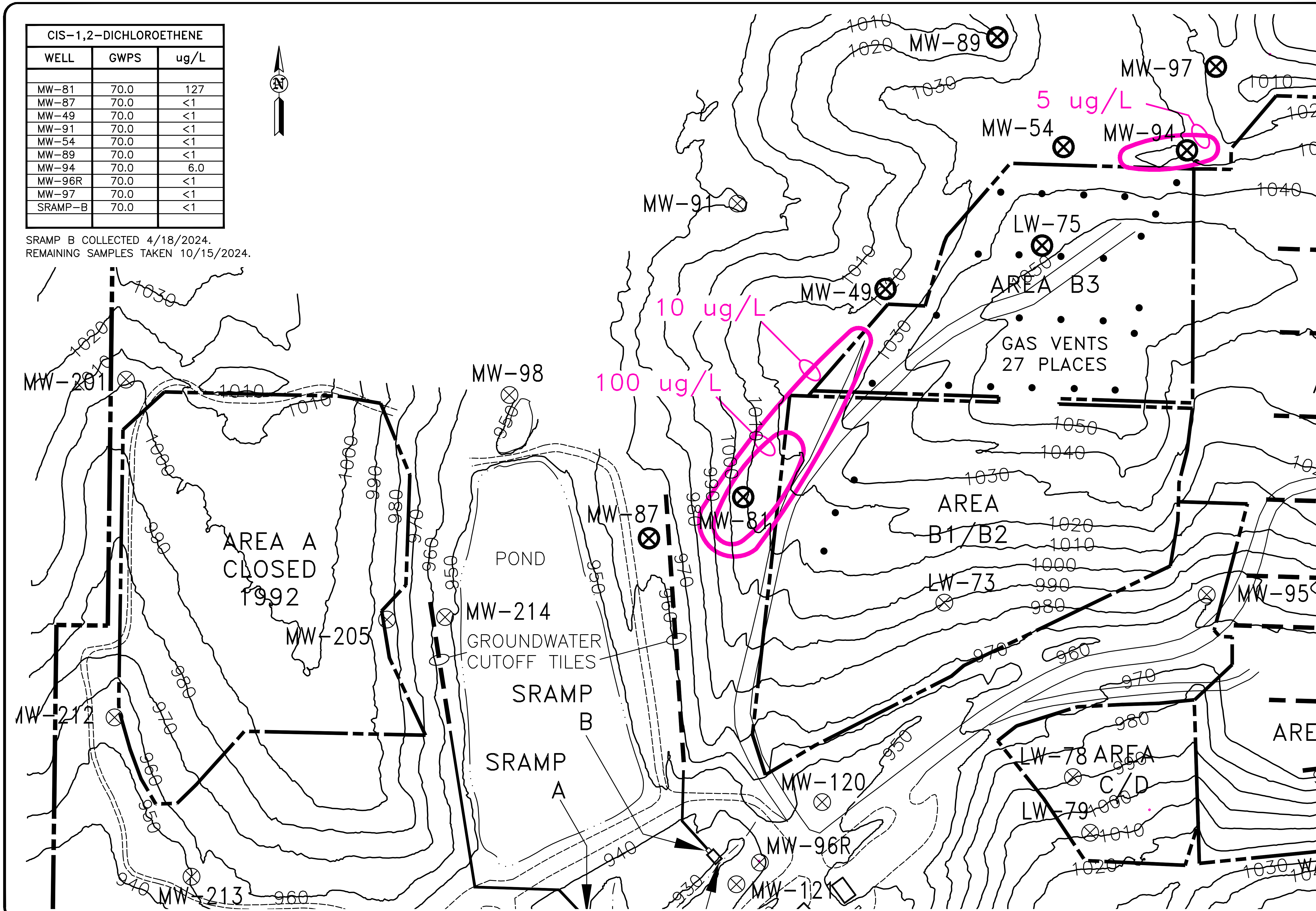

FIGURE: 7

REVISION	NO.	DATE
DRAWN DRA	PROJECT NO. 6003	DATE 1-8-25

ISO-CONTOUR MAP
CIS-1,2-DICHLOROETHENE
MARSHALL COUNTY SANITARY LANDFILL
MARSHALLTOWN, IOWA

HLW Engineering Group
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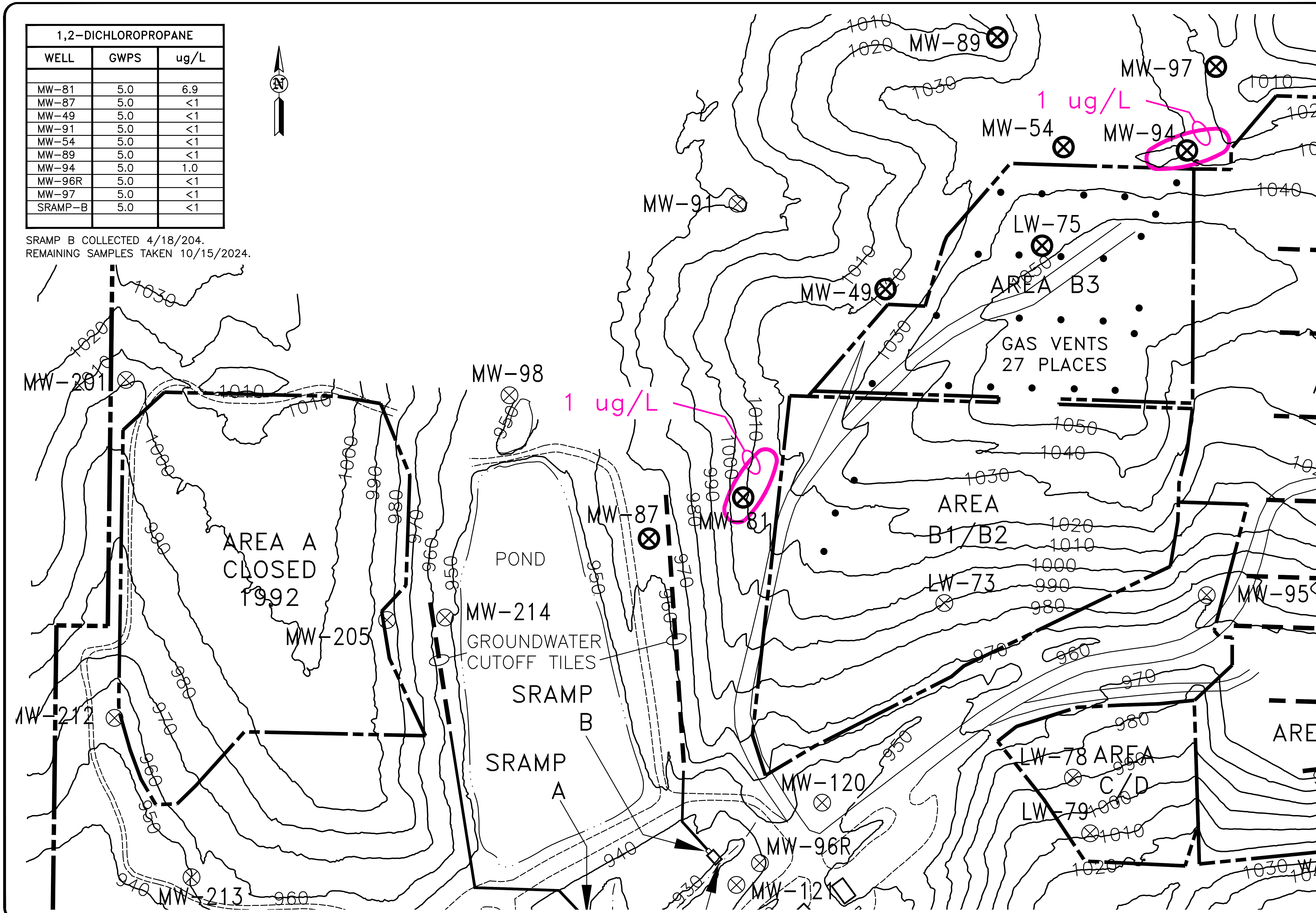
FAX: (515) 733-4146

1,2-DICHLOROPROPANE		
WELL	GWPS	ug/L
MW-81	5.0	6.9
MW-87	5.0	<1
MW-49	5.0	<1
MW-91	5.0	<1
MW-54	5.0	<1
MW-89	5.0	<1
MW-94	5.0	1.0
MW-96R	5.0	<1
MW-97	5.0	<1
SRAMP-B	5.0	<1

SRAMP B COLLECTED 4/18/204.
REMAINING SAMPLES TAKEN 10/15/2024.



ISO-CONTOUR MAP
1,2-DICHLOROPROPANE
MARSHALL COUNTY SANITARY LANDFILL
MARSHALLTOWN, IOWA

FIGURE:	8	
REVISION	NO.	DATE
DRAWN DRA	PROJECT NO. 6003	DATE 1-8-25

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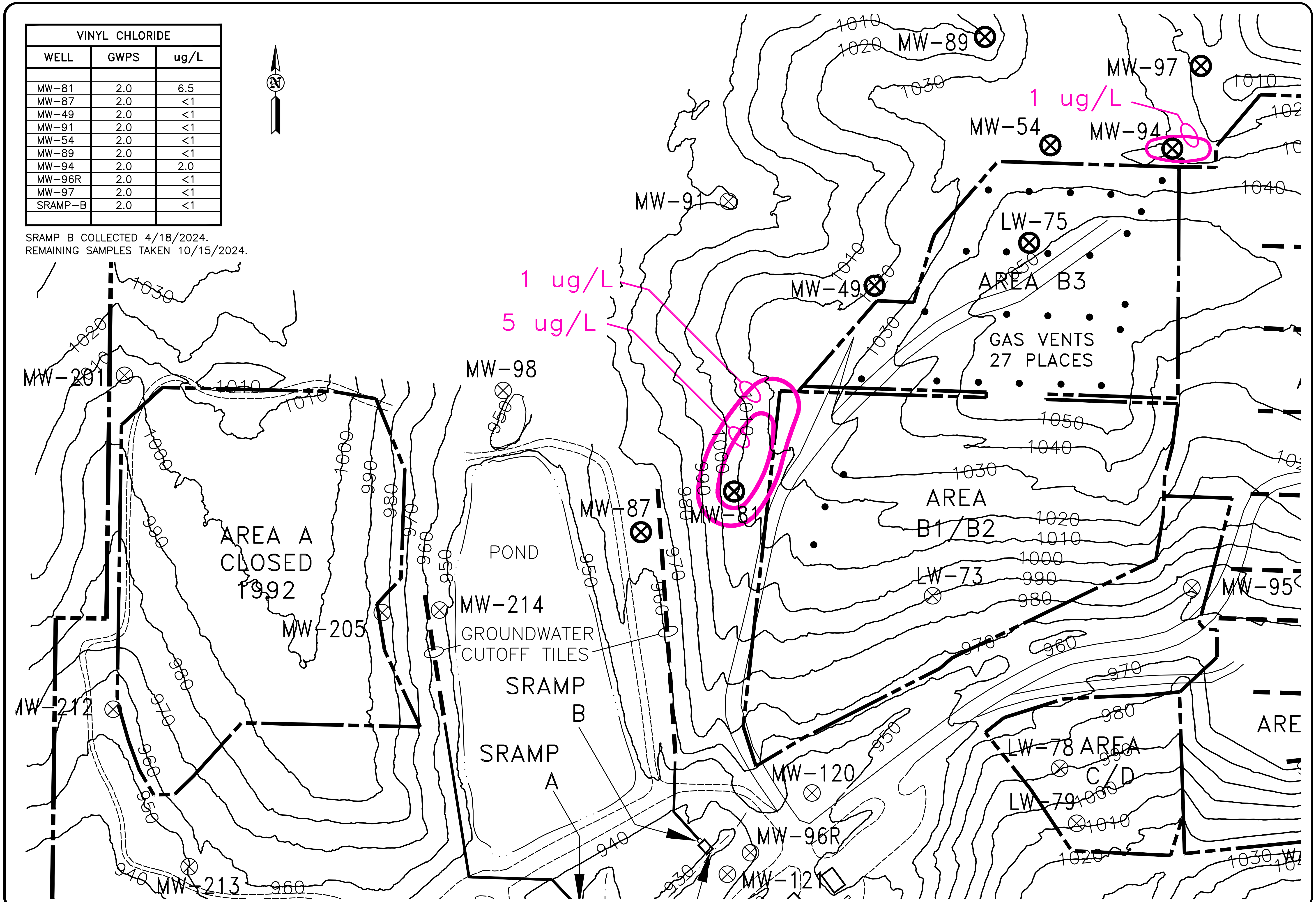

VINYL CHLORIDE		
WELL	GWPS	ug/L
MW-81	2.0	6.5
MW-87	2.0	<1
MW-49	2.0	<1
MW-91	2.0	<1
MW-54	2.0	<1
MW-89	2.0	<1
MW-94	2.0	2.0
MW-96R	2.0	<1
MW-97	2.0	<1
SRAMP-B	2.0	<1

SRAMP B COLLECTED 4/18/2024.
REMAINING SAMPLES TAKEN 10/15/2024.

FIGURE: 9

NO.	REVISION	DATE

DRAWN DRA | PROJECT NO. 6003 | DATE 1-8-25

ISO-CONTOUR MAP
VINYL CHLORIDE
MARSHALL COUNTY SANITARY LANDFILL
MARSHALLTOWN, IOWA

HLW Engineering Group
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Story City, Iowa 50248
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HLW
HLW Engineering Group

Tables
(in IDNR Format)

Table Index

Table 1 – Monitoring Program Summary

Table 1
Monitoring Program Summary
Annual Water Quality Report
Marshall County Sanitary Landfill
Permit No. 64-SDP-02-75P

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 October 15, 2014		
							Detection	Assessment	Corrective Action
MW-66	Glacial Till	Background	NC	None	None	None	8	0	0
MW-85	Glacial Till	Background	NC	None	None	None	23	0	0
MW-98	Alluvium	Background	NC	None	None	None	17	0	0
MW-99	Alluvium	Background	NC	None	None	None	17	0	0
MW-87	Glacial Till	AZPOC - detection	NC	None	None	None	21	0	0
MW-89	Glacial Till	AZPOC - detection	NC	None	None	None	21	0	0
MW-91	Glacial Till	AZPOC - assessment	NC	selenium, 1,1-dichloroethane	None	None	0	21	0
MW-93	Glacial Till	POC - Lagoon - detection	NC	arsenic, cobalt, nickel	None	None	21	0	0
MW-95	Glacial Till	POC - detection	NC	None	None	None	21	0	0
MW-96R	Glacial Till	POC - detection	NC	arsenic, barium, cobalt	None	None	0	9	0
MW-49	Glacial Till	Supplemental Monitoring Points	NC	arsenic, barium, cobalt, nickel, 1,1-dichloroethane, 1,4-dichlorobenzene, acetone, benzene, bis(2-ethylhexyl)phthalate, chloroethane, chlorobenzene, cis-1,2-dichloroethene, vinyl chloride	Not Applicable	Not Applicable	0	0	21
MW-54	Glacial Till	Supplemental Monitoring Points	NC	arsenic, cobalt, nickel, 1,1-dichloroethane, 1,4-dichlorobenzene, benzene, chloroethane, cis-1,2-dichloroethene, vinyl chloride	Not Applicable	Not Applicable	0	0	21
MW-81	Glacial Till	Supplemental Monitoring Points	NC	barium, cobalt, nickel, 1,1-dichloroethane, 1,2-dichlorobenzene, 1,2-dichloroethane, 1,2-dichloropropane, 1,4-dichlorobenzene, acetone, benzene, bis(2ethylhexyl)phthalate, chlorobenzene, chloroethane, cis-1,2-dichloroethene, trans-1,2-dichloroethene, TCE, vinyl chloride	Not Applicable	Not Applicable	0	0	21
MW-94	Glacial Till	Supplemental Monitoring Points	NC	arsenic, cobalt, nickel, 1,1-dichloroethane, 1,2-dichloroethane, 1,2-dichloropropane, benzene, chloroethane, cis-1,2-dichloroethene, trans-1,2-dichloroethene, vinyl chloride	Not Applicable	Not Applicable	0	0	21
MW-97	Glacial Till	AZPOC - detection	NC	None	None	None	21	0	0
SRAMP-B	Glacial Till	POC - detection	NC	None	None	None	7	0	0
PECS-B	Glacial Till	PECS Performance	NC	None	None	None	4	0	0

Table 2 – Monitoring Program Implementation Schedule

Table 2
Monitoring Program Implementation Schedule
Annual Water Quality Report
Marshall County Sanitary Landfill
Permit No. 64-SDP-02-75P

	Recent Sampling Dates and Constituents	Upcoming Sampling Dates and Constituents				Full Appendix II Sample Dates		
Monitoring Well		**January 2025**	**April 2025**	**July 2025**	**October 2025**	**Previously Collected**	**Next Event**	
MW-66		---	Appendix I	---	Appendix I		N/A	background
MW-85		---	Appendix I	---	Appendix I		N/A	background
MW-98	**See following pages**	---	Appendix I	---	Appendix I		N/A	background
MW-99		---	Appendix I	---	Appendix I		N/A	background
MW-87		---	Appendix I	---	Appendix I	3/28/08, 6/25/08, 8/25/08, 10/3/08, 12/8/08, 10/16/13	N/A	azpoc-detection
MW-89		---	Appendix I	---	Appendix I	3/28/08, 6/25/08, 8/25/08, 10/3/08, 12/8/08, 10/16/13	N/A	azpoc-detection
MW-91		---	Appendix I	---	Appendix I	3/28/08, 6/25/08, 8/25/08, 10/3/08, 12/8/08, 10/16/13, 10/22/18, 10/13/2023	Oct., 2028	azpoc-assessment
MW-93		---	Appendix I	---	Appendix I	10/8/12, 4/4/13, 10/22/2018, 10/13/2023	N/A	poc-detection
MW-95		---	Appendix I	---	Appendix I		N/A	poc-detection
MW-96R		---	Appendix I	---	Appendix I	10/8/2021, 10/25/2022	N/A	poc-detection
MW-49		---	Appendix I + Note 1	---	Appendix I	3/28/08, 6/25/08, 8/25/08, 10/3/08, 12/8/08, 10/16/13, 10/22/18	N/A	supplemental-assessment
MW-54		---	Appendix I + Note 1	---	Appendix I	3/28/08, 6/25/08, 8/25/08, 10/3/08, 12/8/08, 10/16/13, 10/22/18	N/A	supplemental-assessment
MW-81		---	Appendix I + Note 1	---	Appendix I	3/28/08, 6/25/08, 8/25/08, 10/3/08, 12/8/08, 10/16/13, 10/22/18	N/A	supplemental-assessment
MW-94		---	Appendix I + Note 1	---	Appendix I	4/4/11, 10/6/11, 10/8/12, 10/9/17	N/A	supplemental-assessment
MW-97		---	Appendix I	---	Appendix I		N/A	azpoc-detection
SRAMP-B		---	Appendix I	---	Appendix I		N/A	poc-detection
PECS-B		---	Appendix I VOC	---	Appendix I VOC		N/A	PECS Performance
LW-75		---	Note 1 + Note 2	---	---		N/A	CAMP
Vents 1-27		%LEL	%LEL	%LEL	%LEL		N/A	CAMP

Note 1 = dissolvedmethane, ethane, ethene and alkalinity and pH.
Note 2 = Appendix I VOC, cobalt (total), arsenic (total), ammonia (N), sulfate, chloride, TDS, and BOD5

Table 2A – Summary of Well Testing to Date

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

WELL	3/28/08	6/20/08	8/5/08	10/2/08	12/10/08
MW-66	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW-85	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW-49	**Appendix II**	**Appendix II**	**Appendix II**	**Appendix II**	**Appendix II**
MW-54	**Appendix II**	**Appendix II**	**Appendix II**	**Appendix II**	**Appendix II**
MW-80	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW-81	**Appendix II**	**Appendix II**	**Appendix II**	**Appendix II**	**Appendix II**
MW-87	**Appendix II**	**Appendix II**	**Appendix II**	**Appendix II**	**Appendix II**
MW-89	**Appendix II**	**Appendix II**	**Appendix II**	**Appendix II**	**Appendix II**
MW-91	**Appendix II**	**Appendix II**	**Appendix II**	**Appendix II**	**Appendix II**
MW-93	Installed 8/08	Installed 8/08	Appendix I	Appendix I	Appendix I
GWD-2	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
Duplicate	N/A	N/A	At MW-66	At MW-93	At MW-80

WELL	2/11/09	4/1/09	10/21/09	1/29/10	4/20/10
MW-66		Appendix I	Appendix I		Appendix I
MW-85		Appendix I	Appendix I		Appendix I
MW-49		**Appendix I+**	**Appendix I+**		Appendix I
MW-54		**Appendix I+**	**Appendix I+**		Appendix I
MW-80		Appendix I	Appendix I	Retest	Appendix I
MW-81		Appendix I+	Appendix I+		Appendix I
MW-87		**Appendix I+**	**Appendix I+**		**Appendix I+**
MW-89		**Appendix I+**	**Appendix I+**	Retest	**Appendix I+**
MW-91		**Appendix I+**	**Appendix I+**	Retest	**Appendix I+**
MW-93	Appendix I	Appendix I	Appendix I	Retest	Appendix I
GWD-2		Appendix I	Appendix I		Appendix I
Duplicate	N/A	At MW-80	At MW-66	N/A	At MW-93

WELL	10/8/10	1/14/11	4/5/2011	6/18/2011	8/10/2011	10/6/2011
MW-66	Appendix I		Appendix I			Appendix I
MW-85	Appendix I		Appendix I			Appendix I
MW-49	**Appendix I***		**Appendix I***			**Appendix I***
MW-54	**Appendix I***		**Appendix I***			**Appendix I***
MW-80	Appendix I		Plugged			Plugged
MW-81	**Appendix I***		**Appendix I***			**Appendix I***
MW-87	**Appendix I+**		**Appendix I+**			**Appendix I+**
MW-89	**Appendix I+**		**Appendix I+**			**Appendix I+**
MW-91	**Appendix I+**		**Appendix I+**			**Appendix I+**
MW-93	Appendix I		Appendix I			Appendix I
MW-94	Installed 11/10	Appendix I	Appendix I	**Appendix II**	Appendix I	**Appendix II**
MW-95	Installed 11/10	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW-96	Installed 11/10	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
GU-2	Appendix I		Appendix I	Removed from HMSP		
GU-3	Appendix I	Appendix I	Appendix I	Removed from HMSP		
Duplicate	At MW-87	N/A	At MW-91	At GU-3	N/A	At MW-54

* = Appendix I list for Assessment Monitoring Wells.
+ = Bis (2 ethylhexyl) phthalate

WELL	4/10/12	10/9/12	4/4/13	7/12/13	10/16/13
MW-66	Appendix I	Appendix I	Appendix I		Appendix I
MW-85	Appendix I	Appendix I	Appendix I		Appendix I
MW-49	**Appendix I***	**Appendix I+**	**Appendix I+**		**Appendix II**
MW-54	**Appendix I***	**Appendix I+**	**Appendix I+**		**Appendix II**
MW-81	**Appendix I***	**Appendix I+**	**Appendix I+**		**Appendix II**
MW-87	**Appendix I+**	**Appendix I+**	**Appendix I+**		**Appendix II**
MW-89	**Appendix I+**	**Appendix I+**	**Appendix I+**		**Appendix II**
MW-91	**Appendix I+**	**Appendix I+**	**Appendix I+**		**Appendix II**
MW-93	Appendix I	**Appendix II**	**Appendix II**		Appendix I
MW-94	Appendix I	**Appendix II**	**Appendix I+**		**Appendix I+**
MW-95	Appendix I	Appendix I	Appendix I		Appendix I
MW-96	**Appendix II**	**Appendix II**	**Appendix I+**	**Bis(2-EH)P**	**Appendix I+**
MW-97	**Installed 9/13**	**Installed 9/13**	**Installed 9/13**	**Installed 9/13**	Appendix I
Duplicate	At MW-49	At MW-85	At MW-85		At MW-97

+ = Bis (2-ethylhexyl) phthalate = (Bis(2-EH)P)

WELL	4/9/14	10/16/14	1/14/2015	4/3/15	7/6/2015	10/1/2015
MW-66	Appendix I	Appendix I(2)	Appendix I	Appendix I(2)	Appendix I	Appendix I(2)
MW-85	Appendix I	Appendix I(2)	Appendix I	Appendix I(2)	Appendix I	Appendix I(2)
MW-49	Appendix I(1)	Appendix I(1)(2)	---	Appendix I(1)(2)	---	Appendix I(1)(2)
MW-54	Appendix I(1)	Appendix I(1)(2)	---	Appendix I(1)(2)	---	Appendix I(1)(2)
MW-81	Appendix I(1)	Appendix I(1)(2)	---	Appendix I(1)(2)	---	Appendix I(1)(2)
MW-87	Appendix I(1)	Appendix I(1)(2)	---	Appendix I(1)(2)	---	Appendix I(1)(2)
MW-89	Appendix I(1)	Appendix I(1)(2)	---	Appendix I(1)(2)	---	Appendix I(1)(2)
MW-91	Appendix I(1)	Appendix I(1)(2)	---	Appendix I(1)(2)	---	Appendix I(1)(2)
MW-93	Appendix I	Appendix I*(2)	---	Appendix I(2)	---	Appendix I(2)
MW-94	Appendix I(1)	Appendix I(1)(2)	---	Appendix I(1)(2)	---	Appendix I(1)(2)
MW-95	Appendix I	Appendix I(2)	---	Appendix I(2)	---	Appendix I(2)
MW-96	Appendix I(1)	Appendix I(1)(2)	---	Appendix I(1)(2)	---	Appendix I(1)(2)
MW-97	Appendix I	Appendix I(2)	---	Appendix I(2)	---	Appendix I(2)
Duplicate	At MW-66	At MW-96	---	At MW-85	---	At MW-97

(1) = bis(2-ethylhexyl)phthalate
(2) = TSS, TDS, chloride, alkalinity, sulfate, calcium, sodium, potassium, magnesium, ammonia

WELL	4/14/16	10/13/16	4/10/2017	7/11/2017	10/9/2017	1/9/2018
MW-66	Appendix I	Appendix I(2)	Appendix I		Dry	
MW-85	Appendix I	Appendix I(2)	Appendix I		Appendix I	
MW-98	---	Appendix I	Appendix I		Appendix I	
MW-99	---	Appendix I	Appendix I		Appendix I	
MW-49	Appendix I(1)	Appendix I(1)(2)	Appendix I(1)		Appendix I	R- Ba
MW-54	Appendix I(1)	Appendix I(1)(2)	Appendix I(1)		Appendix I	
MW-81	Appendix I(1)	Appendix I(1)(2)	Appendix I(1)		Appendix I	
MW-87	Appendix I(1)	Appendix I(1)(2)	Appendix I(1)		Appendix I	
MW-89	Appendix I(1)	Appendix I(1)(2)	Appendix I(1)		Appendix I	
MW-91	Appendix I(1)	Appendix I(1)(2)	Appendix I(1)	R- Cu, Se	Appendix I	R- Ba, Se, 1,4-DCB
MW-93	Appendix I	Appendix I*(2)	Appendix I		Appendix I	
MW-94	Appendix I(1)	Appendix I(1)(2)	Appendix I(1)		**Appendix II**	
MW-95	Appendix I	Appendix I(2)	Appendix I		Appendix I	
MW-96	Appendix I(1)	Appendix I(1)(2)	Appendix I(1)		**Appendix II**	
MW-97	Appendix I	Appendix I(2)	Appendix I		Appendix I	
Duplicate	At MW-96	At MW-54	At MW-54		At MW-96	

(1) = bis(2-ethylhexyl)phthalate
(2) = TSS, TDS, chloride, alkalinity, sulfate, calcium, sodium, potassium, magnesium, ammonia

WELL	4/17/18	7/2/18	10/22/18	4/22/2019	10/23/2019
MW-66	Dry		Dry	Dry	Dry
MW-85	Appendix I		Appendix I	Appendix I	Appendix I
MW-98	Appendix I		Appendix I	Appendix I	Appendix I
MW-99	Appendix I		Appendix I	Appendix I	Appendix I
MW-49	Appendix I		**Appendix II**	Appendix I	Appendix I
MW-54	Appendix I		**Appendix II**	Appendix I	Appendix I
MW-81	Appendix I		**Appendix II**	Appendix I	Appendix I
MW-87	Appendix I		Appendix I	Appendix I	Appendix I
MW-89	Appendix I		Appendix I	Appendix I	Appendix I
MW-91	Appendix I	R- Se	**Appendix II**	Appendix I	Appendix I
MW-93	Appendix I		**Appendix II**	Appendix I	Appendix I
MW-94	Appendix I		Appendix I	Appendix I	Appendix I
MW-95	Appendix I		Appendix I	Appendix I	Appendix I
MW-96	Appendix I		Appendix I	Appendix I	Appendix I
MW-97	As, Co, cis-1,2-DCE, vinyl chloride		As, Co, cis-1,2-DCE, vinyl chloride	As, Co, cis-1,2-DCE, vinyl chloride	As, Co, cis-1,2-DCE, vinyl chloride
Duplicate	At MW-54		At MW-93	At MW-89	At MW-93

WELL	4/10/2020	10/19/2020	1/7/2021	4/5/2021	7/2/2021	10/8/2021
MW-66	Dry	Dry		Dry		Dry
MW-85	Appendix I	Appendix I		Appendix I		Appendix I
MW-98	Appendix I	Appendix I		Appendix I		Appendix I
MW-99	Appendix I	Appendix I		Appendix I		Appendix I
MW-49	Appendix I	Appendix I + Note 1		Appendix I + Note 1		Appendix I
MW-54	Appendix I	Appendix I + Note 1		Appendix I + Note 1		Appendix I
MW-81	Appendix I	Appendix I + Note 1		Appendix I + Note 1		Appendix I
MW-87	Appendix I	Appendix I		Appendix I		Appendix I
MW-89	Appendix I	Appendix I		Appendix I		Appendix I
MW-91	Appendix I	Appendix I	R-Se	Appendix I		Appendix I
MW-93	Appendix I	Appendix I		Appendix I	R-Cu	Appendix I
MW-94	Appendix I + Note 1	Appendix I		Appendix I + Note 1		Appendix I
MW-95	Appendix I	Appendix I		Appendix I		Appendix I
MW-96/96R	Appendix I	Appendix I		Appendix I	R-As,Ba,Co	**Appendix II**
MW-97	Appendix I	Appendix I		Appendix I		Appendix I
SRAMP-B	Appendix I	Dry		Appendix I		Dry
PECS-B	Dry	Dry		Dry		Dry
LW-75	Note 1	Note 2		Note 1 + Note 2		N/A
Duplicate	At MW-96	At MW-85		At MW-89		At MW-97

WELL	4/6/2022	10/25/2022	4/10/2023	7/7/2023	7/20/2023	10/13/2023
MW-66	Dry	Dry	Dry			Dry
MW-85	Appendix I	Appendix I	Appendix I			Appendix I
MW-98	Appendix I	Appendix I	Appendix I			Appendix I
MW-99	Appendix I	Appendix I	Appendix I			Appendix I
MW-49	Appendix I + Note 1	Appendix I	Appendix I + Note 1			Appendix I
MW-54	Appendix I + Note 1	Appendix I	Appendix I + Note 1			Appendix I
MW-81	Appendix I + Note 1	Appendix I	Appendix I + Note 1			Appendix I
MW-87	Appendix I	Appendix I	Appendix I			Appendix I
MW-89	Appendix I	Appendix I	Appendix I			Appendix I
MW-91	Appendix I	Appendix I	Appendix I			**Appendix II**
MW-93	Appendix I	Appendix I	Appendix I			**Appendix II**
MW-94	Appendix I + Note 1	Appendix I	Appendix I + Note 1			Appendix I
MW-95	Appendix I	Appendix I	Appendix I			Appendix I
MW-96R	Appendix I	**Appendix II**	Appendix I	R-As+Co+Se	R-As+Co	Appendix I
MW-97	Appendix I	Appendix I	Appendix I			Appendix I
SRAMP-B	Appendix I	Dry	Dry			Appendix I
PECS-B	Dry	Dry	Dry			Dry
LW-75	Note 1+Note 2	NA	Note 1+Note 2			NA
Duplicate	At MW-91	At MW-98	At MW-97			At MW-95

WELL	1/25/2024	4/16/2024	7/18/2024	10/15/2024		
MW-66		Dry		Dry		
MW-85		Appendix I		Appendix I		
MW-98		Appendix I		Appendix I		
MW-99		Appendix I		Appendix I		
MW-49		Appendix I + Note 1		Appendix I + Note 1		
MW-54		Appendix I + Note 1		Appendix I + Note 1		
MW-81		Appendix I + Note 1		Appendix I + Note 1		
MW-87		Appendix I		Appendix I		
MW-89		Appendix I		Appendix I		
MW-91		Appendix I		Appendix I		
MW-93		Appendix I		Appendix I		
MW-94		Appendix I + Note 1		Appendix I + Note 1		
MW-95	R-acetone	Appendix I		Appendix I		
MW-96R		Appendix I		Appendix I		
MW-97		Appendix I	R-copper	Appendix I		
SRAMP-B		Appendix I		Dry		
PECS-B		Dry		Dry		
LW-75		Note 2		Note 1+Note 2 (less VOC)		
Duplicate		At MW-96R		At MW-95		

Note 1 = dissolved methane, ethane, ethene and pH, alkalinity
Note 2 = Appendix I VOC, total cobalt, ammonia (N), sulfate, chloride, TDS, and BOD5.

Table 3 – Monitoring Well Maintenance Performance Reevaluation Schedule

Table 3
Monitoring Well Maintenance and Performance Revaluation Schedule
Annual Water Quality Report
Marshall County Sanitary Landfill
Permit No. 64-SDP-02-75P

Compliance with:	Monitoring Calendar Years									
	1996	2001	2006	2007	2008	2009	2010	2011	2012	2013
567 IAC 113.10(2)"f"(1) high and low water levels (biennial)	X	X	X	X	X	X	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		X	
Waste separation from ground water 113.6(2)"I"					2X	2X	2X	2X	2X	2X

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

Compliance with:	Monitoring Calendar Years									
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
567 IAC 113.10(2)"f"(1) high and low water levels (biennial)	X	P	P	P	P	P	P	P	P	P
567 IAC 113.10(2)"f"(2) changes in the hydrologic setting and flow paths (historic = 1 per 5 years; current = biennial)	X		P		P		P		P	
567 IAC 113.10(2)"f"(3) well depths (annual)	X	P	P	P	P	P	P	P	P	P
567 IAC 113.10(2)"f"(4) well recharge rates and chemistry (biennial)	X		P		P		P		P	
Waste separation from ground water 113.6(2)"I"	2X	2P	2P	2P	2P	2P	2P	2P	2P	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
Marshall County Sanitary Landfill
Permit No. 64-SDP-02-75P

Well	Top of casing	Top of Screen	Total Depth		Date of Measurements		Maximum Depth	Hydraulic Cond.	Most Recent Recharge Rate	
					4/16/2024	10/15/2024	Discrepancy (ft)	(cm/sec)/date	4/16/2024	Change
MW-66	1032.39	995.53	51.86	Groundwater Level (ft)	51.86	51.86	0	0.000392 Feb 2001	DRY	
				Groundwater Elevation (Ft MSL)	980.53	980.53				
				Measured Well Depth (ft)	51.86	51.86				
				Submerged (+) or Exposed screen (-)	-15	-15				
MW-85	1039.27	982.2	72.07	Groundwater Level (ft)	37.42	35.38	0.87	0.0000138 Feb 2006	Full recovery in <5 hour	None percieved
				Groundwater Elevation (Ft MSL)	1001.85	1003.89				
				Measured Well Depth (ft)	71.2	71.2				
				Submerged (+) or Exposed screen (-)	19.65	21.69				
MW-98	953.24	941.81	21.65	Groundwater Level (ft)	5.56	6.76	0	Not Measured	Full recovery in <5 hour	None percieved
				Groundwater Elevation (Ft MSL)	947.68	946.48				
				Measured Well Depth (ft)	21.65	21.65				
				Submerged (+) or Exposed screen (-)	5.87	4.67				
MW-99	913.98	902.35	21.9	Groundwater Level (ft)	11.8	11.74	0	Not Measured	Full recovery in <3 hour	None percieved
				Groundwater Elevation (Ft MSL)	902.18	902.24				
				Measured Well Depth (ft)	21.9	21.9				
				Submerged (+) or Exposed screen (-)	-0.17	-0.11				
MW-87	964.2	952.62	21.58	Groundwater Level (ft)	5.25	7.98	0.58	0.00000359 Feb 2006	90% recovery in 5 hour	None percieved
				Groundwater Elevation (Ft MSL)	958.95	956.22				
				Measured Well Depth (ft)	21	21				
				Submerged (+) or Exposed screen (-)	6.33	3.6				
MW-89	1012.79	995.25	27.5	Groundwater Level (ft)	8.26	8.75	0.2	0.0000039 Feb 2006	90% recovery in 8 hour	None percieved
				Groundwater Elevation (Ft MSL)	1004.53	1004.04				
				Measured Well Depth (ft)	27.3	27.3				
				Submerged (+) or Exposed screen (-)	9.28	8.79				
MW-91	978.57	971.07	17.5	Groundwater Level (ft)	8.79	11.5	0.5	0.000622 Feb 2006	Full recovery in 4 hour	None percieved
				Groundwater Elevation (Ft MSL)	969.78	967.07				
				Measured Well Depth (ft)	17	17				
				Submerged (+) or Exposed screen (-)	-1.29	-4				
MW-93	921.91	909.74	22.25	Groundwater Level (ft)	18.41	18.42	0.05	Not Measured	Full recovery in 4 hour	None percieved
				Groundwater Elevation (Ft MSL)	903.5	903.49				
				Measured Well Depth (ft)	22.2	22.2				
				Submerged (+) or Exposed screen (-)	-6.24	-6.25				
MW-95	973.55	960.16	23.39	Groundwater Level (ft)	7.45	5.41	-0.01	Not Measured	Full recovery in >8 hour	None percieved
				Groundwater Elevation (Ft MSL)	966.1	968.14				
				Measured Well Depth (ft)	23.4	23.4				
				Submerged (+) or Exposed screen (-)	5.94	7.98				
MW-96R	941.85	931.05	20.8	Groundwater Level (ft)	10.63	13.81	0	Not Measured	Full recovery in 6 hour	None percieved
				Groundwater Elevation (Ft MSL)	931.22	928.04				
				Measured Well Depth (ft)	20.8	20.8				
				Submerged (+) or Exposed screen (-)	0.17	-3.01				
MW-49	1019.99	993.57	26.25	Groundwater Level (ft)	20.11	16.39	0	0.00013 Feb 2006	Full recovery in 8 hour	None percieved
				Groundwater Elevation (Ft MSL)	999.88	1003.6				
				Measured Well Depth (ft)	26.25	26.25				
				Submerged (+) or Exposed screen (-)	6.31	10.03				
MW-54	1035.44	1013.49	31.8	Groundwater Level (ft)	17.46	18.01	0	0.00000551 Feb 2006	Full recovery in 8 hour	None percieved
				Groundwater Elevation (Ft MSL)	1017.98	1017.43				
				Measured Well Depth (ft)	31.8	31.8				
				Submerged (+) or Exposed screen (-)	4.49	3.94				
MW-81	1009.27	989.27	35	Groundwater Level (ft)	22.49	21.11	1.1	0.0000197 Feb 2006	Full recovery in 4 hour	None percieved
				Groundwater Elevation (Ft MSL)	986.78	988.16				
				Measured Well Depth (ft)	33.9	33.9				
				Submerged (+) or Exposed screen (-)	-2.49	-1.11				
MW-94	1030.99	1013.14	27.85	Groundwater Level (ft)	15.36	16.1	0.35	Not Measured	Full recovery in 4 hour	None percieved
				Groundwater Elevation (Ft MSL)	1015.63	1014.89				
				Measured Well Depth (ft)	27.5	27.5				
				Submerged (+) or Exposed screen (-)	2.49	1.75				
MW-97	1015.38	988.28	37.1	Groundwater Level (ft)	11.17	14.15	0.3	Not Measured	90% recovery in 8 hour	None percieved
				Groundwater Elevation (Ft MSL)	1004.21	1001.23				
				Measured Well Depth (ft)	36.8	36.8				
				Submerged (+) or Exposed screen (-)	15.93	12.95				

Groundwater Underdrain Piezometer

Well		Date of Measurements	
		4/16/2024	10/15/2024
GPZ - 105	bottom of waste (feet MSL)	962	962
	Bottom Screen of GPZ (feet MSL)	956.75	956.75
	Thickness Water in GPZ (ft)	0.08	0.1
	Elevation water in GPZ (feet MSL)	956.83	956.85
	Minimum Separation (ft)	5.17	5.15

Table 4A – Water Elevation Summary Over Time

MARSHALL COUNTY SANITARY LANDFILL

Area B Elevations

MONTHLY WATER ELEVATIONS

	MW 49	MW 54	MW 66	MW 81	MW 85	MW 87	MW 89	MW 91	MW93	MW94
TOP PVC. ELEV, FT.	1019.99	1035.44	1032.39	1009.27	1039.27	964.20	1012.79	978.57	921.91	1030.99
DATE										
01/17/2001	999.65	1004.68					1001.08	966.87		
02/07/2001	1006.89	1019.44	995.39	988.07	1002.25	958.67	1002.54	972.44		
04/25/2001	1006.84	1019.44	1005.79	992.77	1005.67	958.70	1006.09	973.57		
07/20/2001	1002.74	1019.19					1005.89	969.87		
10/05/2001	998.89	1015.54	996.69	988.87	1001.97	956.20	1003.94	966.77		
01/03/2002	998.29	1014.04					1002.59	966.97		
04/29/2002	1003.02	1015.76	994.41	989.13	1001.22	958.11	1002.01	968.07		
07/03/2002	1005.69	1017.64					1004.74	971.87		
10/14/2002	999.40	1014.62	994.97	988.72	1001.86	956.27	1002.55	966.78		
01/27/2003	997.59	1013.14					1000.59	966.37		
04/21/2003	997.84	1014.26	993.50	987.57	999.18	958.27	1000.88	967.26		
07/10/2003	1007.49	1019.34					1006.74	974.67		
10/01/2003	1001.60	1016.16	994.89	988.59	1003.76	955.75	1004.18	966.78		
04/22/2004	1006.89	1019.94	1005.69	994.97	1005.57	959.80	1006.29	975.52		
10/05/2004	998.79	1015.29	998.09	989.97	1002.27	956.55	1002.39	966.87		
04/01/2005	1006.08	1016.97	1000.11	992.64	1003.54	960.16	1004.00	970.82		
07/12/2005										
10/04/2005	999.33	1015.32	996.60	990.66	1003.22	957.12	1002.94	967.49		
01/09/2006										
02/01/2006	1001.31	1013.58	994.60	989.20	1001.32	959.63	1002.83	968.66		
04/05/2006	1007.47	1018.51	996.67	994.28	1002.36	960.30	1004.47	973.00		
07/13/2006										
10/05/2006	1002.64	1016.87	995.89	992.41	1004.02	958.59	1004.89	970.71		
01/02/2007				1009.27		964.20				
04/10/2007	1006.58	1019.95		996.21	1006.29	960.33	1006.34	974.23		
07/30/2007			1005.45							
10/10/2007	1000.29	1015.63	998.27	992.03	1003.31	959.75	1004.19	970.43		
01/16/2008										
04/01/2008	1006.32	1019.90	1002.36	991.83	1004.86	960.31	1003.05	974.06		
06/20/2008	1004.98	1020.87	1009.66	995.98	1007.97	960.02	1008.97	973.45		
08/05/2008	1002.94	1019.44	1007.69	995.49	1006.57	960.02	1005.49	969.47	909.35	
10/02/2008	999.49	1016.24	1000.91	991.67	1003.67	959.48	1003.49	967.67	907.96	
12/10/2008	1001.98	1015.34	998.59	991.87	1003.77	960.20	1003.04	969.55	908.81	
04/01/2009	1005.74	1018.09	1004.84	994.17	1005.27	960.50	1004.84	973.97	910.31	
10/21/2009	1005.19	1017.44	1001.29	993.39	1005.29	960.30	1005.79	972.97	909.51	
04/20/2010	1003.99	1019.64	1005.89	993.77	1005.77	960.35	1005.99	972.87	909.81	
10/08/2010	1004.19	1019.44	1004.99	993.77	1006.22	960.20	1006.09	972.27	909.91	
04/04/2011	1006.54	1017.79	1000.79	992.87	1004.52	960.40	1004.34	971.57	908.91	1014.99
10/05/2011	997.99	1015.59	995.79	989.17	1002.37	957.20	1000.99	966.47	904.61	1011.69
04/09/2012	1005.49	1017.49	994.24	991.67	1002.92	960.00	1004.29	969.07	906.76	1014.24
10/08/2012	996.39	1014.34	992.59	987.27	999.87	954.65	999.29	965.47	902.61	1009.49
04/05/2013	1006.99	1021.24	990.49	989.27	1000.97	960.40	1001.99	971.47	905.41	1020.19
10/15/2013	997.44	1016.29	989.21	988.60	1002.37	955.85	999.57	963.87	900.59	1010.64
04/09/2014	1000.49	1017.84	987.59	986.57	1000.52	959.90	1000.74	967.82	904.71	1015.19
10/17/2014	1005.91	1020.79	988.09	993.67	1004.97	960.55	1006.44	972.22	908.81	1017.39
04/03/2015	1002.56	1017.68	987.73	992.07	1004.47	960.50	1004.06	969.47	907.09	1015.53
10/01/2015	1000.54	1017.29	986.48	991.57	1004.13	959.70	1004.29	968.77	907.42	1014.77
4/14/2016	1003.48	1019.04	988.61	994.37	1004.94	960.60	1004.60	971.97	909.37	1016.30
10/13/2016	1005.38	1019.74	983.87	993.01	1005.32	960.43	1005.97	971.06	908.25	1015.44
4/10/2017	1007.88	1020.74	983.70	995.19	1005.00	960.56	1006.12	972.40	909.75	1017.75
10/9/2017	997.84	1015.61	980.49	988.82	1001.46	956.30	1000.92	966.45	903.43	1012.53
4/17/2018	1008.62	1023.37	980.59	994.32	1002.55	960.70	1006.46	972.37	907.30	1018.30
10/22/2018	1006.89	1021.71	980.59	994.51	1007.25	960.16	1009.31	972.47	909.86	1020.16
4/22/2019	1004.09	1019.51	980.54	993.99	1005.41	960.10	1004.81	971.26	909.07	1017.79
10/23/2019	1006.10	1020.54	980.54	993.40	1004.27	960.38	1005.99	972.64	909.45	1017.31
4/10/2020	1005.55	1020.43	980.54	993.83	1005.89	960.34	1005.22	971.77	909.21	1017.18
10/23/2020	998.73	1015.96	980.54	989.54	1001.64	957.05	1003.51	967.21	904.16	1012.37
4/5/2021	1007.32	1021.03	980.54	992.24	1003.86	960.25	1005.64	972.14	908.17	1018.77
10/8/2021	997.54	1015.18	980.54	987.15	1000.13	955.10	1000.03	966.77	902.42	1010.57
4/6/2022	1005.50	1019.59	980.54	991.22	1001.89	960.35	1006.80	972.29	905.66	1013.55
10/25/2022	998.49	1015.77	980.54	987.39	1002.09	955.69	1002.85	966.72	902.81	1011.19
4/10/2023	1006.97	1019.72	980.54	992.02	1004.82	960.16	1004.48	971.42	907.32	1017.23
10/13/2023	997.23	1014.91	980.54	986.95	1001.32	955.03	998.87	966.43	902.42	1009.54
4/16/2024	999.88	1017.98	980.54	986.78	1001.85	958.95	1004.53	969.78	903.50	1015.63
10/15/2024	1003.60	1017.43	980.59	988.16	1003.89	956.22	1004.04	967.07	903.49	1014.89
maximum depth to water	26	32.3	52.5	23.25	45.4	9.55	13.5	14.7	21.32	21.5
low water elevation	993.99	1003.14	979.89	986.02	993.87	954.65	999.29	963.87	900.59	1009.49
minimum depth to water	10.54	9.7	22.27	12.43	31.3	3.5	3.48	3.05	11.6	10.8
high water elevation	1009.45	1025.74	1010.12	996.84	1007.97	960.70	1009.31	975.52	910.31	1020.19

Area B Elevations

	MW95	MW96	MW97	MW98	MW99	MW120	MW121
TOP PVC. ELEV, FT.	973.55	947.01	1015.38	953.24	913.98	948.04	938.61
DATE		MW96R 941.85					
01/17/2001							
02/07/2001							
04/25/2001							
07/20/2001							
10/05/2001							
01/03/2002							
04/29/2002							
07/03/2002							
10/14/2002							
01/27/2003							
04/21/2003							
07/10/2003							
10/01/2003							
04/22/2004							
10/05/2004							
04/01/2005							
07/12/2005							
10/04/2005							
01/09/2006							
02/01/2006							
04/05/2006							
07/13/2006							
10/05/2006							
01/02/2007							
04/10/2007							
07/30/2007							
10/10/2007							
01/16/2008							
04/01/2008							
06/20/2008							
08/05/2008							
10/02/2008							
12/10/2008							
04/01/2009							
10/21/2009							
04/20/2010							
10/08/2010							
04/04/2011	966.95	935.16					
10/05/2011	969.55	933.11					
04/09/2012	967.20	935.16					
10/08/2012	968.35	933.01					
04/05/2013	965.40	934.21					
10/15/2013	968.35	932.21					
04/09/2014	966.55	933.41	1002.68				
10/17/2014	970.00	936.81	1006.28				
04/03/2015	967.05	934.61	1003.48				
10/01/2015	970.45	935.20	1002.79				
4/14/2016	967.24	935.16	1004.42				
10/13/2016	970.59	934.49	1004.13	947.61	906.28		
4/10/2017	962.35	936.59	1006.58	949.43	907.64		
10/9/2017	969.40	934.80	999.24	947.07	894.10		
4/17/2018	966.98	938.11	1005.32	949.49	905.16		
10/22/2018	970.40	939.81	1007.24	948.70	907.75		
4/22/2019	967.27	934.87	1004.98	948.86	907.27		
10/23/2019	970.13	935.86	1006.60	949.41	906.20		
4/10/2020	967.19	935.16	1005.11	949.31	906.84		
10/23/2020	969.08	934.06	1000.43	947.44	902.88		
4/5/2021	966.88	932.39	1006.74	948.85	904.93		
10/8/2021	968.80	927.95	998.28	944.94	901.21		
4/6/2022	966.55	932.55	1005.10	948.75	903.59		
10/25/2022	968.71	928.70	999.35	946.35	901.77		
4/10/2023	966.69	931.36	1004.80	948.63	904.52	938.54	925.17
10/13/2023	968.18	928.05	997.56	944.72	901.25	938.23	924.53
4/16/2024	966.10	931.22	1004.21	947.68	902.18	941.63	929.51
10/15/2024	968.14	928.04	1001.23	946.48	902.24	938.58	924.83
maximum depth to water	11.2	941.85	17.1	8.3	19.88	9.81	14.08
low water elevation	962.35	5.16	998.28	944.94	894.10	938.23	924.53
minimum depth to water	2.96	7.2	8.14	3.75	6.23	9.5	13.44
high water elevation	970.59	939.81	1007.24	949.49	907.75	938.54	925.17

Table 5 – Background and GWPS Summary

Table 5
Background and GWPS Summary
Annual Water Quality Report
Marshall County Sanitary Landfill
Permit No. 64-SDP-02-75P

Interwell Background/(MW-66, MW-85, MW-98, and MW-99)

Inorganics - Appendix I										
Constituent	**Units**	**Model Type**	**Samples - N**	**Detections**	**Mean**	**SD**	**Prediction Limit**	**Confidence**	**GWPS**	**Source**
Antimony (Sb)	µg/l	nonparametric	65	0			2.0000	0.99	6	SS
Arsenic (As)	µg/l	nonparametric	63	5			7.8000	0.99	10	SS
Barium (Ba)	µg/l	normal	65	65	179.9300	113.53	452.8900		2000	SS
Beryllium (Be)	µg/l	nonparametric	65	0			4.0000	0.99	4	SS
Cadmium (Cd)	µg/l	nonparametric	65	0			0.8000	0.99	5	SS
Chromium (Cr)	µg/l	nonparametric	65	2			23.4000	0.99	100	SS
Cobalt (Co)	µg/l	normal	65	35	1.519	1.817	**5.9879**		**5.9879**	**Site**
Copper (Cu)	µg/l	nonparametric	65	4			5.3000	0.99	1300	SS
Lead (Pb)	µg/l	nonparametric	65	0			4.0000	0.99	15	SS
Nickel (Ni)	µg/l	nonparametric	64	14			8.8000	0.99	100	SS
Selenium (Se)	µg/l	nonparametric	65	0			4.0000	0.99	50	SS
Silver (Ag)	µg/l	nonparametric	65	0			4.0000	0.99	100	SS
Thallium (Tl)	µg/l	nonparametric	65	0			2.0000	0.99	2	SS
Vanadium (V)	µg/l	nonparametric	65	0			20.0000	0.99	35	SS
Zinc (Zn)	µg/l	nonparametric	64	7			54.6000	0.99	2000	SS
VOC - Appendix I										
Constituent	**Units**	**Model Type**	**Samples - N**	**Detections**	**Mean**	**SD**	**Prediction Limit**	**Confidence**	**GWPS**	**Source**
All	µg/l	DQR	65	0	<1	<1	<1		various	SS

= Prediction limit exceeds the GWPS. A Site-Specific GWPS equal to the Prediction Limit is used.

Intrawell Background at MW-93 and MW-96R

Compound	**Units**	**Point**	**Intrawell Statistical Control Limit**	**IAC 567-137 Statewide Standards**
Antimony, total	ug/L	**MW-93**	**2.0000**	**6**
Arsenic, total	ug/L	**MW-93**	**81.6313**	**10**
Barium, total	ug/L	**MW-93**	**525.9443**	**2000**
Beryllium, total	ug/L	**MW-93**	**4.0000**	**4**
Cadmium, totall	ug/L	**MW-93**	**0.8000**	**5**
Chromium, total	ug/L	**MW-93**	**8.0000**	**100**
Cobalt, total	ug/L	**MW-93**	**25.1103**	**2.1**
Copper, total	ug/L	**MW-93**	**4.0000**	**1300**
Lead, total	ug/L	**MW-93**	**4.0000**	**15**
Nickel, total	ug/L	**MW-93**	**54.9667**	**100**
Selenium, total	ug/L	**MW-93**	**4.0000**	**50**
Silver, total	ug/L	**MW-93**	**4.0000**	**100**
Thallium, total	ug/L	**MW-93**	**4.0000**	**2**
Vanadium, total	ug/L	**MW-93**	**20.0000**	**35**
Zinc, total	ug/L	**MW-93**	**34.2000**	**2000**
Antimony, total	ug/L	**MW-96R**	*pending*	**6**
Arsenic, total	ug/L	**MW-96R**	**71.8419**	**10**
Barium, total	ug/L	**MW-96R**	**2034.0643**	**2000**
Beryllium, total	ug/L	**MW-96R**	*pending*	**4**
Cadmium, totall	ug/L	**MW-96R**	*pending*	**5**
Chromium, total	ug/L	**MW-96R**	*pending*	**100**
Cobalt, total	ug/L	**MW-96R**	**22.9275**	**2.1**
Copper, total	ug/L	**MW-96R**	*pending*	**1300**
Lead, total	ug/L	**MW-96R**	*pending*	**15**
Nickel, total	ug/L	**MW-96R**	**12.632**	**100**
Selenium, total	ug/L	**MW-96R**	**15.3227**	**50**
Silver, total	ug/L	**MW-96R**	*pending*	**100**
Thallium, total	ug/L	**MW-96R**	*pending*	**2**
Vanadium, total	ug/L	**MW-96R**	*pending*	**35**
Zinc, total	ug/L	**MW-96R**	*pending*	**2000**

= Control limit exceeds the GWPS. A Site-Specific GWPS equal to the Control Limit is used.

Table 6 – Summary of Detections

Table 6
Summary of Well/Detected Constituent Pairs that Exceed the Prediction Limit/Control Limit
Annual Water Quality Report
Marshall County Sanitary Landfill
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MW-66 was dry 4/16/2024 & 10/15/2024
SRAMP B was dry 10/15/2024
PECS B was dry 4/16/2024 & 10/15/2024
LW-75 was sampled twice to get the required annual parameters

Well	Constituent	Date	Most recent result (ug/L)	Background Standard (ug/L)	Monitoring Program	Statistical Method	
MW-87	None	4/16/2024 & 10/15/2024	N/A	N/A	AZPOC - detection	Interwell	
MW-89	None	4/16/2024 & 10/15/2024	N/A	N/A	AZPOC - detection	Interwell	
MW-91	None	4/16/2024 & 10/15/2024	N/A	N/A	AZPOC - assessment	Interwell	
MW-93	Arsenic, Cobalt, Nickel	4/16/2024 & 10/15/2024	N/A	N/A	POC - assessment	Interwell	There is no SSI, as both methods of statistical
MW-93	**None**	4/16/2024 & 10/15/2024	N/A	N/A	POC - assessment	**INTRAWELL**	analyses did not exhibit an exceedance (Doc #110151).
MW-95	None	4/16/2024 & 10/15/2024	N/A	N/A	POC - detection	Interwell	
MW-96R	Cobalt, Selenium	4/16/2024 & 10/15/2024	N/A	N/A	POC - assessment	Interwell	There is no SSI, as both methods of statistical
MW-96R	**None**	4/16/2024 & 10/15/2024	N/A	N/A	POC - assessment	**INTRAWELL**	analyses did not exhibit an exceedance (Doc #110151).
MW-97	None	4/16/2024 & 10/15/2024	N/A	N/A	AZPOC - detection	Interwell	
SRAMP-B	None	4/16/2024	N/A	N/A	POC - detection	Interwell	

Table 7 – Summary of Ongoing and Newly Identified SSI - INTERWELL

Table 7
Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
Marshall County Sanitary Landfill
Permit No.64-SDP-02-75P

KEY:	SSI	SSL LCL>GWPS

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-87	Cobalt	4/14/2016	<0.8	6.0	0.400	**6**	NA	NA	10/22/2018
MW-87	Cobalt	10/13/2016	<0.8	6.0	0.400	**6**	NA	NA	10/22/2018
MW-87	Cobalt	4/10/2017	<0.8	6.0	0.400	**6**	NA	NA	10/22/2018
MW-87	Cobalt	10/9/2017	<0.8	6.0	0.400	**6**	NA	NA	10/22/2018
MW-87	Cobalt	4/17/2018	<0.8	6.0	0.400	**6**	NA	NA	10/22/2018
MW-87	Cobalt	10/22/2018	<0.8	6.0	0.400	**6**	NA	NA	10/22/2018
MW-87	Cobalt	4/22/2019	<0.8	6.0	0.400	**6**	NA	NA	10/22/2018
MW-87	Cobalt	10/23/2019	<0.8	6.0	0.400	**6**	NA	NA	10/22/2018
MW-87	Cobalt	4/10/2020	<0.4	6.0	0.400	**6**	NA	NA	10/22/2018
MW-87	Cobalt	10/19/2020	<0.4	6.0	0.400	**6**	NA	NA	10/22/2018
MW-87	Cobalt	4/5/2021	<0.4	6.0	0.400	**6**	NA	NA	10/22/2018
MW-87	Cobalt	10/8/2021	<0.4	5.7024	0.200	**5.7024**	NA	NA	10/22/2018
MW-87	Cobalt	4/6/2022	<0.4	5.7100	0.200	**5.7100**	NA	NA	10/22/2018
MW-87	Cobalt	10/25/2022	<0.4	5.7836	0.200	**5.7836**	NA	NA	10/22/2018
MW-87	Cobalt	4/10/2023	<0.4	5.6895	0.200	**5.6895**	NA	NA	10/22/2018
MW-87	Cobalt	10/13/2023	<0.4	5.9053	0.200	**5.9053**	NA	NA	10/22/2018
MW-87	Cobalt	4/16/2024	<0.4	6.0584	0.200	**6.0584**	NA	NA	10/22/2018
MW-87	Cobalt	10/15/2024	<0.4	5.9879	0.200	**5.9879**	NA	NA	10/22/2018

Table 7

Summary of Ongoing & Newly Identified SSI

Annual Water Quality Report

Marshall County Sanitary Landfill

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KEY:	SSI	SSL LCL>GWPS

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-87	1,2-dichloropropane	4/14/2016	<1.00	1.00	0.500	5	NA	NA	10/22/2018
MW-87	1,2-dichloropropane	10/13/2016	<1.00	1.00	0.500	5	NA	NA	10/22/2018
MW-87	1,2-dichloropropane	4/10/2017	<1.00	1.00	0.500	5	NA	NA	10/22/2018
MW-87	1,2-dichloropropane	10/9/2017	<1.00	1.00	0.500	5	NA	NA	10/22/2018
MW-87	1,2-dichloropropane	4/17/2018	<1.00	1.00	0.500	5	NA	NA	10/22/2018
MW-87	1,2-dichloropropane	10/22/2018	<1.00	1.00	0.500	5	NA	NA	10/22/2018
MW-87	1,2-dichloropropane	4/22/2019	<1.00	1.00	0.500	5	NA	NA	10/22/2018
MW-87	1,2-dichloropropane	10/23/2019	<1.00	1.00	0.500	5	NA	NA	10/22/2018
MW-87	1,2-dichloropropane	4/10/2020	<1.00	1.00	0.500	5	NA	NA	10/22/2018
MW-87	1,2-dichloropropane	10/19/2020	<1.00	1.00	0.500	5	NA	NA	10/22/2018
MW-87	1,2-dichloropropane	4/5/2021	<1.00	1.00	0.500	5	NA	NA	10/22/2018
MW-87	1,2-dichloropropane	10/8/2021	<1.00	1.00	0.500	5	NA	NA	10/22/2018
MW-87	1,2-dichloropropane	4/6/2022	<1.00	1.00	0.500	5	NA	NA	10/22/2018
MW-87	1,2-dichloropropane	10/25/2022	<1.00	1.00	0.500	5	NA	NA	10/22/2018
MW-87	1,2-dichloropropane	4/10/2023	<1.00	1.00	0.500	5	NA	NA	10/22/2018
MW-87	1,2-dichloropropane	10/13/2023	<1.00	1.00	0.500	5	NA	NA	10/22/2018
MW-87	1,2-dichloropropane	4/16/2024	<1.00	1.00	0.500	5	NA	NA	10/22/2018
MW-87	1,2-dichloropropane	10/15/2024	<1.00	1.00	0.500	5	NA	NA	10/22/2018

Table 7
Summary of Ongoing & Newly Identified SSI
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Marshall County Sanitary Landfill
Permit No.64-SDP-02-75P

KEY:	SSI	SSL LCL>GWPS

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-87	cis-1,2-dichloroethene	4/14/2016	<1.00	1.00	0.500	70	NA	NA	10/22/2018
MW-87	cis-1,2-dichloroethene	10/13/2016	<1.00	1.00	0.500	70	NA	NA	10/22/2018
MW-87	cis-1,2-dichloroethene	4/10/2017	<1.00	1.00	0.500	70	NA	NA	10/22/2018
MW-87	cis-1,2-dichloroethene	10/9/2017	<1.00	1.00	0.500	70	NA	NA	10/22/2018
MW-87	cis-1,2-dichloroethene	4/17/2018	<1.00	1.00	0.500	70	NA	NA	10/22/2018
MW-87	cis-1,2-dichloroethene	10/22/2018	<1.00	1.00	0.500	70	NA	NA	10/22/2018
MW-87	cis-1,2-dichloroethene	4/22/2019	<1.00	1.00	0.500	70	NA	NA	10/22/2018
MW-87	cis-1,2-dichloroethene	10/23/2019	<1.00	1.00	0.500	70	NA	NA	10/22/2018
MW-87	cis-1,2-dichloroethene	4/10/2020	<1.00	1.00	0.500	70	NA	NA	10/22/2018
MW-87	cis-1,2-dichloroethene	10/19/2020	<1.00	1.00	0.500	70	NA	NA	10/22/2018
MW-87	cis-1,2-dichloroethene	4.5/2021	<1.00	1.00	0.500	70	NA	NA	10/22/2018
MW-87	cis-1,2-dichloroethene	10/8/2021	<1.00	1.00	0.500	70	NA	NA	10/22/2018
MW-87	cis-1,2-dichloroethene	4/6/2022	<1.00	1.00	0.500	70	NA	NA	10/22/2018
MW-87	cis-1,2-dichloroethene	10/25/2022	<1.00	1.00	0.500	70	NA	NA	10/22/2018
MW-87	cis-1,2-dichloroethene	4/10/2023	<1.00	1.00	0.500	70	NA	NA	10/22/2018
MW-87	cis-1,2-dichloroethene	10/13/2023	<1.00	1.00	0.500	70	NA	NA	10/22/2018
MW-87	cis-1,2-dichloroethene	4/16/2024	<1.00	1.00	0.500	70	NA	NA	10/22/2018
MW-87	cis-1,2-dichloroethene	10/15/2024	<1.00	1.00	0.500	70	NA	NA	10/22/2018

Table 7
Summary of Ongoing & Newly Identified SSI
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Marshall County Sanitary Landfill
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KEY:	SSI	SSL LCL>GWPS

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-87	Vinyl Chloride	4/14/2016	<1.00	1.00	0.500	2	NA	NA	10/22/2018
MW-87	Vinyl Chloride	10/13/2016	<1.00	1.00	0.500	2	NA	NA	10/22/2018
MW-87	Vinyl Chloride	4/10/2017	<1.00	1.00	0.500	2	NA	NA	10/22/2018
MW-87	Vinyl Chloride	10/9/2017	<1.00	1.00	0.500	2	NA	NA	10/22/2018
MW-87	Vinyl Chloride	4/17/2018	<1.00	1.00	0.500	2	NA	NA	10/22/2018
MW-87	Vinyl Chloride	10/22/2018	<1.00	1.00	0.500	2	NA	NA	10/22/2018
MW-87	Vinyl Chloride	4/22/2019	<1.00	1.00	0.500	2	NA	NA	10/22/2018
MW-87	Vinyl Chloride	10/23/2019	<1.00	1.00	0.500	2	NA	NA	10/22/2018
MW-87	Vinyl Chloride	4/10/2020	<1.00	1.00	0.500	2	NA	NA	10/22/2018
MW-87	Vinyl Chloride	10/19/2020	<1.00	1.00	0.500	2	NA	NA	10/22/2018
MW-87	Vinyl Chloride	4/5/2021	<1.00	1.00	0.500	2	NA	NA	10/22/2018
MW-87	Vinyl Chloride	10/8/2021	<1.00	1.00	0.500	2	NA	NA	10/22/2018
MW-87	Vinyl Chloride	4/6/2022	<1.00	1.00	0.500	2	NA	NA	10/22/2018
MW-87	Vinyl Chloride	10/25/2022	<1.00	1.00	0.500	2	NA	NA	10/22/2018
MW-87	Vinyl Chloride	4/10/2023	<1.00	1.00	0.500	2	NA	NA	10/22/2018
MW-87	Vinyl Chloride	10/13/2023	<1.00	1.00	0.500	2	NA	NA	10/22/2018
MW-87	Vinyl Chloride	4/16/2024	<1.00	1.00	0.500	2	NA	NA	10/22/2018
MW-87	Vinyl Chloride	10/15/2024	<1.00	1.00	0.500	2	NA	NA	10/22/2018

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

Table 7
Summary of Ongoing & Newly Identified SSI
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Marshall County Sanitary Landfill
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KEY:	SSI	SSL LCL>GWPS

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW 89	Cobalt	4/14/2016	<0.8	6.00	0.400	**6**	NA	NA	10/22/2018
MW 89	Cobalt	10/13/2016	<0.8	6.00	0.400	**6**	NA	NA	10/22/2018
MW 89	Cobalt	4/10/2017	<0.8	6.00	0.400	**6**	NA	NA	10/22/2018
MW 89	Cobalt	10/9/2017	<0.8	6.00	0.400	**6**	NA	NA	10/22/2018
MW 89	Cobalt	4/17/2018	<0.8	6.00	0.400	**6**	NA	NA	10/22/2018
MW 89	Cobalt	10/22/2018	<0.8	6.00	0.400	**6**	NA	NA	10/22/2018
MW 89	Cobalt	4/22/2019	<0.8	6.00	0.400	**6**	NA	NA	10/22/2018
MW 89	Cobalt	10/23/2019	<0.8	6.00	0.400	**6**	NA	NA	10/22/2018
MW 89	Cobalt	4/10/2020	<0.4	6.00	0.400	**6**	NA	NA	10/22/2018
MW 89	Cobalt	10/19/2020	<0.4	6.00	0.400	**6**	NA	NA	10/22/2018
MW 89	Cobalt	4/5/2021	<0.4	6.00	0.400	**6**	NA	NA	10/22/2018
MW 89	Cobalt	10/8/2021	<0.4	5.7024	0.200	**5.7024**	NA	NA	10/22/2018
MW 89	Cobalt	4/6/2022	<0.4	5.7100	0.200	**5.7100**	NA	NA	10/22/2018
MW 89	Cobalt	10/25/2022	<0.4	5.7836	0.200	**5.7836**	NA	NA	10/22/2018
MW 89	Cobalt	4/10/2023	<0.4	5.6895	0.200	**5.6895**	NA	NA	10/22/2018
MW 89	Cobalt	10/13/2023	<0.4	5.9053	0.200	**5.9053**	NA	NA	10/22/2018
MW 89	Cobalt	4/16/2024	<0.4	6.0584	0.200	**6.0584**	NA	NA	10/22/2018
MW 89	Cobalt	10/15/2024	<0.4	5.9879	0.200	**5.9879**	NA	NA	10/22/2018

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

Table 7
Summary of Ongoing & Newly Identified SSI
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Marshall County Sanitary Landfill
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KEY:	SSI	SSL LCL>GWPS

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-91	arsenic	4/14/2016	<4.0	25.3	2.000	**25.3**	NA	NA	10/22/2018
MW-91	arsenic	10/13/2016	<4.0	25.3	2.000	**25.3**	NA	NA	10/22/2018
MW-91	arsenic	4/10/2017	<4.0	25.3	2.000	**25.3**	NA	NA	10/22/2018
MW-91	arsenic	10/9/2017	4.00	25.3	1.324	**25.3**	NA	NA	10/22/2018
MW-91	arsenic	4/17/2018	<4.0	25.3	1.324	**25.3**	NA	NA	10/22/2018
MW-91	arsenic	10/22/2018	<4.0	25.3	1.324	**25.3**	NA	NA	10/22/2018
MW-91	arsenic	4/22/2019	<4.0	25.3	1.324	**25.3**	NA	NA	10/22/2018
MW-91	arsenic	10/23/2019	<4.0	25.3	2.000	**25.3**	NA	NA	10/22/2018
MW-91	arsenic	4/10/2020	<4.0	25.3	2.000	**25.3**	NA	NA	10/22/2018
MW-91	arsenic	10/19/2020	<4.0	7.8	2.000	10	NA	NA	10/22/2018
MW-91	arsenic	4/5/2021	<4.0	7.8	2.000	10	NA	NA	10/22/2018
MW-91	arsenic	10/8/2021	<4.0	7.8	2.000	10	NA	NA	10/22/2018
MW-91	arsenic	4/6/2022	<4.0	7.8	2.000	10	NA	NA	10/22/2018
MW-91	arsenic	10/25/2022	<4.0	7.8	2.000	10	NA	NA	10/22/2018
MW-91	arsenic	4/10/2023	<4.0	7.8	2.000	10	NA	NA	10/22/2018
MW-91	arsenic	10/13/2023	<4.0	7.8	2.000	10	NA	NA	10/22/2018
MW-91	arsenic	4/16/2024	<4.0	7.8	2.000	10	NA	NA	10/22/2018
MW-91	arsenic	10/15/2024	<4.0	7.8	2.000	10	NA	NA	10/22/2018

Table 7
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KEY:	SSI	SSL LCL>GWPS

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-91	barium	4/14/2016	162.0	830.3938	---	2000	NA	NA	10/22/2018
MW-91	barium	10/13/2016	255.0	752.2511	---	2000	NA	NA	10/22/2018
MW-91	barium	4/10/2017	162.0	697.2202	127.012	2000	NA	NA	10/22/2018
MW-91	barium	10/9/2017	663.0	661.9074	29.303	2000	NA	NA	10/22/2018
MW-91	barium	4/17/2018	126.0	632.3878	4.532	2000	NA	NA	10/22/2018
MW-91	barium	10/22/2018	167.0	608.9577	6.833	2000	NA	NA	10/22/2018
MW-91	barium	4/22/2019	183.0	585.7477	124.465	2000	NA	NA	10/22/2018
MW-91	barium	10/23/2019	363.0	566.1175	86.300	2000	NA	NA	10/22/2018
MW-91	barium	4/10/2020	165.0	547.5754	106.570	2000	NA	NA	10/22/2018
MW-91	barium	10/19/2020	268.0	531.2195	138.023	2000	NA	NA	10/22/2018
MW-91	barium	4/5/2021	118.0	516.6799	99.836	2000	NA	NA	10/22/2018
MW-91	barium	10/8/2021	235.0	503.4302	116.868	2000	NA	NA	10/22/2018
MW-91	barium	4/6/2022	111.0	491.5435	88.559	2000	NA	NA	10/22/2018
MW-91	barium	10/25/2022	203.0	480.8617	94.058	2000	NA	NA	10/22/2018
MW-91	barium	4/10/2023	116.0	471.0737	92.933	2000	NA	NA	10/22/2018
MW-91	barium	10/13/2023	241.0	462.9491	92.933	2000	NA	NA	10/22/2018
MW-91	barium	4/16/2024	186.0	460.7031	141.190	2000	NA	NA	10/22/2018
MW-91	barium	10/15/2024	242.0	452.8909	144.670	2000	NA	NA	10/22/2018

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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-91	cobalt	4/14/2016	<0.8	6.0	0.400	**6**	NA	NA	10/22/2018
MW-91	cobalt	10/13/2016	<0.8	6.0	0.400	**6**	NA	NA	10/22/2018
MW-91	cobalt	4/10/2017	<0.8	6.0	0.400	**6**	NA	NA	10/22/2018
MW-91	cobalt	10/9/2017	<0.8	6.0	0.400	**6**	NA	NA	10/22/2018
MW-91	cobalt	4/17/2018	<0.8	6.0	0.400	**6**	NA	NA	10/22/2018
MW-91	cobalt	10/22/2018	<0.8	6.0	0.400	**6**	NA	NA	10/22/2018
MW-91	cobalt	4/22/2019	<0.8	6.0	0.400	**6**	NA	NA	10/22/2018
MW-91	cobalt	10/23/2019	<0.8	6.0	0.400	**6**	NA	NA	10/22/2018
MW-91	cobalt	4/10/2020	<0.4	6.0	0.400	**6**	NA	NA	10/22/2018
MW-91	cobalt	10/19/2020	<0.4	6.0	0.400	**6**	NA	NA	10/22/2018
MW-91	cobalt	4/5/2021	<0.4	6.0	0.400	**6**	NA	NA	10/22/2018
MW-91	cobalt	10/8/2021	<0.4	5.7024	0.200	**5.7024**	NA	NA	10/22/2018
MW-91	cobalt	4/6/2022	<0.4	5.7100	0.200	**5.7100**	NA	NA	10/22/2018
MW-91	cobalt	10/25/2022	<0.4	5.7836	0.200	**5.7836**	NA	NA	10/22/2018
MW-91	cobalt	4/10/2023	<0.4	5.6895	0.200	**5.6895**	NA	NA	10/22/2018
MW-91	cobalt	10/13/2023	<0.4	5.9053	0.200	**5.9053**	NA	NA	10/22/2018
MW-91	cobalt	4/16/2024	<0.4	6.0584	0.200	**6.0584**	NA	NA	10/22/2018
MW-91	cobalt	10/15/2024	<0.4	5.9879	0.200	**5.9879**	NA	NA	10/22/2018

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KEY:	SSI	SSL LCL>GWPS

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-91	selenium	4/14/2016	<4.0	4.00	---	50	NA	NA	10/22/2018
MW-91	selenium	10/13/2016	<4.0	4.00	---	50	NA	NA	10/22/2018
MW-91	selenium	4/10/2017	6.50	4.00	0.478	50	4/10/2017	NA	10/22/2018
MW-91	selenium	7/11/2017	<4.0	4.00	---	50	4/10/2017	NA	10/22/2018
MW-91	selenium	10/9/2017	4.70	4.00	1.207	50	4/10/2017	NA	10/22/2018
MW-91	selenium	1/9/2018	<4.0	4.00	1.207	50	4/10/2017	NA	10/22/2018
MW-91	selenium	4/17/2018	5.60	4.00	1.393	50	4/10/2017	NA	10/22/2018
MW-91	selenium	7/2/2018	<4.0	4.00	1.393	50	4/10/2017	NA	10/22/2018
MW-91	selenium	10/22/2018	<4.0	4.00	0.783	50	4/10/2017	NA	10/22/2018
MW-91	selenium	4/22/2019	<4.0	4.00	0.783	50	4/10/2017	NA	10/22/2018
MW-91	selenium	10/23/2019	<4.0	4.00	2.000	50	4/10/2017	NA	10/22/2018
MW-91	selenium	4/10/2020	<4.0	4.00	2.000	50	4/10/2017	NA	10/22/2018
MW-91	selenium	10/19/2020	4.10	4.00	1.29	50	4/10/2017	NA	10/22/2018
MW-91	selenium	1/7/2021	<4.0	4.00	1.29	50	4/10/2017	NA	10/22/2018
MW-91	selenium	4/5/2021	5.30	4.00	1.428	50	4/10/2017	NA	10/22/2018
MW-91	selenium	10/8/2021	<4.0	4.00	1.428	50	4/10/2017	NA	10/22/2018
MW-91	selenium	4/6/2022	<4.0	4.00	0.884	50	4/10/2017	NA	10/22/2018
MW-91	selenium	10/25/2022	<4.0	4.00	0.884	50	4/10/2017	NA	10/22/2018
MW-91	selenium	4/10/2023	<4.0	4.00	2.000	50	4/10/2017	NA	10/22/2018
MW-91	selenium	10/13/2023	<4.0	4.00	2.000	50	4/10/2017	NA	10/22/2018
MW-91	selenium	4/16/2024	<4.0	4.00	2.000	50	4/10/2017	NA	10/22/2018
MW-91	selenium	10/15/2024	<4.0	4.00	2.000	50	4/10/2017	NA	10/22/2018

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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-91	1,1-dichloroethane	4/14/2016	<1.0	1.0	0.392	140	NA	NA	10/22/2018
MW-91	1,1-dichloroethane	10/13/2016	<1.0	1.0	0	140	NA	NA	10/22/2018
MW-91	1,1-dichloroethane	4/10/2017	<1.0	1.0	0	140	NA	NA	10/22/2018
MW-91	1,1-dichloroethane	10/9/2017	2.50	1.0	0	140	10/9/2017	NA	10/22/2018
MW-91	1,1-dichloroethane	1/9/2018	1.70	1.0	0	140	10/9/2017	NA	10/22/2018
MW-91	1,1-dichloroethane	4/17/2018	<1.0	1.0	0.147	140	10/9/2017	NA	10/22/2018
MW-91	1,1-dichloroethane	10/22/2018	<1.0	1.0	0.147	140	10/9/2017	NA	10/22/2018
MW-91	1,1-dichloroethane	4/22/2019	2.70	1.0	0.100	140	10/9/2017	NA	10/22/2018
MW-91	1,1-dichloroethane	10/23/2019	<1.0	1.0	0.000	140	10/9/2017	NA	10/22/2018
MW-91	1,1-dichloroethane	4/10/2020	<1.0	1.0	0.000	140	10/9/2017	NA	10/22/2018
MW-91	1,1-dichloroethane	10/19/2020	1.50	1.0	0.070	140	10/9/2017	NA	10/22/2018
MW-91	1,1-dichloroethane	4/5/2021	<1.0	1.0	0.162	140	10/9/2017	NA	10/22/2018
MW-91	1,1-dichloroethane	10/8/2021	<1.0	1.0	0.162	140	10/9/2017	NA	10/22/2018
MW-91	1,1-dichloroethane	4/6/2022	<1.0	1.0	0.162	140	10/9/2017	NA	10/22/2018
MW-91	1,1-dichloroethane	10/25/2022	<1.0	1.0	0.500	140	10/9/2017	NA	10/22/2018
MW-91	1,1-dichloroethane	4/10/2023	<1.0	1.0	0.500	140	10/9/2017	NA	10/22/2018
MW-91	1,1-dichloroethane	10/13/2023	<1.0	1.0	0.500	140	10/9/2017	NA	10/22/2018
MW-91	1,1-dichloroethane	4/16/2024	<1.0	1.0	0.500	140	10/9/2017	NA	10/22/2018
MW-91	1,1-dichloroethane	10/15/2024	<1.0	1.0	0.500	140	10/9/2017	NA	10/22/2018

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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-91	vinyl chloride	4/14/2016	<1.0	1.0	0.500	2	NA	NA	10/22/2018
MW-91	vinyl chloride	10/13/2016	<1.0	1.0	0.500	2	NA	NA	10/22/2018
MW-91	vinyl chloride	4/10/2017	<1.0	1.0	0.500	2	NA	NA	10/22/2018
MW-91	vinyl chloride	10/9/2017	<1.0	1.0	0.500	2	NA	NA	10/22/2018
MW-91	vinyl chloride	4/17/2018	<1.0	1.0	0.500	2	NA	NA	10/22/2018
MW-91	vinyl chloride	10/22/2018	<1.0	1.0	0.500	2	NA	NA	10/22/2018
MW-91	vinyl chloride	4/22/2019	<1.0	1.0	0.500	2	NA	NA	10/22/2018
MW-91	vinyl chloride	10/23/2019	<1.0	1.0	0.500	2	NA	NA	10/22/2018
MW-91	vinyl chloride	4/10/2020	<1.0	1.0	0.500	2	NA	NA	10/22/2018
MW-91	vinyl chloride	10/19/2020	<1.0	1.0	0.500	2	NA	NA	10/22/2018
MW-91	vinyl chloride	4/5/2021	<1.0	1.0	0.500	2	NA	NA	10/22/2018
MW-91	vinyl chloride	10/8/2021	<1.0	1.0	0.500	2	NA	NA	10/22/2018
MW-91	vinyl chloride	4/6/2022	<1.0	1.0	0.500	2	NA	NA	10/22/2018
MW-91	vinyl chloride	10/25/2022	<1.0	1.0	0.500	2	NA	NA	10/22/2018
MW-91	vinyl chloride	4/10/2023	<1.0	1.0	0.500	2	NA	NA	10/22/2018
MW-91	vinyl chloride	10/13/2023	<1.0	1.0	0.500	2	NA	NA	10/22/2018
MW-91	vinyl chloride	4/16/2024	<1.0	1.0	0.500	2	NA	NA	10/22/2018
MW-91	vinyl chloride	10/15/2024	<1.0	1.0	0.500	2	NA	NA	10/22/2018

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

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Monitoring Well	Compound	Sample Date	Each Result (ug/L)	INTERWELL Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-93	Aresenic	4/14/2016	16.10	25.30	1.768	**25.30**	4/22/2019	NA	10/22/2018
MW-93	Aresenic	10/13/2016	6.50	25.30	2.374	**25.30**	4/22/2019	NA	10/22/2018
MW-93	Aresenic	4/10/2017	5.50	25.30	2.193	**25.30**	4/22/2019	NA	10/22/2018
MW-93	Aresenic	10/9/2017	<4.0	25.30	0.428	**25.30**	4/22/2019	NA	10/22/2018
MW-93	Aresenic	4/17/2018	5.40	25.30	2.540	**25.30**	4/22/2019	NA	10/22/2018
MW-93	Aresenic	10/22/2018	18.40	25.30	0.000	**25.30**	4/22/2019	NA	10/22/2018
MW-93	Aresenic	4/22/2019	67.30	25.30	0.000	**25.30**	4/22/2019	NA	10/22/2018
MW-93	Aresenic	10/23/2019	13.60	25.30	0.000	**25.30**	4/22/2019	NA	10/22/2018
MW-93	Aresenic	4/10/2020	17.50	25.30	0.000	**25.30**	4/22/2019	NA	10/22/2018
MW-93	Aresenic	10/19/2020	4.80	7.80	0.000	10	4/22/2019	NA	10/22/2018
MW-93	Aresenic	4/5/2021	10.50	7.80	5.292	10	4/22/2019	NA	10/22/2018
MW-93	Aresenic	10/8/2021	11.40	7.80	4.934	10	4/22/2019	NA	10/22/2018
MW-93	Aresenic	4/6/2022	11.10	7.80	5.777	10	4/22/2019	NA	10/22/2018
MW-93	Aresenic	10/25/2022	58.50	7.80	0.000	10	4/22/2019	NA	10/22/2018
MW-93	Aresenic	4/10/2023	9.30	7.80	0.000	10	4/22/2019	NA	10/22/2018
MW-93	Aresenic	10/13/2023	59.60	7.80	1.434	10	4/22/2019	NA	10/22/2018
MW-93	Aresenic	4/16/2024	11.90	7.80	1.893	10	4/22/2019	NA	10/22/2018
MW-93	Aresenic	10/15/2024	15.20	7.80	0.000	10	4/22/2019	NA	10/22/2018

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Monitoring Well	Compound	Sample Date	Each Result (ug/L)	INTERWELL Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-93	Cobalt	4/14/2016	14.70	6.00	5.750	**6.00**	4/14/2016	NA	10/22/2018
MW-93	Cobalt	10/13/2016	6.60	6.00	5.361	**6.00**	4/14/2016	NA	10/22/2018
MW-93	Cobalt	4/10/2017	8.60	6.00	5.046	**6.00**	4/14/2016	NA	10/22/2018
MW-93	Cobalt	10/9/2017	5.20	6.00	3.847	**6.00**	4/14/2016	NA	10/22/2018
MW-93	Cobalt	4/17/2018	5.90	6.00	4.851	**6.00**	4/14/2016	NA	10/22/2018
MW-93	Cobalt	10/22/2018	9.90	6.00	4.789	**6.00**	4/14/2016	NA	10/22/2018
MW-93	Cobalt	4/22/2019	18.90	6.00	2.564	**6.00**	4/14/2016	NA	10/22/2018
MW-93	Cobalt	10/23/2019	8.30	6.00	4.073	**6.00**	4/14/2016	NA	10/22/2018
MW-93	Cobalt	4/10/2020	11.30	6.00	6.576	**6.00**	4/14/2016	NA	10/22/2018
MW-93	Cobalt	10/19/2020	4.60	6.00	3.635	**6.00**	4/14/2016	NA	10/22/2018
MW-93	Cobalt	4/5/2021	7.90	6.00	4.800	**6.00**	4/14/2016	NA	10/22/2018
MW-93	Cobalt	10/8/2021	7.10	5.7024	4.470	**5.7024**	4/14/2016	NA	10/22/2018
MW-93	Cobalt	4/6/2022	8.70	5.7100	4.988	**5.7100**	4/14/2016	NA	10/22/2018
MW-93	Cobalt	10/25/2022	8.60	5.7836	7.203	**5.7836**	4/14/2016	NA	10/22/2018
MW-93	Cobalt	4/10/2023	9.00	5.6895	7.350	**5.6895**	4/14/2016	NA	10/22/2018
MW-93	Cobalt	10/13/2023	8.30	5.9053	8.310	**5.9053**	4/14/2016	NA	10/22/2018
MW-93	Cobalt	4/16/2024	9.80	6.0584	8.160	**6.0584**	4/14/2016	NA	10/22/2018
MW-93	Cobalt	10/15/2024	9.90	5.9879	8.367	**5.9879**	4/14/2016	NA	10/22/2018

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Monitoring Well	Compound	Sample Date	Each Result (ug/L)	INTERWELL Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-93	Nickel	4/14/2016	26.50	8.80	27.148	100	4/14/2016	NA	10/22/2018
MW-93	Nickel	10/13/2016	31.80	8.80	26.223	100	4/14/2016	NA	10/22/2018
MW-93	Nickel	4/10/2017	27.30	8.80	25.222	100	4/14/2016	NA	10/22/2018
MW-93	Nickel	10/9/2017	28.20	8.80	25.699	100	4/14/2016	NA	10/22/2018
MW-93	Nickel	4/17/2018	26.20	8.80	25.522	100	4/14/2016	NA	10/22/2018
MW-93	Nickel	10/22/2018	35.70	8.80	24.278	100	4/14/2016	NA	10/22/2018
MW-93	Nickel	4/22/2019	24.20	8.80	22.667	100	4/14/2016	NA	10/22/2018
MW-93	Nickel	10/23/2019	26.30	8.80	22.033	100	4/14/2016	NA	10/22/2018
MW-93	Nickel	4/10/2020	18.10	8.80	17.490	100	4/14/2016	NA	10/22/2018
MW-93	Nickel	10/19/2020	27.60	8.80	19.102	100	4/14/2016	NA	10/22/2018
MW-93	Nickel	4/5/2021	23.10	8.80	18.800	100	4/14/2016	NA	10/22/2018
MW-93	Nickel	10/8/2021	21.30	8.80	17.861	100	4/14/2016	NA	10/22/2018
MW-93	Nickel	4/6/2022	20.20	8.80	19.215	100	4/14/2016	NA	10/22/2018
MW-93	Nickel	10/25/2022	27.90	8.80	19.125	100	4/14/2016	NA	10/22/2018
MW-93	Nickel	4/10/2023	31.80	8.80	18.821	100	4/14/2016	NA	10/22/2018
MW-93	Nickel	10/13/2023	28.80	8.80	21.364	100	4/14/2016	NA	10/22/2018
MW-93	Nickel	4/16/2024	25.50	8.80	25.437	100	4/14/2016	NA	10/22/2018
MW-93	Nickel	10/15/2024	27.10	8.80	25.131	100	4/14/2016	NA	10/22/2018

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

Table 7
Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
Marshall County Sanitary Landfill
Permit No.64-SDP-02-75P

KEY:	SSI	SSL LCL>GWPS

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-96R	Arsenic	4/5/2021	29.80	7.8	---	**10**	4/5/2021	NA	10/25/2022
MW-96R	Arsenic	7/2/2021	29.10	7.8	---	**10**	4/5/2021	NA	10/25/2022
MW-96R	Arsenic	10/8/2021	18.60	7.8	---	**10**	4/5/2021	NA	10/25/2022
MW-96R	Arsenic	4/6/2022	10.40	7.8	11.080	**10**	4/5/2021	NA	10/25/2022
MW-96R	Arsenic	10/25/2022	38.70	7.8	9.697	**10**	4/5/2021	NA	10/25/2022
MW-96R	Arsenic	4/11/2023	<4.0	7.8	0.000	**10**	4/5/2021	NA	10/25/2022
MW-96R	Arsenic	7/7/2023	12.90	7.8	2.286	**10**	4/5/2021	NA	10/25/2022
MW-96R	Arsenic	7/20/2023	<4.0	7.8	0.000	**10**	4/5/2021	NA	10/25/2022
MW-96R	Arsenic	10/13/2023	15.00	7.8	1.954	**10**	4/5/2021	NA	10/25/2022
MW-96R	Arsenic	4/16/2024	<4.0	7.8	0.000	**10**	4/5/2021	NA	10/25/2022
MW-96R	Arsenic	10/15/2024	6.60	7.8	0.000	**10**	4/5/2021	NA	10/25/2022

Table 7

KEY:	SSI	SSL LCL>GWPS

Summary of Ongoing & Newly Identified SSI

Annual Water Quality Report

Marshall County Sanitary Landfill

Permit No.64-SDP-02-75P

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-96R	Barium	4/5/2021	1160.00	516.6799	---	2000	4/5/2021	NA	10/25/2022
MW-96R	Barium	7/2/2021	696.00	503.4302	---	2000	4/5/2021	NA	10/25/2022
MW-96R	Barium	10/8/2021	667.00	503.4302	---	2000	4/5/2021	NA	10/25/2022
MW-96R	Barium	4/6/2022	406.00	491.5435	363.400	2000	4/5/2021	NA	10/25/2022
MW-96R	Barium	10/25/2022	661.00	480.8617	448.466	2000	4/5/2021	NA	10/25/2022
MW-96R	Barium	4/11/2023	190.00	471.0740	211.648	2000	4/5/2021	NA	10/25/2022
MW-96R	Barium	10/13/2023	576.00	462.9491	278.208	2000	4/5/2021	NA	10/25/2022
MW-96R	Barium	4/16/2024	124.00	460.7031	153.884	2000	4/5/2021	NA	10/25/2022
MW-96R	Barium	10/15/2024	338.00	452.8909	133.434	2000	4/5/2021	NA	10/25/2022

Table 7
Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
Marshall County Sanitary Landfill
Permit No.64-SDP-02-75P

KEY:	SSI	SSL LCL>GWPS

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-96R	Cobalt	4/5/2021	16.80	6.0	---	**6**	4/5/2021	NA	10/25/2022
MW-96R	Cobalt	7/2/2021	11.90	6.0	---	**6**	4/5/2021	NA	10/25/2022
MW-96R	Cobalt	10/8/2021	11.40	5.7024	---	**5.702**	4/5/2021	NA	10/25/2022
MW-96R	Cobalt	4/6/2022	7.60	5.7100	7.485	**5.710**	4/5/2021	NA	10/25/2022
MW-96R	Cobalt	10/25/2022	11.10	5.7836	8.193	**5.784**	4/5/2021	NA	10/25/2022
MW-96R	Cobalt	4/11/2023	2.20	5.6895	3.041	**5.690**	4/5/2021	NA	10/25/2022
MW-96R	Cobalt	7/7/2023	11.20	5.6895	4.363	**5.690**	4/5/2021	NA	10/25/2022
MW-96R	Cobalt	7/20/2023	10.00	5.6895	4.886	**5.690**	4/5/2021	NA	10/25/2022
MW-96R	Cobalt	10/13/2023	10.60	5.9053	4.838	**5.905**	4/5/2021	NA	10/25/2022
MW-96R	Cobalt	4/16/2024	1.80	6.0584	3.192	**6.058**	4/5/2021	NA	10/25/2022
MW-96R	Cobalt	10/15/2024	10.50	5.9879	3.177	**5.988**	4/5/2021	NA	10/25/2022

Table 7
Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
Marshall County Sanitary Landfill
Permit No.64-SDP-02-75P

KEY:	SSI	SSL LCL>GWPS

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-96R	Selenium	4/5/2021	<4	4.0	---	50	4/6/2022	NA	10/25/2022
MW-96R	Selenium	10/8/2021	<4	4.0	---	50	4/6/2022	NA	10/25/2022
MW-96R	Selenium	4/6/2022	9.10	4.0	---	50	4/6/2022	NA	10/25/2022
MW-96R	Selenium	10/25/2022	<4	4.0	0.000	50	4/6/2022	NA	10/25/2022
MW-96R	Selenium	4/11/2023	7.80	4.0	0.080	50	4/6/2022	NA	10/25/2022
MW-96R	Selenium	7/7/2023	<4	4.0	0.080	50	4/6/2022	NA	10/25/2022
MW-96R	Selenium	10/13/2023	<4	4.0	0.939	50	4/6/2022	NA	10/25/2022
MW-96R	Selenium	4/16/2024	7.40	4.0	0.992	50	4/6/2022	NA	10/25/2022
MW-96R	Selenium	10/15/2024	<4	4.0	1.012	50	4/6/2022	NA	10/25/2022

Table 7
Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
Marshall County Sanitary Landfill
Permit No.64-SDP-02-75P

KEY:	SSI	SSL LCL>GWPS

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-96R	bis (2-ethylhexyl) phthalate	4/5/2021	--	6.0	---	6	NA	NA	10/25/2022
MW-96R	bis (2-ethylhexyl) phthalate	7/2/2021	--	6.0	---	6	NA	NA	10/25/2022
MW-96R	bis (2-ethylhexyl) phthalate	10/8/2021	**6.00**	6.0	---	6	NA	NA	10/25/2022
MW-96R	bis (2-ethylhexyl) phthalate	4/6/2022	--	6.0	---	6	NA	NA	10/25/2022
MW-96R	bis (2-ethylhexyl) phthalate	10/25/2022	<6.0	6.0	---	6	NA	NA	10/25/2022
MW-96R	bis (2-ethylhexyl) phthalate	4/11/2023	--	6.0	---	6	NA	NA	10/25/2022
MW-96R	bis (2-ethylhexyl) phthalate	10/13/2023	--	6.0	---	6	NA	NA	10/25/2022
MW-96R	bis (2-ethylhexyl) phthalate	4/16/2024	--	6.0	---	6	NA	NA	10/25/2022
MW-96R	bis (2-ethylhexyl) phthalate	10/15/2024	--	6.0	---	6	NA	NA	10/25/2022

***Bold** = 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
Marshall County Sanitary Landfill
Permit No.64-SDP-02-75P

KEY:	SSI	SSL LCL>GWPS

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-97	arsenic	4/14/2016	<4.0	25.30	2.000	**25.30**	None	NA	10/22/2018
MW-97	arsenic	10/13/2016	<4.0	25.30	2.000	**25.30**	None	NA	10/22/2018
MW-97	arsenic	4/10/2017	<4.0	25.30	2.000	**25.30**	None	NA	10/22/2018
MW-97	arsenic	10/9/2017	<4.0	25.30	2.000	**25.30**	None	NA	10/22/2018
MW-97	arsenic	4/17/2018	<4.0	25.30	2.000	**25.30**	None	NA	10/22/2018
MW-97	arsenic	10/22/2018	<4.0	25.30	2.000	**25.30**	None	NA	10/22/2018
MW-97	arsenic	4/22/2019	<4.0	25.30	2.000	**25.30**	None	NA	10/22/2018
MW-97	arsenic	10/23/2019	<4.0	25.30	2.000	**25.30**	None	NA	10/22/2018
MW-97	arsenic	4/10/2020	<4.0	25.30	2.000	**25.30**	None	NA	10/22/2018
MW-97	arsenic	10/19/2020	<4.0	7.80	2.000	**10**	None	NA	10/22/2018
MW-97	arsenic	4/5/2021	<4.0	7.80	2.000	**10**	None	NA	10/22/2018
MW-97	arsenic	10/8/2021	<4.0	7.80	2.000	**10**	None	NA	10/22/2018
MW-97	arsenic	4/6/2022	<4.0	7.80	2.000	**10**	None	NA	10/22/2018
MW-97	arsenic	10/25/2022	<4.0	7.80	2.000	**10**	None	NA	10/22/2018
MW-97	arsenic	4/10/2023	<4.0	7.80	2.000	**10**	None	NA	10/22/2018
MW-97	arsenic	10/13/2023	<4.0	7.80	2.000	**10**	None	NA	10/22/2018
MW-97	arsenic	4/16/2024	<4.0	7.80	2.000	**10**	None	NA	10/22/2018
MW-97	arsenic	10/15/2024	<4.0	7.80	2.000	**10**	None	NA	10/22/2018

Table 7
Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
Marshall County Sanitary Landfill
Permit No.64-SDP-02-75P

KEY:	SSI	SSL LCL>GWPS

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-97	cobalt	4/14/2016	<0.8	6.00	0.400	**6.00**	None	NA	10/22/2018
MW-97	cobalt	10/13/2016	<0.8	6.00	0.400	**6.00**	None	NA	10/22/2018
MW-97	cobalt	4/10/2017	<0.8	6.00	0.400	**6.00**	None	NA	10/22/2018
MW-97	cobalt	10/9/2017	<0.8	6.00	0.400	**6.00**	None	NA	10/22/2018
MW-97	cobalt	4/17/2018	<0.8	6.00	0.400	**6.00**	None	NA	10/22/2018
MW-97	cobalt	10/22/2018	<0.8	6.00	0.400	**6.00**	None	NA	10/22/2018
MW-97	cobalt	4/22/2019	<0.8	6.00	0.400	**6.00**	None	NA	10/22/2018
MW-97	cobalt	10/23/2019	<0.8	6.00	0.400	**6.00**	None	NA	10/22/2018
MW-97	cobalt	4/10/2020	<0.4	6.00	0.400	**6.00**	None	NA	10/22/2018
MW-97	cobalt	10/19/2020	<0.4	6.00	0.400	**6.00**	None	NA	10/22/2018
MW-97	cobalt	4/5/2021	<0.4	6.00	0.400	**6.00**	None	NA	10/22/2018
MW-97	cobalt	10/8/2021	<0.4	5.7024	0.400	**5.7024**	None	NA	10/22/2018
MW-97	cobalt	4/6/2022	<0.4	5.7100	0.400	**5.7100**	None	NA	10/22/2018
MW-97	cobalt	10/25/2022	<0.4	5.7836	0.400	**5.7836**	None	NA	10/22/2018
MW-97	cobalt	4/10/2023	<0.4	5.6895	0.400	**5.6895**	None	NA	10/22/2018
MW-97	cobalt	10/13/2023	<0.4	5.9053	0.400	**5.9053**	None	NA	10/22/2018
MW-97	cobalt	4/16/2024	<0.4	6.0584	0.400	**6.0584**	None	NA	10/22/2018
MW-97	cobalt	10/15/2024	<0.4	5.9879	0.400	**5.9879**	None	NA	10/22/2018

Table 7
Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
Marshall County Sanitary Landfill
Permit No.64-SDP-02-75P

KEY:	SSI	SSL LCL>GWPS

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-97	cis-1,2-dichloroethene	4/14/2016	<1.0	1.00	0.500	70	None	NA	10/22/2018
MW-97	cis-1,2-dichloroethene	10/13/2016	<1.0	1.00	0.500	70	None	NA	10/22/2018
MW-97	cis-1,2-dichloroethene	4/10/2017	<1.0	1.00	0.500	70	None	NA	10/22/2018
MW-97	cis-1,2-dichloroethene	10/9/2017	<1.0	1.00	0.500	70	None	NA	10/22/2018
MW-97	cis-1,2-dichloroethene	4/17/2018	<1.0	1.00	0.500	70	None	NA	10/22/2018
MW-97	cis-1,2-dichloroethene	10/22/2018	<1.0	1.00	0.500	70	None	NA	10/22/2018
MW-97	cis-1,2-dichloroethene	4/22/2019	<1.0	1.00	0.500	70	None	NA	10/22/2018
MW-97	cis-1,2-dichloroethene	10/23/2019	<1.0	1.00	0.500	70	None	NA	10/22/2018
MW-97	cis-1,2-dichloroethene	4/10/2020	<1.0	1.00	0.500	70	None	NA	10/22/2018
MW-97	cis-1,2-dichloroethene	10/19/2020	<1.0	1.00	0.500	70	None	NA	10/22/2018
MW-97	cis-1,2-dichloroethene	4/5/2021	<1.0	1.00	0.500	70	None	NA	10/22/2018
MW-97	cis-1,2-dichloroethene	10/8/2021	<1.0	1.00	0.500	70	None	NA	10/22/2018
MW-97	cis-1,2-dichloroethene	4/6/2022	<1.0	1.00	0.500	70	None	NA	10/22/2018
MW-97	cis-1,2-dichloroethene	10/25/2022	<1.0	1.00	0.500	70	None	NA	10/22/2018
MW-97	cis-1,2-dichloroethene	4/10/2023	<1.0	1.00	0.500	70	None	NA	10/22/2018
MW-97	cis-1,2-dichloroethene	10/13/2023	<1.0	1.00	0.500	70	None	NA	10/22/2018
MW-97	cis-1,2-dichloroethene	4/16/2024	<1.0	1.00	0.500	70	None	NA	10/22/2018
MW-97	cis-1,2-dichloroethene	10/15/2024	<1.0	1.00	0.500	70	None	NA	10/22/2018

Table 7
Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
Marshall County Sanitary Landfill
Permit No.64-SDP-02-75P

KEY:	SSI	SSL LCL>GWPS

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-97	Vinyl Chloride	4/14/2016	<1.0	1.00	0.500	2	None	NA	10/22/2018
MW-97	Vinyl Chloride	10/13/2016	<1.0	1.00	0.500	2	None	NA	10/22/2018
MW-97	Vinyl Chloride	4/10/2017	<1.0	1.00	0.500	2	None	NA	10/22/2018
MW-97	Vinyl Chloride	10/9/2017	<1.0	1.00	0.500	2	None	NA	10/22/2018
MW-97	Vinyl Chloride	4/17/2018	<1.0	1.00	0.500	2	None	NA	10/22/2018
MW-97	Vinyl Chloride	10/22/2018	<1.0	1.00	0.500	2	None	NA	10/22/2018
MW-97	Vinyl Chloride	4/22/2019	<1.0	1.00	0.500	2	None	NA	10/22/2018
MW-97	Vinyl Chloride	10/23/2019	<1.0	1.00	0.500	2	None	NA	10/22/2018
MW-97	Vinyl Chloride	4/10/2020	<1.0	1.00	0.500	2	None	NA	10/22/2018
MW-97	Vinyl Chloride	10/19/2020	<1.0	1.00	0.500	2	None	NA	10/22/2018
MW-97	Vinyl Chloride	4/5/2021	<1.0	1.00	0.500	2	None	NA	10/22/2018
MW-97	Vinyl Chloride	10/8/2021	<1.0	1.00	0.500	2	None	NA	10/22/2018
MW-97	Vinyl Chloride	4/6/2022	<1.0	1.00	0.500	2	None	NA	10/22/2018
MW-97	Vinyl Chloride	10/25/2022	<1.0	1.00	0.500	2	None	NA	10/22/2018
MW-97	Vinyl Chloride	4/10/2023	<1.0	1.00	0.500	2	None	NA	10/22/2018
MW-97	Vinyl Chloride	10/13/2023	<1.0	1.00	0.500	2	None	NA	10/22/2018
MW-97	Vinyl Chloride	4/16/2024	<1.0	1.00	0.500	2	None	NA	10/22/2018
MW-97	Vinyl Chloride	10/15/2024	<1.0	1.00	0.500	2	None	NA	10/22/2018

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

Table 7A – Summary of Ongoing and Newly Identified SSI - INTRAWELL

Table 7A

KEY:	SSI	SSL LCL>GWPS

Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
Marshall County Sanitary Landfill
Permit No.64-SDP-02-75P

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	INTRAWELL Control Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-93	Aresenic	4/14/2016	16.10	24.0801	1.768	**24.0801**	4/22/2019	NA	10/22/2018
MW-93	Aresenic	10/13/2016	6.50	24.0801	2.374	**24.0801**	4/22/2019	NA	10/22/2018
MW-93	Aresenic	4/10/2017	5.50	24.0801	2.193	**24.0801**	4/22/2019	NA	10/22/2018
MW-93	Aresenic	10/9/2017	<4.0	24.0801	0.428	**24.0801**	4/22/2019	NA	10/22/2018
MW-93	Aresenic	4/17/2018	5.40	24.0801	2.540	**24.0801**	4/22/2019	NA	10/22/2018
MW-93	Aresenic	10/22/2018	18.40	24.0801	0.000	**24.0801**	4/22/2019	NA	10/22/2018
MW-93	Aresenic	4/22/2019	67.30	24.0801	0.000	**24.0801**	4/22/2019	NA	10/22/2018
MW-93	Aresenic	10/23/2019	13.60	24.0801	0.000	**24.0801**	4/22/2019	NA	10/22/2018
MW-93	Aresenic	4/10/2020	17.50	24.0801	0.000	**24.0801**	4/22/2019	NA	10/22/2018
MW-93	Aresenic	10/19/2020	4.80	24.0801	0.000	**24.0801**	4/22/2019	NA	10/22/2018
MW-93	Aresenic	4/5/2021	10.50	81.6313	5.292	**81.6313**	4/22/2019	NA	10/22/2018
MW-93	Aresenic	10/8/2021	11.40	81.6313	4.934	**81.6313**	4/22/2019	NA	10/22/2018
MW-93	Aresenic	4/6/2022	11.10	81.6313	5.777	**81.6313**	4/22/2019	NA	10/22/2018
MW-93	Aresenic	10/25/2022	58.50	81.6313	0.000	**81.6313**	4/22/2019	NA	10/22/2018
MW-93	Aresenic	4/10/2023	9.30	81.6313	0.000	**81.6313**	4/22/2019	NA	10/22/2018
MW-93	Aresenic	10/13/2023	59.60	81.6313	1.434	**81.6313**	4/22/2019	NA	10/22/2018
MW-93	Aresenic	4/16/2024	11.90	81.6313	1.893	**81.6313**	4/22/2019	NA	10/22/2018
MW-93	Aresenic	10/15/2024	15.20	81.6313	0.000	**81.6313**	4/22/2019	NA	10/22/2018

Table 7A

KEY:	SSI	SSL LCL>GWPS

Summary of Ongoing & Newly Identified SSI

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

Annual Water Quality Report

Marshall County Sanitary Landfill

Permit No.64-SDP-02-75P

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	INTRAWELL Control Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-93	Cobalt	4/14/2016	14.70	21.6670	5.750	**21.6670**	NA	NA	10/22/2018
MW-93	Cobalt	10/13/2016	6.60	21.6670	5.361	**21.6670**	NA	NA	10/22/2018
MW-93	Cobalt	4/10/2017	8.60	21.6670	5.046	**21.6670**	NA	NA	10/22/2018
MW-93	Cobalt	10/9/2017	5.20	21.6670	3.847	**21.6670**	NA	NA	10/22/2018
MW-93	Cobalt	4/17/2018	5.90	21.6670	4.851	**21.6670**	NA	NA	10/22/2018
MW-93	Cobalt	10/22/2018	9.90	21.6670	4.789	**21.6670**	NA	NA	10/22/2018
MW-93	Cobalt	4/22/2019	18.90	21.6670	2.564	**21.6670**	NA	NA	10/22/2018
MW-93	Cobalt	10/23/2019	8.30	21.6670	4.073	**21.6670**	NA	NA	10/22/2018
MW-93	Cobalt	4/10/2020	11.30	21.6670	6.576	**21.6670**	NA	NA	10/22/2018
MW-93	Cobalt	10/19/2020	4.60	21.6670	3.635	**21.6670**	NA	NA	10/22/2018
MW-93	Cobalt	4/5/2021	7.90	25.1103	4.800	**25.1103**	NA	NA	10/22/2018
MW-93	Cobalt	10/8/2021	7.10	25.1103	4.470	**25.1103**	NA	NA	10/22/2018
MW-93	Cobalt	4/6/2022	8.70	25.1103	4.988	**25.1103**	NA	NA	10/22/2018
MW-93	Cobalt	10/25/2022	8.60	25.1103	7.203	**25.1103**	NA	NA	10/22/2018
MW-93	Cobalt	4/10/2023	9.00	25.1103	7.350	**25.1103**	NA	NA	10/22/2018
MW-93	Cobalt	10/13/2023	8.30	25.1103	8.310	**25.1103**	NA	NA	10/22/2018
MW-93	Cobalt	4/16/2024	9.80	25.1103	8.160	**25.1103**	NA	NA	10/22/2018
MW-93	Cobalt	10/15/2024	9.90	25.1103	8.367	**25.1103**	NA	NA	10/22/2018

Table 7A

KEY:	SSI	SSL LCL>GWPS

Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
Marshall County Sanitary Landfill
Permit No.64-SDP-02-75P

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	INTRAWELL Control Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-93	Nickel	4/14/2016	26.50	57.7012	27.148	**100**	NA	NA	10/22/2018
MW-93	Nickel	10/13/2016	31.80	57.7012	26.223	**100**	NA	NA	10/22/2018
MW-93	Nickel	4/10/2017	27.30	57.7012	25.222	**100**	NA	NA	10/22/2018
MW-93	Nickel	10/9/2017	28.20	57.7012	25.699	**100**	NA	NA	10/22/2018
MW-93	Nickel	4/17/2018	26.20	57.7012	25.522	**100**	NA	NA	10/22/2018
MW-93	Nickel	10/22/2018	35.70	57.7012	24.278	**100**	NA	NA	10/22/2018
MW-93	Nickel	4/22/2019	24.20	57.7012	22.667	**100**	NA	NA	10/22/2018
MW-93	Nickel	10/23/2019	26.30	57.7012	22.033	**100**	NA	NA	10/22/2018
MW-93	Nickel	4/10/2020	18.10	57.7012	17.490	**100**	NA	NA	10/22/2018
MW-93	Nickel	10/19/2020	27.60	57.7012	19.102	**100**	NA	NA	10/22/2018
MW-93	Nickel	4/5/2021	23.10	54.9667	18.800	**100**	NA	NA	10/22/2018
MW-93	Nickel	10/8/2021	21.30	54.9667	17.861	**100**	NA	NA	10/22/2018
MW-93	Nickel	4/6/2022	20.20	54.9667	19.215	**100**	NA	NA	10/22/2018
MW-93	Nickel	10/25/2022	27.90	54.9667	19.125	**100**	NA	NA	10/22/2018
MW-93	Nickel	4/10/2023	31.80	54.9667	18.821	**100**	NA	NA	10/22/2018
MW-93	Nickel	10/13/2023	28.80	54.9667	21.364	**100**	NA	NA	10/22/2018
MW-93	Nickel	4/16/2024	25.50	54.9667	25.437	**100**	NA	NA	10/22/2018
MW-93	Nickel	10/15/2024	27.10	54.9667	25.131	**100**	NA	NA	10/22/2018

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

Table 7A

KEY:	SSI	SSL LCL>GWPS

Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
Marshall County Sanitary Landfill
Permit No.64-SDP-02-75P

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	INTRAWELL Control Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-96R	Arsenic	4/5/2021	29.80	76.5042	---	**76.5042**	NA	NA	10/25/2022
MW-96R	Arsenic	7/2/2021	29.10	76.5042	---	**76.5042**	NA	NA	10/25/2022
MW-96R	Arsenic	10/8/2021	18.60	76.5042	---	**76.5042**	NA	NA	10/25/2022
MW-96R	Arsenic	4/6/2022	10.40	76.5042	11.080	**76.5042**	NA	NA	10/25/2022
MW-96R	Arsenic	10/25/2022	38.70	76.5042	9.697	**76.5042**	NA	NA	10/25/2022
MW-96R	Arsenic	4/11/2023	<4.0	76.5042	0.000	**76.5042**	NA	NA	10/25/2022
MW-96R	Arsenic	7/7/2023	12.90	76.5042	2.286	**76.5042**	NA	NA	10/25/2022
MW-96R	Arsenic	7/20/2023	<4.0	76.5042	0.000	**76.5042**	NA	NA	10/25/2022
MW-96R	Arsenic	10/13/2023	15.00	76.5042	1.954	**76.5042**	NA	NA	10/25/2022
MW-96R	Arsenic	4/16/2024	<4.0	76.5042	1.954	**76.5042**	NA	NA	10/25/2022
MW-96R	Arsenic	10/15/2024	6.60	71.8419	1.092	**71.8419**	NA	NA	10/25/2022

Table 7A

KEY:	SSI	SSL LCL>GWPS

Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
Marshall County Sanitary Landfill
Permit No.64-SDP-02-75P

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	INTRAWELL Control Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-96R	Barium	4/5/2021	1160.00	2096.9752	---	**2096.9752**	NA	NA	10/25/2022
MW-96R	Barium	7/2/2021	696.00	2096.9752	---	**2096.9752**	NA	NA	10/25/2022
MW-96R	Barium	10/8/2021	667.00	2096.9752	---	**2096.9752**	NA	NA	10/25/2022
MW-96R	Barium	4/6/2022	406.00	2096.9752	363.400	**2096.9752**	NA	NA	10/25/2022
MW-96R	Barium	10/25/2022	661.00	2096.9752	448.466	**2096.9752**	NA	NA	10/25/2022
MW-96R	Barium	4/11/2023	190.00	2096.9752	211.648	**2096.9752**	NA	NA	10/25/2022
MW-96R	Barium	10/13/2023	576.00	2096.9752	278.208	**2096.9752**	NA	NA	10/25/2022
MW-96R	Barium	4/16/2024	124.00	2096.9752	153.884	**2096.9752**	NA	NA	10/25/2022
MW-96R	Barium	10/15/2024	338.00	2034.0634	133.434	**2034.0634**	NA	NA	10/25/2022

Table 7A

KEY:	SSI	SSL LCL>GWPS

Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
Marshall County Sanitary Landfill
Permit No.64-SDP-02-75P

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	INTRAWELL Control Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-96R	Cobalt	4/5/2021	16.80	23.8796	---	**23.8796**	4/5/2021	NA	10/25/2022
MW-96R	Cobalt	7/2/2021	11.90	23.8796	---	**23.8796**	4/5/2021	NA	10/25/2022
MW-96R	Cobalt	10/8/2021	11.40	23.8796	---	**23.8796**	4/5/2021	NA	10/25/2022
MW-96R	Cobalt	4/6/2022	7.60	23.8796	7.485	**23.8796**	4/5/2021	NA	10/25/2022
MW-96R	Cobalt	10/25/2022	11.10	23.8796	8.193	**23.8796**	4/5/2021	NA	10/25/2022
MW-96R	Cobalt	4/11/2023	2.20	23.8796	3.041	**23.8796**	4/5/2021	NA	10/25/2022
MW-96R	Cobalt	7/7/2023	11.20	23.8796	4.363	**23.8796**	4/5/2021	NA	10/25/2022
MW-96R	Cobalt	7/20/2023	10.00	23.8796	4.886	**23.8796**	4/5/2021	NA	10/25/2022
MW-96R	Cobalt	10/13/2023	10.60	23.8796	4.838	**23.8796**	4/5/2021	NA	10/25/2022
MW-96R	Cobalt	4/16/2024	1.80	23.8796	4.566	**23.8796**	4/5/2021	NA	10/25/2022
MW-96R	Cobalt	10/15/2024	10.50	22.9275	4.509	**22.9275**	4/5/2021	NA	10/25/2022

Table 7A

KEY:	SSI	SSL LCL>GWPS

Summary of Ongoing & Newly Identified SSI

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

Annual Water Quality Report

Marshall County Sanitary Landfill

Permit No.64-SDP-02-75P

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	INTRAWELL Control Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-96R	Selenium	4/5/2021	<4	15.9884	---	50	4/6/2022	NA	10/25/2022
MW-96R	Selenium	10/8/2021	<4	15.9884	---	50	4/6/2022	NA	10/25/2022
MW-96R	Selenium	4/6/2022	9.10	15.9884	---	50	4/6/2022	NA	10/25/2022
MW-96R	Selenium	10/25/2022	<4	15.9884	0.000	50	4/6/2022	NA	10/25/2022
MW-96R	Selenium	4/11/2023	7.80	15.9884	0.080	50	4/6/2022	NA	10/25/2022
MW-96R	Selenium	7/7/2023	<4	15.9884	0.080	50	4/6/2022	NA	10/25/2022
MW-96R	Selenium	10/13/2023	<4	15.9884	0.939	50	4/6/2022	NA	10/25/2022
MW-96R	Selenium	4/16/2024	7.40	15.9884	1.996	50	4/6/2022	NA	10/25/2022
MW-96R	Selenium	10/15/2024	<4	15.3227	1.012	50	4/6/2022	NA	10/25/2022

Table 7A

KEY:	SSI	SSL LCL>GWPS

Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
Marshall County Sanitary Landfill
Permit No.64-SDP-02-75P

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	INTRAWELL Control Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-96R	bis (2-ethylhexyl) phthalate	4/5/2021	--	6.0	---	6	NA	NA	10/25/2022
MW-96R	bis (2-ethylhexyl) phthalate	7/2/2021	--	6.0	---	6	NA	NA	10/25/2022
MW-96R	bis (2-ethylhexyl) phthalate	10/8/2021	6.00	6.0	---	6	NA	NA	10/25/2022
MW-96R	bis (2-ethylhexyl) phthalate	4/6/2022	--	6.0	---	6	NA	NA	10/25/2022
MW-96R	bis (2-ethylhexyl) phthalate	10/25/2022	<6.0	6.0	---	6	NA	NA	10/25/2022
MW-96R	bis (2-ethylhexyl) phthalate	4/11/2023	--	6.0	---	6	NA	NA	10/25/2022
MW-96R	bis (2-ethylhexyl) phthalate	10/13/2023	--	6.0	---	6	NA	NA	10/25/2022
MW-96R	bis (2-ethylhexyl) phthalate	4/16/2024	--	6.0	---	6	NA	NA	10/25/2022
MW-96R	bis (2-ethylhexyl) phthalate	10/15/2024	--	6.0	---	6	NA	NA	10/25/2022

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

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

Table 9 – Analytical Data Summary

Table 9

Analytical Data Summary for MW-120

Constituents	Units	10/13/2023
1,1,1,2-tetrachloroethane	ug/L	<1
1,1,1-trichloroethane	ug/L	<1
1,1,2,2-tetrachloroethane	ug/L	<1
1,1,2-trichloroethane	ug/L	<1
1,1-dichloroethane	ug/L	<1
1,1-dichloroethylene	ug/L	<1
1,2,3-trichloropropane	ug/L	<1
1,2-dibromo-3-chloropropane	ug/L	<5
1,2-dibromoethane	ug/L	<1
1,2-dichlorobenzene	ug/L	<1
1,2-dichloroethane	ug/L	<1
1,2-dichloropropane	ug/L	<1
1,4-dichlorobenzene	ug/L	<1
2-butanone (mek)	ug/L	<10
2-hexanone (mbk)	ug/L	<5
4-methyl-2-pentanone (mibk)	ug/L	<5
Acetone	ug/L	<10
Acrylonitrile	ug/L	<5
Alkalinity, as caco3	mg/L	354
Antimony, total	ug/L	<2
Arsenic, total	ug/L	9.9
Barium, total	ug/L	406
Benzene	ug/L	<1
Beryllium, total	ug/L	<4
Bromochloromethane	ug/L	<1
Bromodichloromethane	ug/L	<1
Bromoform	ug/L	<1
Bromomethane	ug/L	<1
Cadmium, total	ug/L	<.8
Carbon disulfide	ug/L	<1
Carbon tetrachloride	ug/L	<1
Chlorobenzene	ug/L	<1
Chloroethane	ug/L	<1
Chloroform	ug/L	<1
Chloromethane	ug/L	<1
Chromium, total	ug/L	<8
Cis-1,2-dichloroethylene	ug/L	<1
Cis-1,3-dichloropropene	ug/L	<1
Cobalt, total	ug/L	9.1
Copper, total	ug/L	4.1
Dibromochloromethane	ug/L	<1
Dibromomethane	ug/L	<1
Ethylbenzene	ug/L	<1
Lead, total	ug/L	<4
Methyl iodide	ug/L	<1
Methylene chloride	ug/L	<5
Nickel, total	ug/L	7
pH	pH	6.6
Selenium, total	ug/L	<4
Silver, total	ug/L	<4
Styrene	ug/L	<1
Tetrachloroethylene	ug/L	<1
Thallium, total	ug/L	<2
Toluene	ug/L	<1
Trans-1,2-dichloroethylene	ug/L	<1
Trans-1,3-dichloropropene	ug/L	<1
Trans-1,4-dichloro-2-butene	ug/L	<5
Trichloroethylene	ug/L	<1
Trichlorofluoromethane	ug/L	<1
Vanadium, total	ug/L	<20
Vinyl acetate	ug/L	<5
Vinyl chloride	ug/L	<1
Xylenes, total	ug/L	<2
Zinc, total	ug/L	40.4

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

Table 9

Analytical Data Summary for MW-121

Constituents	Units	10/13/2023
1,1,1,2-tetrachloroethane	ug/L	<1
1,1,1-trichloroethane	ug/L	<1
1,1,2,2-tetrachloroethane	ug/L	<1
1,1,2-trichloroethane	ug/L	<1
1,1-dichloroethane	ug/L	<1
1,1-dichloroethylene	ug/L	<1
1,2,3-trichloropropane	ug/L	<1
1,2-dibromo-3-chloropropane	ug/L	<5
1,2-dibromoethane	ug/L	<1
1,2-dichlorobenzene	ug/L	<1
1,2-dichloroethane	ug/L	<1
1,2-dichloropropane	ug/L	<1
1,4-dichlorobenzene	ug/L	<1
2-butanone (mek)	ug/L	<10
2-hexanone (mbk)	ug/L	<5
4-methyl-2-pentanone (mibk)	ug/L	<5
Acetone	ug/L	<10
Acrylonitrile	ug/L	<5
Alkalinity, as caco3	mg/L	359
Antimony, total	ug/L	<2
Arsenic, total	ug/L	9.2
Barium, total	ug/L	528
Benzene	ug/L	<1
Beryllium, total	ug/L	<4
Bromochloromethane	ug/L	<1
Bromodichloromethane	ug/L	<1
Bromoform	ug/L	<1
Bromomethane	ug/L	<1
Cadmium, total	ug/L	1
Carbon disulfide	ug/L	<1
Carbon tetrachloride	ug/L	<1
Chlorobenzene	ug/L	<1
Chloroethane	ug/L	<1
Chloroform	ug/L	<1
Chloromethane	ug/L	<1
Chromium, total	ug/L	<8
Cis-1,2-dichloroethylene	ug/L	<1
Cis-1,3-dichloropropene	ug/L	<1
Cobalt, total	ug/L	9.6
Copper, total	ug/L	<4
Dibromochloromethane	ug/L	<1
Dibromomethane	ug/L	<1
Ethylbenzene	ug/L	<1
Lead, total	ug/L	<4
Methyl iodide	ug/L	<1
Methylene chloride	ug/L	<5
Nickel, total	ug/L	8.4
pH	pH	6.5
Selenium, total	ug/L	<4
Silver, total	ug/L	<4
Styrene	ug/L	<1
Tetrachloroethylene	ug/L	<1
Thallium, total	ug/L	<2
Toluene	ug/L	<1
Trans-1,2-dichloroethylene	ug/L	<1
Trans-1,3-dichloropropene	ug/L	<1
Trans-1,4-dichloro-2-butene	ug/L	<5
Trichloroethylene	ug/L	<1
Trichlorofluoromethane	ug/L	<1
Vanadium, total	ug/L	<20
Vinyl acetate	ug/L	<5
Vinyl chloride	ug/L	<1
Xylenes, total	ug/L	<2
Zinc, total	ug/L	21

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

Table 9

Analytical Data Summary for MW-201

Constituents	Units	10/17/2014	4/6/2015	4/14/2016	10/14/2016	4/10/2017	10/9/2017	4/17/2018	10/22/2018
1,1,1,2-tetrachloroethane	ug/L				<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L				<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L				<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L				<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L				<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L				<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L				<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L				<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L				<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L				<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L				<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L				<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L				<1	<1	<1	<1	<1
2-butanone (mek)	ug/L				<5	<5	<5	<5	<5
2-hexanone (mbk)	ug/L				<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L				<5	<5	<5	<5	<5
Acetone	ug/L				<10	<10	<10	<10	<10
Acrylonitrile	ug/L				<5	<5	<5	<5	<5
Antimony, total	ug/L				<2	<2	<2	<2	<2
Arsenic, total	ug/L				<4	<4	<4	<4	<4
Barium, total	ug/L				240	235	218	223	220
Benzene	ug/L				<1	<1	<1	<1	<1
Beryllium, total	ug/L				<4	<4	<4	<4	<4
Bromochloromethane	ug/L				<1	<1	<1	<1	<1
Bromodichloromethane	ug/L				<1	<1	<1	<1	<1
Bromoform	ug/L				<1	<1	<1	<1	<1
Bromomethane	ug/L				<1	<1	<1	<1	<1
Cadmium, total	ug/L				<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L				<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L				<1	<1	<1	<1	<1
Chemical oxygen demand	mg/L	24	10	<10					
Chloride	mg/L	11	11	10					
Chlorobenzene	ug/L				<1	<1	<1	<1	<1
Chloroethane	ug/L				<1	<1	<1	<1	<1
Chloroform	ug/L				<1	<1	<1	<1	<1
Chloromethane	ug/L				<1	<1	<1	<1	<1
Chromium, total	ug/L				<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	ug/L				<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L				<1	<1	<1	<1	<1
Cobalt, total	ug/L				<.8	<.8	<.8	<.8	<.8
Copper, total	ug/L				<4	<4	<4	<4	<4
Dibromochloromethane	ug/L				<1	<1	<1	<1	<1
Dibromomethane	ug/L				<1	<1	<1	<1	<1
Ethylbenzene	ug/L				<1	<1	<1	<1	<1
Iron, dissolved	ug/L	<100	<100	<100					
Lead, total	ug/L				<4	<4	<4	<4	<4
Methyl iodide	ug/L				<1	<1	<1	<1	<1
Methylene chloride	ug/L				<5	<5	<5	<5	<5
Nickel, total	ug/L				<4	<4	<4	<4	<4
Nitrogen, ammonia	mg/L	1.44	<1.00	<1.00					
Phenols, total	mg/L	<.1							
Selenium, total	ug/L				<4	<4	<4	<4	<4
Silver, total	ug/L				<4	<4	<4	<4	<4
Solids, total suspended	mg/L				72				
Styrene	ug/L				<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L				<1	<1	<1	<1	<1
Thallium, total	ug/L				<4	<4	<4	<4	<4
Toluene	ug/L				<1	<1	<1	<1	<1
Total organic halogens (tox)	mg/L	<.01							
Trans-1,2-dichloroethylene	ug/L				<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L				<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L				<5	<5	<5	<5	<5
Trichloroethylene	ug/L				<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L				<1	<1	<1	<1	<1
Vanadium, total	ug/L				<20	<20	<20	<20	<20
Vinyl acetate	ug/L				<5	<5	<5	<5	<5
Vinyl chloride	ug/L				<1	<1	<1	<1	<1
Xylenes, total	ug/L				<2	<2	<2	<2	<2
Zinc, total	ug/L				<8.0	<8.0	39.6	<8.0	25.6

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

Table 9

Analytical Data Summary for MW-205

Constituents	Units	10/17/2014	4/6/2015	4/14/2016	10/14/2016	4/10/2017	10/9/2017	4/17/2018	10/22/2018
1,1,1,2-tetrachloroethane	ug/L				<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L				<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L				<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L				<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L				10.2	7.1	7.7	7.8	3.3
1,1-dichloroethylene	ug/L				<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L				<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L				<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L				<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L				<1.0	<1.0	<1.0	1.1	<1.0
1,2-dichloroethane	ug/L				<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L				<1.0	2.0	<1.0	3.3	<1.0
1,4-dichlorobenzene	ug/L				7.2	8.5	8.0	11.9	9.4
2-butanone (mek)	ug/L				<5	<5	<5	<5	<5
2-hexanone (mbk)	ug/L				<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L				<5	<5	<5	<5	<5
Acetone	ug/L				<10.0	<10.0	22.2	<10.0	<10.0
Acrylonitrile	ug/L				<5	<5	<5	<5	<5
Antimony, total	ug/L				<2	<2	<2	<2	<2
Arsenic, total	ug/L				24.9	23.6	18.2	22.5	24.7
Barium, total	ug/L				1450	1360	1390	1160	1500
Benzene	ug/L	7.2	10.8	12.1	12.3	10.8	8.7	5.6	10.8
Beryllium, total	ug/L				<4	<4	<4	<4	<4
Bromochloromethane	ug/L				<1	<1	<1	<1	<1
Bromodichloromethane	ug/L				<1	<1	<1	<1	<1
Bromoform	ug/L				<1	<1	<1	<1	<1
Bromomethane	ug/L				<1	<1	<1	<1	<1
Cadmium, total	ug/L				<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L				<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L				<1	<1	<1	<1	<1
Chemical oxygen demand	mg/L	62	53	39	38	49	53	39	60
Chloride	mg/L	<10	32	27					
Chlorobenzene	ug/L				2.9	2.6	1.9	2.4	<1.0
Chloroethane	ug/L				7.1	5.0	3.8	3.4	3.3
Chloroform	ug/L				<1	<1	<1	<1	<1
Chloromethane	ug/L				<1	<1	<1	<1	<1
Chromium, total	ug/L				<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	ug/L				6.1	1.7	5.1	5.9	<1.0
Cis-1,3-dichloropropene	ug/L				<1	<1	<1	<1	<1
Cobalt, total	ug/L				33.9	37.5	24.2	30.2	25.0
Copper, total	ug/L				<4.0	<4.0	<4.0	14.4	<4.0
Dibromochloromethane	ug/L				<1	<1	<1	<1	<1
Dibromomethane	ug/L				<1	<1	<1	<1	<1
Ethylbenzene	ug/L				<1.0	<1.0	1.1	<1.0	14.0
Iron, dissolved	ug/L	24800	25800	34100	30600	33400	25200	28200	30400
Iron, total	ug/L				37600	46600	23500	42100	32100
Lead, total	ug/L				<4	<4	<4	<4	<4
Methyl iodide	ug/L				<1	<1	<1	<1	<1
Methylene chloride	ug/L				<5	<5	<5	<5	<5
Nickel, total	ug/L				33.9	38.4	31.2	47.4	29.9
Nitrogen, ammonia	mg/L	3.20	3.37	4.13	5.85	6.83	7.06	2.90	7.66
pH	pH				6.6	6.5	6.5	6.4	6.4
Phenols, total	mg/L	<.1							
Selenium, total	ug/L				<4	<4	<4	<4	<4
Silver, total	ug/L				<4	<4	<4	<4	<4
Solids, total suspended	mg/L				321				
Styrene	ug/L				<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L				<1	<1	<1	<1	<1
Thallium, total	ug/L				<4	<4	<4	<4	<4
Toluene	ug/L				1.0	1.0	<1.0	<1.0	<1.0
Total organic halogens (tox)	mg/L	.239							
Trans-1,2-dichloroethylene	ug/L				<1	<1	<1	1	<1
Trans-1,3-dichloropropene	ug/L				<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L				<5	<5	<5	<5	<5
Trichloroethylene	ug/L	19.3	8.8	1.2	1.2	<1.0	<1.0	1.7	<1.0
Trichlorofluoromethane	ug/L				<1	<1	<1	<1	<1
Vanadium, total	ug/L				<20	<20	<20	<20	<20
Vinyl acetate	ug/L				<5	<5	<5	<5	<5
Vinyl chloride	ug/L				1.8	1.9	1.2	1.0	<1.0
Xylenes, total	ug/L				<2	<2	<2	<2	<2
Zinc, total	ug/L				<8.0	<8.0	<8.0	25.3	<20.0

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

Table 9

Analytical Data Summary for MW-205

Constituents	4/22/2019	10/23/2020	4/5/2021
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	5.7	4.8	2.8
1,1-dichloroethylene	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1
1,2-dibromo-3-chloropropane	<1	<5	<5
1,2-dibromoethane	<1	<1	<1
1,2-dichlorobenzene	<1.0	<1.0	<1.0
1,2-dichloroethane	<1	<1	<1
1,2-dichloropropane	1.3	<1.0	1.4
1,4-dichlorobenzene	<1.0	8.7	10.2
2-butanone (mek)	<5	<5	<5
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
Antimony, total	<2	<2	<2
Arsenic, total	25.9	21.0	51.2
Barium, total	1490	1820	1650
Benzene	11.9	13.6	7.2
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
Chemical oxygen demand	46	76	
Chloride			
Chlorobenzene	4.9	3.4	3.2
Chloroethane	4.3	3.9	1.9
Chloroform	<1	<1	<1
Chloromethane	<1	<1	<1
Chromium, total	<8	<8	<8
Cis-1,2-dichloroethylene	1.2	2.3	1.3
Cis-1,3-dichloropropene	<1	<1	<1
Cobalt, total	36.4	27.5	24.0
Copper, total	<4.0	<4.0	<4.0
Dibromochloromethane	<1	<1	<1
Dibromomethane	<1	<1	<1
Ethylbenzene	4.8	<1.0	<1.0
Iron, dissolved	34000	37300	
Iron, total	42900	39100	
Lead, total	<4	<4	<4
Methyl iodide	<1	<1	<1
Methylene chloride	<5	<5	<5
Nickel, total	30.8	32.1	29.4
Nitrogen, ammonia	7.61	21.60	
pH	6.6	6.5	
Phenols, total			
Selenium, total	<4	<4	<4
Silver, total	<4	<4	<4
Solids, total suspended			
Styrene	<1	<1	<1
Tetrachloroethylene	<1	<1	<1
Thallium, total	<2	<2	<2
Toluene	1.9	<1.0	<1.0
Total organic halogens (tox)			
Trans-1,2-dichloroethylene	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5
Trichloroethylene	<1.0	<1.0	<1.0
Trichlorofluoromethane	<1	<1	<1
Vanadium, total	<20	<20	<20
Vinyl acetate	<5	<5	<5
Vinyl chloride	<1.0	<1.0	<1.0
Xylenes, total	4	<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-212

Constituents	Units	10/17/2014	4/6/2015	4/14/2016	10/14/2016	4/10/2017	10/9/2017	4/17/2018	10/22/2018
1,1,1,2-tetrachloroethane	ug/L				<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L				<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L				<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L				<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L				<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L				<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L				<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L				<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L				<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L				<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L				<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L				<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L				<1	<1	<1	<1	<1
2-butanone (mek)	ug/L				<5	<5	<5	<5	<5
2-hexanone (mbk)	ug/L				<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L				<5	<5	<5	<5	<5
Acetone	ug/L				<10	<10	<10	<10	<10
Acrylonitrile	ug/L				<5	<5	<5	<5	<5
Antimony, total	ug/L				<2	<2	<2	<2	<2
Arsenic, total	ug/L				<4	<4	<4	<4	<4
Barium, total	ug/L				49.4	46.3	45.8	49.5	53.8
Benzene	ug/L				<1	<1	<1	<1	<1
Beryllium, total	ug/L				<4	<4	<4	<4	<4
Bromochloromethane	ug/L				<1	<1	<1	<1	<1
Bromodichloromethane	ug/L				<1	<1	<1	<1	<1
Bromoform	ug/L				<1	<1	<1	<1	<1
Bromomethane	ug/L				<1	<1	<1	<1	<1
Cadmium, total	ug/L				<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L				<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L				<1	<1	<1	<1	<1
Chemical oxygen demand	mg/L	28	10	<10					
Chloride	mg/L	<10	14	14					
Chlorobenzene	ug/L				<1	<1	<1	<1	<1
Chloroethane	ug/L				<1	<1	<1	<1	<1
Chloroform	ug/L				<1	<1	<1	<1	<1
Chloromethane	ug/L				<1	<1	<1	<1	<1
Chromium, total	ug/L				<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	ug/L				<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L				<1	<1	<1	<1	<1
Cobalt, total	ug/L				<.8	<.8	<.8	<.8	<.8
Copper, total	ug/L				<4	<4	<4	<4	<4
Dibromochloromethane	ug/L				<1	<1	<1	<1	<1
Dibromomethane	ug/L				<1	<1	<1	<1	<1
Ethylbenzene	ug/L				<1	<1	<1	<1	<1
Iron, dissolved	ug/L	<100	<100	<100					
Lead, total	ug/L				<4	<4	<4	<4	<4
Methyl iodide	ug/L				<1	<1	<1	<1	<1
Methylene chloride	ug/L				<5	<5	<5	<5	<5
Nickel, total	ug/L				<4	<4	<4	<4	<4
Nitrogen, ammonia	mg/L	<1	<1	<1					
Phenols, total	mg/L	<.1							
Selenium, total	ug/L				<4	<4	<4	<4	<4
Silver, total	ug/L				<4	<4	<4	<4	<4
Solids, total suspended	mg/L				103				
Styrene	ug/L				<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L				<1	<1	<1	<1	<1
Thallium, total	ug/L				<4	<4	<4	<4	<4
Toluene	ug/L				<1	<1	<1	<1	<1
Total organic halogens (tox)	mg/L	<.01							
Trans-1,2-dichloroethylene	ug/L				<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L				<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L				<5	<5	<5	<5	<5
Trichloroethylene	ug/L				<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L				<1	<1	<1	<1	<1
Vanadium, total	ug/L				<20	<20	<20	<20	<20
Vinyl acetate	ug/L				<5	<5	<5	<5	<5
Vinyl chloride	ug/L				<1	<1	<1	<1	<1
Xylenes, total	ug/L				<2	<2	<2	<2	<2
Zinc, total	ug/L				<8.0	<8.0	9.5	<8.0	<20.0

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

Table 9

Analytical Data Summary for MW-213

Constituents	Units	10/17/2014	4/6/2015	4/14/2016	10/14/2016	4/10/2017	4/17/2018	10/22/2018	4/22/2019
1,1,1,2-tetrachloroethane	ug/L				<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L				<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L				<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L				<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L				<1.0	<1.0	<1.0	<1.0	<1.0
1,1-dichloroethylene	ug/L				<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L				<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L				<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L				<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L				<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L				<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L				<1.0	1.6	<1.0	<1.0	3.8
1,4-dichlorobenzene	ug/L				<1	<1	<1	<1	<1
2-butanone (mek)	ug/L				<5	<5	<5	<5	<5
2-hexanone (mbk)	ug/L				<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L				<5	<5	<5	<5	<5
Acetone	ug/L				<10	<10	<10	<10	<10
Acrylonitrile	ug/L				<5	<5	<5	<5	<5
Antimony, total	ug/L				<2	<2	<2	<2	<2
Arsenic, total	ug/L				<4.0	<4.0	<4.0	<4.0	<4.0
Barium, total	ug/L				345	360	357	362	421
Benzene	ug/L				<1.0	<1.0	<1.0	<1.0	<1.0
Beryllium, total	ug/L				<4	<4	<4	<4	<4
Bromochloromethane	ug/L				<1	<1	<1	<1	<1
Bromodichloromethane	ug/L				<1	<1	<1	<1	<1
Bromoform	ug/L				<1	<1	<1	<1	<1
Bromomethane	ug/L				<1	<1	<1	<1	<1
Cadmium, total	ug/L				<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L				<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L				<1	<1	<1	<1	<1
Chemical oxygen demand	mg/L	23	<10	<10					
Chloride	mg/L	<10	19	<10					
Chlorobenzene	ug/L				<1	<1	<1	<1	<1
Chloroethane	ug/L				<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	ug/L				<1	<1	<1	<1	<1
Chloromethane	ug/L				<1	<1	<1	<1	<1
Chromium, total	ug/L				<8.0	<8.0	<8.0	<8.0	<8.0
Cis-1,2-dichloroethylene	ug/L				8.8	4.7	1.6	1.5	19.0
Cis-1,3-dichloropropene	ug/L				<1	<1	<1	<1	<1
Cobalt, total	ug/L				<.8	<.8	<.8	<.8	<.8
Copper, total	ug/L				<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	ug/L				<1	<1	<1	<1	<1
Dibromomethane	ug/L				<1	<1	<1	<1	<1
Ethylbenzene	ug/L				<1	<1	<1	<1	<1
Iron, dissolved	ug/L	<100	<100	<100					
Lead, total	ug/L				<4	<4	<4	<4	<4
Methyl iodide	ug/L				<1	<1	<1	<1	<1
Methylene chloride	ug/L				<5	<5	<5	<5	<5
Nickel, total	ug/L				<4.0	<4.0	<4.0	<4.0	<4.0
Nitrogen, ammonia	mg/L	<1	<1	<1					
Phenols, total	mg/L	<.1							
Selenium, total	ug/L				<4	<4	<4	<4	<4
Silver, total	ug/L				<4	<4	<4	<4	<4
Solids, total suspended	mg/L				150				
Styrene	ug/L				<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L				<1	<1	<1	<1	<1
Thallium, total	ug/L				<4	<4	<4	<4	<2
Toluene	ug/L				<1	<1	<1	<1	<1
Total organic halogens (tox)	mg/L	.011							
Trans-1,2-dichloroethylene	ug/L				<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L				<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L				<5	<5	<5	<5	<5
Trichloroethylene	ug/L				<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L				<1	<1	<1	<1	<1
Vanadium, total	ug/L				<20	<20	<20	<20	<20
Vinyl acetate	ug/L				<5	<5	<5	<5	<5
Vinyl chloride	ug/L				<1.0	<1.0	<1.0	<1.0	<1.0
Xylenes, total	ug/L				<2	<2	<2	<2	<2
Zinc, total	ug/L				<8	<8	<8	<8	<20

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

Table 9

Analytical Data Summary for MW-213

Constituents	10/23/2020	4/5/2021	4/6/2022	10/25/2022	4/10/2023	10/13/2023	10/15/2024
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1.0	2.2	3.3	2.7	2.5	3.2	1.9
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	6.1	7.6	7.7	6.5	5.6	4.1	3.8
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<5	<5	<10	<10	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2		<2
Arsenic, total	<4.0	<4.0	<4.0	4.7	<4.0		<4.0
Barium, total	578	409	800	899	674		720
Benzene	<1.0	<1.0	<1.0	1.1	1.0	1.4	<1.0
Beryllium, total	<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
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1
Chemical oxygen demand							
Chloride							
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1
Chloroethane	1.5	2.6	2.6	3.0	2.5	4.2	1.4
Chloroform	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1
Chromium, total	<8.0	<8.0	<8.0	10.8	<8.0		<8.0
Cis-1,2-dichloroethylene	44.9	37.8	43.5	31.9	21.0	32.6	19.0
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	6.9	<.4	.6	6.1	<.4		<.4
Copper, total	<4.0	<4.0	<4.0	9.6	<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
Iron, dissolved							
Lead, total	<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	8.5	<4.0	<4.0	11.5	<4.0		<4.0
Nitrogen, ammonia							
Phenols, total							
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	<1
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2		<2
Toluene	<1	<1	<1	<1	<1	<1	<1
Total organic halogens (tox)							
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
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	1.4	3.0	2.4	3.1	2.5	4.3	1.4
Xylenes, total	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<20	<20	<20	<20	<20		<20

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

Table 9

Analytical Data Summary for MW-214

Constituents	Units	10/17/2014	4/6/2015	4/14/2016	10/14/2016	4/10/2017	10/9/2017	4/17/2018	10/22/2018
1,1,1,2-tetrachloroethane	ug/L				<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L				<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L				<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L				<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L				1.1	<1.0	<1.0	<1.0	<1.0
1,1-dichloroethylene	ug/L				<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L				<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L				<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L				<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L				<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L				<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L				<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L				<1	<1	<1	<1	<1
2-butanone (mek)	ug/L				<5	<5	<5	<5	<5
2-hexanone (mbk)	ug/L				<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L				<5	<5	<5	<5	<5
Acetone	ug/L				<10	<10	<10	<10	<10
Acrylonitrile	ug/L				<5	<5	<5	<5	<5
Antimony, total	ug/L				<2	<2	<2	<2	<2
Arsenic, total	ug/L				<4	<4	<4	<4	<4
Barium, total	ug/L				100.0	103.0	104.0	107.0	98.9
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L				<4	<4	<4	<4	<4
Bromochloromethane	ug/L				<1	<1	<1	<1	<1
Bromodichloromethane	ug/L				<1	<1	<1	<1	<1
Bromoform	ug/L				<1	<1	<1	<1	<1
Bromomethane	ug/L				<1	<1	<1	<1	<1
Cadmium, total	ug/L				<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L				<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L				<1	<1	<1	<1	<1
Chemical oxygen demand	mg/L	13	<10	<10	<10	<10	<10	<10	<20
Chloride	mg/L	<10	<10	<10					
Chlorobenzene	ug/L				<1	<1	<1	<1	<1
Chloroethane	ug/L				<1	<1	<1	<1	<1
Chloroform	ug/L				<1	<1	<1	<1	<1
Chloromethane	ug/L				<1	<1	<1	<1	<1
Chromium, total	ug/L				<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	ug/L				3.0	2.7	2.8	3.4	1.4
Cis-1,3-dichloropropene	ug/L				<1	<1	<1	<1	<1
Cobalt, total	ug/L				<.8	<.8	<.8	<.8	<.8
Copper, total	ug/L				<4.0	<4.0	<4.0	5.8	6.0
Dibromochloromethane	ug/L				<1	<1	<1	<1	<1
Dibromomethane	ug/L				<1	<1	<1	<1	<1
Ethylbenzene	ug/L				<1	<1	<1	<1	<1
Iron, dissolved	ug/L	<100	<100	<100	<100	<100	<100	<100	<100
Iron, total	ug/L				<100	<100	<100	<100	<100
Lead, total	ug/L				<4	<4	<4	<4	<4
Methyl iodide	ug/L				<1	<1	<1	<1	<1
Methylene chloride	ug/L				<5	<5	<5	<5	<5
Nickel, total	ug/L				<4	<4	<4	<4	<4
Nitrogen, ammonia	mg/L	<1	<1	<1	<1	<1	<1	<1	<1
pH	pH				7.4	7.3	7.2	7.2	7.1
Phenols, total	mg/L	<.1							
Selenium, total	ug/L				<4	<4	<4	<4	<4
Silver, total	ug/L				<4	<4	<4	<4	<4
Solids, total suspended	mg/L				20				
Styrene	ug/L				<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L				12.2	9.9	8.8	8.6	4.1
Thallium, total	ug/L				<4	<4	<4	<4	<4
Toluene	ug/L				<1	<1	<1	<1	<1
Total organic halogens (tox)	mg/L	.016							
Trans-1,2-dichloroethylene	ug/L				<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L				<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L				<5	<5	<5	<5	<5
Trichloroethylene	ug/L	2.0	1.8	2.1	3.0	2.4	2.8	2.6	<1.0
Trichlorofluoromethane	ug/L				<1	<1	<1	<1	<1
Vanadium, total	ug/L				<20	<20	<20	<20	<20
Vinyl acetate	ug/L				<5	<5	<5	<5	<5
Vinyl chloride	ug/L				<1	<1	<1	<1	<1
Xylenes, total	ug/L				<2	<2	<2	<2	<2
Zinc, total	ug/L				<8.0	<8.0	<8.0	8.8	<8.0

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

Table 9

Analytical Data Summary for MW-214

Constituents	4/22/2019	10/23/2020	4/5/2021
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	<1	<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)	<5	<5	<5
2-hexanone (mbk)	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5
Acetone	<10	<10	<10
Acrylonitrile	<5	<5	<5
Antimony, total	<2	<2	<2
Arsenic, total	<4	<4	<4
Barium, total	93.7	112.0	109.0
Benzene	<1	<1	<1
Beryllium, total	<4	<4	<4
Bromochloromethane	<1	<1	<1
Bromodichloromethane	<1	<1	<1
Bromoform	<1	<1	<1
Bromomethane	<1	<1	<1
Cadmium, total	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1
Carbon tetrachloride	<1	<1	<1
Chemical oxygen demand	<20	<20	
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	4.1	6.5	3.3
Cis-1,3-dichloropropene	<1	<1	<1
Cobalt, total	<.8	<.4	<.4
Copper, total	<4.0	<4.0	<4.0
Dibromochloromethane	<1	<1	<1
Dibromomethane	<1	<1	<1
Ethylbenzene	<1	<1	<1
Iron, dissolved	<100	<100	
Iron, total	<100	<100	
Lead, total	<4	<4	<4
Methyl iodide	<1	<1	<1
Methylene chloride	<5	<5	<5
Nickel, total	<4	<4	<4
Nitrogen, ammonia	<1	<1	
pH	7.3	7.1	
Phenols, total			
Selenium, total	<4	<4	<4
Silver, total	<4	<4	<4
Solids, total suspended			
Styrene	<1	<1	<1
Tetrachloroethylene	8.5	7.8	5.4
Thallium, total	<2	<2	<2
Toluene	<1	<1	<1
Total organic halogens (tox)			
Trans-1,2-dichloroethylene	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5
Trichloroethylene	3.3	5.8	2.9
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-49

Constituents	Units	10/16/2014	4/6/2015	10/1/2015	4/14/2016	10/13/2016	4/10/2017	10/9/2017	1/9/2018
(3 4)-methylphenol	ug/L								
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	1.5	1.1	1.3	1.9	1.7	2.1	
1,1-dichloroethylene	ug/L	<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	
1,2,4,5-tetrachlorobenzene	ug/L								
1,2,4-trichlorobenzene	ug/L								
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	
1,2-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								
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	8.7	8.7	8.6	8.9	9.2	7.8	5.8	
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	
2-chloronaphthalene	ug/L								
2-chlorophenol	ug/L								
2-hexanone (mbk)	ug/L	<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	
4-nitroaniline	ug/L								
4-nitrophenol	ug/L								
5-nitro-o-toluidine	ug/L								
7,12-dimethylbenz(a)anthracene	ug/L								
Acenaphthene	ug/L								
Acenaphthylene	ug/L								
Acetone	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	20.0	
Acetonitrile	ug/L								
Acetophenone	ug/L								
Acrolein	ug/L								
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	
Aldrin	ug/L								
Alkalinity, as caco3	mg/L	1080	1130	994		1100			
Allyl chloride	ug/L								
Alpha-bhc	ug/L								

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

Table 9

Analytical Data Summary for MW-49

Constituents	4/17/2018	10/22/2018	4/22/2019	10/23/2019	4/10/2020	10/19/2020	4/5/2021	10/8/2021	4/6/2022
(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	1.4	1.2	3.4	2.6	2.6	2.5	1.4	1.9	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	<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		<8							
1,3,5-trinitrobenzene		<8							
1,3-dichlorobenzene		<1							
1,3-dichloropropane		<1							
1,3-dinitrobenzene		<8							
1,4-dichlorobenzene	1.8	2.5	11.4	7.4	<1.0	6.6	6.4	6.0	3.6
1,4-naphthoquinone		<8							
1,4-phenylenediamine		<8							
1-naphthylamine		<8							
2,2-dichloropropane		<1							
2,3,4,6-tetrachlorophenol		<8							
2,4,5-t		<.5							
2,4,5-tp (silvex)		<.5							
2,4,5-trichlorophenol		<8							
2,4,6-trichlorophenol		<8							
2,4-d		<2							
2,4-dichlorophenol		<8							
2,4-dimethylphenol		<8							
2,4-dinitrophenol		<8							
2,4-dinitrotoluene		<8							
2,6-dichlorophenol		<8							
2,6-dinitrotoluene		<8							
2-acetylaminofluorene		<8							
2-butanone (mek)	<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	76.0	36.8	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	24.1
Acetonitrile		<10							
Acetophenone		<8							
Acrolein		<10							
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin		<.05							
Alkalinity, as caco3						1010	960		844
Allyl chloride		<1							
Alpha-bhc		<.05							

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

Table 9

Analytical Data Summary for MW-49

Constituents	10/25/2022	4/11/2023	10/13/2023	4/17/2024	10/15/2024
(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	1.7	1.4	1.6	1.1	1.2
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	6.3	7.4	6.1	3.3	7.9
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					
Alkalinity, as caco3		816		652	1170
Allyl chloride					
Alpha-bhc					

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

Table 9

Analytical Data Summary for MW-49

Constituents	Units	10/16/2014	4/6/2015	10/1/2015	4/14/2016	10/13/2016	4/10/2017	10/9/2017	1/9/2018
Anthracene	ug/L								
Antimony, total	ug/L	<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	42.7	82.1	41.6	125.0	118.0	134.0	10.4	
Azobenzene	ug/L								
Barium, total	ug/L	544	544	571	516	747	457	695	623
Benzene	ug/L	2.9	2.3	1.9	2.6	3.5	3.0	1.2	
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	
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	<10	65	<10	<10	<10	<10		
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								
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	
Calcium, total	mg/L	234	264	233		265			
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								
Chloride	mg/L	14	29	27		37			
Chlorobenzene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Chlorobenzilate	ug/L								
Chloroethane	ug/L	12.9	8.9	8.7	9.0	11.9	10.1	8.7	
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	
Chloroprene	ug/L								
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	
Chrysene	ug/L								
Cis-1,2-dichloroethylene	ug/L	23.1	13.6	11.2	13.8	13.8	10.3	16.9	
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	
Cobalt, total	ug/L	45.5	59.9	30.1	79.5	42.2	68.4	6.5	
Copper, total	ug/L	<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	
Dibromomethane	ug/L	<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								
Ethane	ug/L								
Ethene	ug/L								
Ethyl methacrylate	ug/L								
Ethyl methanesulfonate	ug/L								
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	
Famphur	ug/L								
Fluoranthene	ug/L								

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

Table 9

Analytical Data Summary for MW-49

Constituents	4/17/2018	10/22/2018	4/22/2019	10/23/2019	4/10/2020	10/19/2020	4/5/2021	10/8/2021	4/6/2022
Anthracene		<8							
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016		<.1							
Arochlor 1221		<.2							
Arochlor 1232		<.2							
Arochlor 1242		<.2							
Arochlor 1248		<.2							
Arochlor 1254		<.1							
Arochlor 1260		<.1							
Arsenic, total	99.1	294.0	167.0	137.0	206.0	76.4	132.0	26.0	41.5
Azobenzene		<8							
Barium, total	304	283	409	380	390	479	562	526	237
Benzene	1.9	2.5	4.3	3.5	3.7	2.0	2.8	1.9	2.4
Benzo(a)anthracene		<8							
Benzo(a)pyrene		<8							
Benzo(b)fluoranthene		<8							
Benzo(g,h,i)perylene		<8							
Benzo(k)fluoranthene		<8							
Benzyl alcohol		<8							
Beryllium, total	<4	<4	<4	<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
Calcium, total									
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane		<.1							
Chloride									
Chlorobenzene	<1.0	<1.0	1.1	<1.0	1.1	1.0	1.0	1.0	<1.0
Chlorobenzilate		<8							
Chloroethane	5.5	11.0	8.2	10.2	9.4	9.8	6.8	7.3	5.6
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	2.7	<1.0	2.6	<1.0	1.1	6.2	<1.0	2.0	<1.0
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	130.0	95.5	62.6	108.0	75.1	30.1	115.0	17.3	63.3
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Cyanide, total		<.005							
Delta-bhc		<.05							
Diallate		<8							
Dibenzo(a,h)anthracene		<8							
Dibenzofuran		<8							
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
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							
Ethane						<10	<13		
Ethene						<10	<13		
Ethyl methacrylate		<10							
Ethyl methanesulfonate		<8							
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Famphur		<.4							
Fluoranthene		<8							

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

Table 9

Analytical Data Summary for MW-49

Constituents	10/25/2022	4/11/2023	10/13/2023	4/17/2024	10/15/2024
Anthracene					
Antimony, total	<2	<2	<2	<2	<2
Arochlor 1016					
Arochlor 1221					
Arochlor 1232					
Arochlor 1242					
Arochlor 1248					
Arochlor 1254					
Arochlor 1260					
Arsenic, total	135.0	278.0	44.5	53.7	520.0
Azobenzene					
Barium, total	473	275	499	429	213
Benzene	2.4	2.9	1.1	<1.0	3.7
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	.9	<.8
Calcium, total					
Carbon disulfide	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1
Chlordane					
Chloride					
Chlorobenzene	1.1	<1.0	1.0	<1.0	1.1
Chlorobenzilate					
Chloroethane	7.4	6.6	6.6	4.6	5.5
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	1.6	<1.0	2.1	2.4	<1.0
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1
Cobalt, total	30.0	65.5	16.2	5.8	66.9
Copper, total	<4.0	<4.0	<4.0	7.5	<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					
Ethane					<5
Ethene					<5
Ethyl methacrylate					
Ethyl methanesulfonate					
Ethylbenzene	<1	<1	<1	<1	<1
Famphur					
Fluoranthene					

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

Table 9

Analytical Data Summary for MW-49

Constituents	Units	10/16/2014	4/6/2015	10/1/2015	4/14/2016	10/13/2016	4/10/2017	10/9/2017	1/9/2018
Fluorene	ug/L								
Gamma-bhc (lindane)	ug/L								
Heptachlor	ug/L								
Heptachlor epoxide	ug/L								
Hexachlorobenzene	ug/L								
Hexachlorobutadiene	ug/L								
Hexachlorocyclopentadiene	ug/L								
Hexachloroethane	ug/L								
Hexachloropropene	ug/L								
Indeno(1,2,3-cd)pyrene	ug/L								
Isobutanol	mg/L								
Isodrin	ug/L								
Isophorone	ug/L								
Isosafrole	ug/L								
Kepone	ug/L								
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	
Magnesium, total	mg/L	104	112	106		115			
Mercury, total	ug/L								
Methacrylonitrile	ug/L								
Methane	ug/L								
Methapyrilene	ug/L								
Methoxychlor	ug/L								
Methyl iodide	ug/L	<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	
Naphthalene	ug/L								
Nickel, total	ug/L	18.8	24.0	11.3	31.8	15.4	27.5	5.1	
Nitrobenzene	ug/L								
Nitrogen, ammonia	mg/L	<1	<1	<1		<1			
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								
pH	pH								
Phenacetin	ug/L								
Phenanthrene	ug/L								
Phenol	ug/L								
Phorate	ug/L								
Potassium, total	mg/L	<1	<1	1		1			
Pronamide	ug/L								
Propionitrile	ug/L								
Pyrene	ug/L								
Safrole	ug/L								
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	
Sodium, total	mg/L	11.8	11.9	11.0		11.7			
Solids, total dissolved	mg/L	995	984	1010		1290			
Solids, total suspended	mg/L	46	40						
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	
Sulfate	mg/L	8.4	3.0	6.3		5.2			
Sulfide, total	mg/L								
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	
Thallium, total	ug/L	<4	<4	<1	<4	<4	<4	<4	
Thionazin	ug/L								
Tin, total	ug/L								
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	
Toxaphene	ug/L								
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	

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

Table 9

Analytical Data Summary for MW-49

Constituents	4/17/2018	10/22/2018	4/22/2019	10/23/2019	4/10/2020	10/19/2020	4/5/2021	10/8/2021	4/6/2022
Fluorene		<8							
Gamma-bhc (lindane)		<.05							
Heptachlor		<.05							
Heptachlor epoxide		<.05							
Hexachlorobenzene		<.05							
Hexachlorobutadiene		<8							
Hexachlorocyclopentadiene		<8							
Hexachloroethane		<8							
Hexachloropropene		<8							
Indeno(1,2,3-cd)pyrene		<8							
Isobutanol		<1							
Isodrin		<8							
Isophorone		<8							
Isosafrole		<8							
Kepone		<8							
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Magnesium, total									
Mercury, total		<.5							
Methacrylonitrile		<1							
Methane						737	9660		
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	41.1	40.0	28.1	44.7	35.2	13.1	53.5	10.7	28.1
Nitrobenzene		<8							
Nitrogen, ammonia									
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							
pH						6.4	6.7		6.5
Phenacetin		<8							
Phenanthrene		<8							
Phenol		<8							
Phorate		<.4							
Potassium, total									
Pronamide		<8							
Propionitrile		<10							
Pyrene		<8							
Safrole		<8							
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total									
Solids, total dissolved									
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate									
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

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

Table 9

Analytical Data Summary for MW-49

Constituents	10/25/2022	4/11/2023	10/13/2023	4/17/2024	10/15/2024
Fluorene					
Gamma-bhc (lindane)					
Heptachlor					
Heptachlor epoxide					
Hexachlorobenzene					
Hexachlorobutadiene					
Hexachlorocyclopentadiene					
Hexachloroethane					
Hexachloropropene					
Indeno(1,2,3-cd)pyrene					
Isobutanol					
Isodrin					
Isophorone					
Isosafrole					
Kepone					
Lead, total	<4	<4	<4	<4	<4
Magnesium, total					
Mercury, total					
Methacrylonitrile					
Methane					4770
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	13.9	27.5	10.0	16.2	33.9
Nitrobenzene					
Nitrogen, ammonia					
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					
pH		6.5		6.5	6.3
Phenacetin					
Phenanthrene					
Phenol					
Phorate					
Potassium, total					
Pronamide					
Propionitrile					
Pyrene					
Safrole					
Selenium, total	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4
Sodium, total					
Solids, total dissolved					
Solids, total suspended					
Styrene	<1	<1	<1	<1	<1
Sulfate					
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

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

Table 9

Analytical Data Summary for MW-49

Constituents	Units	10/16/2014	4/6/2015	10/1/2015	4/14/2016	10/13/2016	4/10/2017	10/9/2017	1/9/2018
Vinyl chloride	ug/L	4.6	3.1	3.1	4.0	5.1	5.5	3.2	
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-49

Constituents	4/17/2018	10/22/2018	4/22/2019	10/23/2019	4/10/2020	10/19/2020	4/5/2021	10/8/2021	4/6/2022
Vinyl chloride	1.1	2.6	2.8	1.4	1.1	2.4	<1.0	<1.0	<1.0
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<8.0	<8.0	<20.0	39.6	<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-49

Constituents	10/25/2022	4/11/2023	10/13/2023	4/17/2024	10/15/2024
Vinyl chloride	<1.0	<1.0	<1.0	<1.0	<1.0
Xylenes, total	<2	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0	22.7	<20.0

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

Table 9

Analytical Data Summary for MW-54

Constituents	Units	10/16/2014	4/6/2015	10/1/2015	4/14/2016	10/13/2016	4/10/2017	10/9/2017	4/17/2018
(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	17.5	13.4	12.2	11.0	13.0	10.4	11.2	7.8
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	2.3	2.1	2.3	2.1	2.3	2.7	3.5	4.3
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	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	18.1	<10.0
Acetonitrile	ug/L								
Acetophenone	ug/L								
Acrolein	ug/L								
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin	ug/L								
Alkalinity, as caco3	mg/L	911	913	704		700			
Allyl chloride	ug/L								
Alpha-bhc	ug/L								

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

Table 9

Analytical Data Summary for MW-54

Constituents	10/22/2018	4/22/2019	10/23/2019	4/10/2020	10/19/2020	4/5/2021	10/8/2021	4/6/2022	10/25/2022
(3 4)-methylphenol	<8								
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	3.8	4.7	2.9	<1.0	1.9	<1.0	1.2	<1.0	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	<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	<1.0	2.5	3.5	<1.0	3.8	2.9	2.8	2.4	3.1
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	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acetonitrile	<10								
Acetophenone	<8								
Acrolein	<10								
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin	<.05								
Alkalinity, as caco3					624	581		670	
Allyl chloride	<1								
Alpha-bhc	<.05								

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

Table 9

Analytical Data Summary for MW-54

Constituents	4/11/2023	10/13/2023	4/17/2024	10/15/2024
(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	1.6	4.1	2.3	2.9
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				
Alkalinity, as caco3	585		512	612
Allyl chloride				
Alpha-bhc				

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

Table 9

Analytical Data Summary for MW-54

Constituents	Units	10/16/2014	4/6/2015	10/1/2015	4/14/2016	10/13/2016	4/10/2017	10/9/2017	4/17/2018
Anthracene	ug/L								
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016	ug/L								
Arochlor 1221	ug/L								
Arochlor 1232	ug/L								
Arochlor 1242	ug/L								
Arochlor 1248	ug/L								
Arochlor 1254	ug/L								
Arochlor 1260	ug/L								
Arsenic, total	ug/L	<4.0	<4.0	<4.0	<4.0	5.9	<4.0	4.2	<4.0
Azobenzene	ug/L								
Barium, total	ug/L	444	578	445	493	537	454	487	466
Benzene	ug/L	1	<1	<1	<1	1	<1	1	<1
Benzo(a)anthracene	ug/L								
Benzo(a)pyrene	ug/L								
Benzo(b)fluoranthene	ug/L								
Benzo(g,h,i)perylene	ug/L								
Benzo(k)fluoranthene	ug/L								
Benzyl alcohol	ug/L								
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Beta-bhc	ug/L								
Bis (2-chloroethoxy) methane	ug/L								
Bis(2-chloroethyl) ether	ug/L								
Bis(2-chloroisopropyl) ether	ug/L								
Bis(2-ethylhexyl) phthalate	ug/L	<17	<10	<10	<15	<10	<10		
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate	ug/L								
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Calcium, total	mg/L	178	181	172		164			
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane	ug/L								
Chloride	mg/L	<10.0	<10.0	<10.0		3.2			
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate	ug/L								
Chloroethane	ug/L	20.6	14.1	13.6	5.8	13.7	10.5	11.4	8.5
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	2.9	2.4	2.1	1.9	2.0	1.5	1.9	1.2
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	9.3	12.1	7.8	10.0	14.9	13.0	10.8	14.6
Copper, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Cyanide, total	mg/L								
Delta-bhc	ug/L								
Diallate	ug/L								
Dibenzo(a,h)anthracene	ug/L								
Dibenzofuran	ug/L								
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L								
Dieldrin	ug/L								
Diethyl phthalate	ug/L								
Dimethoate	ug/L								
Dimethylphthalate	ug/L								
Di-n-butyl phthalate	ug/L								
Di-n-octyl phthalate	ug/L								
Dinoseb	ug/L								
Diphenylamine	ug/L								
Disulfoton	ug/L								
Endosulfan i	ug/L								
Endosulfan ii	ug/L								
Endosulfan sulfate	ug/L								
Endrin	ug/L								
Endrin aldehyde	ug/L								
Ethane	ug/L								
Ethene	ug/L								
Ethyl methacrylate	ug/L								
Ethyl methanesulfonate	ug/L								
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Famphur	ug/L								
Fluoranthene	ug/L								

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

Table 9

Analytical Data Summary for MW-54

Constituents	10/22/2018	4/22/2019	10/23/2019	4/10/2020	10/19/2020	4/5/2021	10/8/2021	4/6/2022	10/25/2022
Anthracene	<8								
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016	<.1								
Arochlor 1221	<.2								
Arochlor 1232	<.2								
Arochlor 1242	<.2								
Arochlor 1248	<.2								
Arochlor 1254	<.1								
Arochlor 1260	<.1								
Arsenic, total	<4.0	6.0	11.3	46.4	7.6	4.9	8.7	6.7	5.0
Azobenzene	<8								
Barium, total	373	439	354	528	424	441	408	397	438
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
Calcium, total									
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane	<.1								
Chloride									
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate	<8								
Chloroethane	2.0	4.0	4.3	1.9	2.7	<1.0	<1.0	<1.0	1.6
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	<1.0	<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	9.7	9.7	9.3	28.9	8.5	9.7	8.9	10.1	9.6
Copper, total	<4.0	<4.0	<4.0	50.9	<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								
Ethane					<14	<10			
Ethene					<14	<10			
Ethyl methacrylate	<10								
Ethyl methanesulfonate	<8								
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Famphur	<.4								
Fluoranthene	<8								

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

Table 9

Analytical Data Summary for MW-54

Constituents	4/11/2023	10/13/2023	4/17/2024	10/15/2024
Anthracene				
Antimony, total	<2	<2	<2	<2
Arochlor 1016				
Arochlor 1221				
Arochlor 1232				
Arochlor 1242				
Arochlor 1248				
Arochlor 1254				
Arochlor 1260				
Arsenic, total	<4.0	22.3	4.8	5.4
Azobenzene				
Barium, total	373	460	449	481
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
Calcium, total				
Carbon disulfide	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1
Chlordane				
Chloride				
Chlorobenzene	<1	<1	<1	<1
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	9.9	11.3	10.6	9.9
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				
Ethane				<5
Ethene				<5
Ethyl methacrylate				
Ethyl methanesulfonate				
Ethylbenzene	<1	<1	<1	<1
Famphur				
Fluoranthene				

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

Table 9

Analytical Data Summary for MW-54

Constituents	Units	10/16/2014	4/6/2015	10/1/2015	4/14/2016	10/13/2016	4/10/2017	10/9/2017	4/17/2018
Fluorene	ug/L								
Gamma-bhc (lindane)	ug/L								
Heptachlor	ug/L								
Heptachlor epoxide	ug/L								
Hexachlorobenzene	ug/L								
Hexachlorobutadiene	ug/L								
Hexachlorocyclopentadiene	ug/L								
Hexachloroethane	ug/L								
Hexachloropropene	ug/L								
Indeno(1,2,3-cd)pyrene	ug/L								
Isobutanol	mg/L								
Isodrin	ug/L								
Isophorone	ug/L								
Isosafrole	ug/L								
Kepone	ug/L								
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Magnesium, total	mg/L	72.6	69.8	72.0		64.5			
Mercury, total	ug/L								
Methacrylonitrile	ug/L								
Methane	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	33.2	38.7	25.5	37.4	52.0	35.4	28.3	32.3
Nitrobenzene	ug/L								
Nitrogen, ammonia	mg/L	<1	<1	<1		<1			
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								
pH	pH								
Phenacetin	ug/L								
Phenanthrene	ug/L								
Phenol	ug/L								
Phorate	ug/L								
Potassium, total	mg/L	1.3	<1.0	1.4		<1.0			
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
Sodium, total	mg/L	10.8	10.6	12.4		9.8			
Solids, total dissolved	mg/L	713	700	713		545			
Solids, total suspended	mg/L	107	9						
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate	mg/L	6.9	6.4	11.1		5.6			
Sulfide, total	mg/L								
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<1	<4	<4	<4	<4	<4
Thionazin	ug/L								
Tin, total	ug/L								
Toluene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Toxaphene	ug/L								
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5

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

Table 9

Analytical Data Summary for MW-54

Constituents	10/22/2018	4/22/2019	10/23/2019	4/10/2020	10/19/2020	4/5/2021	10/8/2021	4/6/2022	10/25/2022
Fluorene	<8								
Gamma-bhc (lindane)	<.05								
Heptachlor	<.05								
Heptachlor epoxide	<.05								
Hexachlorobenzene	<.05								
Hexachlorobutadiene	<8								
Hexachlorocyclopentadiene	<8								
Hexachloroethane	<8								
Hexachloropropene	<8								
Indeno(1,2,3-cd)pyrene	<8								
Isobutanol	<1								
Isodrin	<8								
Isophorone	<8								
Isosafrole	<8								
Kepone	<8								
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Magnesium, total									
Mercury, total	<.5								
Methacrylonitrile	<1								
Methane					68	63			
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	24.7	23.1	18.5	105.0	21.0	22.0	20.7	21.1	19.3
Nitrobenzene	<8								
Nitrogen, ammonia									
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								
pH					6.7	6.8		6.8	
Phenacetin	<8								
Phenanthrene	<8								
Phenol	<8								
Phorate	<.4								
Potassium, total									
Pronamide	<8								
Propionitrile	<10								
Pyrene	<8								
Safrole	<8								
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total									
Solids, total dissolved									
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate									
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	1.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
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

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

Table 9

Analytical Data Summary for MW-54

Constituents	4/11/2023	10/13/2023	4/17/2024	10/15/2024
Fluorene				
Gamma-bhc (lindane)				
Heptachlor				
Heptachlor epoxide				
Hexachlorobenzene				
Hexachlorobutadiene				
Hexachlorocyclopentadiene				
Hexachloroethane				
Hexachloropropene				
Indeno(1,2,3-cd)pyrene				
Isobutanol				
Isodrin				
Isophorone				
Isosafrole				
Kepone				
Lead, total	<4	<4	<4	<4
Magnesium, total				
Mercury, total				
Methacrylonitrile				
Methane				78
Methapyrilene				
Methoxychlor				
Methyl iodide	<1	<1	<1	<1
Methyl methacrylate				
Methyl methanesulfonate				
Methyl parathion				
Methylene chloride	<5	<5	<5	<5
Naphthalene				
Nickel, total	22.4	22.2	22.4	22.6
Nitrobenzene				
Nitrogen, ammonia				
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				
pH			6.7	6.4
Phenacetin				
Phenanthrene				
Phenol				
Phorate				
Potassium, total				
Pronamide				
Propionitrile				
Pyrene				
Safrole				
Selenium, total	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4
Sodium, total				
Solids, total dissolved				
Solids, total suspended				
Styrene	<1	<1	<1	<1
Sulfate				
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	<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

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

Table 9

Analytical Data Summary for MW-54

Constituents	Units	10/16/2014	4/6/2015	10/1/2015	4/14/2016	10/13/2016	4/10/2017	10/9/2017	4/17/2018
Vinyl chloride	ug/L	1.0	<1.0	1.0	<1.0	2.0	1.8	1.6	<1.0
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<20.0	8.3	<8.0	<8.0	9.2	<8.0	<8.0	<8.0

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

Table 9

Analytical Data Summary for MW-54

Constituents	10/22/2018	4/22/2019	10/23/2019	4/10/2020	10/19/2020	4/5/2021	10/8/2021	4/6/2022	10/25/2022
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	9.3	28.6	28.9	244.0	<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-54

Constituents	4/11/2023	10/13/2023	4/17/2024	10/15/2024
Vinyl chloride	<1.0	<1.0	<1.0	<1.0
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-66

Constituents	Units	10/16/2014	1/14/2015	4/3/2015	7/6/2015	10/1/2015	4/14/2016	10/13/2016	4/10/2017
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
Alkalinity, as caco3	mg/L	457		472		433		354	
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	325	412	524	560	612	395	413	371
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
Calcium, total	mg/L	119.0		112.0		104.0		89.8	
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	<10		<10		<10		2	
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	.9	<.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
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Magnesium, total	mg/L	39.3		35.8		36.1		28.2	
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
Nitrogen, ammonia	mg/L	<1		<1		<1		<1	
Potassium, total	mg/L	1.9		1.2		1.6		1.4	
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total	mg/L	9.9		9.3		9.1		7.3	
Solids, total dissolved	mg/L	487		380		449		331	
Solids, total suspended	mg/L	133		17					
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate	mg/L	33.4		26.0		25.9		24.1	
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<1	<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	54.6	<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-81

Constituents	Units	10/16/2014	4/3/2015	10/1/2015	4/14/2016	10/13/2016	4/10/2017	10/9/2017	4/17/2018
(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	44.6	39.2	38.6	27.5	29.7	25.9	33.9	24.5
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	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-dichloroethane	ug/L	7.7	6.5	8.7	4.7	6.4	4.2	9.9	5.8
1,2-dichloropropane	ug/L	19.6	16.1	15.8	11.1	10.6	9.1	12.6	8.6
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	1.6	1.5	1.5	2.2	3.2	2.8	3.4	4.2
1,4-naphthoquinone	ug/L								
1,4-phenylenediamine	ug/L								
1-naphthylamine	ug/L								
2,2-dichloropropane	ug/L								
2,3,4,6-tetrachlorophenol	ug/L								
2,4,5-t	ug/L								
2,4,5-tp (silvex)	ug/L								
2,4,5-trichlorophenol	ug/L								
2,4,6-trichlorophenol	ug/L								
2,4-d	ug/L								
2,4-dichlorophenol	ug/L								
2,4-dimethylphenol	ug/L								
2,4-dinitrophenol	ug/L								
2,4-dinitrotoluene	ug/L								
2,6-dichlorophenol	ug/L								
2,6-dinitrotoluene	ug/L								
2-acetylaminofluorene	ug/L								
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
2-chloronaphthalene	ug/L								
2-chlorophenol	ug/L								
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene	ug/L								
2-methylphenol	ug/L								
2-naphthylamine	ug/L								
2-nitroaniline	ug/L								
2-nitrophenol	ug/L								
3,3´-dichlorobenzidine	ug/L								
3,3'-dimethylbenzidine	ug/L								
3-methylcholanthrene	ug/L								
3-nitroaniline	ug/L								
4,4´-ddd	ug/L								
4,4´-dde	ug/L								
4,4´-ddt	ug/L								
4,6-dinitro-2-methylphenol	ug/L								
4-aminobiphenyl	ug/L								
4-bromophenyl phenyl ether	ug/L								
4-chloro-3-methylphenol	ug/L								
4-chloroaniline	ug/L								
4-chlorophenyl phenyl ether	ug/L								
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline	ug/L								
4-nitrophenol	ug/L								
5-nitro-o-toluidine	ug/L								
7,12-dimethylbenz(a)anthracene	ug/L								
Acenaphthene	ug/L								
Acenaphthylene	ug/L								
Acetone	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acetonitrile	ug/L								
Acetophenone	ug/L								
Acrolein	ug/L								
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin	ug/L								
Alkalinity, as caco3	mg/L	1140	1210	973		1030			
Allyl chloride	ug/L								
Alpha-bhc	ug/L								

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

Table 9

Analytical Data Summary for MW-81

Constituents	10/22/2018	4/22/2019	10/23/2019	4/10/2020	10/19/2020	4/5/2021	10/8/2021	4/6/2022	10/25/2022
(3 4)-methylphenol	<8								
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	19.0	13.8	11.0	10.8	27.9	15.8	29.3	21.5	27.7
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	<1.0	1.9	1.3	2.0	1.1	<1.0	<1.0	<1.0	<1.0
1,2-dichloroethane	2.9	2.1	<1.0	2.4	7.7	3.9	9.8	5.7	12.8
1,2-dichloropropane	4.9	1.9	1.5	1.1	7.9	4.0	9.3	2.6	8.1
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	8.0	7.6	<1.0	6.6	5.2	5.0	4.6	5.8
1,4-naphthoquinone	<8								
1,4-phenylenediamine	<8								
1-naphthylamine	<8								
2,2-dichloropropane	<1								
2,3,4,6-tetrachlorophenol	<8								
2,4,5-t	<.5								
2,4,5-tp (silvex)	<.5								
2,4,5-trichlorophenol	<8								
2,4,6-trichlorophenol	<8								
2,4-d	<2								
2,4-dichlorophenol	<8								
2,4-dimethylphenol	<8								
2,4-dinitrophenol	<8								
2,4-dinitrotoluene	<8								
2,6-dichlorophenol	<8								
2,6-dinitrotoluene	<8								
2-acetylaminofluorene	<8								
2-butanone (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	26.7	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acetonitrile	<10								
Acetophenone	<8								
Acrolein	<10								
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin	<.05								
Alkalinity, as caco3					1020	1050		965	
Allyl chloride	<1								
Alpha-bhc	<.05								

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

Table 9

Analytical Data Summary for MW-81

Constituents	4/11/2023	10/13/2023	4/16/2024	10/15/2024
(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	23.9	30.0	28.2	24.8
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	<1.0	<1.0	<1.0	<1.0
1,2-dichloroethane	6.9	15.6	12.3	11.2
1,2-dichloropropane	3.5	8.4	6.5	6.9
1,2-dinitrobenzene				
1,3,5-trinitrobenzene				
1,3-dichlorobenzene				
1,3-dichloropropane				
1,3-dinitrobenzene				
1,4-dichlorobenzene	4.6	5.7	4.7	5.6
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				
Alkalinity, as caco3	982		886	907
Allyl chloride				
Alpha-bhc				

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

Table 9

Analytical Data Summary for MW-81

Constituents	Units	10/16/2014	4/3/2015	10/1/2015	4/14/2016	10/13/2016	4/10/2017	10/9/2017	4/17/2018
Anthracene	ug/L								
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016	ug/L								
Arochlor 1221	ug/L								
Arochlor 1232	ug/L								
Arochlor 1242	ug/L								
Arochlor 1248	ug/L								
Arochlor 1254	ug/L								
Arochlor 1260	ug/L								
Arsenic, total	ug/L	6.1	4.4	<4.0	<4.0	4.4	<4.0	<4.0	<4.0
Azobenzene	ug/L								
Barium, total	ug/L	1610	2000	1810	1340	1600	1170	1640	1460
Benzene	ug/L	<1.0	<1.0	<1.0	<1.0	1.3	1.5	1.1	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
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	<10	36	<10	<10	<10	<10		
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate	ug/L								
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Calcium, total	mg/L	230	229	221		260			
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane	ug/L								
Chloride	mg/L	<10.0	10.0	<10.0		8.8			
Chlorobenzene	ug/L	<1.0	<1.0	<1.0	<1.0	1.1	1.0	1.1	1.1
Chlorobenzilate	ug/L								
Chloroethane	ug/L	13.3	13.7	8.6	7.5	11.5	9.8	8.7	7.1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene	ug/L								
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene	ug/L								
Cis-1,2-dichloroethylene	ug/L	288	252	201	247	243	205	188	195
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	14.0	13.6	9.3	9.5	6.4	7.7	9.1	9.2
Copper, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Cyanide, total	mg/L								
Delta-bhc	ug/L								
Diallate	ug/L								
Dibenzo(a,h)anthracene	ug/L								
Dibenzofuran	ug/L								
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L								
Dieldrin	ug/L								
Diethyl phthalate	ug/L								
Dimethoate	ug/L								
Dimethylphthalate	ug/L								
Di-n-butyl phthalate	ug/L								
Di-n-octyl phthalate	ug/L								
Dinoseb	ug/L								
Diphenylamine	ug/L								
Disulfoton	ug/L								
Endosulfan i	ug/L								
Endosulfan ii	ug/L								
Endosulfan sulfate	ug/L								
Endrin	ug/L								
Endrin aldehyde	ug/L								
Ethane	ug/L								
Ethene	ug/L								
Ethyl methacrylate	ug/L								
Ethyl methanesulfonate	ug/L								
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Famphur	ug/L								
Fluoranthene	ug/L								

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

Table 9

Analytical Data Summary for MW-81

Constituents	10/22/2018	4/22/2019	10/23/2019	4/10/2020	10/19/2020	4/5/2021	10/8/2021	4/6/2022	10/25/2022
Anthracene	<8								
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016	<.1								
Arochlor 1221	<.2								
Arochlor 1232	<.2								
Arochlor 1242	<.2								
Arochlor 1248	<.2								
Arochlor 1254	<.1								
Arochlor 1260	<.1								
Arsenic, total	10.5	6.6	8.0	11.5	6.1	6.7	5.5	8.2	6.0
Azobenzene	<8								
Barium, total	2140	956	873	1010	1180	1190	1550	1500	1670
Benzene	<1.0	2.9	2.7	2.9	1.5	1.1	<1.0	<1.0	<1.0
Benzo(a)anthracene	<8								
Benzo(a)pyrene	<8								
Benzo(b)fluoranthene	<8								
Benzo(g,h,i)perylene	<8								
Benzo(k)fluoranthene	<8								
Benzyl alcohol	<8								
Beryllium, total	<4	<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
Calcium, total									
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane	<.1								
Chloride									
Chlorobenzene	<1.0	1.4	1.4	1.3	1.5	1.2	1.3	1.2	1.7
Chlorobenzilate	<8								
Chloroethane	5.2	6.0	7.8	6.0	9.2	5.6	5.7	5.0	7.2
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	101	84	127	83	210	148	188	192	225
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	5.6	15.9	13.1	23.5	12.9	8.8	10.9	12.1	9.7
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								
Ethane					<10	<10			
Ethene					<10	<10			
Ethyl methacrylate	<10								
Ethyl methanesulfonate	<8								
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Famphur	<.4								
Fluoranthene	<8								

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

Table 9

Analytical Data Summary for MW-81

Constituents	4/11/2023	10/13/2023	4/16/2024	10/15/2024
Anthracene				
Antimony, total	<2	<2	<2	<2
Arochlor 1016				
Arochlor 1221				
Arochlor 1232				
Arochlor 1242				
Arochlor 1248				
Arochlor 1254				
Arochlor 1260				
Arsenic, total	7.0	6.3	6.8	6.0
Azobenzene				
Barium, total	1540	1750	1940	1580
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
Calcium, total				
Carbon disulfide	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1
Chlordane				
Chloride				
Chlorobenzene	1.4	1.9	1.7	1.8
Chlorobenzilate				
Chloroethane	5.4	6.5	6.8	6.0
Chloroform	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1
Chloroprene				
Chromium, total	<8	<8	<8	<8
Chrysene				
Cis-1,2-dichloroethylene	140	181	164	127
Cis-1,3-dichloropropene	<1	<1	<1	<1
Cobalt, total	10.9	9.0	10.5	8.2
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				
Ethane				<5
Ethene				<5
Ethyl methacrylate				
Ethyl methanesulfonate				
Ethylbenzene	<1	<1	<1	<1
Famphur				
Fluoranthene				

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

Table 9

Analytical Data Summary for MW-81

Constituents	Units	10/16/2014	4/3/2015	10/1/2015	4/14/2016	10/13/2016	4/10/2017	10/9/2017	4/17/2018
Fluorene	ug/L								
Gamma-bhc (lindane)	ug/L								
Heptachlor	ug/L								
Heptachlor epoxide	ug/L								
Hexachlorobenzene	ug/L								
Hexachlorobutadiene	ug/L								
Hexachlorocyclopentadiene	ug/L								
Hexachloroethane	ug/L								
Hexachloropropene	ug/L								
Indeno(1,2,3-cd)pyrene	ug/L								
Isobutanol	mg/L								
Isodrin	ug/L								
Isophorone	ug/L								
Isosafrole	ug/L								
Kepone	ug/L								
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Magnesium, total	mg/L	113	112	113		129			
Mercury, total	ug/L								
Methacrylonitrile	ug/L								
Methane	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	19.7	17.3	11.2	9.7	6.1	7.6	12.0	10.3
Nitrobenzene	ug/L								
Nitrogen, ammonia	mg/L	<1	<1	<1		<1			
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								
pH	pH								
Phenacetin	ug/L								
Phenanthrene	ug/L								
Phenol	ug/L								
Phorate	ug/L								
Potassium, total	mg/L	3.0	1.7	2.6		3.2			
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
Sodium, total	mg/L	10.3	10.7	11.0		12.0			
Solids, total dissolved	mg/L	955	880	943		1150			
Solids, total suspended	mg/L	500	25						
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate	mg/L	17.5	13.0	9.8		16.7			
Sulfide, total	mg/L								
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<1	<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	2.5	3.2	2.2	2.6	3.1	3.0	2.6	2.4
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	10.0	6.7	12.2	4.7	2.1	5.4	9.4	4.3
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

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

Table 9

Analytical Data Summary for MW-81

Constituents	10/22/2018	4/22/2019	10/23/2019	4/10/2020	10/19/2020	4/5/2021	10/8/2021	4/6/2022	10/25/2022
Fluorene	<8								
Gamma-bhc (lindane)	<.05								
Heptachlor	<.05								
Heptachlor epoxide	<.05								
Hexachlorobenzene	<.05								
Hexachlorobutadiene	<8								
Hexachlorocyclopentadiene	<8								
Hexachloroethane	<8								
Hexachloropropene	<8								
Indeno(1,2,3-cd)pyrene	<8								
Isobutanol	<1								
Isodrin	<8								
Isophorone	<8								
Isosafrole	<8								
Kepone	<8								
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Magnesium, total									
Mercury, total	<.5								
Methacrylonitrile	<1								
Methane					1160	2880			
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	22.0	5.0	5.6	5.9	10.3	9.5	11.5	11.9	11.2
Nitrobenzene	<8								
Nitrogen, ammonia									
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								
pH					6.6	6.7		6.6	
Phenacetin	<8								
Phenanthrene	<8								
Phenol	<8								
Phorate	<.4								
Potassium, total									
Pronamide	<8								
Propionitrile	<10								
Pyrene	<8								
Safrole	<8								
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total									
Solids, total dissolved									
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate									
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	2.6	2.2	2.4	4.1	1.8	1.9	<1.0	2.4
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	<1.0	<1.0	<1.0	<1.0	3.0	2.0	2.3	1.0	2.9
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

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

Table 9

Analytical Data Summary for MW-81

Constituents	4/11/2023	10/13/2023	4/16/2024	10/15/2024
Fluorene				
Gamma-bhc (lindane)				
Heptachlor				
Heptachlor epoxide				
Hexachlorobenzene				
Hexachlorobutadiene				
Hexachlorocyclopentadiene				
Hexachloroethane				
Hexachloropropene				
Indeno(1,2,3-cd)pyrene				
Isobutanol				
Isodrin				
Isophorone				
Isosafrole				
Kepone				
Lead, total	<4	<4	<4	<4
Magnesium, total				
Mercury, total				
Methacrylonitrile				
Methane				560
Methapyrilene				
Methoxychlor				
Methyl iodide	<1	<1	<1	<1
Methyl methacrylate				
Methyl methanesulfonate				
Methyl parathion				
Methylene chloride	<5	<5	<5	<5
Naphthalene				
Nickel, total	10.9	12.2	13.4	9.4
Nitrobenzene				
Nitrogen, ammonia				
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				
pH	6.6		6.6	6.3
Phenacetin				
Phenanthrene				
Phenol				
Phorate				
Potassium, total				
Pronamide				
Propionitrile				
Pyrene				
Safrole				
Selenium, total	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4
Sodium, total				
Solids, total dissolved				
Solids, total suspended				
Styrene	<1	<1	<1	<1
Sulfate				
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	2.2	2.5	2.2	2.4
Trans-1,3-dichloropropene	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5
Trichloroethylene	2.6	3.3	1.4	2.2
Trichlorofluoromethane	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5

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

Table 9

Analytical Data Summary for MW-81

Constituents	Units	10/16/2014	4/3/2015	10/1/2015	4/14/2016	10/13/2016	4/10/2017	10/9/2017	4/17/2018
Vinyl chloride	ug/L	9.7	12.9	8.8	15.8	20.1	16.5	13.2	13.6
Xylenes, total	ug/L	<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	<8.0

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

Table 9

Analytical Data Summary for MW-81

Constituents	10/22/2018	4/22/2019	10/23/2019	4/10/2020	10/19/2020	4/5/2021	10/8/2021	4/6/2022	10/25/2022
Vinyl chloride	26.6	15.5	24.2	13.9	15.4	11.3	7.2	7.0	8.4
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	15.4	<20.0	20.8	<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-81

Constituents	4/11/2023	10/13/2023	4/16/2024	10/15/2024
Vinyl chloride	7.7	6.7	6.8	6.5
Xylenes, total	<2	<2	<2	<2
Zinc, total	<20.0	21.8	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-85

Constituents	Units	10/16/2014	1/14/2015	4/3/2015	7/6/2015	10/1/2015	4/14/2016	10/13/2016	4/10/2017	10/9/2017
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	15.4
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Alkalinity, as caco3	mg/L	387		416		437		382		
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	138	157	167	143	135	155	149	175	143
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
Calcium, total	mg/L	107		101		103		121		
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
Chloride	mg/L	<10		<10		<10		<1		
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Copper, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Magnesium, total	mg/L	31.7		29.1		31.2		34.2		
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
Nitrogen, ammonia	mg/L	<1		<1		<1		<1		
Potassium, total	mg/L	2.8		1.9		2.8		4.3		
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
Sodium, total	mg/L	16.2		16.5		15.0		15.9		
Solids, total dissolved	mg/L	40400		344		411		435		
Solids, total suspended	mg/L	308		41						
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate	mg/L	14.3		13.6		14.8		14.9		
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<1	<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	27.0	9.1	<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-85

Constituents	4/17/2018	10/22/2018	4/22/2019	10/23/2019	4/10/2020	10/19/2020	4/5/2021	10/8/2021	4/6/2022
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
Alkalinity, as caco3									
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	142	146	152	126	160	151	135	121	133
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
Calcium, total									
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride									
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.8	<.8	<.8	<.8	.4	.4	<.4	<.4	<.4
Copper, total	<4.0	4.8	<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
Magnesium, total									
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	20.6	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Nitrogen, ammonia									
Potassium, total									
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total									
Solids, total dissolved									
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate									
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	125.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-85

Constituents	10/25/2022	4/11/2023	10/13/2023	4/17/2024	10/15/2024
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
Alkalinity, as caco3					
Antimony, total	<2	<2	<2	<2	<2
Arsenic, total	<4	<4	<4	<4	<4
Barium, total	138	141	143	144	136
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
Calcium, total					
Carbon disulfide	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1
Chloride					
Chlorobenzene	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1
Cobalt, total	<.4	<.4	<.4	.4	<.4
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4	<4
Magnesium, total					
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
Nitrogen, ammonia					
Potassium, total					
Selenium, total	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4
Sodium, total					
Solids, total dissolved					
Solids, total suspended					
Styrene	<1	<1	<1	<1	<1
Sulfate					
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-87

Constituents	Units	10/16/2014	4/3/2015	10/1/2015	4/14/2016	10/13/2016	4/10/2017	10/9/2017	4/17/2018
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	18.4	<10.0
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Alkalinity, as caco3	mg/L	373	400	352		340			
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	138	129	154	132	135	128	110	124
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Bis(2-ethylhexyl) phthalate	ug/L	<10	<10	<10	<10	<10	<10		
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Calcium, total	mg/L	121	125	104		124			
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	<10.0	<10.0	<10.0		1.5			
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	<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
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Magnesium, total	mg/L	28.6	27.1	25.1		27.9			
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
Nitrogen, ammonia	mg/L	<1	<1	<1		<1			
Potassium, total	mg/L	3.5	3.0	3.4		3.8			
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total	mg/L	18.7	17.5	17.1		19.7			
Solids, total dissolved	mg/L	439	419	457		443			
Solids, total suspended	mg/L	3	3						
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate	mg/L	91.2	85.7	85.1		95.2			
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<1	<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	<8	<8	<8	<8	<8	<8	<8

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

Table 9

Analytical Data Summary for MW-87

Constituents	10/22/2018	4/22/2019	10/23/2019	4/10/2020	10/19/2020	4/5/2021	10/8/2021	4/6/2022	10/25/2022
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	<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	<10.0	<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
Alkalinity, as caco3									
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	120	131	125	121	125	107	109	104	120
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
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
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Calcium, total									
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride									
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	<.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
Magnesium, total									
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
Nitrogen, ammonia									
Potassium, total									
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total									
Solids, total dissolved									
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate									
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	<20	<20	<20	<20	<20	<20	<20	<20

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

Table 9

Analytical Data Summary for MW-87

Constituents	4/11/2023	10/13/2023	4/16/2024	10/15/2024
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	<10.0	<10.0	<10.0	<10.0
Acrylonitrile	<5	<5	<5	<5
Alkalinity, as caco3				
Antimony, total	<2	<2	<2	<2
Arsenic, total	<4	<4	<4	<4
Barium, total	115	104	117	100
Benzene	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4
Bis(2-ethylhexyl) phthalate				
Bromochloromethane	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8
Calcium, total				
Carbon disulfide	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1
Chloride				
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
Magnesium, total				
Methyl iodide	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5
Nickel, total	<4	<4	<4	<4
Nitrogen, ammonia				
Potassium, total				
Selenium, total	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4
Sodium, total				
Solids, total dissolved				
Solids, total suspended				
Styrene	<1	<1	<1	<1
Sulfate				
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	<20	<20	<20

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

Table 9

Analytical Data Summary for MW-89

Constituents	Units	10/16/2014	4/3/2015	10/1/2015	4/14/2016	10/13/2016	4/10/2017	10/9/2017	4/17/2018
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	18.2	<10.0
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Alkalinity, as caco3	mg/L	406	428	393		374			
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	329	356	330	323	317	309	295	238
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Bis(2-ethylhexyl) phthalate	ug/L	<10		<10	19	<10	<10		
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Calcium, total	mg/L	94.7	102.0	84.4		105.0			
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	<10.0	<10.0	<10.0		7.5			
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	<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
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Magnesium, total	mg/L	33.5	33.0	31.1		37.2			
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
Nitrogen, ammonia	mg/L	<1	<1	<1		<1			
Potassium, total	mg/L	1.0	<1.0	1.0		1.4			
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total	mg/L	14.5	15.5	13.2		17.8			
Solids, total dissolved	mg/L	407	353	384		320			
Solids, total suspended	mg/L	87	5						
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate	mg/L	10.1	9.8	10.2		14.6			
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<1	<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	<8	<8	<8	<8	<8	<8	<8

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

Table 9

Analytical Data Summary for MW-89

Constituents	10/22/2018	4/22/2019	10/23/2019	4/10/2020	10/19/2020	4/5/2021	10/8/2021	4/6/2022	10/25/2022
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	<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	<10.0	<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
Alkalinity, as caco3									
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	255	336	352	311	336	263	298	219	242
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
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
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Calcium, total									
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride									
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	<.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
Magnesium, total									
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
Nitrogen, ammonia									
Potassium, total									
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total									
Solids, total dissolved									
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate									
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	<20	<20	<20	<20	<20	<20	<20	<20

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

Table 9

Analytical Data Summary for MW-89

Constituents	4/11/2023	11/9/2023	4/16/2024	10/15/2024
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	<10.0	<10.0	<10.0	<10.0
Acrylonitrile	<5	<5	<5	<5
Alkalinity, as caco3				
Antimony, total	<2	<2	<2	<2
Arsenic, total	<4	<4	<4	<4
Barium, total	214	257	240	215
Benzene	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4
Bis(2-ethylhexyl) phthalate				
Bromochloromethane	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8
Calcium, total				
Carbon disulfide	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1
Chloride				
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
Magnesium, total				
Methyl iodide	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5
Nickel, total	<4	<4	<4	<4
Nitrogen, ammonia				
Potassium, total				
Selenium, total	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4
Sodium, total				
Solids, total dissolved				
Solids, total suspended				
Styrene	<1	<1	<1	<1
Sulfate				
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	<20	<20	<20

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

Table 9

Analytical Data Summary for MW-91

Constituents	Units	10/16/2014	4/3/2015	10/1/2015	4/14/2016	10/13/2016	4/10/2017	7/11/2017	10/9/2017
(3 4)-methylphenol	ug/L								
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	2.4	6.1	3.6	<1.0	<1.0	<1.0		2.5
1,1-dichloroethylene	ug/L	<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
1,2,4,5-tetrachlorobenzene	ug/L								
1,2,4-trichlorobenzene	ug/L								
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1		<1
1,2-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								
1,3,5-trinitrobenzene	ug/L								
1,3-dichlorobenzene	ug/L								
1,3-dichloropropane	ug/L								
1,3-dinitrobenzene	ug/L								
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1		<1
1,4-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
2-chloronaphthalene	ug/L								
2-chlorophenol	ug/L								
2-hexanone (mbk)	ug/L	<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
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
Acetonitrile	ug/L								
Acetophenone	ug/L								
Acrolein	ug/L								
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5		<5
Aldrin	ug/L								
Alkalinity, as caco3	mg/L	464	559	559		382			
Allyl chloride	ug/L								
Alpha-bhc	ug/L								

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

Table 9

Analytical Data Summary for MW-91

Constituents	1/9/2018	4/17/2018	7/2/2018	10/22/2018	4/22/2019	10/23/2019	4/10/2020	10/19/2020	1/7/2021
(3 4)-methylphenol				<8					
1,1,1,2-tetrachloroethane		<1		<1	<1	<1	<1	<1	
1,1,1-trichloroethane		<1		<1	<1	<1	<1	<1	
1,1,2,2-tetrachloroethane		<1		<1	<1	<1	<1	<1	
1,1,2-trichloroethane		<1		<1	<1	<1	<1	<1	
1,1-dichloroethane	1.7	<1.0		<1.0	2.7	<1.0	<1.0	1.5	
1,1-dichloroethylene		<1		<1	<1	<1	<1	<1	
1,1-dichloropropene				<1					
1,2,3-trichloropropane		<1		<1	<1	<1	<1	<1	
1,2,4,5-tetrachlorobenzene				<8					
1,2,4-trichlorobenzene				<1					
1,2-dibromo-3-chloropropane		<1		<1	<1	<1	<5	<5	
1,2-dibromoethane		<1		<1	<1	<1	<1	<1	
1,2-dichlorobenzene		<1		<1	<1	<1	<1	<1	
1,2-dichloroethane		<1		<1	<1	<1	<1	<1	
1,2-dichloropropane		<1		<1	<1	<1	<1	<1	
1,2-dinitrobenzene				<8					
1,3,5-trinitrobenzene				<8					
1,3-dichlorobenzene				<1					
1,3-dichloropropane				<1					
1,3-dinitrobenzene				<8					
1,4-dichlorobenzene		<1		<1	<1	<1	<1	<1	
1,4-naphthoquinone				<8					
1,4-phenylenediamine				<8					
1-naphthylamine				<8					
2,2-dichloropropane				<1					
2,3,4,6-tetrachlorophenol				<8					
2,4,5-t				<.5					
2,4,5-tp (silvex)				<.5					
2,4,5-trichlorophenol				<8					
2,4,6-trichlorophenol				<8					
2,4-d				<2					
2,4-dichlorophenol				<8					
2,4-dimethylphenol				<8					
2,4-dinitrophenol				<8					
2,4-dinitrotoluene				<8					
2,6-dichlorophenol				<8					
2,6-dinitrotoluene				<8					
2-acetylaminofluorene				<8					
2-butanone (mek)		<5		<5	<5	<5	<5	<5	
2-chloronaphthalene				<8					
2-chlorophenol				<8					
2-hexanone (mbk)		<5		<5	<5	<5	<5	<5	
2-methylnaphthalene				<8					
2-methylphenol				<8					
2-naphthylamine				<8					
2-nitroaniline				<8					
2-nitrophenol				<8					
3,3´-dichlorobenzidine				<8					
3,3'-dimethylbenzidine				<8					
3-methylcholanthrene				<8					
3-nitroaniline				<8					
4,4´-ddd				<.05					
4,4´-dde				<.05					
4,4´-ddt				<.05					
4,6-dinitro-2-methylphenol				<8					
4-aminobiphenyl				<8					
4-bromophenyl phenyl ether				<8					
4-chloro-3-methylphenol				<8					
4-chloroaniline				<8					
4-chlorophenyl phenyl ether				<8					
4-methyl-2-pentanone (mibk)		<5		<5	<5	<5	<5	<5	
4-nitroaniline				<8					
4-nitrophenol				<8					
5-nitro-o-toluidine				<8					
7,12-dimethylbenz(a)anthracene				<8					
Acenaphthene				<8					
Acenaphthylene				<8					
Acetone		<10		<10	<10	<10	<10	<10	
Acetonitrile				<10					
Acetophenone				<8					
Acrolein				<10					
Acrylonitrile		<5		<5	<5	<5	<5	<5	
Aldrin				<.05					
Alkalinity, as caco3									
Allyl chloride				<1					
Alpha-bhc				<.05					

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

Table 9

Analytical Data Summary for MW-91

Constituents	4/5/2021	10/8/2021	4/6/2022	10/25/2022	4/11/2023	11/9/2023	4/16/2024	10/15/2024
(3 4)-methylphenol						<8		
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1.0	<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-dichloropropene						<1		
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene						<8		
1,2,4-trichlorobenzene						<1		
1,2-dibromo-3-chloropropane	<5	<5	<5	<5	<5	<1	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene						<8		
1,3,5-trinitrobenzene						<8		
1,3-dichlorobenzene						<1		
1,3-dichloropropane						<1		
1,3-dinitrobenzene						<8		
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone						<8		
1,4-phenylenediamine						<8		
1-naphthylamine						<8		
2,2-dichloropropane						<1		
2,3,4,6-tetrachlorophenol						<8		
2,4,5-t						<.5		
2,4,5-tp (silvex)						<.5		
2,4,5-trichlorophenol						<8		
2,4,6-trichlorophenol						<8		
2,4-d						<2		
2,4-dichlorophenol						<8		
2,4-dimethylphenol						<8		
2,4-dinitrophenol						<8		
2,4-dinitrotoluene						<8		
2,6-dichlorophenol						<8		
2,6-dinitrotoluene						<8		
2-acetylaminofluorene						<8		
2-butanone (mek)	<5	<5	<10	<10	<10	<5	<10	<10
2-chloronaphthalene						<8		
2-chlorophenol						<8		
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene						<8		
2-methylphenol						<8		
2-naphthylamine						<8		
2-nitroaniline						<8		
2-nitrophenol						<8		
3,3´-dichlorobenzidine						<8		
3,3'-dimethylbenzidine						<8		
3-methylcholanthrene						<8		
3-nitroaniline						<8		
4,4´-ddd						<.05		
4,4´-dde						<.05		
4,4´-ddt						<.05		
4,6-dinitro-2-methylphenol						<8		
4-aminobiphenyl						<8		
4-bromophenyl phenyl ether						<8		
4-chloro-3-methylphenol						<8		
4-chloroaniline						<8		
4-chlorophenyl phenyl ether						<8		
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline						<8		
4-nitrophenol						<8		
5-nitro-o-toluidine						<8		
7,12-dimethylbenz(a)anthracene						<8		
Acenaphthene						<8		
Acenaphthylene						<8		
Acetone	<10	<10	<10	<10	<10	<10	<10	<10
Acetonitrile						<10		
Acetophenone						<8		
Acrolein						<10		
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin						<.05		
Alkalinity, as caco3								
Allyl chloride						<1		
Alpha-bhc						<.05		

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

Table 9

Analytical Data Summary for MW-91

Constituents	Units	10/16/2014	4/3/2015	10/1/2015	4/14/2016	10/13/2016	4/10/2017	7/11/2017	10/9/2017
Anthracene	ug/L								
Antimony, total	ug/L	<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	<4	<4	<4	<4	<4		4
Azobenzene	ug/L								
Barium, total	ug/L	266	303	348	162	255	162		663
Benzene	ug/L	<1	<1	<1	<1	<1	<1		<1
Benzo(a)anthracene	ug/L								
Benzo(a)pyrene	ug/L								
Benzo(b)fluoranthene	ug/L								
Benzo(g,h,i)perylene	ug/L								
Benzo(k)fluoranthene	ug/L								
Benzyl alcohol	ug/L								
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4		<4
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	<10	<10	<10	<10	<10	<10		
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								
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8		<.8
Calcium, total	mg/L	119	140	132		120			
Carbon disulfide	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1		<1
Chlordane	ug/L								
Chloride	mg/L	13	18	<10		17			
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1		<1
Chlorobenzilate	ug/L								
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1		<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1		<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1		<1
Chloroprene	ug/L								
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8		<8
Chrysene	ug/L								
Cis-1,2-dichloroethylene	ug/L	<1.0	1.5	<1.0	<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	<.8	<.8	<.8	<.8	<.8	<.8		<.8
Copper, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	4.6	<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
Dibromomethane	ug/L	<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
Famphur	ug/L								
Fluoranthene	ug/L								
Fluorene	ug/L								
Gamma-bhc (lindane)	ug/L								

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

Table 9

Analytical Data Summary for MW-91

Constituents	1/9/2018	4/17/2018	7/2/2018	10/22/2018	4/22/2019	10/23/2019	4/10/2020	10/19/2020	1/7/2021
Anthracene				<8					
Antimony, total		<2		<2	<2	<2	<2	<2	
Arochlor 1016				<.1					
Arochlor 1221				<.2					
Arochlor 1232				<.2					
Arochlor 1242				<.2					
Arochlor 1248				<.2					
Arochlor 1254				<.1					
Arochlor 1260				<.1					
Arsenic, total		<4		<4	<4	<4	<4	<4	
Azobenzene				<8					
Barium, total	236	126		167	183	363	165	268	
Benzene		<1		<1	<1	<1	<1	<1	
Benzo(a)anthracene				<8					
Benzo(a)pyrene				<8					
Benzo(b)fluoranthene				<8					
Benzo(g,h,i)perylene				<8					
Benzo(k)fluoranthene				<8					
Benzyl alcohol				<8					
Beryllium, total		<4		<4	<4	<4	<4	<4	
Beta-bhc				<.05					
Bis (2-chloroethoxy) methane				<8					
Bis(2-chloroethyl) ether				<8					
Bis(2-chloroisopropyl) ether				<8					
Bis(2-ethylhexyl) phthalate				<6					
Bromochloromethane		<1		<1	<1	<1	<1	<1	
Bromodichloromethane		<1		<1	<1	<1	<1	<1	
Bromoform		<1		<1	<1	<1	<1	<1	
Bromomethane		<1		<1	<1	<1	<1	<1	
Butyl benzyl phthalate				<8					
Cadmium, total		<.8		<.8	<.8	<.8	<.8	<.8	
Calcium, total									
Carbon disulfide		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	
Carbon tetrachloride		<1		<1	<1	<1	<1	<1	
Chlordane				<.1					
Chloride									
Chlorobenzene		<1		<1	<1	<1	<1	<1	
Chlorobenzilate				<8					
Chloroethane		<1		<1	<1	<1	<1	<1	
Chloroform		<1		<1	<1	<1	<1	<1	
Chloromethane		<1		<1	<1	<1	<1	<1	
Chloroprene				<1					
Chromium, total		<8		<8	<8	<8	<8	<8	
Chrysene				<8					
Cis-1,2-dichloroethylene		<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	
Cis-1,3-dichloropropene		<1		<1	<1	<1	<1	<1	
Cobalt, total		<.8		<.8	<.8	<.8	<.4	<.4	
Copper, total		<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	
Dibromomethane		<1		<1	<1	<1	<1	<1	
Dichlorodifluoromethane				<1					
Dieldrin				<.05					
Diethyl phthalate				<8					
Dimethoate				<.4					
Dimethylphthalate				<8					
Di-n-butyl phthalate				<8					
Di-n-octyl phthalate				<8					
Dinoseb				<.5					
Diphenylamine				<8					
Disulfoton				<.4					
Endosulfan i				<.05					
Endosulfan ii				<.05					
Endosulfan sulfate				<.05					
Endrin				<.05					
Endrin aldehyde				<.05					
Ethyl methacrylate				<10					
Ethyl methanesulfonate				<8					
Ethylbenzene		<1		<1	<1	<1	<1	<1	
Famphur				<.4					
Fluoranthene				<8					
Fluorene				<8					
Gamma-bhc (lindane)				<.05					

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

Table 9

Analytical Data Summary for MW-91

Constituents	4/5/2021	10/8/2021	4/6/2022	10/25/2022	4/11/2023	11/9/2023	4/16/2024	10/15/2024
Anthracene						<8		
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016						<.2		
Arochlor 1221						<.2		
Arochlor 1232						<.2		
Arochlor 1242						<.2		
Arochlor 1248						<.2		
Arochlor 1254						<.2		
Arochlor 1260						<.2		
Arsenic, total	<4	<4	<4	<4	<4	<4	<4	<4
Azobenzene						<8		
Barium, total	118	235	111	203	116	241	186	242
Benzene	<1	<1	<1	<1	<1	<1	<1	<1
Benzo(a)anthracene						<8		
Benzo(a)pyrene						<8		
Benzo(b)fluoranthene						<8		
Benzo(g,h,i)perylene						<8		
Benzo(k)fluoranthene						<8		
Benzyl alcohol						<8		
Beryllium, total	<4	<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
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate						<8		
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Calcium, total								
Carbon disulfide	<1.0	<1.0	2.6	<1.0	<1.0	<1.0	<1.0	<1.0
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane						<.1		
Chloride								
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate						<8		
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene						<1		
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene						<8		
Cis-1,2-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	<.4	<.4	<.4	<.4	<.4	<.4	<.4	<.4
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Cyanide, total						<.005		
Delta-bhc						<.05		
Diallate						<8		
Dibenzo(a,h)anthracene						<8		
Dibenzofuran						<8		
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane						<1		
Dieldrin						<.05		
Diethyl phthalate						<8		
Dimethoate						<.4		
Dimethylphthalate						<8		
Di-n-butyl phthalate						<8		
Di-n-octyl phthalate						<8		
Dinoseb						<.5		
Diphenylamine						<8		
Disulfoton						<.4		
Endosulfan i						<.05		
Endosulfan ii						<.05		
Endosulfan sulfate						<.05		
Endrin						<.05		
Endrin aldehyde						<.05		
Ethyl methacrylate						<10		
Ethyl methanesulfonate						<8		
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1
Famphur						<.4		
Fluoranthene						<8		
Fluorene						<8		
Gamma-bhc (lindane)						<.05		

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

Table 9

Analytical Data Summary for MW-91

Constituents	Units	10/16/2014	4/3/2015	10/1/2015	4/14/2016	10/13/2016	4/10/2017	7/11/2017	10/9/2017
Heptachlor	ug/L								
Heptachlor epoxide	ug/L								
Hexachlorobenzene	ug/L								
Hexachlorobutadiene	ug/L								
Hexachlorocyclopentadiene	ug/L								
Hexachloroethane	ug/L								
Hexachloropropene	ug/L								
Indeno(1,2,3-cd)pyrene	ug/L								
Isobutanol	mg/L								
Isodrin	ug/L								
Isophorone	ug/L								
Isosafrole	ug/L								
Kepone	ug/L								
Lead, total	ug/L	<4	<4	<4	<4	<4	<4		<4
Magnesium, total	mg/L	47.6	54.4	55.8		47.3			
Mercury, total	ug/L								
Methacrylonitrile	ug/L								
Methapyrilene	ug/L								
Methoxychlor	ug/L								
Methyl iodide	ug/L	<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
Naphthalene	ug/L								
Nickel, total	ug/L	<4	<4	<4	<4	<4	<4		<4
Nitrobenzene	ug/L								
Nitrogen, ammonia	mg/L	<1	<1	<1		<1			
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								
Potassium, total	mg/L	<1.0	<1.0	<1.0		2.1			
Pronamide	ug/L								
Propionitrile	ug/L								
Pyrene	ug/L								
Safrole	ug/L								
Selenium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	6.5	<4.0	4.7
Silver, total	ug/L	<4	<4	<4	<4	<4	<4		<4
Sodium, total	mg/L	8.3	8.0	8.1		7.2			
Solids, total dissolved	mg/L	537	477	577		464			
Solids, total suspended	mg/L	7	19						
Styrene	ug/L	<1	<1	<1	<1	<1	<1		<1
Sulfate	mg/L	10.9	8.4	7.1		8.7			
Sulfide, total	mg/L								
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1		<1
Thallium, total	ug/L	<4	<4	<1	<4	<4	<4		<4
Thionazin	ug/L								
Tin, total	ug/L								
Toluene	ug/L	<1	<1	<1	<1	<1	<1		<1
Toxaphene	ug/L								
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1		<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1		<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5		<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1		<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1		<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20		<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5		<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1		<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2		<2
Zinc, total	ug/L	<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-91

Constituents	1/9/2018	4/17/2018	7/2/2018	10/22/2018	4/22/2019	10/23/2019	4/10/2020	10/19/2020	1/7/2021
Heptachlor				<.05					
Heptachlor epoxide				<.05					
Hexachlorobenzene				<.05					
Hexachlorobutadiene				<8					
Hexachlorocyclopentadiene				<8					
Hexachloroethane				<8					
Hexachloropropene				<8					
Indeno(1,2,3-cd)pyrene				<8					
Isobutanol				<1					
Isodrin				<8					
Isophorone				<8					
Isosafrole				<8					
Kepone				<8					
Lead, total		<4		<4	<4	<4	<4	<4	
Magnesium, total									
Mercury, total				<.5					
Methacrylonitrile				<1					
Methapyrilene				<8					
Methoxychlor				<.05					
Methyl iodide		<1		<1	<1	<1	<1	<1	
Methyl methacrylate				<1					
Methyl methanesulfonate				<8					
Methyl parathion				<.4					
Methylene chloride		<5		<5	<5	<5	<5	<5	
Naphthalene				<8					
Nickel, total		<4		<4	<4	<4	<4	<4	
Nitrobenzene				<8					
Nitrogen, ammonia									
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					
Potassium, total									
Pronamide				<8					
Propionitrile				<10					
Pyrene				<8					
Safrole				<8					
Selenium, total	<4.0	5.6	<4.0	<4.0	<4.0	<4.0	<4.0	4.1	<4.0
Silver, total		<4		<4	<4	<4	<4	<4	
Sodium, total									
Solids, total dissolved									
Solids, total suspended									
Styrene		<1		<1	<1	<1	<1	<1	
Sulfate									
Sulfide, total				<.1					
Tetrachloroethylene		<1		<1	<1	<1	<1	<1	
Thallium, total		<4		<4	<2	<2	<2	<2	
Thionazin				<.4					
Tin, total				<20					
Toluene		<1		<1	<1	<1	<1	<1	
Toxaphene				<.2					
Trans-1,2-dichloroethylene		<1		<1	<1	<1	<1	<1	
Trans-1,3-dichloropropene		<1		<1	<1	<1	<1	<1	
Trans-1,4-dichloro-2-butene		<5		<5	<5	<5	<5	<5	
Trichloroethylene		<1		<1	<1	<1	<1	<1	
Trichlorofluoromethane		<1		<1	<1	<1	<1	<1	
Vanadium, total		<20		<20	<20	<20	<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		<8.0		<20.0	<20.0	24.7	<20.0	<20.0	

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

Table 9

Analytical Data Summary for MW-91

Constituents	4/5/2021	10/8/2021	4/6/2022	10/25/2022	4/11/2023	11/9/2023	4/16/2024	10/15/2024
Heptachlor						<.05		
Heptachlor epoxide						<.05		
Hexachlorobenzene						<.05		
Hexachlorobutadiene						<8		
Hexachlorocyclopentadiene						<8		
Hexachloroethane						<8		
Hexachloropropene						<8		
Indeno(1,2,3-cd)pyrene						<8		
Isobutanol						<1		
Isodrin						<8		
Isophorone						<8		
Isosafrole						<8		
Kepone						<8		
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4
Magnesium, total								
Mercury, total						<.5		
Methacrylonitrile						<1		
Methapyrilene						<8		
Methoxychlor						<.05		
Methyl iodide	<1	<1	<1	<1	<1	<2	<1	<1
Methyl methacrylate						<1		
Methyl methanesulfonate						<8		
Methyl parathion						<.4		
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene						<8		
Nickel, total	<4	<4	<4	<4	<4	<4	<4	<4
Nitrobenzene						<8		
Nitrogen, ammonia								
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		
Potassium, total								
Pronamide						<8		
Propionitrile						<10		
Pyrene						<8		
Safrole						<8		
Selenium, total	5.3	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total								
Solids, total dissolved								
Solids, total suspended								
Styrene	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate								
Sulfide, total						<.1		
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2	<2	<2	<2
Thionazin						<.4		
Tin, total						<20		
Toluene	<1	<1	<1	<1	<1	<1	<1	<1
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	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-93

Constituents	Units	10/16/2014	4/6/2015	10/1/2015	4/14/2016	10/13/2016	4/10/2017	10/9/2017	4/17/2018
(3 4)-methylphenol	ug/L								
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene	ug/L								
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	ug/L								
1,2,4-trichlorobenzene	ug/L								
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene	ug/L								
1,3,5-trinitrobenzene	ug/L								
1,3-dichlorobenzene	ug/L								
1,3-dichloropropane	ug/L								
1,3-dinitrobenzene	ug/L								
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone	ug/L								
1,4-phenylenediamine	ug/L								
1-naphthylamine	ug/L								
2,2-dichloropropane	ug/L								
2,3,4,6-tetrachlorophenol	ug/L								
2,4,5-t	ug/L								
2,4,5-tp (silvex)	ug/L								
2,4,5-trichlorophenol	ug/L								
2,4,6-trichlorophenol	ug/L								
2,4-d	ug/L								
2,4-dichlorophenol	ug/L								
2,4-dimethylphenol	ug/L								
2,4-dinitrophenol	ug/L								
2,4-dinitrotoluene	ug/L								
2,6-dichlorophenol	ug/L								
2,6-dinitrotoluene	ug/L								
2-acetylaminofluorene	ug/L								
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
2-chloronaphthalene	ug/L								
2-chlorophenol	ug/L								
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene	ug/L								
2-methylphenol	ug/L								
2-naphthylamine	ug/L								
2-nitroaniline	ug/L								
2-nitrophenol	ug/L								
3,3´-dichlorobenzidine	ug/L								
3,3'-dimethylbenzidine	ug/L								
3-methylcholanthrene	ug/L								
3-nitroaniline	ug/L								
4,4´-ddd	ug/L								
4,4´-dde	ug/L								
4,4´-ddt	ug/L								
4,6-dinitro-2-methylphenol	ug/L								
4-aminobiphenyl	ug/L								
4-bromophenyl phenyl ether	ug/L								
4-chloro-3-methylphenol	ug/L								
4-chloroaniline	ug/L								
4-chlorophenyl phenyl ether	ug/L								
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline	ug/L								
4-nitrophenol	ug/L								
5-nitro-o-toluidine	ug/L								
7,12-dimethylbenz(a)anthracene	ug/L								
Acenaphthene	ug/L								
Acenaphthylene	ug/L								
Acetone	ug/L	<10	<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								
Alkalinity, as caco3	mg/L	497	476	476		440			
Allyl chloride	ug/L								
Alpha-bhc	ug/L								

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

Table 9

Analytical Data Summary for MW-93

Constituents	10/22/2018	4/22/2019	10/23/2019	4/10/2020	10/19/2020	4/5/2021	7/2/2021	10/8/2021	4/6/2022
(3 4)-methylphenol	<8								
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1		<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1		<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1		<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1		<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1		<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1		<1	<1
1,1-dichloropropene	<1								
1,2,3-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	<5	<5	<5		<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1		<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1		<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1		<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1		<1	<1
1,2-dinitrobenzene	<8								
1,3,5-trinitrobenzene	<8								
1,3-dichlorobenzene	<1								
1,3-dichloropropane	<1								
1,3-dinitrobenzene	<8								
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1		<1	<1
1,4-naphthoquinone	<8								
1,4-phenylenediamine	<8								
1-naphthylamine	<8								
2,2-dichloropropane	<1								
2,3,4,6-tetrachlorophenol	<8								
2,4,5-t	<.5								
2,4,5-tp (silvex)	<.5								
2,4,5-trichlorophenol	<8								
2,4,6-trichlorophenol	<8								
2,4-d	<2								
2,4-dichlorophenol	<8								
2,4-dimethylphenol	<8								
2,4-dinitrophenol	<8								
2,4-dinitrotoluene	<8								
2,6-dichlorophenol	<8								
2,6-dinitrotoluene	<8								
2-acetylaminofluorene	<8								
2-butanone (mek)	<5	<5	<5	<5	<5	<5		<5	<10
2-chloronaphthalene	<8								
2-chlorophenol	<8								
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5		<5	<5
2-methylnaphthalene	<8								
2-methylphenol	<8								
2-naphthylamine	<8								
2-nitroaniline	<8								
2-nitrophenol	<8								
3,3´-dichlorobenzidine	<8								
3,3'-dimethylbenzidine	<8								
3-methylcholanthrene	<8								
3-nitroaniline	<8								
4,4´-ddd	<.05								
4,4´-dde	<.05								
4,4´-ddt	<.05								
4,6-dinitro-2-methylphenol	<8								
4-aminobiphenyl	<8								
4-bromophenyl phenyl ether	<8								
4-chloro-3-methylphenol	<8								
4-chloroaniline	<8								
4-chlorophenyl phenyl ether	<8								
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5		<5	<5
4-nitroaniline	<8								
4-nitrophenol	<8								
5-nitro-o-toluidine	<8								
7,12-dimethylbenz(a)anthracene	<8								
Acenaphthene	<8								
Acenaphthylene	<8								
Acetone	<10	<10	<10	<10	<10	<10		<10	<10
Acetonitrile	<10								
Acetophenone	<8								
Acrolein	<10								
Acrylonitrile	<5	<5	<5	<5	<5	<5		<5	<5
Aldrin	<.05								
Alkalinity, as caco3									
Allyl chloride	<1								
Alpha-bhc	<.05								

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

Table 9

Analytical Data Summary for MW-93

Constituents	10/25/2022	4/11/2023	10/13/2023	4/16/2024	10/15/2024
(3 4)-methylphenol			<8		
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		
1,2,3-trichloropropane	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene			<8		
1,2,4-trichlorobenzene			<1		
1,2-dibromo-3-chloropropane	<5	<5	<1	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1
1,2-dinitrobenzene			<8		
1,3,5-trinitrobenzene			<8		
1,3-dichlorobenzene			<1		
1,3-dichloropropane			<1		
1,3-dinitrobenzene			<8		
1,4-dichlorobenzene	<1	<1	<1	<1	<1
1,4-naphthoquinone			<8		
1,4-phenylenediamine			<8		
1-naphthylamine			<8		
2,2-dichloropropane			<1		
2,3,4,6-tetrachlorophenol			<8		
2,4,5-t			<.5		
2,4,5-tp (silvex)			<.5		
2,4,5-trichlorophenol			<8		
2,4,6-trichlorophenol			<8		
2,4-d			<2		
2,4-dichlorophenol			<8		
2,4-dimethylphenol			<8		
2,4-dinitrophenol			<8		
2,4-dinitrotoluene			<8		
2,6-dichlorophenol			<8		
2,6-dinitrotoluene			<8		
2-acetylaminofluorene			<8		
2-butanone (mek)	<10	<10	<5	<10	<10
2-chloronaphthalene			<8		
2-chlorophenol			<8		
2-hexanone (mbk)	<5	<5	<5	<5	<5
2-methylnaphthalene			<8		
2-methylphenol			<8		
2-naphthylamine			<8		
2-nitroaniline			<8		
2-nitrophenol			<8		
3,3´-dichlorobenzidine			<8		
3,3'-dimethylbenzidine			<8		
3-methylcholanthrene			<8		
3-nitroaniline			<8		
4,4´-ddd			<.05		
4,4´-dde			<.05		
4,4´-ddt			<.05		
4,6-dinitro-2-methylphenol			<8		
4-aminobiphenyl			<8		
4-bromophenyl phenyl ether			<8		
4-chloro-3-methylphenol			<8		
4-chloroaniline			<8		
4-chlorophenyl phenyl ether			<8		
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5
4-nitroaniline			<8		
4-nitrophenol			<8		
5-nitro-o-toluidine			<8		
7,12-dimethylbenz(a)anthracene			<8		
Acenaphthene			<8		
Acenaphthylene			<8		
Acetone	<10	<10	<10	<10	<10
Acetonitrile			<10		
Acetophenone			<8		
Acrolein			<10		
Acrylonitrile	<5	<5	<5	<5	<5
Aldrin			<.05		
Alkalinity, as caco3					
Allyl chloride			<1		
Alpha-bhc			<.05		

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

Table 9

Analytical Data Summary for MW-93

Constituents	Units	10/16/2014	4/6/2015	10/1/2015	4/14/2016	10/13/2016	4/10/2017	10/9/2017	4/17/2018
Anthracene	ug/L								
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016	ug/L								
Arochlor 1221	ug/L								
Arochlor 1232	ug/L								
Arochlor 1242	ug/L								
Arochlor 1248	ug/L								
Arochlor 1254	ug/L								
Arochlor 1260	ug/L								
Arsenic, total	ug/L	5.1	5.9	5.2	16.1	6.5	5.5	<4.0	5.4
Azobenzene	ug/L								
Barium, total	ug/L	248	272	274	297	232	202	183	191
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Benzo(a)anthracene	ug/L								
Benzo(a)pyrene	ug/L								
Benzo(b)fluoranthene	ug/L								
Benzo(g,h,i)perylene	ug/L								
Benzo(k)fluoranthene	ug/L								
Benzyl alcohol	ug/L								
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Beta-bhc	ug/L								
Bis (2-chloroethoxy) methane	ug/L								
Bis(2-chloroethyl) ether	ug/L								
Bis(2-chloroisopropyl) ether	ug/L								
Bis(2-ethylhexyl) phthalate	ug/L								
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
Calcium, total	mg/L	143	127	130		126			
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane	ug/L								
Chloride	mg/L	<10.0	<10.0	<10.0		3.7			
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate	ug/L								
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene	ug/L								
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene	ug/L								
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	7.3	9.7	7.5	14.7	6.6	8.6	5.2	5.9
Copper, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Cyanide, total	mg/L								
Delta-bhc	ug/L								
Diallate	ug/L								
Dibenzo(a,h)anthracene	ug/L								
Dibenzofuran	ug/L								
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L								
Dieldrin	ug/L								
Diethyl phthalate	ug/L								
Dimethoate	ug/L								
Dimethylphthalate	ug/L								
Di-n-butyl phthalate	ug/L								
Di-n-octyl phthalate	ug/L								
Dinoseb	ug/L								
Diphenylamine	ug/L								
Disulfoton	ug/L								
Endosulfan i	ug/L								
Endosulfan ii	ug/L								
Endosulfan sulfate	ug/L								
Endrin	ug/L								
Endrin aldehyde	ug/L								
Ethyl methacrylate	ug/L								
Ethyl methanesulfonate	ug/L								
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Famphur	ug/L								
Fluoranthene	ug/L								
Fluorene	ug/L								
Gamma-bhc (lindane)	ug/L								

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

Table 9

Analytical Data Summary for MW-93

Constituents	10/22/2018	4/22/2019	10/23/2019	4/10/2020	10/19/2020	4/5/2021	7/2/2021	10/8/2021	4/6/2022
Anthracene	<8								
Antimony, total	<2	<2	<2	<2	<2	<2		<2	<2
Arochlor 1016	<.1								
Arochlor 1221	<.2								
Arochlor 1232	<.2								
Arochlor 1242	<.2								
Arochlor 1248	<.2								
Arochlor 1254	<.1								
Arochlor 1260	<.1								
Arsenic, total	18.4	67.3	13.6	17.5	4.8	10.5		11.4	11.1
Azobenzene	<8								
Barium, total	249	443	222	206	178	192		178	188
Benzene	<1	<1	<1	<1	<1	<1		<1	<1
Benzo(a)anthracene	<8								
Benzo(a)pyrene	<8								
Benzo(b)fluoranthene	<8								
Benzo(g,h,i)perylene	<8								
Benzo(k)fluoranthene	<8								
Benzyl alcohol	<8								
Beryllium, total	<4	<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
Bromodichloromethane	<1	<1	<1	<1	<1	<1		<1	<1
Bromoform	<1	<1	<1	<1	<1	<1		<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1		<1	<1
Butyl benzyl phthalate	<8								
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8		<.8	<.8
Calcium, total									
Carbon disulfide	<1	<1	<1	<1	<1	<1		<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1		<1	<1
Chlordane	<.1								
Chloride									
Chlorobenzene	<1	<1	<1	<1	<1	<1		<1	<1
Chlorobenzilate	<8								
Chloroethane	<1	<1	<1	<1	<1	<1		<1	<1
Chloroform	<1	<1	<1	<1	<1	<1		<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1		<1	<1
Chloroprene	<1								
Chromium, total	<8	<8	<8	<8	<8	<8		<8	<8
Chrysene	<8								
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1		<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1		<1	<1
Cobalt, total	9.9	18.9	8.3	11.3	4.6	7.9		7.1	8.7
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	8.5	<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
Dibromomethane	<1	<1	<1	<1	<1	<1		<1	<1
Dichlorodifluoromethane	<1								
Dieldrin	<.05								
Diethyl phthalate	<8								
Dimethoate	<.4								
Dimethylphthalate	<8								
Di-n-butyl phthalate	<8								
Di-n-octyl phthalate	<8								
Dinoseb	<.5								
Diphenylamine	<8								
Disulfoton	<.4								
Endosulfan i	<.05								
Endosulfan ii	<.05								
Endosulfan sulfate	<.05								
Endrin	<.05								
Endrin aldehyde	<.05								
Ethyl methacrylate	<10								
Ethyl methanesulfonate	<8								
Ethylbenzene	<1	<1	<1	<1	<1	<1		<1	<1
Famphur	<.4								
Fluoranthene	<8								
Fluorene	<8								
Gamma-bhc (lindane)	<.05								

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

Table 9

Analytical Data Summary for MW-93

Constituents	10/25/2022	4/11/2023	10/13/2023	4/16/2024	10/15/2024
Anthracene			<8		
Antimony, total	<2	<2	<2	<2	<2
Arochlor 1016			<.2		
Arochlor 1221			<.2		
Arochlor 1232			<.2		
Arochlor 1242			<.2		
Arochlor 1248			<.2		
Arochlor 1254			<.2		
Arochlor 1260			<.2		
Arsenic, total	58.5	9.3	59.6	11.9	15.2
Azobenzene			<8		
Barium, total	231	201	249	243	242
Benzene	<1	<1	<1	<1	<1
Benzo(a)anthracene			<8		
Benzo(a)pyrene			<8		
Benzo(b)fluoranthene			<8		
Benzo(g,h,i)perylene			<8		
Benzo(k)fluoranthene			<8		
Benzyl alcohol			<8		
Beryllium, total	<4	<4	<4	<4	<4
Beta-bhc			<.05		
Bis (2-chloroethoxy) methane			<8		
Bis(2-chloroethyl) ether			<8		
Bis(2-chloroisopropyl) ether			<8		
Bis(2-ethylhexyl) phthalate			<6		
Bromochloromethane	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1
Butyl benzyl phthalate			<8		
Cadmium, total	<.8	<.8	<.8	<.8	<.8
Calcium, total					
Carbon disulfide	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1
Chlordane			<.1		
Chloride					
Chlorobenzene	<1	<1	<1	<1	<1
Chlorobenzilate			<8		
Chloroethane	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1
Chloroprene			<1		
Chromium, total	<8	<8	<8	<8	<8
Chrysene			<8		
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1
Cobalt, total	8.6	9.0	8.3	9.8	9.9
Copper, total	<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
Dibromomethane	<1	<1	<1	<1	<1
Dichlorodifluoromethane			<1		
Dieldrin			<.05		
Diethyl phthalate			<8		
Dimethoate			<.4		
Dimethylphthalate			<8		
Di-n-butyl phthalate			<8		
Di-n-octyl phthalate			<8		
Dinoseb			<.5		
Diphenylamine			<8		
Disulfoton			<.4		
Endosulfan i			<.05		
Endosulfan ii			<.05		
Endosulfan sulfate			<.05		
Endrin			<.05		
Endrin aldehyde			<.05		
Ethyl methacrylate			<10		
Ethyl methanesulfonate			<8		
Ethylbenzene	<1	<1	<1	<1	<1
Famphur			<.4		
Fluoranthene			<8		
Fluorene			<8		
Gamma-bhc (lindane)			<.05		

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

Table 9

Analytical Data Summary for MW-93

Constituents	Units	10/16/2014	4/6/2015	10/1/2015	4/14/2016	10/13/2016	4/10/2017	10/9/2017	4/17/2018
Heptachlor	ug/L								
Heptachlor epoxide	ug/L								
Hexachlorobenzene	ug/L								
Hexachlorobutadiene	ug/L								
Hexachlorocyclopentadiene	ug/L								
Hexachloroethane	ug/L								
Hexachloropropene	ug/L								
Indeno(1,2,3-cd)pyrene	ug/L								
Isobutanol	mg/L								
Isodrin	ug/L								
Isophorone	ug/L								
Isosafrole	ug/L								
Kepone	ug/L								
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Magnesium, total	mg/L	63.3	44.5	58.7		56.6			
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	34.6	42.6	36.0	26.5	31.8	27.3	28.2	26.2
Nitrobenzene	ug/L								
Nitrogen, ammonia	mg/L	<1	<1	<1		<1			
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								
Potassium, total	mg/L	8.0	<1.0	7.3		9.9			
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
Sodium, total	mg/L	10.2	9.3	8.8		9.2			
Solids, total dissolved	mg/L	191	505	900		444			
Solids, total suspended	mg/L	2150	148						
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate	mg/L	35.4	36.0	39.0		33.0			
Sulfide, total	mg/L								
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<1	<4	<4	<4	<4	<4
Thionazin	ug/L								
Tin, total	ug/L								
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene	ug/L								
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<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	<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-93

Constituents	10/22/2018	4/22/2019	10/23/2019	4/10/2020	10/19/2020	4/5/2021	7/2/2021	10/8/2021	4/6/2022
Heptachlor	<.05								
Heptachlor epoxide	<.05								
Hexachlorobenzene	<.05								
Hexachlorobutadiene	<8								
Hexachlorocyclopentadiene	<8								
Hexachloroethane	<8								
Hexachloropropene	<8								
Indeno(1,2,3-cd)pyrene	<8								
Isobutanol	<1								
Isodrin	<8								
Isophorone	<8								
Isosafrole	<8								
Kepone	<8								
Lead, total	<4	<4	<4	<4	<4	<4		<4	<4
Magnesium, total									
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	35.7	24.2	26.3	18.1	27.6	23.1		21.3	20.2
Nitrobenzene	<8								
Nitrogen, ammonia									
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								
Potassium, total									
Pronamide	<8								
Propionitrile	<10								
Pyrene	<8								
Safrole	<8								
Selenium, total	<4	<4	<4	<4	<4	<4		<4	<4
Silver, total	<4	<4	<4	<4	<4	<4		<4	<4
Sodium, total									
Solids, total dissolved									
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1	<1		<1	<1
Sulfate									
Sulfide, total	<.1								
Tetrachloroethylene	<1	<1	<1	<1	<1	<1		<1	<1
Thallium, total	<4	<2	<2	<2	<2	<2		<2	<2
Thionazin	<.4								
Tin, total	<20								
Toluene	<1	<1	<1	<1	<1	<1		<1	<1
Toxaphene	<.2								
Trans-1,2-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	34.2	<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-93

Constituents	10/25/2022	4/11/2023	10/13/2023	4/16/2024	10/15/2024
Heptachlor			<.05		
Heptachlor epoxide			<.05		
Hexachlorobenzene			<.05		
Hexachlorobutadiene			<8		
Hexachlorocyclopentadiene			<8		
Hexachloroethane			<8		
Hexachloropropene			<8		
Indeno(1,2,3-cd)pyrene			<8		
Isobutanol			<1		
Isodrin			<8		
Isophorone			<8		
Isosafrole			<8		
Kepone			<8		
Lead, total	<4	<4	<4	<4	<4
Magnesium, total					
Mercury, total			<.5		
Methacrylonitrile			<1		
Methapyrilene			<8		
Methoxychlor			<.05		
Methyl iodide	<1	<1	<2	<1	<1
Methyl methacrylate			<1		
Methyl methanesulfonate			<8		
Methyl parathion			<.4		
Methylene chloride	<5	<5	<5	<5	<5
Naphthalene			<8		
Nickel, total	27.9	31.8	28.8	25.5	27.1
Nitrobenzene			<8		
Nitrogen, ammonia					
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		
Potassium, total					
Pronamide			<8		
Propionitrile			<10		
Pyrene			<8		
Safrole			<8		
Selenium, total	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4
Sodium, total					
Solids, total dissolved					
Solids, total suspended					
Styrene	<1	<1	<1	<1	<1
Sulfate					
Sulfide, total			<.1		
Tetrachloroethylene	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2
Thionazin			<.4		
Tin, total			<20		
Toluene	<1	<1	<1	<1	<1
Toxaphene			<.2		
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<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	21.4	<20.0

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

Table 9

Analytical Data Summary for MW-94

Constituents	Units	10/16/2014	4/3/2015	10/1/2015	4/14/2016	10/13/2016	4/10/2017	10/9/2017	4/17/2018
(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	16.1	11.3	8.2	8.6	9.8	7.7	8.3	5.7
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	<1.0	<1.0	1.1	<1.0	1.9	1.4	1.5	1.3
1,2-dichloropropane	ug/L	3.8	<1.0	2.4	<1.0	2.8	2.7	3.2	2.9
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	38.8	<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	
Alkalinity, as caco3	mg/L	836	890	828		842			
Allyl chloride	ug/L							<1	
Alpha-bhc	ug/L							<.05	

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

Table 9

Analytical Data Summary for MW-94

Constituents	10/22/2018	4/22/2019	10/23/2019	4/10/2020	10/19/2020	4/5/2021	10/8/2021	4/6/2022	10/25/2022
(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	6.0	5.4	4.3	3.5	3.8	1.8	2.6	1.9	2.4
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	<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	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-dichloropropane	4.5	3.0	2.4	2.2	2.7	1.6	2.2	1.7	2.1
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	<10	<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	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acetonitrile									
Acetophenone									
Acrolein									
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin									
Alkalinity, as caco3				919		904		923	
Allyl chloride									
Alpha-bhc									

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

Table 9

Analytical Data Summary for MW-94

Constituents	4/11/2023	10/13/2023	4/17/2024	10/15/2024
(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	1.6	2.4	1.3	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	<1.0	<1.0	<1.0	<1.0
1,2-dichloropropane	1.4	2.2	1.1	1.0
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	15.6	<10.0	<10.0
Acetonitrile				
Acetophenone				
Acrolein				
Acrylonitrile	<5	<5	<5	<5
Aldrin				
Alkalinity, as caco3	775		698	752
Allyl chloride				
Alpha-bhc				

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

Table 9

Analytical Data Summary for MW-94

Constituents	Units	10/16/2014	4/3/2015	10/1/2015	4/14/2016	10/13/2016	4/10/2017	10/9/2017	4/17/2018
Anthracene	ug/L							<8	
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	10.4	7.3	8.1	9.1	27.7	11.6	21.1	28.0
Azobenzene	ug/L							<8	
Barium, total	ug/L	316	383	367	342	576	322	401	452
Benzene	ug/L	4.2	2.6	3.2	3.5	4.5	2.8	3.6	2.4
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	<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							<8	
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Calcium, total	mg/L	188	207	190		214			
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	
Chloride	mg/L	<10.0	<10.0	<10.0		7.3			
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate	ug/L							<8	
Chloroethane	ug/L	16.4	13.0	9.5	9.2	11.8	8.9	8.6	5.6
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	144.0	102.0	88.2	89.5	63.0	43.3	56.4	28.6
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	21.9	22.1	18.1	28.4	46.5	30.9	38.4	32.6
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	
Ethane	ug/L								
Ethene	ug/L								
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	

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

Table 9

Analytical Data Summary for MW-94

Constituents	10/22/2018	4/22/2019	10/23/2019	4/10/2020	10/19/2020	4/5/2021	10/8/2021	4/6/2022	10/25/2022
Anthracene									
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	6.4	18.6	13.4	26.4	27.6	43.9	25.3	51.5	31.5
Azobenzene									
Barium, total	504	388	374	366	332	414	401	401	356
Benzene	3.5	2.5	2.3	2.2	2.4	1.6	1.6	2.1	2.1
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
Calcium, total									
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane									
Chloride									
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate									
Chloroethane	5.2	5.4	6.0	4.4	5.2	3.7	4.0	4.6	4.7
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	27.4	30.2	23.0	21.4	27.4	13.2	25.1	18.2	29.4
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	30.9	24.7	27.5	28.1	23.2	21.0	23.7	19.9	25.4
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	5.2	<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									
Ethane				<10		<10			
Ethene				<10		<10			
Ethyl methacrylate									
Ethyl methanesulfonate									
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Famphur									
Fluoranthene									

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

Table 9

Analytical Data Summary for MW-94

Constituents	4/11/2023	10/13/2023	4/17/2024	10/15/2024
Anthracene				
Antimony, total	<2	<2	<2	<2
Arochlor 1016				
Arochlor 1221				
Arochlor 1232				
Arochlor 1242				
Arochlor 1248				
Arochlor 1254				
Arochlor 1260				
Arsenic, total	68.7	28.1	95.9	75.8
Azobenzene				
Barium, total	370	413	308	305
Benzene	1.9	1.7	2.0	1.8
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				
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
Calcium, total				
Carbon disulfide	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1
Chlordane				
Chloride				
Chlorobenzene	<1	<1	<1	<1
Chlorobenzilate				
Chloroethane	4.0	4.5	4.3	3.0
Chloroform	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1
Chloroprene				
Chromium, total	<8	<8	<8	<8
Chrysene				
Cis-1,2-dichloroethylene	11.4	29.4	5.2	6.0
Cis-1,3-dichloropropene	<1	<1	<1	<1
Cobalt, total	17.0	17.2	10.2	8.8
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				
Ethane				<5
Ethene				<5
Ethyl methacrylate				
Ethyl methanesulfonate				
Ethylbenzene	<1	<1	<1	<1
Famphur				
Fluoranthene				

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

Table 9

Analytical Data Summary for MW-94

Constituents	Units	10/16/2014	4/3/2015	10/1/2015	4/14/2016	10/13/2016	4/10/2017	10/9/2017	4/17/2018
Fluorene	ug/L							<8	
Gamma-bhc (lindane)	ug/L							<.05	
Heptachlor	ug/L							<.05	
Heptachlor epoxide	ug/L							<.05	
Hexachlorobenzene	ug/L							<.05	
Hexachlorobutadiene	ug/L							<8	
Hexachlorocyclopentadiene	ug/L							<8	
Hexachloroethane	ug/L							<8	
Hexachloropropene	ug/L							<8	
Indeno(1,2,3-cd)pyrene	ug/L							<8	
Isobutanol	mg/L							<1	
Isodrin	ug/L							<8	
Isophorone	ug/L							<8	
Isosafrole	ug/L							<8	
Kepone	ug/L							<8	
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Magnesium, total	mg/L	80.0	83.9	84.5		87.4			
Mercury, total	ug/L							<.5	
Methacrylonitrile	ug/L							<1	
Methane	ug/L								
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	21.4	20.8	20.8	24.0	35.8	20.9	36.2	20.9
Nitrobenzene	ug/L							<8	
Nitrogen, ammonia	mg/L	<1	<1	<1		<1			
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	
pH	pH								
Phenacetin	ug/L							<8	
Phenanthrene	ug/L							<8	
Phenol	ug/L							<8	
Phorate	ug/L							<.4	
Potassium, total	mg/L	<1	<1	<1		<1			
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
Sodium, total	mg/L	21.5	20.6	12.7		14.9			
Solids, total dissolved	mg/L	797	800	804		781			
Solids, total suspended	mg/L	49	29						
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate	mg/L	21.5	20.0	18.3		18.6			
Sulfide, total	mg/L							<.1	
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<1	<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	1.2	1.2	<1.0	<1.0	1.2	<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	2.0	1.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
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

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

Table 9

Analytical Data Summary for MW-94

Constituents	10/22/2018	4/22/2019	10/23/2019	4/10/2020	10/19/2020	4/5/2021	10/8/2021	4/6/2022	10/25/2022
Fluorene									
Gamma-bhc (lindane)									
Heptachlor									
Heptachlor epoxide									
Hexachlorobenzene									
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
Magnesium, total									
Mercury, total									
Methacrylonitrile									
Methane				4440		10500			
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	24.6	19.3	23.9	20.8	20.8	13.5	16.1	12.4	18.0
Nitrobenzene									
Nitrogen, ammonia									
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									
pH				6.6		6.6		6.5	
Phenacetin									
Phenanthrene									
Phenol									
Phorate									
Potassium, total									
Pronamide									
Propionitrile									
Pyrene									
Safrole									
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total									
Solids, total dissolved									
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate									
Sulfide, total									
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4	<2	<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	<1.0	<1.0	<1.0	1.0	1.2	<1.0	<1.0	<1.0	1.2
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	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
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

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

Table 9

Analytical Data Summary for MW-94

Constituents	4/11/2023	10/13/2023	4/17/2024	10/15/2024
Fluorene				
Gamma-bhc (lindane)				
Heptachlor				
Heptachlor epoxide				
Hexachlorobenzene				
Hexachlorobutadiene				
Hexachlorocyclopentadiene				
Hexachloroethane				
Hexachloropropene				
Indeno(1,2,3-cd)pyrene				
Isobutanol				
Isodrin				
Isophorone				
Isosafrole				
Kepone				
Lead, total	<4	<4	<4	<4
Magnesium, total				
Mercury, total				
Methacrylonitrile				
Methane				1380
Methapyrilene				
Methoxychlor				
Methyl iodide	<1	<1	<1	<1
Methyl methacrylate				
Methyl methanesulfonate				
Methyl parathion				
Methylene chloride	<5	<5	<5	<5
Naphthalene				
Nickel, total	12.0	9.6	9.2	7.4
Nitrobenzene				
Nitrogen, ammonia				
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				
pH	6.5		6.6	6.4
Phenacetin				
Phenanthrene				
Phenol				
Phorate				
Potassium, total				
Pronamide				
Propionitrile				
Pyrene				
Safrole				
Selenium, total	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4
Sodium, total				
Solids, total dissolved				
Solids, total suspended				
Styrene	<1	<1	<1	<1
Sulfate				
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	<1.0	1.6	<1.0	<1.0
Trans-1,3-dichloropropene	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5
Trichloroethylene	<1.0	<1.0	<1.0	<1.0
Trichlorofluoromethane	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5

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

Table 9

Analytical Data Summary for MW-94

Constituents	Units	10/16/2014	4/3/2015	10/1/2015	4/14/2016	10/13/2016	4/10/2017	10/9/2017	4/17/2018
Vinyl chloride	ug/L	6.2	4.5	3.6	2.9	2.6	3.2	2.0	2.0
Xylenes, total	ug/L	<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	8.4

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

Table 9

Analytical Data Summary for MW-94

Constituents	10/22/2018	4/22/2019	10/23/2019	4/10/2020	10/19/2020	4/5/2021	10/8/2021	4/6/2022	10/25/2022
Vinyl chloride	2.2	1.7	<1.0	1.1	1.1	<1.0	<1.0	<1.0	1.2
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	29.7	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-94

Constituents	4/11/2023	10/13/2023	4/17/2024	10/15/2024
Vinyl chloride	2.1	2.0	2.2	2.0
Xylenes, total	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0	20.3

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

Table 9

Analytical Data Summary for MW-95

Constituents	Units	10/16/2014	4/6/2015	10/1/2015	4/14/2016	10/13/2016	4/10/2017	10/9/2017	4/17/2018
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
Alkalinity, as caco3	mg/L	418	373	373		358			
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	37.1	38.5	34.1	40.3	32.1	52.1	35.6	40.5
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
Calcium, total	mg/L	163	178	144		170			
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	<10	<10	<10		<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	<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
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Magnesium, total	mg/L	42.5	43.8	39.2		41.6			
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
Nitrogen, ammonia	mg/L	<1	<1	<1		<1			
Potassium, total	mg/L	3.0	2.9	3.0		3.2			
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total	mg/L	14.8	14.8	12.8		14.2			
Solids, total dissolved	mg/L	691	713	691		668			
Solids, total suspended	mg/L	3	4						
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate	mg/L	318	239	241		235			
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<1	<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	<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-95

Constituents	10/22/2018	4/22/2019	10/23/2019	4/10/2020	10/19/2020	4/5/2021	10/8/2021	4/6/2022	10/25/2022
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	<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	<10.0	<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
Alkalinity, as caco3									
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	36.9	40.0	37.8	39.9	33.6	41.9	30.5	30.3	31.4
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
Calcium, total									
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride									
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	<.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
Magnesium, total									
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
Nitrogen, ammonia									
Potassium, total									
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total									
Solids, total dissolved									
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate									
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	31.5	<20.0	26.5	<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-95

Constituents	4/11/2023	10/13/2023	1/25/2024	4/17/2024	10/15/2024
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	<10.0	10.7	<10.0	<10.0	<10.0
Acrylonitrile	<5	<5		<5	<5
Alkalinity, as caco3					
Antimony, total	<2	<2		<2	<2
Arsenic, total	<4	<4		<4	<4
Barium, total	39.6	29.3		42.7	32.3
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
Calcium, total					
Carbon disulfide	<1	<1		<1	<1
Carbon tetrachloride	<1	<1		<1	<1
Chloride					
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
Magnesium, total					
Methyl iodide	<1	<1		<1	<1
Methylene chloride	<5	<5		<5	<5
Nickel, total	<4	<4		<4	<4
Nitrogen, ammonia					
Potassium, total					
Selenium, total	<4	<4		<4	<4
Silver, total	<4	<4		<4	<4
Sodium, total					
Solids, total dissolved					
Solids, total suspended					
Styrene	<1	<1		<1	<1
Sulfate					
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-96

Constituents	Units	10/16/2014	4/6/2015	10/1/2015	4/14/2016	10/13/2016	4/10/2017	10/9/2017	4/17/2018
(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	<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	
Alkalinity, as caco3	mg/L	584	476	476		548			
Allyl chloride	ug/L							<1	
Alpha-bhc	ug/L							<.05	

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

Table 9

Analytical Data Summary for MW-96

Constituents	10/22/2018	4/22/2019	10/23/2019	4/10/2020
(3 4)-methylphenol				
1,1,1,2-tetrachloroethane	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1
1,1-dichloropropene				
1,2,3-trichloropropane	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene				
1,2,4-trichlorobenzene				
1,2-dibromo-3-chloropropane	<1	<1	<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				
Alkalinity, as caco3				
Allyl chloride				
Alpha-bhc				

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

Table 9

Analytical Data Summary for MW-96

Constituents	Units	10/16/2014	4/6/2015	10/1/2015	4/14/2016	10/13/2016	4/10/2017	10/9/2017	4/17/2018
Anthracene	ug/L							<8	
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	<4	<4	<4	<4	<4	<4	<4
Azobenzene	ug/L							<8	
Barium, total	ug/L	588	617	577	540	540	486	495	491
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	<10	<10	<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							<8	
Cadmium, total	ug/L	.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Calcium, total	mg/L	192	173	165		182			
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	
Chloride	mg/L	85.0	107.0	84.0		94.9			
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	6.0	3.6	4.7	1.8	4.4	2.1	4.4	1.0
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	

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

Table 9

Analytical Data Summary for MW-96

Constituents	10/22/2018	4/22/2019	10/23/2019	4/10/2020
Anthracene				
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	502	514	513	535
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
Calcium, total				
Carbon disulfide	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1
Chlordane				
Chloride				
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	2.6	2.2	3.0	3.5
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)				

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

Table 9

Analytical Data Summary for MW-96

Constituents	Units	10/16/2014	4/6/2015	10/1/2015	4/14/2016	10/13/2016	4/10/2017	10/9/2017	4/17/2018
Heptachlor	ug/L							<.05	
Heptachlor epoxide	ug/L							<.05	
Hexachlorobenzene	ug/L							<.05	
Hexachlorobutadiene	ug/L							<8	
Hexachlorocyclopentadiene	ug/L							<8	
Hexachloroethane	ug/L							<8	
Hexachloropropene	ug/L							<8	
Indeno(1,2,3-cd)pyrene	ug/L							<8	
Isobutanol	mg/L							<1	
Isodrin	ug/L							<8	
Isophorone	ug/L							<8	
Isosafrole	ug/L							<8	
Kepone	ug/L							<8	
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Magnesium, total	mg/L	68.7	59.6	62.2		63.0			
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	14.8	14.7	10.6	13.1	13.4	14.1	11.7	10.6
Nitrobenzene	ug/L							<8	
Nitrogen, ammonia	mg/L	<1	<1	<1		<1			
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	
Potassium, total	mg/L	1.8	1.6	1.8		1.6			
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
Sodium, total	mg/L	19.0	17.2	16.4		17.1			
Solids, total dissolved	mg/L	904	735	828		807			
Solids, total suspended	mg/L	24	23						
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate	mg/L	108.0	85.7	78.9		66.3			
Sulfide, total	mg/L							<.1	
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<1	<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	<8	<8	<8	<8	<8

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

Table 9

Analytical Data Summary for MW-96

Constituents	10/22/2018	4/22/2019	10/23/2019	4/10/2020
Heptachlor				
Heptachlor epoxide				
Hexachlorobenzene				
Hexachlorobutadiene				
Hexachlorocyclopentadiene				
Hexachloroethane				
Hexachloropropene				
Indeno(1,2,3-cd)pyrene				
Isobutanol				
Isodrin				
Isophorone				
Isosafrole				
Kepone				
Lead, total	<4	<4	<4	<4
Magnesium, total				
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	11.6	13.0	9.5	12.8
Nitrobenzene				
Nitrogen, ammonia				
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				
Potassium, total				
Pronamide				
Propionitrile				
Pyrene				
Safrole				
Selenium, total	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4
Sodium, total				
Solids, total dissolved				
Solids, total suspended				
Styrene	<1	<1	<1	<1
Sulfate				
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	<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-96R

Constituents	Units	4/5/2021	7/2/2021	10/8/2021	4/6/2022	10/25/2022	4/11/2023	7/7/2023	7/20/2023	10/13/2023
(3 4)-methylphenol	ug/L			<8		<8				
1,1,1,2-tetrachloroethane	ug/L	<1		<1	<1	<1	<1			<1
1,1,1-trichloroethane	ug/L	<1		<1	<1	<1	<1			<1
1,1,2,2-tetrachloroethane	ug/L	<1		<1	<1	<1	<1			<1
1,1,2-trichloroethane	ug/L	<1		<1	<1	<1	<1			<1
1,1-dichloroethane	ug/L	<1		<1	<1	<1	<1			<1
1,1-dichloroethylene	ug/L	<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
1,2,4,5-tetrachlorobenzene	ug/L			<8		<8				
1,2,4-trichlorobenzene	ug/L			<1		<1				
1,2-dibromo-3-chloropropane	ug/L	<5		<1	<5	<1	<5			<5
1,2-dibromoethane	ug/L	<1		<1	<1	<1	<1			<1
1,2-dichlorobenzene	ug/L	<1		<1	<1	<1	<1			<1
1,2-dichloroethane	ug/L	<1		<1	<1	<1	<1			<1
1,2-dichloropropane	ug/L	<1		<1	<1	<1	<1			<1
1,2-dinitrobenzene	ug/L			<8		<8				
1,3,5-trinitrobenzene	ug/L			<8		<8				
1,3-dichlorobenzene	ug/L			<1		<1				
1,3-dichloropropane	ug/L			<1		<1				
1,3-dinitrobenzene	ug/L			<8		<8				
1,4-dichlorobenzene	ug/L	<1		<1	<1	<1	<1			<1
1,4-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	<10	<5	<10			<10
2-chloronaphthalene	ug/L			<8		<8				
2-chlorophenol	ug/L			<8		<8				
2-hexanone (mbk)	ug/L	<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		<.06				
4,4´-dde	ug/L			<.05		<.06				
4,4´-ddt	ug/L			<.05		<.06				
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
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
Acetonitrile	ug/L			<10		<10				
Acetophenone	ug/L			<8		<8				
Acrolein	ug/L			<10		<10				
Acrylonitrile	ug/L	<5		<5	<5	<5	<5			<5
Aldrin	ug/L			<.05		<.06				
Alkalinity, as caco3	mg/L						434			370
Allyl chloride	ug/L			<1		<1				
Alpha-bhc	ug/L			<.05		<.06				

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

Table 9

Analytical Data Summary for MW-96R

Constituents	4/16/2024	10/15/2024
(3 4)-methylphenol		
1,1,1,2-tetrachloroethane	<1	<1
1,1,1-trichloroethane	<1	<1
1,1,2,2-tetrachloroethane	<1	<1
1,1,2-trichloroethane	<1	<1
1,1-dichloroethane	<1	<1
1,1-dichloroethylene	<1	<1
1,1-dichloropropene		
1,2,3-trichloropropane	<1	<1
1,2,4,5-tetrachlorobenzene		
1,2,4-trichlorobenzene		
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
1,2-dinitrobenzene		
1,3,5-trinitrobenzene		
1,3-dichlorobenzene		
1,3-dichloropropane		
1,3-dinitrobenzene		
1,4-dichlorobenzene	<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
2-chloronaphthalene		
2-chlorophenol		
2-hexanone (mbk)	<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
4-nitroaniline		
4-nitrophenol		
5-nitro-o-toluidine		
7,12-dimethylbenz(a)anthracene		
Acenaphthene		
Acenaphthylene		
Acetone	<10	<10
Acetonitrile		
Acetophenone		
Acrolein		
Acrylonitrile	<5	<5
Aldrin		
Alkalinity, as caco3		
Allyl chloride		
Alpha-bhc		

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

Table 9

Analytical Data Summary for MW-96R

Constituents	Units	4/5/2021	7/2/2021	10/8/2021	4/6/2022	10/25/2022	4/11/2023	7/7/2023	7/20/2023	10/13/2023
Anthracene	ug/L			<8		<8				
Antimony, total	ug/L	<2		<2	<2	<2	<2			<2
Arochlor 1016	ug/L			<.10		<.13				
Arochlor 1221	ug/L			<.20		<.26				
Arochlor 1232	ug/L			<.20		<.26				
Arochlor 1242	ug/L			<.20		<.26				
Arochlor 1248	ug/L			<.20		<.26				
Arochlor 1254	ug/L			<.10		<.13				
Arochlor 1260	ug/L			<.10		<.13				
Arsenic, total	ug/L	29.8	29.1	18.6	10.4	38.7	<4.0	12.9	<4.0	15.0
Azobenzene	ug/L			<8		<8				
Barium, total	ug/L	1160	696	667	406	661	190			576
Benzene	ug/L	<1		<1	<1	<1	<1			<1
Benzo(a)anthracene	ug/L			<8		<8				
Benzo(a)pyrene	ug/L			<8		<8				
Benzo(b)fluoranthene	ug/L			<8		<8				
Benzo(g,h,i)perylene	ug/L			<8		<8				
Benzo(k)fluoranthene	ug/L			<8		<8				
Benzyl alcohol	ug/L			<8		<8				
Beryllium, total	ug/L	<4		<4	<4	<4	<4			<4
Beta-bhc	ug/L			<.05		<.06				
Bis (2-chloroethoxy) methane	ug/L			<8		<8				
Bis(2-chloroethyl) ether	ug/L			<8		<8				
Bis(2-chloroisopropyl) ether	ug/L			<8		<8				
Bis(2-ethylhexyl) phthalate	ug/L			6		<6				
Bromochloromethane	ug/L	<1		<1	<1	<1	<1			<1
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			<8		<8				
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			<.10		<.13				
Chlorobenzene	ug/L	<1		<1	<1	<1	<1			<1
Chlorobenzilate	ug/L			<8		<8				
Chloroethane	ug/L	<1		<1	<1	<1	<1			<1
Chloroform	ug/L	<1		<1	<1	<1	<1			<1
Chloromethane	ug/L	<1		<1	<1	<1	<1			<1
Chloroprene	ug/L			<1		<1				
Chromium, total	ug/L	<8		<8	<8	<8	<8			<8
Chrysene	ug/L			<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	16.8	11.9	11.4	7.6	11.1	2.2	11.2	10.0	10.6
Copper, total	ug/L	<4		<4	<4	<4	<4			<4
Cyanide, total	mg/L			<.005		<.005				
Delta-bhc	ug/L			<.05		<.06				
Diallate	ug/L			<8		<8				
Dibenzo(a,h)anthracene	ug/L			<8		<8				
Dibenzofuran	ug/L			<8		<8				
Dibromochloromethane	ug/L	<1		<1	<1	<1	<1			<1
Dibromomethane	ug/L	<1		<1	<1	<1	<1			<1
Dichlorodifluoromethane	ug/L			<1		<1				
Dieldrin	ug/L			<.05		<.06				
Diethyl phthalate	ug/L			<8		<8				
Dimethoate	ug/L			<.5		<.5				
Dimethylphthalate	ug/L			<8		<8				
Di-n-butyl phthalate	ug/L			<8		<8				
Di-n-octyl phthalate	ug/L			<8		<8				
Dinoseb	ug/L			<.5		<.5				
Diphenylamine	ug/L			<8		<8				
Disulfoton	ug/L			<.5		<.5				
Endosulfan i	ug/L			<.05		<.06				
Endosulfan ii	ug/L			<.05		<.06				
Endosulfan sulfate	ug/L			<.05		<.06				
Endrin	ug/L			<.05		<.06				
Endrin aldehyde	ug/L			<.05		<.06				
Ethyl methacrylate	ug/L			<10		<10				
Ethyl methanesulfonate	ug/L			<8		<8				
Ethylbenzene	ug/L	<1		<1	<1	<1	<1			<1
Famphur	ug/L			<.5		<.5				
Fluoranthene	ug/L			<8		<8				
Fluorene	ug/L			<8		<8				
Gamma-bhc (lindane)	ug/L			<.05		<.06				
Heptachlor	ug/L			<.05		<.06				
Heptachlor epoxide	ug/L			<.05		<.06				

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

Table 9

Analytical Data Summary for MW-96R

Constituents	4/16/2024	10/15/2024
Anthracene		
Antimony, total	<2	<2
Arochlor 1016		
Arochlor 1221		
Arochlor 1232		
Arochlor 1242		
Arochlor 1248		
Arochlor 1254		
Arochlor 1260		
Arsenic, total	<4.0	6.6
Azobenzene		
Barium, total	124	338
Benzene	<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
Beta-bhc		
Bis (2-chloroethoxy) methane		
Bis(2-chloroethyl) ether		
Bis(2-chloroisopropyl) ether		
Bis(2-ethylhexyl) phthalate		
Bromochloromethane	<1	<1
Bromodichloromethane	<1	<1
Bromoform	<1	<1
Bromomethane	<1	<1
Butyl benzyl phthalate		
Cadmium, total	<.8	<.8
Carbon disulfide	<1	<1
Carbon tetrachloride	<1	<1
Chlordane		
Chlorobenzene	<1	<1
Chlorobenzilate		
Chloroethane	<1	<1
Chloroform	<1	<1
Chloromethane	<1	<1
Chloroprene		
Chromium, total	<8	<8
Chrysene		
Cis-1,2-dichloroethylene	<1	<1
Cis-1,3-dichloropropene	<1	<1
Cobalt, total	1.8	10.5
Copper, total	<4	<4
Cyanide, total		
Delta-bhc		
Diallate		
Dibenzo(a,h)anthracene		
Dibenzofuran		
Dibromochloromethane	<1	<1
Dibromomethane	<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
Famphur		
Fluoranthene		
Fluorene		
Gamma-bhc (lindane)		
Heptachlor		
Heptachlor epoxide		

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

Table 9

Analytical Data Summary for MW-96R

Constituents	Units	4/5/2021	7/2/2021	10/8/2021	4/6/2022	10/25/2022	4/11/2023	7/7/2023	7/20/2023	10/13/2023
Hexachlorobenzene	ug/L			<.05		<.06				
Hexachlorobutadiene	ug/L			<8		<8				
Hexachlorocyclopentadiene	ug/L			<8		<8				
Hexachloroethane	ug/L			<8		<8				
Hexachloropropene	ug/L			<8		<8				
Indeno(1,2,3-cd)pyrene	ug/L			<8		<8				
Isobutanol	mg/L			<1		<1				
Isodrin	ug/L			<8		<8				
Isophorone	ug/L			<8		<8				
Isosafrole	ug/L			<8		<8				
Kepone	ug/L			<8		<8				
Lead, total	ug/L	<4		<4	<4	<4	<4			<4
Mercury, total	ug/L			<.5		<.5				
Methacrylonitrile	ug/L			<1		<1				
Methapyrilene	ug/L			<8		<8				
Methoxychlor	ug/L			<.05		<.06				
Methyl iodide	ug/L	<1		<2	<1	<2	<1			<1
Methyl methacrylate	ug/L			<1		<1				
Methyl methanesulfonate	ug/L			<8		<8				
Methyl parathion	ug/L			<.5		<.5				
Methylene chloride	ug/L	<5		<5	<5	<5	<5			<5
Naphthalene	ug/L			<8		<8				
Nickel, total	ug/L	8.8		5.9	6.8	4.5	5.6			4.6
Nitrobenzene	ug/L			<8		<8				
N-nitrosodiethylamine	ug/L			<8		<8				
N-nitrosodimethylamine	ug/L			<8		<8				
N-nitrosodi-n-butylamine	ug/L			<8		<8				
N-nitroso-di-n-propylamine	ug/L			<8		<8				
N-nitrosodiphenylamine	ug/L			<8		<8				
N-nitrosomethylethylamine	ug/L			<8		<8				
N-nitrosopiperidine	ug/L			<8		<8				
N-nitrosopyrrolidine	ug/L			<8		<8				
O,o,o-triethyl phosphorothioate	ug/L			<.5		<.5				
O-toluidine	ug/L			<8		<8				
Parathion	ug/L			<.5		<.5				
P-dimethylaminoazobenzene	ug/L			<8		<8				
Pentachlorobenzene	ug/L			<8		<8				
Pentachloronitrobenzene (pcnb)	ug/L			<8		<8				
Pentachlorophenol	ug/L			<8		<8				
pH	pH						6.6			6.4
Phenacetin	ug/L			<8		<8				
Phenanthrene	ug/L			<8		<8				
Phenol	ug/L			<8		<8				
Phorate	ug/L			<.5		<.5				
Pronamide	ug/L			<8		<8				
Propionitrile	ug/L			<10		<10				
Pyrene	ug/L			<8		<8				
Safrole	ug/L			<8		<8				
Selenium, total	ug/L	<4.0		<4.0	9.1	<4.0	7.8	<4.0		<4.0
Silver, total	ug/L	<4		<4	<4	<4	<4			<4
Styrene	ug/L	<1		<1	<1	<1	<1			<1
Sulfide, total	mg/L			<.1		<.3				
Tetrachloroethylene	ug/L	<1		<1	<1	<1	<1			<1
Thallium, total	ug/L	<2		<2	<2	<2	<2			<2
Thionazin	ug/L			<.5		<.5				
Tin, total	ug/L			<20		<20				
Toluene	ug/L	<1		<1	<1	<1	<1			<1
Toxaphene	ug/L			<.20		<.26				
Trans-1,2-dichloroethylene	ug/L	<1		<1	<1	<1	<1			<1
Trans-1,3-dichloropropene	ug/L	<1		<1	<1	<1	<1			<1
Trans-1,4-dichloro-2-butene	ug/L	<5		<5	<5	<5	<5			<5
Trichloroethylene	ug/L	<1		<1	<1	<1	<1			<1
Trichlorofluoromethane	ug/L	<1		<1	<1	<1	<1			<1
Vanadium, total	ug/L	<20		<20	<20	<20	<20			<20
Vinyl acetate	ug/L	<5		<5	<5	<5	<5			<5
Vinyl chloride	ug/L	<1		<1	<1	<1	<1			<1
Xylenes, total	ug/L	<2		<2	<2	<2	<2			<2
Zinc, total	ug/L	<20		<20	<20	<20	<20			<20

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

Table 9

Analytical Data Summary for MW-96R

Constituents	4/16/2024	10/15/2024
Hexachlorobenzene		
Hexachlorobutadiene		
Hexachlorocyclopentadiene		
Hexachloroethane		
Hexachloropropene		
Indeno(1,2,3-cd)pyrene		
Isobutanol		
Isodrin		
Isophorone		
Isosafrole		
Kepone		
Lead, total	<4	<4
Mercury, total		
Methacrylonitrile		
Methapyrilene		
Methoxychlor		
Methyl iodide	<1	<1
Methyl methacrylate		
Methyl methanesulfonate		
Methyl parathion		
Methylene chloride	<5	<5
Naphthalene		
Nickel, total	5.3	4.6
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		
pH		
Phenacetin		
Phenanthrene		
Phenol		
Phorate		
Pronamide		
Propionitrile		
Pyrene		
Safrole		
Selenium, total	7.4	<4.0
Silver, total	<4	<4
Styrene	<1	<1
Sulfide, total		
Tetrachloroethylene	<1	<1
Thallium, total	<2	<2
Thionazin		
Tin, total		
Toluene	<1	<1
Toxaphene		
Trans-1,2-dichloroethylene	<1	<1
Trans-1,3-dichloropropene	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5
Trichloroethylene	<1	<1
Trichlorofluoromethane	<1	<1
Vanadium, total	<20	<20
Vinyl acetate	<5	<5
Vinyl chloride	<1	<1
Xylenes, total	<2	<2
Zinc, total	<20	<20

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

Table 9

Analytical Data Summary for MW-97

Constituents	Units	10/16/2014	4/3/2015	10/1/2015	4/14/2016	10/13/2016	4/10/2017	10/9/2017	4/17/2018
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		
Alkalinity, as caco3	mg/L	555	455	435		350			
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2		
Arsenic, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	ug/L	160	179	202	535	244	264		
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		
Calcium, total	mg/L	115	110	142		167			
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1		
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1		
Chloride	mg/L	11.0	13.0	12.0		17.3			
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	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1		
Cobalt, total	ug/L	<.8	<.8	<.8	1.8	<.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		
Magnesium, total	mg/L	45.0	41.5	50.7		55.8			
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1		
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5		
Nickel, total	ug/L	<4.0	<4.0	5.8	13.4	<4.0	<4.0		
Nitrogen, ammonia	mg/L	<1	<1	<1		<1			
pH	pH								
Potassium, total	mg/L	2.1	1.5	3.7		6.3			
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4		
Silver, total	ug/L	<4	<4	<4	<4	<4	<4		
Sodium, total	mg/L	16.1	18.7	17.5		24.5			
Solids, total dissolved	mg/L	527	451	503		588			
Solids, total suspended	mg/L	72	4						
Styrene	ug/L	<1	<1	<1	<1	<1	<1		
Sulfate	mg/L	23.2	17.2	18.2		16.8			
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	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2		
Zinc, total	ug/L	<20	<8	<8	<8	<8	<8		

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

Table 9

Analytical Data Summary for MW-97

Constituents	10/22/2018	4/22/2019	10/23/2019	4/10/2020	10/19/2020	4/5/2021	10/8/2021	4/6/2022	10/25/2022
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)				<5	<5	<5	<5	<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
Alkalinity, as caco3				424					
Antimony, total				<2	<2	<2	<2	<2	<2
Arsenic, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total				279	269	287	259	300	275
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
Calcium, total									
Carbon disulfide				<1	<1	<1	<1	<1	<1
Carbon tetrachloride				<1	<1	<1	<1	<1	<1
Chloride									
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	<1	<1	<1
Cis-1,3-dichloropropene				<1	<1	<1	<1	<1	<1
Cobalt, total	<.8	<.8	<.8	<.4	<.4	<.4	<.4	<.4	<.4
Copper, total				<4.0	<4.0	<4.0	<4.0	<4.0	<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
Magnesium, total									
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
Nitrogen, ammonia									
pH				7.2					
Potassium, total									
Selenium, total				<4	<4	<4	<4	<4	<4
Silver, total				<4	<4	<4	<4	<4	<4
Sodium, total									
Solids, total dissolved									
Solids, total suspended									
Styrene				<1	<1	<1	<1	<1	<1
Sulfate									
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	<1	<1	<1
Xylenes, total				<2	<2	<2	<2	<2	<2
Zinc, total				<20	<20	<20	<20	<20	<20

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

Table 9

Analytical Data Summary for MW-97

Constituents	4/11/2023	10/13/2023	4/17/2024	7/18/2024	10/15/2024
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
Alkalinity, as caco3					
Antimony, total	<2	<2	<2		<2
Arsenic, total	<4	<4	<4		<4
Barium, total	290	264	315		274
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
Calcium, total					
Carbon disulfide	<1	<1	<1		<1
Carbon tetrachloride	<1	<1	<1		<1
Chloride					
Chlorobenzene	<1	<1	<1		<1
Chloroethane	<1	<1	<1		<1
Chloroform	<1	<1	<1		<1
Chloromethane	<1	<1	<1		<1
Chromium, total	<8	<8	<8		<8
Cis-1,2-dichloroethylene	<1	<1	<1		<1
Cis-1,3-dichloropropene	<1	<1	<1		<1
Cobalt, total	<.4	<.4	<.4		<.4
Copper, total	<4.0	<4.0	7.1	<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
Magnesium, total					
Methyl iodide	<1	<1	<1		<1
Methylene chloride	<5	<5	<5		<5
Nickel, total	<4.0	<4.0	<4.0		<4.0
Nitrogen, ammonia					
pH					
Potassium, total					
Selenium, total	<4	<4	<4		<4
Silver, total	<4	<4	<4		<4
Sodium, total					
Solids, total dissolved					
Solids, total suspended					
Styrene	<1	<1	<1		<1
Sulfate					
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	<20	<20		<20

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

Table 9

Analytical Data Summary for MW-98

Constituents	Units	10/13/2016	4/10/2017	10/9/2017	4/17/2018	10/22/2018	4/22/2019	10/23/2019	4/10/2020
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	<5
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (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	18.4	<10.0	<10.0	<10.0	<10.0	<10.0
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	7.4	25.3	<4.0	7.8	<4.0	<4.0	4.8	<4.0
Barium, total	ug/L	171.0	241.0	129.0	193.0	102.0	133.0	94.4	157.0
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	<8.0	9.8	<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	3.0	4.4	.8	5.0	<.8	1.3	2.4	2.0
Copper, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<4	<4	<4	<2	<2	<2
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<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	<8	<8	<8	<8	<20	<20	<20

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

Table 9

Analytical Data Summary for MW-98

Constituents	10/19/2020	4/5/2021	10/8/2021	4/6/2022	10/25/2022	4/11/2023	10/13/2023	4/17/2024	10/15/2024
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<5	<5	<5	<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	<10.0	<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	6.4	6.3	48.0	<4.0
Barium, total	147.0	125.0	149.0	117.0	183.0	136.0	217.0	325.0	137.0
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	2.2	.6	2.2	.7	3.6	2.1	5.5	4.7	1.9
Copper, total	<4.0	4.1	<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
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	<20	<20	<20	<20	<20	<20	<20	<20

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

Table 9

Analytical Data Summary for MW-99

Constituents	Units	10/13/2016	4/10/2017	10/9/2017	4/17/2018	10/22/2018	4/22/2019	10/23/2019	4/10/2020
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	<5
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (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	131.0	109.0	140.0	93.9	81.0	110.0	123.0	124.0
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	<8.0	23.4	<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	5.2	3.4	6.0	2.5	.8	3.1	2.7	4.1
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	5.6	5.1	8.8	4.3	<4.0	5.1	7.1	6.5
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	<2	<2	<2
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<8.0	<8.0	11.2	<8.0	23.6	27.8	20.8	<20.0

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

Table 9

Analytical Data Summary for MW-99

Constituents	10/19/2020	4/5/2021	10/8/2021	4/6/2022	10/25/2022	4/11/2023	10/13/2023	4/18/2024	10/15/2024
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<5	<5	<5	<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	118.0	117.0	130.0	110.0	134.0	89.4	134.0	164.0	88.8
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	3.8	3.2	4.0	3.5	3.6	2.2	3.3	4.1	.9
Copper, total	<4.0	5.3	<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	6.9	5.1	5.5	5.3	6.2	<4.0	5.3	6.3	<4.0
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for SRAMP A

Constituents	Units	10/14/2016	4/10/2017	4/22/2019	12/17/2019	4/10/2020	4/5/2021
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	<1.0	<1.0	1.4	<1.0	<1.0	<1.0
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	<5	<5
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1.0	<1.0	1.7	<1.0	<1.0	<1.0
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
Arsenic, total	ug/L	<4	<4	<4		<4	<4
Barium, total	ug/L	232	196	250		247	155
Benzene	ug/L	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4	<4	<4		<4	<4
Bod (5 day)	mg/L	<5	25	<5			<5
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
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1
Chemical oxygen demand	mg/L	<10	<10	<20			<20
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
Cis-1,2-dichloroethylene	ug/L	<1.0	1.3	2.8	<1.0	<1.0	<1.0
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	<.8	<.8	<.8		<.4	<.4
Copper, total	ug/L	<4	<4	<4		<4	<4
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
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
Nitrogen, ammonia	mg/L	<1	<1	<1			<1
pH	pH	8.1	7.8	7.9			8.3
Selenium, total	ug/L	<4	<4	<4		<4	<4
Silver, total	ug/L	<4	<4	<4		<4	<4
Solids, total suspended	mg/L	<2	<2	<4			<3
Styrene	ug/L	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4	<4	<2		<2	<2
Toluene	ug/L	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20		<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<8	<8	<20		<20	<20

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

Table 9

Analytical Data Summary for SRAMP B

Constituents	Units	4/22/2019	12/17/2019	4/10/2020	10/19/2020	4/5/2021	4/6/2022	4/11/2023	4/16/2024
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	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<10	<10	<10
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
Arsenic, total	ug/L	<4		<4	<4	<4	<4	<4	<4
Barium, total	ug/L	36.8		32.6	32.0	22.8	18.7	15.3	16.1
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4		<4	<4	<4	<4	<4	<4
Bod (5 day)	mg/L	<5							
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
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Chemical oxygen demand	mg/L	<20							
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
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		<.4	<.4	<.4	<.4	<.4	<.4
Copper, total	ug/L	<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
Lead, total	ug/L	<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
Nitrogen, ammonia	mg/L	<1							
pH	pH	7.6							
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	<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	<2		<2	<2	<2	<2	<2	<2
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20		<20	<20	<20	<20	<20	<20
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		<20	<20	<20	<20	<20	<20

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

Table 9

Analytical Data Summary for SW-1

Constituents	Units	10/17/2014	4/14/2016	10/14/2016	4/10/2017	4/17/2018	7/2/2018	10/22/2018
1,1,1,2-tetrachloroethane	ug/L			<1	<1	<1		<1
1,1,1-trichloroethane	ug/L			<1	<1	<1		<1
1,1,2,2-tetrachloroethane	ug/L			<1	<1	<1		<1
1,1,2-trichloroethane	ug/L			<1	<1	<1		<1
1,1-dichloroethane	ug/L			<1.0	1.1	1.2	<1.0	<1.0
1,1-dichloroethylene	ug/L			<1	<1	<1		<1
1,2,3-trichloropropane	ug/L			<1	<1	<1		<1
1,2-dibromo-3-chloropropane	ug/L			<1	<1	<1		<1
1,2-dibromoethane	ug/L			<1	<1	<1		<1
1,2-dichlorobenzene	ug/L			<1.0	<1.0	3.6	<1.0	<1.0
1,2-dichloroethane	ug/L			<1	<1	<1		<1
1,2-dichloropropane	ug/L			<1	<1	<1		<1
1,4-dichlorobenzene	ug/L			<1	<1	<1		<1
2-butanone (mek)	ug/L			<5	<5	<5		<5
2-hexanone (mbk)	ug/L			<5	<5	<5		<5
4-methyl-2-pentanone (mibk)	ug/L			<5	<5	<5		<5
Acetone	ug/L			<10	<10	<10		<10
Acrylonitrile	ug/L			<5	<5	<5		<5
Antimony, total	ug/L			<2	<2	<2		<2
Arsenic, total	ug/L			<4	<4	<4		<4
Barium, total	ug/L			150	201	169		182
Benzene	ug/L			<1	<1	<1		<1
Beryllium, total	ug/L			<4	<4	<4		<4
Bromochloromethane	ug/L			<1	<1	<1		<1
Bromodichloromethane	ug/L			<1	<1	<1		<1
Bromoform	ug/L			<1	<1	<1		<1
Bromomethane	ug/L			<1	<1	<1		<1
Cadmium, total	ug/L			<.8	<.8	<.8		<.8
Carbon disulfide	ug/L			<1	<1	<1		<1
Carbon tetrachloride	ug/L			<1	<1	<1		<1
Chemical oxygen demand	mg/L	21	<10					
Chloride	mg/L	17	24					
Chlorobenzene	ug/L			<1.0	<1.0	1.1	<1.0	<1.0
Chloroethane	ug/L			<1	<1	<1		<1
Chloroform	ug/L			<1	<1	<1		<1
Chloromethane	ug/L			<1	<1	<1		<1
Chromium, total	ug/L			<8	<8	<8		<8
Cis-1,2-dichloroethylene	ug/L			<1	<1	<1		<1
Cis-1,3-dichloropropene	ug/L			<1	<1	<1		<1
Cobalt, total	ug/L			<.8	<.8	<.8		<.8
Copper, total	ug/L			<4	<4	<4		<4
Dibromochloromethane	ug/L			<1	<1	<1		<1
Dibromomethane	ug/L			<1	<1	<1		<1
Ethylbenzene	ug/L			<1	<1	<1		<1
Iron, dissolved	ug/L	<100	<100					
Lead, total	ug/L			<4	<4	<4		<4
Methyl iodide	ug/L			<1	<1	<1		<1
Methylene chloride	ug/L			<5	<5	<5		<5
Nickel, total	ug/L			<4.0	<4.0	4.1		<4.0
Nitrogen, ammonia	mg/L	<1	<1					
Phenols, total	mg/L	<.1						
Selenium, total	ug/L			<4	<4	<4		<4
Silver, total	ug/L			<4	<4	<4		<4
Solids, total suspended	mg/L			<2				
Styrene	ug/L			<1	<1	<1		<1
Tetrachloroethylene	ug/L			<1	<1	<1		<1
Thallium, total	ug/L			<4	<4	<4		<4
Toluene	ug/L			<1	<1	<1		<1
Total organic halogens (tox)	mg/L	.021						
Trans-1,2-dichloroethylene	ug/L			<1	<1	<1		<1
Trans-1,3-dichloropropene	ug/L			<1	<1	<1		<1
Trans-1,4-dichloro-2-butene	ug/L			<5	<5	<5		<5
Trichloroethylene	ug/L			<1	<1	<1		<1
Trichlorofluoromethane	ug/L			<1	<1	<1		<1
Vanadium, total	ug/L			<20	<20	<20		<20
Vinyl acetate	ug/L			<5	<5	<5		<5
Vinyl chloride	ug/L			<1	<1	<1		<1
Xylenes, total	ug/L			<2	<2	<2		<2
Zinc, total	ug/L			<8	<8	<8		<8

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

Table 10 – Historic SSI and SSL **– Not Required**

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

Table 12 – Leachate Levels

			Leachate Level Summary				
			2024 Annual Water Quality Report				
			Marshall County Sanitary Landfill				
			Permit No. 64-SDP-02-75P				
Monthly Leachate Levels - Marshall County Landfill 2024							
	OPERATING LANDFILL - LINED				CLOSED LANDFILL - UNLINED		
		Area B4			Area B1	Area B3	Area C/D
Date	LPZ-101	LPZ-102	GPZ - 105	LPZ-106	LW -73	LW-75	LW-78	LW-79
	(cell bse)	(in trench)	Grndwater	(cell bse)				
	10.0 Depth	8.3 Depth	12.1 Depth	7.8 Depth	30.08 Dept	45.23 Depth	25.90 Depth	23.00 Depth
1/4/24	10 dry	8.14	12.09	7.8 dry	29.66	32.26	17.71	15.64
2/8/24	10 dry	7.95	12	7.8 dry	29.65	31.54	17.75	15.05
3/12//2024	10 dry	8.1	12	7.8 dry	29.66	31.66	17.66	15.51
4/17/24	10 dry	8.01	12.02	7.8 dry	29.64	32.05	17.43	15.4
5/15/24	10 dry	8.03	11.86	7.8 dry	29.66	31.6	17.37	14.75
6/25/24	10 dry	8.06	11.94	7.8 dry	29.65	31.01	17.17	13.96
7/23/24	10 dry	8.05	11.89	7.8 dry	29.66	30.89	17.18	13.85
8/8/24	10 dry	8.07	11.91	7.8 dry	29.67	30.86	17.21	13.46
9/5/24	10 dry	8.09	11.95	7.8 dry	29.66	31.01	17.21	13.51
10/15/24	10 dry	8.1	12	7.8 dry	29.68	31.4	17.38	14.34
11/18/24	10 dry	8.02	11.99	7.8 dry	29.67	31.1	17.32	14.54
12/9/24	10 dry	8.09	12.04	7.8 dry	29.69	31.18	17.36	14.37

Table 13 – Gas Monitoring Summary

Table 13
Explosive Gas Monitoring
Annual Water Quality Report
Marshall County Sanitary Landfill
Permit No. 64-SDP-02-75P

Reference Location	25-Jan-24 LEL %	16-Apr-24 LEL %	18-Jul-24 LEL %	15-Oct-24 LEL %
Scale House Interior	0	0	0	0
Old Scale House Interior	0	0	0	0
Electronics Shed North of Scale	0	0	0	0
Main Shop	0	0	0	0
Attached Cold Shop/Garage	0	0	0	0
Storage Shed East of Shop	0	0	0	0
GP-1	0	0	0	0
GP-2	0	0	0	0
GP-3	0	0	0	0
GP-4	0	0	0	0
GP-5	0	0	0	0
GP-6	0	0	**22.8**	0
GP-7	**24.3**	**34.6**	0	0
GP-8 (MW-213)	0	0	0	0
GU-2	0	0	0	0
GU-3	0	0	0	0

Table 14 – LW-75 Leachate Quality Data

Table 14

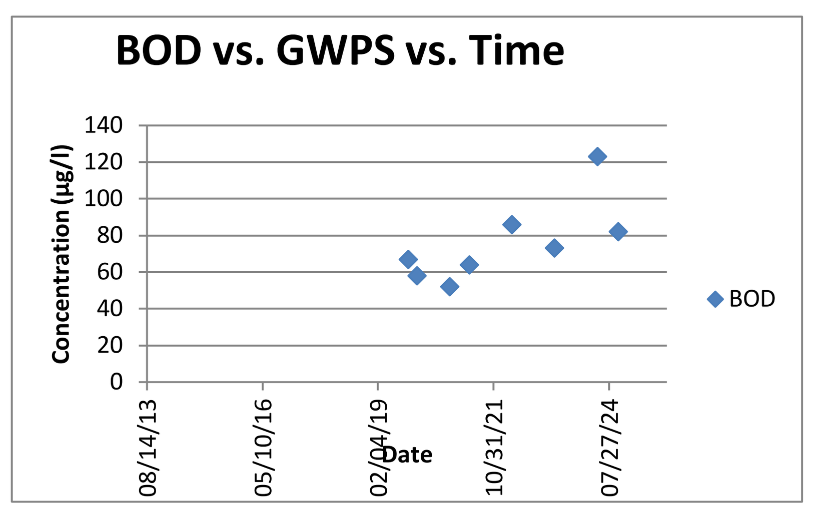
Leachate Well LW-75 - Leachate Quality over Time

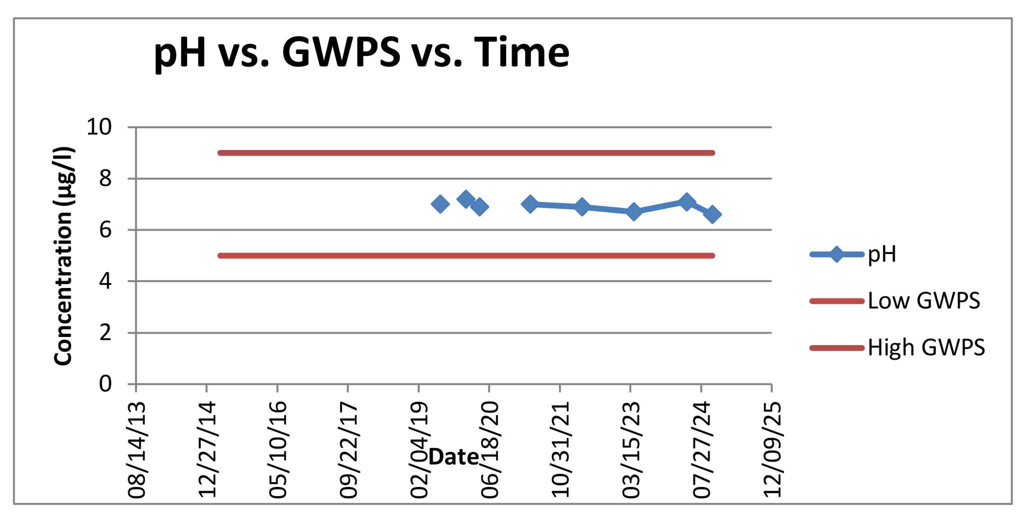
Annual Water Quality Report

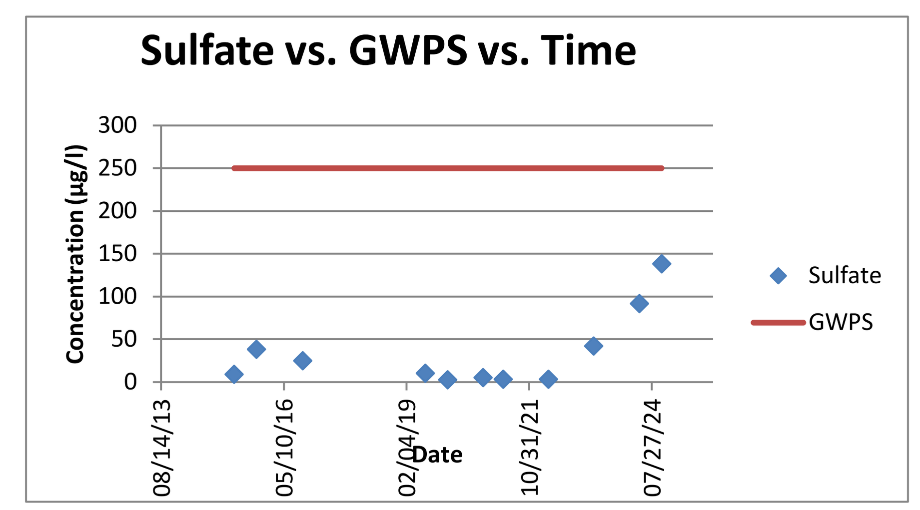
Marshall County Sanitary Landfill

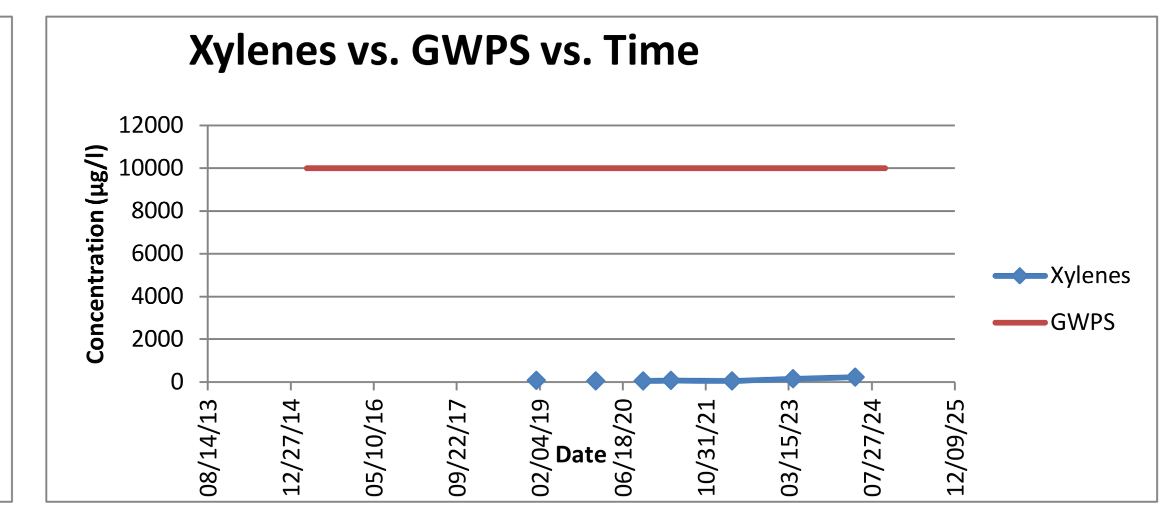
Permit No. 64-SDP-02-75P

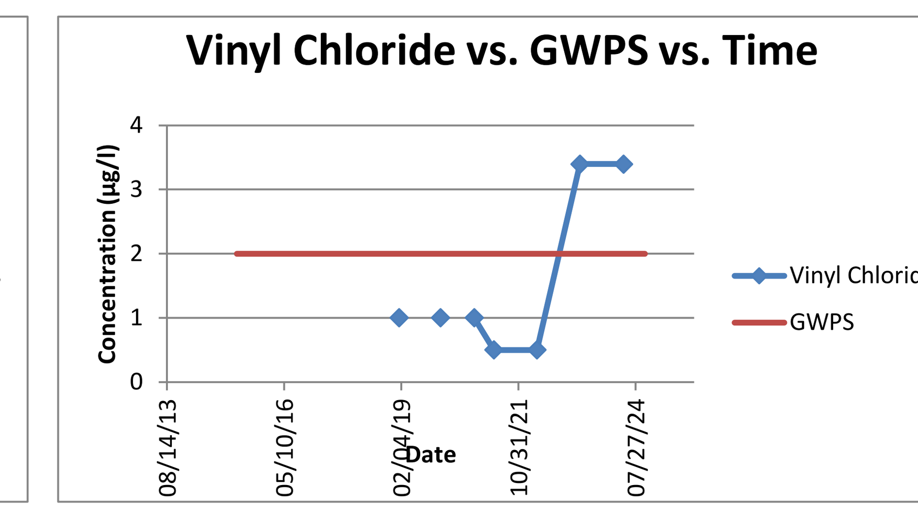
Sample Date	BOD Concentration mg/L	GWPS mg/L	Alkalinity Concentration mg/L	GWPS mg/L	Nitrogen (NH3) Concentration mg/L	GWPS mg/L	pH Concentration mg/L	Low GWPS mg/L	High GWPS mg/L	TDS Concentration mg/L	GWPS mg/L	chloride Concentration mg/L	GWPS mg/L	Sulfate Concentration mg/L	GWPS mg/L	Benzene Concentration ug/L	GWPS ug/L	Ethyl Benzene Concentration ug/L	GWPS ug/L	Xylene Concentration ug/L	GWPS ug/L	1,4-dichlorobenzene Concentration ug/L	GWPS ug/L	cis-1,2-dichloroethene Concentration ug/L	GWPS ug/L	Vinyl Chloride Concentration ug/L	GWPS ug/L	Cobalt Concentration ug/L	GWPS ug/L	Methane Concentration mg/L	GWPS mg/L
4/3/2015		none	2300	none	105	30		5	9	3570	none	26	none	9	250		5		700		10000		75		70		2		2.1		none
10/1/2015		none	2210	none	84.8	30		5	9	3980	none	1210	none	38.5	250		5		700		10000		75		70		2		2.1		none
10/13/2016		none	2150	none	92.2	30		5	9	4790	none	1220	none	24.7	250		5		700		10000		75		70		2		2.1		none
1/15/2019		none		none		30		5	9		none		none		250	7.8	5	77.8	700	86	10000	18.2	75	2.5	70	1	2		2.1		none
7/8/2019		none	2320	none	71	30	7	5	9	4590	none	1360	none	10.2	250		5		700		10000		75		70		2		2.1		none
10/23/2019	67	none		none		30		5	9		none		none		250		5		700		10000		75		70		2		2.1		none
1/7/2020	58	none	211	none	63.3	30	7.2	5	9	4290	none	1300	none	2.6	250	2.5	5	48.4	700	65.2	10000	11.2	75	2.5	70	1	2	19	2.1	5.32	none
4/10/2020		none	2420	none		30	6.9	5	9		none		none		250		5		700		10000		75		70		2		2.1	11.5	none
10/19/2020	52	none		none	57.9	30		5	9	3860	none	1290	none	5.2	250	3.4	5	38.6	700	49.2	10000	9.4	75	1	70	1	2	13.8	2.1		none
4/5/2021	64	none	2150	none	77.3	30	7	5	9	3570	none	1260	none	3.5	250	4.8	5	39.9	700	71.4	10000	9.6	75	1	70	0.5	2	13.8	2.1	6.53	none
4/6/2022	86	none	1970	none	80.3	30	6.9	5	9	3780	none	1160	none	3.2	250	5.2	5	35.3	700	62.1	10000	10	75	0.5	70	0.5	2	20	2.1	6.41	
4/10/2023	73	none	1790	none	84.1	30	6.7	5	9	3970	none	1190	none	42.2	250	9.4	5	275	700	161	10000	67.5	75	5.4	70	3.4	2	30.9	2.1	1.36	none
4/16/2024	123	none	1530	none	109	30	7.1	5	9	3680	none	1090	none	92	250	8.9	5	297	700	231	10000	163	75	6.8	70	3.4	2	22.1	2.1		none
10/15/2024	82	none	1730	none	109	30	6.6	5	9	3780	none	1220	none	138	250		5		700		10000		75		70		2	18.8	2.1	5.53	none

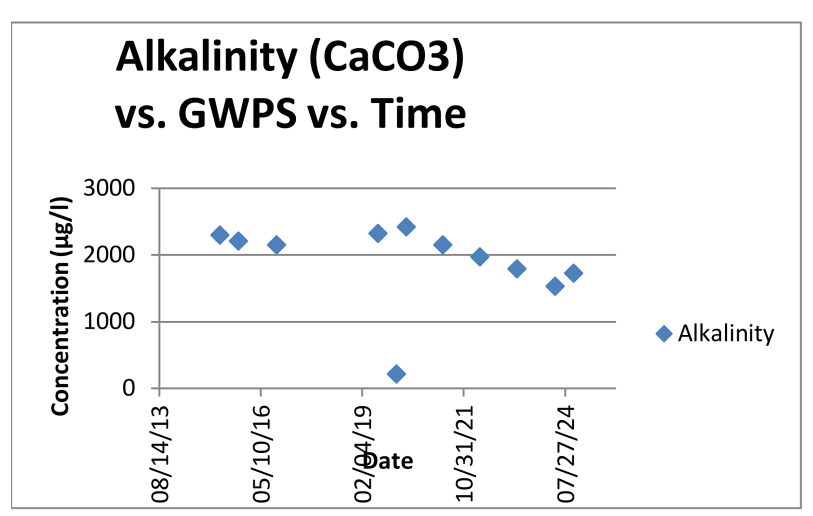


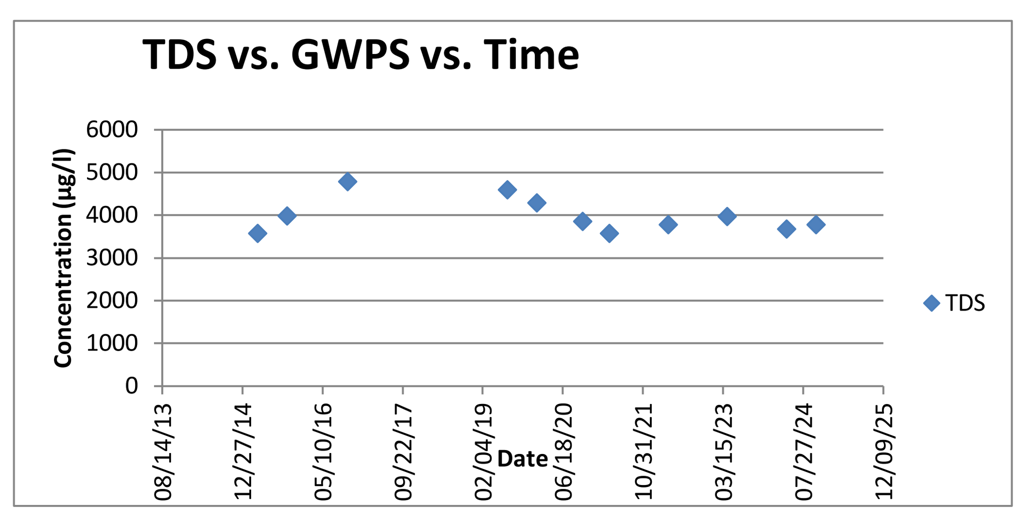


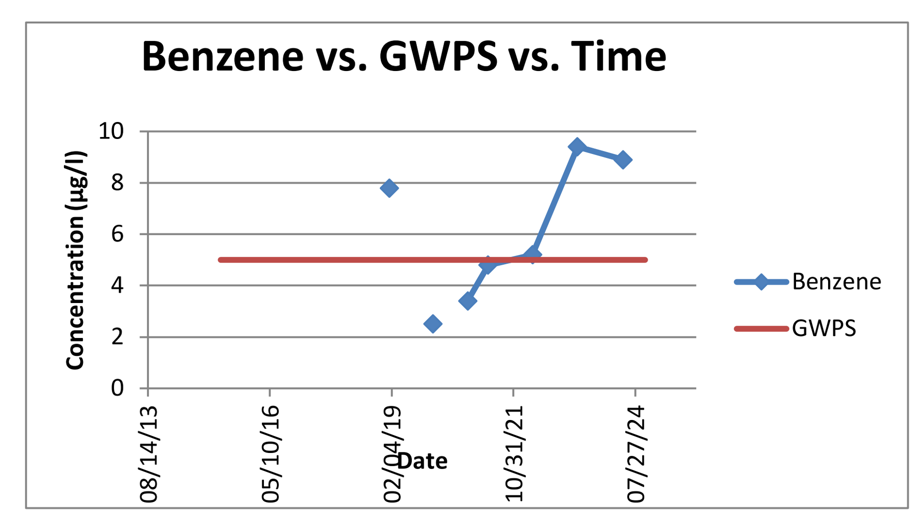


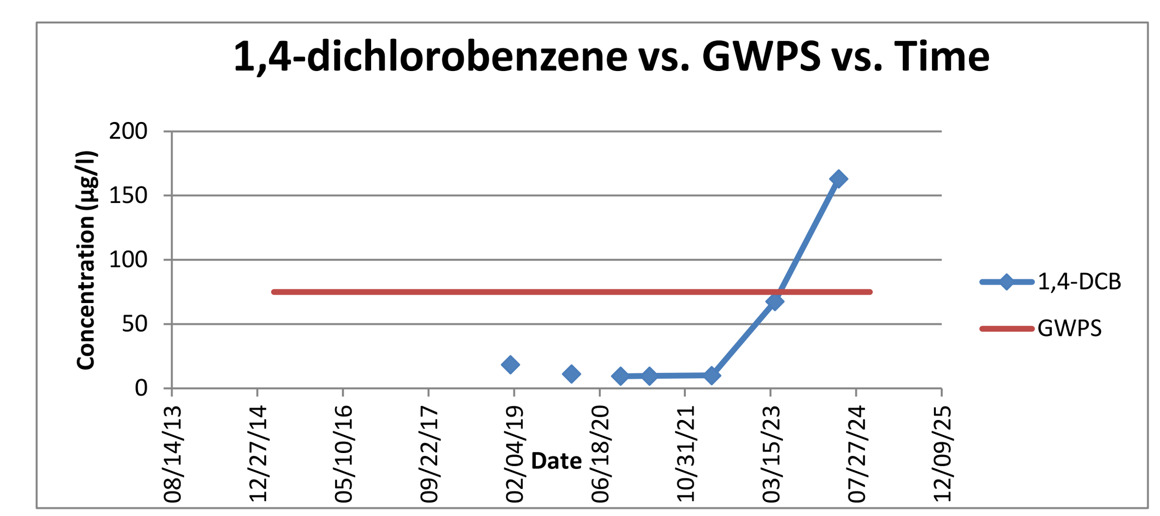


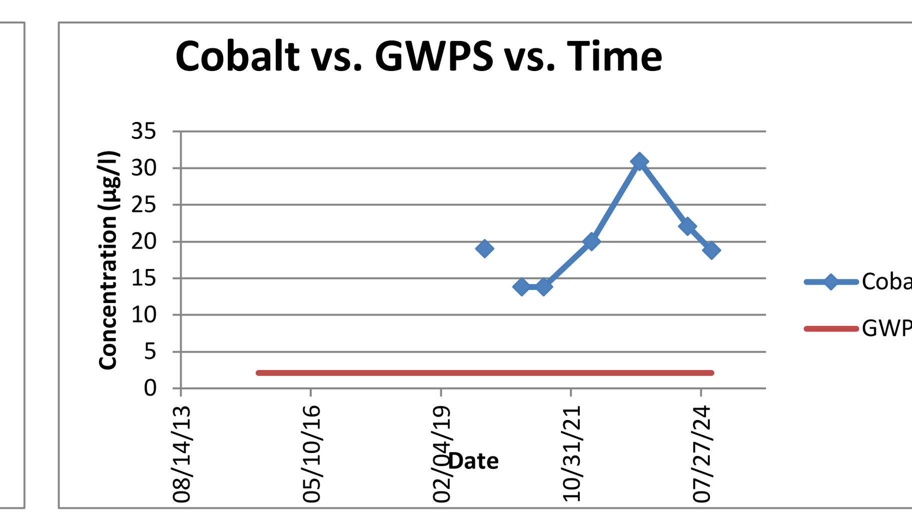


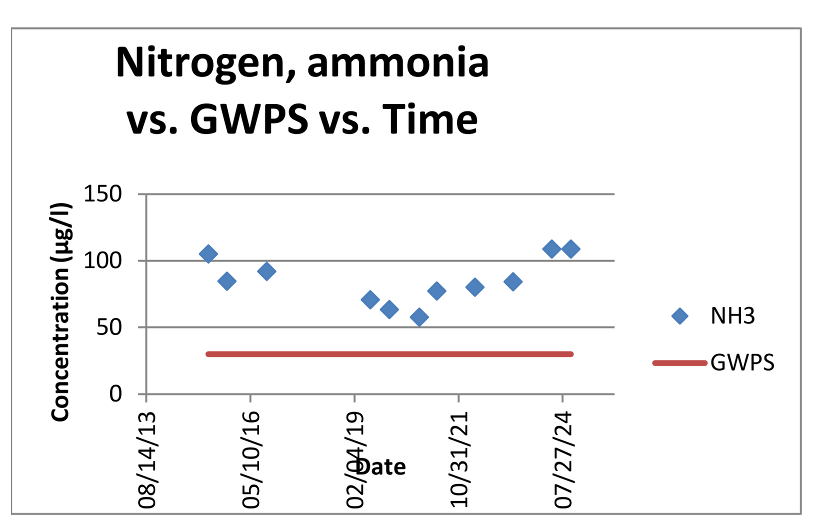


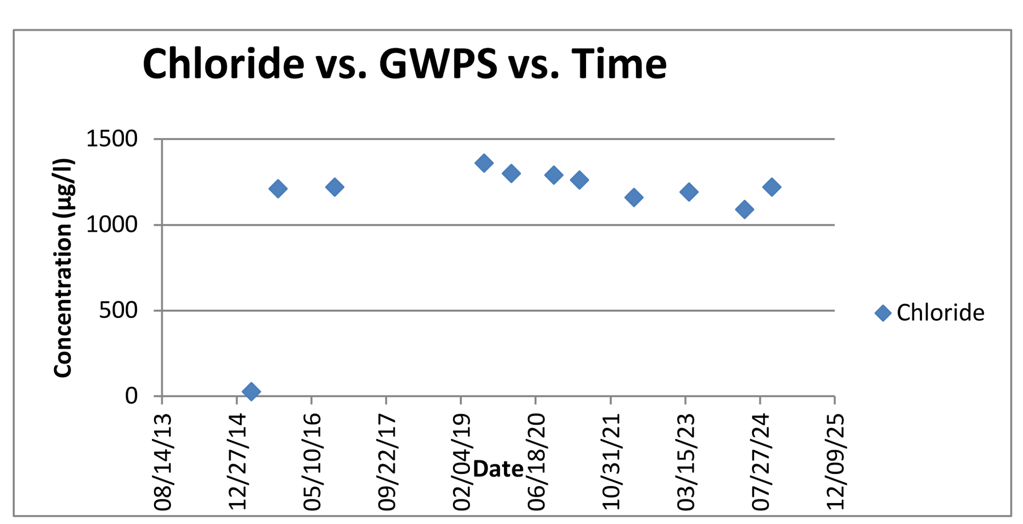


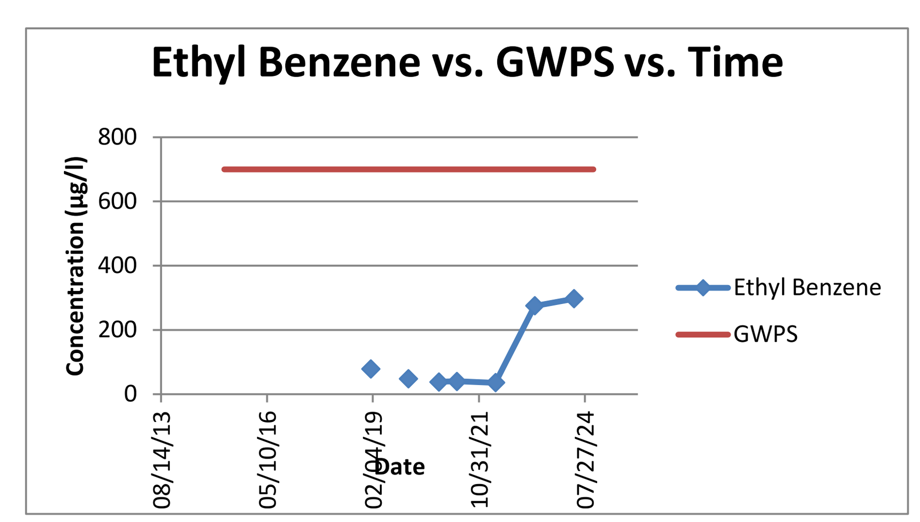


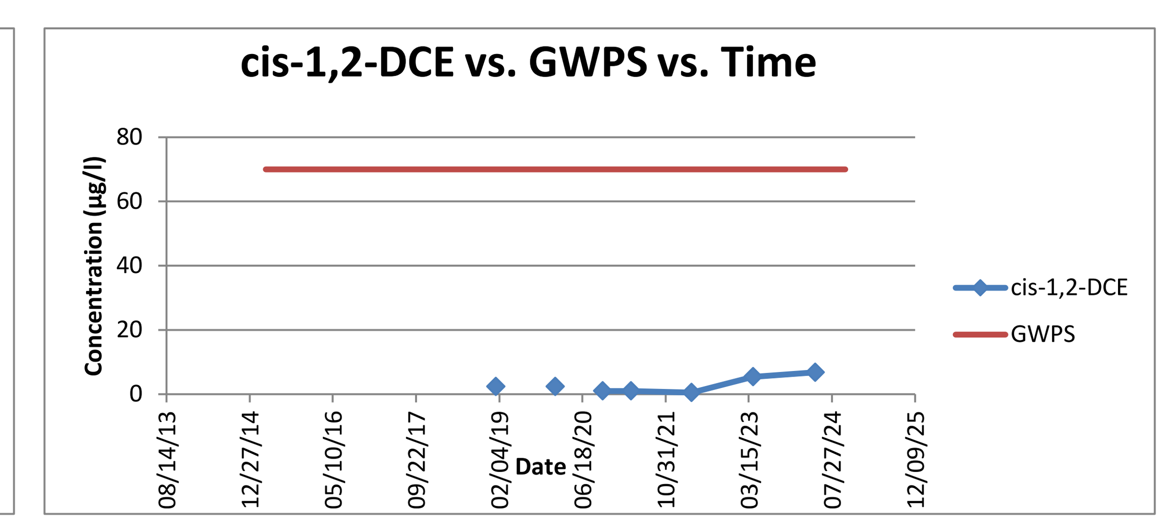












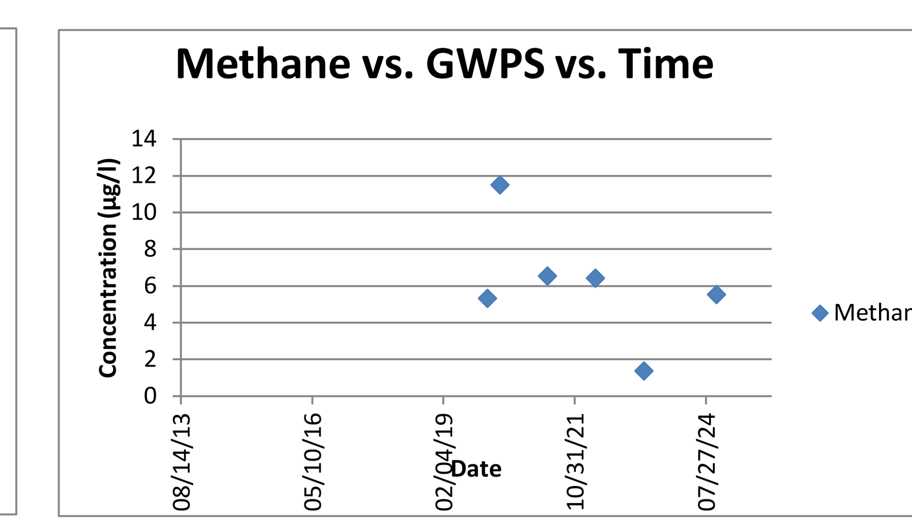


Table 15 – Vent Gas Evaluation Summary

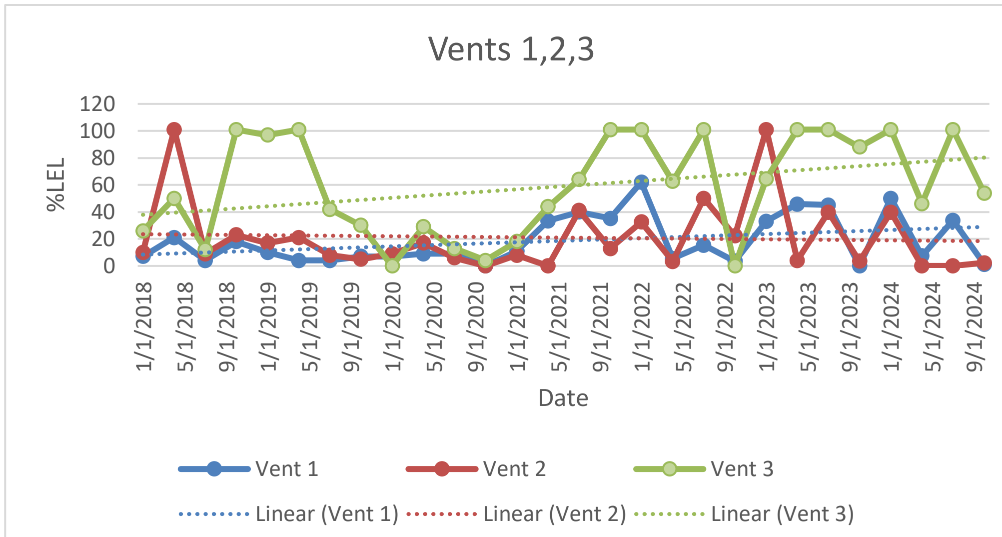
Table 15
SRAMP Vent Gas Evaluation
Annual Water Quality Report
Marshall County Sanitary Landfill
Permit No. 64-SDP-02-75P

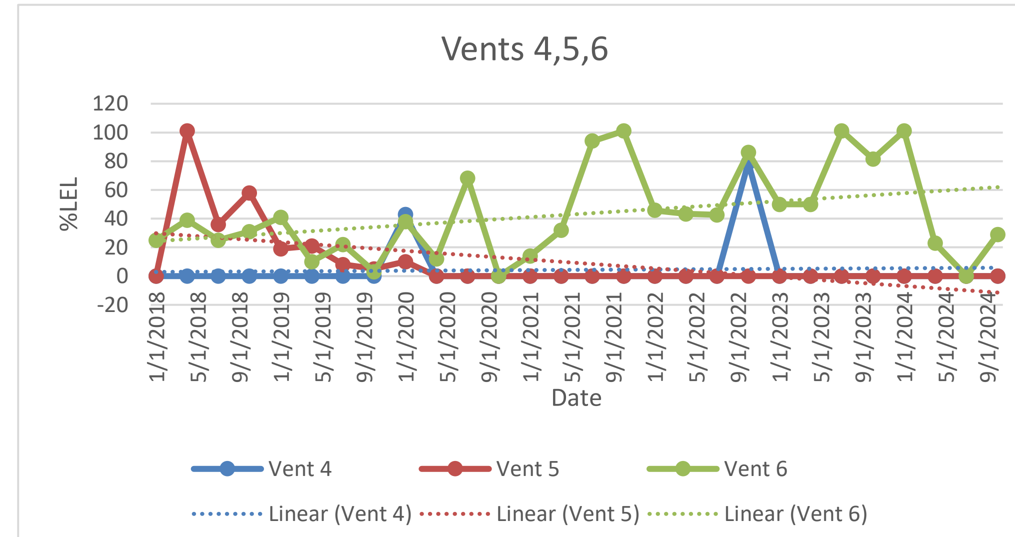
KEY: 101 = a value that exceeds 100% of the LEL

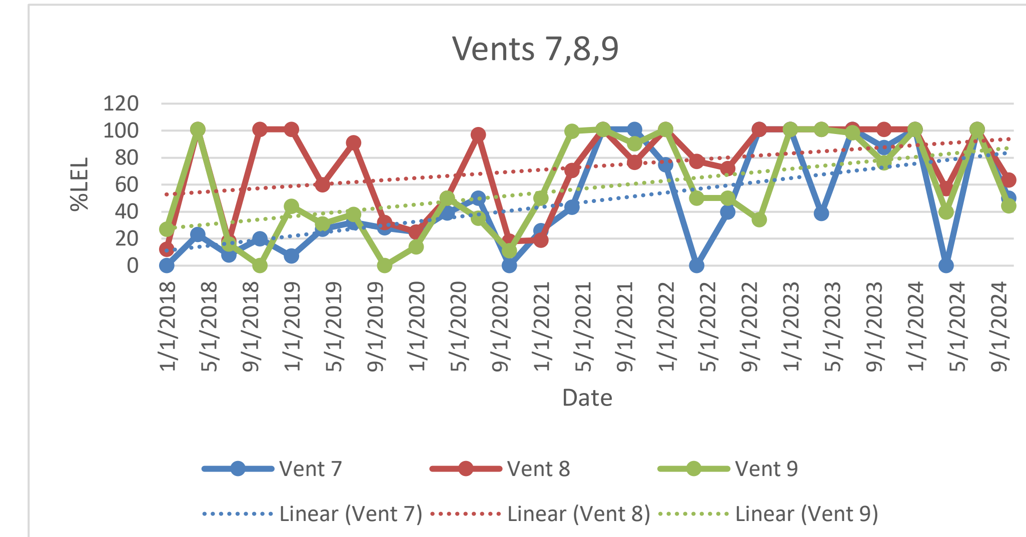
Date	Vent 1	Vent 2	Vent 3	Vent 4	Vent 5	Vent 6	Vent 7	Vent 8	Vent 9	Vent 10	Vent 11	Vent 12	Vent 13	Vent 14	Vent 15	Vent 16	Vent 17	Vent 18	Vent 19	Vent 20	Vent 21	Vent 22	Vent 23	Vent 24	Vent 25	Vent 26	Vent 27
1/9/2018	7	10	26	0	0	25	0	12	27	3	3	11	6	7	3	0	10	95	18	3	60	13	12	37	92	4	6
4/17/2018	21	101	50	0	101	39	23	101	101	0	0	0	34	0	0	0	0	71	101	101	101	8	34	88	32	0	0
7/2/2018	4	9	12	0	36	25	8	18	16	4	4	0	27	4	0	4	7	20	12	6	16	2	20	101	30	0	0
10/22/2018	18	23	101	0	58	31	20	101	0	26	0	0	71	9	0	4	0	101	36	4	32	0	30	50	101	0	8
1/15/2019	10	17	97	0	19	41	7	101	44	12	0	5	33	10	0	13	0	53	20	18	50	0	21	101	50	0	0
4/22/2019	4	21	101	0	21	10	27	60	31	4	0	4	32	3	0	4	0	67	13	25	44	0	8	84	29	0	0
7/8/2019	4	8	42	0	8	22	32	91	38	13	0	6	27	10	0	5	0	101	50	24	85	0	23	101	57	0	0
10/23/2019	7	5	30	0	5	3	28	32	0	20	25	5	13	45	0	3	6	18	16	14	34	0	22	68	35	0	0
1/7/2020	7	9	0	43	10	38	25	25	14	5	0	5	12	0	0	5	0	21	11	61	59	0	11	101	34	0	0
4/10/2020	9	17	29	0	0	12	39	50	50	10	0	6	0	6	0	13	0	101	4	32	101	0	9	69	50	0	0
7/8/2020	9	6	13	0	0	68	50	97	35	6	0	0	0	4	0	5	0	50	7	50	17	0	25	101	12	0	0
10/19/2020	0	0	4	0	0	0	0	18	11	5	0	5	4	5	0	3	0	66	3	4	5	0	6	16	13	0	0
1/7/2021	11	8	18	0	0	14	26	19	50	0	0	10	13	6	3	3	0	95	7	12	26	3	0	65	3	0	3
4/5/2021	33.5	0	43.9	0	0	31.8	43.2	70.5	99.5	7.4	0	0	0	0	0	4.6	0	101	11.8	42.1	101	0	8	101	85.5	0	0
7/2/2021	40	41	64	0	0	94	101	101	101	6	3	42	35	12	0	50	4	101	86	101	101	8	80	101	82	0	0
10/8/2021	35.2	13	101	0	0	101	101	76.5	90.2	9.6	0	5	44.7	37.2	3.8	26.2	3.8	101	37.9	38.4	101	0	38.6	101	50	0	0
1/17/2022	62	32.6	101	0	0	45.8	74.6	101	101	26.7	0	32.3	54.5	34.34	0	98.8	0	101	43.3	55.5	101	3.8	8	101	45.5	0	5.2
4/6/2022	5.4	3.4	62.6	0	0	43.2	0	77.3	50	22.1	0	7.8	0	0	0	5.6	0	101	38.1	0	4	0	4.2	101	4.8	0	0
7/8/2022	15.4	50	101	0	0	42.6	39.6	72	50	0	0	0	3.6	0	0	3.4	0	101	38.1	6	80	0	39.6	101	70	0	0
10/25/2022	3.6	22.3	0	79	0	86	101	101	34	0	0	4	44.7	0	0	0	2.8	101	7.4	60.1	101	0	7	101	4.4	0	3.4
1/23/2023	33.1	101	64.5	0	0	50	101	101	101	101	2.2	12.5	2.4	35.2	0	35.3	19.5	101	44.4	101	101	0	50.1	101	10.2	0	29.3
4/10/2023	45.8	4	101	0	0	50	38.5	101	101	50	0	50	0	0	0	35.2	0	101	50	41.7	66.7	0	54.5	101	101	0	0
7/7/2023	45.1	39.8	101	0	0	101	101	101	98.3	31.3	0	95.1	26.5	0	0	34.8	0	101	68.6	101	101	0	96.4	101	91.1	0	0
10/13/2023	0	3.6	88.1	0	0	81.5	87.5	101	76.2	0	0	5.2	37.2	0	0	2.8	6.8	101	27.7	75	74.6	0	39.9	101	7.6	0	0
1/25/2024	50	39.8	101	0	0	101	101	101	101	6.6	0	45.6	101	0	7.8	23.1	33.2	101	50	101	101	12.8	35.4	101	0	0	41.2
4/16/2024	7.4	0	46.2	0	0	22.8	0	57	39.9	4.8	0	0	5.8	3.2	0	0	0	101	12.6	0	0	0	0	40.6	3.8	0	0
7/18/2024	33.8	0	101	0	0	0	101	101	101	63.6	0	0	0	0	0	0	0	101	5.9	101	101	0	60.6	101	101	0	0
10/15/2024	1.2	2.2	54	0	0	29	50	63.6	44.4	10.8	0	0	20.2	8.2	0	0	0	101	3.4	63.6	18.2	0	13.6	90.8	27	0	0

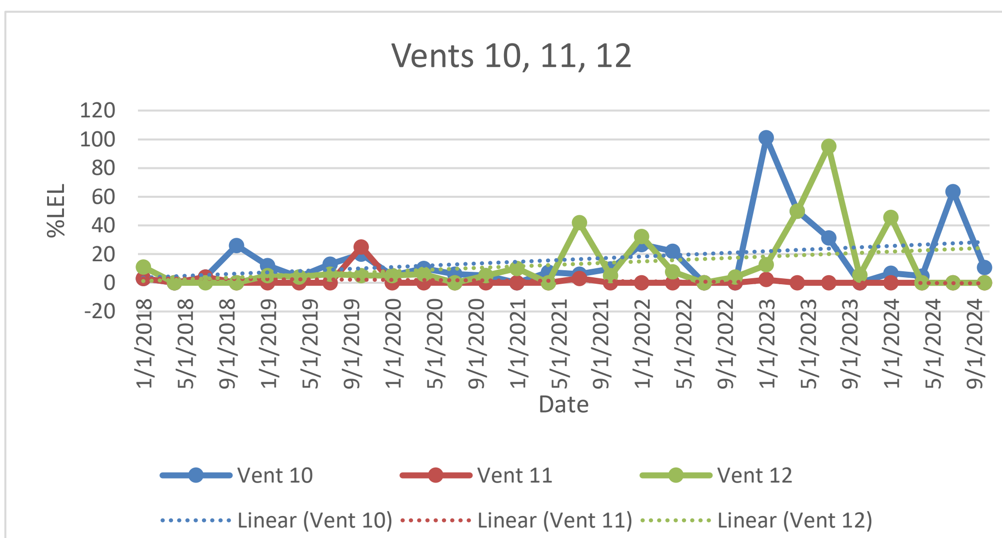
Table 15
SRAMP Vent Gas Evaluation
Annual Water Quality Report
Marshall County Sanitary Landfill
Permit No. 64-SDP-02-75P

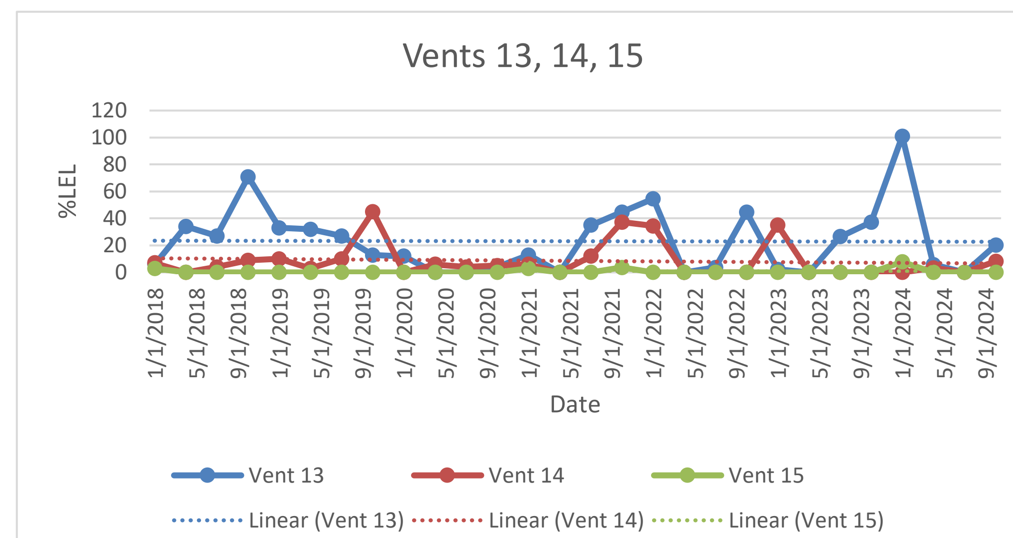
KEY: 101 = a value that exceeds 100% of the LEL

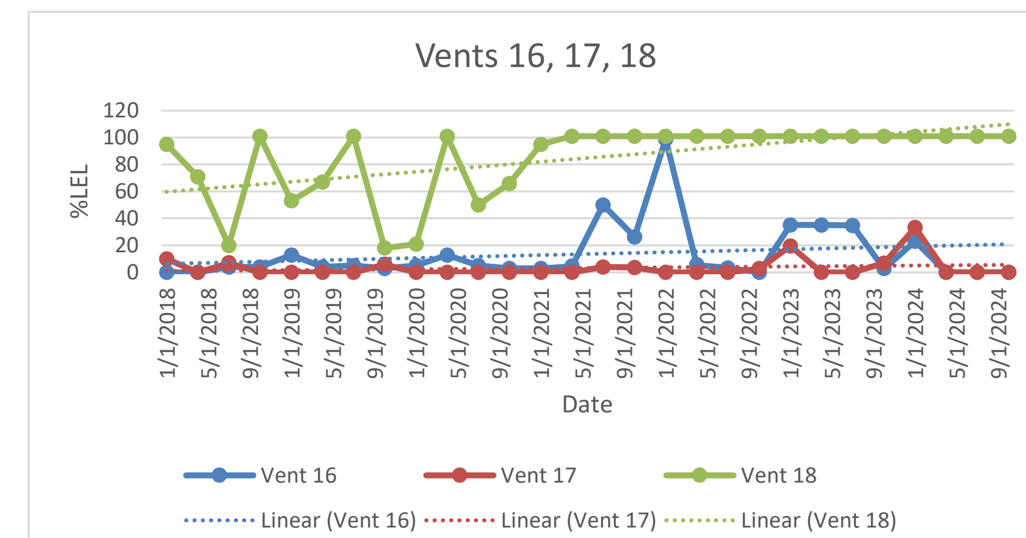


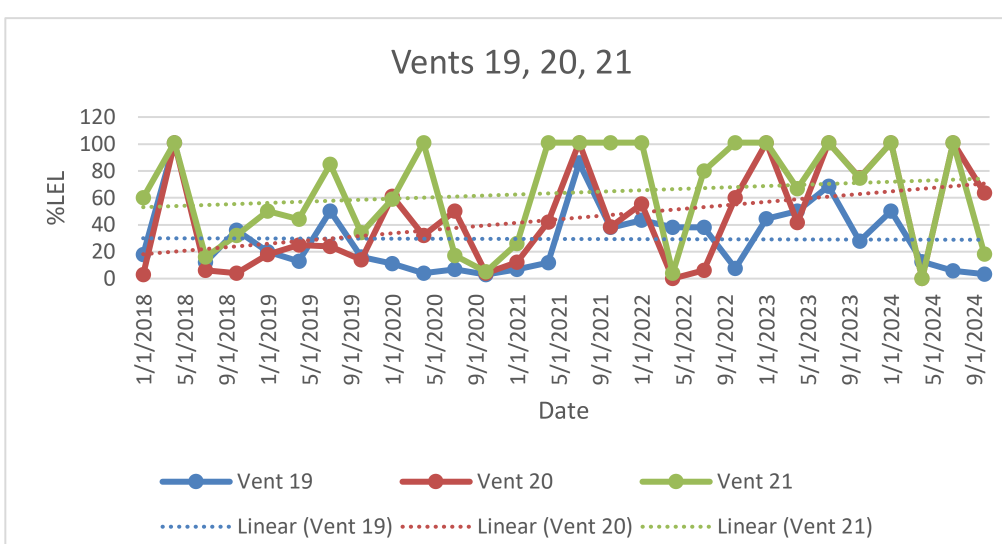


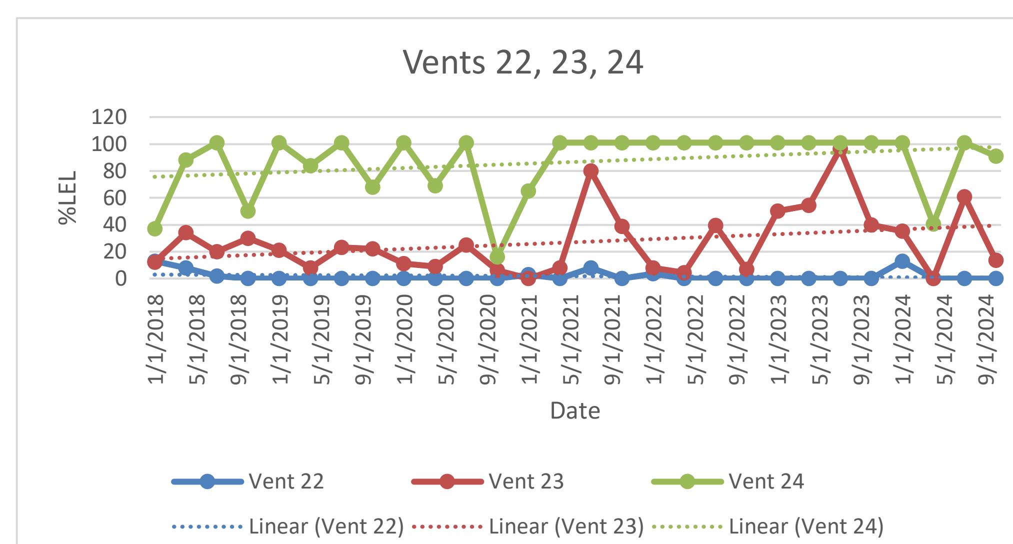












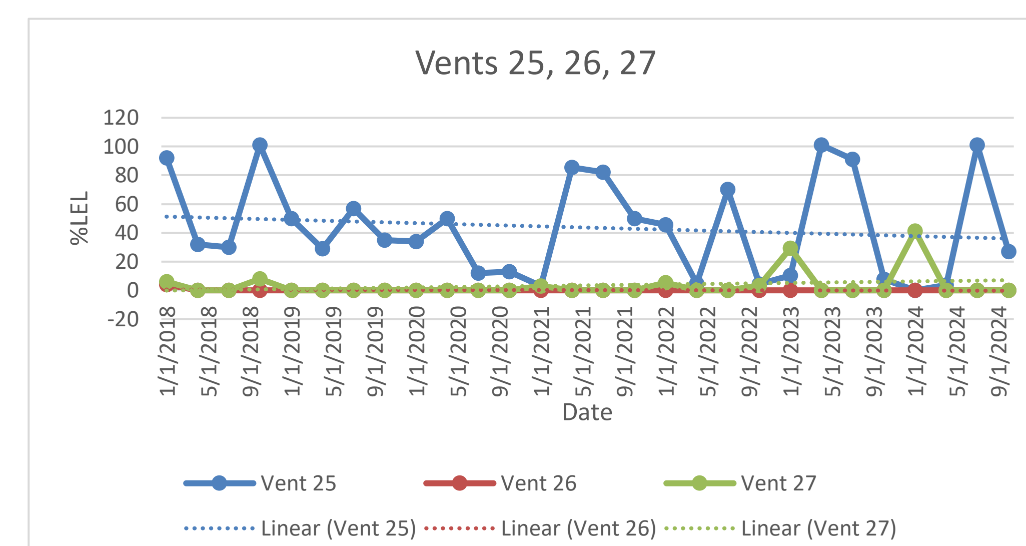


Table 16 – Dissolved Methane, Ethane, Ethene, and Alkalinity and pH CAMP Testing Summary

Table 16

Methane, Ethane, Ethene, Alkalinity, and pH over Time

Annual Water Quality Report
Marshall County Sanitary Landfill
Permit No. 64-SDP-02-75P

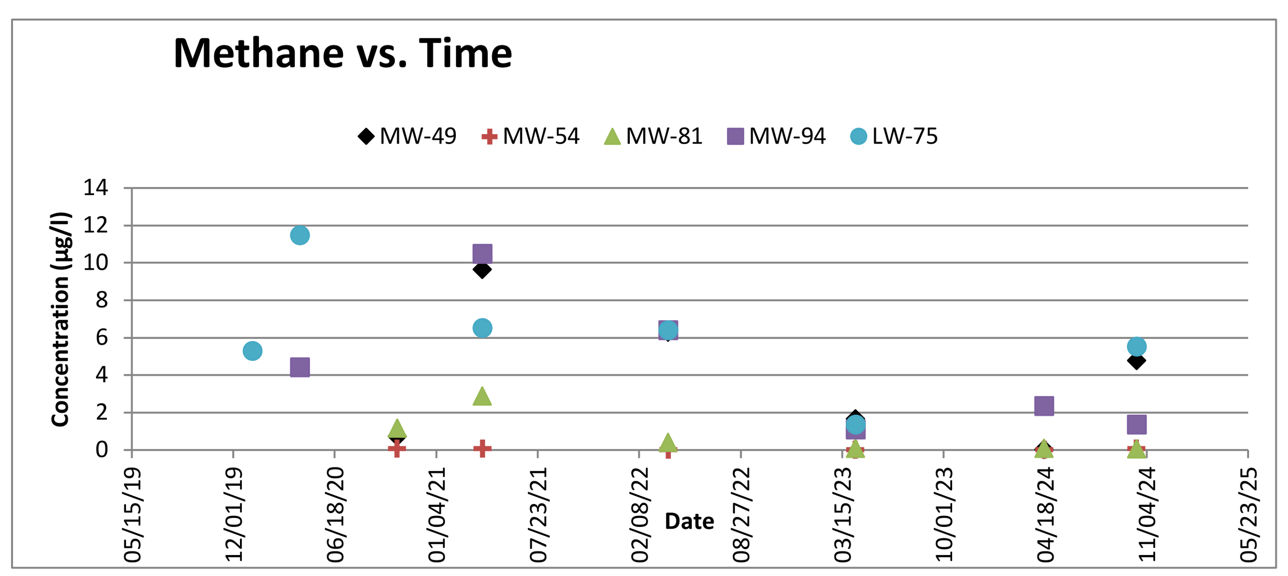
	Methane				
Sample Date	MW-49 Concentration mg/L	MW-54 Concentration mg/L	MW-81 Concentration mg/L	MW-94 Concentration mg/L	LW-75 Concentration mg/L
4/3/2015					
10/1/2015					
10/13/2016					
1/15/2019					
7/8/2019					
10/23/2019					
1/7/2020					5.32
4/10/2020				4.44	11.5
10/19/2020	0.737	0.068	1.16		
4/5/2021	9.66	0.063	2.88	10.5	6.53
4/6/2022	6.3	0.00476	0.398	6.41	6.41
4/10/2023	1.66	0.0051	0.101	1.11	1.36
4/16/2024	0.0223	0.0091	0.0962	2.37	
10/15/2024	4.77	0.078	0.056	1.38	5.53

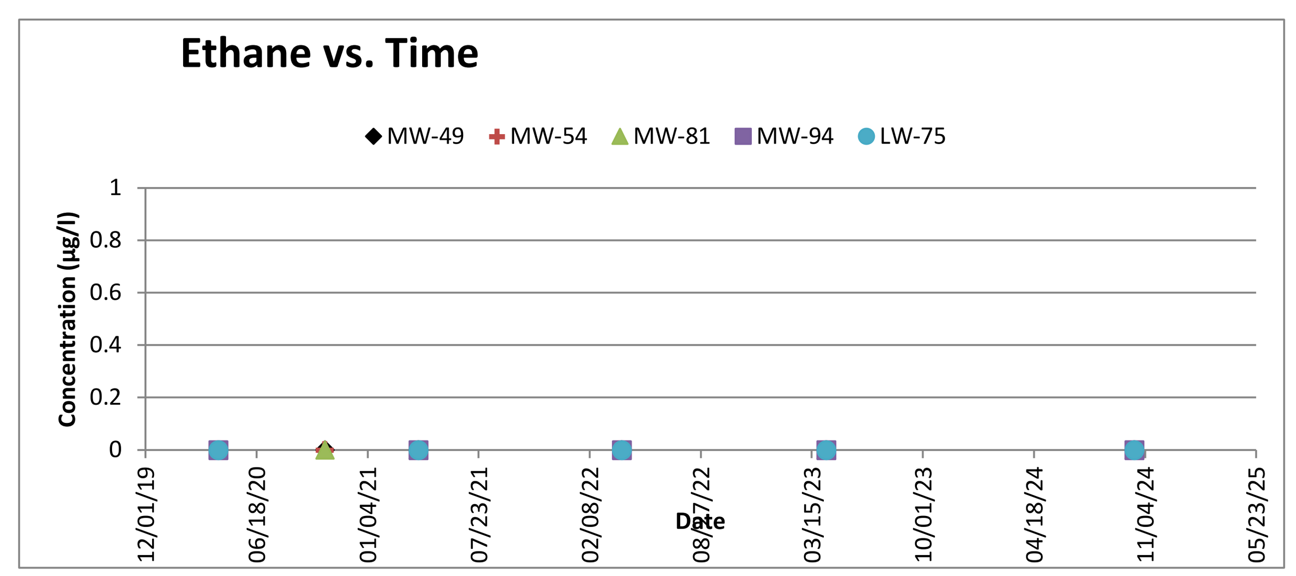
	Ethane				
Sample Date	MW-49 GWPS mg/L	MW-54 Concentration mg/L	MW-81 GWPS mg/L	MW-94 GWPS mg/L	LW-75 Concentration mg/L
4/3/2015					
10/1/2015					
10/13/2016					
1/15/2019					
7/8/2019					
10/23/2019					
1/7/2020					
4/10/2020				<0.010	<0.013
10/19/2020	<0.010	<0.014	<0.010		
4/5/2021	<0.013	<0.010	<0.010	<0.010	<0.010
4/6/2022	<0.00773	<0.00773	<0.00773	<0.00773	<0.0386
4/10/2023	<0.007	<0.007	<0.007	<0.007	<0.007
4/16/2024					
10/15/2024	<0.005	<0.005	<0.005	<0.005	<0.005

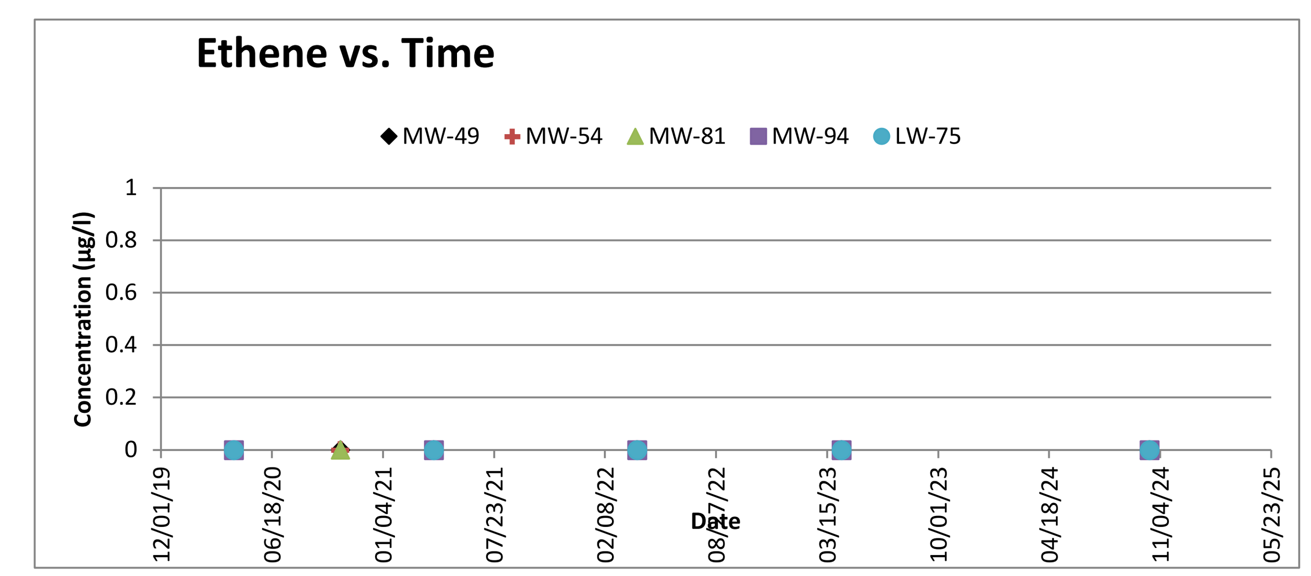
	Ethene				
Sample Date	MW-49 GWPS mg/L	MW-54 Concentration mg/L	MW-81 GWPS mg/L	MW-94 Concentration mg/L	LW-75 GWPS mg/L
4/3/2015					
10/1/2015					
10/13/2016					
1/15/2019					
7/8/2019					
10/23/2019					
1/7/2020					
4/10/2020				<0.010	<0.013
10/19/2020	<0.010	<0.014	<0.010		
4/5/2021	<0.013	<0.010	<0.010	<0.010	<0.010
4/6/2022	<0.0828	<0.0828	<0.0828	<0.0828	<0.0414
4/10/2023	<0.01	<0.01	<0.01	<0.01	<0.01
4/16/2024					
10/15/2024	<0.005	<0.005	<0.005	<0.005	<0.005

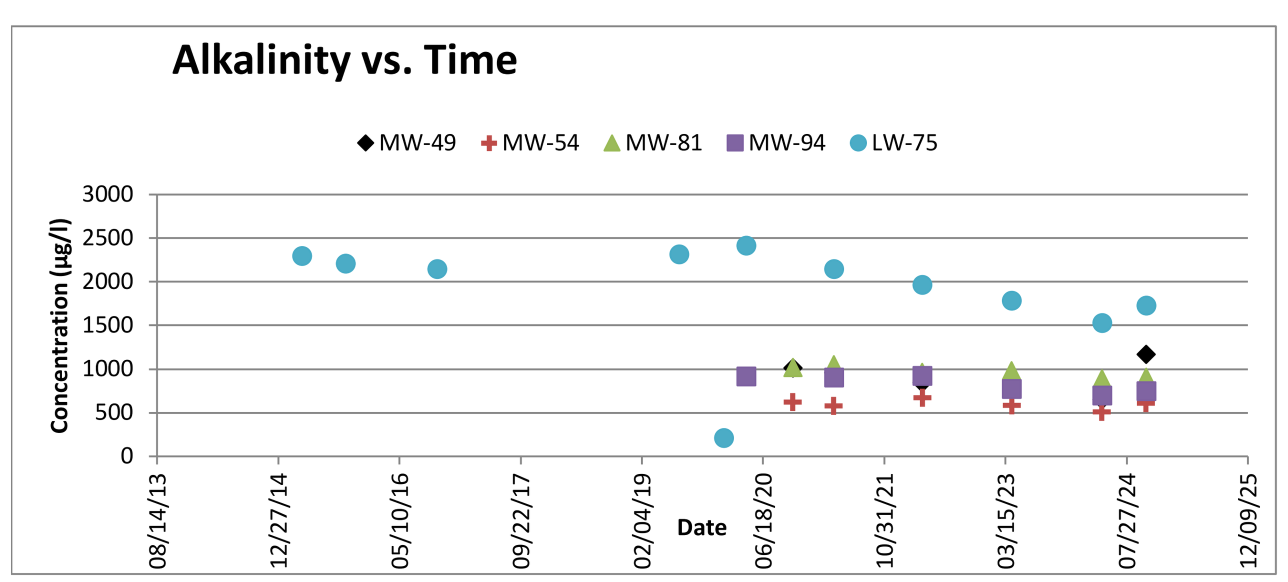
	Alkalinity				
Sample Date	MW-49 Concentration ug/L	MW-54 GWPS ug/L	MW-81 Concentration ug/L	MW-94 GWPS ug/L	LW-75 Concentration ug/L
4/3/2015					2300
10/1/2015					2210
10/13/2016					2150
1/15/2019					
7/8/2019					2320
10/23/2019					
1/7/2020					211
4/10/2020				919	2420
10/19/2020	1010	624	1020		
4/5/2021	960	581	1050	904	2150
4/6/2022	844	670	965	923	1970
4/10/2023	816	585	982	775	1790
4/16/2024	652	512	886	698	1530
10/15/2024	1170	612	907	752	1730

	pH				
Sample Date	MW-49 GWPS ug/L	MW-54 Concentration ug/L	MW-81 GWPS ug/L	MW-94 Concentration ug/L	LW-75 GWPS ug/L
4/3/2015					
10/1/2015					
10/13/2016					
1/15/2019					
7/8/2019					
10/23/2019					
1/7/2020					
4/10/2020				6.6	6.9
10/19/2020	6.4	6.7	6.6		
4/5/2021	6.7	6.8	6.7	6.6	7.0
4/6/2022	6.5	6.8	6.6	6.5	6.9
4/10/2023	6.5		6.6	6.5	6.7
4/16/2024	6.5	6.7	6.6	6.6	7.1
10/15/2024	6.3	6.4	6.3	6.4	6.6









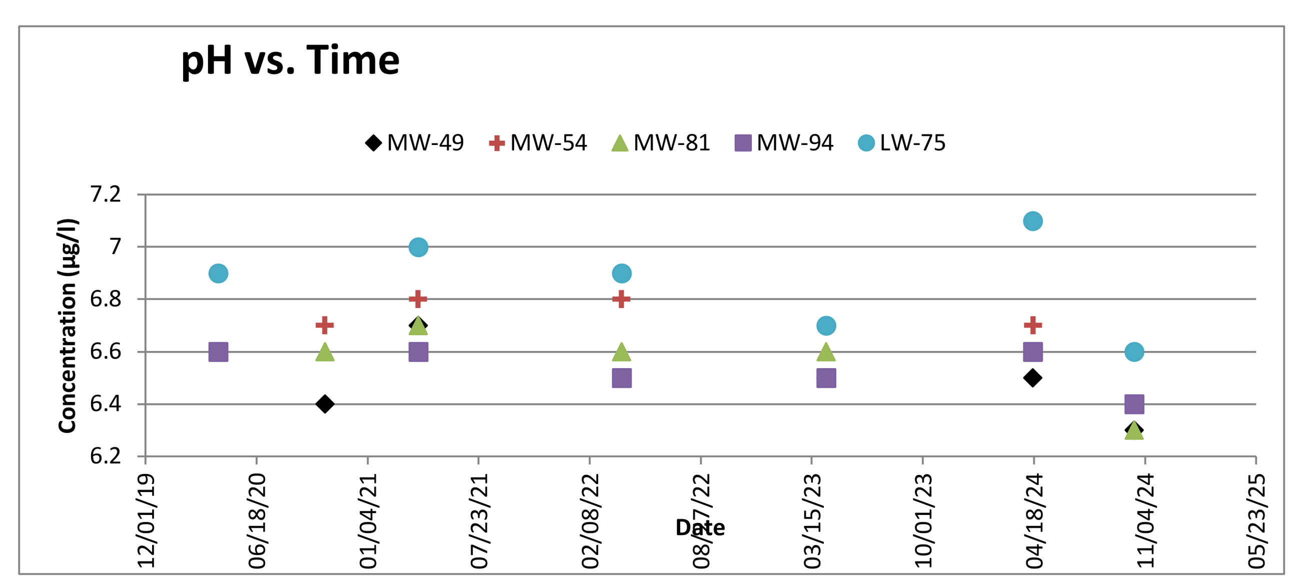


Table 17 – Progress of the Remedy

Table 17
Remedy Progress
Annual Water Quality Report
Marshall County Sanitary Landfill
Permit No. 64-SDP-02-75P

Key

	SSI
	SSL
	3-year demonstration of Remedy per 567 IAC 113.10(9)"e"
	On-going successful Remedy per 567 IAC 113.10(9)"e"

Well	Constituent	Spring 2020	Fall 2020	Spring 2021	Fall 2021	Spring 2022	Fall 2022	Spring 2023	Fall 2023	Spring 2024	Fall 2024	Spring 2025	Fall 2025	Fall 2026
MW-87 (AZPOC) - related to Supplemental Well MW-81	Cobalt													
	1,2-dichloropropane													
	cis-1,2-dichloroethene													
	Vinyl Chloride													
MW-89 (AZPOC) - related to Supplemental Well MW-54	Cobalt													
MW-91 (AZPOC) - related to Supplemental Well MW-49	Arsenic													
	Cobalt													
	Selenium													
	1,1-dichloroethane													
	Vinyl Chloride													
MW-97 (AZPOC) - related to Supplemental Well MW-94	Arsenic													
	Cobalt													
	cis-1,2-dichloroethene													
	Vinyl Chloride													

Appendix A

Field Sampling Forms

MARSHALL COUNTY SANITARY LANDFILL
PERMIT # 64-SDP-2-75P

4/16/2024 Sampled by: Todd Whipple Weather Conditions: Overcast mist breezy 50 degrees

IDNR Form 542-1322

Primary Sampling Method: No-Purge for Appendix I
Monitoring Well: MW-49 (dg) **Secondary Sampling Method:** Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	1019.99
Well Depth	26.42
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	1019.99
Well Depth	26.25
Top Screen	1003.57
Bottom Screen	993.57
Bottom Well	993.97
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	21.00
Top sample	998.99
Bottom sample	994.99
Turbidity(NTU)	14.83

Date	Time	Water Level	Water Elevation	Notes
4/16/2024	9:10	20.11	999.88	

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		14.83
Appendix I	Metals	150	150		14.83
Appendix I	VOC	240	240		14.83
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	bis 2	946			
Supplemental	add VOC, alkalinity	370	0		
Total			400	0	

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

TOC	1019.99	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	26.42	Before purging	4/16/2024	9:10	20.11	999.88	2	1.9	yes
		After purging				1019.99			
		Top of Screen January 1990				1003.57			
						16.42	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				993.57			
		Bottom of Well	4/16/2024		26.25	993.74			
						0.17	feet sedimentation		
		Before Sampling		9:24	24.64	995.35			
		Recovery		10:42	21.31	998.68			
		Recovery				1019.99			
		Recovery				1019.99			
		Recovery				1019.99			

IDNR Form 542-1322

Primary Sampling Method: No-Purge for Appendix I

Monitoring Well: MW-54 (dg) | Secondary Sampling Method: Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	1035.44
Well Depth	31.95
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	1035.44
Well Depth	31.80
Top Screen	1013.49
Bottom Screen	1003.49
Bottom Well	1003.49
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	26.00
Top sample	1009.44
Bottom sample	1005.44
Turbidity(NTU)	19.53

Date	Time	Water Level	Water Elevation	Notes
4/16/2024	8:46	17.46	1017.98	

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		19.53
Appendix I	Metals	150	150		19.53
Appendix I	VOC	240	240		19.53
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	bis 2	946			
Supplemental	add VOC, alkalinity	370	0		
Total			400	0	

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

TOC	1035.44	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	31.95	Before purging	4/16/2024	8:46	17.46	1017.98	3	1.3	no
		After purging				1035.44			
		Top of Screen January 1990				1013.49			
						21.95	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				1003.49			
		Bottom of Well	4/16/2024		31.80	1003.64			
						0.15	feet sedimentation		
		Before Sampling		9:01	25.45	1009.99			
		Recovery		10:40	21.48	1013.96			
		Recovery				1035.44			
		Recovery				1035.44			
		Recovery				1035.44			

IDNR Form 542-1322

Monitoring Well: MW-66 (ug)

Primary Sampling Method: No-Purge for Appendix I

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

GENERAL INFORMATION

TOC	1032.39
Well Depth	51.86
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	1032.39
Well Depth	51.86
Top Screen	995.53
Bottom Screen	980.53
Bottom Well	980.53
Sampler Length (ft)	
Sampler Volume (mL)	440.00
Feet cordage	
Top sample	1032.39
Bottom sample	1032.39
Turbidity(NTU)	

Date	Time	Water Level	Water Elevation	Notes
4/16/2024		>51.8	#VALUE!	**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			
Appendix I	Metals	250			
Appendix I	VOC	120			
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental					
Supplemental	Minerals	750			
Total			0	0	

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

TOC	1032.39	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	51.86	Before purging				1032.39	3	0.4	no
		After purging				1032.39			
		Top of Screen May 1990				995.53			
						36.86	feet above (+) or below (-) top screen		
		Bottom of Well May 1990				980.53			
		Bottom of Well	10/25/2022		51.80	980.59			
						0.06	feet sedimentation		
		Before Sampling				1032.39			
		Recovery				1032.39			
		Recovery				1032.39			
		Recovery				1032.39			
		Recovery				1032.39			

IDNR Form 542-1322

Monitoring Well: MW-81 (dg)

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

GENERAL INFORMATION

TOC	1009.27
Well Depth	35.00
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	1009.27
Well Depth	35.00
Top Screen	989.27
Bottom Screen	974.27
Bottom Well	974.27
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	28.00
Top sample	981.27
Bottom sample	977.27
Turbidity(NTU)	1.56

Date	Time	Water Level	Water Elevation	Notes
4/16/2024	11:20	22.49	986.78	

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	10		1.56
Appendix I	Metals	150	150		1.56
Appendix I	VOC	240	240		1.56
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	bis 2	946			
Supplemental	add VOC, alkalinity	370	0		
Total			400	0	

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

TOC	1009.27	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	35.00	Before purging	4/16/2024	11:20	22.49	986.78	3	1.5	no
		After purging				1009.27			
		Top of Screen January 1990				989.27			
						20.00	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				974.27			
		Bottom of Well	4/16/2024		33.90	975.37			
						1.10	feet sedimentation		
		Before Sampling		11:32	26.50	982.77			
		Recovery		14:43	22.64	986.63			
		Recovery				1009.27			
		Recovery				1009.27			
		Recovery				1009.27			

IDNR Form 542-1322

Monitoring Well: MW-85 (ug)

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

GENERAL INFORMATION

TOC	1039.27
Well Depth	72.07
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	1039.27
Well Depth	72.07
Top Screen	982.20
Bottom Screen	967.20
Bottom Well	967.20
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	64.00
Top sample	975.27
Bottom sample	971.27
Turbidity(NTU)	6.76

Date	Time	Water Level	Water Elevation	Notes
4/16/2024	7:51	37.42	1001.85	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		6.76
Appendix I	Metals	150	150		6.76
Appendix I	VOC	240	240		6.76
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental		946			
Supplemental	Minerals	370	0		
Total			400	0	

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

TOC	1039.27	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	72.07	Before purging	4/16/2024	7:51	37.42	1001.85	3	0.5	no
		After purging				1039.27			
		Top of Screen January 1990				982.20			
						57.07	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				967.20			
		Bottom of Well	4/16/2024		71.20	968.07			
						0.87	feet sedimentation		
		Before Sampling		8:03	52.40	986.87			
		Recovery		10:50	38.31	1000.96			
		Recovery				1039.27			
		Recovery				1039.27			
		Recovery				1039.27			

IDNR Form 542-1322

Monitoring Well: MW-87 (dg)

Primary Sampling Method: No-Purge for Appendix I

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

GENERAL INFORMATION

TOC	964.2
Well Depth	21.58
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	964.2
Well Depth	21.58
Top Screen	952.62
Bottom Screen	942.62
Bottom Well	942.62
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	14.50
Top sample	949.70
Bottom sample	945.70
Turbidity(NTU)	1.82

Date	Time	Water Level	Water Elevation	Notes
4/16/2024	11:02	5.25	958.95	

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		1.82
Appendix I	Metals	150	150		1.82
Appendix I	VOC	240	240		1.82
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	bis 2	946			
Supplemental	Minerals	370	0		
Total			400	0	

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

TOC	964.2	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	21.58	Before purging	4/16/2024	11:02	5.25	958.95	3	1.1	no
		After purging				964.20			
		Top of Screen January 1990				952.62			
						11.58	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				942.62			
		Bottom of Well	4/16/2024		21.00	943.20			
						0.58	feet sedimentation		
		Before Sampling		11:11	11.76	952.44			
		Recovery		14:41	6.19	958.01			
		Recovery				964.20			
		Recovery				964.20			
		Recovery				964.20			

IDNR Form 542-1322

Monitoring Well: MW-89 (dg)

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

GENERAL INFORMATION

TOC	1012.79
Well Depth	27.50
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1012.79
Well Depth	27.50
Top Screen	995.25
Bottom Screen	985.25
Bottom Well	985.25
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	22.00
Top sample	990.79
Bottom sample	986.79
Turbidity(NTU)	2.11

Date	Time	Water Level	Water Elevation	Notes
4/16/2024	10:44	8.26	1004.53	

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		2.11
Appendix I	Metals	150	150		2.11
Appendix I	VOC	240	240		2.11
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	bis 2	946			
Supplemental	Minerals	370	0		
Total			400	0	

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

TOC	1012.79	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	27.50	Before purging	4/16/2024	10:44	8.26	1004.53	3	1.0	no
		After purging				1012.79			
		Top of Screen January 1990				995.25			
						17.54	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				985.25			
		Bottom of Well	4/16/2024		27.30	985.49			
						0.24	feet sedimentation		
		Before Sampling		10:55	18.60	994.19			
		Recovery		14:36	10.12	1002.67			
		Recovery				1012.79			
		Recovery				1012.79			
		Recovery				1012.79			

IDNR Form 542-1322

Monitoring Well: MW-91 (dg)

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

GENERAL INFORMATION

TOC	978.57
Well Depth	17.50
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	978.57
Well Depth	17.50
Top Screen	971.07
Bottom Screen	961.07
Bottom Well	961.07
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	12.00
Top sample	966.57
Bottom sample	962.57
Turbidity(NTU)	1.69

Date	Time	Water Level	Water Elevation	Notes
4/16/2024	10:05	8.79	969.78	

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	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	bis 2	946			
Supplemental	Minerals	370	0		
Total			400	0	

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

TOC	978.57	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	17.50	Before purging	4/16/2024	10:05	8.79	969.78	3	2.1	no
		After purging				978.57			
		Top of Screen January 1990				971.07			
						7.50	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				961.07			
		Bottom of Well	4/16/2024		17.00	961.57			
						0.50	feet sedimentation		
		Before Sampling		10:13	10.79	967.78			
		Recovery		14:34	8.01	970.56			
		Recovery				978.57			
		Recovery				978.57			
		Recovery				978.57			

IDNR Form 542-1322

Monitoring Well:	MW-93 (dg)
Primary Sampling Method:	No-Purge for Appendix I
Secondary Sampling Method:	Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	921.91
Well Depth	22.25
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	921.91
Well Depth	22.25
Top Screen	909.74
Bottom Screen	899.74
Bottom Well	899.74
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	18.50
Top sample	903.41
Bottom sample	899.41
Turbidity(NTU)	5.75

Date	Time	Water Level	Water Elevation	Notes
4/16/2024	11:43	18.41	903.5	

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		5.75
Appendix I	Metals	150	150		5.75
Appendix I	VOC	240	240		5.75
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	bis 2	946			
Supplemental	Minerals	370	0		
Total			400	0	

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

TOC	921.91
Well Depth	22.25

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	4/16/2024	11:43	18.41	903.50	2	3.2	dry
After purging				921.91			
Top of Screen January 1990				909.74			
				12.17	feet above (+) or below (-) top screen		
Bottom of Well January 1990				899.74			
Bottom of Well	4/16/2024		22.20	899.71			
				-0.03	feet sedimentation		
Before Sampling		11:52	21.50	900.41			
Recovery		14:49	18.62	903.29			
Recovery				921.91			
Recovery				921.91			
Recovery				921.91			

IDNR Form 542-1322

Monitoring Well: MW-94 (dg)

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

GENERAL INFORMATION

TOC	1030.99
Well Depth	27.85
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1030.99
Well Depth	27.85
Top Screen	1013.14
Bottom Screen	1003.14
Bottom Well	1003.14
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	22.00
Top sample	1008.99
Bottom sample	1004.99
Turbidity(NTU)	6.96

Date	Time	Water Level	Water Elevation	Notes
4/16/2024	8:29	15.36	1015.63	

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		6.96
Appendix I	Metals	150	150		6.96
Appendix I	VOC	240	240		6.96
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	bis 2	946			
Supplemental	add VOC, alkalinity	370	0		
Total			400	0	

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

		2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
TOC	1030.99								
Well Depth	27.85	Before purging	4/16/2024	8:29	15.36	1015.63	3	1.5	No
		After purging				1030.99			
		Top of Screen January 1990				1013.14			
						17.85	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				1003.14			
		Bottom of Well	4/16/2024		27.50	1003.49			
						0.35	feet sedimentation		
		Before Sampling		8:40	20.90	1010.09			
		Recovery		10:35	15.75	1015.24			
		Recovery				1030.99			
		Recovery				1030.99			
		Recovery				1030.99			

IDNR Form 542-1322

Monitoring Well: MW-95 (dg)

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

GENERAL INFORMATION

TOC	973.55
Well Depth	23.39
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	973.55
Well Depth	23.39
Top Screen	960.16
Bottom Screen	950.16
Bottom Well	950.16
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	17.50
Top sample	956.05
Bottom sample	952.05
Turbidity(NTU)	2.27

Date	Time	Water Level	Water Elevation	Notes
4/16/2024	7:35	7.45	966.1	

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		2.27
Appendix I	Metals	150	150		2.27
Appendix I	VOC	240	240		2.27
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental		946			
Supplemental	Minerals	370	0		
Total			400	0	

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

TOC	973.55	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	23.39	Before purging	4/16/2024	7:35	7.45	966.10	3	1.2	No
		After purging				973.55			
		Top of Screen January 1990				960.16			
						13.39	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				950.16			
		Bottom of Well	4/16/2024		23.40	950.15			
						-0.01	feet sedimentation		
		Before Sampling		7:44	16.21	957.34			
		Recovery		10:46	10.11	963.44			
		Recovery				973.55			
		Recovery				973.55			
		Recovery				973.55			

IDNR Form 542-1322

Primary Sampling Method: No-Purge for Appendix I
Monitoring Well: MW-96R (dg) **Secondary Sampling Method:** Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	941.85
Well Depth	20.80
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	941.85	
Well Depth	20.80	
Top Screen	931.05	
Bottom Screen	921.05	
Bottom Well	921.05	
Sampler Length (ft)	4.00	
Sampler Volume (mL)	440.00	
Feet cordage	15.00	
Top sample	926.85	
Bottom sample	922.85	
Turbidity(NTU)	14.22	red

Date	Time	Water Level	Water Elevation	Notes
4/16/2024	7:55	10.63	931.22	

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		14.22
Appendix I	Metals	150	150		14.22
Appendix I	VOC	240	240		14.22
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	bis 2	946			
Supplemental	Minerals	370	0		
Total			400	0	

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

TOC	941.85	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	20.80	Before purging	4/16/2024	7:55	10.63	931.22	5	3.0	No
		After purging				941.85			
		Top of Screen January 1990				931.05			
						10.80	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				921.05			
		Bottom of Well	4/16/2024		20.80	921.05			
						0.00	feet sedimentation		
		Before Sampling		8:18	16.78	925.07			
		Recovery		14:55	9.98	931.87			
		Recovery				941.85			
		Recovery				941.85			
		Recovery				941.85			

IDNR Form 542-1322

Monitoring Well: MW-97 (dg)

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

GENERAL INFORMATION

TOC	1015.38
Well Depth	37.10
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1015.38
Well Depth	37.10
Top Screen	988.28
Bottom Screen	978.28
Bottom Well	978.28
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	31.00
Top sample	984.38
Bottom sample	980.38
Turbidity(NTU)	2.20

Date	Time	Water Level	Water Elevation	Notes
4/16/2024	8:09	11.17	1004.21	

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		2.20
Appendix I	Metals	150	150		2.20
Appendix I	VOC	240	240		2.20
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	bis2	946			
Supplemental	Minerals	370	0		
Total			400	0	

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

TOC	1015.38	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	37.10	Before purging	4/16/2024	8:09	11.17	1004.21	3	0.7	No
		After purging				1015.38			
		Top of Screen January 1990				988.28			
						27.10	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				978.28			
		Bottom of Well	4/16/2024		36.80	978.58			
						0.30	feet sedimentation		
		Before Sampling		8:20	24.00	991.38			
		Recovery		10:33	15.78	999.60			
		Recovery				1015.38			
		Recovery				1015.38			
		Recovery				1015.38			

IDNR Form 542-1322

Monitoring Well: MW- 98 (up)

Primary Sampling Method: No-Purge for Appendix I

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

GENERAL INFORMATION

TOC	953.24
Well Depth	21.65
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	953.24	
Well Depth	21.65	
Top Screen	941.81	
Bottom Screen	931.81	
Bottom Well	931.59	
Sampler Length (ft)	4.00	
Sampler Volume (mL)	440.00	
Feet cordage	16.00	
Top sample	937.24	
Bottom sample	933.24	
Turbidity(NTU)	393.50	red

Date	Time	Water Level	Water Elevation	Notes
4/16/2024	9:48	5.56	947.68	

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		393.50
Appendix I	Metals	150	150		393.50
Appendix I	VOC	240	240		393.50
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	bis2	946			
Supplemental		370	0		
Total			400	0	

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

TOC	953.24
Well Depth	21.65

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	4/16/2024	9:48	5.56	947.68	3	1.1	No
After purging				953.24			
Top of Screen January 1990				941.81			
				11.43	feet above (+) or below (-) top screen		
Bottom of Well January 1990				931.59			
Bottom of Well	4/16/2024		21.65	931.59			
				0.00	feet sedimentation		
Before Sampling		9:56	12.32	940.92			
Recovery		14:30	5.51	947.73			
Recovery				953.24			
Recovery				953.24			
Recovery				953.24			

IDNR Form 542-1322

Monitoring Well: MW-99 (up)

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

GENERAL INFORMATION

TOC	913.98
Well Depth	21.90
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	913.98
Well Depth	21.90
Top Screen	902.35
Bottom Screen	892.35
Bottom Well	892.08
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	16.50
Top sample	897.48
Bottom sample	893.48
Turbidity(NTU)	1.60

Date	Time	Water Level	Water Elevation	Notes
4/16/2024	9:34	11.8	902.18	

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		1.60
Appendix I	Metals	150	150		1.60
Appendix I	VOC	240	240		1.60
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	bis2	946			
Supplemental		370	0		
Total			400	0	

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

TOC	913.98	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	21.90	Before purging	4/16/2024	9:34	11.8	902.18	3	1.8	No
		After purging				913.98			
		Top of Screen January 1990				902.35			
						11.63	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				892.08			
		Bottom of Well	4/16/2024		21.90	892.08			
						0.00	feet sedimentation		
		Before Sampling		9:43	12.80	901.18			
		Recovery		10:53	11.84	902.14			
		Recovery				913.98			
		Recovery				913.98			
		Recovery				913.98			

MARSHALL COUNTY SANITARY LANDFILL
PERMIT # 64-SDP-2-75P

4/16/2024 Sampled by: Todd Whipple Weather Conditions: Overcast mist breezy 50 degrees

IDNR Form 542-1324

	Date	Time	Type	Flowing	Quantity		Discolored	Odor	Litter
SRAMP B	4/16/2024	8:30	Tile Outlet	trickle	250 mL/30 sec		No	No	No

NTU	pH	Conductivity	Temp.(C)
2.09	--	--	--

IDNR Form 542-1324

	Date	Time	Type	Flowing	Quantity		Discolored	Odor	Litter
PECS B	4/16/2024		Surface Water	No	Dry		No	No	No

NTU	pH	Conductivity	Temp.(C)
--	--	--	--

MARSHALL COUNTY SANITARY LANDFILL
PERMIT # 64-SDP-2-75P

10/15/2024 Sampled by: Todd Whipple Weather Conditions: Sunny breezy 40-57 degrees

IDNR Form 542-1322

Monitoring Well: MW-49 (dg)

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

GENERAL INFORMATION

TOC	1019.99
Well Depth	26.42
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	1019.99
Well Depth	26.25
Top Screen	1003.57
Bottom Screen	993.57
Bottom Well	993.97
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	20.00
Top sample	999.99
Bottom sample	995.99
Turbidity(NTU)	8.80

Date	Time	Water Level	Water Elevation	Notes
10/15/2024	12:38	16.39	1003.6	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		8.80
Appendix I	Metals	150	150		8.80
Appendix I	VOC	240	240		8.80
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	bis 2	946			
Supplemental	add VOC, alkalinity	370	0		
Total			400	0	

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

TOC	1019.99
Well Depth	26.42

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	10/15/2024	12:38	16.39	1003.60		0.0	
After purging				1019.99			
Top of Screen January 1990				1003.57			
				16.42	feet above (+) or below (-) top screen		
Bottom of Well January 1990				993.57			
Bottom of Well	10/15/2024		26.25	993.74			
				0.17	feet sedimentation		
Before Sampling				1019.99			
Recovery				1019.99			
Recovery				1019.99			
Recovery				1019.99			
Recovery				1019.99			

IDNR Form 542-1322

Monitoring Well: MW-54 (dg)

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

GENERAL INFORMATION

TOC	1035.44
Well Depth	31.95
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	1035.44
Well Depth	31.80
Top Screen	1013.49
Bottom Screen	1003.49
Bottom Well	1003.49
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	25.00
Top sample	1010.44
Bottom sample	1006.44
Turbidity(NTU)	5.99

Date	Time	Water Level	Water Elevation	Notes
10/15/2024	12:20	18.01	1017.43	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		5.99
Appendix I	Metals	150	150		5.99
Appendix I	VOC	240	240		5.99
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	bis 2	946			
Supplemental	add VOC, alkalinity	370	0		
Total			400	0	

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

TOC	1035.44
Well Depth	31.95

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	10/15/2024	12:20	18.01	1017.43		0.0	
After purging				1035.44			
Top of Screen January 1990				1013.49			
				21.95	feet above (+) or below (-) top screen		
Bottom of Well January 1990				1003.49			
Bottom of Well	10/15/2024		31.80	1003.64			
				0.15	feet sedimentation		
Before Sampling				1035.44			
Recovery				1035.44			
Recovery				1035.44			
Recovery				1035.44			
Recovery				1035.44			

IDNR Form 542-1322

Monitoring Well: MW-66 (ug)

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

GENERAL INFORMATION

TOC	1032.39
Well Depth	51.86
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	1032.39
Well Depth	51.86
Top Screen	995.53
Bottom Screen	980.53
Bottom Well	980.53
Sampler Length (ft)	
Sampler Volume (mL)	440.00
Feet cordage	
Top sample	1032.39
Bottom sample	1032.39
Turbidity(NTU)	

Date	Time	Water Level	Water Elevation	Notes
10/15/2024		>51.8	#VALUE!	**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			
Appendix I	Metals	250			
Appendix I	VOC	120			
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental					
Supplemental	Minerals	750			
Total			0	0	

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

TOC	1032.39
Well Depth	51.86

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging				1032.39	3	0.4	no
After purging				1032.39			
Top of Screen May 1990				995.53			
				36.86	feet above (+) or below (-) top screen		
Bottom of Well May 1990				980.53			
Bottom of Well	10/25/2022		51.80	980.59			
				0.06	feet sedimentation		
Before Sampling				1032.39			
Recovery				1032.39			
Recovery				1032.39			
Recovery				1032.39			
Recovery				1032.39			

IDNR Form 542-1322

Monitoring Well: MW-81 (dg)

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

GENERAL INFORMATION

TOC	1009.27
Well Depth	35.00
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	1009.27
Well Depth	35.00
Top Screen	989.27
Bottom Screen	974.27
Bottom Well	974.27
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	28.00
Top sample	981.27
Bottom sample	977.27
Turbidity(NTU)	2.50

Date	Time	Water Level	Water Elevation	Notes
10/15/2024	15:48	21.11	988.16	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		2.50
Appendix I	Metals	150	150		2.50
Appendix I	VOC	240	240		2.50
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	bis 2	946			
Supplemental	add VOC, alkalinity	370	0		
Total			400	0	

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

		2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
TOC	1009.27	Before purging	10/15/2024	15:48	21.11	988.16		0.0	
Well Depth	35.00	After purging				1009.27			
		Top of Screen January 1990				989.27			
						20.00	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				974.27			
		Bottom of Well	10/15/2024		33.90	975.37			
						1.10	feet sedimentation		
		Before Sampling				1009.27			
		Recovery				1009.27			
		Recovery				1009.27			
		Recovery				1009.27			
		Recovery				1009.27			

IDNR Form 542-1322

Monitoring Well: MW-85 (ug)

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

GENERAL INFORMATION

TOC	1039.27
Well Depth	72.07
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	1039.27
Well Depth	72.07
Top Screen	982.20
Bottom Screen	967.20
Bottom Well	967.20
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	65.00
Top sample	974.27
Bottom sample	970.27
Turbidity(NTU)	2.99

Date	Time	Water Level	Water Elevation	Notes
10/15/2024	11:33	35.38	1003.89	

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		2.99
Appendix I	Metals	150	150		2.99
Appendix I	VOC	240	240		2.99
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental		946			
Supplemental	Minerals	370	0		
Total			400	0	

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

TOC	1039.27
Well Depth	72.07

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	10/15/2024	11:33	35.38	1003.89		0.0	
After purging				1039.27			
Top of Screen January 1990				982.20			
				57.07	feet above (+) or below (-) top screen		
Bottom of Well January 1990				967.20			
Bottom of Well	10/15/2024		71.20	968.07			
				0.87	feet sedimentation		
Before Sampling				1039.27			
Recovery				1039.27			
Recovery				1039.27			
Recovery				1039.27			
Recovery				1039.27			

IDNR Form 542-1322

Monitoring Well: MW-87 (dg)

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

GENERAL INFORMATION

TOC	964.2
Well Depth	21.58
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	964.2
Well Depth	21.58
Top Screen	952.62
Bottom Screen	942.62
Bottom Well	942.62
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	15.00
Top sample	949.20
Bottom sample	945.20
Turbidity(NTU)	2.53

Date	Time	Water Level	Water Elevation	Notes
10/15/2024	15:36	7.98	956.22	

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		2.53
Appendix I	Metals	150	150		2.53
Appendix I	VOC	240	240		2.53
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	bis 2	946			
Supplemental	Minerals	370	0		
Total			400	0	

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

TOC	964.2	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	21.58	Before purging	10/15/2024	15:36	7.98	956.22		0.0	
		After purging				964.20			
		Top of Screen January 1990				952.62			
						11.58	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				942.62			
		Bottom of Well	10/15/2024		21.00	943.20			
						0.58	feet sedimentation		
		Before Sampling				964.20			
		Recovery				964.20			
		Recovery				964.20			
		Recovery				964.20			
		Recovery				964.20			

IDNR Form 542-1322

Primary Sampling Method: No-Purge for Appendix I

Monitoring Well: MW-89 (dg) **Secondary Sampling Method:** Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	1012.79
Well Depth	27.50
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1012.79
Well Depth	27.50
Top Screen	995.25
Bottom Screen	985.25
Bottom Well	985.25
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	22.00
Top sample	990.79
Bottom sample	986.79
Turbidity(NTU)	2.66

Date	Time	Water Level	Water Elevation	Notes
10/15/2024	15:20	8.75	1004.04	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		2.66
Appendix I	Metals	150	150		2.66
Appendix I	VOC	240	240		2.66
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	bis 2	946			
Supplemental	Minerals	370	0		
Total			400	0	

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

		2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
TOC	1012.79								
Well Depth	27.50	Before purging	10/15/2024	15:20	8.75	1004.04		0.0	
		After purging				1012.79			
		Top of Screen January 1990				995.25			
						17.54	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				985.25			
		Bottom of Well	10/15/2024		27.30	985.49			
						0.24	feet sedimentation		
		Before Sampling				1012.79			
		Recovery				1012.79			
		Recovery				1012.79			
		Recovery				1012.79			
		Recovery				1012.79			

IDNR Form 542-1322

Primary Sampling Method: No-Purge for Appendix I

Monitoring Well: MW-91 (dg) **Secondary Sampling Method:** Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	978.57
Well Depth	17.50
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	978.57
Well Depth	17.50
Top Screen	971.07
Bottom Screen	961.07
Bottom Well	961.07
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	12.00
Top sample	966.57
Bottom sample	962.57
Turbidity(NTU)	3.20

Date	Time	Water Level	Water Elevation	Notes
10/15/2024	15:09	11.50	967.07	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		3.20
Appendix I	Metals	150	150		3.20
Appendix I	VOC	240	240		3.20
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	bis 2	946			
Supplemental	Minerals	370	0		
Total			400	0	

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

TOC	978.57	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	17.50	Before purging	10/15/2024	15:09	11.50	967.07		0.0	
		After purging				978.57			
		Top of Screen January 1990				971.07			
						7.50	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				961.07			
		Bottom of Well	10/15/2024		17.00	961.57			
						0.50	feet sedimentation		
		Before Sampling				978.57			
		Recovery				978.57			
		Recovery				978.57			
		Recovery				978.57			
		Recovery				978.57			

IDNR Form 542-1322

Monitoring Well: MW-93 (dg)

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

GENERAL INFORMATION

TOC	921.91
Well Depth	22.25
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	921.91
Well Depth	22.25
Top Screen	909.74
Bottom Screen	899.74
Bottom Well	899.74
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	18.50
Top sample	903.41
Bottom sample	899.41
Turbidity(NTU)	3.49

Date	Time	Water Level	Water Elevation	Notes
10/15/2024	9:53	18.42	903.49	

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		3.49
Appendix I	Metals	150	150		3.49
Appendix I	VOC	240	240		3.49
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	bis 2	946			
Supplemental	Minerals	370	0		
Total			400	0	

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

TOC	921.91
Well Depth	22.25

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	10/15/2024	9:53	18.42	903.49		0.0	
After purging				921.91			
Top of Screen January 1990				909.74			
				12.17	feet above (+) or below (-) top screen		
Bottom of Well January 1990				899.74			
Bottom of Well	10/15/2024		22.20	899.71			
				-0.03	feet sedimentation		
Before Sampling				921.91			
Recovery				921.91			
Recovery				921.91			
Recovery				921.91			
Recovery				921.91			

IDNR Form 542-1322

Monitoring Well: MW-94 (dg)

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

GENERAL INFORMATION

TOC	1030.99
Well Depth	27.85
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1030.99
Well Depth	27.85
Top Screen	1013.14
Bottom Screen	1003.14
Bottom Well	1003.14
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	22.00
Top sample	1008.99
Bottom sample	1004.99
Turbidity(NTU)	4.00

Date	Time	Water Level	Water Elevation	Notes
10/15/2024	12:03	16.10	1014.89	

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		4.00
Appendix I	Metals	150	150		4.00
Appendix I	VOC	240	240		4.00
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	bis 2	946			
Supplemental	add VOC, alkalinity	370	0		
Total			400	0	

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

TOC	1030.99
Well Depth	27.85

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	10/15/2024	12:03	16.10	1014.89		0.0	
After purging				1030.99			
Top of Screen January 1990				1013.14			
				17.85	feet above (+) or below (-) top screen		
Bottom of Well January 1990				1003.14			
Bottom of Well	10/15/2024		27.50	1003.49			
				0.35	feet sedimentation		
Before Sampling				1030.99			
Recovery				1030.99			
Recovery				1030.99			
Recovery				1030.99			
Recovery				1030.99			

IDNR Form 542-1322

Primary Sampling Method: No-Purge for Appendix I

Monitoring Well: MW-95 (dg) **Secondary Sampling Method:** Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	973.55
Well Depth	23.39
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	973.55
Well Depth	23.39
Top Screen	960.16
Bottom Screen	950.16
Bottom Well	950.16
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	18.00
Top sample	955.55
Bottom sample	951.55
Turbidity(NTU)	4.31

Date	Time	Water Level	Water Elevation	Notes
10/15/2024	11:07	5.41	968.14	

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		946			
Supplemental	Minerals	370	0		
Total			400	0	

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

TOC	973.55
Well Depth	23.39

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	10/15/2024	11:07	5.41	968.14		0.0	
After purging				973.55			
Top of Screen January 1990				960.16			
				13.39	feet above (+) or below (-) top screen		
Bottom of Well January 1990				950.16			
Bottom of Well	10/15/2024		23.40	950.15			
				-0.01	feet sedimentation		
Before Sampling				973.55			
Recovery				973.55			
Recovery				973.55			
Recovery				973.55			
Recovery				973.55			

IDNR Form 542-1322

Primary Sampling Method: No-Purge for Appendix I

Monitoring Well: MW-96R (dg) **Secondary Sampling Method:** Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	941.85
Well Depth	20.80
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	941.85	
Well Depth	20.80	
Top Screen	931.05	
Bottom Screen	921.05	
Bottom Well	921.05	
Sampler Length (ft)	4.00	
Sampler Volume (mL)	440.00	
Feet cordage	15.00	
Top sample	926.85	
Bottom sample	922.85	
Turbidity(NTU)	14.54	red

Date	Time	Water Level	Water Elevation	Notes
10/15/2024	13:59	13.81	928.04	

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		14.54
Appendix I	Metals	150	150		14.54
Appendix I	VOC	240	240		14.54
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	bis 2	946			
Supplemental	Minerals	370	0		
Total			400	0	

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

TOC	941.85	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	20.80	Before purging	10/15/2024	13:59	13.81	928.04		0.0	
		After purging				941.85			
		Top of Screen January 1990				931.05			
						10.80	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				921.05			
		Bottom of Well	10/15/2024		20.80	921.05			
						0.00	feet sedimentation		
		Before Sampling				941.85			
		Recovery				941.85			
		Recovery				941.85			
		Recovery				941.85			
		Recovery				941.85			

IDNR Form 542-1322

Primary Sampling Method: No-Purge for Appendix I

Monitoring Well: MW-97 (dg) **Secondary Sampling Method:** Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	1015.38
Well Depth	37.10
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1015.38
Well Depth	37.10
Top Screen	988.28
Bottom Screen	978.28
Bottom Well	978.28
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	31.00
Top sample	984.38
Bottom sample	980.38
Turbidity(NTU)	1.95

Date	Time	Water Level	Water Elevation	Notes
10/15/2024	11:49	14.15	1001.23	

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		1.95
Appendix I	Metals	150	150		1.95
Appendix I	VOC	240	240		1.95
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	bis2	946			
Supplemental	Minerals	370	0		
Total			400	0	

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

TOC	1015.38
Well Depth	37.10

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	10/15/2024	11:49	14.15	1001.23		0.0	
After purging				1015.38			
Top of Screen January 1990				988.28			
				27.10	feet above (+) or below (-) top screen		
Bottom of Well January 1990				978.28			
Bottom of Well	10/15/2024		36.80	978.58			
				0.30	feet sedimentation		
Before Sampling				1015.38			
Recovery				1015.38			
Recovery				1015.38			
Recovery				1015.38			
Recovery				1015.38			

IDNR Form 542-1322

Monitoring Well: MW- 98 (up)

Primary Sampling Method: No-Purge for Appendix I

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

GENERAL INFORMATION

TOC	953.24
Well Depth	21.65
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	953.24
Well Depth	21.65
Top Screen	941.81
Bottom Screen	931.81
Bottom Well	931.59
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	15.50
Top sample	937.74
Bottom sample	933.74
Turbidity(NTU)	6.06

Date	Time	Water Level	Water Elevation	Notes
10/15/2024	14:53	6.76	946.48	

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		6.06
Appendix I	Metals	150	150		6.06
Appendix I	VOC	240	240		6.06
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	bis2	946			
Supplemental		370	0		
Total			400	0	

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

		2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
TOC	953.24								
Well Depth	21.65	Before purging	10/15/2024	14:53	6.76	946.48		0.0	
		After purging				953.24			
		Top of Screen January 1990				941.81			
						11.43	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				931.59			
		Bottom of Well	10/15/2024		21.65	931.59			
						0.00	feet sedimentation		
		Before Sampling				953.24			
		Recovery				953.24			
		Recovery				953.24			
		Recovery				953.24			
		Recovery				953.24			

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Monitoring Well: MW-99 (up)

Primary Sampling Method: No-Purge for Appendix I

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

GENERAL INFORMATION

TOC	913.98
Well Depth	21.90
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	913.98
Well Depth	21.90
Top Screen	902.35
Bottom Screen	892.35
Bottom Well	892.08
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	16.00
Top sample	897.98
Bottom sample	893.98
Turbidity(NTU)	3.34

Date	Time	Water Level	Water Elevation	Notes
10/15/2024	10:10	11.74	902.24	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		3.34
Appendix I	Metals	150	150		3.34
Appendix I	VOC	240	240		3.34
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	bis2	946			
Supplemental		370	0		
Total			400	0	

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

TOC	913.98	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	21.90	Before purging	10/15/2024	10:10	11.74	902.24		0.0	
		After purging				913.98			
		Top of Screen January 1990				902.35			
						11.63	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				892.08			
		Bottom of Well	10/15/2024		21.90	892.08			
						0.00	feet sedimentation		
		Before Sampling				913.98			
		Recovery				913.98			
		Recovery				913.98			
		Recovery				913.98			
		Recovery				913.98			

MARSHALL COUNTY SANITARY LANDFILL
PERMIT # 64-SDP-2-75P

10/15/2024 Sampled by: Todd Whipple Weather Conditions: Sunny breezy 40-57 degrees

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	Date	Time	Type	Flowing	Quantity		Discolored	Odor	Litter
SRAMP B	10/15/2024		Tile Outlet	No	Dry		No	No	No

NTU	pH	Conductivity	Temp.(C)
--	--	--	--

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	Date	Time	Type	Flowing	Quantity		Discolored	Odor	Litter
PECS B	10/15/2024		Surface Water	No	Dry		No	No	No

NTU	pH	Conductivity	Temp.(C)
--	--	--	--

Appendix B

Statistical Reports

Appendix B.1 – Spring Statistical Evaluation Report

GROUND WATER STATISTICS

FOR THE

MARSHALL COUNTY SANITARY LANDFILL

First Semi-Annual Monitoring Event in 2024

Prepared for:
Marshall County Sanitary Landfill
2313 Marshalltown Blvd.
Marshalltown, Marshall County, IA 50158

Prepared by:
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May 2024

INTRODUCTION

This report summarizes the results of the statistical analysis used to evaluate the ground water quality data obtained during the first semi-annual monitoring event in 2024 at the Marshall County Sanitary Landfill in Marshall 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 method is described and then applied to the Marshall County Landfill data. The statistical plan conforms with IAC 567, Chapter 113.10 and the USEPA Unified Guidance document ("*Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities*", March 2009).

Ground Water Monitoring Program

The groundwater monitoring network for Marshall County Sanitary Landfill includes upgradient wells MW-66, MW-85, MW-98, and MW-99 and downgradient detection sample points GU-2, GU-3, MW-49, MW-54, MW-81, MW-87, MW-89, MW-91, MW-93, MW-94, MW-95, MW-96(R), and MW-97. Detections of volatile organic compounds (VOCs) at wells along the north and west edges of the facility prompted a site remedial and mitigating action plan (SRAMP). Wells MW-89, MW-91, and MW-87 were installed to monitor the effectiveness of the SRAMP. Monitoring well MW-93 was installed adjacent to the leachate holding lagoon. Each of the groundwater monitoring wells is to be sampled at least semiannually and analyzed for the detection monitoring parameters listed in 113.10(5), which includes 15 inorganic constituents and 47 organic compounds, summarized in Table 1 below.

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

Organic Compounds:

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

Inorganic constituents:

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

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

STATISTICAL METHODOLOGIES FOR DETECTION MONITORING

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

Interwell Statistics: Upgradient versus Downgradient Comparisons

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

Results of the Interwell Statistics

The background data used in this statistical analysis includes the ground water data collected from ground water wells MW-66, MW-85, MW-98, and MW-99 during the period from October 2014 through the current data. A summary of the background data from monitoring wells MW-66, MW-85, MW-98, and MW-99, 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-87, MW-89, MW-91, MW-93, MW-95, and MW-97 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-93	Arsenic	11.9	7.8000	Nonparametric	Verified
	Cobalt	9.8	6.0584	Normal	Verified
	Nickel	25.5	8.8000	Nonparametric	Verified
MW-97	Copper	7.1	5.3000	Nonparametric	Awaiting Verification

The detection frequencies of the parameters in the up and down gradient monitoring wells are summarized in Table 3. Excluding barium and cobalt, these constituents are rarely detected in the upgradient wells. With the detection frequencies being less than 50% for all but barium and cobalt, nonparametric site prediction limits are used for those trace metals. Table 4 summarizes the results of the Shapiro-Wilk test. Table 5 is a summary of the statistics and prediction limits determined for the metals. Time series graphs of each of the parameters at each well with the corresponding prediction limits are attached.

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

The 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 cobalt at MW-93 (8.160 µg/L) exceeds the Iowa Statewide Standard of 2.1 µg/L. The remainder of the calculated 95% LCLs are below the respective GWPS.

Supplemental Wells

Monitoring wells MW-49, MW-54, MW-81, MW-94, and MW-96R are now designated as supplemental wells, where only trend analysis is required. The data for each well is tested for existing trends using Sen's nonparametric estimate of trend (Attachment D). An increasing trend was identified for arsenic at MW-94. Decreasing trends were identified for nickel at MW-54, nickel at MW-94, and barium at MW96R.

Intrawell statistics

Because MW-93 monitors a leachate storage lagoon, the current data was also compared to background using intrawell statistics. Intrawell statistics are appropriate for facilities where the upgradient wells do not accurately characterize the natural ground water conditions downgradient from the facility. This may be due to different hydrogeological conditions where the wells are screened, having too few upgradient wells to account for the spatial variability, or the site exhibiting no definable hydraulic gradient. Intrawell statistics compare new measurements to the historical data at each ground water monitoring well independently. It is recommended that at least eight background samples be obtained prior to performing the statistics.

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

The combined Shewhart-CUSUM control chart assumes that the data are independent and normally distributed with a fixed mean and a constant variance. Independent data is much more critical than the normality assumption. To achieve independence, it is recommended that data are collected no more frequently than quarterly to account for seasonal variation. The combined Shewhart-CUSUM control chart is extremely robust to deviations from normality. Because the control charts do not use a specific multiplier based on a normal distribution, it is more conservative to assume normality.

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

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

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

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

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

Results of the Intrawell Statistics

The Appendix I trace metals data from well MW-93 were evaluated using the combined Shewhart-CUSUM control chart method. The previous background included the data obtained from October 2014 through April 2018. As ground water monitoring at a municipal solid waste facility proceeds, it is recommended to update background data sets periodically with valid detection monitoring results that are representative of background groundwater quality not affected by leakage from a monitored unit. Failure to update background will exclude factors such as natural temporal variation, changes in field or laboratory methodologies, and changes in the water table due to meteorological conditions or other influences. Ongoing operations at a facility such as excavations or drainage control may affect the ground water flow direction and water quality. An increase in the number of statistical failures, not related to the landfill, is routinely observed for sites neglecting to update the statistical background with valid data points.

Since there were no exceedances attributed to the lagoon and also that there was insufficient background to determine nonparametric limits, the background was updated to include data collected from October 2014 through 2020.

A summary of the intrawell statistics is included in Attachment E, Table 1 “Summary Statistics and Intermediate Computations for Combined Shewhart-CUSUM Control Charts.” The control charts or time series graphs follow the summary table.

For the parameters compared to background, there were no control limit exceedances detected. No increasing trends were detected in the background data.

A control chart factor was selected to provide a balance of the site-wide false positive and false negative rates. A statistical power curve indicates the expected false assessments for the site as a whole. For intrawell analysis, the site-wide false positive rate is 5% and the test becomes sensitive to 3 standard deviation units over background.

Volatile Organic Compounds

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

VOCs Detected During the First Semi-Annual Monitoring Event in 2024

Well	VOC Detected	Result, µg/L	Reporting Limit, µg/L	Verified or Awaiting Verification	Ground Water Standard
MW-49	1,1-Dichloroethane	1.1	1	Verified	140[b]
	1,4-Dichlorobenzene	3.3	1	Verified	75[a]
	Chloroethane	4.6	1	Verified	2800[b]
	cis-1,2-Dichloroethene	2.4	1	Verified	70[a]
MW-54	1,4-Dichlorobenzene	2.3	1	Verified	75[a]
MW-81	1,1-Dichloroethane	28.2	1	Verified	140[b]
	1,2-Dichloroethane	12.3	1	Verified	5[a]
	1,2-Dichloropropane	6.5	1	Verified	5[a]
	1,4-Dichlorobenzene	4.7	1	Verified	75[a]
	Chlorobenzene	1.7	1	Verified	100[a]
	Chloroethane	6.8	1	Verified	2800[b]
	cis-1,2-Dichloroethene	164	1	Verified	70[a]
	trans-1,2-Dichloroethene	2.2	1	Verified	100[a]
	Trichloroethene	1.4	1	Verified	5[a]
	Vinyl chloride	6.8	1	Verified	2[a]
MW-94	1,1-Dichloroethane	1.3	1	Verified	140[b]
	1,2-Dichloropropane	1.1	1	Verified	5[a]
	Benzene	2.0	1	Verified	75[a]
	Chloroethane	4.3	1	Verified	2800[b]
	cis-1,2-Dichloroethene	5.2	1	Verified	70[a]
	Vinyl chloride	2.2	1	Verified	2[a]

a - USEPA MCL
b – Iowa Statewide Standard

This table indicates that these VOCs are generally verified detections. A site remedial and mitigating action plan was implemented due to the presence of these VOCs. Historical VOC detections are summarized in Attachment F.

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 (Attachment G).

The 95% LCL for 1,2-dichloropropane at MW-81 (7.623 µg/L) exceeds the USEPA MCL of 5 µg/L.
The 95% LCL for *cis*-1,2-dichloroethene at MW-81 (135.323 µg/L) exceeds the USEPA MCL of 70 µg/L.
The 95% LCL for vinyl chloride at MW-81 (6.454 µg/L) exceeds the USEPA MCL of 2 µg/L.

The remainder of the verified VOC detections are statistically below the respective 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 4/16/2024 to 4/18/2024

Constituents	Units	MW-49	MW-54	MW-81	MW-85	MW-87	MW-89	MW-91	MW-93	MW-94	MW-95	MW-96R
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	1.1	<1.0	28.2	<1.0	<1.0	<1.0	<1.0	<1.0	1.3	<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	<1.0	<1.0	12.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-dichloropropane	ug/L	<1.0	<1.0	6.5	<1.0	<1.0	<1.0	<1.0	<1.0	1.1	<1.0	<1.0
1,4-dichlorobenzene	ug/L	3.3	2.3	4.7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-butanone (mek)	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<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
Alkalinity, as caco3	mg/L	652	512	886						698		
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	53.7	4.8	6.8	<4.0	<4.0	<4.0	<4.0	11.9	95.9	<4.0	<4.0
Barium, total	ug/L	429.0	449.0	1940.0	144.0	117.0	240.0	186.0	243.0	308.0	42.7	124.0
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	2	<1	<1
Beryllium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L	.9	<.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	<1.0	1.7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	ug/L	4.6	<1.0	6.8	<1.0	<1.0	<1.0	<1.0	<1.0	4.3	<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	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	ug/L	2.4	<1.0	164.0	<1.0	<1.0	<1.0	<1.0	<1.0	5.2	<1.0	<1.0
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	5.8	10.6	10.5	.4	<.4	<.4	<.4	9.8	10.2	<.4	1.8
Copper, total	ug/L	7.5	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
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	16.2	22.4	13.4	<4.0	<4.0	<4.0	<4.0	25.5	9.2	<4.0	5.3
pH	pH	6.5	6.7	6.6						6.6		
Selenium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	7.4
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	2.2	<1.0	<1.0	<1.0	<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	<1.0	<1.0	1.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1.0	<1.0	6.8	<1.0	<1.0	<1.0	<1.0	<1.0	2.2	<1.0	<1.0
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	22.7	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	21.4	<20.0	<20.0	<20.0

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

Table 1

Analytical Data Summary for 4/16/2024 to 4/18/2024

Constituents	MW-97	MW-98	MW-99	SRAMP B
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
1,2,3-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	<1.0	<1.0	<1.0	<1.0
1,2-dichloropropane	<1.0	<1.0	<1.0	<1.0
1,4-dichlorobenzene	<1.0	<1.0	<1.0	<1.0
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
Alkalinity, as caco3				
Antimony, total	<2	<2	<2	<2
Arsenic, total	<4.0	48.0	<4.0	<4.0
Barium, total	315.0	325.0	164.0	16.1
Benzene	<1	<1	<1	<1
Beryllium, total	<4	<4	<4	<4
Bromochloromethane	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1
Chlorobenzene	<1.0	<1.0	<1.0	<1.0
Chloroethane	<1.0	<1.0	<1.0	<1.0
Chloroform	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8
Cis-1,2-dichloroethylene	<1.0	<1.0	<1.0	<1.0
Cis-1,3-dichloropropene	<1	<1	<1	<1
Cobalt, total	<.4	4.7	4.1	<.4
Copper, total	7.1	<4.0	<4.0	<4.0
Dibromochloromethane	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4
Methyl iodide	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5
Nickel, total	<4.0	<4.0	6.3	<4.0
pH				
Selenium, total	<4.0	<4.0	<4.0	<4.0
Silver, total	<4	<4	<4	<4
Styrene	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1
Thallium, total	<2	<2	<2	<2
Toluene	<1	<1	<1	<1
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	<1.0	<1.0	<1.0	<1.0
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	<20.0	<20.0	<20.0

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

Attachment B

Summary Tables and Graphs for the Interwell Comparisons

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Antimony, total	ug/L	MW-66	10/16/2014	ND	2.0000		
Antimony, total	ug/L	MW-66	01/14/2015	ND	2.0000		
Antimony, total	ug/L	MW-66	04/03/2015	ND	2.0000		
Antimony, total	ug/L	MW-66	07/06/2015	ND	2.0000		
Antimony, total	ug/L	MW-66	10/01/2015	ND	2.0000		
Antimony, total	ug/L	MW-66	04/14/2016	ND	2.0000		
Antimony, total	ug/L	MW-66	10/13/2016	ND	2.0000		
Antimony, total	ug/L	MW-66	04/10/2017	ND	2.0000		
Arsenic, total	ug/L	MW-66	10/16/2014	ND	4.0000		
Arsenic, total	ug/L	MW-66	01/14/2015	ND	4.0000		
Arsenic, total	ug/L	MW-66	04/03/2015	ND	4.0000		
Arsenic, total	ug/L	MW-66	07/06/2015	ND	4.0000		
Arsenic, total	ug/L	MW-66	10/01/2015	ND	4.0000		
Arsenic, total	ug/L	MW-66	04/14/2016	ND	4.0000		
Arsenic, total	ug/L	MW-66	10/13/2016	ND	4.0000		
Arsenic, total	ug/L	MW-66	04/10/2017	ND	4.0000		
Barium, total	ug/L	MW-66	10/16/2014		325.0000		
Barium, total	ug/L	MW-66	01/14/2015		412.0000		
Barium, total	ug/L	MW-66	04/03/2015		524.0000		
Barium, total	ug/L	MW-66	07/06/2015		560.0000		
Barium, total	ug/L	MW-66	10/01/2015		612.0000		
Barium, total	ug/L	MW-66	04/14/2016		395.0000		
Barium, total	ug/L	MW-66	10/13/2016		413.0000		
Barium, total	ug/L	MW-66	04/10/2017		371.0000		
Beryllium, total	ug/L	MW-66	10/16/2014	ND	4.0000		
Beryllium, total	ug/L	MW-66	01/14/2015	ND	4.0000		
Beryllium, total	ug/L	MW-66	04/03/2015	ND	4.0000		
Beryllium, total	ug/L	MW-66	07/06/2015	ND	4.0000		
Beryllium, total	ug/L	MW-66	10/01/2015	ND	4.0000		
Beryllium, total	ug/L	MW-66	04/14/2016	ND	4.0000		
Beryllium, total	ug/L	MW-66	10/13/2016	ND	4.0000		
Beryllium, total	ug/L	MW-66	04/10/2017	ND	4.0000		
Cadmium, total	ug/L	MW-66	10/16/2014	ND	0.8000		
Cadmium, total	ug/L	MW-66	01/14/2015	ND	0.8000		
Cadmium, total	ug/L	MW-66	04/03/2015	ND	0.8000		
Cadmium, total	ug/L	MW-66	07/06/2015	ND	0.8000		
Cadmium, total	ug/L	MW-66	10/01/2015	ND	0.8000		
Cadmium, total	ug/L	MW-66	04/14/2016	ND	0.8000		
Cadmium, total	ug/L	MW-66	10/13/2016	ND	0.8000		
Cadmium, total	ug/L	MW-66	04/10/2017	ND	0.8000		
Chromium, total	ug/L	MW-66	10/16/2014	ND	8.0000		
Chromium, total	ug/L	MW-66	01/14/2015	ND	8.0000		
Chromium, total	ug/L	MW-66	04/03/2015	ND	8.0000		
Chromium, total	ug/L	MW-66	07/06/2015	ND	8.0000		
Chromium, total	ug/L	MW-66	10/01/2015	ND	8.0000		
Chromium, total	ug/L	MW-66	04/14/2016	ND	8.0000		
Chromium, total	ug/L	MW-66	10/13/2016	ND	8.0000		
Chromium, total	ug/L	MW-66	04/10/2017	ND	8.0000		
Cobalt, total	ug/L	MW-66	10/16/2014	ND	0.8000		
Cobalt, total	ug/L	MW-66	01/14/2015	ND	0.8000		
Cobalt, total	ug/L	MW-66	04/03/2015	ND	0.8000		
Cobalt, total	ug/L	MW-66	07/06/2015	ND	0.8000		
Cobalt, total	ug/L	MW-66	10/01/2015	ND	0.8000		
Cobalt, total	ug/L	MW-66	04/14/2016	ND	0.8000		
Cobalt, total	ug/L	MW-66	10/13/2016		0.9000		
Cobalt, total	ug/L	MW-66	04/10/2017	ND	0.8000		
Copper, total	ug/L	MW-66	10/16/2014	ND	4.0000		
Copper, total	ug/L	MW-66	01/14/2015	ND	4.0000		
Copper, total	ug/L	MW-66	04/03/2015	ND	4.0000		
Copper, total	ug/L	MW-66	07/06/2015	ND	4.0000		
Copper, total	ug/L	MW-66	10/01/2015	ND	4.0000		
Copper, total	ug/L	MW-66	04/14/2016	ND	4.0000		
Copper, total	ug/L	MW-66	10/13/2016	ND	4.0000		
Copper, total	ug/L	MW-66	04/10/2017	ND	4.0000		
Lead, total	ug/L	MW-66	10/16/2014	ND	4.0000		
Lead, total	ug/L	MW-66	01/14/2015	ND	4.0000		
Lead, total	ug/L	MW-66	04/03/2015	ND	4.0000		
Lead, total	ug/L	MW-66	07/06/2015	ND	4.0000		
Lead, total	ug/L	MW-66	10/01/2015	ND	4.0000		
Lead, total	ug/L	MW-66	04/14/2016	ND	4.0000		
Lead, total	ug/L	MW-66	10/13/2016	ND	4.0000		
Lead, total	ug/L	MW-66	04/10/2017	ND	4.0000		
Nickel, total	ug/L	MW-66	10/16/2014	ND	4.0000		
Nickel, total	ug/L	MW-66	01/14/2015	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-66	04/03/2015	ND	4.0000		
Nickel, total	ug/L	MW-66	07/06/2015	ND	4.0000		
Nickel, total	ug/L	MW-66	10/01/2015	ND	4.0000		
Nickel, total	ug/L	MW-66	04/14/2016	ND	4.0000		
Nickel, total	ug/L	MW-66	10/13/2016	ND	4.0000		
Nickel, total	ug/L	MW-66	04/10/2017	ND	4.0000		
Selenium, total	ug/L	MW-66	10/16/2014	ND	4.0000		
Selenium, total	ug/L	MW-66	01/14/2015	ND	4.0000		
Selenium, total	ug/L	MW-66	04/03/2015	ND	4.0000		
Selenium, total	ug/L	MW-66	07/06/2015	ND	4.0000		
Selenium, total	ug/L	MW-66	10/01/2015	ND	4.0000		
Selenium, total	ug/L	MW-66	04/14/2016	ND	4.0000		
Selenium, total	ug/L	MW-66	10/13/2016	ND	4.0000		
Selenium, total	ug/L	MW-66	04/10/2017	ND	4.0000		
Silver, total	ug/L	MW-66	10/16/2014	ND	4.0000		
Silver, total	ug/L	MW-66	01/14/2015	ND	4.0000		
Silver, total	ug/L	MW-66	04/03/2015	ND	4.0000		
Silver, total	ug/L	MW-66	07/06/2015	ND	4.0000		
Silver, total	ug/L	MW-66	10/01/2015	ND	4.0000		
Silver, total	ug/L	MW-66	04/14/2016	ND	4.0000		
Silver, total	ug/L	MW-66	10/13/2016	ND	4.0000		
Silver, total	ug/L	MW-66	04/10/2017	ND	4.0000		
Thallium, total	ug/L	MW-66	10/16/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-66	01/14/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-66	04/03/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-66	07/06/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-66	10/01/2015	ND	1.0000	2.0000	**
Thallium, total	ug/L	MW-66	04/14/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-66	10/13/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-66	04/10/2017	ND	4.0000	2.0000	**
Vanadium, total	ug/L	MW-66	10/16/2014	ND	20.0000		
Vanadium, total	ug/L	MW-66	01/14/2015	ND	20.0000		
Vanadium, total	ug/L	MW-66	04/03/2015	ND	20.0000		
Vanadium, total	ug/L	MW-66	07/06/2015	ND	20.0000		
Vanadium, total	ug/L	MW-66	10/01/2015	ND	20.0000		
Vanadium, total	ug/L	MW-66	04/14/2016	ND	20.0000		
Vanadium, total	ug/L	MW-66	10/13/2016	ND	20.0000		
Vanadium, total	ug/L	MW-66	04/10/2017	ND	20.0000		
Zinc, total	ug/L	MW-66	10/16/2014	ND	20.0000		
Zinc, total	ug/L	MW-66	01/14/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-66	04/03/2015		54.6000		
Zinc, total	ug/L	MW-66	07/06/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-66	10/01/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-66	04/14/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-66	10/13/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-66	04/10/2017	ND	8.0000	20.0000	**
Antimony, total	ug/L	MW-85	10/16/2014	ND	2.0000		
Antimony, total	ug/L	MW-85	01/14/2015	ND	2.0000		
Antimony, total	ug/L	MW-85	04/03/2015	ND	2.0000		
Antimony, total	ug/L	MW-85	07/06/2015	ND	2.0000		
Antimony, total	ug/L	MW-85	10/01/2015	ND	2.0000		
Antimony, total	ug/L	MW-85	04/14/2016	ND	2.0000		
Antimony, total	ug/L	MW-85	10/13/2016	ND	2.0000		
Antimony, total	ug/L	MW-85	04/10/2017	ND	2.0000		
Antimony, total	ug/L	MW-85	10/09/2017	ND	2.0000		
Antimony, total	ug/L	MW-85	04/17/2018	ND	2.0000		
Antimony, total	ug/L	MW-85	10/22/2018	ND	2.0000		
Antimony, total	ug/L	MW-85	04/22/2019	ND	2.0000		
Antimony, total	ug/L	MW-85	10/23/2019	ND	2.0000		
Antimony, total	ug/L	MW-85	04/10/2020	ND	2.0000		
Antimony, total	ug/L	MW-85	10/19/2020	ND	2.0000		
Antimony, total	ug/L	MW-85	04/05/2021	ND	2.0000		
Antimony, total	ug/L	MW-85	10/08/2021	ND	2.0000		
Antimony, total	ug/L	MW-85	04/06/2022	ND	2.0000		
Antimony, total	ug/L	MW-85	10/25/2022	ND	2.0000		
Antimony, total	ug/L	MW-85	04/11/2023	ND	2.0000		
Antimony, total	ug/L	MW-85	10/13/2023	ND	2.0000		
Antimony, total	ug/L	MW-85	04/17/2024	ND	2.0000		
Arsenic, total	ug/L	MW-85	10/16/2014	ND	4.0000		
Arsenic, total	ug/L	MW-85	01/14/2015	ND	4.0000		
Arsenic, total	ug/L	MW-85	04/03/2015	ND	4.0000		
Arsenic, total	ug/L	MW-85	07/06/2015	ND	4.0000		
Arsenic, total	ug/L	MW-85	10/01/2015	ND	4.0000		
Arsenic, total	ug/L	MW-85	04/14/2016	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	
Arsenic, total	ug/L	MW-85	10/13/2016	ND	4.0000		
Arsenic, total	ug/L	MW-85	04/10/2017	ND	4.0000		
Arsenic, total	ug/L	MW-85	10/09/2017	ND	4.0000		
Arsenic, total	ug/L	MW-85	04/17/2018	ND	4.0000		
Arsenic, total	ug/L	MW-85	10/22/2018	ND	4.0000		
Arsenic, total	ug/L	MW-85	04/22/2019	ND	4.0000		
Arsenic, total	ug/L	MW-85	10/23/2019	ND	4.0000		
Arsenic, total	ug/L	MW-85	04/10/2020	ND	4.0000		
Arsenic, total	ug/L	MW-85	10/19/2020	ND	4.0000		
Arsenic, total	ug/L	MW-85	04/05/2021	ND	4.0000		
Arsenic, total	ug/L	MW-85	10/08/2021	ND	4.0000		
Arsenic, total	ug/L	MW-85	04/06/2022	ND	4.0000		
Arsenic, total	ug/L	MW-85	10/25/2022	ND	4.0000		
Arsenic, total	ug/L	MW-85	04/11/2023	ND	4.0000		
Arsenic, total	ug/L	MW-85	10/13/2023	ND	4.0000		
Arsenic, total	ug/L	MW-85	04/17/2024	ND	4.0000		
Barium, total	ug/L	MW-85	10/16/2014		138.0000		
Barium, total	ug/L	MW-85	01/14/2015		157.0000		
Barium, total	ug/L	MW-85	04/03/2015		167.0000		
Barium, total	ug/L	MW-85	07/06/2015		143.0000		
Barium, total	ug/L	MW-85	10/01/2015		135.0000		
Barium, total	ug/L	MW-85	04/14/2016		155.0000		
Barium, total	ug/L	MW-85	10/13/2016		149.0000		
Barium, total	ug/L	MW-85	04/10/2017		175.0000		
Barium, total	ug/L	MW-85	10/09/2017		143.0000		
Barium, total	ug/L	MW-85	04/17/2018		142.0000		
Barium, total	ug/L	MW-85	10/22/2018		146.0000		
Barium, total	ug/L	MW-85	04/22/2019		152.0000		
Barium, total	ug/L	MW-85	10/23/2019		126.0000		
Barium, total	ug/L	MW-85	04/10/2020		160.0000		
Barium, total	ug/L	MW-85	10/19/2020		151.0000		
Barium, total	ug/L	MW-85	04/05/2021		135.0000		
Barium, total	ug/L	MW-85	10/08/2021		121.0000		
Barium, total	ug/L	MW-85	04/06/2022		133.0000		
Barium, total	ug/L	MW-85	10/25/2022		138.0000		
Barium, total	ug/L	MW-85	04/11/2023		141.0000		
Barium, total	ug/L	MW-85	10/13/2023		143.0000		
Barium, total	ug/L	MW-85	04/17/2024		144.0000		
Beryllium, total	ug/L	MW-85	10/16/2014	ND	4.0000		
Beryllium, total	ug/L	MW-85	01/14/2015	ND	4.0000		
Beryllium, total	ug/L	MW-85	04/03/2015	ND	4.0000		
Beryllium, total	ug/L	MW-85	07/06/2015	ND	4.0000		
Beryllium, total	ug/L	MW-85	10/01/2015	ND	4.0000		
Beryllium, total	ug/L	MW-85	04/14/2016	ND	4.0000		
Beryllium, total	ug/L	MW-85	10/13/2016	ND	4.0000		
Beryllium, total	ug/L	MW-85	04/10/2017	ND	4.0000		
Beryllium, total	ug/L	MW-85	10/09/2017	ND	4.0000		
Beryllium, total	ug/L	MW-85	04/17/2018	ND	4.0000		
Beryllium, total	ug/L	MW-85	10/22/2018	ND	4.0000		
Beryllium, total	ug/L	MW-85	04/22/2019	ND	4.0000		
Beryllium, total	ug/L	MW-85	10/23/2019	ND	4.0000		
Beryllium, total	ug/L	MW-85	04/10/2020	ND	4.0000		
Beryllium, total	ug/L	MW-85	10/19/2020	ND	4.0000		
Beryllium, total	ug/L	MW-85	04/05/2021	ND	4.0000		
Beryllium, total	ug/L	MW-85	10/08/2021	ND	4.0000		
Beryllium, total	ug/L	MW-85	04/06/2022	ND	4.0000		
Beryllium, total	ug/L	MW-85	10/25/2022	ND	4.0000		
Beryllium, total	ug/L	MW-85	04/11/2023	ND	4.0000		
Beryllium, total	ug/L	MW-85	10/13/2023	ND	4.0000		
Beryllium, total	ug/L	MW-85	04/17/2024	ND	4.0000		
Cadmium, total	ug/L	MW-85	10/16/2014	ND	0.8000		
Cadmium, total	ug/L	MW-85	01/14/2015	ND	0.8000		
Cadmium, total	ug/L	MW-85	04/03/2015	ND	0.8000		
Cadmium, total	ug/L	MW-85	07/06/2015	ND	0.8000		
Cadmium, total	ug/L	MW-85	10/01/2015	ND	0.8000		
Cadmium, total	ug/L	MW-85	04/14/2016	ND	0.8000		
Cadmium, total	ug/L	MW-85	10/13/2016	ND	0.8000		
Cadmium, total	ug/L	MW-85	04/10/2017	ND	0.8000		
Cadmium, total	ug/L	MW-85	10/09/2017	ND	0.8000		
Cadmium, total	ug/L	MW-85	04/17/2018	ND	0.8000		
Cadmium, total	ug/L	MW-85	10/22/2018	ND	0.8000		
Cadmium, total	ug/L	MW-85	04/22/2019	ND	0.8000		
Cadmium, total	ug/L	MW-85	10/23/2019	ND	0.8000		
Cadmium, total	ug/L	MW-85	04/10/2020	ND	0.8000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Cadmium, total	ug/L	MW-85	10/19/2020	ND	0.8000		
Cadmium, total	ug/L	MW-85	04/05/2021	ND	0.8000		
Cadmium, total	ug/L	MW-85	10/08/2021	ND	0.8000		
Cadmium, total	ug/L	MW-85	04/06/2022	ND	0.8000		
Cadmium, total	ug/L	MW-85	10/25/2022	ND	0.8000		
Cadmium, total	ug/L	MW-85	04/11/2023	ND	0.8000		
Cadmium, total	ug/L	MW-85	10/13/2023	ND	0.8000		
Cadmium, total	ug/L	MW-85	04/17/2024	ND	0.8000		
Chromium, total	ug/L	MW-85	10/16/2014	ND	8.0000		
Chromium, total	ug/L	MW-85	01/14/2015	ND	8.0000		
Chromium, total	ug/L	MW-85	04/03/2015	ND	8.0000		
Chromium, total	ug/L	MW-85	07/06/2015	ND	8.0000		
Chromium, total	ug/L	MW-85	10/01/2015	ND	8.0000		
Chromium, total	ug/L	MW-85	04/14/2016	ND	8.0000		
Chromium, total	ug/L	MW-85	10/13/2016	ND	8.0000		
Chromium, total	ug/L	MW-85	04/10/2017	ND	8.0000		
Chromium, total	ug/L	MW-85	10/09/2017	ND	8.0000		
Chromium, total	ug/L	MW-85	04/17/2018	ND	8.0000		
Chromium, total	ug/L	MW-85	10/22/2018	ND	8.0000		
Chromium, total	ug/L	MW-85	04/22/2019	ND	8.0000		
Chromium, total	ug/L	MW-85	10/23/2019	ND	8.0000		
Chromium, total	ug/L	MW-85	04/10/2020	ND	8.0000		
Chromium, total	ug/L	MW-85	10/19/2020	ND	8.0000		
Chromium, total	ug/L	MW-85	04/05/2021	ND	8.0000		
Chromium, total	ug/L	MW-85	10/08/2021	ND	8.0000		
Chromium, total	ug/L	MW-85	04/06/2022	ND	8.0000		
Chromium, total	ug/L	MW-85	10/25/2022	ND	8.0000		
Chromium, total	ug/L	MW-85	04/11/2023	ND	8.0000		
Chromium, total	ug/L	MW-85	10/13/2023	ND	8.0000		
Chromium, total	ug/L	MW-85	04/17/2024	ND	8.0000		
Cobalt, total	ug/L	MW-85	10/16/2014	ND	0.8000		
Cobalt, total	ug/L	MW-85	01/14/2015	ND	0.8000		
Cobalt, total	ug/L	MW-85	04/03/2015	ND	0.8000		
Cobalt, total	ug/L	MW-85	07/06/2015	ND	0.8000		
Cobalt, total	ug/L	MW-85	10/01/2015	ND	0.8000		
Cobalt, total	ug/L	MW-85	04/14/2016	ND	0.8000		
Cobalt, total	ug/L	MW-85	10/13/2016	ND	0.8000		
Cobalt, total	ug/L	MW-85	04/10/2017	ND	0.8000		
Cobalt, total	ug/L	MW-85	10/09/2017	ND	0.8000		
Cobalt, total	ug/L	MW-85	04/17/2018	ND	0.8000		
Cobalt, total	ug/L	MW-85	10/22/2018	ND	0.8000		
Cobalt, total	ug/L	MW-85	04/22/2019	ND	0.8000		
Cobalt, total	ug/L	MW-85	10/23/2019	ND	0.8000		
Cobalt, total	ug/L	MW-85	04/10/2020		0.4000		
Cobalt, total	ug/L	MW-85	10/19/2020		0.4000		
Cobalt, total	ug/L	MW-85	04/05/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-85	10/08/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-85	04/06/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-85	10/25/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-85	04/11/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-85	10/13/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-85	04/17/2024		0.4000		
Copper, total	ug/L	MW-85	10/16/2014	ND	4.0000		
Copper, total	ug/L	MW-85	01/14/2015	ND	4.0000		
Copper, total	ug/L	MW-85	04/03/2015	ND	4.0000		
Copper, total	ug/L	MW-85	07/06/2015	ND	4.0000		
Copper, total	ug/L	MW-85	10/01/2015	ND	4.0000		
Copper, total	ug/L	MW-85	04/14/2016	ND	4.0000		
Copper, total	ug/L	MW-85	10/13/2016	ND	4.0000		
Copper, total	ug/L	MW-85	04/10/2017	ND	4.0000		
Copper, total	ug/L	MW-85	10/09/2017	ND	4.0000		
Copper, total	ug/L	MW-85	04/17/2018	ND	4.0000		
Copper, total	ug/L	MW-85	10/22/2018		4.8000		
Copper, total	ug/L	MW-85	04/22/2019	ND	4.0000		
Copper, total	ug/L	MW-85	10/23/2019		4.0000		
Copper, total	ug/L	MW-85	04/10/2020	ND	4.0000		
Copper, total	ug/L	MW-85	10/19/2020	ND	4.0000		
Copper, total	ug/L	MW-85	04/05/2021	ND	4.0000		
Copper, total	ug/L	MW-85	10/08/2021	ND	4.0000		
Copper, total	ug/L	MW-85	04/06/2022	ND	4.0000		
Copper, total	ug/L	MW-85	10/25/2022	ND	4.0000		
Copper, total	ug/L	MW-85	04/11/2023	ND	4.0000		
Copper, total	ug/L	MW-85	10/13/2023	ND	4.0000		
Copper, total	ug/L	MW-85	04/17/2024	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-85	10/16/2014	ND	4.0000		
Lead, total	ug/L	MW-85	01/14/2015	ND	4.0000		
Lead, total	ug/L	MW-85	04/03/2015	ND	4.0000		
Lead, total	ug/L	MW-85	07/06/2015	ND	4.0000		
Lead, total	ug/L	MW-85	10/01/2015	ND	4.0000		
Lead, total	ug/L	MW-85	04/14/2016	ND	4.0000		
Lead, total	ug/L	MW-85	10/13/2016	ND	4.0000		
Lead, total	ug/L	MW-85	04/10/2017	ND	4.0000		
Lead, total	ug/L	MW-85	10/09/2017	ND	4.0000		
Lead, total	ug/L	MW-85	04/17/2018	ND	4.0000		
Lead, total	ug/L	MW-85	10/22/2018	ND	4.0000		
Lead, total	ug/L	MW-85	04/22/2019	ND	4.0000		
Lead, total	ug/L	MW-85	10/23/2019	ND	4.0000		
Lead, total	ug/L	MW-85	04/10/2020	ND	4.0000		
Lead, total	ug/L	MW-85	10/19/2020	ND	4.0000		
Lead, total	ug/L	MW-85	04/05/2021	ND	4.0000		
Lead, total	ug/L	MW-85	10/08/2021	ND	4.0000		
Lead, total	ug/L	MW-85	04/06/2022	ND	4.0000		
Lead, total	ug/L	MW-85	10/25/2022	ND	4.0000		
Lead, total	ug/L	MW-85	04/11/2023	ND	4.0000		
Lead, total	ug/L	MW-85	10/13/2023	ND	4.0000		
Lead, total	ug/L	MW-85	04/17/2024	ND	4.0000		
Nickel, total	ug/L	MW-85	10/16/2014	ND	4.0000		
Nickel, total	ug/L	MW-85	01/14/2015	ND	4.0000		
Nickel, total	ug/L	MW-85	04/03/2015	ND	4.0000		
Nickel, total	ug/L	MW-85	07/06/2015	ND	4.0000		
Nickel, total	ug/L	MW-85	10/01/2015	ND	4.0000		
Nickel, total	ug/L	MW-85	04/14/2016	ND	4.0000		
Nickel, total	ug/L	MW-85	10/13/2016	ND	4.0000		
Nickel, total	ug/L	MW-85	04/10/2017	ND	4.0000		
Nickel, total	ug/L	MW-85	10/09/2017	ND	4.0000		
Nickel, total	ug/L	MW-85	04/17/2018	ND	4.0000		
Nickel, total	ug/L	MW-85	10/22/2018		20.6000		*
Nickel, total	ug/L	MW-85	04/22/2019	ND	4.0000		
Nickel, total	ug/L	MW-85	10/23/2019	ND	4.0000		
Nickel, total	ug/L	MW-85	04/10/2020	ND	4.0000		
Nickel, total	ug/L	MW-85	10/19/2020	ND	4.0000		
Nickel, total	ug/L	MW-85	04/05/2021	ND	4.0000		
Nickel, total	ug/L	MW-85	10/08/2021	ND	4.0000		
Nickel, total	ug/L	MW-85	04/06/2022	ND	4.0000		
Nickel, total	ug/L	MW-85	10/25/2022	ND	4.0000		
Nickel, total	ug/L	MW-85	04/11/2023	ND	4.0000		
Nickel, total	ug/L	MW-85	10/13/2023	ND	4.0000		
Nickel, total	ug/L	MW-85	04/17/2024	ND	4.0000		
Selenium, total	ug/L	MW-85	10/16/2014	ND	4.0000		
Selenium, total	ug/L	MW-85	01/14/2015	ND	4.0000		
Selenium, total	ug/L	MW-85	04/03/2015	ND	4.0000		
Selenium, total	ug/L	MW-85	07/06/2015	ND	4.0000		
Selenium, total	ug/L	MW-85	10/01/2015	ND	4.0000		
Selenium, total	ug/L	MW-85	04/14/2016	ND	4.0000		
Selenium, total	ug/L	MW-85	10/13/2016	ND	4.0000		
Selenium, total	ug/L	MW-85	04/10/2017	ND	4.0000		
Selenium, total	ug/L	MW-85	10/09/2017	ND	4.0000		
Selenium, total	ug/L	MW-85	04/17/2018	ND	4.0000		
Selenium, total	ug/L	MW-85	10/22/2018	ND	4.0000		
Selenium, total	ug/L	MW-85	04/22/2019	ND	4.0000		
Selenium, total	ug/L	MW-85	10/23/2019	ND	4.0000		
Selenium, total	ug/L	MW-85	04/10/2020	ND	4.0000		
Selenium, total	ug/L	MW-85	10/19/2020	ND	4.0000		
Selenium, total	ug/L	MW-85	04/05/2021	ND	4.0000		
Selenium, total	ug/L	MW-85	10/08/2021	ND	4.0000		
Selenium, total	ug/L	MW-85	04/06/2022	ND	4.0000		
Selenium, total	ug/L	MW-85	10/25/2022	ND	4.0000		
Selenium, total	ug/L	MW-85	04/11/2023	ND	4.0000		
Selenium, total	ug/L	MW-85	10/13/2023	ND	4.0000		
Selenium, total	ug/L	MW-85	04/17/2024	ND	4.0000		
Silver, total	ug/L	MW-85	10/16/2014	ND	4.0000		
Silver, total	ug/L	MW-85	01/14/2015	ND	4.0000		
Silver, total	ug/L	MW-85	04/03/2015	ND	4.0000		
Silver, total	ug/L	MW-85	07/06/2015	ND	4.0000		
Silver, total	ug/L	MW-85	10/01/2015	ND	4.0000		
Silver, total	ug/L	MW-85	04/14/2016	ND	4.0000		
Silver, total	ug/L	MW-85	10/13/2016	ND	4.0000		
Silver, total	ug/L	MW-85	04/10/2017	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	
Silver, total	ug/L	MW-85	10/09/2017	ND	4.0000		
Silver, total	ug/L	MW-85	04/17/2018	ND	4.0000		
Silver, total	ug/L	MW-85	10/22/2018	ND	4.0000		
Silver, total	ug/L	MW-85	04/22/2019	ND	4.0000		
Silver, total	ug/L	MW-85	10/23/2019	ND	4.0000		
Silver, total	ug/L	MW-85	04/10/2020	ND	4.0000		
Silver, total	ug/L	MW-85	10/19/2020	ND	4.0000		
Silver, total	ug/L	MW-85	04/05/2021	ND	4.0000		
Silver, total	ug/L	MW-85	10/08/2021	ND	4.0000		
Silver, total	ug/L	MW-85	04/06/2022	ND	4.0000		
Silver, total	ug/L	MW-85	10/25/2022	ND	4.0000		
Silver, total	ug/L	MW-85	04/11/2023	ND	4.0000		
Silver, total	ug/L	MW-85	10/13/2023	ND	4.0000		
Silver, total	ug/L	MW-85	04/17/2024	ND	4.0000		
Thallium, total	ug/L	MW-85	10/16/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-85	01/14/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-85	04/03/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-85	07/06/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-85	10/01/2015	ND	1.0000	2.0000	**
Thallium, total	ug/L	MW-85	04/14/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-85	10/13/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-85	04/10/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-85	10/09/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-85	04/17/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-85	10/22/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-85	04/22/2019	ND	2.0000		
Thallium, total	ug/L	MW-85	10/23/2019	ND	2.0000		
Thallium, total	ug/L	MW-85	04/10/2020	ND	2.0000		
Thallium, total	ug/L	MW-85	10/19/2020	ND	2.0000		
Thallium, total	ug/L	MW-85	04/05/2021	ND	2.0000		
Thallium, total	ug/L	MW-85	10/08/2021	ND	2.0000		
Thallium, total	ug/L	MW-85	04/06/2022	ND	2.0000		
Thallium, total	ug/L	MW-85	10/25/2022	ND	2.0000		
Thallium, total	ug/L	MW-85	04/11/2023	ND	2.0000		
Thallium, total	ug/L	MW-85	10/13/2023	ND	2.0000		
Thallium, total	ug/L	MW-85	04/17/2024	ND	2.0000		
Vanadium, total	ug/L	MW-85	10/16/2014	ND	20.0000		
Vanadium, total	ug/L	MW-85	01/14/2015	ND	20.0000		
Vanadium, total	ug/L	MW-85	04/03/2015	ND	20.0000		
Vanadium, total	ug/L	MW-85	07/06/2015	ND	20.0000		
Vanadium, total	ug/L	MW-85	10/01/2015	ND	20.0000		
Vanadium, total	ug/L	MW-85	04/14/2016	ND	20.0000		
Vanadium, total	ug/L	MW-85	10/13/2016	ND	20.0000		
Vanadium, total	ug/L	MW-85	04/10/2017	ND	20.0000		
Vanadium, total	ug/L	MW-85	10/09/2017	ND	20.0000		
Vanadium, total	ug/L	MW-85	04/17/2018	ND	20.0000		
Vanadium, total	ug/L	MW-85	10/22/2018	ND	20.0000		
Vanadium, total	ug/L	MW-85	04/22/2019	ND	20.0000		
Vanadium, total	ug/L	MW-85	10/23/2019	ND	20.0000		
Vanadium, total	ug/L	MW-85	04/10/2020	ND	20.0000		
Vanadium, total	ug/L	MW-85	10/19/2020	ND	20.0000		
Vanadium, total	ug/L	MW-85	04/05/2021	ND	20.0000		
Vanadium, total	ug/L	MW-85	10/08/2021	ND	20.0000		
Vanadium, total	ug/L	MW-85	04/06/2022	ND	20.0000		
Vanadium, total	ug/L	MW-85	10/25/2022	ND	20.0000		
Vanadium, total	ug/L	MW-85	04/11/2023	ND	20.0000		
Vanadium, total	ug/L	MW-85	10/13/2023	ND	20.0000		
Vanadium, total	ug/L	MW-85	04/17/2024	ND	20.0000		
Zinc, total	ug/L	MW-85	10/16/2014	ND	20.0000		
Zinc, total	ug/L	MW-85	01/14/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-85	04/03/2015		27.0000		
Zinc, total	ug/L	MW-85	07/06/2015		9.1000		
Zinc, total	ug/L	MW-85	10/01/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-85	04/14/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-85	10/13/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-85	04/10/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-85	10/09/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-85	04/17/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-85	10/22/2018		125.0000		*
Zinc, total	ug/L	MW-85	04/22/2019	ND	20.0000		
Zinc, total	ug/L	MW-85	10/23/2019	ND	20.0000		
Zinc, total	ug/L	MW-85	04/10/2020	ND	20.0000		
Zinc, total	ug/L	MW-85	10/19/2020	ND	20.0000		
Zinc, total	ug/L	MW-85	04/05/2021	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-85	10/08/2021	ND	20.0000		
Zinc, total	ug/L	MW-85	04/06/2022	ND	20.0000		
Zinc, total	ug/L	MW-85	10/25/2022	ND	20.0000		
Zinc, total	ug/L	MW-85	04/11/2023	ND	20.0000		
Zinc, total	ug/L	MW-85	10/13/2023	ND	20.0000		
Zinc, total	ug/L	MW-85	04/17/2024	ND	20.0000		
Antimony, total	ug/L	MW-98	10/13/2016	ND	2.0000		
Antimony, total	ug/L	MW-98	04/10/2017	ND	2.0000		
Antimony, total	ug/L	MW-98	10/09/2017	ND	2.0000		
Antimony, total	ug/L	MW-98	04/17/2018	ND	2.0000		
Antimony, total	ug/L	MW-98	10/22/2018	ND	2.0000		
Antimony, total	ug/L	MW-98	04/22/2019	ND	2.0000		
Antimony, total	ug/L	MW-98	10/23/2019	ND	2.0000		
Antimony, total	ug/L	MW-98	04/10/2020	ND	2.0000		
Antimony, total	ug/L	MW-98	10/19/2020	ND	2.0000		
Antimony, total	ug/L	MW-98	04/05/2021	ND	2.0000		
Antimony, total	ug/L	MW-98	10/08/2021	ND	2.0000		
Antimony, total	ug/L	MW-98	04/06/2022	ND	2.0000		
Antimony, total	ug/L	MW-98	10/25/2022	ND	2.0000		
Antimony, total	ug/L	MW-98	04/11/2023	ND	2.0000		
Antimony, total	ug/L	MW-98	10/13/2023	ND	2.0000		
Antimony, total	ug/L	MW-98	04/17/2024	ND	2.0000		
Arsenic, total	ug/L	MW-98	10/13/2016		7.4000		
Arsenic, total	ug/L	MW-98	04/10/2017		25.3000		*
Arsenic, total	ug/L	MW-98	10/09/2017	ND	4.0000		
Arsenic, total	ug/L	MW-98	04/17/2018		7.8000		
Arsenic, total	ug/L	MW-98	10/22/2018	ND	4.0000		
Arsenic, total	ug/L	MW-98	04/22/2019	ND	4.0000		
Arsenic, total	ug/L	MW-98	10/23/2019		4.8000		
Arsenic, total	ug/L	MW-98	04/10/2020	ND	4.0000		
Arsenic, total	ug/L	MW-98	10/19/2020	ND	4.0000		
Arsenic, total	ug/L	MW-98	04/05/2021	ND	4.0000		
Arsenic, total	ug/L	MW-98	10/08/2021	ND	4.0000		
Arsenic, total	ug/L	MW-98	04/06/2022	ND	4.0000		
Arsenic, total	ug/L	MW-98	10/25/2022	ND	4.0000		
Arsenic, total	ug/L	MW-98	04/11/2023		6.4000		
Arsenic, total	ug/L	MW-98	10/13/2023		6.3000		
Arsenic, total	ug/L	MW-98	04/17/2024		48.0000		*
Barium, total	ug/L	MW-98	10/13/2016		171.0000		
Barium, total	ug/L	MW-98	04/10/2017		241.0000		
Barium, total	ug/L	MW-98	10/09/2017		129.0000		
Barium, total	ug/L	MW-98	04/17/2018		193.0000		
Barium, total	ug/L	MW-98	10/22/2018		102.0000		
Barium, total	ug/L	MW-98	04/22/2019		133.0000		
Barium, total	ug/L	MW-98	10/23/2019		94.4000		
Barium, total	ug/L	MW-98	04/10/2020		157.0000		
Barium, total	ug/L	MW-98	10/19/2020		147.0000		
Barium, total	ug/L	MW-98	04/05/2021		125.0000		
Barium, total	ug/L	MW-98	10/08/2021		149.0000		
Barium, total	ug/L	MW-98	04/06/2022		117.0000		
Barium, total	ug/L	MW-98	10/25/2022		183.0000		
Barium, total	ug/L	MW-98	04/11/2023		136.0000		
Barium, total	ug/L	MW-98	10/13/2023		217.0000		
Barium, total	ug/L	MW-98	04/17/2024		325.0000		
Beryllium, total	ug/L	MW-98	10/13/2016	ND	4.0000		
Beryllium, total	ug/L	MW-98	04/10/2017	ND	4.0000		
Beryllium, total	ug/L	MW-98	10/09/2017	ND	4.0000		
Beryllium, total	ug/L	MW-98	04/17/2018	ND	4.0000		
Beryllium, total	ug/L	MW-98	10/22/2018	ND	4.0000		
Beryllium, total	ug/L	MW-98	04/22/2019	ND	4.0000		
Beryllium, total	ug/L	MW-98	10/23/2019	ND	4.0000		
Beryllium, total	ug/L	MW-98	04/10/2020	ND	4.0000		
Beryllium, total	ug/L	MW-98	10/19/2020	ND	4.0000		
Beryllium, total	ug/L	MW-98	04/05/2021	ND	4.0000		
Beryllium, total	ug/L	MW-98	10/08/2021	ND	4.0000		
Beryllium, total	ug/L	MW-98	04/06/2022	ND	4.0000		
Beryllium, total	ug/L	MW-98	10/25/2022	ND	4.0000		
Beryllium, total	ug/L	MW-98	04/11/2023	ND	4.0000		
Beryllium, total	ug/L	MW-98	10/13/2023	ND	4.0000		
Beryllium, total	ug/L	MW-98	04/17/2024	ND	4.0000		
Cadmium, total	ug/L	MW-98	10/13/2016	ND	0.8000		
Cadmium, total	ug/L	MW-98	04/10/2017	ND	0.8000		
Cadmium, total	ug/L	MW-98	10/09/2017	ND	0.8000		
Cadmium, total	ug/L	MW-98	04/17/2018	ND	0.8000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Cadmium, total	ug/L	MW-98	10/22/2018	ND	0.8000		
Cadmium, total	ug/L	MW-98	04/22/2019	ND	0.8000		
Cadmium, total	ug/L	MW-98	10/23/2019	ND	0.8000		
Cadmium, total	ug/L	MW-98	04/10/2020	ND	0.8000		
Cadmium, total	ug/L	MW-98	10/19/2020	ND	0.8000		
Cadmium, total	ug/L	MW-98	04/05/2021	ND	0.8000		
Cadmium, total	ug/L	MW-98	10/08/2021	ND	0.8000		
Cadmium, total	ug/L	MW-98	04/06/2022	ND	0.8000		
Cadmium, total	ug/L	MW-98	10/25/2022	ND	0.8000		
Cadmium, total	ug/L	MW-98	04/11/2023	ND	0.8000		
Cadmium, total	ug/L	MW-98	10/13/2023	ND	0.8000		
Cadmium, total	ug/L	MW-98	04/17/2024	ND	0.8000		
Chromium, total	ug/L	MW-98	10/13/2016	ND	8.0000		
Chromium, total	ug/L	MW-98	04/10/2017		9.8000		
Chromium, total	ug/L	MW-98	10/09/2017	ND	8.0000		
Chromium, total	ug/L	MW-98	04/17/2018	ND	8.0000		
Chromium, total	ug/L	MW-98	10/22/2018	ND	8.0000		
Chromium, total	ug/L	MW-98	04/22/2019	ND	8.0000		
Chromium, total	ug/L	MW-98	10/23/2019	ND	8.0000		
Chromium, total	ug/L	MW-98	04/10/2020	ND	8.0000		
Chromium, total	ug/L	MW-98	10/19/2020	ND	8.0000		
Chromium, total	ug/L	MW-98	04/05/2021	ND	8.0000		
Chromium, total	ug/L	MW-98	10/08/2021	ND	8.0000		
Chromium, total	ug/L	MW-98	04/06/2022	ND	8.0000		
Chromium, total	ug/L	MW-98	10/25/2022	ND	8.0000		
Chromium, total	ug/L	MW-98	04/11/2023	ND	8.0000		
Chromium, total	ug/L	MW-98	10/13/2023	ND	8.0000		
Chromium, total	ug/L	MW-98	04/17/2024	ND	8.0000		
Cobalt, total	ug/L	MW-98	10/13/2016		3.0000		
Cobalt, total	ug/L	MW-98	04/10/2017		4.4000		
Cobalt, total	ug/L	MW-98	10/09/2017		0.8000		
Cobalt, total	ug/L	MW-98	04/17/2018		5.0000		
Cobalt, total	ug/L	MW-98	10/22/2018	ND	0.8000		
Cobalt, total	ug/L	MW-98	04/22/2019		1.3000		
Cobalt, total	ug/L	MW-98	10/23/2019		2.4000		
Cobalt, total	ug/L	MW-98	04/10/2020		2.0000		
Cobalt, total	ug/L	MW-98	10/19/2020		2.2000		
Cobalt, total	ug/L	MW-98	04/05/2021		0.6000		
Cobalt, total	ug/L	MW-98	10/08/2021		2.2000		
Cobalt, total	ug/L	MW-98	04/06/2022		0.7000		
Cobalt, total	ug/L	MW-98	10/25/2022		3.6000		
Cobalt, total	ug/L	MW-98	04/11/2023		2.1000		
Cobalt, total	ug/L	MW-98	10/13/2023		5.5000		
Cobalt, total	ug/L	MW-98	04/17/2024		4.7000		
Copper, total	ug/L	MW-98	10/13/2016	ND	4.0000		
Copper, total	ug/L	MW-98	04/10/2017	ND	4.0000		
Copper, total	ug/L	MW-98	10/09/2017	ND	4.0000		
Copper, total	ug/L	MW-98	04/17/2018	ND	4.0000		
Copper, total	ug/L	MW-98	10/22/2018	ND	4.0000		
Copper, total	ug/L	MW-98	04/22/2019	ND	4.0000		
Copper, total	ug/L	MW-98	10/23/2019	ND	4.0000		
Copper, total	ug/L	MW-98	04/10/2020	ND	4.0000		
Copper, total	ug/L	MW-98	10/19/2020	ND	4.0000		
Copper, total	ug/L	MW-98	04/05/2021		4.1000		
Copper, total	ug/L	MW-98	10/08/2021	ND	4.0000		
Copper, total	ug/L	MW-98	04/06/2022	ND	4.0000		
Copper, total	ug/L	MW-98	10/25/2022	ND	4.0000		
Copper, total	ug/L	MW-98	04/11/2023	ND	4.0000		
Copper, total	ug/L	MW-98	10/13/2023	ND	4.0000		
Copper, total	ug/L	MW-98	04/17/2024	ND	4.0000		
Lead, total	ug/L	MW-98	10/13/2016	ND	4.0000		
Lead, total	ug/L	MW-98	04/10/2017	ND	4.0000		
Lead, total	ug/L	MW-98	10/09/2017	ND	4.0000		
Lead, total	ug/L	MW-98	04/17/2018	ND	4.0000		
Lead, total	ug/L	MW-98	10/22/2018	ND	4.0000		
Lead, total	ug/L	MW-98	04/22/2019	ND	4.0000		
Lead, total	ug/L	MW-98	10/23/2019	ND	4.0000		
Lead, total	ug/L	MW-98	04/10/2020	ND	4.0000		
Lead, total	ug/L	MW-98	10/19/2020	ND	4.0000		
Lead, total	ug/L	MW-98	04/05/2021	ND	4.0000		
Lead, total	ug/L	MW-98	10/08/2021	ND	4.0000		
Lead, total	ug/L	MW-98	04/06/2022	ND	4.0000		
Lead, total	ug/L	MW-98	10/25/2022	ND	4.0000		
Lead, total	ug/L	MW-98	04/11/2023	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	
Lead, total	ug/L	MW-98	10/13/2023	ND	4.0000		
Lead, total	ug/L	MW-98	04/17/2024	ND	4.0000		
Nickel, total	ug/L	MW-98	10/13/2016	ND	4.0000		
Nickel, total	ug/L	MW-98	04/10/2017	ND	4.0000		
Nickel, total	ug/L	MW-98	10/09/2017	ND	4.0000		
Nickel, total	ug/L	MW-98	04/17/2018	ND	4.0000		
Nickel, total	ug/L	MW-98	10/22/2018	ND	4.0000		
Nickel, total	ug/L	MW-98	04/22/2019	ND	4.0000		
Nickel, total	ug/L	MW-98	10/23/2019	ND	4.0000		
Nickel, total	ug/L	MW-98	04/10/2020	ND	4.0000		
Nickel, total	ug/L	MW-98	10/19/2020	ND	4.0000		
Nickel, total	ug/L	MW-98	04/05/2021	ND	4.0000		
Nickel, total	ug/L	MW-98	10/08/2021	ND	4.0000		
Nickel, total	ug/L	MW-98	04/06/2022	ND	4.0000		
Nickel, total	ug/L	MW-98	10/25/2022	ND	4.0000		
Nickel, total	ug/L	MW-98	04/11/2023	ND	4.0000		
Nickel, total	ug/L	MW-98	10/13/2023	ND	4.0000		
Nickel, total	ug/L	MW-98	04/17/2024	ND	4.0000		
Selenium, total	ug/L	MW-98	10/13/2016	ND	4.0000		
Selenium, total	ug/L	MW-98	04/10/2017	ND	4.0000		
Selenium, total	ug/L	MW-98	10/09/2017	ND	4.0000		
Selenium, total	ug/L	MW-98	04/17/2018	ND	4.0000		
Selenium, total	ug/L	MW-98	10/22/2018	ND	4.0000		
Selenium, total	ug/L	MW-98	04/22/2019	ND	4.0000		
Selenium, total	ug/L	MW-98	10/23/2019	ND	4.0000		
Selenium, total	ug/L	MW-98	04/10/2020	ND	4.0000		
Selenium, total	ug/L	MW-98	10/19/2020	ND	4.0000		
Selenium, total	ug/L	MW-98	04/05/2021	ND	4.0000		
Selenium, total	ug/L	MW-98	10/08/2021	ND	4.0000		
Selenium, total	ug/L	MW-98	04/06/2022	ND	4.0000		
Selenium, total	ug/L	MW-98	10/25/2022	ND	4.0000		
Selenium, total	ug/L	MW-98	04/11/2023	ND	4.0000		
Selenium, total	ug/L	MW-98	10/13/2023	ND	4.0000		
Selenium, total	ug/L	MW-98	04/17/2024	ND	4.0000		
Silver, total	ug/L	MW-98	10/13/2016	ND	4.0000		
Silver, total	ug/L	MW-98	04/10/2017	ND	4.0000		
Silver, total	ug/L	MW-98	10/09/2017	ND	4.0000		
Silver, total	ug/L	MW-98	04/17/2018	ND	4.0000		
Silver, total	ug/L	MW-98	10/22/2018	ND	4.0000		
Silver, total	ug/L	MW-98	04/22/2019	ND	4.0000		
Silver, total	ug/L	MW-98	10/23/2019	ND	4.0000		
Silver, total	ug/L	MW-98	04/10/2020	ND	4.0000		
Silver, total	ug/L	MW-98	10/19/2020	ND	4.0000		
Silver, total	ug/L	MW-98	04/05/2021	ND	4.0000		
Silver, total	ug/L	MW-98	10/08/2021	ND	4.0000		
Silver, total	ug/L	MW-98	04/06/2022	ND	4.0000		
Silver, total	ug/L	MW-98	10/25/2022	ND	4.0000		
Silver, total	ug/L	MW-98	04/11/2023	ND	4.0000		
Silver, total	ug/L	MW-98	10/13/2023	ND	4.0000		
Silver, total	ug/L	MW-98	04/17/2024	ND	4.0000		
Thallium, total	ug/L	MW-98	10/13/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-98	04/10/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-98	10/09/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-98	04/17/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-98	10/22/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-98	04/22/2019	ND	2.0000		
Thallium, total	ug/L	MW-98	10/23/2019	ND	2.0000		
Thallium, total	ug/L	MW-98	04/10/2020	ND	2.0000		
Thallium, total	ug/L	MW-98	10/19/2020	ND	2.0000		
Thallium, total	ug/L	MW-98	04/05/2021	ND	2.0000		
Thallium, total	ug/L	MW-98	10/08/2021	ND	2.0000		
Thallium, total	ug/L	MW-98	04/06/2022	ND	2.0000		
Thallium, total	ug/L	MW-98	10/25/2022	ND	2.0000		
Thallium, total	ug/L	MW-98	04/11/2023	ND	2.0000		
Thallium, total	ug/L	MW-98	10/13/2023	ND	2.0000		
Thallium, total	ug/L	MW-98	04/17/2024	ND	2.0000		
Vanadium, total	ug/L	MW-98	10/13/2016	ND	20.0000		
Vanadium, total	ug/L	MW-98	04/10/2017	ND	20.0000		
Vanadium, total	ug/L	MW-98	10/09/2017	ND	20.0000		
Vanadium, total	ug/L	MW-98	04/17/2018	ND	20.0000		
Vanadium, total	ug/L	MW-98	10/22/2018	ND	20.0000		
Vanadium, total	ug/L	MW-98	04/22/2019	ND	20.0000		
Vanadium, total	ug/L	MW-98	10/23/2019	ND	20.0000		
Vanadium, total	ug/L	MW-98	04/10/2020	ND	20.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Vanadium, total	ug/L	MW-98	10/19/2020	ND	20.0000		
Vanadium, total	ug/L	MW-98	04/05/2021	ND	20.0000		
Vanadium, total	ug/L	MW-98	10/08/2021	ND	20.0000		
Vanadium, total	ug/L	MW-98	04/06/2022	ND	20.0000		
Vanadium, total	ug/L	MW-98	10/25/2022	ND	20.0000		
Vanadium, total	ug/L	MW-98	04/11/2023	ND	20.0000		
Vanadium, total	ug/L	MW-98	10/13/2023	ND	20.0000		
Vanadium, total	ug/L	MW-98	04/17/2024	ND	20.0000		
Zinc, total	ug/L	MW-98	10/13/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-98	04/10/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-98	10/09/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-98	04/17/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-98	10/22/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-98	04/22/2019	ND	20.0000		
Zinc, total	ug/L	MW-98	10/23/2019	ND	20.0000		
Zinc, total	ug/L	MW-98	04/10/2020	ND	20.0000		
Zinc, total	ug/L	MW-98	10/19/2020	ND	20.0000		
Zinc, total	ug/L	MW-98	04/05/2021	ND	20.0000		
Zinc, total	ug/L	MW-98	10/08/2021	ND	20.0000		
Zinc, total	ug/L	MW-98	04/06/2022	ND	20.0000		
Zinc, total	ug/L	MW-98	10/25/2022	ND	20.0000		
Zinc, total	ug/L	MW-98	04/11/2023	ND	20.0000		
Zinc, total	ug/L	MW-98	10/13/2023	ND	20.0000		
Zinc, total	ug/L	MW-98	04/17/2024	ND	20.0000		
Antimony, total	ug/L	MW-99	10/13/2016	ND	2.0000		
Antimony, total	ug/L	MW-99	04/10/2017	ND	2.0000		
Antimony, total	ug/L	MW-99	10/09/2017	ND	2.0000		
Antimony, total	ug/L	MW-99	04/17/2018	ND	2.0000		
Antimony, total	ug/L	MW-99	10/22/2018	ND	2.0000		
Antimony, total	ug/L	MW-99	04/22/2019	ND	2.0000		
Antimony, total	ug/L	MW-99	10/23/2019	ND	2.0000		
Antimony, total	ug/L	MW-99	04/10/2020	ND	2.0000		
Antimony, total	ug/L	MW-99	10/19/2020	ND	2.0000		
Antimony, total	ug/L	MW-99	04/05/2021	ND	2.0000		
Antimony, total	ug/L	MW-99	10/08/2021	ND	2.0000		
Antimony, total	ug/L	MW-99	04/06/2022	ND	2.0000		
Antimony, total	ug/L	MW-99	10/25/2022	ND	2.0000		
Antimony, total	ug/L	MW-99	04/11/2023	ND	2.0000		
Antimony, total	ug/L	MW-99	10/13/2023	ND	2.0000		
Antimony, total	ug/L	MW-99	04/18/2024	ND	2.0000		
Arsenic, total	ug/L	MW-99	10/13/2016	ND	4.0000		
Arsenic, total	ug/L	MW-99	04/10/2017	ND	4.0000		
Arsenic, total	ug/L	MW-99	10/09/2017	ND	4.0000		
Arsenic, total	ug/L	MW-99	04/17/2018	ND	4.0000		
Arsenic, total	ug/L	MW-99	10/22/2018	ND	4.0000		
Arsenic, total	ug/L	MW-99	04/22/2019	ND	4.0000		
Arsenic, total	ug/L	MW-99	10/23/2019	ND	4.0000		
Arsenic, total	ug/L	MW-99	04/10/2020	ND	4.0000		
Arsenic, total	ug/L	MW-99	10/19/2020	ND	4.0000		
Arsenic, total	ug/L	MW-99	04/05/2021	ND	4.0000		
Arsenic, total	ug/L	MW-99	10/08/2021	ND	4.0000		
Arsenic, total	ug/L	MW-99	04/06/2022	ND	4.0000		
Arsenic, total	ug/L	MW-99	10/25/2022	ND	4.0000		
Arsenic, total	ug/L	MW-99	04/11/2023	ND	4.0000		
Arsenic, total	ug/L	MW-99	10/13/2023	ND	4.0000		
Arsenic, total	ug/L	MW-99	04/18/2024	ND	4.0000		
Barium, total	ug/L	MW-99	10/13/2016		131.0000		
Barium, total	ug/L	MW-99	04/10/2017		109.0000		
Barium, total	ug/L	MW-99	10/09/2017		140.0000		
Barium, total	ug/L	MW-99	04/17/2018		93.9000		
Barium, total	ug/L	MW-99	10/22/2018		81.0000		
Barium, total	ug/L	MW-99	04/22/2019		110.0000		
Barium, total	ug/L	MW-99	10/23/2019		123.0000		
Barium, total	ug/L	MW-99	04/10/2020		124.0000		
Barium, total	ug/L	MW-99	10/19/2020		118.0000		
Barium, total	ug/L	MW-99	04/05/2021		117.0000		
Barium, total	ug/L	MW-99	10/08/2021		130.0000		
Barium, total	ug/L	MW-99	04/06/2022		110.0000		
Barium, total	ug/L	MW-99	10/25/2022		134.0000		
Barium, total	ug/L	MW-99	04/11/2023		89.4000		
Barium, total	ug/L	MW-99	10/13/2023		134.0000		
Barium, total	ug/L	MW-99	04/18/2024		164.0000		
Beryllium, total	ug/L	MW-99	10/13/2016	ND	4.0000		
Beryllium, total	ug/L	MW-99	04/10/2017	ND	4.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Beryllium, total	ug/L	MW-99	10/09/2017	ND	4.0000		
Beryllium, total	ug/L	MW-99	04/17/2018	ND	4.0000		
Beryllium, total	ug/L	MW-99	10/22/2018	ND	4.0000		
Beryllium, total	ug/L	MW-99	04/22/2019	ND	4.0000		
Beryllium, total	ug/L	MW-99	10/23/2019	ND	4.0000		
Beryllium, total	ug/L	MW-99	04/10/2020	ND	4.0000		
Beryllium, total	ug/L	MW-99	10/19/2020	ND	4.0000		
Beryllium, total	ug/L	MW-99	04/05/2021	ND	4.0000		
Beryllium, total	ug/L	MW-99	10/08/2021	ND	4.0000		
Beryllium, total	ug/L	MW-99	04/06/2022	ND	4.0000		
Beryllium, total	ug/L	MW-99	10/25/2022	ND	4.0000		
Beryllium, total	ug/L	MW-99	04/11/2023	ND	4.0000		
Beryllium, total	ug/L	MW-99	10/13/2023	ND	4.0000		
Beryllium, total	ug/L	MW-99	04/18/2024	ND	4.0000		
Cadmium, total	ug/L	MW-99	10/13/2016	ND	0.8000		
Cadmium, total	ug/L	MW-99	04/10/2017	ND	0.8000		
Cadmium, total	ug/L	MW-99	10/09/2017	ND	0.8000		
Cadmium, total	ug/L	MW-99	04/17/2018	ND	0.8000		
Cadmium, total	ug/L	MW-99	10/22/2018	ND	0.8000		
Cadmium, total	ug/L	MW-99	04/22/2019	ND	0.8000		
Cadmium, total	ug/L	MW-99	10/23/2019	ND	0.8000		
Cadmium, total	ug/L	MW-99	04/10/2020	ND	0.8000		
Cadmium, total	ug/L	MW-99	10/19/2020	ND	0.8000		
Cadmium, total	ug/L	MW-99	04/05/2021	ND	0.8000		
Cadmium, total	ug/L	MW-99	10/08/2021	ND	0.8000		
Cadmium, total	ug/L	MW-99	04/06/2022	ND	0.8000		
Cadmium, total	ug/L	MW-99	10/25/2022	ND	0.8000		
Cadmium, total	ug/L	MW-99	04/11/2023	ND	0.8000		
Cadmium, total	ug/L	MW-99	10/13/2023	ND	0.8000		
Cadmium, total	ug/L	MW-99	04/18/2024	ND	0.8000		
Chromium, total	ug/L	MW-99	10/13/2016	ND	8.0000		
Chromium, total	ug/L	MW-99	04/10/2017		23.4000		
Chromium, total	ug/L	MW-99	10/09/2017	ND	8.0000		
Chromium, total	ug/L	MW-99	04/17/2018	ND	8.0000		
Chromium, total	ug/L	MW-99	10/22/2018	ND	8.0000		
Chromium, total	ug/L	MW-99	04/22/2019	ND	8.0000		
Chromium, total	ug/L	MW-99	10/23/2019	ND	8.0000		
Chromium, total	ug/L	MW-99	04/10/2020	ND	8.0000		
Chromium, total	ug/L	MW-99	10/19/2020	ND	8.0000		
Chromium, total	ug/L	MW-99	04/05/2021	ND	8.0000		
Chromium, total	ug/L	MW-99	10/08/2021	ND	8.0000		
Chromium, total	ug/L	MW-99	04/06/2022	ND	8.0000		
Chromium, total	ug/L	MW-99	10/25/2022	ND	8.0000		
Chromium, total	ug/L	MW-99	04/11/2023	ND	8.0000		
Chromium, total	ug/L	MW-99	10/13/2023	ND	8.0000		
Chromium, total	ug/L	MW-99	04/18/2024	ND	8.0000		
Cobalt, total	ug/L	MW-99	10/13/2016		5.2000		
Cobalt, total	ug/L	MW-99	04/10/2017		3.4000		
Cobalt, total	ug/L	MW-99	10/09/2017		6.0000		
Cobalt, total	ug/L	MW-99	04/17/2018		2.5000		
Cobalt, total	ug/L	MW-99	10/22/2018		0.8000		*
Cobalt, total	ug/L	MW-99	04/22/2019		3.1000		
Cobalt, total	ug/L	MW-99	10/23/2019		2.7000		
Cobalt, total	ug/L	MW-99	04/10/2020		4.1000		
Cobalt, total	ug/L	MW-99	10/19/2020		3.8000		
Cobalt, total	ug/L	MW-99	04/05/2021		3.2000		
Cobalt, total	ug/L	MW-99	10/08/2021		4.0000		
Cobalt, total	ug/L	MW-99	04/06/2022		3.5000		
Cobalt, total	ug/L	MW-99	10/25/2022		3.6000		
Cobalt, total	ug/L	MW-99	04/11/2023		2.2000		
Cobalt, total	ug/L	MW-99	10/13/2023		3.3000		
Cobalt, total	ug/L	MW-99	04/18/2024		4.1000		
Copper, total	ug/L	MW-99	10/13/2016	ND	4.0000		
Copper, total	ug/L	MW-99	04/10/2017	ND	4.0000		
Copper, total	ug/L	MW-99	10/09/2017	ND	4.0000		
Copper, total	ug/L	MW-99	04/17/2018	ND	4.0000		
Copper, total	ug/L	MW-99	10/22/2018	ND	4.0000		
Copper, total	ug/L	MW-99	04/22/2019	ND	4.0000		
Copper, total	ug/L	MW-99	10/23/2019	ND	4.0000		
Copper, total	ug/L	MW-99	04/10/2020	ND	4.0000		
Copper, total	ug/L	MW-99	10/19/2020	ND	4.0000		
Copper, total	ug/L	MW-99	04/05/2021		5.3000		
Copper, total	ug/L	MW-99	10/08/2021	ND	4.0000		
Copper, total	ug/L	MW-99	04/06/2022	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-99	10/25/2022	ND	4.0000		
Copper, total	ug/L	MW-99	04/11/2023	ND	4.0000		
Copper, total	ug/L	MW-99	10/13/2023	ND	4.0000		
Copper, total	ug/L	MW-99	04/18/2024	ND	4.0000		
Lead, total	ug/L	MW-99	10/13/2016	ND	4.0000		
Lead, total	ug/L	MW-99	04/10/2017	ND	4.0000		
Lead, total	ug/L	MW-99	10/09/2017	ND	4.0000		
Lead, total	ug/L	MW-99	04/17/2018	ND	4.0000		
Lead, total	ug/L	MW-99	10/22/2018	ND	4.0000		
Lead, total	ug/L	MW-99	04/22/2019	ND	4.0000		
Lead, total	ug/L	MW-99	10/23/2019	ND	4.0000		
Lead, total	ug/L	MW-99	04/10/2020	ND	4.0000		
Lead, total	ug/L	MW-99	10/19/2020	ND	4.0000		
Lead, total	ug/L	MW-99	04/05/2021	ND	4.0000		
Lead, total	ug/L	MW-99	10/08/2021	ND	4.0000		
Lead, total	ug/L	MW-99	04/06/2022	ND	4.0000		
Lead, total	ug/L	MW-99	10/25/2022	ND	4.0000		
Lead, total	ug/L	MW-99	04/11/2023	ND	4.0000		
Lead, total	ug/L	MW-99	10/13/2023	ND	4.0000		
Lead, total	ug/L	MW-99	04/18/2024	ND	4.0000		
Nickel, total	ug/L	MW-99	10/13/2016		5.6000		
Nickel, total	ug/L	MW-99	04/10/2017		5.1000		
Nickel, total	ug/L	MW-99	10/09/2017		8.8000		
Nickel, total	ug/L	MW-99	04/17/2018		4.3000		
Nickel, total	ug/L	MW-99	10/22/2018	ND	4.0000		
Nickel, total	ug/L	MW-99	04/22/2019		5.1000		
Nickel, total	ug/L	MW-99	10/23/2019		7.1000		
Nickel, total	ug/L	MW-99	04/10/2020		6.5000		
Nickel, total	ug/L	MW-99	10/19/2020		6.9000		
Nickel, total	ug/L	MW-99	04/05/2021		5.1000		
Nickel, total	ug/L	MW-99	10/08/2021		5.5000		
Nickel, total	ug/L	MW-99	04/06/2022		5.3000		
Nickel, total	ug/L	MW-99	10/25/2022		6.2000		
Nickel, total	ug/L	MW-99	04/11/2023	ND	4.0000		
Nickel, total	ug/L	MW-99	10/13/2023		5.3000		
Nickel, total	ug/L	MW-99	04/18/2024		6.3000		
Selenium, total	ug/L	MW-99	10/13/2016	ND	4.0000		
Selenium, total	ug/L	MW-99	04/10/2017	ND	4.0000		
Selenium, total	ug/L	MW-99	10/09/2017	ND	4.0000		
Selenium, total	ug/L	MW-99	04/17/2018	ND	4.0000		
Selenium, total	ug/L	MW-99	10/22/2018	ND	4.0000		
Selenium, total	ug/L	MW-99	04/22/2019	ND	4.0000		
Selenium, total	ug/L	MW-99	10/23/2019	ND	4.0000		
Selenium, total	ug/L	MW-99	04/10/2020	ND	4.0000		
Selenium, total	ug/L	MW-99	10/19/2020	ND	4.0000		
Selenium, total	ug/L	MW-99	04/05/2021	ND	4.0000		
Selenium, total	ug/L	MW-99	10/08/2021	ND	4.0000		
Selenium, total	ug/L	MW-99	04/06/2022	ND	4.0000		
Selenium, total	ug/L	MW-99	10/25/2022	ND	4.0000		
Selenium, total	ug/L	MW-99	04/11/2023	ND	4.0000		
Selenium, total	ug/L	MW-99	10/13/2023	ND	4.0000		
Selenium, total	ug/L	MW-99	04/18/2024	ND	4.0000		
Silver, total	ug/L	MW-99	10/13/2016	ND	4.0000		
Silver, total	ug/L	MW-99	04/10/2017	ND	4.0000		
Silver, total	ug/L	MW-99	10/09/2017	ND	4.0000		
Silver, total	ug/L	MW-99	04/17/2018	ND	4.0000		
Silver, total	ug/L	MW-99	10/22/2018	ND	4.0000		
Silver, total	ug/L	MW-99	04/22/2019	ND	4.0000		
Silver, total	ug/L	MW-99	10/23/2019	ND	4.0000		
Silver, total	ug/L	MW-99	04/10/2020	ND	4.0000		
Silver, total	ug/L	MW-99	10/19/2020	ND	4.0000		
Silver, total	ug/L	MW-99	04/05/2021	ND	4.0000		
Silver, total	ug/L	MW-99	10/08/2021	ND	4.0000		
Silver, total	ug/L	MW-99	04/06/2022	ND	4.0000		
Silver, total	ug/L	MW-99	10/25/2022	ND	4.0000		
Silver, total	ug/L	MW-99	04/11/2023	ND	4.0000		
Silver, total	ug/L	MW-99	10/13/2023	ND	4.0000		
Silver, total	ug/L	MW-99	04/18/2024	ND	4.0000		
Thallium, total	ug/L	MW-99	10/13/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-99	04/10/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-99	10/09/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-99	04/17/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-99	10/22/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-99	04/22/2019	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	
Thallium, total	ug/L	MW-99	10/23/2019	ND	2.0000		
Thallium, total	ug/L	MW-99	04/10/2020	ND	2.0000		
Thallium, total	ug/L	MW-99	10/19/2020	ND	2.0000		
Thallium, total	ug/L	MW-99	04/05/2021	ND	2.0000		
Thallium, total	ug/L	MW-99	10/08/2021	ND	2.0000		
Thallium, total	ug/L	MW-99	04/06/2022	ND	2.0000		
Thallium, total	ug/L	MW-99	10/25/2022	ND	2.0000		
Thallium, total	ug/L	MW-99	04/11/2023	ND	2.0000		
Thallium, total	ug/L	MW-99	10/13/2023	ND	2.0000		
Thallium, total	ug/L	MW-99	04/18/2024	ND	2.0000		
Vanadium, total	ug/L	MW-99	10/13/2016	ND	20.0000		
Vanadium, total	ug/L	MW-99	04/10/2017	ND	20.0000		
Vanadium, total	ug/L	MW-99	10/09/2017	ND	20.0000		
Vanadium, total	ug/L	MW-99	04/17/2018	ND	20.0000		
Vanadium, total	ug/L	MW-99	10/22/2018	ND	20.0000		
Vanadium, total	ug/L	MW-99	04/22/2019	ND	20.0000		
Vanadium, total	ug/L	MW-99	10/23/2019	ND	20.0000		
Vanadium, total	ug/L	MW-99	04/10/2020	ND	20.0000		
Vanadium, total	ug/L	MW-99	10/19/2020	ND	20.0000		
Vanadium, total	ug/L	MW-99	04/05/2021	ND	20.0000		
Vanadium, total	ug/L	MW-99	10/08/2021	ND	20.0000		
Vanadium, total	ug/L	MW-99	04/06/2022	ND	20.0000		
Vanadium, total	ug/L	MW-99	10/25/2022	ND	20.0000		
Vanadium, total	ug/L	MW-99	04/11/2023	ND	20.0000		
Vanadium, total	ug/L	MW-99	10/13/2023	ND	20.0000		
Vanadium, total	ug/L	MW-99	04/18/2024	ND	20.0000		
Zinc, total	ug/L	MW-99	10/13/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-99	04/10/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-99	10/09/2017		11.2000		
Zinc, total	ug/L	MW-99	04/17/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-99	10/22/2018		23.6000		
Zinc, total	ug/L	MW-99	04/22/2019		27.8000		
Zinc, total	ug/L	MW-99	10/23/2019		20.8000		
Zinc, total	ug/L	MW-99	04/10/2020	ND	20.0000		
Zinc, total	ug/L	MW-99	10/19/2020	ND	20.0000		
Zinc, total	ug/L	MW-99	04/05/2021	ND	20.0000		
Zinc, total	ug/L	MW-99	10/08/2021	ND	20.0000		
Zinc, total	ug/L	MW-99	04/06/2022	ND	20.0000		
Zinc, total	ug/L	MW-99	10/25/2022	ND	20.0000		
Zinc, total	ug/L	MW-99	04/11/2023	ND	20.0000		
Zinc, total	ug/L	MW-99	10/13/2023	ND	20.0000		
Zinc, total	ug/L	MW-99	04/18/2024	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-87	04/16/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-87	04/16/2024	ND	4.0000		7.8000
Barium, total	ug/L	MW-87	04/16/2024		117.0000		460.7031
Beryllium, total	ug/L	MW-87	04/16/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-87	04/16/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-87	04/16/2024	ND	8.0000		23.4000
Cobalt, total	ug/L	MW-87	04/16/2024	ND	0.4000		6.0584
Copper, total	ug/L	MW-87	04/16/2024	ND	4.0000		5.3000
Lead, total	ug/L	MW-87	04/16/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-87	04/16/2024	ND	4.0000		8.8000
Selenium, total	ug/L	MW-87	04/16/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-87	04/16/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-87	04/16/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-87	04/16/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-87	04/16/2024	ND	20.0000		54.6000
Antimony, total	ug/L	MW-89	04/16/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-89	04/16/2024	ND	4.0000		7.8000
Barium, total	ug/L	MW-89	04/16/2024		240.0000		460.7031
Beryllium, total	ug/L	MW-89	04/16/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-89	04/16/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-89	04/16/2024	ND	8.0000		23.4000
Cobalt, total	ug/L	MW-89	04/16/2024	ND	0.4000		6.0584
Copper, total	ug/L	MW-89	04/16/2024	ND	4.0000		5.3000
Lead, total	ug/L	MW-89	04/16/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-89	04/16/2024	ND	4.0000		8.8000
Selenium, total	ug/L	MW-89	04/16/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-89	04/16/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-89	04/16/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-89	04/16/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-89	04/16/2024	ND	20.0000		54.6000
Antimony, total	ug/L	MW-91	04/16/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-91	04/16/2024	ND	4.0000		7.8000
Barium, total	ug/L	MW-91	04/16/2024		186.0000		460.7031
Beryllium, total	ug/L	MW-91	04/16/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-91	04/16/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-91	04/16/2024	ND	8.0000		23.4000
Cobalt, total	ug/L	MW-91	04/16/2024	ND	0.4000		6.0584
Copper, total	ug/L	MW-91	04/16/2024	ND	4.0000		5.3000
Lead, total	ug/L	MW-91	04/16/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-91	04/16/2024	ND	4.0000		8.8000
Selenium, total	ug/L	MW-91	04/16/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-91	04/16/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-91	04/16/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-91	04/16/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-91	04/16/2024	ND	20.0000		54.6000
Antimony, total	ug/L	MW-93	04/16/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-93	04/16/2024		11.9000	***	7.8000
Barium, total	ug/L	MW-93	04/16/2024		243.0000		460.7031
Beryllium, total	ug/L	MW-93	04/16/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-93	04/16/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-93	04/16/2024	ND	8.0000		23.4000
Cobalt, total	ug/L	MW-93	04/16/2024		9.8000	***	6.0584
Copper, total	ug/L	MW-93	04/16/2024	ND	4.0000		5.3000
Lead, total	ug/L	MW-93	04/16/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-93	04/16/2024		25.5000	***	8.8000
Selenium, total	ug/L	MW-93	04/16/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-93	04/16/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-93	04/16/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-93	04/16/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-93	04/16/2024		21.4000		54.6000
Antimony, total	ug/L	MW-95	04/17/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-95	04/17/2024	ND	4.0000		7.8000
Barium, total	ug/L	MW-95	04/17/2024		42.7000		460.7031
Beryllium, total	ug/L	MW-95	04/17/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-95	04/17/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-95	04/17/2024	ND	8.0000		23.4000
Cobalt, total	ug/L	MW-95	04/17/2024	ND	0.4000		6.0584
Copper, total	ug/L	MW-95	04/17/2024	ND	4.0000		5.3000
Lead, total	ug/L	MW-95	04/17/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-95	04/17/2024	ND	4.0000		8.8000
Selenium, total	ug/L	MW-95	04/17/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-95	04/17/2024	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-95	04/17/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-95	04/17/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-95	04/17/2024	ND	20.0000		54.6000
Antimony, total	ug/L	MW-97	04/17/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-97	04/17/2024	ND	4.0000		7.8000
Barium, total	ug/L	MW-97	04/17/2024		315.0000		460.7031
Beryllium, total	ug/L	MW-97	04/17/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-97	04/17/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-97	04/17/2024	ND	8.0000		23.4000
Cobalt, total	ug/L	MW-97	04/17/2024	ND	0.4000		6.0584
Copper, total	ug/L	MW-97	04/17/2024		7.1000	*	5.3000
Lead, total	ug/L	MW-97	04/17/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-97	04/17/2024	ND	4.0000		8.8000
Selenium, total	ug/L	MW-97	04/17/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-97	04/17/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-97	04/17/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-97	04/17/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-97	04/17/2024	ND	20.0000		54.6000

* - 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 Detect	Upgradient N	Upgradient Proportion	Downgradient Detect	Downgradient N	Downgradient Proportion
Antimony, total	0	62	0.000	0	190	0.000
Arsenic, total	5	60	0.083	41	196	0.209
Barium, total	62	62	1.000	192	192	1.000
Beryllium, total	0	62	0.000	0	190	0.000
Cadmium, total	0	62	0.000	5	190	0.026
Chromium, total	2	62	0.032	7	190	0.037
Cobalt, total	34	61	0.557	36	195	0.185
Copper, total	4	62	0.065	31	194	0.160
Lead, total	0	62	0.000	12	190	0.063
Nickel, total	14	61	0.230	75	192	0.391
Selenium, total	0	62	0.000	5	194	0.026
Silver, total	0	62	0.000	0	190	0.000
Thallium, total	0	62	0.000	0	190	0.000
Vanadium, total	0	62	0.000	11	191	0.058
Zinc, total	7	61	0.115	53	191	0.277

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	62	0.000									nonpar
Arsenic, total	5	60	0.083	0.427	0.013					2.326	normal	nonpar
Barium, total	62	62	1.000	0.041	1.560					2.326	normal	normal
Beryllium, total	0	62	0.000									nonpar
Cadmium, total	0	62	0.000									nonpar
Chromium, total	2	62	0.032									nonpar
Cobalt, total	34	61	0.557	1.012	0.001					2.326	normal	normal
Copper, total	4	62	0.065									nonpar
Lead, total	0	62	0.000									nonpar
Nickel, total	14	61	0.230	1.049	0.057					2.326	normal	nonpar
Selenium, total	0	62	0.000									nonpar
Silver, total	0	62	0.000									nonpar
Thallium, total	0	62	0.000									nonpar
Vanadium, total	0	62	0.000									nonpar
Zinc, total	7	61	0.115	0.439	0.418					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	62					2.0000	nonpar	***	0.99
Arsenic, total	ug/L	5	60					7.8000	nonpar		0.99
Barium, total	ug/L	62	62	182.8016	115.3977	0.0100	2.4082	460.7031	normal		
Beryllium, total	ug/L	0	62					4.0000	nonpar	***	0.99
Cadmium, total	ug/L	0	62					0.8000	nonpar	***	0.99
Chromium, total	ug/L	2	62					23.4000	nonpar		0.99
Cobalt, total	ug/L	34	61	1.5951	1.8523	0.0100	2.4096	6.0584	normal		
Copper, total	ug/L	4	62					5.3000	nonpar		0.99
Lead, total	ug/L	0	62					4.0000	nonpar	***	0.99
Nickel, total	ug/L	14	61					8.8000	nonpar		0.99
Selenium, total	ug/L	0	62					4.0000	nonpar	***	0.99
Silver, total	ug/L	0	62					4.0000	nonpar	***	0.99
Thallium, total	ug/L	0	62					2.0000	nonpar	***	0.99
Vanadium, total	ug/L	0	62					20.0000	nonpar	***	0.99
Zinc, total	ug/L	7	61					54.6000	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
Arsenic, total	ug/L	MW-98	04/17/2024	48.0000		10/13/2016-04/17/2024	15	0.6177
Cobalt, total	ug/L	MW-99	10/22/2018	0.8000		10/13/2016-04/18/2024	16	0.5973

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-93	08/21/2008	ND	20.0000		7.8000
Arsenic, total	ug/L	MW-93	10/03/2008	ND	4.0000		7.8000
Arsenic, total	ug/L	MW-93	12/08/2008	ND	4.0000		7.8000
Arsenic, total	ug/L	MW-93	02/11/2009	ND	4.0000		7.8000
Arsenic, total	ug/L	MW-93	04/02/2009	ND	4.0000		7.8000
Arsenic, total	ug/L	MW-93	10/16/2009	ND	4.0000		7.8000
Arsenic, total	ug/L	MW-93	04/20/2010		10.9000	*	7.8000
Arsenic, total	ug/L	MW-93	10/08/2010		11.1000	*	7.8000
Arsenic, total	ug/L	MW-93	04/05/2011	ND	4.0000		7.8000
Arsenic, total	ug/L	MW-93	10/06/2011	ND	4.0000		7.8000
Arsenic, total	ug/L	MW-93	04/10/2012		4.2000		7.8000
Arsenic, total	ug/L	MW-93	10/09/2012		4.4000		7.8000
Arsenic, total	ug/L	MW-93	04/04/2013	ND	4.0000		7.8000
Arsenic, total	ug/L	MW-93	10/16/2013	ND	4.0000		7.8000
Arsenic, total	ug/L	MW-93	04/10/2014		9.2000	*	7.8000
Arsenic, total	ug/L	MW-93	10/16/2014		5.1000		7.8000
Arsenic, total	ug/L	MW-93	04/06/2015		5.9000		7.8000
Arsenic, total	ug/L	MW-93	10/01/2015		5.2000		7.8000
Arsenic, total	ug/L	MW-93	04/14/2016		16.1000	*	7.8000
Arsenic, total	ug/L	MW-93	10/13/2016		6.5000		7.8000
Arsenic, total	ug/L	MW-93	04/10/2017		5.5000		7.8000
Arsenic, total	ug/L	MW-93	10/09/2017	ND	4.0000		7.8000
Arsenic, total	ug/L	MW-93	04/17/2018		5.4000		7.8000
Arsenic, total	ug/L	MW-93	10/22/2018		18.4000	*	7.8000
Arsenic, total	ug/L	MW-93	04/22/2019		67.3000	*	7.8000
Arsenic, total	ug/L	MW-93	10/23/2019		13.6000	*	7.8000
Arsenic, total	ug/L	MW-93	04/10/2020		17.5000	*	7.8000
Arsenic, total	ug/L	MW-93	10/19/2020		4.8000		7.8000
Arsenic, total	ug/L	MW-93	04/05/2021		10.5000	*	7.8000
Arsenic, total	ug/L	MW-93	10/08/2021		11.4000	*	7.8000
Arsenic, total	ug/L	MW-93	04/06/2022		11.1000	*	7.8000
Arsenic, total	ug/L	MW-93	10/25/2022		58.5000	*	7.8000
Arsenic, total	ug/L	MW-93	04/11/2023		9.3000	*	7.8000
Arsenic, total	ug/L	MW-93	10/13/2023		59.6000	*	7.8000
Arsenic, total	ug/L	MW-93	04/16/2024		11.9000	*	7.8000
Cobalt, total	ug/L	MW-93	08/21/2008	ND	10.0000		6.0584
Cobalt, total	ug/L	MW-93	10/03/2008	ND	4.0000		6.0584
Cobalt, total	ug/L	MW-93	12/08/2008	ND	4.0000		6.0584
Cobalt, total	ug/L	MW-93	02/11/2009	ND	4.0000		6.0584
Cobalt, total	ug/L	MW-93	04/02/2009	ND	4.0000		6.0584
Cobalt, total	ug/L	MW-93	10/16/2009	ND	4.0000		6.0584
Cobalt, total	ug/L	MW-93	04/20/2010		11.6000	*	6.0584
Cobalt, total	ug/L	MW-93	10/08/2010		16.2000	*	6.0584
Cobalt, total	ug/L	MW-93	04/05/2011		9.2000	*	6.0584
Cobalt, total	ug/L	MW-93	10/06/2011		8.6000	*	6.0584
Cobalt, total	ug/L	MW-93	04/10/2012		4.8000		6.0584
Cobalt, total	ug/L	MW-93	10/09/2012		4.5000		6.0584
Cobalt, total	ug/L	MW-93	04/04/2013		4.5000		6.0584
Cobalt, total	ug/L	MW-93	10/16/2013		4.6000		6.0584
Cobalt, total	ug/L	MW-93	04/10/2014		11.2000	*	6.0584
Cobalt, total	ug/L	MW-93	10/16/2014		7.3000	*	6.0584
Cobalt, total	ug/L	MW-93	04/06/2015		9.7000	*	6.0584
Cobalt, total	ug/L	MW-93	10/01/2015		7.5000	*	6.0584
Cobalt, total	ug/L	MW-93	04/14/2016		14.7000	*	6.0584
Cobalt, total	ug/L	MW-93	10/13/2016		6.6000	*	6.0584
Cobalt, total	ug/L	MW-93	04/10/2017		8.6000	*	6.0584
Cobalt, total	ug/L	MW-93	10/09/2017		5.2000		6.0584
Cobalt, total	ug/L	MW-93	04/17/2018		5.9000		6.0584
Cobalt, total	ug/L	MW-93	10/22/2018		9.9000	*	6.0584
Cobalt, total	ug/L	MW-93	04/22/2019		18.9000	*	6.0584
Cobalt, total	ug/L	MW-93	10/23/2019		8.3000	*	6.0584
Cobalt, total	ug/L	MW-93	04/10/2020		11.3000	*	6.0584
Cobalt, total	ug/L	MW-93	10/19/2020		4.6000		6.0584
Cobalt, total	ug/L	MW-93	04/05/2021		7.9000	*	6.0584
Cobalt, total	ug/L	MW-93	10/08/2021		7.1000	*	6.0584
Cobalt, total	ug/L	MW-93	04/06/2022		8.7000	*	6.0584
Cobalt, total	ug/L	MW-93	10/25/2022		8.6000	*	6.0584
Cobalt, total	ug/L	MW-93	04/11/2023		9.0000	*	6.0584
Cobalt, total	ug/L	MW-93	10/13/2023		8.3000	*	6.0584
Cobalt, total	ug/L	MW-93	04/16/2024		9.8000	*	6.0584
Nickel, total	ug/L	MW-93	08/21/2008		29.0000	*	8.8000

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

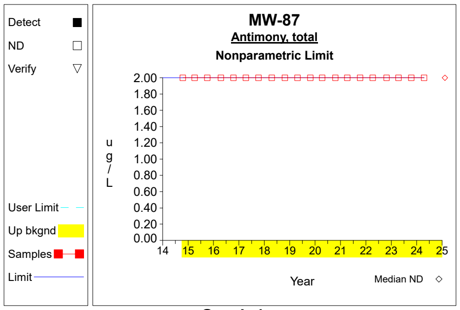
Table 8

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

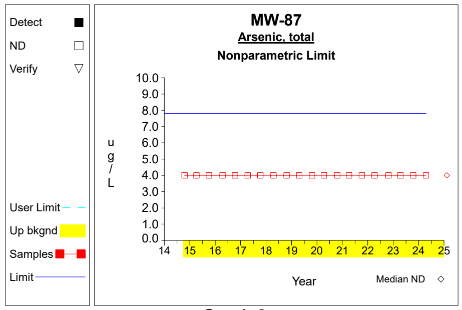
Constituent	Units	Well	Date		Result		Pred. Limit
Nickel, total	ug/L	MW-93	10/03/2008		28.9000	*	8.8000
Nickel, total	ug/L	MW-93	12/08/2008		23.8000	*	8.8000
Nickel, total	ug/L	MW-93	02/11/2009		30.4000	*	8.8000
Nickel, total	ug/L	MW-93	04/02/2009		32.1000	*	8.8000
Nickel, total	ug/L	MW-93	10/16/2009		30.2000	*	8.8000
Nickel, total	ug/L	MW-93	01/29/2010		35.3000	*	8.8000
Nickel, total	ug/L	MW-93	04/20/2010		45.5000	*	8.8000
Nickel, total	ug/L	MW-93	10/08/2010		69.8000	*	8.8000
Nickel, total	ug/L	MW-93	04/05/2011		37.5000	*	8.8000
Nickel, total	ug/L	MW-93	10/06/2011		31.9000	*	8.8000
Nickel, total	ug/L	MW-93	04/10/2012		29.6000	*	8.8000
Nickel, total	ug/L	MW-93	10/09/2012		23.5000	*	8.8000
Nickel, total	ug/L	MW-93	04/04/2013		13.8000	*	8.8000
Nickel, total	ug/L	MW-93	10/16/2013		21.5000	*	8.8000
Nickel, total	ug/L	MW-93	04/10/2014		43.1000	*	8.8000
Nickel, total	ug/L	MW-93	10/16/2014		34.6000	*	8.8000
Nickel, total	ug/L	MW-93	04/06/2015		42.6000	*	8.8000
Nickel, total	ug/L	MW-93	10/01/2015		36.0000	*	8.8000
Nickel, total	ug/L	MW-93	04/14/2016		26.5000	*	8.8000
Nickel, total	ug/L	MW-93	10/13/2016		31.8000	*	8.8000
Nickel, total	ug/L	MW-93	04/10/2017		27.3000	*	8.8000
Nickel, total	ug/L	MW-93	10/09/2017		28.2000	*	8.8000
Nickel, total	ug/L	MW-93	04/17/2018		26.2000	*	8.8000
Nickel, total	ug/L	MW-93	10/22/2018		35.7000	*	8.8000
Nickel, total	ug/L	MW-93	04/22/2019		24.2000	*	8.8000
Nickel, total	ug/L	MW-93	10/23/2019		26.3000	*	8.8000
Nickel, total	ug/L	MW-93	04/10/2020		18.1000	*	8.8000
Nickel, total	ug/L	MW-93	10/19/2020		27.6000	*	8.8000
Nickel, total	ug/L	MW-93	04/05/2021		23.1000	*	8.8000
Nickel, total	ug/L	MW-93	10/08/2021		21.3000	*	8.8000
Nickel, total	ug/L	MW-93	04/06/2022		20.2000	*	8.8000
Nickel, total	ug/L	MW-93	10/25/2022		27.9000	*	8.8000
Nickel, total	ug/L	MW-93	04/11/2023		31.8000	*	8.8000
Nickel, total	ug/L	MW-93	10/13/2023		28.8000	*	8.8000
Nickel, total	ug/L	MW-93	04/16/2024		25.5000	*	8.8000
Copper, total	ug/L	MW-97	10/16/2013		4.7000		5.3000
Copper, total	ug/L	MW-97	04/10/2014		4.9000		5.3000
Copper, total	ug/L	MW-97	10/16/2014	ND	4.0000		5.3000
Copper, total	ug/L	MW-97	04/03/2015	ND	4.0000		5.3000
Copper, total	ug/L	MW-97	10/01/2015	ND	4.0000		5.3000
Copper, total	ug/L	MW-97	04/14/2016	ND	4.0000		5.3000
Copper, total	ug/L	MW-97	10/13/2016	ND	4.0000		5.3000
Copper, total	ug/L	MW-97	04/10/2017	ND	4.0000		5.3000
Copper, total	ug/L	MW-97	04/10/2020	ND	4.0000		5.3000
Copper, total	ug/L	MW-97	10/19/2020	ND	4.0000		5.3000
Copper, total	ug/L	MW-97	04/05/2021	ND	4.0000		5.3000
Copper, total	ug/L	MW-97	10/08/2021	ND	4.0000		5.3000
Copper, total	ug/L	MW-97	04/06/2022	ND	4.0000		5.3000
Copper, total	ug/L	MW-97	10/25/2022	ND	4.0000		5.3000
Copper, total	ug/L	MW-97	04/11/2023	ND	4.0000		5.3000
Copper, total	ug/L	MW-97	10/13/2023	ND	4.0000		5.3000
Copper, total	ug/L	MW-97	04/17/2024		7.1000	*	5.3000

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

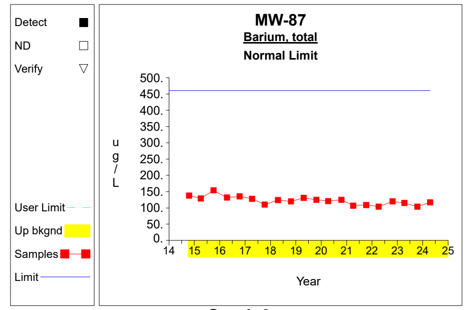
Up vs. Down Prediction Limits



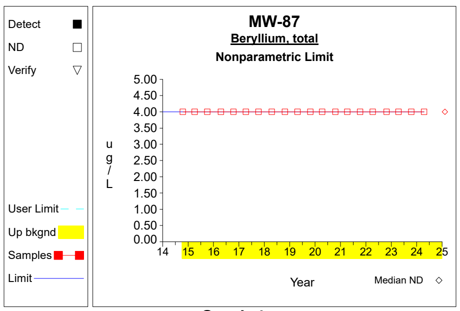
Graph 1



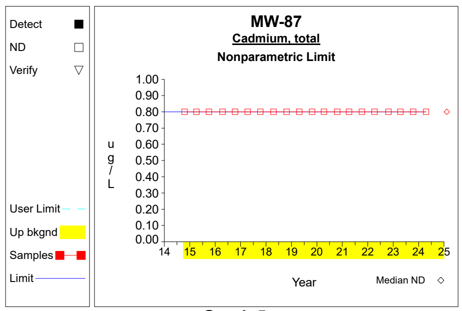
Graph 2



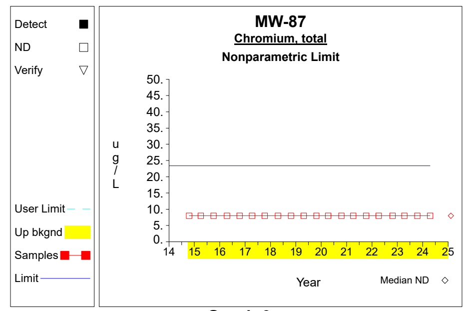
Graph 3



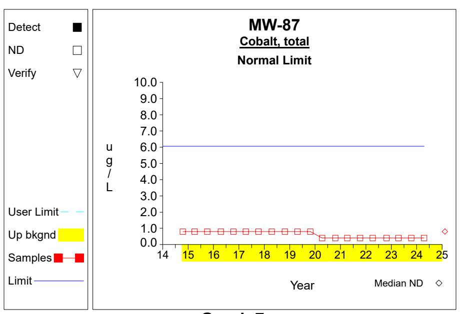
Graph 4



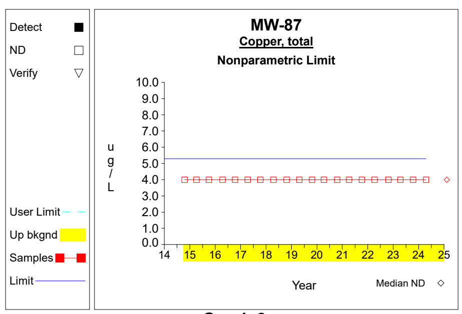
Graph 5



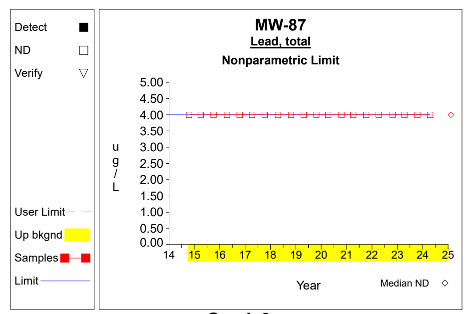
Graph 6



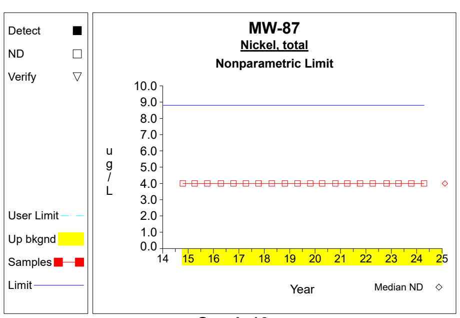
Graph 7



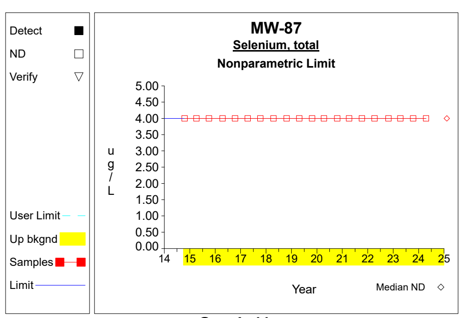
Graph 8



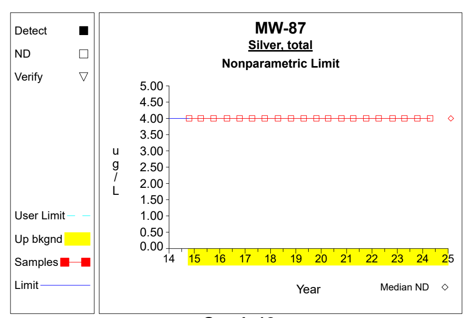
Graph 9



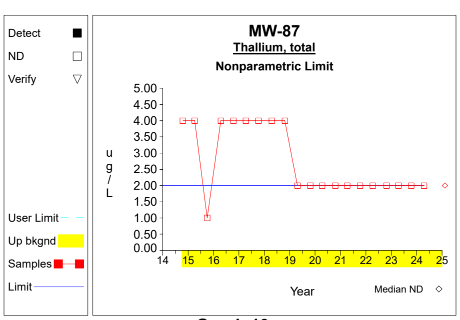
Graph 10



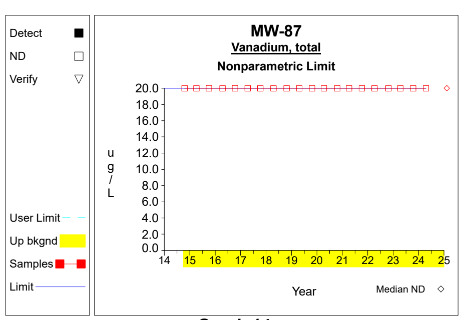
Graph 11



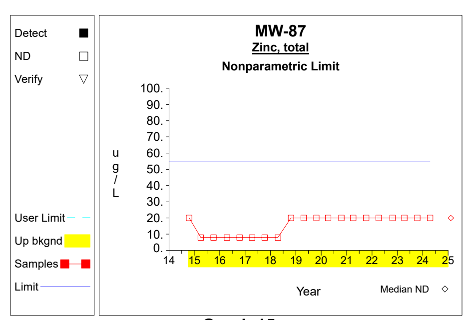
Graph 12



Graph 13

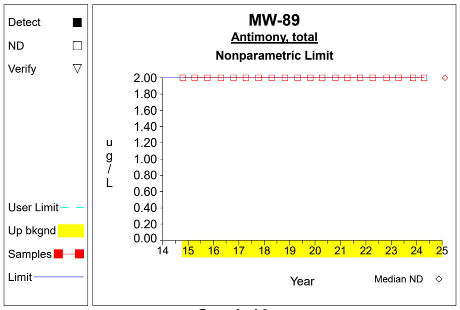


Graph 14

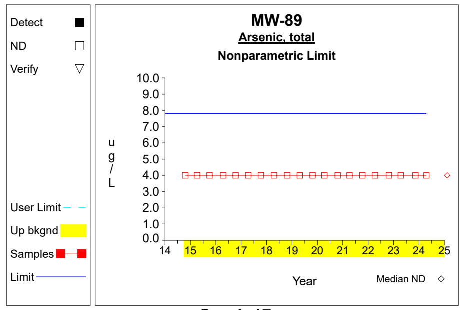


Graph 15

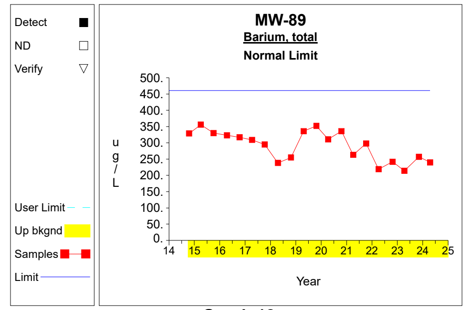
Up vs. Down Prediction Limits



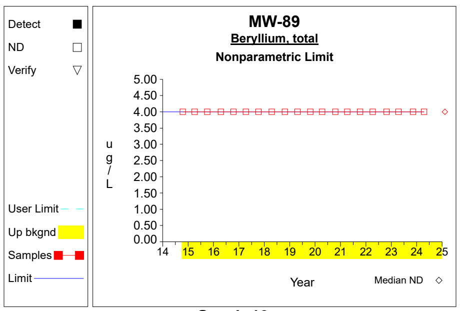
Graph 16



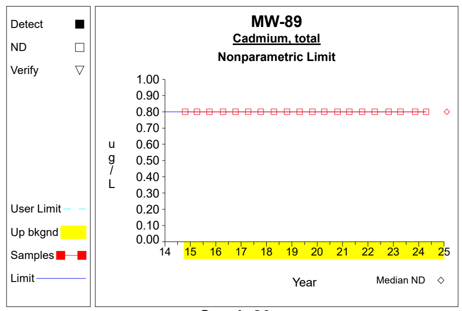
Graph 17



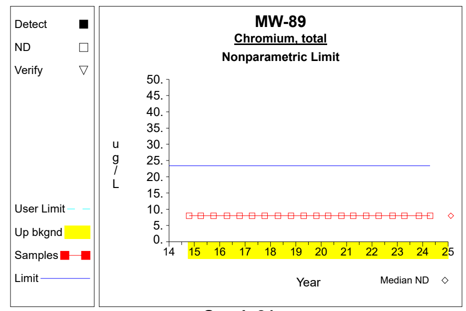
Graph 18



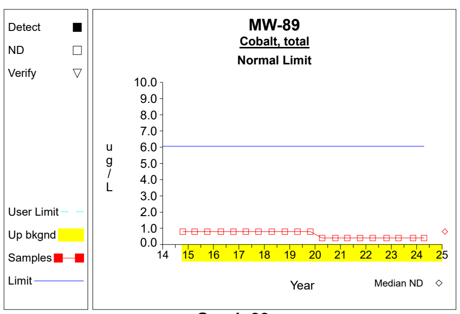
Graph 19



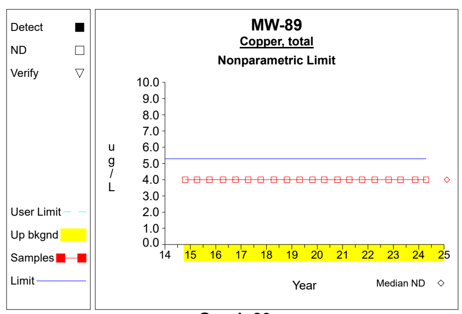
Graph 20



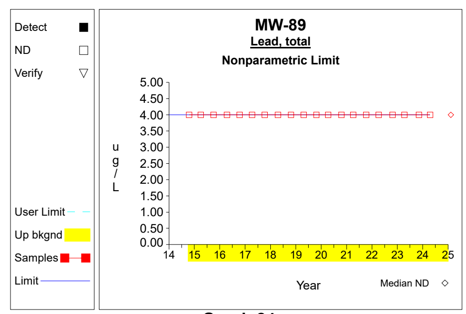
Graph 21



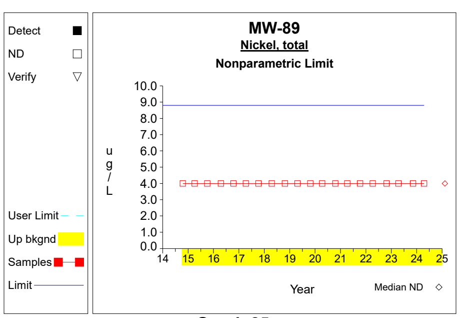
Graph 22



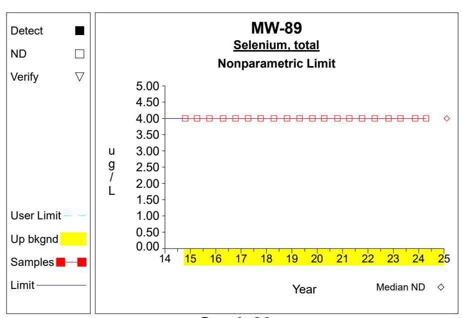
Graph 23



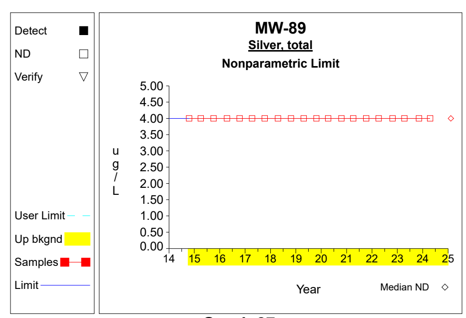
Graph 24



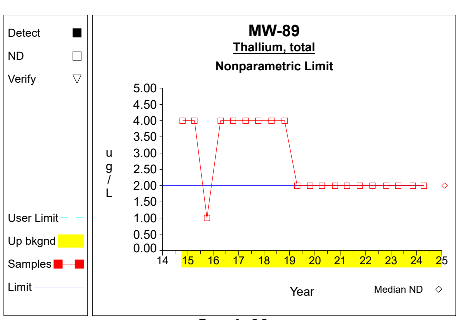
Graph 25



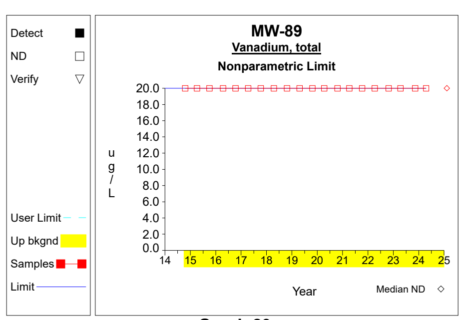
Graph 26



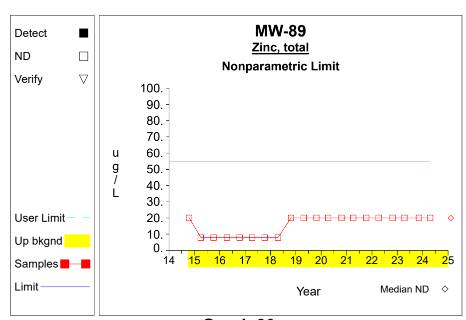
Graph 27



Graph 28

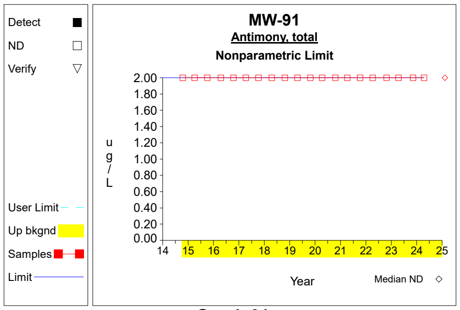


Graph 29

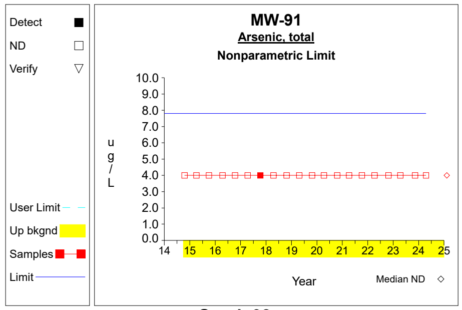


Graph 30

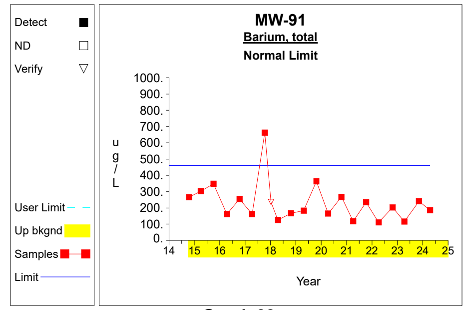
Up vs. Down Prediction Limits



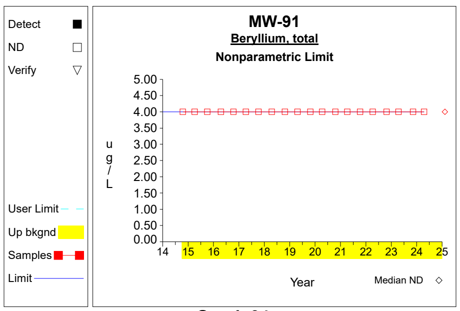
Graph 31



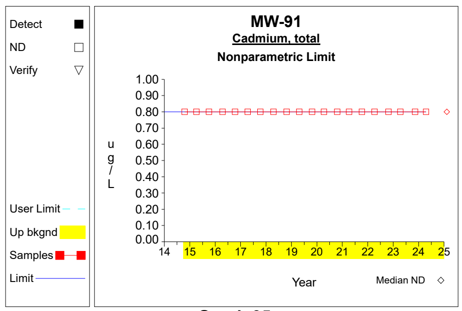
Graph 32



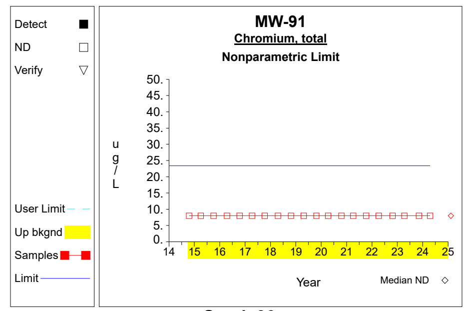
Graph 33



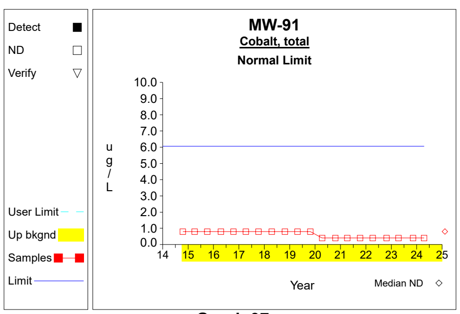
Graph 34



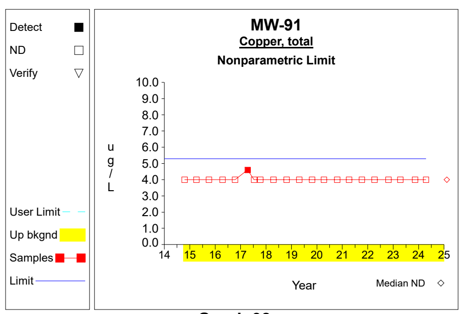
Graph 35



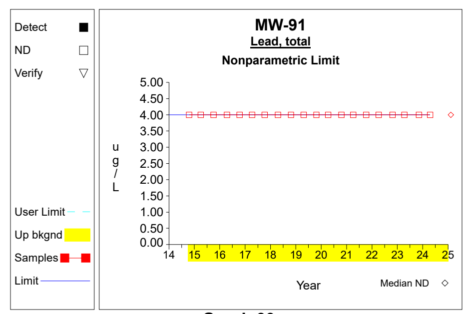
Graph 36



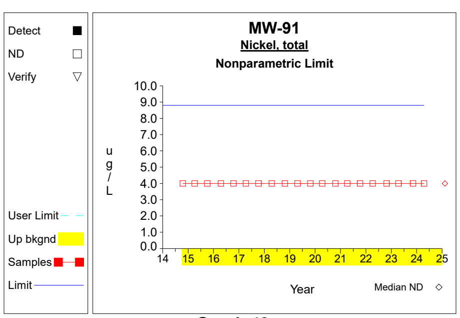
Graph 37



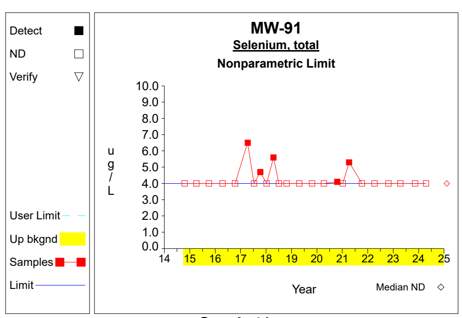
Graph 38



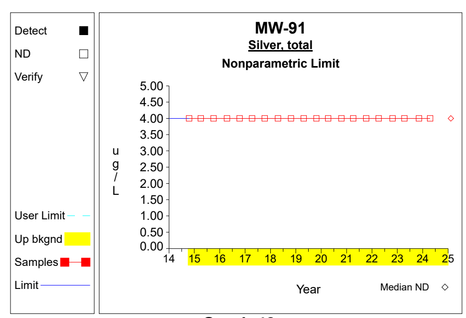
Graph 39



Graph 40



Graph 41



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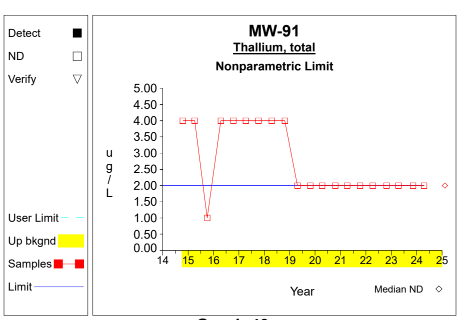
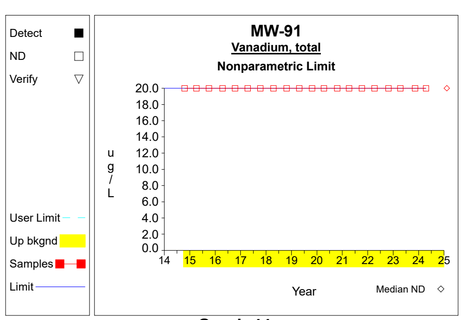
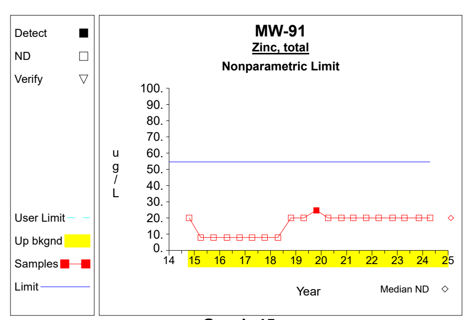


Graph 43



Graph 44



Graph 45

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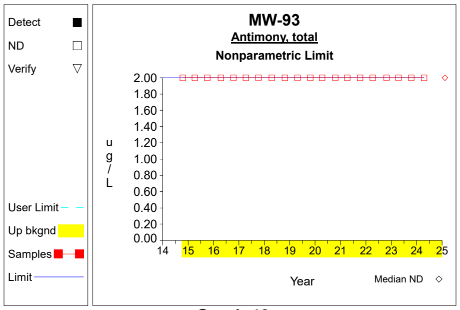
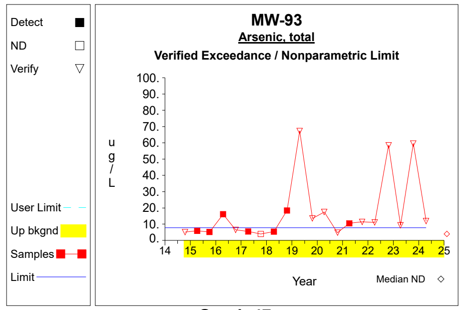
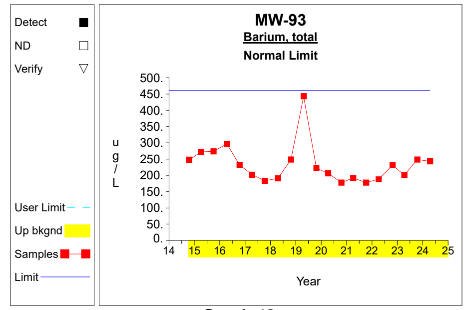
Up vs. Down Prediction Limits



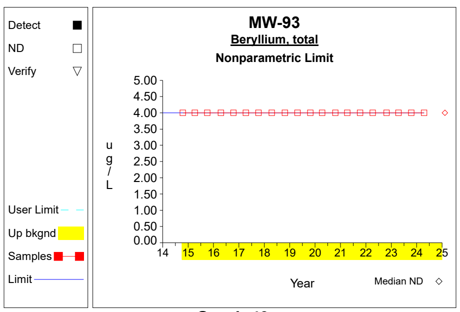
Graph 46



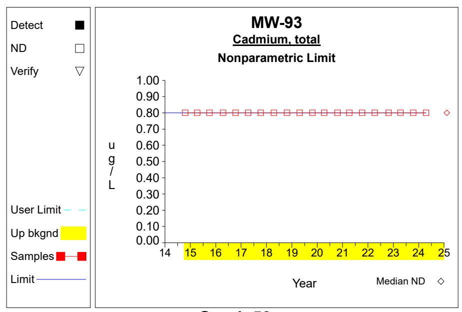
Graph 47



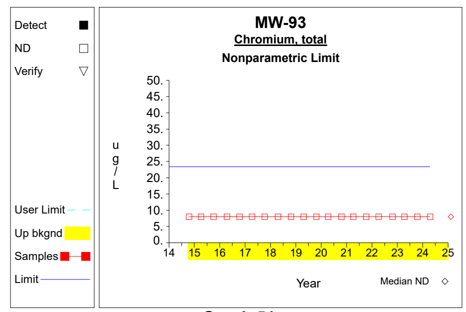
Graph 48



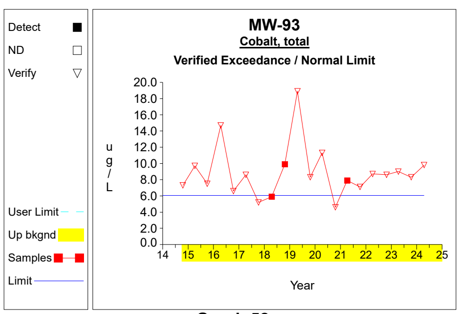
Graph 49



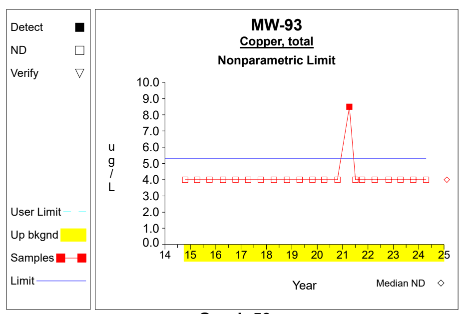
Graph 50



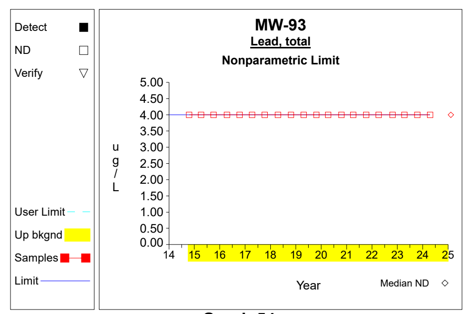
Graph 51



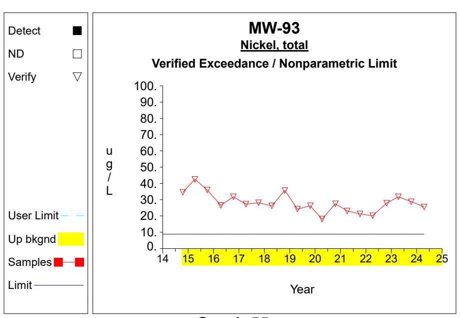
Graph 52



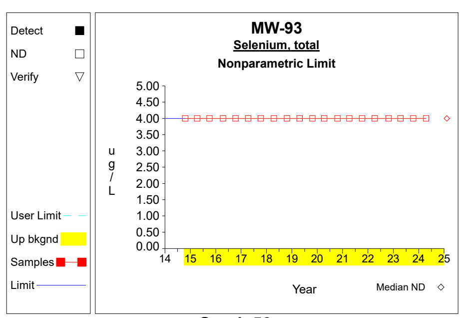
Graph 53



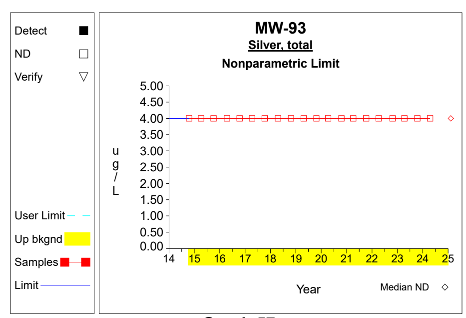
Graph 54



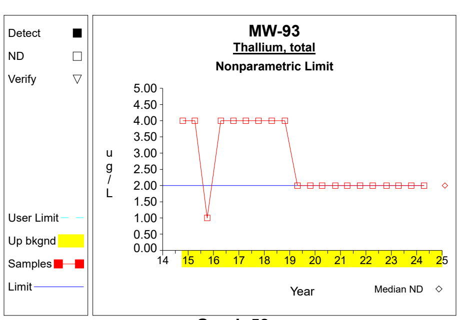
Graph 55



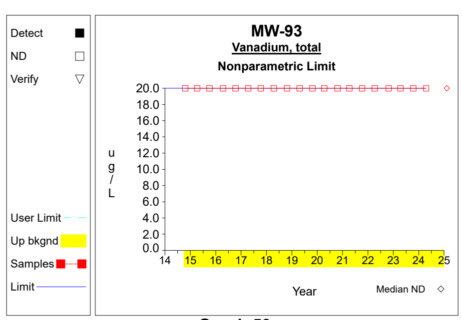
Graph 56



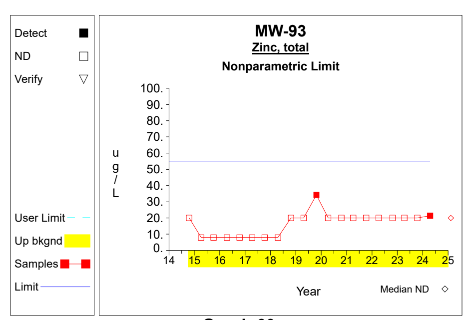
Graph 57



Graph 58



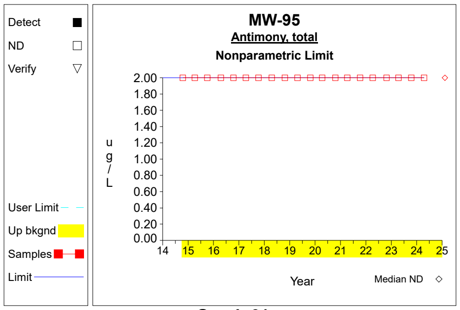
Graph 59



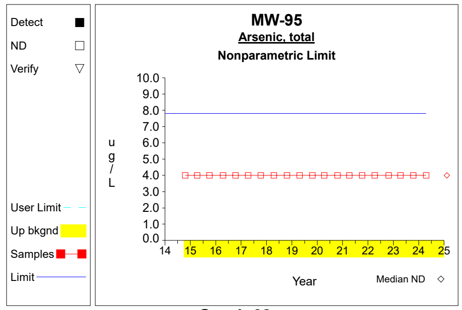
Graph 60

Marshall [GW] May 2024

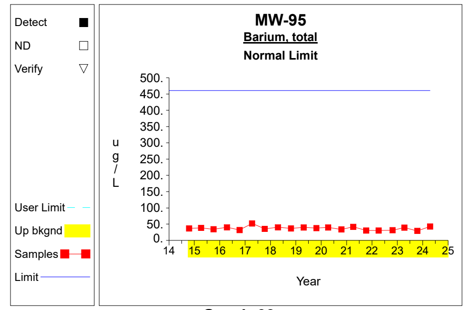
Up vs. Down Prediction Limits



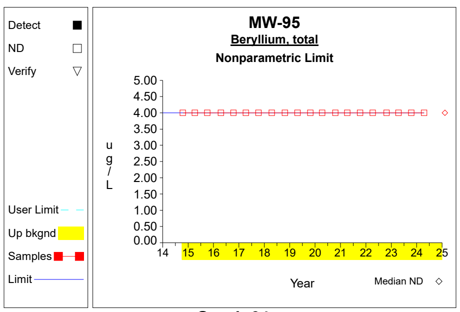
Graph 61



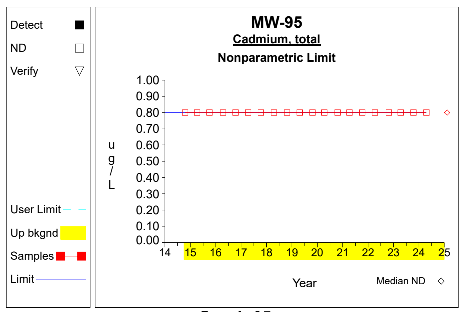
Graph 62



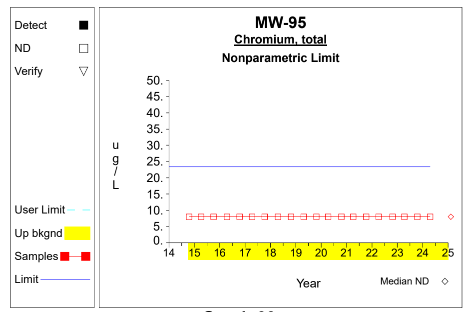
Graph 63



Graph 64



Graph 65



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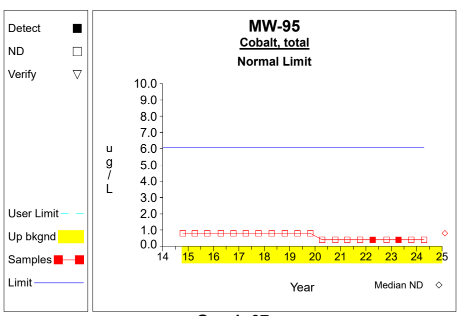

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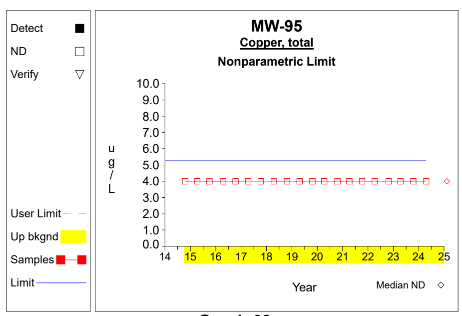

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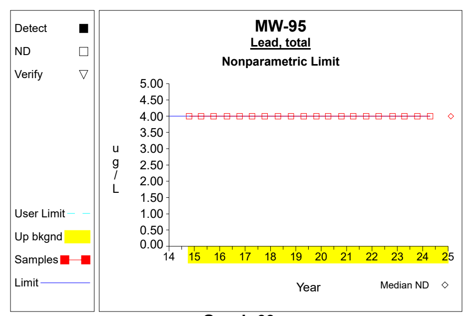

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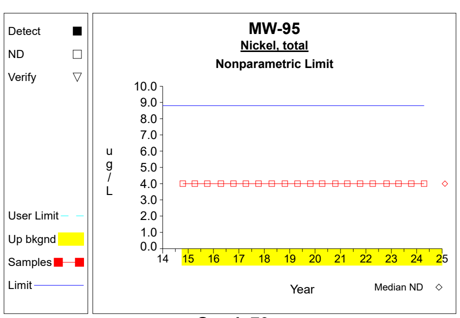
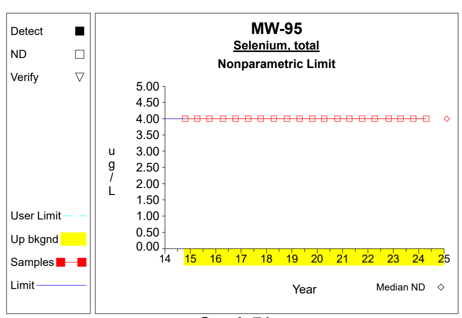
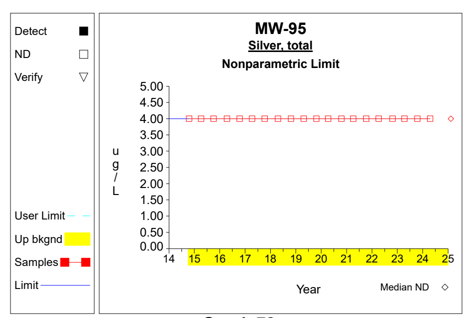


Graph 70



Graph 71



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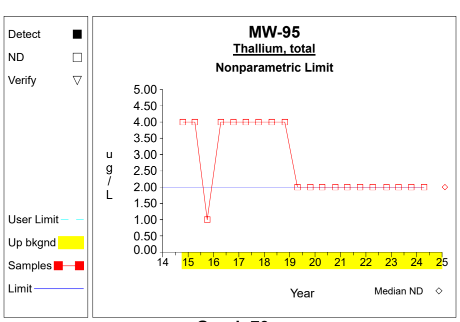
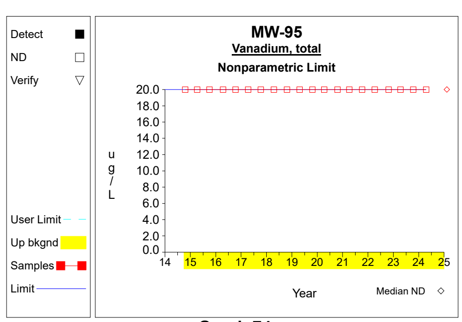
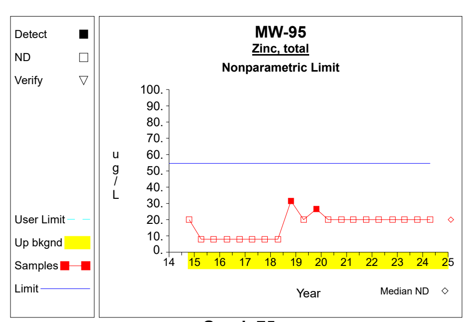


Graph 73



Graph 74



Graph 75

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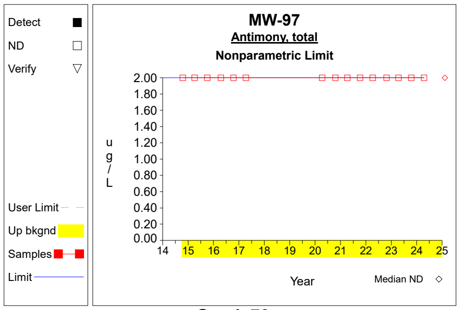
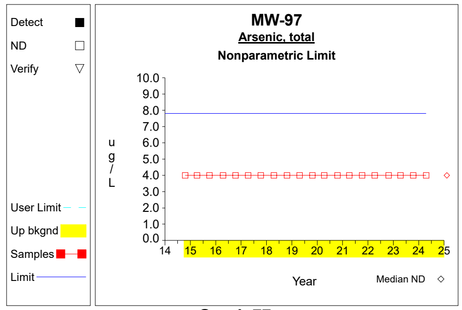
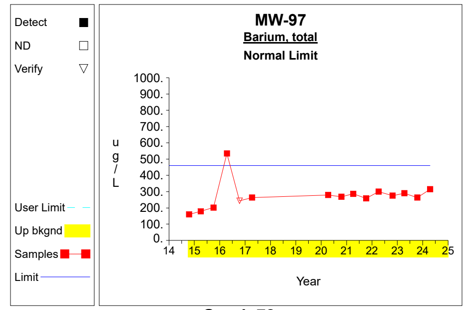
Up vs. Down Prediction Limits



Graph 76



Graph 77



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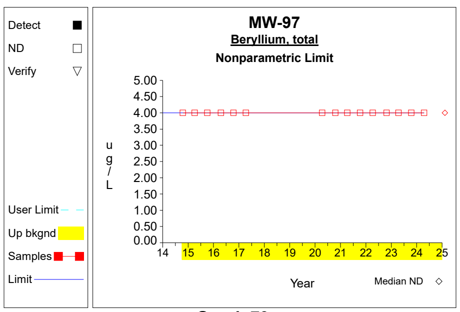

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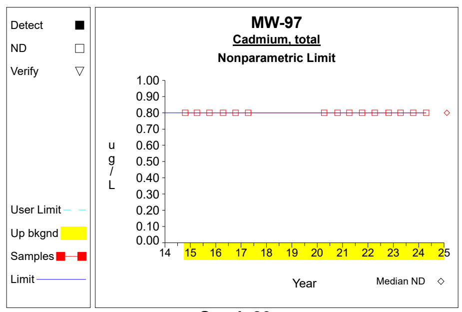

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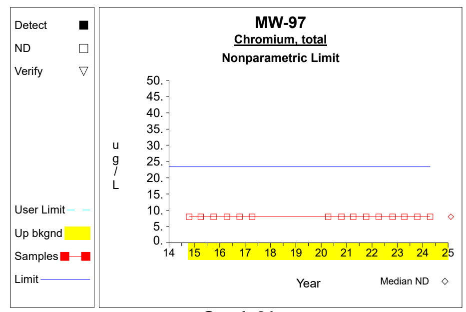
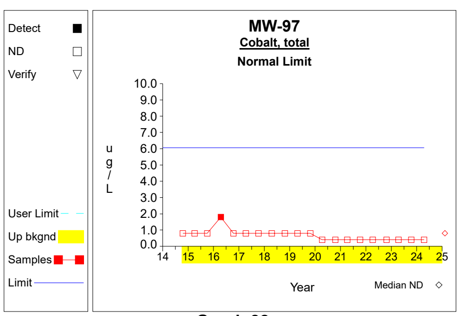
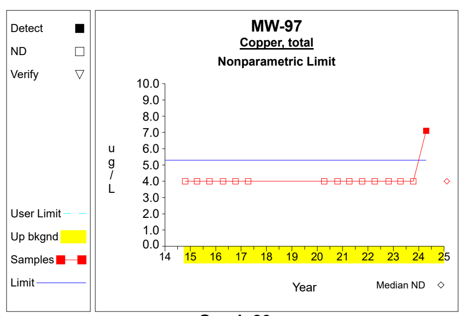


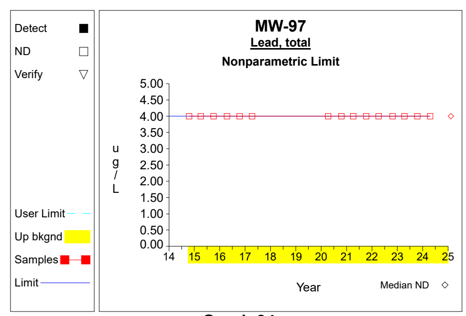
Graph 81



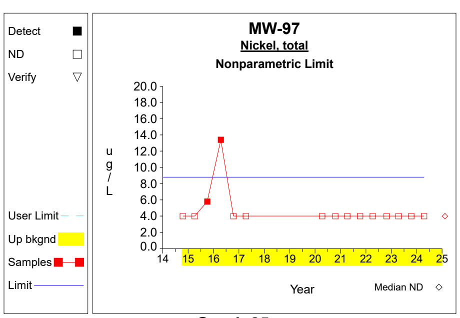
Graph 82



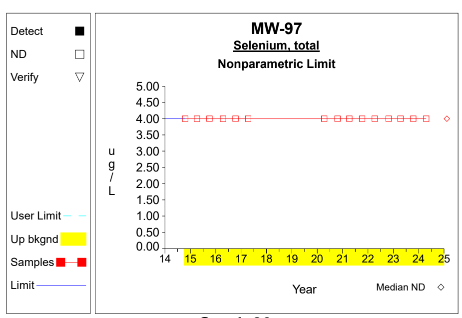
Graph 83



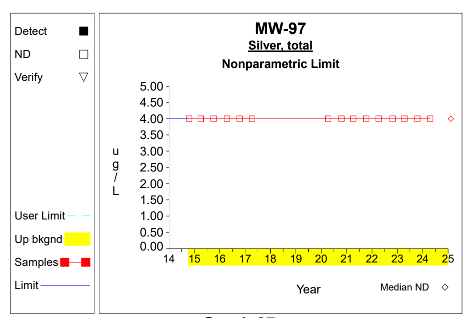
Graph 84



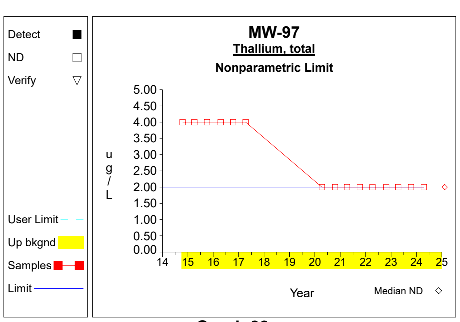
Graph 85



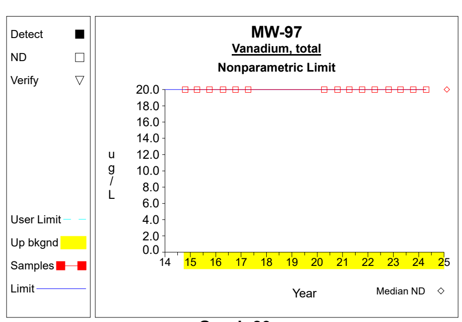
Graph 86



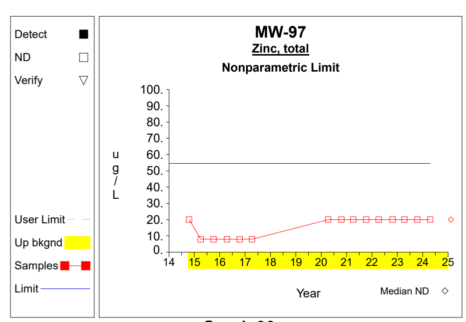
Graph 87



Graph 88



Graph 89



Graph 90

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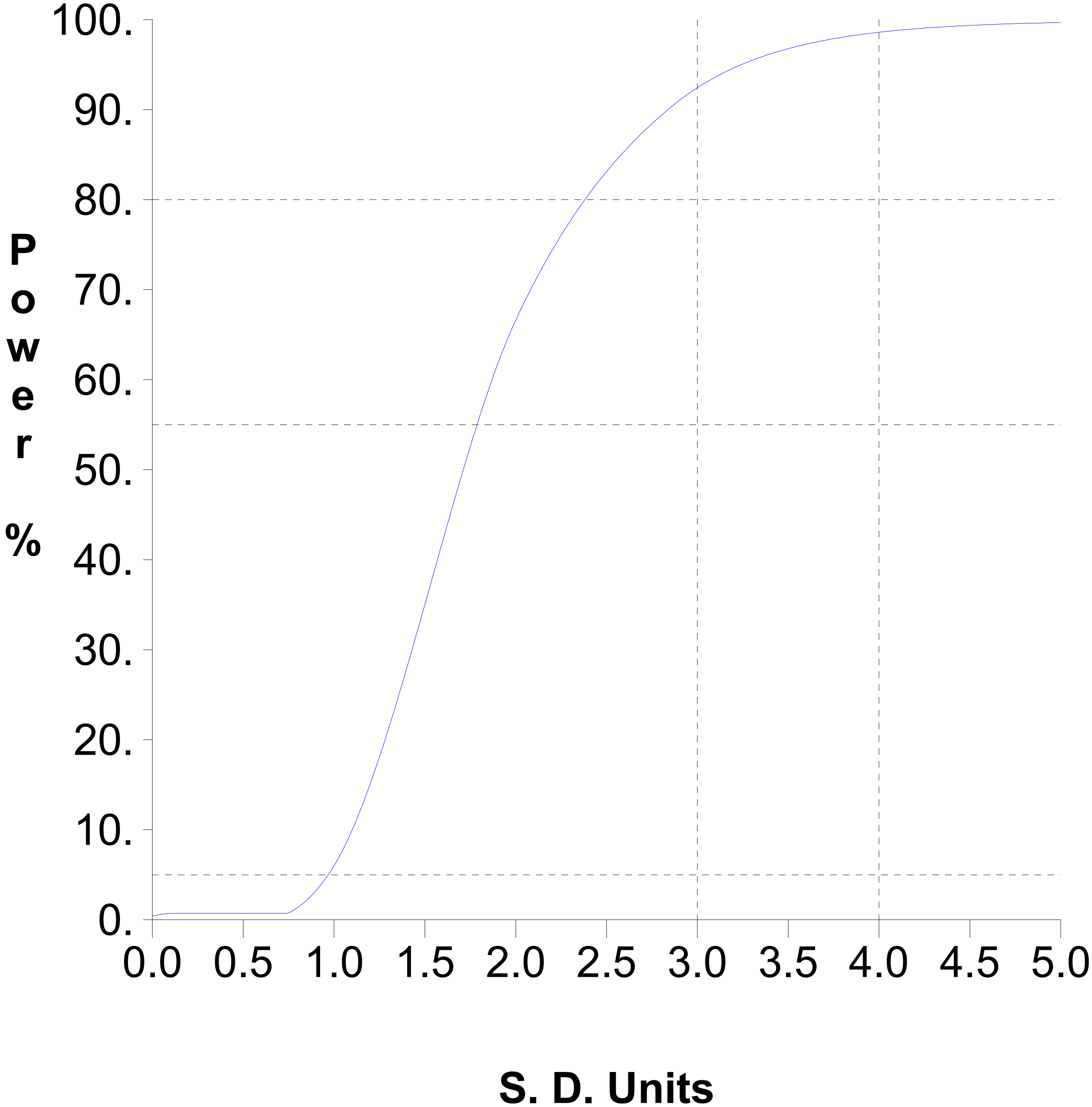
False Positive and False Negative Rates for Current Upgradient vs. Downgradient Monitoring Program



Attachment C

Assessment Statistics for Trace Metals

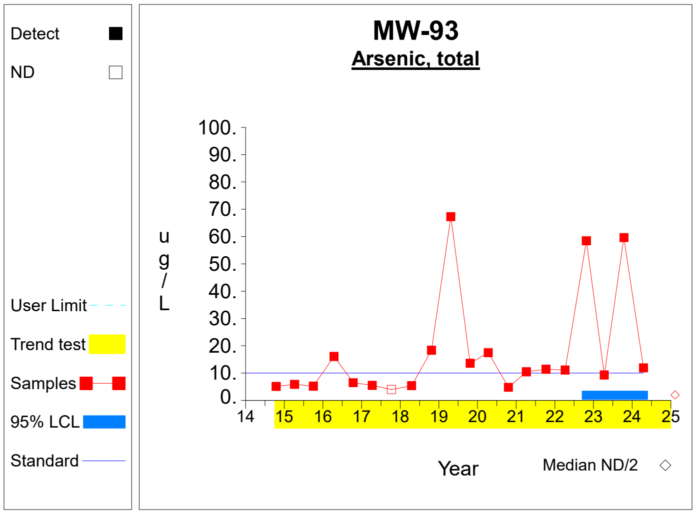
Table 1

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

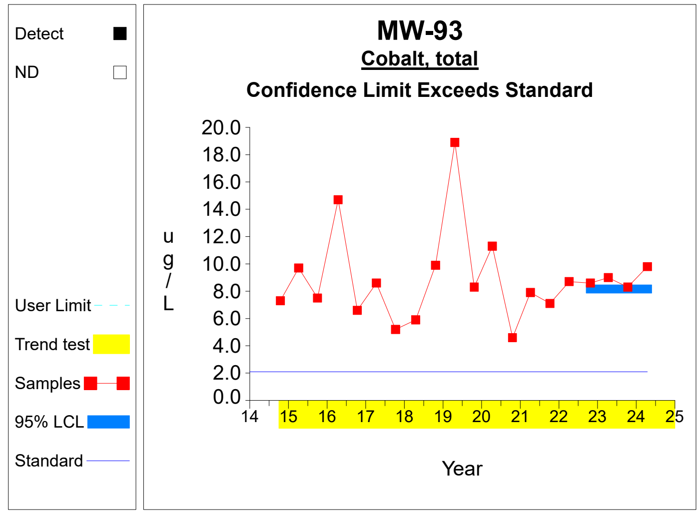
Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend	
Arsenic, total	ug/L	MW-93	4	34.825	27.996	1.176	1.893	67.757	10.000		
Cobalt, total	ug/L	MW-93	4	8.925	0.650	1.176	8.160	9.690	2.100		**
Nickel, total	ug/L	MW-93	4	28.500	2.604	1.176	25.437	31.563	100.000		

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

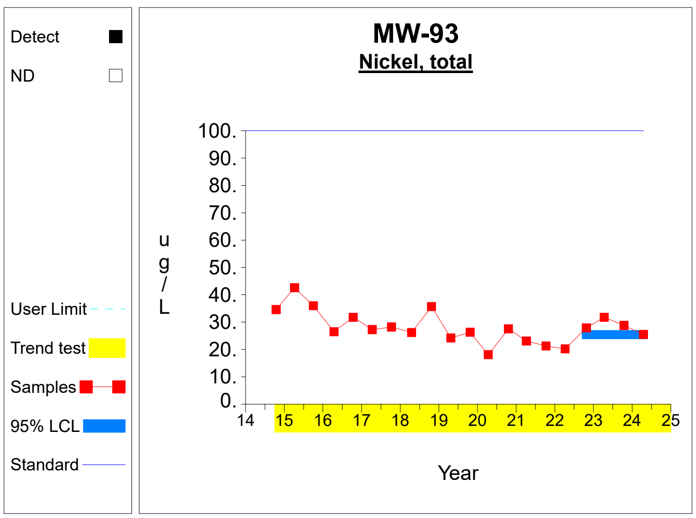
Confidence Limits (Assessment)



Graph 1



Graph 2

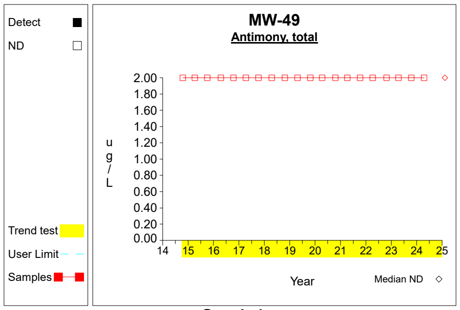


Graph 3

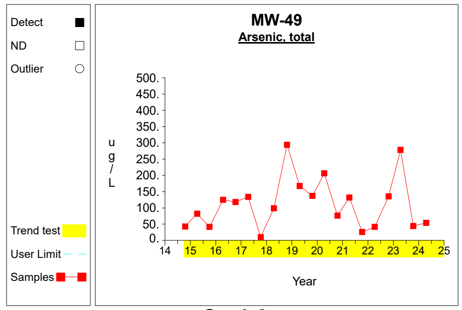
Attachment D

Supplemental Wells Time Series of Trace Metals

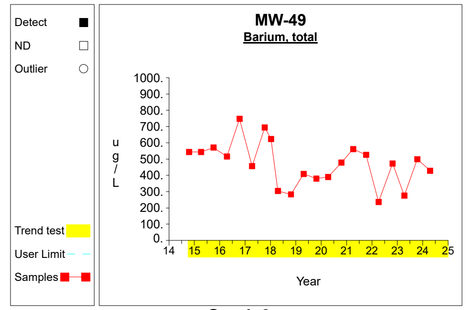
Time Series



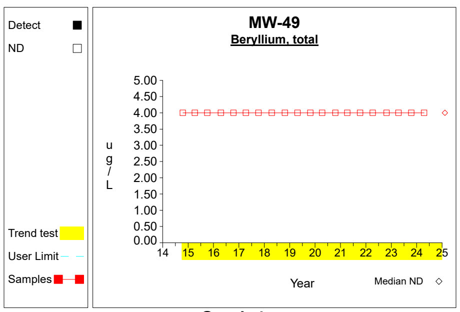
Graph 1



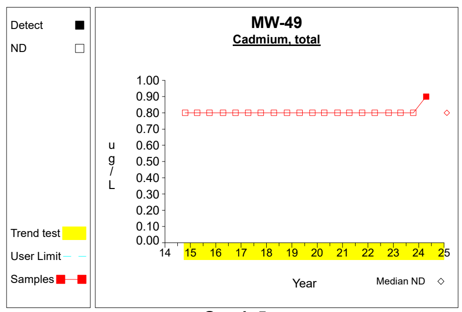
Graph 2



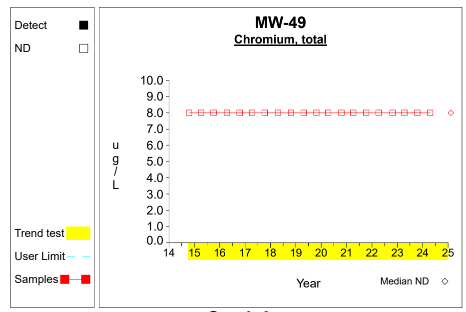
Graph 3



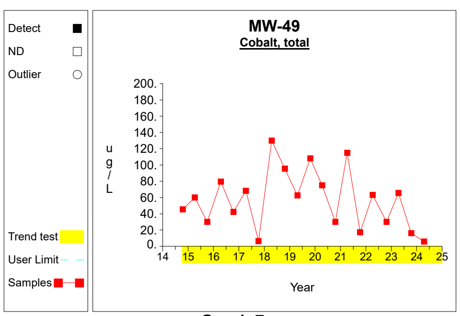
Graph 4



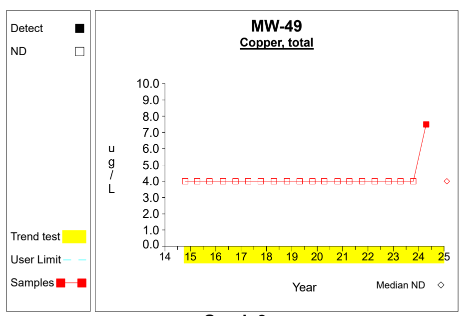
Graph 5



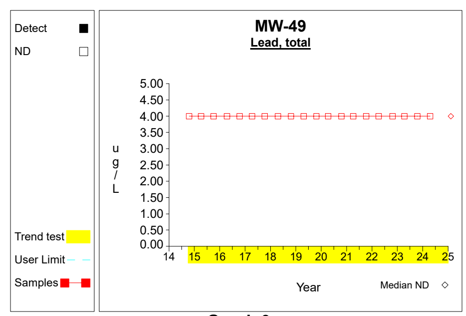
Graph 6



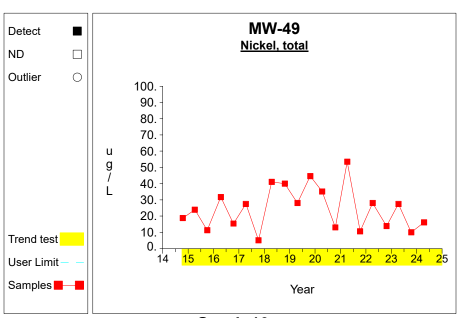
Graph 7



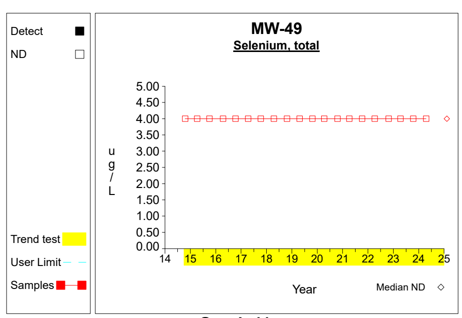
Graph 8



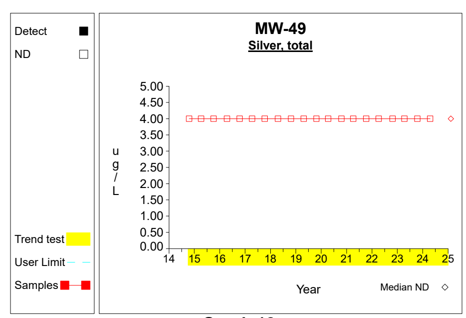
Graph 9



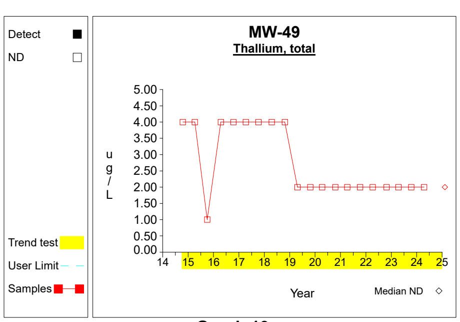
Graph 10



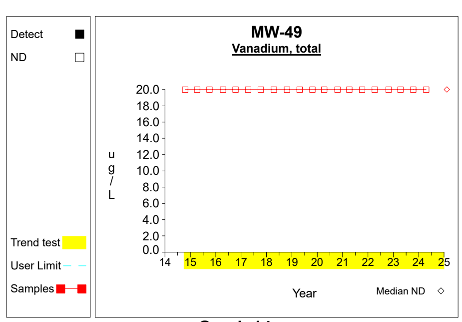
Graph 11



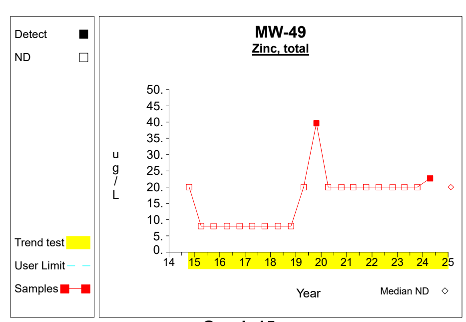
Graph 12



Graph 13

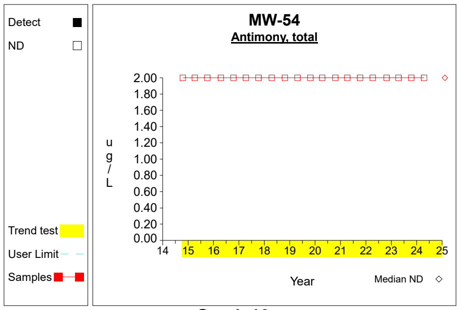


Graph 14

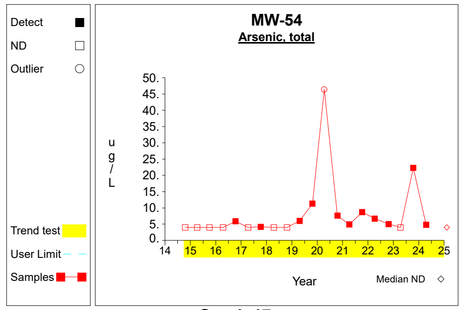


Graph 15

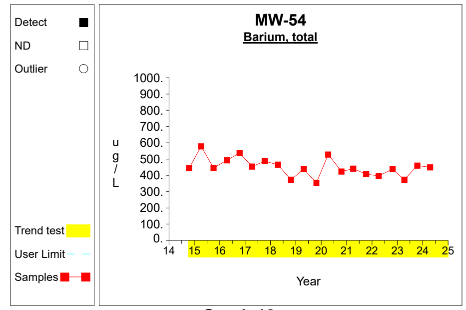
Time Series



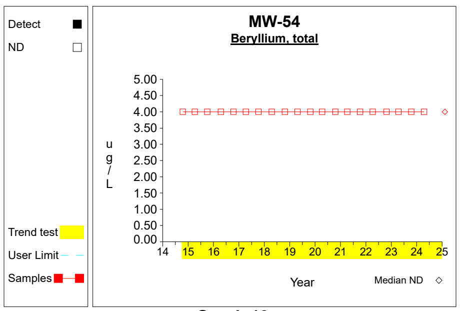
Graph 16



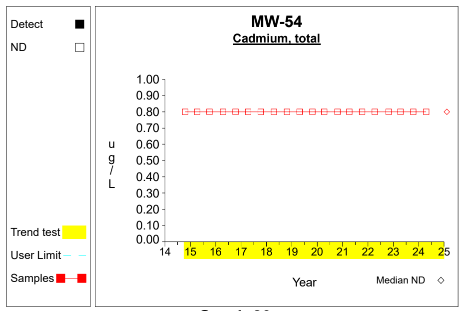
Graph 17



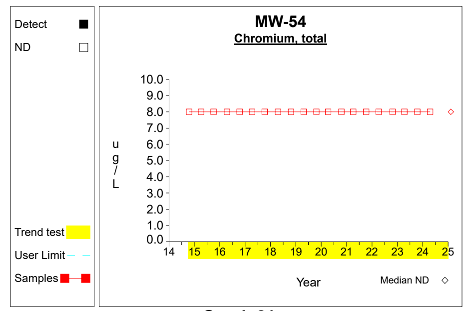
Graph 18



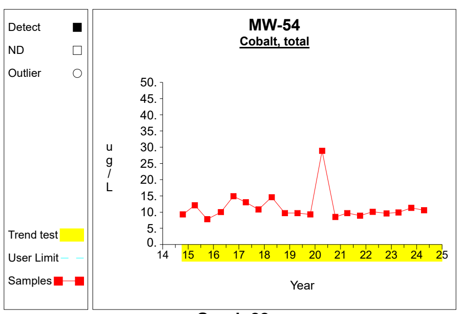
Graph 19



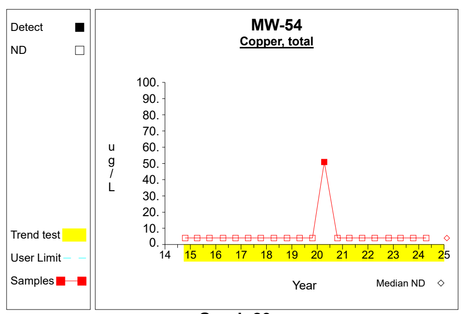
Graph 20



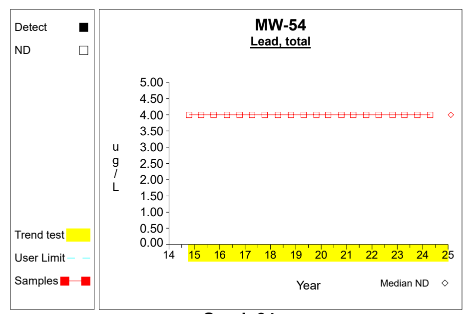
Graph 21



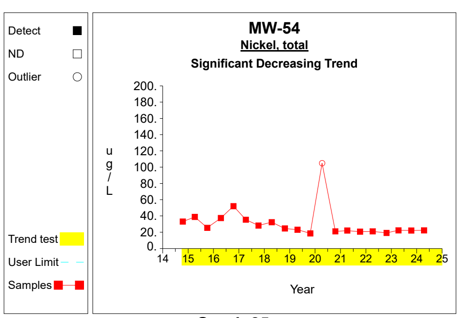
Graph 22



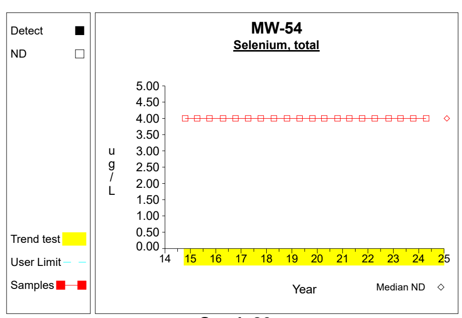
Graph 23



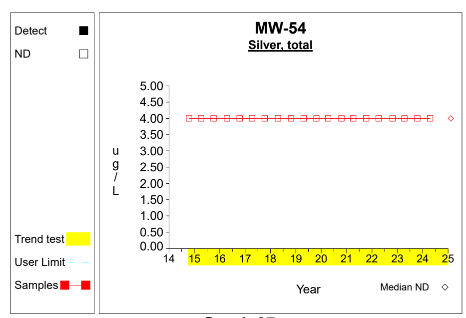
Graph 24



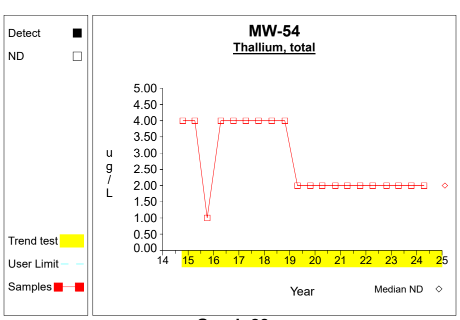
Graph 25



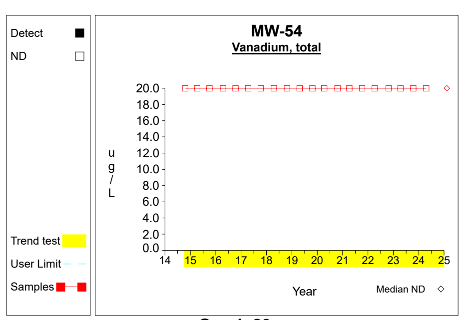
Graph 26



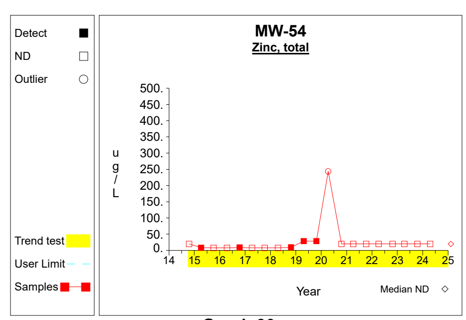
Graph 27



Graph 28



Graph 29



Graph 30

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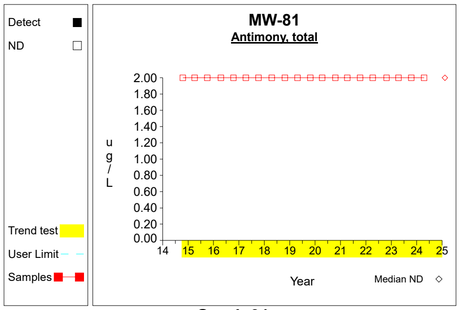
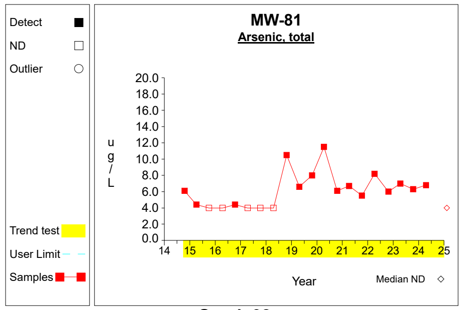
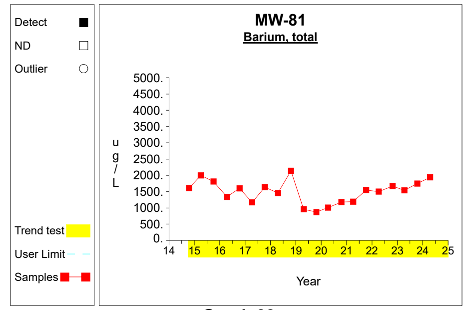
Time Series



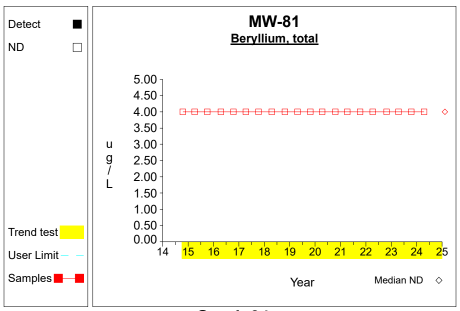
Graph 31



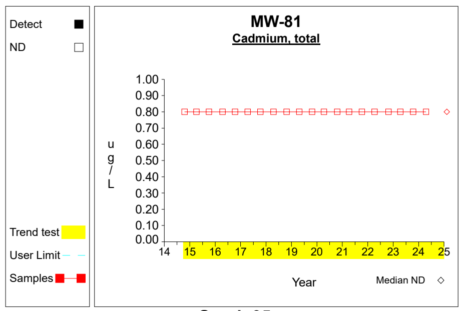
Graph 32



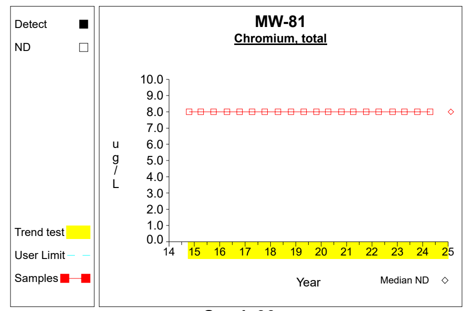
Graph 33



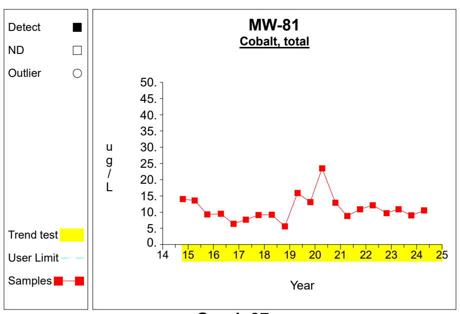
Graph 34



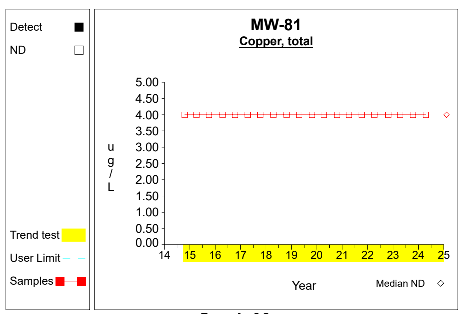
Graph 35



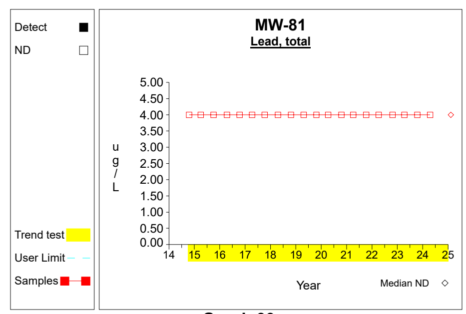
Graph 36



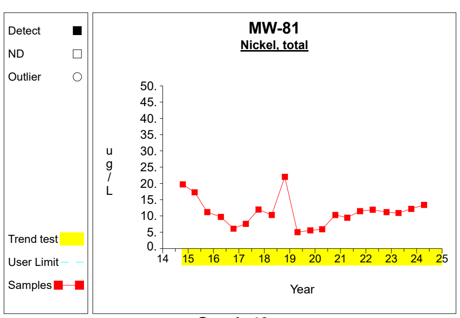
Graph 37



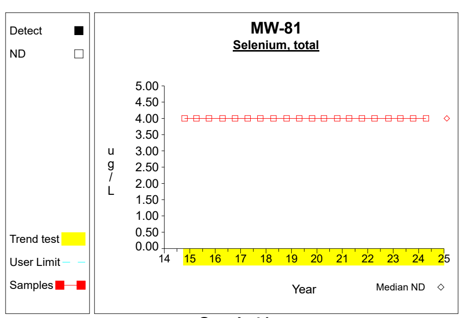
Graph 38



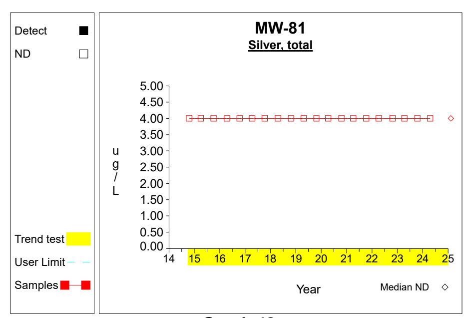
Graph 39



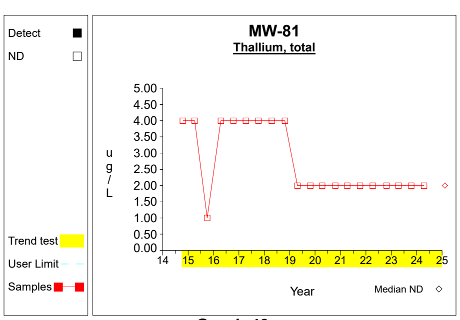
Graph 40



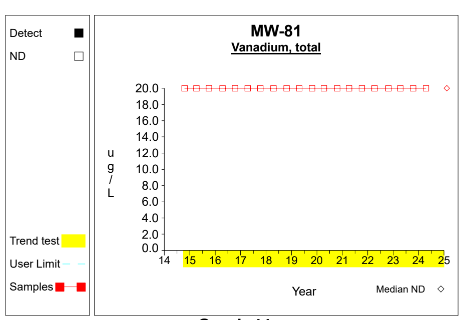
Graph 41



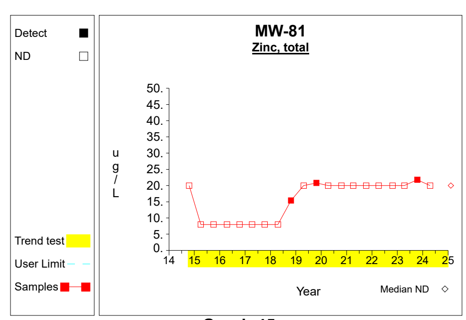
Graph 42



Graph 43

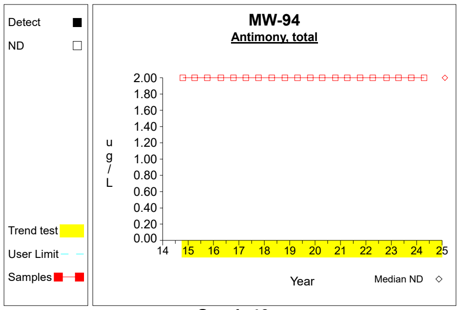


Graph 44

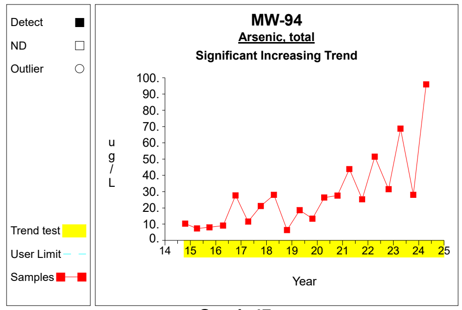


Graph 45

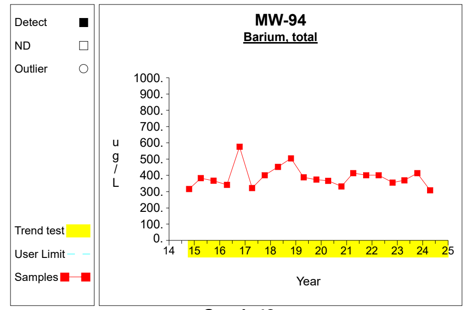
Time Series



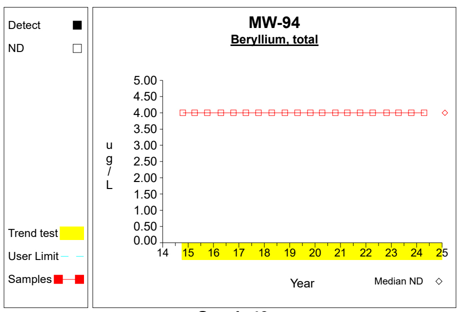
Graph 46



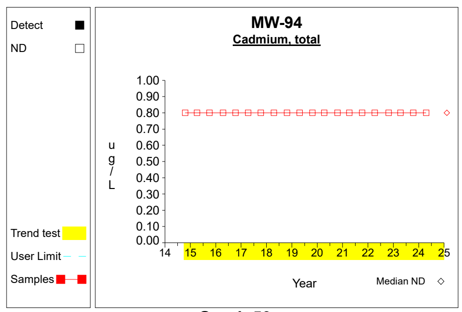
Graph 47



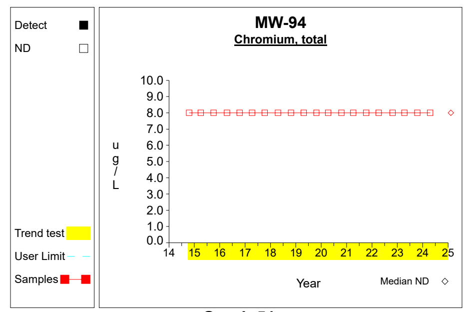
Graph 48



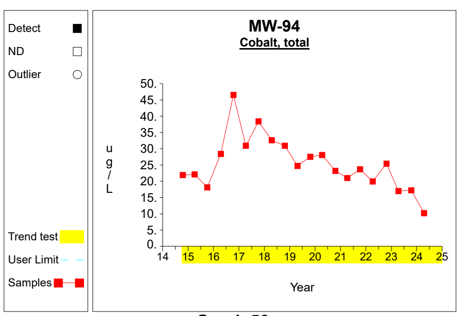
Graph 49



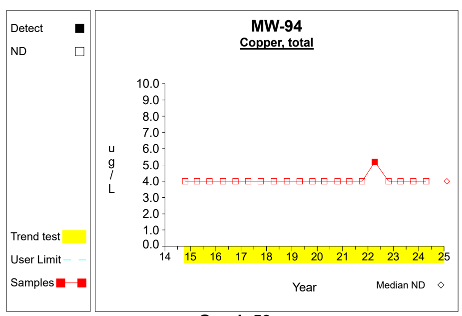
Graph 50



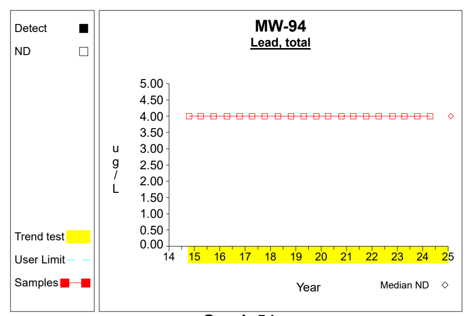
Graph 51



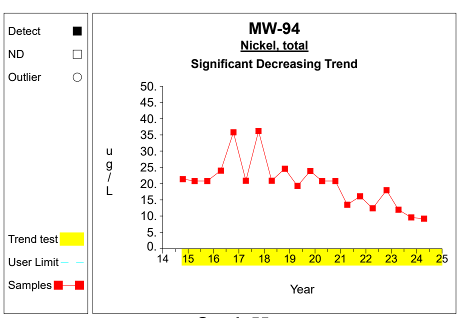
Graph 52



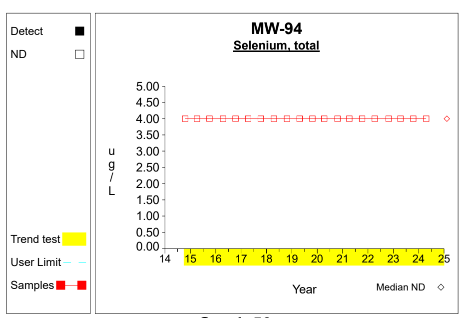
Graph 53



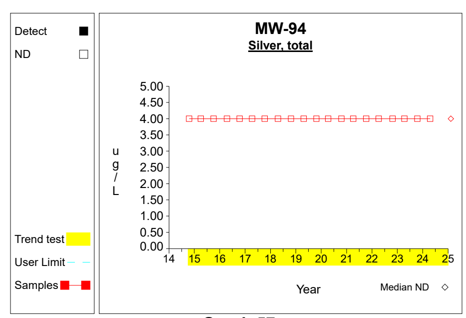
Graph 54



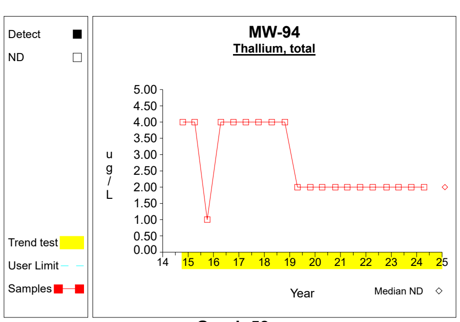
Graph 55



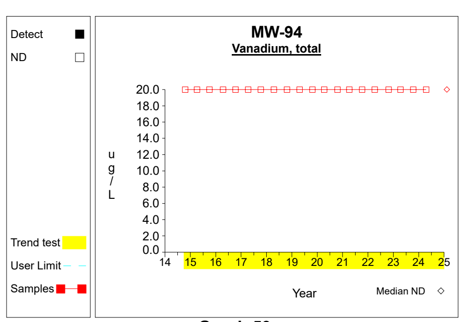
Graph 56



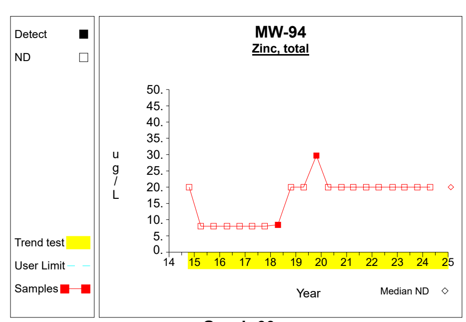
Graph 57



Graph 58

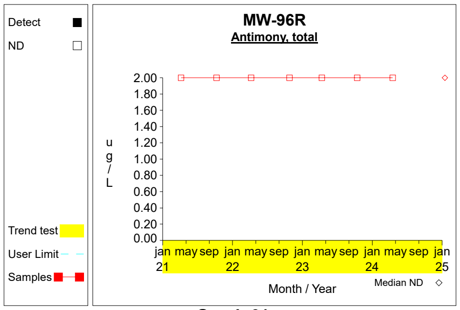


Graph 59

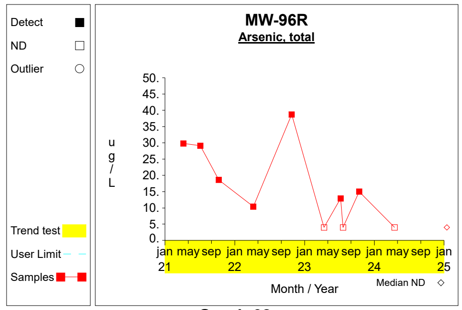


Graph 60

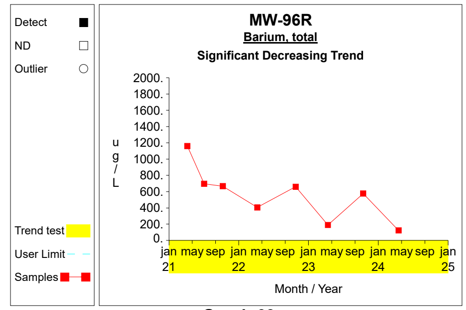
Time Series



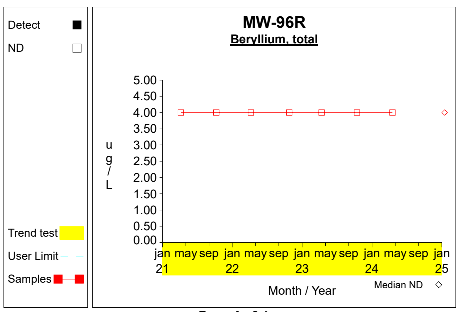
Graph 61



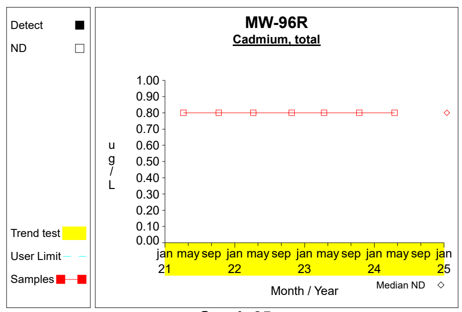
Graph 62



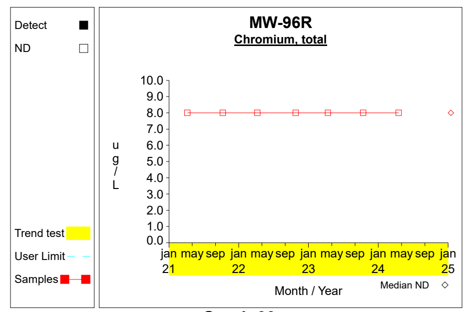
Graph 63



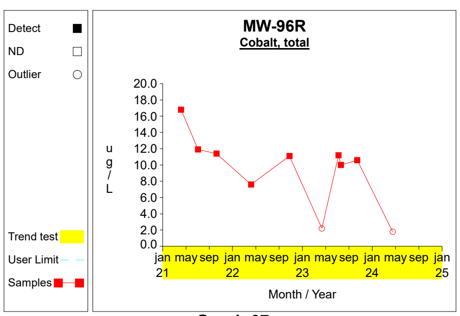
Graph 64



Graph 65



Graph 66



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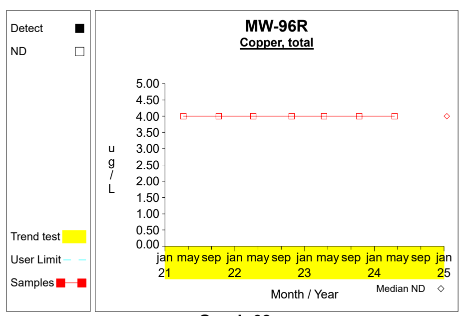

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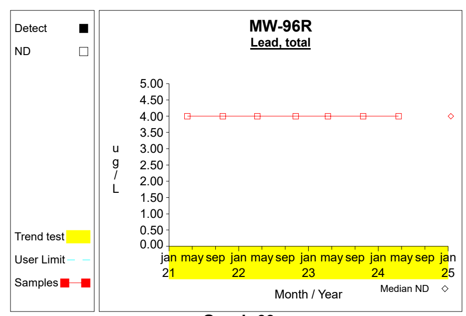

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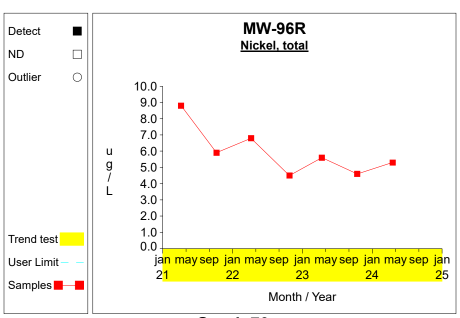
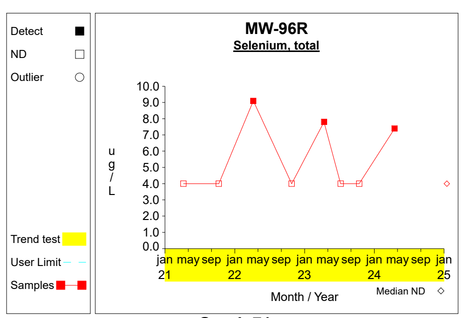
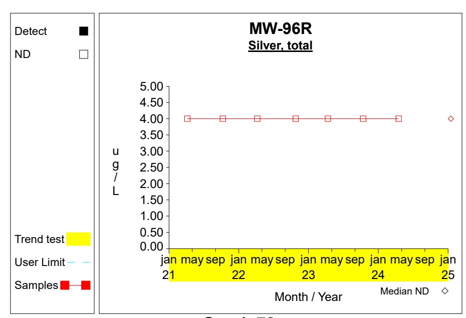


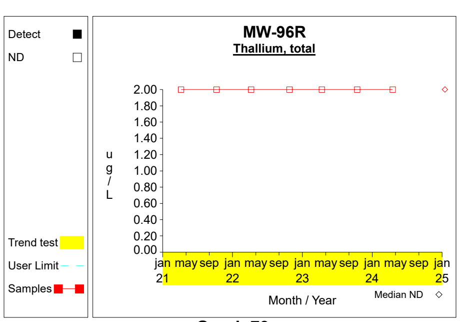
Graph 70



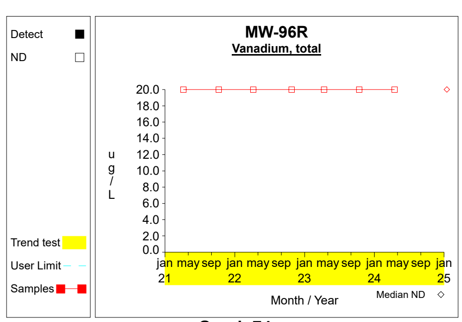
Graph 71



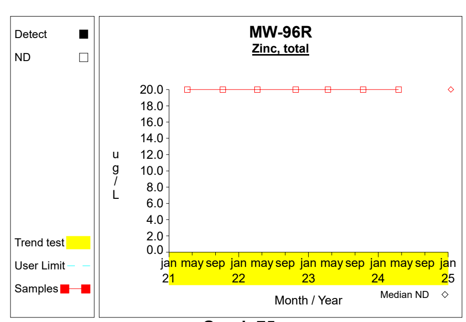
Graph 72



Graph 73



Graph 74



Graph 75

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Attachment E

Summary Table and Graphs – Intrawell Statistics

Table 1

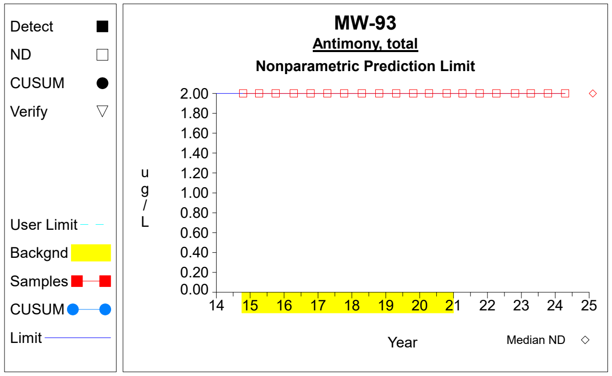
Summary Statistics and Intermediate Computations for Combined Shewhart-CUSUM Control Charts

Constituent	Units	Well	N(back)	N(mon)	N(tot)	Mean	SD	R(i-1)	R(i)	S(i-1)	S(i)	Limit	Type	Conf	
Antimony, total	ug/L	MW-93	13	7	35			2.0000	2.0000			2.0000	nonpar	.99	**
Arsenic, total	ug/L	MW-93	13	7	35	13.4846	17.0367	59.6000	11.9000	62.0983	47.7361	81.6313	normal		
Barium, total	ug/L	MW-93	13	7	35	245.9231	70.0053	249.0000	243.0000	245.9231	245.9231	525.9443	normal		
Beryllium, total	ug/L	MW-93	13	7	35			4.0000	4.0000			4.0000	nonpar	.99	**
Cadmium, total	ug/L	MW-93	13	7	35			0.8000	0.8000			0.8000	nonpar	.99	**
Chromium, total	ug/L	MW-93	13	7	35			8.0000	8.0000			8.0000	nonpar	.99	**
Cobalt, total	ug/L	MW-93	13	7	35	9.1154	3.9987	8.3000	9.8000	9.1154	9.1154	25.1103	normal		
Copper, total	ug/L	MW-93	13	8	36			4.0000	4.0000			4.0000	nonpar	.99	**
Lead, total	ug/L	MW-93	13	7	35			4.0000	4.0000			4.0000	nonpar	.99	**
Nickel, total	ug/L	MW-93	13	7	36	29.6231	6.3359	28.8000	25.5000	29.6231	29.6231	54.9667	normal		
Selenium, total	ug/L	MW-93	13	7	35			4.0000	4.0000			4.0000	nonpar	.99	**
Silver, total	ug/L	MW-93	13	7	35			4.0000	4.0000			4.0000	nonpar	.99	**
Thallium, total	ug/L	MW-93	13	7	35			2.0000	2.0000			4.0000	nonpar	.99	**
Vanadium, total	ug/L	MW-93	13	7	35			20.0000	20.0000			20.0000	nonpar	.99	**
Zinc, total	ug/L	MW-93	13	7	35			20.0000	21.4000			34.2000	nonpar	.99	**

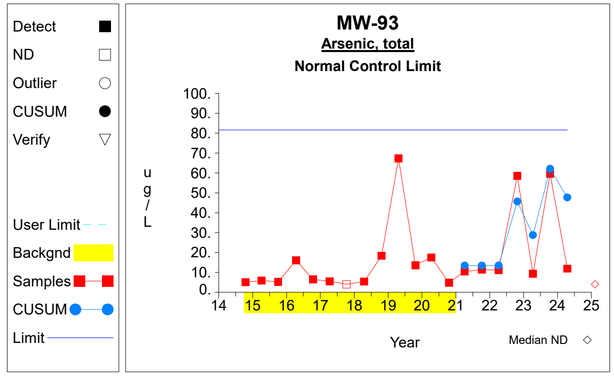
N(back) and N(mon) = Non-outlier measurements in the background and monitoring periods.
N(tot) = All independent measurements for that constituent and well.
For transformed data, mean and SD in transformed units and control limit in original units.
Conf = confidence level for passing initial test or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

Marshall [GW] May 2024

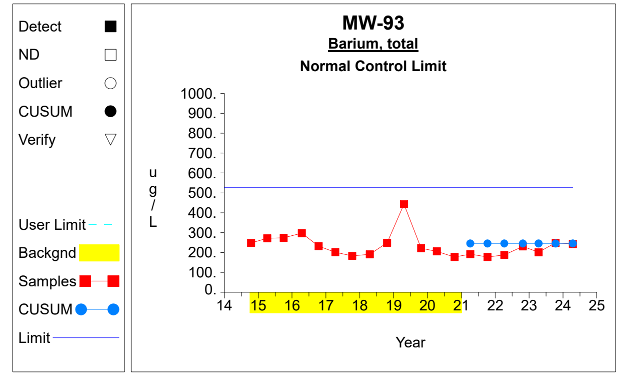
Intra-Well Control Charts / Prediction Limits



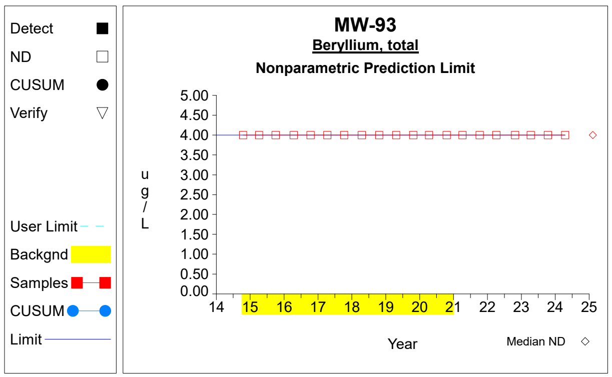
Graph 1



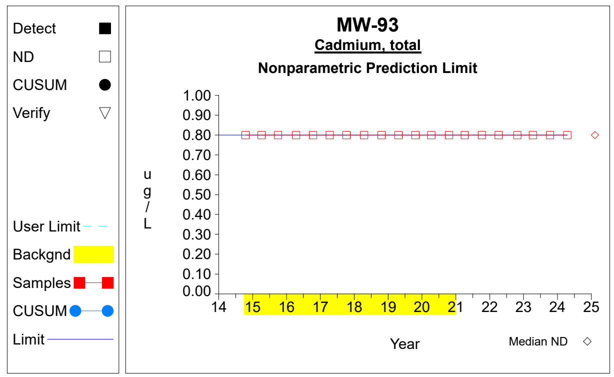
Graph 2



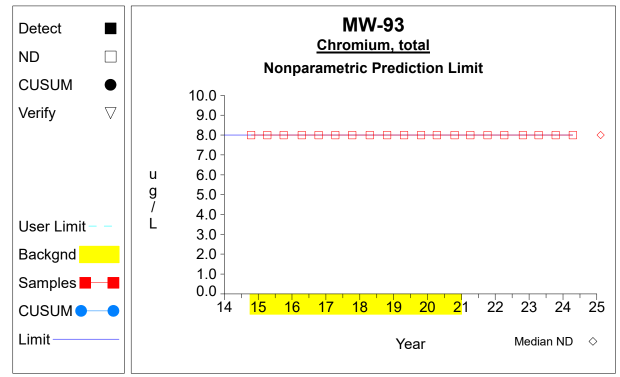
Graph 3



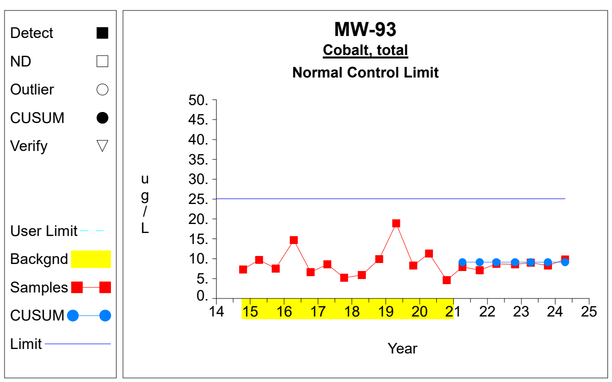
Graph 4



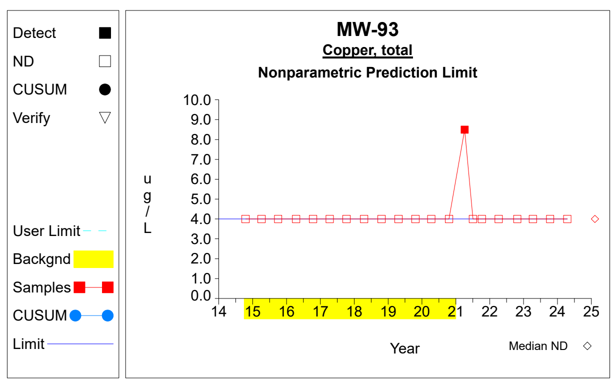
Graph 5



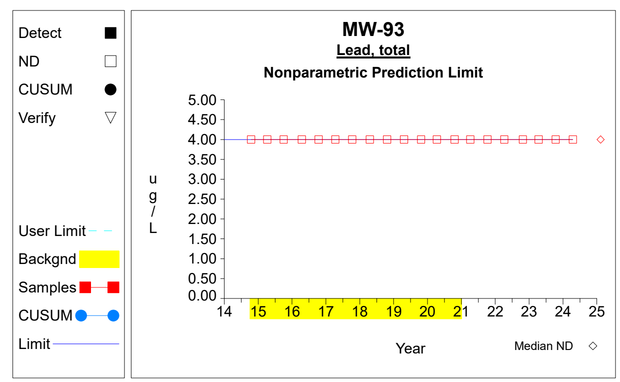
Graph 6



Graph 7



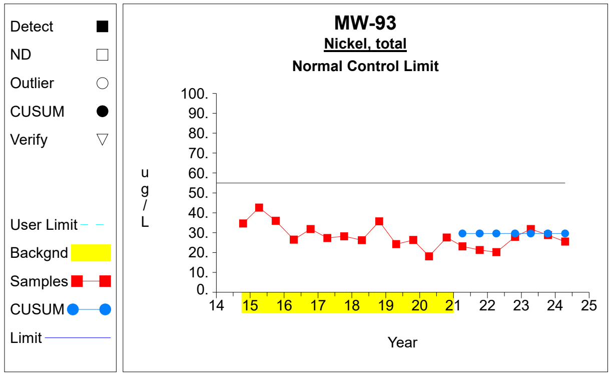
Graph 8



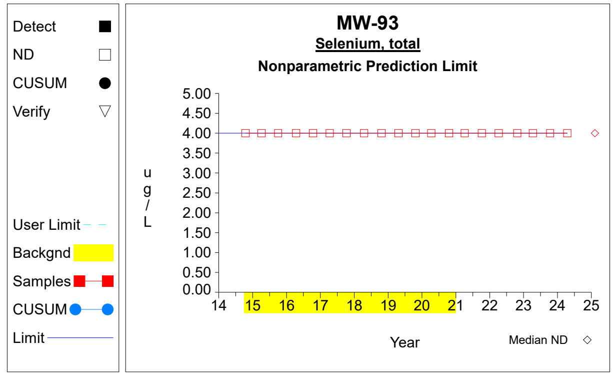
Graph 9

Prepared by: Otter Creek Environmental

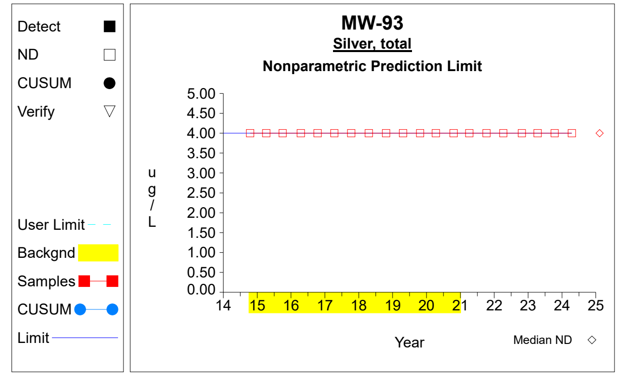
Intra-Well Control Charts / Prediction Limits



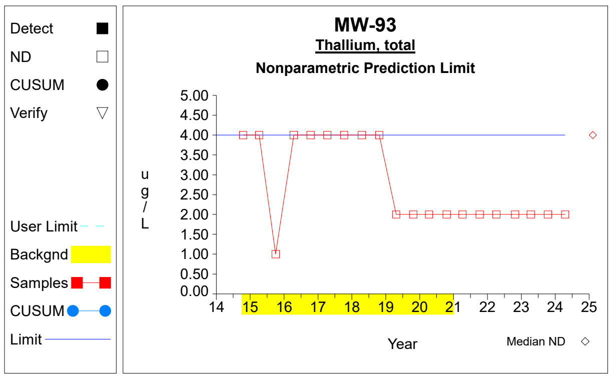
Graph 10



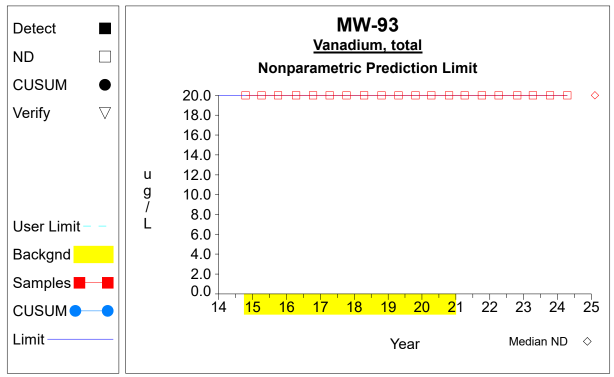
Graph 11



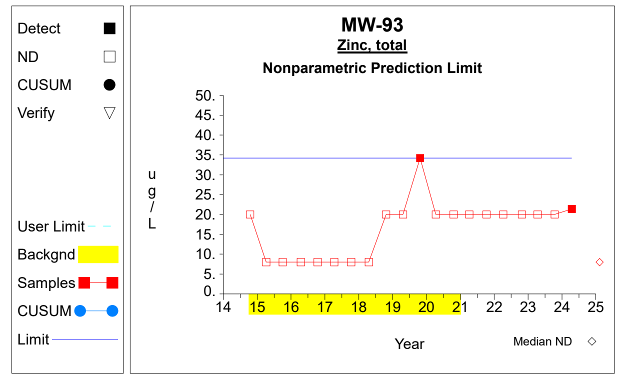
Graph 12



Graph 13



Graph 14



Graph 15

Prepared by: Otter Creek Environmental

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

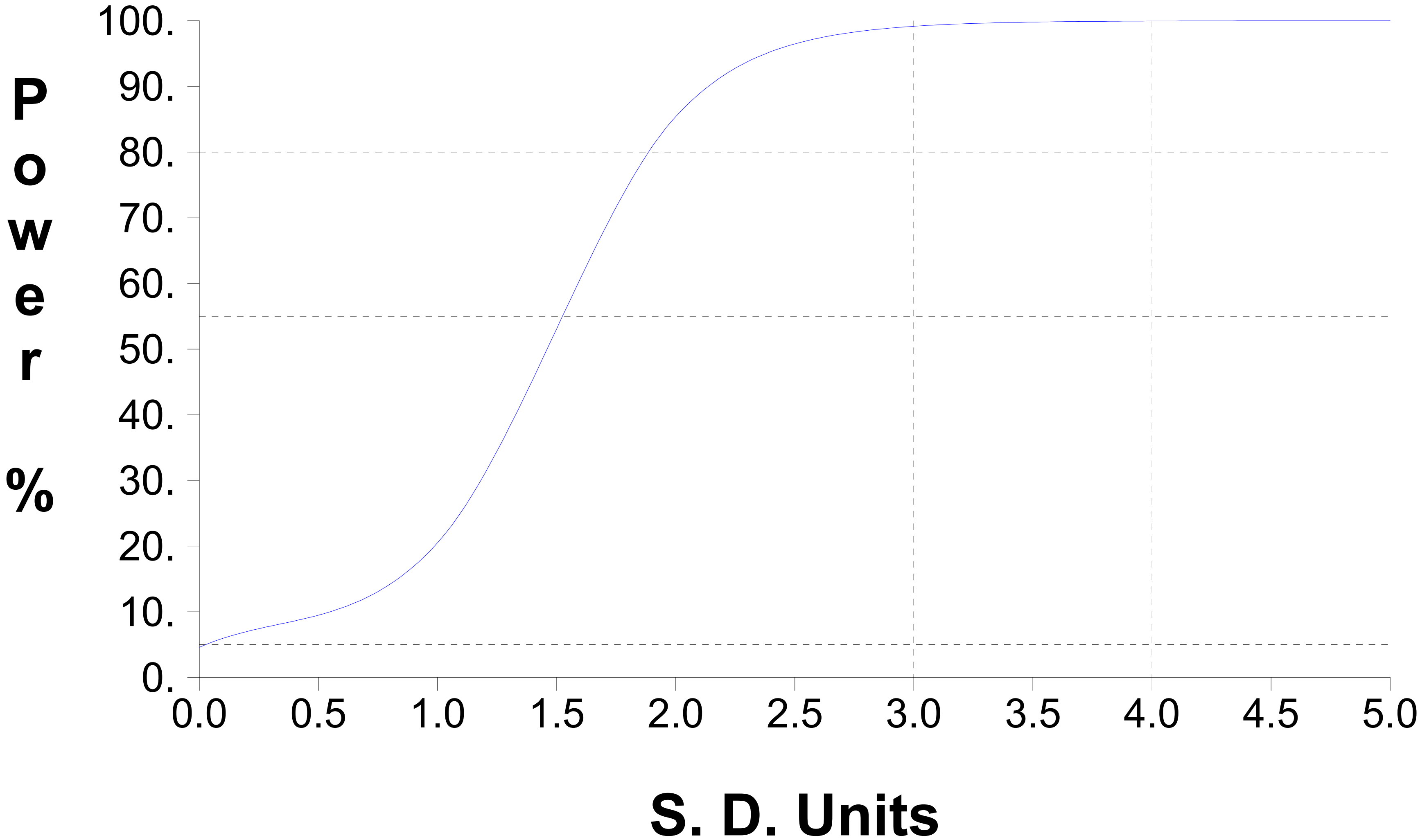


Table 2

Analytical Data and CUSUM Summary

Constituent	Units	Well	Date	Background	Result		Outlier	CUSUM	Adjusted	
Antimony, total	ug/L	MW-93	10/16/2014	yes	2.0000	ND				
Antimony, total	ug/L	MW-93	04/06/2015	yes	2.0000	ND				
Antimony, total	ug/L	MW-93	10/01/2015	yes	2.0000	ND				
Antimony, total	ug/L	MW-93	04/14/2016	yes	2.0000	ND				
Antimony, total	ug/L	MW-93	10/13/2016	yes	2.0000	ND				
Antimony, total	ug/L	MW-93	04/10/2017	yes	2.0000	ND				
Antimony, total	ug/L	MW-93	10/09/2017	yes	2.0000	ND				
Antimony, total	ug/L	MW-93	04/17/2018	yes	2.0000	ND				
Antimony, total	ug/L	MW-93	10/22/2018	yes	2.0000	ND				
Antimony, total	ug/L	MW-93	04/22/2019	yes	2.0000	ND				
Antimony, total	ug/L	MW-93	10/23/2019	yes	2.0000	ND				
Antimony, total	ug/L	MW-93	04/10/2020	yes	2.0000	ND				
Antimony, total	ug/L	MW-93	10/19/2020	yes	2.0000	ND				
Antimony, total	ug/L	MW-93	04/05/2021		2.0000	ND				
Antimony, total	ug/L	MW-93	10/08/2021		2.0000	ND				
Antimony, total	ug/L	MW-93	04/06/2022		2.0000	ND				
Antimony, total	ug/L	MW-93	10/25/2022		2.0000	ND				
Antimony, total	ug/L	MW-93	04/11/2023		2.0000	ND				
Antimony, total	ug/L	MW-93	10/13/2023		2.0000	ND				
Antimony, total	ug/L	MW-93	04/16/2024		2.0000	ND				
Arsenic, total	ug/L	MW-93	10/16/2014	yes	5.1000					
Arsenic, total	ug/L	MW-93	04/06/2015	yes	5.9000					
Arsenic, total	ug/L	MW-93	10/01/2015	yes	5.2000					
Arsenic, total	ug/L	MW-93	04/14/2016	yes	16.1000					
Arsenic, total	ug/L	MW-93	10/13/2016	yes	6.5000					
Arsenic, total	ug/L	MW-93	04/10/2017	yes	5.5000					
Arsenic, total	ug/L	MW-93	10/09/2017	yes	4.0000	ND				
Arsenic, total	ug/L	MW-93	04/17/2018	yes	5.4000					
Arsenic, total	ug/L	MW-93	10/22/2018	yes	18.4000					
Arsenic, total	ug/L	MW-93	04/22/2019	yes	67.3000					
Arsenic, total	ug/L	MW-93	10/23/2019	yes	13.6000					
Arsenic, total	ug/L	MW-93	04/10/2020	yes	17.5000					
Arsenic, total	ug/L	MW-93	10/19/2020	yes	4.8000					
Arsenic, total	ug/L	MW-93	04/05/2021		10.5000			13.4846		
Arsenic, total	ug/L	MW-93	10/08/2021		11.4000			13.4846		
Arsenic, total	ug/L	MW-93	04/06/2022		11.1000			13.4846		
Arsenic, total	ug/L	MW-93	10/25/2022		58.5000			45.7225		
Arsenic, total	ug/L	MW-93	04/11/2023		9.3000			28.7604		
Arsenic, total	ug/L	MW-93	10/13/2023		59.6000			62.0983		
Arsenic, total	ug/L	MW-93	04/16/2024		11.9000			47.7361		
Barium, total	ug/L	MW-93	10/16/2014	yes	248.0000					
Barium, total	ug/L	MW-93	04/06/2015	yes	272.0000					
Barium, total	ug/L	MW-93	10/01/2015	yes	274.0000					
Barium, total	ug/L	MW-93	04/14/2016	yes	297.0000					
Barium, total	ug/L	MW-93	10/13/2016	yes	232.0000					
Barium, total	ug/L	MW-93	04/10/2017	yes	202.0000					
Barium, total	ug/L	MW-93	10/09/2017	yes	183.0000					
Barium, total	ug/L	MW-93	04/17/2018	yes	191.0000					
Barium, total	ug/L	MW-93	10/22/2018	yes	249.0000					
Barium, total	ug/L	MW-93	04/22/2019	yes	443.0000					

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

Table 2

Analytical Data and CUSUM Summary

Constituent	Units	Well	Date	Background	Result		Outlier	CUSUM	Adjusted	
Barium, total	ug/L	MW-93	10/23/2019	yes	222.0000					
Barium, total	ug/L	MW-93	04/10/2020	yes	206.0000					
Barium, total	ug/L	MW-93	10/19/2020	yes	178.0000					
Barium, total	ug/L	MW-93	04/05/2021		192.0000			245.9231		
Barium, total	ug/L	MW-93	10/08/2021		178.0000			245.9231		
Barium, total	ug/L	MW-93	04/06/2022		188.0000			245.9231		
Barium, total	ug/L	MW-93	10/25/2022		231.0000			245.9231		
Barium, total	ug/L	MW-93	04/11/2023		201.0000			245.9231		
Barium, total	ug/L	MW-93	10/13/2023		249.0000			245.9231		
Barium, total	ug/L	MW-93	04/16/2024		243.0000			245.9231		
Beryllium, total	ug/L	MW-93	10/16/2014	yes	4.0000	ND				
Beryllium, total	ug/L	MW-93	04/06/2015	yes	4.0000	ND				
Beryllium, total	ug/L	MW-93	10/01/2015	yes	4.0000	ND				
Beryllium, total	ug/L	MW-93	04/14/2016	yes	4.0000	ND				
Beryllium, total	ug/L	MW-93	10/13/2016	yes	4.0000	ND				
Beryllium, total	ug/L	MW-93	04/10/2017	yes	4.0000	ND				
Beryllium, total	ug/L	MW-93	10/09/2017	yes	4.0000	ND				
Beryllium, total	ug/L	MW-93	04/17/2018	yes	4.0000	ND				
Beryllium, total	ug/L	MW-93	10/22/2018	yes	4.0000	ND				
Beryllium, total	ug/L	MW-93	04/22/2019	yes	4.0000	ND				
Beryllium, total	ug/L	MW-93	10/23/2019	yes	4.0000	ND				
Beryllium, total	ug/L	MW-93	04/10/2020	yes	4.0000	ND				
Beryllium, total	ug/L	MW-93	10/19/2020	yes	4.0000	ND				
Beryllium, total	ug/L	MW-93	04/05/2021		4.0000	ND				
Beryllium, total	ug/L	MW-93	10/08/2021		4.0000	ND				
Beryllium, total	ug/L	MW-93	04/06/2022		4.0000	ND				
Beryllium, total	ug/L	MW-93	10/25/2022		4.0000	ND				
Beryllium, total	ug/L	MW-93	04/11/2023		4.0000	ND				
Beryllium, total	ug/L	MW-93	10/13/2023		4.0000	ND				
Beryllium, total	ug/L	MW-93	04/16/2024		4.0000	ND				
Cadmium, total	ug/L	MW-93	10/16/2014	yes	0.8000	ND				
Cadmium, total	ug/L	MW-93	04/06/2015	yes	0.8000	ND				
Cadmium, total	ug/L	MW-93	10/01/2015	yes	0.8000	ND				
Cadmium, total	ug/L	MW-93	04/14/2016	yes	0.8000	ND				
Cadmium, total	ug/L	MW-93	10/13/2016	yes	0.8000	ND				
Cadmium, total	ug/L	MW-93	04/10/2017	yes	0.8000	ND				
Cadmium, total	ug/L	MW-93	10/09/2017	yes	0.8000	ND				
Cadmium, total	ug/L	MW-93	04/17/2018	yes	0.8000	ND				
Cadmium, total	ug/L	MW-93	10/22/2018	yes	0.8000	ND				
Cadmium, total	ug/L	MW-93	04/22/2019	yes	0.8000	ND				
Cadmium, total	ug/L	MW-93	10/23/2019	yes	0.8000	ND				
Cadmium, total	ug/L	MW-93	04/10/2020	yes	0.8000	ND				
Cadmium, total	ug/L	MW-93	10/19/2020	yes	0.8000	ND				
Cadmium, total	ug/L	MW-93	04/05/2021		0.8000	ND				
Cadmium, total	ug/L	MW-93	10/08/2021		0.8000	ND				
Cadmium, total	ug/L	MW-93	04/06/2022		0.8000	ND				
Cadmium, total	ug/L	MW-93	10/25/2022		0.8000	ND				
Cadmium, total	ug/L	MW-93	04/11/2023		0.8000	ND				
Cadmium, total	ug/L	MW-93	10/13/2023		0.8000	ND				
Cadmium, total	ug/L	MW-93	04/16/2024		0.8000	ND				

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**** - ND value replaced with manual RL.
ND = Not detected, Result = detection limit.

Table 2

Analytical Data and CUSUM Summary

Constituent	Units	Well	Date	Background	Result		Outlier	CUSUM	Adjusted	
Chromium, total	ug/L	MW-93	10/16/2014	yes	8.0000	ND				
Chromium, total	ug/L	MW-93	04/06/2015	yes	8.0000	ND				
Chromium, total	ug/L	MW-93	10/01/2015	yes	8.0000	ND				
Chromium, total	ug/L	MW-93	04/14/2016	yes	8.0000	ND				
Chromium, total	ug/L	MW-93	10/13/2016	yes	8.0000	ND				
Chromium, total	ug/L	MW-93	04/10/2017	yes	8.0000	ND				
Chromium, total	ug/L	MW-93	10/09/2017	yes	8.0000	ND				
Chromium, total	ug/L	MW-93	04/17/2018	yes	8.0000	ND				
Chromium, total	ug/L	MW-93	10/22/2018	yes	8.0000	ND				
Chromium, total	ug/L	MW-93	04/22/2019	yes	8.0000	ND				
Chromium, total	ug/L	MW-93	10/23/2019	yes	8.0000	ND				
Chromium, total	ug/L	MW-93	04/10/2020	yes	8.0000	ND				
Chromium, total	ug/L	MW-93	10/19/2020	yes	8.0000	ND				
Chromium, total	ug/L	MW-93	04/05/2021		8.0000	ND				
Chromium, total	ug/L	MW-93	10/08/2021		8.0000	ND				
Chromium, total	ug/L	MW-93	04/06/2022		8.0000	ND				
Chromium, total	ug/L	MW-93	10/25/2022		8.0000	ND				
Chromium, total	ug/L	MW-93	04/11/2023		8.0000	ND				
Chromium, total	ug/L	MW-93	10/13/2023		8.0000	ND				
Chromium, total	ug/L	MW-93	04/16/2024		8.0000	ND				
Cobalt, total	ug/L	MW-93	10/16/2014	yes	7.3000					
Cobalt, total	ug/L	MW-93	04/06/2015	yes	9.7000					
Cobalt, total	ug/L	MW-93	10/01/2015	yes	7.5000					
Cobalt, total	ug/L	MW-93	04/14/2016	yes	14.7000					
Cobalt, total	ug/L	MW-93	10/13/2016	yes	6.6000					
Cobalt, total	ug/L	MW-93	04/10/2017	yes	8.6000					
Cobalt, total	ug/L	MW-93	10/09/2017	yes	5.2000					
Cobalt, total	ug/L	MW-93	04/17/2018	yes	5.9000					
Cobalt, total	ug/L	MW-93	10/22/2018	yes	9.9000					
Cobalt, total	ug/L	MW-93	04/22/2019	yes	18.9000					
Cobalt, total	ug/L	MW-93	10/23/2019	yes	8.3000					
Cobalt, total	ug/L	MW-93	04/10/2020	yes	11.3000					
Cobalt, total	ug/L	MW-93	10/19/2020	yes	4.6000					
Cobalt, total	ug/L	MW-93	04/05/2021		7.9000			9.1154		
Cobalt, total	ug/L	MW-93	10/08/2021		7.1000			9.1154		
Cobalt, total	ug/L	MW-93	04/06/2022		8.7000			9.1154		
Cobalt, total	ug/L	MW-93	10/25/2022		8.6000			9.1154		
Cobalt, total	ug/L	MW-93	04/11/2023		9.0000			9.1154		
Cobalt, total	ug/L	MW-93	10/13/2023		8.3000			9.1154		
Cobalt, total	ug/L	MW-93	04/16/2024		9.8000			9.1154		
Copper, total	ug/L	MW-93	10/16/2014	yes	4.0000	ND				
Copper, total	ug/L	MW-93	04/06/2015	yes	4.0000	ND				
Copper, total	ug/L	MW-93	10/01/2015	yes	4.0000	ND				
Copper, total	ug/L	MW-93	04/14/2016	yes	4.0000	ND				
Copper, total	ug/L	MW-93	10/13/2016	yes	4.0000	ND				
Copper, total	ug/L	MW-93	04/10/2017	yes	4.0000	ND				
Copper, total	ug/L	MW-93	10/09/2017	yes	4.0000	ND				
Copper, total	ug/L	MW-93	04/17/2018	yes	4.0000	ND				
Copper, total	ug/L	MW-93	10/22/2018	yes	4.0000	ND				
Copper, total	ug/L	MW-93	04/22/2019	yes	4.0000	ND				

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Table 2

Analytical Data and CUSUM Summary

Constituent	Units	Well	Date	Background	Result		Outlier	CUSUM	Adjusted	
Copper, total	ug/L	MW-93	10/23/2019	yes	4.0000	ND				
Copper, total	ug/L	MW-93	04/10/2020	yes	4.0000	ND				
Copper, total	ug/L	MW-93	10/19/2020	yes	4.0000	ND				
Copper, total	ug/L	MW-93	04/05/2021		8.5000					**
Copper, total	ug/L	MW-93	07/02/2021		4.0000	ND				
Copper, total	ug/L	MW-93	10/08/2021		4.0000	ND				
Copper, total	ug/L	MW-93	04/06/2022		4.0000	ND				
Copper, total	ug/L	MW-93	10/25/2022		4.0000	ND				
Copper, total	ug/L	MW-93	04/11/2023		4.0000	ND				
Copper, total	ug/L	MW-93	10/13/2023		4.0000	ND				
Copper, total	ug/L	MW-93	04/16/2024		4.0000	ND				
Lead, total	ug/L	MW-93	10/16/2014	yes	4.0000	ND				
Lead, total	ug/L	MW-93	04/06/2015	yes	4.0000	ND				
Lead, total	ug/L	MW-93	10/01/2015	yes	4.0000	ND				
Lead, total	ug/L	MW-93	04/14/2016	yes	4.0000	ND				
Lead, total	ug/L	MW-93	10/13/2016	yes	4.0000	ND				
Lead, total	ug/L	MW-93	04/10/2017	yes	4.0000	ND				
Lead, total	ug/L	MW-93	10/09/2017	yes	4.0000	ND				
Lead, total	ug/L	MW-93	04/17/2018	yes	4.0000	ND				
Lead, total	ug/L	MW-93	10/22/2018	yes	4.0000	ND				
Lead, total	ug/L	MW-93	04/22/2019	yes	4.0000	ND				
Lead, total	ug/L	MW-93	10/23/2019	yes	4.0000	ND				
Lead, total	ug/L	MW-93	04/10/2020	yes	4.0000	ND				
Lead, total	ug/L	MW-93	10/19/2020	yes	4.0000	ND				
Lead, total	ug/L	MW-93	04/05/2021		4.0000	ND				
Lead, total	ug/L	MW-93	10/08/2021		4.0000	ND				
Lead, total	ug/L	MW-93	04/06/2022		4.0000	ND				
Lead, total	ug/L	MW-93	10/25/2022		4.0000	ND				
Lead, total	ug/L	MW-93	04/11/2023		4.0000	ND				
Lead, total	ug/L	MW-93	10/13/2023		4.0000	ND				
Lead, total	ug/L	MW-93	04/16/2024		4.0000	ND				
Nickel, total	ug/L	MW-93	10/16/2014	yes	34.6000					
Nickel, total	ug/L	MW-93	04/06/2015	yes	42.6000					
Nickel, total	ug/L	MW-93	10/01/2015	yes	36.0000					
Nickel, total	ug/L	MW-93	04/14/2016	yes	26.5000					
Nickel, total	ug/L	MW-93	10/13/2016	yes	31.8000					
Nickel, total	ug/L	MW-93	04/10/2017	yes	27.3000					
Nickel, total	ug/L	MW-93	10/09/2017	yes	28.2000					
Nickel, total	ug/L	MW-93	04/17/2018	yes	26.2000					
Nickel, total	ug/L	MW-93	10/22/2018	yes	35.7000					
Nickel, total	ug/L	MW-93	04/22/2019	yes	24.2000					
Nickel, total	ug/L	MW-93	10/23/2019	yes	26.3000					
Nickel, total	ug/L	MW-93	04/10/2020	yes	18.1000					
Nickel, total	ug/L	MW-93	10/19/2020	yes	27.6000					
Nickel, total	ug/L	MW-93	04/05/2021		23.1000			29.6231		
Nickel, total	ug/L	MW-93	10/08/2021		21.3000			29.6231		
Nickel, total	ug/L	MW-93	04/06/2022		20.2000			29.6231		
Nickel, total	ug/L	MW-93	10/25/2022		27.9000			29.6231		
Nickel, total	ug/L	MW-93	04/11/2023		31.8000			29.6231		
Nickel, total	ug/L	MW-93	10/13/2023		28.8000			29.6231		

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Table 2

Analytical Data and CUSUM Summary

Constituent	Units	Well	Date	Background	Result		Outlier	CUSUM	Adjusted	
Nickel, total	ug/L	MW-93	04/16/2024		25.5000			29.6231		
Selenium, total	ug/L	MW-93	10/16/2014	yes	4.0000	ND				
Selenium, total	ug/L	MW-93	04/06/2015	yes	4.0000	ND				
Selenium, total	ug/L	MW-93	10/01/2015	yes	4.0000	ND				
Selenium, total	ug/L	MW-93	04/14/2016	yes	4.0000	ND				
Selenium, total	ug/L	MW-93	10/13/2016	yes	4.0000	ND				
Selenium, total	ug/L	MW-93	04/10/2017	yes	4.0000	ND				
Selenium, total	ug/L	MW-93	10/09/2017	yes	4.0000	ND				
Selenium, total	ug/L	MW-93	04/17/2018	yes	4.0000	ND				
Selenium, total	ug/L	MW-93	10/22/2018	yes	4.0000	ND				
Selenium, total	ug/L	MW-93	04/22/2019	yes	4.0000	ND				
Selenium, total	ug/L	MW-93	10/23/2019	yes	4.0000	ND				
Selenium, total	ug/L	MW-93	04/10/2020	yes	4.0000	ND				
Selenium, total	ug/L	MW-93	10/19/2020	yes	4.0000	ND				
Selenium, total	ug/L	MW-93	04/05/2021		4.0000	ND				
Selenium, total	ug/L	MW-93	10/08/2021		4.0000	ND				
Selenium, total	ug/L	MW-93	04/06/2022		4.0000	ND				
Selenium, total	ug/L	MW-93	10/25/2022		4.0000	ND				
Selenium, total	ug/L	MW-93	04/11/2023		4.0000	ND				
Selenium, total	ug/L	MW-93	10/13/2023		4.0000	ND				
Selenium, total	ug/L	MW-93	04/16/2024		4.0000	ND				
Silver, total	ug/L	MW-93	10/16/2014	yes	4.0000	ND				
Silver, total	ug/L	MW-93	04/06/2015	yes	4.0000	ND				
Silver, total	ug/L	MW-93	10/01/2015	yes	4.0000	ND				
Silver, total	ug/L	MW-93	04/14/2016	yes	4.0000	ND				
Silver, total	ug/L	MW-93	10/13/2016	yes	4.0000	ND				
Silver, total	ug/L	MW-93	04/10/2017	yes	4.0000	ND				
Silver, total	ug/L	MW-93	10/09/2017	yes	4.0000	ND				
Silver, total	ug/L	MW-93	04/17/2018	yes	4.0000	ND				
Silver, total	ug/L	MW-93	10/22/2018	yes	4.0000	ND				
Silver, total	ug/L	MW-93	04/22/2019	yes	4.0000	ND				
Silver, total	ug/L	MW-93	10/23/2019	yes	4.0000	ND				
Silver, total	ug/L	MW-93	04/10/2020	yes	4.0000	ND				
Silver, total	ug/L	MW-93	10/19/2020	yes	4.0000	ND				
Silver, total	ug/L	MW-93	04/05/2021		4.0000	ND				
Silver, total	ug/L	MW-93	10/08/2021		4.0000	ND				
Silver, total	ug/L	MW-93	04/06/2022		4.0000	ND				
Silver, total	ug/L	MW-93	10/25/2022		4.0000	ND				
Silver, total	ug/L	MW-93	04/11/2023		4.0000	ND				
Silver, total	ug/L	MW-93	10/13/2023		4.0000	ND				
Silver, total	ug/L	MW-93	04/16/2024		4.0000	ND				
Thallium, total	ug/L	MW-93	10/16/2014	yes	4.0000	ND				
Thallium, total	ug/L	MW-93	04/06/2015	yes	4.0000	ND				
Thallium, total	ug/L	MW-93	10/01/2015	yes	1.0000	ND			4.0000	***
Thallium, total	ug/L	MW-93	04/14/2016	yes	4.0000	ND				
Thallium, total	ug/L	MW-93	10/13/2016	yes	4.0000	ND				
Thallium, total	ug/L	MW-93	04/10/2017	yes	4.0000	ND				
Thallium, total	ug/L	MW-93	10/09/2017	yes	4.0000	ND				
Thallium, total	ug/L	MW-93	04/17/2018	yes	4.0000	ND				
Thallium, total	ug/L	MW-93	10/22/2018	yes	4.0000	ND				

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

Table 2

Analytical Data and CUSUM Summary

Constituent	Units	Well	Date	Background	Result		Outlier	CUSUM	Adjusted	
Thallium, total	ug/L	MW-93	04/22/2019	yes	2.0000	ND			4.0000	***
Thallium, total	ug/L	MW-93	10/23/2019	yes	2.0000	ND			4.0000	***
Thallium, total	ug/L	MW-93	04/10/2020	yes	2.0000	ND			4.0000	***
Thallium, total	ug/L	MW-93	10/19/2020	yes	2.0000	ND			4.0000	***
Thallium, total	ug/L	MW-93	04/05/2021		2.0000	ND				
Thallium, total	ug/L	MW-93	10/08/2021		2.0000	ND				
Thallium, total	ug/L	MW-93	04/06/2022		2.0000	ND				
Thallium, total	ug/L	MW-93	10/25/2022		2.0000	ND				
Thallium, total	ug/L	MW-93	04/11/2023		2.0000	ND				
Thallium, total	ug/L	MW-93	10/13/2023		2.0000	ND				
Thallium, total	ug/L	MW-93	04/16/2024		2.0000	ND				
Vanadium, total	ug/L	MW-93	10/16/2014	yes	20.0000	ND				
Vanadium, total	ug/L	MW-93	04/06/2015	yes	20.0000	ND				
Vanadium, total	ug/L	MW-93	10/01/2015	yes	20.0000	ND				
Vanadium, total	ug/L	MW-93	04/14/2016	yes	20.0000	ND				
Vanadium, total	ug/L	MW-93	10/13/2016	yes	20.0000	ND				
Vanadium, total	ug/L	MW-93	04/10/2017	yes	20.0000	ND				
Vanadium, total	ug/L	MW-93	10/09/2017	yes	20.0000	ND				
Vanadium, total	ug/L	MW-93	04/17/2018	yes	20.0000	ND				
Vanadium, total	ug/L	MW-93	10/22/2018	yes	20.0000	ND				
Vanadium, total	ug/L	MW-93	04/22/2019	yes	20.0000	ND				
Vanadium, total	ug/L	MW-93	10/23/2019	yes	20.0000	ND				
Vanadium, total	ug/L	MW-93	04/10/2020	yes	20.0000	ND				
Vanadium, total	ug/L	MW-93	10/19/2020	yes	20.0000	ND				
Vanadium, total	ug/L	MW-93	04/05/2021		20.0000	ND				
Vanadium, total	ug/L	MW-93	10/08/2021		20.0000	ND				
Vanadium, total	ug/L	MW-93	04/06/2022		20.0000	ND				
Vanadium, total	ug/L	MW-93	10/25/2022		20.0000	ND				
Vanadium, total	ug/L	MW-93	04/11/2023		20.0000	ND				
Vanadium, total	ug/L	MW-93	10/13/2023		20.0000	ND				
Vanadium, total	ug/L	MW-93	04/16/2024		20.0000	ND				
Zinc, total	ug/L	MW-93	10/16/2014	yes	20.0000	ND			8.0000	***
Zinc, total	ug/L	MW-93	04/06/2015	yes	8.0000	ND				
Zinc, total	ug/L	MW-93	10/01/2015	yes	8.0000	ND				
Zinc, total	ug/L	MW-93	04/14/2016	yes	8.0000	ND				
Zinc, total	ug/L	MW-93	10/13/2016	yes	8.0000	ND				
Zinc, total	ug/L	MW-93	04/10/2017	yes	8.0000	ND				
Zinc, total	ug/L	MW-93	10/09/2017	yes	8.0000	ND				
Zinc, total	ug/L	MW-93	04/17/2018	yes	8.0000	ND				
Zinc, total	ug/L	MW-93	10/22/2018	yes	20.0000	ND			8.0000	***
Zinc, total	ug/L	MW-93	04/22/2019	yes	20.0000	ND			8.0000	***
Zinc, total	ug/L	MW-93	10/23/2019	yes	34.2000					
Zinc, total	ug/L	MW-93	04/10/2020	yes	20.0000	ND			8.0000	***
Zinc, total	ug/L	MW-93	10/19/2020	yes	20.0000	ND			8.0000	***
Zinc, total	ug/L	MW-93	04/05/2021		20.0000	ND				
Zinc, total	ug/L	MW-93	10/08/2021		20.0000	ND				
Zinc, total	ug/L	MW-93	04/06/2022		20.0000	ND				
Zinc, total	ug/L	MW-93	10/25/2022		20.0000	ND				
Zinc, total	ug/L	MW-93	04/11/2023		20.0000	ND				
Zinc, total	ug/L	MW-93	10/13/2023		20.0000	ND				

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

Table 2

Analytical Data and CUSUM Summary

Constituent	Units	Well	Date	Background	Result		Outlier	CUSUM	Adjusted	
Zinc, total	ug/L	MW-93	04/16/2024		21.4000					

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

Table 1

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

Constituent	Units	Well	N(back)	N(mon)	N(tot)	Mean	SD	R(i-1)	R(i)	S(i-1)	S(i)	Limit	Type	Conf	
Antimony, total	ug/L	MW-96R	5	2	7								nonpar *		**
Arsenic, total	ug/L	MW-96R	8	2	10	18.4375	12.9037	15.0000	4.0000	18.4375	18.4375	76.5042	normal		
Barium, total	ug/L	MW-96R	6	2	8	630.0000	325.9945	576.0000	124.0000	630.0000	630.0000	2096.9752	normal		
Beryllium, total	ug/L	MW-96R	5	2	7								nonpar *		**
Cadmium, total	ug/L	MW-96R	5	2	7								nonpar *		**
Chromium, total	ug/L	MW-96R	5	2	7								nonpar *		**
Cobalt, total	ug/L	MW-96R	7	2	10	11.4286	2.7669	10.6000	1.8000	11.4286	11.4286	23.8796	normal		
Copper, total	ug/L	MW-96R	5	2	7								nonpar *		**
Lead, total	ug/L	MW-96R	5	2	7								nonpar *		**
Nickel, total	ug/L	MW-96R	5	2	7	6.3200	1.6115	4.6000	5.3000	6.3200	6.3200	13.5718	normal		
Selenium, total	ug/L	MW-96R	6	2	8	5.4833	2.3345	4.0000	7.4000	5.4833	5.4833	15.9884	normal		
Silver, total	ug/L	MW-96R	5	2	7								nonpar *		**
Thallium, total	ug/L	MW-96R	5	2	7								nonpar *		**
Vanadium, total	ug/L	MW-96R	5	2	7								nonpar *		**
Zinc, total	ug/L	MW-96R	5	2	7								nonpar *		**

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

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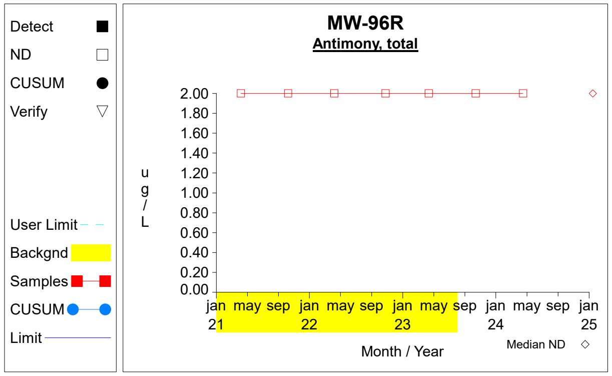
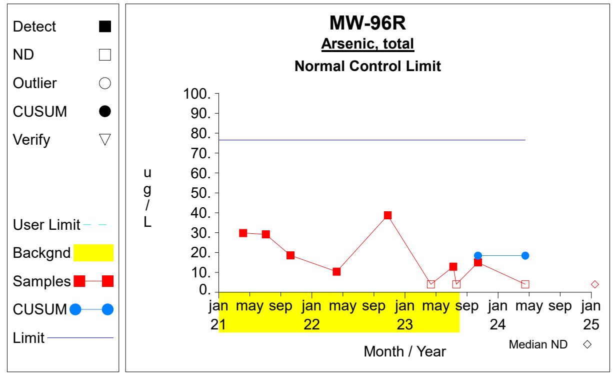
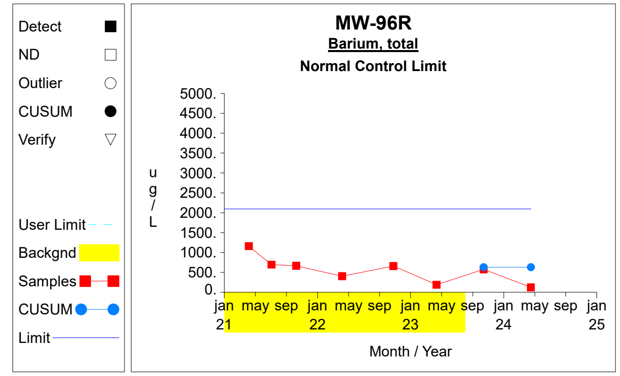
Intra-Well Control Charts / Prediction Limits



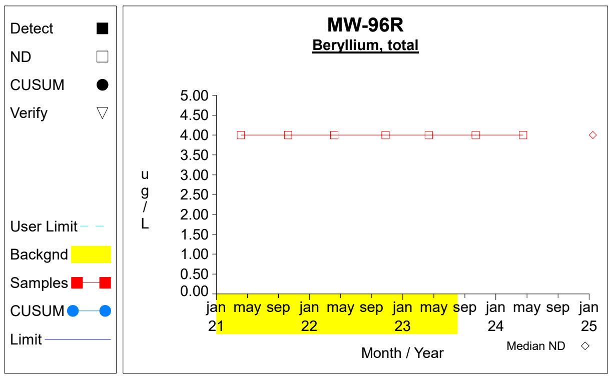
Graph 1



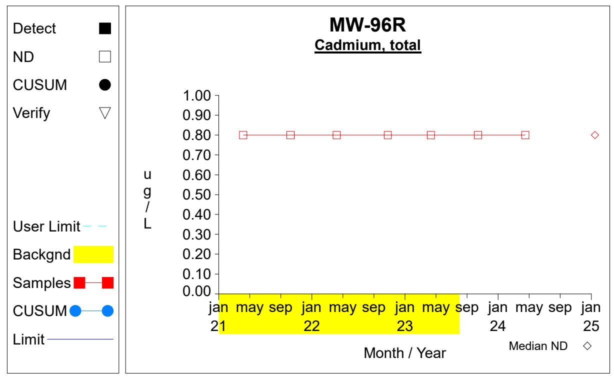
Graph 2



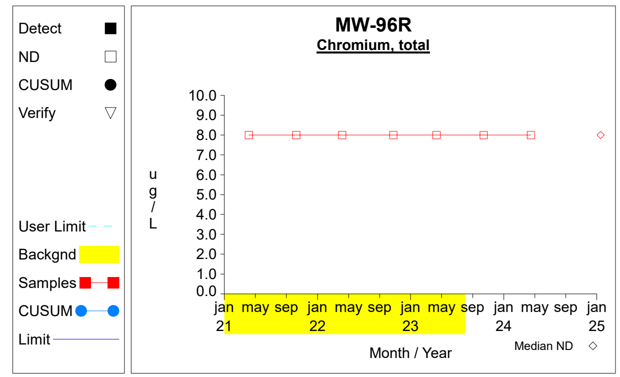
Graph 3



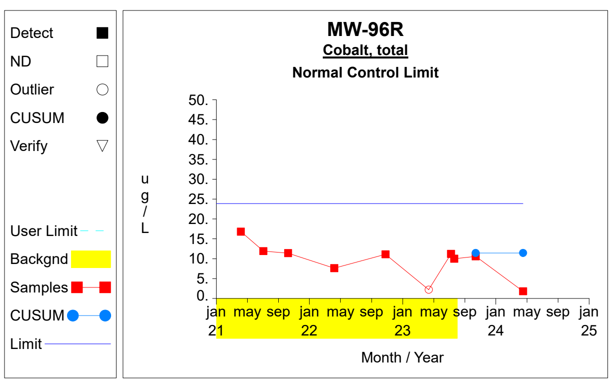
Graph 4



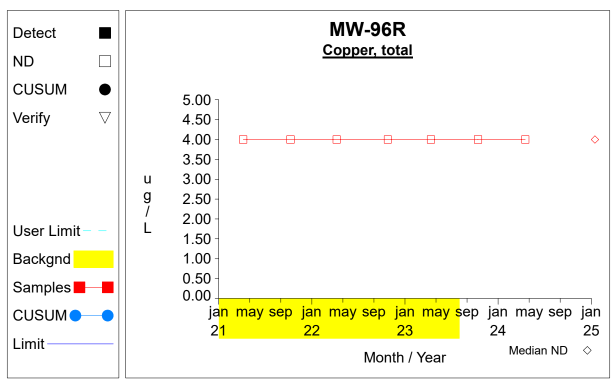
Graph 5



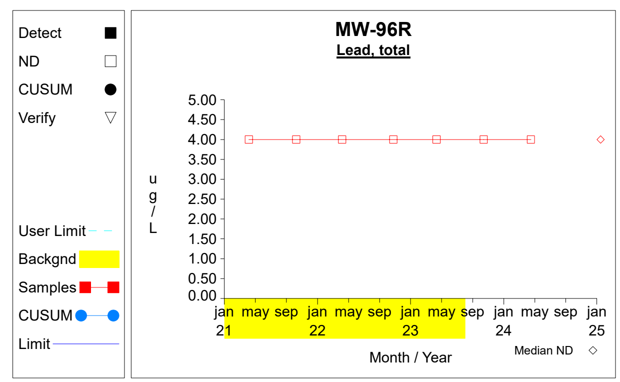
Graph 6



Graph 7



Graph 8



Graph 9

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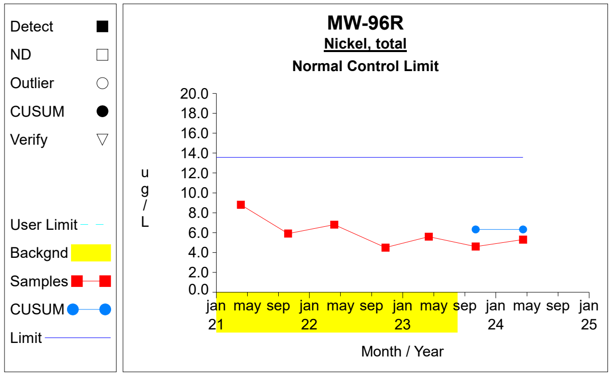
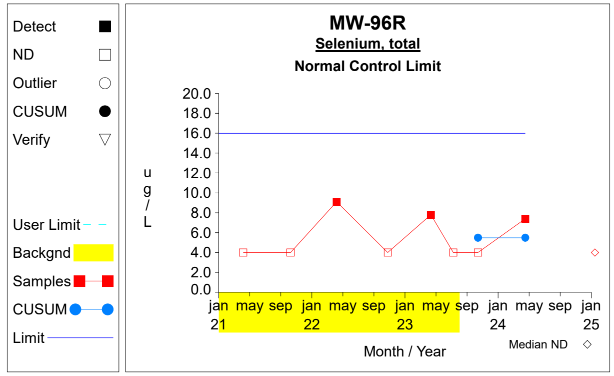
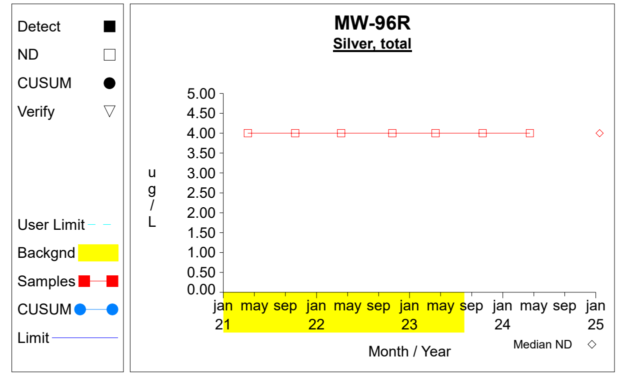
Intra-Well Control Charts / Prediction Limits



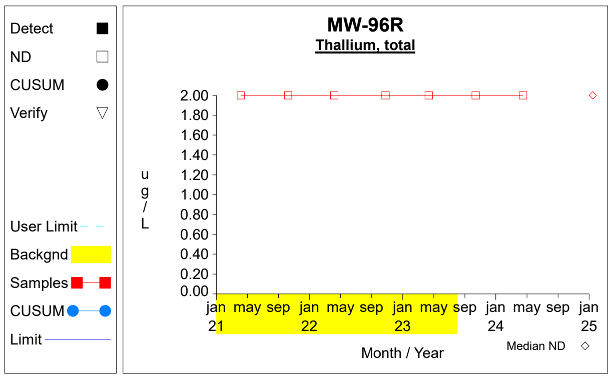
Graph 10



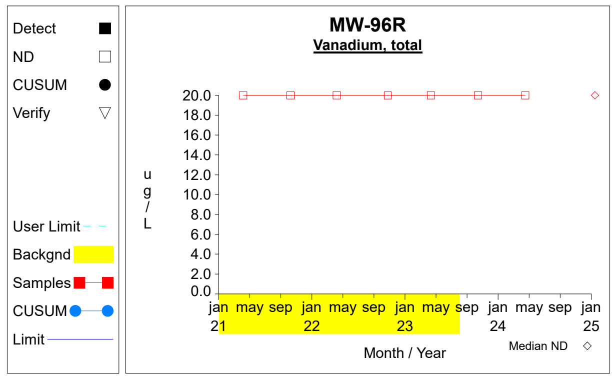
Graph 11



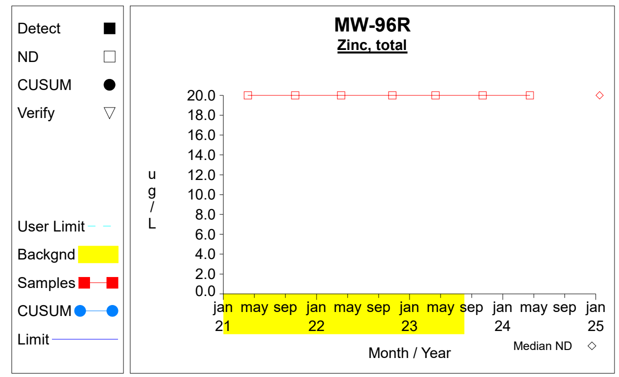
Graph 12



Graph 13



Graph 14



Graph 15

Prepared by: Otter Creek Environmental

Table 2

Analytical Data and CUSUM Summary

Constituent	Units	Well	Date	Background	Result		Outlier	CUSUM	Adjusted	
Antimony, total	ug/L	MW-96R	04/05/2021	yes	2.0000	ND				
Antimony, total	ug/L	MW-96R	10/08/2021	yes	2.0000	ND				
Antimony, total	ug/L	MW-96R	04/06/2022	yes	2.0000	ND				
Antimony, total	ug/L	MW-96R	10/25/2022	yes	2.0000	ND				
Antimony, total	ug/L	MW-96R	04/11/2023	yes	2.0000	ND				
Antimony, total	ug/L	MW-96R	10/13/2023		2.0000	ND				
Antimony, total	ug/L	MW-96R	04/16/2024		2.0000	ND				
Arsenic, total	ug/L	MW-96R	04/05/2021	yes	29.8000					
Arsenic, total	ug/L	MW-96R	07/02/2021	yes	29.1000					
Arsenic, total	ug/L	MW-96R	10/08/2021	yes	18.6000					
Arsenic, total	ug/L	MW-96R	04/06/2022	yes	10.4000					
Arsenic, total	ug/L	MW-96R	10/25/2022	yes	38.7000					
Arsenic, total	ug/L	MW-96R	04/11/2023	yes	4.0000	ND				
Arsenic, total	ug/L	MW-96R	07/07/2023	yes	12.9000					
Arsenic, total	ug/L	MW-96R	07/20/2023	yes	4.0000	ND				
Arsenic, total	ug/L	MW-96R	10/13/2023		15.0000			18.4375		
Arsenic, total	ug/L	MW-96R	04/16/2024		4.0000	ND		18.4375		
Barium, total	ug/L	MW-96R	04/05/2021	yes	1160.0000					
Barium, total	ug/L	MW-96R	07/02/2021	yes	696.0000					
Barium, total	ug/L	MW-96R	10/08/2021	yes	667.0000					
Barium, total	ug/L	MW-96R	04/06/2022	yes	406.0000					
Barium, total	ug/L	MW-96R	10/25/2022	yes	661.0000					
Barium, total	ug/L	MW-96R	04/11/2023	yes	190.0000					
Barium, total	ug/L	MW-96R	10/13/2023		576.0000			630.0000		
Barium, total	ug/L	MW-96R	04/16/2024		124.0000			630.0000		
Beryllium, total	ug/L	MW-96R	04/05/2021	yes	4.0000	ND				
Beryllium, total	ug/L	MW-96R	10/08/2021	yes	4.0000	ND				
Beryllium, total	ug/L	MW-96R	04/06/2022	yes	4.0000	ND				
Beryllium, total	ug/L	MW-96R	10/25/2022	yes	4.0000	ND				
Beryllium, total	ug/L	MW-96R	04/11/2023	yes	4.0000	ND				
Beryllium, total	ug/L	MW-96R	10/13/2023		4.0000	ND				
Beryllium, total	ug/L	MW-96R	04/16/2024		4.0000	ND				
Cadmium, total	ug/L	MW-96R	04/05/2021	yes	0.8000	ND				
Cadmium, total	ug/L	MW-96R	10/08/2021	yes	0.8000	ND				
Cadmium, total	ug/L	MW-96R	04/06/2022	yes	0.8000	ND				
Cadmium, total	ug/L	MW-96R	10/25/2022	yes	0.8000	ND				
Cadmium, total	ug/L	MW-96R	04/11/2023	yes	0.8000	ND				
Cadmium, total	ug/L	MW-96R	10/13/2023		0.8000	ND				
Cadmium, total	ug/L	MW-96R	04/16/2024		0.8000	ND				
Chromium, total	ug/L	MW-96R	04/05/2021	yes	8.0000	ND				
Chromium, total	ug/L	MW-96R	10/08/2021	yes	8.0000	ND				
Chromium, total	ug/L	MW-96R	04/06/2022	yes	8.0000	ND				
Chromium, total	ug/L	MW-96R	10/25/2022	yes	8.0000	ND				
Chromium, total	ug/L	MW-96R	04/11/2023	yes	8.0000	ND				
Chromium, total	ug/L	MW-96R	10/13/2023		8.0000	ND				
Chromium, total	ug/L	MW-96R	04/16/2024		8.0000	ND				
Cobalt, total	ug/L	MW-96R	04/05/2021	yes	16.8000					
Cobalt, total	ug/L	MW-96R	07/02/2021	yes	11.9000					
Cobalt, total	ug/L	MW-96R	10/08/2021	yes	11.4000					
Cobalt, total	ug/L	MW-96R	04/06/2022	yes	7.6000					

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

Table 2

Analytical Data and CUSUM Summary

Constituent	Units	Well	Date	Background	Result		Outlier	CUSUM	Adjusted	
Cobalt, total	ug/L	MW-96R	10/25/2022	yes	11.1000					
Cobalt, total	ug/L	MW-96R	04/11/2023	yes	2.2000		yes			*
Cobalt, total	ug/L	MW-96R	07/07/2023	yes	11.2000					
Cobalt, total	ug/L	MW-96R	07/20/2023	yes	10.0000					
Cobalt, total	ug/L	MW-96R	10/13/2023		10.6000			11.4286		
Cobalt, total	ug/L	MW-96R	04/16/2024		1.8000			11.4286		
Copper, total	ug/L	MW-96R	04/05/2021	yes	4.0000	ND				
Copper, total	ug/L	MW-96R	10/08/2021	yes	4.0000	ND				
Copper, total	ug/L	MW-96R	04/06/2022	yes	4.0000	ND				
Copper, total	ug/L	MW-96R	10/25/2022	yes	4.0000	ND				
Copper, total	ug/L	MW-96R	04/11/2023	yes	4.0000	ND				
Copper, total	ug/L	MW-96R	10/13/2023		4.0000	ND				
Copper, total	ug/L	MW-96R	04/16/2024		4.0000	ND				
Lead, total	ug/L	MW-96R	04/05/2021	yes	4.0000	ND				
Lead, total	ug/L	MW-96R	10/08/2021	yes	4.0000	ND				
Lead, total	ug/L	MW-96R	04/06/2022	yes	4.0000	ND				
Lead, total	ug/L	MW-96R	10/25/2022	yes	4.0000	ND				
Lead, total	ug/L	MW-96R	04/11/2023	yes	4.0000	ND				
Lead, total	ug/L	MW-96R	10/13/2023		4.0000	ND				
Lead, total	ug/L	MW-96R	04/16/2024		4.0000	ND				
Nickel, total	ug/L	MW-96R	04/05/2021	yes	8.8000					
Nickel, total	ug/L	MW-96R	10/08/2021	yes	5.9000					
Nickel, total	ug/L	MW-96R	04/06/2022	yes	6.8000					
Nickel, total	ug/L	MW-96R	10/25/2022	yes	4.5000					
Nickel, total	ug/L	MW-96R	04/11/2023	yes	5.6000					
Nickel, total	ug/L	MW-96R	10/13/2023		4.6000			6.3200		
Nickel, total	ug/L	MW-96R	04/16/2024		5.3000			6.3200		
Selenium, total	ug/L	MW-96R	04/05/2021	yes	4.0000	ND				
Selenium, total	ug/L	MW-96R	10/08/2021	yes	4.0000	ND				
Selenium, total	ug/L	MW-96R	04/06/2022	yes	9.1000					
Selenium, total	ug/L	MW-96R	10/25/2022	yes	4.0000	ND				
Selenium, total	ug/L	MW-96R	04/11/2023	yes	7.8000					
Selenium, total	ug/L	MW-96R	07/07/2023	yes	4.0000	ND				
Selenium, total	ug/L	MW-96R	10/13/2023		4.0000	ND		5.4833		
Selenium, total	ug/L	MW-96R	04/16/2024		7.4000			5.4833		
Silver, total	ug/L	MW-96R	04/05/2021	yes	4.0000	ND				
Silver, total	ug/L	MW-96R	10/08/2021	yes	4.0000	ND				
Silver, total	ug/L	MW-96R	04/06/2022	yes	4.0000	ND				
Silver, total	ug/L	MW-96R	10/25/2022	yes	4.0000	ND				
Silver, total	ug/L	MW-96R	04/11/2023	yes	4.0000	ND				
Silver, total	ug/L	MW-96R	10/13/2023		4.0000	ND				
Silver, total	ug/L	MW-96R	04/16/2024		4.0000	ND				
Thallium, total	ug/L	MW-96R	04/05/2021	yes	2.0000	ND				
Thallium, total	ug/L	MW-96R	10/08/2021	yes	2.0000	ND				
Thallium, total	ug/L	MW-96R	04/06/2022	yes	2.0000	ND				
Thallium, total	ug/L	MW-96R	10/25/2022	yes	2.0000	ND				
Thallium, total	ug/L	MW-96R	04/11/2023	yes	2.0000	ND				
Thallium, total	ug/L	MW-96R	10/13/2023		2.0000	ND				
Thallium, total	ug/L	MW-96R	04/16/2024		2.0000	ND				
Vanadium, total	ug/L	MW-96R	04/05/2021	yes	20.0000	ND				

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

Table 2

Analytical Data and CUSUM Summary

Constituent	Units	Well	Date	Background	Result		Outlier	CUSUM	Adjusted	
Vanadium, total	ug/L	MW-96R	10/08/2021	yes	20.0000	ND				
Vanadium, total	ug/L	MW-96R	04/06/2022	yes	20.0000	ND				
Vanadium, total	ug/L	MW-96R	10/25/2022	yes	20.0000	ND				
Vanadium, total	ug/L	MW-96R	04/11/2023	yes	20.0000	ND				
Vanadium, total	ug/L	MW-96R	10/13/2023		20.0000	ND				
Vanadium, total	ug/L	MW-96R	04/16/2024		20.0000	ND				
Zinc, total	ug/L	MW-96R	04/05/2021	yes	20.0000	ND				
Zinc, total	ug/L	MW-96R	10/08/2021	yes	20.0000	ND				
Zinc, total	ug/L	MW-96R	04/06/2022	yes	20.0000	ND				
Zinc, total	ug/L	MW-96R	10/25/2022	yes	20.0000	ND				
Zinc, total	ug/L	MW-96R	04/11/2023	yes	20.0000	ND				
Zinc, total	ug/L	MW-96R	10/13/2023		20.0000	ND				
Zinc, total	ug/L	MW-96R	04/16/2024		20.0000	ND				

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

Table 4

Dixon's Test Outliers
1% Significance Level

Constituent	Units	Well	Date	Result	ND Qualifier	Date Range	N	Critical Value
Cobalt, total	ug/L	MW-96R	04/11/2023	2.2000		04/05/2021-07/20/2023	8	0.6808

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

Attachment F

Summary Table of Historical VOC Detections

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,1-dichloroethane	GU-2	10/08/2010		2.8	1.0	ug/L
1,1-dichloroethane	GU-2	4/04/2011		4.6	1.0	ug/L
Benzene	GU-2	10/08/2010		1.6	1.0	ug/L
Benzene	GU-2	4/04/2011		2.3	1.0	ug/L
Chloroethane	GU-2	10/08/2010		4.9	1.0	ug/L
Chloroethane	GU-2	4/04/2011		6.8	1.0	ug/L
Cis-1,2-dichloroethylene	GU-2	10/08/2010		2.9	1.0	ug/L
Cis-1,2-dichloroethylene	GU-2	4/04/2011		2.8	1.0	ug/L
Vinyl chloride	GU-2	10/08/2010		4.3	1.0	ug/L
Vinyl chloride	GU-2	4/04/2011		3.4	1.0	ug/L
1,1-dichloroethane	GU-3	8/11/2011		2.8	1.0	ug/L
Benzene	GU-3	8/11/2011		3.5	1.0	ug/L
Chloroethane	GU-3	8/11/2011		7.4	1.0	ug/L
Cis-1,2-dichloroethylene	GU-3	8/11/2011		3.6	1.0	ug/L
Vinyl chloride	GU-3	8/11/2011		4.6	1.0	ug/L
1,1-dichloroethane	LW-75	4/11/2023		3.8	1.0	ug/L
1,4-dichlorobenzene	LW-75	1/15/2019		18.2	5.0	ug/L
1,4-dichlorobenzene	LW-75	1/07/2020		11.2	5.0	ug/L
1,4-dichlorobenzene	LW-75	10/19/2020		9.4	1.0	ug/L
1,4-dichlorobenzene	LW-75	4/05/2021		9.6	1.0	ug/L
1,4-dichlorobenzene	LW-75	4/06/2022		10.0	1.0	ug/L
1,4-dichlorobenzene	LW-75	4/11/2023		67.5	1.0	ug/L
4-methyl-2-pentanone (mibk)	LW-75	4/11/2023		11.6	5.0	ug/L
Acetone	LW-75	10/19/2020		17.0	10.0	ug/L
Acetone	LW-75	4/05/2021		15.5	10.0	ug/L
Benzene	LW-75	1/15/2019		7.8	5.0	ug/L
Benzene	LW-75	10/19/2020		3.4	1.0	ug/L
Benzene	LW-75	4/05/2021		4.8	1.0	ug/L
Benzene	LW-75	4/06/2022		5.2	1.0	ug/L
Benzene	LW-75	4/11/2023		9.4	1.0	ug/L
Carbon disulfide	LW-75	4/11/2023		2.1	1.0	ug/L
Chloroethane	LW-75	10/19/2020		1.6	1.0	ug/L
Chloroethane	LW-75	4/05/2021		4.2	1.0	ug/L
Chloroethane	LW-75	4/06/2022		3.8	1.0	ug/L
Chloroethane	LW-75	4/11/2023		1.9	1.0	ug/L
Cis-1,2-dichloroethylene	LW-75	4/05/2021		1.0	1.0	ug/L
Cis-1,2-dichloroethylene	LW-75	4/11/2023		5.4	1.0	ug/L
Ethylbenzene	LW-75	1/15/2019		77.8	5.0	ug/L
Ethylbenzene	LW-75	1/07/2020		48.4	5.0	ug/L
Ethylbenzene	LW-75	10/19/2020		38.6	1.0	ug/L
Ethylbenzene	LW-75	4/05/2021		39.9	1.0	ug/L
Ethylbenzene	LW-75	4/06/2022		35.3	1.0	ug/L
Ethylbenzene	LW-75	4/11/2023		275.0	5.0	ug/L
Methylene chloride	LW-75	4/11/2023		33.1	5.0	ug/L
Styrene	LW-75	4/11/2023		1.6	1.0	ug/L
Toluene	LW-75	4/06/2022		2.5	1.0	ug/L
Toluene	LW-75	4/11/2023		73.8	1.0	ug/L
Vinyl chloride	LW-75	4/11/2023		3.4	1.0	ug/L
Xylenes, total	LW-75	1/15/2019		86.0	10.0	ug/L
Xylenes, total	LW-75	1/07/2020		65.2	10.0	ug/L
Xylenes, total	LW-75	10/19/2020		49.2	2.0	ug/L
Xylenes, total	LW-75	4/05/2021		71.4	2.0	ug/L
Xylenes, total	LW-75	4/06/2022		62.1	2.0	ug/L
Xylenes, total	LW-75	4/11/2023		161.0	2.0	ug/L
1,1-dichloroethane	MW-205	10/14/2016		10.2	1.0	ug/L
1,1-dichloroethane	MW-205	4/10/2017		7.1	1.0	ug/L
1,1-dichloroethane	MW-205	10/09/2017		7.7	1.0	ug/L
1,1-dichloroethane	MW-205	4/17/2018		7.8	1.0	ug/L
1,1-dichloroethane	MW-205	10/22/2018		3.3	1.0	ug/L
1,1-dichloroethane	MW-205	4/22/2019		5.7	1.0	ug/L
1,1-dichloroethane	MW-205	10/23/2020		4.8	1.0	ug/L
1,1-dichloroethane	MW-205	4/05/2021		2.8	1.0	ug/L
1,2-dichlorobenzene	MW-205	4/17/2018		1.1	1.0	ug/L
1,2-dichloropropane	MW-205	4/10/2017		2.0	1.0	ug/L
1,2-dichloropropane	MW-205	4/17/2018		3.3	1.0	ug/L
1,2-dichloropropane	MW-205	4/22/2019		1.3	1.0	ug/L
1,2-dichloropropane	MW-205	4/05/2021		1.4	1.0	ug/L
1,4-dichlorobenzene	MW-205	10/14/2016		7.2	1.0	ug/L
1,4-dichlorobenzene	MW-205	4/10/2017		8.5	1.0	ug/L
1,4-dichlorobenzene	MW-205	10/09/2017		8.0	1.0	ug/L
1,4-dichlorobenzene	MW-205	4/17/2018		11.9	1.0	ug/L
1,4-dichlorobenzene	MW-205	10/22/2018		9.4	1.0	ug/L
1,4-dichlorobenzene	MW-205	10/23/2020		8.7	1.0	ug/L
1,4-dichlorobenzene	MW-205	4/05/2021		10.2	1.0	ug/L
Acetone	MW-205	10/09/2017		22.2	10.0	ug/L
Benzene	MW-205	4/02/2008		4.6	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Benzene	MW-205	10/03/2008		5.9	1.0	ug/L
Benzene	MW-205	4/01/2009		5.8	1.0	ug/L
Benzene	MW-205	10/08/2012		4.3	1.0	ug/L
Benzene	MW-205	10/16/2013		5.6	1.0	ug/L
Benzene	MW-205	4/09/2014		3.0	1.0	ug/L
Benzene	MW-205	10/17/2014		7.2	1.0	ug/L
Benzene	MW-205	4/06/2015		10.8	1.0	ug/L
Benzene	MW-205	4/14/2016		12.1	1.0	ug/L
Benzene	MW-205	10/14/2016		12.3	1.0	ug/L
Benzene	MW-205	4/10/2017		10.8	1.0	ug/L
Benzene	MW-205	10/09/2017		8.7	1.0	ug/L
Benzene	MW-205	4/17/2018		5.6	1.0	ug/L
Benzene	MW-205	10/22/2018		10.8	1.0	ug/L
Benzene	MW-205	4/22/2019		11.9	1.0	ug/L
Benzene	MW-205	10/23/2020		13.6	1.0	ug/L
Benzene	MW-205	4/05/2021		7.2	1.0	ug/L
Chlorobenzene	MW-205	10/14/2016		2.9	1.0	ug/L
Chlorobenzene	MW-205	4/10/2017		2.6	1.0	ug/L
Chlorobenzene	MW-205	10/09/2017		1.9	1.0	ug/L
Chlorobenzene	MW-205	4/17/2018		2.4	1.0	ug/L
Chlorobenzene	MW-205	4/22/2019		4.9	1.0	ug/L
Chlorobenzene	MW-205	10/23/2020		3.4	1.0	ug/L
Chlorobenzene	MW-205	4/05/2021		3.2	1.0	ug/L
Chloroethane	MW-205	10/14/2016		7.1	1.0	ug/L
Chloroethane	MW-205	4/10/2017		5.0	1.0	ug/L
Chloroethane	MW-205	10/09/2017		3.8	1.0	ug/L
Chloroethane	MW-205	4/17/2018		3.4	1.0	ug/L
Chloroethane	MW-205	10/22/2018		3.3	1.0	ug/L
Chloroethane	MW-205	4/22/2019		4.3	1.0	ug/L
Chloroethane	MW-205	10/23/2020		3.9	1.0	ug/L
Chloroethane	MW-205	4/05/2021		1.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-205	10/14/2016		6.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-205	4/10/2017		1.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-205	10/09/2017		5.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-205	4/17/2018		5.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-205	4/22/2019		1.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-205	10/23/2020		2.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-205	4/05/2021		1.3	1.0	ug/L
Ethylbenzene	MW-205	10/09/2017		1.1	1.0	ug/L
Ethylbenzene	MW-205	10/22/2018		14.0	1.0	ug/L
Ethylbenzene	MW-205	4/22/2019		4.8	1.0	ug/L
Toluene	MW-205	10/14/2016		1.0	1.0	ug/L
Toluene	MW-205	4/10/2017		1.0	1.0	ug/L
Toluene	MW-205	4/22/2019		1.9	1.0	ug/L
Trans-1,2-dichloroethylene	MW-205	4/17/2018		1	1	ug/L
Trichloroethylene	MW-205	4/02/2008		4.1	1.0	ug/L
Trichloroethylene	MW-205	10/03/2008		8.0	1.0	ug/L
Trichloroethylene	MW-205	4/01/2009		2.3	1.0	ug/L
Trichloroethylene	MW-205	10/08/2012		5.2	1.0	ug/L
Trichloroethylene	MW-205	10/16/2013		5.6	1.0	ug/L
Trichloroethylene	MW-205	4/09/2014		6.1	1.0	ug/L
Trichloroethylene	MW-205	10/17/2014		19.3	1.0	ug/L
Trichloroethylene	MW-205	4/06/2015		8.8	1.0	ug/L
Trichloroethylene	MW-205	4/14/2016		1.2	1.0	ug/L
Trichloroethylene	MW-205	10/14/2016		1.2	1.0	ug/L
Trichloroethylene	MW-205	4/17/2018		1.7	1.0	ug/L
Vinyl chloride	MW-205	10/14/2016		1.8	1.0	ug/L
Vinyl chloride	MW-205	4/10/2017		1.9	1.0	ug/L
Vinyl chloride	MW-205	10/09/2017		1.2	1.0	ug/L
Vinyl chloride	MW-205	4/17/2018		1.0	1.0	ug/L
Xylenes, total	MW-205	4/22/2019		4	2	ug/L
1,1-dichloroethane	MW-213	4/05/2021		2.2	1.0	ug/L
1,1-dichloroethane	MW-213	4/06/2022		3.3	1.0	ug/L
1,1-dichloroethane	MW-213	10/25/2022		2.7	1.0	ug/L
1,1-dichloroethane	MW-213	4/10/2023		2.5	1.0	ug/L
1,1-dichloroethane	MW-213	10/13/2023		3.2	1.0	ug/L
1,2-dichloropropane	MW-213	4/10/2017		1.6	1.0	ug/L
1,2-dichloropropane	MW-213	4/22/2019		3.8	1.0	ug/L
1,2-dichloropropane	MW-213	10/23/2020		6.1	1.0	ug/L
1,2-dichloropropane	MW-213	4/05/2021		7.6	1.0	ug/L
1,2-dichloropropane	MW-213	4/06/2022		7.7	1.0	ug/L
1,2-dichloropropane	MW-213	10/25/2022		6.5	1.0	ug/L
1,2-dichloropropane	MW-213	4/10/2023		5.6	1.0	ug/L
1,2-dichloropropane	MW-213	10/13/2023		4.1	1.0	ug/L
Benzene	MW-213	10/25/2022		1.1	1.0	ug/L
Benzene	MW-213	4/10/2023		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
Benzene	MW-213	10/13/2023		1.4	1.0	ug/L
Chloroethane	MW-213	10/23/2020		1.5	1.0	ug/L
Chloroethane	MW-213	4/05/2021		2.6	1.0	ug/L
Chloroethane	MW-213	4/06/2022		2.6	1.0	ug/L
Chloroethane	MW-213	10/25/2022		3.0	1.0	ug/L
Chloroethane	MW-213	4/10/2023		2.5	1.0	ug/L
Chloroethane	MW-213	10/13/2023		4.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-213	10/14/2016		8.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-213	4/10/2017		4.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-213	4/17/2018		1.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-213	10/22/2018		1.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW-213	4/22/2019		19.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-213	10/23/2020		44.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-213	4/05/2021		37.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-213	4/06/2022		43.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW-213	10/25/2022		31.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-213	4/10/2023		21.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-213	10/13/2023		32.6	1.0	ug/L
Vinyl chloride	MW-213	10/23/2020		1.4	1.0	ug/L
Vinyl chloride	MW-213	4/05/2021		3.0	1.0	ug/L
Vinyl chloride	MW-213	4/06/2022		2.4	1.0	ug/L
Vinyl chloride	MW-213	10/25/2022		3.1	1.0	ug/L
Vinyl chloride	MW-213	4/10/2023		2.5	1.0	ug/L
Vinyl chloride	MW-213	10/13/2023		4.3	1.0	ug/L
1,1-dichloroethane	MW-214	10/14/2016		1.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-214	10/14/2016		3.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-214	4/10/2017		2.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-214	10/09/2017		2.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-214	4/17/2018		3.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-214	10/22/2018		1.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-214	4/22/2019		4.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-214	10/23/2020		6.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW-214	4/05/2021		3.3	1.0	ug/L
Tetrachloroethylene	MW-214	10/14/2016		12.2	1.0	ug/L
Tetrachloroethylene	MW-214	4/10/2017		9.9	1.0	ug/L
Tetrachloroethylene	MW-214	10/09/2017		8.8	1.0	ug/L
Tetrachloroethylene	MW-214	4/17/2018		8.6	1.0	ug/L
Tetrachloroethylene	MW-214	10/22/2018		4.1	1.0	ug/L
Tetrachloroethylene	MW-214	4/22/2019		8.5	1.0	ug/L
Tetrachloroethylene	MW-214	10/23/2020		7.8	1.0	ug/L
Tetrachloroethylene	MW-214	4/05/2021		5.4	1.0	ug/L
Trichloroethylene	MW-214	4/02/2008		5.2	1.0	ug/L
Trichloroethylene	MW-214	10/03/2008		5.9	1.0	ug/L
Trichloroethylene	MW-214	4/01/2009		4.1	1.0	ug/L
Trichloroethylene	MW-214	10/08/2012		3.6	1.0	ug/L
Trichloroethylene	MW-214	10/16/2013		2.9	1.0	ug/L
Trichloroethylene	MW-214	4/09/2014		2.0	1.0	ug/L
Trichloroethylene	MW-214	10/17/2014		2.0	1.0	ug/L
Trichloroethylene	MW-214	4/06/2015		1.8	1.0	ug/L
Trichloroethylene	MW-214	4/14/2016		2.1	1.0	ug/L
Trichloroethylene	MW-214	10/14/2016		3.0	1.0	ug/L
Trichloroethylene	MW-214	4/10/2017		2.4	1.0	ug/L
Trichloroethylene	MW-214	10/09/2017		2.8	1.0	ug/L
Trichloroethylene	MW-214	4/17/2018		2.6	1.0	ug/L
Trichloroethylene	MW-214	4/22/2019		3.3	1.0	ug/L
Trichloroethylene	MW-214	10/23/2020		5.8	1.0	ug/L
Trichloroethylene	MW-214	4/05/2021		2.9	1.0	ug/L
1,1,1-trichloroethane	MW-49	10/23/1992		10.5	1.0	ug/L
1,1,1-trichloroethane	MW-49	1/21/1993		17.7	1.0	ug/L
1,1,1-trichloroethane	MW-49	4/22/1993		14.7	1.0	ug/L
1,1,1-trichloroethane	MW-49	7/13/1993		11.4	1.0	ug/L
1,1,1-trichloroethane	MW-49	1/25/1994		18.1	1.0	ug/L
1,1,1-trichloroethane	MW-49	4/14/1994		12.8	1.0	ug/L
1,1,1-trichloroethane	MW-49	7/08/1994		10.1	1.0	ug/L
1,1,1-trichloroethane	MW-49	10/20/1994		7.5	1.0	ug/L
1,1,1-trichloroethane	MW-49	1/04/1995		8.0	1.0	ug/L
1,1,1-trichloroethane	MW-49	4/21/1995		9.0	1.0	ug/L
1,1,1-trichloroethane	MW-49	7/07/1995		9.8	1.0	ug/L
1,1,1-trichloroethane	MW-49	10/12/1995		9.5	1.0	ug/L
1,1,1-trichloroethane	MW-49	1/10/1996		8.1	1.0	ug/L
1,1,1-trichloroethane	MW-49	7/17/1996		4.5	1.0	ug/L
1,1,1-trichloroethane	MW-49	10/08/1996		5.2	1.0	ug/L
1,1,1-trichloroethane	MW-49	1/21/1997		2.7	1.0	ug/L
1,1,1-trichloroethane	MW-49	4/11/1997		2.3	1.0	ug/L
1,1,1-trichloroethane	MW-49	1/27/1998		2.8	1.0	ug/L
1,1,1-trichloroethane	MW-49	1/06/2000		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
1,1-dichloroethane	MW-49	3/28/2008		2.9	1.0	ug/L
1,1-dichloroethane	MW-49	6/27/2008		2.7	1.0	ug/L
1,1-dichloroethane	MW-49	8/04/2008		2.7	1.0	ug/L
1,1-dichloroethane	MW-49	12/08/2008		3.1	1.0	ug/L
1,1-dichloroethane	MW-49	4/02/2009		2.7	1.0	ug/L
1,1-dichloroethane	MW-49	10/21/2009		2.6	1.0	ug/L
1,1-dichloroethane	MW-49	4/20/2010		3.0	1.0	ug/L
1,1-dichloroethane	MW-49	10/08/2010		3.0	1.0	ug/L
1,1-dichloroethane	MW-49	4/05/2011		2.3	1.0	ug/L
1,1-dichloroethane	MW-49	10/06/2011		2.8	1.0	ug/L
1,1-dichloroethane	MW-49	4/10/2012		2.1	1.0	ug/L
1,1-dichloroethane	MW-49	10/09/2012		2.8	1.0	ug/L
1,1-dichloroethane	MW-49	4/04/2013		2.0	1.0	ug/L
1,1-dichloroethane	MW-49	10/16/2013		2.6	1.0	ug/L
1,1-dichloroethane	MW-49	4/10/2014		2.2	1.0	ug/L
1,1-dichloroethane	MW-49	4/06/2015		1.5	1.0	ug/L
1,1-dichloroethane	MW-49	10/01/2015		1.1	1.0	ug/L
1,1-dichloroethane	MW-49	4/14/2016		1.3	1.0	ug/L
1,1-dichloroethane	MW-49	10/13/2016		1.9	1.0	ug/L
1,1-dichloroethane	MW-49	4/10/2017		1.7	1.0	ug/L
1,1-dichloroethane	MW-49	10/09/2017		2.1	1.0	ug/L
1,1-dichloroethane	MW-49	4/17/2018		1.4	1.0	ug/L
1,1-dichloroethane	MW-49	10/22/2018		1.2	1.0	ug/L
1,1-dichloroethane	MW-49	4/22/2019		3.4	1.0	ug/L
1,1-dichloroethane	MW-49	10/23/2019		2.6	1.0	ug/L
1,1-dichloroethane	MW-49	4/10/2020		2.6	1.0	ug/L
1,1-dichloroethane	MW-49	10/19/2020		2.5	1.0	ug/L
1,1-dichloroethane	MW-49	4/05/2021		1.4	1.0	ug/L
1,1-dichloroethane	MW-49	10/08/2021		1.9	1.0	ug/L
1,1-dichloroethane	MW-49	4/06/2022		1.0	1.0	ug/L
1,1-dichloroethane	MW-49	10/25/2022		1.7	1.0	ug/L
1,1-dichloroethane	MW-49	4/11/2023		1.4	1.0	ug/L
1,1-dichloroethane	MW-49	10/13/2023		1.6	1.0	ug/L
1,1-dichloroethane	MW-49	4/17/2024		1.1	1.0	ug/L
1,1-dichloroethylene	MW-49	1/25/1994		3.9	1.0	ug/L
1,1-dichloroethylene	MW-49	7/07/1995		1.2	1.0	ug/L
1,1-dichloroethylene	MW-49	10/18/2001		9.1	1.0	ug/L
1,2-dichloroethane	MW-49	10/04/1999		1.4	1.0	ug/L
1,2-dichloroethane	MW-49	7/05/2000		1.7	1.0	ug/L
1,2-dichloroethane	MW-49	9/11/2000		1.3	1.0	ug/L
1,2-dichloroethane	MW-49	10/08/2000		1.4	1.0	ug/L
1,2-dichloroethane	MW-49	4/27/2001		1.1	1.0	ug/L
1,2-dichloroethane	MW-49	7/23/2001		1.4	1.0	ug/L
1,2-dichloroethane	MW-49	1/25/2002		1.0	1.0	ug/L
1,2-dichloroethane	MW-49	10/14/2002		1.2	1.0	ug/L
1,2-dichloroethane	MW-49	10/10/2007		.6	.5	ug/L
1,4-dichlorobenzene	MW-49	3/28/2008		6.3	1.0	ug/L
1,4-dichlorobenzene	MW-49	6/27/2008		7.8	1.0	ug/L
1,4-dichlorobenzene	MW-49	8/04/2008		9.0	1.0	ug/L
1,4-dichlorobenzene	MW-49	10/03/2008		8.3	1.0	ug/L
1,4-dichlorobenzene	MW-49	12/08/2008		7.8	1.0	ug/L
1,4-dichlorobenzene	MW-49	4/02/2009		8.8	1.0	ug/L
1,4-dichlorobenzene	MW-49	10/21/2009		8.9	1.0	ug/L
1,4-dichlorobenzene	MW-49	4/20/2010		9.2	1.0	ug/L
1,4-dichlorobenzene	MW-49	10/08/2010		5.6	1.0	ug/L
1,4-dichlorobenzene	MW-49	4/05/2011		8.1	1.0	ug/L
1,4-dichlorobenzene	MW-49	10/06/2011		4.9	1.0	ug/L
1,4-dichlorobenzene	MW-49	4/10/2012		8.4	1.0	ug/L
1,4-dichlorobenzene	MW-49	10/09/2012		1.8	1.0	ug/L
1,4-dichlorobenzene	MW-49	4/04/2013		10.9	1.0	ug/L
1,4-dichlorobenzene	MW-49	10/16/2013		7.2	1.0	ug/L
1,4-dichlorobenzene	MW-49	4/10/2014		4.9	1.0	ug/L
1,4-dichlorobenzene	MW-49	10/16/2014		8.7	1.0	ug/L
1,4-dichlorobenzene	MW-49	4/06/2015		8.7	1.0	ug/L
1,4-dichlorobenzene	MW-49	10/01/2015		8.6	1.0	ug/L
1,4-dichlorobenzene	MW-49	4/14/2016		8.9	1.0	ug/L
1,4-dichlorobenzene	MW-49	10/13/2016		9.2	1.0	ug/L
1,4-dichlorobenzene	MW-49	4/10/2017		7.8	1.0	ug/L
1,4-dichlorobenzene	MW-49	10/09/2017		5.8	1.0	ug/L
1,4-dichlorobenzene	MW-49	4/17/2018		1.8	1.0	ug/L
1,4-dichlorobenzene	MW-49	10/22/2018		2.5	1.0	ug/L
1,4-dichlorobenzene	MW-49	4/22/2019		11.4	1.0	ug/L
1,4-dichlorobenzene	MW-49	10/23/2019		7.4	1.0	ug/L
1,4-dichlorobenzene	MW-49	10/19/2020		6.6	1.0	ug/L
1,4-dichlorobenzene	MW-49	4/05/2021		6.4	1.0	ug/L
1,4-dichlorobenzene	MW-49	10/08/2021		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-49	4/06/2022		3.6	1.0	ug/L
1,4-dichlorobenzene	MW-49	10/25/2022		6.3	1.0	ug/L
1,4-dichlorobenzene	MW-49	4/11/2023		7.4	1.0	ug/L
1,4-dichlorobenzene	MW-49	10/13/2023		6.1	1.0	ug/L
1,4-dichlorobenzene	MW-49	4/17/2024		3.3	1.0	ug/L
Acetone	MW-49	10/21/2009		48.4	10.0	ug/L
Acetone	MW-49	4/05/2011		69.3	10.0	ug/L
Acetone	MW-49	10/09/2017		20.0	10.0	ug/L
Acetone	MW-49	4/17/2018		76.0	10.0	ug/L
Acetone	MW-49	10/22/2018		36.8	10.0	ug/L
Acetone	MW-49	4/06/2022		24.1	10.0	ug/L
Benzene	MW-49	7/07/1995		1.0	1.0	ug/L
Benzene	MW-49	7/17/1996		1.9	1.0	ug/L
Benzene	MW-49	10/08/1996		1.1	1.0	ug/L
Benzene	MW-49	1/21/1997		2.5	1.0	ug/L
Benzene	MW-49	4/11/1997		3.1	1.0	ug/L
Benzene	MW-49	7/17/1997		2.5	1.0	ug/L
Benzene	MW-49	10/15/1997		2.2	1.0	ug/L
Benzene	MW-49	1/27/1998		1.6	1.0	ug/L
Benzene	MW-49	7/21/1998		1.7	1.0	ug/L
Benzene	MW-49	1/26/1999		1.8	1.0	ug/L
Benzene	MW-49	4/19/1999		2.4	1.0	ug/L
Benzene	MW-49	10/04/1999		1.9	1.0	ug/L
Benzene	MW-49	1/06/2000		1.3	1.0	ug/L
Benzene	MW-49	7/05/2000		1.3	1.0	ug/L
Benzene	MW-49	9/11/2000		1.4	1.0	ug/L
Benzene	MW-49	10/08/2000		1.4	1.0	ug/L
Benzene	MW-49	1/18/2001		1.7	1.0	ug/L
Benzene	MW-49	4/27/2001		1.7	1.0	ug/L
Benzene	MW-49	7/23/2001		2.8	1.0	ug/L
Benzene	MW-49	10/18/2001		1.7	1.0	ug/L
Benzene	MW-49	1/25/2002		1.6	1.0	ug/L
Benzene	MW-49	4/24/2002		2.4	1.0	ug/L
Benzene	MW-49	7/22/2002		2.4	1.0	ug/L
Benzene	MW-49	1/29/2003		1.3	1.0	ug/L
Benzene	MW-49	7/11/2003		2.1	1.0	ug/L
Benzene	MW-49	10/06/2003		2.0	1.0	ug/L
Benzene	MW-49	1/12/2004		2.0	1.0	ug/L
Benzene	MW-49	4/26/2004		2.6	1.0	ug/L
Benzene	MW-49	4/11/2005		2.4	1.0	ug/L
Benzene	MW-49	10/05/2005		2.1	1.0	ug/L
Benzene	MW-49	4/05/2006		2.3	1.0	ug/L
Benzene	MW-49	10/04/2006		2.0	1.0	ug/L
Benzene	MW-49	4/12/2007		2.3	1.0	ug/L
Benzene	MW-49	10/10/2007		2.0	1.0	ug/L
Benzene	MW-49	3/28/2008		2.5	1.0	ug/L
Benzene	MW-49	6/27/2008		2.6	1.0	ug/L
Benzene	MW-49	8/04/2008		2.6	1.0	ug/L
Benzene	MW-49	12/08/2008		2.2	1.0	ug/L
Benzene	MW-49	4/02/2009		2.7	1.0	ug/L
Benzene	MW-49	10/21/2009		2.6	1.0	ug/L
Benzene	MW-49	4/20/2010		2.0	1.0	ug/L
Benzene	MW-49	4/05/2011		2.6	1.0	ug/L
Benzene	MW-49	10/06/2011		1.0	1.0	ug/L
Benzene	MW-49	4/10/2012		2.2	1.0	ug/L
Benzene	MW-49	4/04/2013		2.2	1.0	ug/L
Benzene	MW-49	10/16/2014		2.9	1.0	ug/L
Benzene	MW-49	4/06/2015		2.3	1.0	ug/L
Benzene	MW-49	10/01/2015		1.9	1.0	ug/L
Benzene	MW-49	4/14/2016		2.6	1.0	ug/L
Benzene	MW-49	10/13/2016		3.5	1.0	ug/L
Benzene	MW-49	4/10/2017		3.0	1.0	ug/L
Benzene	MW-49	10/09/2017		1.2	1.0	ug/L
Benzene	MW-49	4/17/2018		1.9	1.0	ug/L
Benzene	MW-49	10/22/2018		2.5	1.0	ug/L
Benzene	MW-49	4/22/2019		4.3	1.0	ug/L
Benzene	MW-49	10/23/2019		3.5	1.0	ug/L
Benzene	MW-49	4/10/2020		3.7	1.0	ug/L
Benzene	MW-49	10/19/2020		2.0	1.0	ug/L
Benzene	MW-49	4/05/2021		2.8	1.0	ug/L
Benzene	MW-49	10/08/2021		1.9	1.0	ug/L
Benzene	MW-49	4/06/2022		2.4	1.0	ug/L
Benzene	MW-49	10/25/2022		2.4	1.0	ug/L
Benzene	MW-49	4/11/2023		2.9	1.0	ug/L
Benzene	MW-49	10/13/2023		1.1	1.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-49	12/08/2008		13	8	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Bis(2-ethylhexyl) phthalate	MW-49	4/06/2015		65	10	ug/L
Chlorobenzene	MW-49	4/22/2019		1.1	1.0	ug/L
Chlorobenzene	MW-49	4/10/2020		1.1	1.0	ug/L
Chlorobenzene	MW-49	10/19/2020		1.0	1.0	ug/L
Chlorobenzene	MW-49	4/05/2021		1.0	1.0	ug/L
Chlorobenzene	MW-49	10/08/2021		1.0	1.0	ug/L
Chlorobenzene	MW-49	10/25/2022		1.1	1.0	ug/L
Chlorobenzene	MW-49	10/13/2023		1.0	1.0	ug/L
Chloroethane	MW-49	3/28/2008		17.8	1.0	ug/L
Chloroethane	MW-49	6/27/2008		15.5	1.0	ug/L
Chloroethane	MW-49	8/04/2008		16.5	1.0	ug/L
Chloroethane	MW-49	10/03/2008		18.1	1.0	ug/L
Chloroethane	MW-49	12/08/2008		18.1	1.0	ug/L
Chloroethane	MW-49	4/02/2009		18.1	1.0	ug/L
Chloroethane	MW-49	10/21/2009		18.6	1.0	ug/L
Chloroethane	MW-49	4/20/2010		15.8	1.0	ug/L
Chloroethane	MW-49	10/08/2010		13.6	1.0	ug/L
Chloroethane	MW-49	4/05/2011		17.2	1.0	ug/L
Chloroethane	MW-49	10/06/2011		11.6	1.0	ug/L
Chloroethane	MW-49	4/10/2012		11.8	1.0	ug/L
Chloroethane	MW-49	10/09/2012		10.0	1.0	ug/L
Chloroethane	MW-49	4/04/2013		11.3	1.0	ug/L
Chloroethane	MW-49	10/16/2013		5.7	1.0	ug/L
Chloroethane	MW-49	4/10/2014		11.2	1.0	ug/L
Chloroethane	MW-49	10/16/2014		12.9	1.0	ug/L
Chloroethane	MW-49	4/06/2015		8.9	1.0	ug/L
Chloroethane	MW-49	10/01/2015		8.7	1.0	ug/L
Chloroethane	MW-49	4/14/2016		9.0	1.0	ug/L
Chloroethane	MW-49	10/13/2016		11.9	1.0	ug/L
Chloroethane	MW-49	4/10/2017		10.1	1.0	ug/L
Chloroethane	MW-49	10/09/2017		8.7	1.0	ug/L
Chloroethane	MW-49	4/17/2018		5.5	1.0	ug/L
Chloroethane	MW-49	10/22/2018		11.0	1.0	ug/L
Chloroethane	MW-49	4/22/2019		8.2	1.0	ug/L
Chloroethane	MW-49	10/23/2019		10.2	1.0	ug/L
Chloroethane	MW-49	4/10/2020		9.4	1.0	ug/L
Chloroethane	MW-49	10/19/2020		9.8	1.0	ug/L
Chloroethane	MW-49	4/05/2021		6.8	1.0	ug/L
Chloroethane	MW-49	10/08/2021		7.3	1.0	ug/L
Chloroethane	MW-49	4/06/2022		5.6	1.0	ug/L
Chloroethane	MW-49	10/25/2022		7.4	1.0	ug/L
Chloroethane	MW-49	4/11/2023		6.6	1.0	ug/L
Chloroethane	MW-49	10/13/2023		6.6	1.0	ug/L
Chloroethane	MW-49	4/17/2024		4.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	3/28/2008		42.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	6/27/2008		41.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	8/04/2008		41.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	10/03/2008		45.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	12/08/2008		42.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	4/02/2009		42.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	10/21/2009		41.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	4/20/2010		38.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	10/08/2010		33.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	4/05/2011		41.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	10/06/2011		28.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	4/10/2012		32.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	10/09/2012		25.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	4/04/2013		28.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	10/16/2013		24.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	4/10/2014		23.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	10/16/2014		23.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	4/06/2015		13.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	10/01/2015		11.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	4/14/2016		13.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	10/13/2016		13.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	4/10/2017		10.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	10/09/2017		16.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	4/17/2018		2.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	4/22/2019		2.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	4/10/2020		1.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	10/19/2020		6.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	10/08/2021		2.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	10/25/2022		1.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	10/13/2023		2.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	4/17/2024		2.4	1.0	ug/L
Trichloroethylene	MW-49	1/21/1993		1.2	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Trichloroethylene	MW-49	4/22/1993		3.3	1.0	ug/L
Trichloroethylene	MW-49	7/13/1993		5.5	1.0	ug/L
Trichloroethylene	MW-49	1/25/1994		3.2	1.0	ug/L
Trichloroethylene	MW-49	4/14/1994		1.8	1.0	ug/L
Trichloroethylene	MW-49	7/08/1994		2.5	1.0	ug/L
Trichloroethylene	MW-49	10/20/1994		4.7	1.0	ug/L
Trichloroethylene	MW-49	1/04/1995		4.1	1.0	ug/L
Trichloroethylene	MW-49	4/21/1995		4.7	1.0	ug/L
Trichloroethylene	MW-49	7/07/1995		4.4	1.0	ug/L
Trichloroethylene	MW-49	10/12/1995		3.4	1.0	ug/L
Trichloroethylene	MW-49	1/10/1996		2.7	1.0	ug/L
Trichloroethylene	MW-49	7/17/1996		5.7	1.0	ug/L
Trichloroethylene	MW-49	10/08/1996		5.8	1.0	ug/L
Trichloroethylene	MW-49	1/21/1997		9.5	1.0	ug/L
Trichloroethylene	MW-49	4/11/1997		10.4	1.0	ug/L
Trichloroethylene	MW-49	7/17/1997		10.8	1.0	ug/L
Trichloroethylene	MW-49	10/15/1997		9.6	1.0	ug/L
Trichloroethylene	MW-49	1/27/1998		7.6	1.0	ug/L
Trichloroethylene	MW-49	4/21/1998		12.2	1.0	ug/L
Trichloroethylene	MW-49	7/21/1998		12.9	1.0	ug/L
Trichloroethylene	MW-49	10/09/1998		9.5	1.0	ug/L
Trichloroethylene	MW-49	1/26/1999		11.1	1.0	ug/L
Trichloroethylene	MW-49	4/19/1999		13.1	1.0	ug/L
Trichloroethylene	MW-49	7/29/1999		10.4	1.0	ug/L
Trichloroethylene	MW-49	10/04/1999		9.8	1.0	ug/L
Trichloroethylene	MW-49	1/06/2000		7.9	1.0	ug/L
Trichloroethylene	MW-49	4/13/2000		5.0	1.0	ug/L
Trichloroethylene	MW-49	7/05/2000		12.0	1.0	ug/L
Trichloroethylene	MW-49	9/11/2000		6.4	1.0	ug/L
Trichloroethylene	MW-49	10/08/2000		4.0	1.0	ug/L
Trichloroethylene	MW-49	1/18/2001		1.2	1.0	ug/L
Trichloroethylene	MW-49	4/27/2001		1.2	1.0	ug/L
Trichloroethylene	MW-49	7/23/2001		2.4	1.0	ug/L
Trichloroethylene	MW-49	10/18/2001		1.5	1.0	ug/L
Trichloroethylene	MW-49	1/25/2002		2.0	1.0	ug/L
Trichloroethylene	MW-49	4/26/2004		.4	.3	ug/L
Trichloroethylene	MW-49	6/27/2008		1.0	1.0	ug/L
Trichloroethylene	MW-49	8/04/2008		1.5	1.0	ug/L
Trichloroethylene	MW-49	4/02/2009		1.0	1.0	ug/L
Trichloroethylene	MW-49	10/21/2009		1.9	1.0	ug/L
Vinyl chloride	MW-49	3/28/2008		6.6	1.0	ug/L
Vinyl chloride	MW-49	6/27/2008		6.6	1.0	ug/L
Vinyl chloride	MW-49	8/04/2008		7.2	1.0	ug/L
Vinyl chloride	MW-49	10/03/2008		6.0	1.0	ug/L
Vinyl chloride	MW-49	12/08/2008		6.8	1.0	ug/L
Vinyl chloride	MW-49	4/02/2009		7.2	1.0	ug/L
Vinyl chloride	MW-49	10/21/2009		6.8	1.0	ug/L
Vinyl chloride	MW-49	4/20/2010		5.6	1.0	ug/L
Vinyl chloride	MW-49	10/08/2010		5.1	1.0	ug/L
Vinyl chloride	MW-49	4/05/2011		7.0	1.0	ug/L
Vinyl chloride	MW-49	10/06/2011		3.2	1.0	ug/L
Vinyl chloride	MW-49	4/10/2012		5.7	1.0	ug/L
Vinyl chloride	MW-49	10/09/2012		3.3	1.0	ug/L
Vinyl chloride	MW-49	4/04/2013		4.5	1.0	ug/L
Vinyl chloride	MW-49	10/16/2013		3.4	1.0	ug/L
Vinyl chloride	MW-49	4/10/2014		3.8	1.0	ug/L
Vinyl chloride	MW-49	10/16/2014		4.6	1.0	ug/L
Vinyl chloride	MW-49	4/06/2015		3.1	1.0	ug/L
Vinyl chloride	MW-49	10/01/2015		3.1	1.0	ug/L
Vinyl chloride	MW-49	4/14/2016		4.0	1.0	ug/L
Vinyl chloride	MW-49	10/13/2016		5.1	1.0	ug/L
Vinyl chloride	MW-49	4/10/2017		5.5	1.0	ug/L
Vinyl chloride	MW-49	10/09/2017		3.2	1.0	ug/L
Vinyl chloride	MW-49	4/17/2018		1.1	1.0	ug/L
Vinyl chloride	MW-49	10/22/2018		2.6	1.0	ug/L
Vinyl chloride	MW-49	4/22/2019		2.8	1.0	ug/L
Vinyl chloride	MW-49	10/23/2019		1.4	1.0	ug/L
Vinyl chloride	MW-49	4/10/2020		1.1	1.0	ug/L
Vinyl chloride	MW-49	10/19/2020		2.4	1.0	ug/L
1,1,1-trichloroethane	MW-54	10/23/1992		16.8	1.0	ug/L
1,1,1-trichloroethane	MW-54	1/21/1993		20.8	1.0	ug/L
1,1,1-trichloroethane	MW-54	4/22/1993		29.4	1.0	ug/L
1,1,1-trichloroethane	MW-54	7/13/1993		49.9	1.0	ug/L
1,1,1-trichloroethane	MW-54	7/26/1999		1.1	1.0	ug/L
1,1,1-trichloroethane	MW-54	10/04/1999		1.4	1.0	ug/L
1,1,1-trichloroethane	MW-54	1/06/2000		1.5	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,1,1-trichloroethane	MW-54	4/13/2000		1.0	1.0	ug/L
1,1,1-trichloroethane	MW-54	7/05/2000		.9	.5	ug/L
1,1,1-trichloroethane	MW-54	9/11/2000		.8	.5	ug/L
1,1-dichloroethane	MW-54	3/28/2008		1.8	1.0	ug/L
1,1-dichloroethane	MW-54	6/25/2008		1.4	1.0	ug/L
1,1-dichloroethane	MW-54	8/04/2008		1.2	1.0	ug/L
1,1-dichloroethane	MW-54	12/08/2008		1.7	1.0	ug/L
1,1-dichloroethane	MW-54	4/02/2009		1.2	1.0	ug/L
1,1-dichloroethane	MW-54	10/21/2009		1.4	1.0	ug/L
1,1-dichloroethane	MW-54	4/20/2010		2.2	1.0	ug/L
1,1-dichloroethane	MW-54	10/08/2010		5.0	1.0	ug/L
1,1-dichloroethane	MW-54	4/05/2011		8.8	1.0	ug/L
1,1-dichloroethane	MW-54	10/06/2011		8.7	1.0	ug/L
1,1-dichloroethane	MW-54	4/10/2012		14.6	1.0	ug/L
1,1-dichloroethane	MW-54	10/09/2012		16.0	1.0	ug/L
1,1-dichloroethane	MW-54	4/04/2013		17.0	1.0	ug/L
1,1-dichloroethane	MW-54	10/16/2013		19.7	1.0	ug/L
1,1-dichloroethane	MW-54	4/10/2014		18.9	1.0	ug/L
1,1-dichloroethane	MW-54	10/16/2014		17.5	1.0	ug/L
1,1-dichloroethane	MW-54	4/06/2015		13.4	1.0	ug/L
1,1-dichloroethane	MW-54	10/01/2015		12.2	1.0	ug/L
1,1-dichloroethane	MW-54	4/14/2016		11.0	1.0	ug/L
1,1-dichloroethane	MW-54	10/13/2016		13.0	1.0	ug/L
1,1-dichloroethane	MW-54	4/10/2017		10.4	1.0	ug/L
1,1-dichloroethane	MW-54	10/09/2017		11.2	1.0	ug/L
1,1-dichloroethane	MW-54	4/17/2018		7.8	1.0	ug/L
1,1-dichloroethane	MW-54	10/22/2018		3.8	1.0	ug/L
1,1-dichloroethane	MW-54	4/22/2019		4.7	1.0	ug/L
1,1-dichloroethane	MW-54	10/23/2019		2.9	1.0	ug/L
1,1-dichloroethane	MW-54	10/19/2020		1.9	1.0	ug/L
1,1-dichloroethane	MW-54	10/08/2021		1.2	1.0	ug/L
1,1-dichloroethane	MW-54	10/25/2022		1.1	1.0	ug/L
1,1-dichloroethylene	MW-54	10/18/2001		18.9	1.0	ug/L
1,4-dichlorobenzene	MW-54	3/28/2008		1.7	1.0	ug/L
1,4-dichlorobenzene	MW-54	6/25/2008		2.9	1.0	ug/L
1,4-dichlorobenzene	MW-54	8/04/2008		2.4	1.0	ug/L
1,4-dichlorobenzene	MW-54	12/08/2008		1.3	1.0	ug/L
1,4-dichlorobenzene	MW-54	4/02/2009		2.2	1.0	ug/L
1,4-dichlorobenzene	MW-54	10/21/2009		2.1	1.0	ug/L
1,4-dichlorobenzene	MW-54	4/20/2010		1.6	1.0	ug/L
1,4-dichlorobenzene	MW-54	4/05/2011		1.0	1.0	ug/L
1,4-dichlorobenzene	MW-54	10/06/2011		1.0	1.0	ug/L
1,4-dichlorobenzene	MW-54	10/16/2013		1.5	1.0	ug/L
1,4-dichlorobenzene	MW-54	4/10/2014		1.7	1.0	ug/L
1,4-dichlorobenzene	MW-54	10/16/2014		2.3	1.0	ug/L
1,4-dichlorobenzene	MW-54	4/06/2015		2.1	1.0	ug/L
1,4-dichlorobenzene	MW-54	10/01/2015		2.3	1.0	ug/L
1,4-dichlorobenzene	MW-54	4/14/2016		2.1	1.0	ug/L
1,4-dichlorobenzene	MW-54	10/13/2016		2.3	1.0	ug/L
1,4-dichlorobenzene	MW-54	4/10/2017		2.7	1.0	ug/L
1,4-dichlorobenzene	MW-54	10/09/2017		3.5	1.0	ug/L
1,4-dichlorobenzene	MW-54	4/17/2018		4.3	1.0	ug/L
1,4-dichlorobenzene	MW-54	4/22/2019		2.5	1.0	ug/L
1,4-dichlorobenzene	MW-54	10/23/2019		3.5	1.0	ug/L
1,4-dichlorobenzene	MW-54	10/19/2020		3.8	1.0	ug/L
1,4-dichlorobenzene	MW-54	4/05/2021		2.9	1.0	ug/L
1,4-dichlorobenzene	MW-54	10/08/2021		2.8	1.0	ug/L
1,4-dichlorobenzene	MW-54	4/06/2022		2.4	1.0	ug/L
1,4-dichlorobenzene	MW-54	10/25/2022		3.1	1.0	ug/L
1,4-dichlorobenzene	MW-54	4/11/2023		1.6	1.0	ug/L
1,4-dichlorobenzene	MW-54	10/13/2023		4.1	1.0	ug/L
1,4-dichlorobenzene	MW-54	4/17/2024		2.3	1.0	ug/L
Acetone	MW-54	10/09/2017		18.1	10.0	ug/L
Benzene	MW-54	7/26/1999		2.1	1.0	ug/L
Benzene	MW-54	10/04/1999		1.4	1.0	ug/L
Benzene	MW-54	1/06/2000		1.2	1.0	ug/L
Benzene	MW-54	4/13/2000		1.3	1.0	ug/L
Benzene	MW-54	7/05/2000		1.7	1.0	ug/L
Benzene	MW-54	9/11/2000		1.8	1.0	ug/L
Benzene	MW-54	4/27/2001		2.1	1.0	ug/L
Benzene	MW-54	7/23/2001		1.7	1.0	ug/L
Benzene	MW-54	10/05/2005		1.0	1.0	ug/L
Benzene	MW-54	4/05/2006		.6	.5	ug/L
Benzene	MW-54	10/16/2013		1.0	1.0	ug/L
Benzene	MW-54	10/16/2014		1.0	1.0	ug/L
Benzene	MW-54	10/13/2016		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
Benzene	MW-54	10/09/2017		1.0	1.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-54	12/08/2008		16	8	ug/L
Chloroethane	MW-54	3/28/2008		9.7	1.0	ug/L
Chloroethane	MW-54	6/25/2008		7.4	1.0	ug/L
Chloroethane	MW-54	8/04/2008		6.0	1.0	ug/L
Chloroethane	MW-54	10/03/2008		5.0	1.0	ug/L
Chloroethane	MW-54	12/08/2008		5.1	1.0	ug/L
Chloroethane	MW-54	4/02/2009		5.1	1.0	ug/L
Chloroethane	MW-54	10/21/2009		8.2	1.0	ug/L
Chloroethane	MW-54	4/20/2010		5.6	1.0	ug/L
Chloroethane	MW-54	10/08/2010		7.8	1.0	ug/L
Chloroethane	MW-54	4/05/2011		13.0	1.0	ug/L
Chloroethane	MW-54	10/06/2011		11.5	1.0	ug/L
Chloroethane	MW-54	4/10/2012		14.3	1.0	ug/L
Chloroethane	MW-54	10/09/2012		15.6	1.0	ug/L
Chloroethane	MW-54	4/04/2013		15.9	1.0	ug/L
Chloroethane	MW-54	10/16/2013		12.0	1.0	ug/L
Chloroethane	MW-54	4/10/2014		17.3	1.0	ug/L
Chloroethane	MW-54	10/16/2014		20.6	1.0	ug/L
Chloroethane	MW-54	4/06/2015		14.1	1.0	ug/L
Chloroethane	MW-54	10/01/2015		13.6	1.0	ug/L
Chloroethane	MW-54	4/14/2016		5.8	1.0	ug/L
Chloroethane	MW-54	10/13/2016		13.7	1.0	ug/L
Chloroethane	MW-54	4/10/2017		10.5	1.0	ug/L
Chloroethane	MW-54	10/09/2017		11.4	1.0	ug/L
Chloroethane	MW-54	4/17/2018		8.5	1.0	ug/L
Chloroethane	MW-54	10/22/2018		2.0	1.0	ug/L
Chloroethane	MW-54	4/22/2019		4.0	1.0	ug/L
Chloroethane	MW-54	10/23/2019		4.3	1.0	ug/L
Chloroethane	MW-54	4/10/2020		1.9	1.0	ug/L
Chloroethane	MW-54	10/19/2020		2.7	1.0	ug/L
Chloroethane	MW-54	10/25/2022		1.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	3/28/2008		4.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	6/25/2008		3.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	8/04/2008		2.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	12/08/2008		3.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	4/02/2009		2.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	10/21/2009		2.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	4/20/2010		2.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	10/08/2010		2.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	4/05/2011		3.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	10/06/2011		2.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	4/10/2012		3.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	10/09/2012		2.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	4/04/2013		3.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	10/16/2013		3.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	4/10/2014		3.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	10/16/2014		2.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	4/06/2015		2.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	10/01/2015		2.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	4/14/2016		1.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	10/13/2016		2.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	4/10/2017		1.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	10/09/2017		1.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	4/17/2018		1.2	1.0	ug/L
Toluene	MW-54	4/22/2019		1.3	1.0	ug/L
Trichloroethylene	MW-54	1/21/1993		1.0	1.0	ug/L
Trichloroethylene	MW-54	4/22/1993		2.2	1.0	ug/L
Trichloroethylene	MW-54	7/13/1993		4.9	1.0	ug/L
Trichloroethylene	MW-54	7/29/1999		7.0	1.0	ug/L
Trichloroethylene	MW-54	10/04/1999		6.0	1.0	ug/L
Trichloroethylene	MW-54	1/06/2000		6.3	1.0	ug/L
Trichloroethylene	MW-54	4/13/2000		5.1	1.0	ug/L
Trichloroethylene	MW-54	7/05/2000		5.7	1.0	ug/L
Trichloroethylene	MW-54	9/11/2000		6.5	1.0	ug/L
Trichloroethylene	MW-54	10/08/2000		5.0	1.0	ug/L
Trichloroethylene	MW-54	4/27/2001		5.9	1.0	ug/L
Trichloroethylene	MW-54	7/23/2001		6.3	1.0	ug/L
Trichloroethylene	MW-54	10/18/2001		4.8	1.0	ug/L
Trichloroethylene	MW-54	1/25/2002		5.6	1.0	ug/L
Trichloroethylene	MW-54	4/24/2002		5.7	1.0	ug/L
Trichloroethylene	MW-54	7/22/2002		5.3	1.0	ug/L
Trichloroethylene	MW-54	10/14/2002		5.0	1.0	ug/L
Trichloroethylene	MW-54	1/29/2003		5.2	1.0	ug/L
Trichloroethylene	MW-54	7/11/2003		4.3	1.0	ug/L
Trichloroethylene	MW-54	10/06/2003		4.3	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
Trichloroethylene	MW-54	4/26/2004		4.4	1.0	ug/L
Trichloroethylene	MW-54	10/05/2004		5.5	1.0	ug/L
Trichloroethylene	MW-54	4/11/2005		3.9	1.0	ug/L
Trichloroethylene	MW-54	10/05/2005		4.0	1.0	ug/L
Trichloroethylene	MW-54	4/05/2006		3.4	1.0	ug/L
Trichloroethylene	MW-54	10/04/2006		2.7	1.0	ug/L
Trichloroethylene	MW-54	4/12/2007		2.3	1.0	ug/L
Trichloroethylene	MW-54	10/10/2007		2.1	1.0	ug/L
Trichloroethylene	MW-54	3/28/2008		1.2	1.0	ug/L
Trichloroethylene	MW-54	12/08/2008		1.4	1.0	ug/L
Vinyl chloride	MW-54	4/10/2012		1.1	1.0	ug/L
Vinyl chloride	MW-54	10/09/2012		1.0	1.0	ug/L
Vinyl chloride	MW-54	10/16/2014		1.0	1.0	ug/L
Vinyl chloride	MW-54	10/01/2015		1.0	1.0	ug/L
Vinyl chloride	MW-54	10/13/2016		2.0	1.0	ug/L
Vinyl chloride	MW-54	4/10/2017		1.8	1.0	ug/L
Vinyl chloride	MW-54	10/09/2017		1.6	1.0	ug/L
1,1-dichloroethane	MW-66	8/05/2008		1.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-66	8/05/2008		1.1	1.0	ug/L
1,1,1-trichloroethane	MW-81	7/13/1993		1.1	1.0	ug/L
1,1,1-trichloroethane	MW-81	1/25/1994		2.2	1.0	ug/L
1,1,1-trichloroethane	MW-81	4/14/1994		1.4	1.0	ug/L
1,1,1-trichloroethane	MW-81	7/08/1994		1.2	1.0	ug/L
1,1,1-trichloroethane	MW-81	10/20/1994		1.2	1.0	ug/L
1,1,1-trichloroethane	MW-81	4/21/1995		1.1	1.0	ug/L
1,1,1-trichloroethane	MW-81	7/07/1995		1.3	1.0	ug/L
1,1,1-trichloroethane	MW-81	7/17/1996		1.6	1.0	ug/L
1,1,1-trichloroethane	MW-81	10/08/1996		1.5	1.0	ug/L
1,1,1-trichloroethane	MW-81	1/21/1997		1.4	1.0	ug/L
1,1,1-trichloroethane	MW-81	4/11/1997		2.2	1.0	ug/L
1,1,1-trichloroethane	MW-81	10/09/1998		1.1	1.0	ug/L
1,1-dichloroethane	MW-81	3/28/2008		59.5	1.0	ug/L
1,1-dichloroethane	MW-81	6/20/2008		50.6	1.0	ug/L
1,1-dichloroethane	MW-81	8/04/2008		56.8	1.0	ug/L
1,1-dichloroethane	MW-81	10/03/2008		70.7	1.0	ug/L
1,1-dichloroethane	MW-81	12/08/2008		53.4	1.0	ug/L
1,1-dichloroethane	MW-81	4/01/2009		54.3	1.0	ug/L
1,1-dichloroethane	MW-81	10/21/2009		58.2	1.0	ug/L
1,1-dichloroethane	MW-81	4/20/2010		47.6	1.0	ug/L
1,1-dichloroethane	MW-81	10/08/2010		34.8	1.0	ug/L
1,1-dichloroethane	MW-81	4/05/2011		44.1	1.0	ug/L
1,1-dichloroethane	MW-81	10/06/2011		41.3	1.0	ug/L
1,1-dichloroethane	MW-81	4/10/2012		38.1	1.0	ug/L
1,1-dichloroethane	MW-81	10/09/2012		42.8	1.0	ug/L
1,1-dichloroethane	MW-81	4/04/2013		39.0	1.0	ug/L
1,1-dichloroethane	MW-81	10/16/2013		49.2	1.0	ug/L
1,1-dichloroethane	MW-81	4/10/2014		46.6	1.0	ug/L
1,1-dichloroethane	MW-81	10/16/2014		44.6	1.0	ug/L
1,1-dichloroethane	MW-81	4/03/2015		39.2	1.0	ug/L
1,1-dichloroethane	MW-81	10/01/2015		38.6	1.0	ug/L
1,1-dichloroethane	MW-81	4/14/2016		27.5	1.0	ug/L
1,1-dichloroethane	MW-81	10/13/2016		29.7	1.0	ug/L
1,1-dichloroethane	MW-81	4/10/2017		25.9	1.0	ug/L
1,1-dichloroethane	MW-81	10/09/2017		33.9	1.0	ug/L
1,1-dichloroethane	MW-81	4/17/2018		24.5	1.0	ug/L
1,1-dichloroethane	MW-81	10/22/2018		19.0	1.0	ug/L
1,1-dichloroethane	MW-81	4/22/2019		13.8	1.0	ug/L
1,1-dichloroethane	MW-81	10/23/2019		11.0	1.0	ug/L
1,1-dichloroethane	MW-81	4/10/2020		10.8	1.0	ug/L
1,1-dichloroethane	MW-81	10/19/2020		27.9	1.0	ug/L
1,1-dichloroethane	MW-81	4/05/2021		15.8	1.0	ug/L
1,1-dichloroethane	MW-81	10/08/2021		29.3	1.0	ug/L
1,1-dichloroethane	MW-81	4/06/2022		21.5	1.0	ug/L
1,1-dichloroethane	MW-81	10/25/2022		27.7	1.0	ug/L
1,1-dichloroethane	MW-81	4/11/2023		23.9	1.0	ug/L
1,1-dichloroethane	MW-81	10/13/2023		30.0	1.0	ug/L
1,1-dichloroethane	MW-81	4/16/2024		28.2	1.0	ug/L
1,1-dichloroethylene	MW-81	1/25/1994		3.6	1.0	ug/L
1,1-dichloroethylene	MW-81	7/07/1995		1.2	1.0	ug/L
1,2-dichlorobenzene	MW-81	4/22/2019		1.9	1.0	ug/L
1,2-dichlorobenzene	MW-81	10/23/2019		1.3	1.0	ug/L
1,2-dichlorobenzene	MW-81	4/10/2020		2.0	1.0	ug/L
1,2-dichlorobenzene	MW-81	10/19/2020		1.1	1.0	ug/L
1,2-dichloroethane	MW-81	7/08/1994		2.2	1.0	ug/L
1,2-dichloroethane	MW-81	10/20/1994		2.1	1.0	ug/L
1,2-dichloroethane	MW-81	1/04/1995		2.6	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,2-dichloroethane	MW-81	4/21/1995		1.6	1.0	ug/L
1,2-dichloroethane	MW-81	7/07/1995		1.7	1.0	ug/L
1,2-dichloroethane	MW-81	10/12/1995		3.1	1.0	ug/L
1,2-dichloroethane	MW-81	7/17/1996		1.6	1.0	ug/L
1,2-dichloroethane	MW-81	10/08/1996		3.0	1.0	ug/L
1,2-dichloroethane	MW-81	1/21/1997		2.2	1.0	ug/L
1,2-dichloroethane	MW-81	10/04/1999		3.5	1.0	ug/L
1,2-dichloroethane	MW-81	1/06/2000		3.4	1.0	ug/L
1,2-dichloroethane	MW-81	4/13/2000		2.9	1.0	ug/L
1,2-dichloroethane	MW-81	7/05/2000		6.6	1.0	ug/L
1,2-dichloroethane	MW-81	10/08/2000		3.7	1.0	ug/L
1,2-dichloroethane	MW-81	4/27/2001		2.6	1.0	ug/L
1,2-dichloroethane	MW-81	10/18/2001		3.3	1.0	ug/L
1,2-dichloroethane	MW-81	4/24/2002		4.2	1.0	ug/L
1,2-dichloroethane	MW-81	10/14/2002		3.5	1.0	ug/L
1,2-dichloroethane	MW-81	10/06/2003		3.7	1.0	ug/L
1,2-dichloroethane	MW-81	4/26/2004		2.8	1.0	ug/L
1,2-dichloroethane	MW-81	4/05/2006		3.0	1.0	ug/L
1,2-dichloroethane	MW-81	10/04/2006		2.0	1.0	ug/L
1,2-dichloroethane	MW-81	4/12/2007		2.4	1.0	ug/L
1,2-dichloroethane	MW-81	10/10/2007		2.4	1.0	ug/L
1,2-dichloroethane	MW-81	3/28/2008		2.1	1.0	ug/L
1,2-dichloroethane	MW-81	6/20/2008		2.9	1.0	ug/L
1,2-dichloroethane	MW-81	8/04/2008		2.7	1.0	ug/L
1,2-dichloroethane	MW-81	12/08/2008		2.7	1.0	ug/L
1,2-dichloroethane	MW-81	4/01/2009		2.7	1.0	ug/L
1,2-dichloroethane	MW-81	10/21/2009		3.4	1.0	ug/L
1,2-dichloroethane	MW-81	4/20/2010		3.6	1.0	ug/L
1,2-dichloroethane	MW-81	4/05/2011		3.2	1.0	ug/L
1,2-dichloroethane	MW-81	10/06/2011		4.5	1.0	ug/L
1,2-dichloroethane	MW-81	4/10/2012		3.7	1.0	ug/L
1,2-dichloroethane	MW-81	10/09/2012		6.5	1.0	ug/L
1,2-dichloroethane	MW-81	4/04/2013		5.4	1.0	ug/L
1,2-dichloroethane	MW-81	10/16/2013		10.8	1.0	ug/L
1,2-dichloroethane	MW-81	4/10/2014		11.3	1.0	ug/L
1,2-dichloroethane	MW-81	10/16/2014		7.7	1.0	ug/L
1,2-dichloroethane	MW-81	4/03/2015		6.5	1.0	ug/L
1,2-dichloroethane	MW-81	10/01/2015		8.7	1.0	ug/L
1,2-dichloroethane	MW-81	4/14/2016		4.7	1.0	ug/L
1,2-dichloroethane	MW-81	10/13/2016		6.4	1.0	ug/L
1,2-dichloroethane	MW-81	4/10/2017		4.2	1.0	ug/L
1,2-dichloroethane	MW-81	10/09/2017		9.9	1.0	ug/L
1,2-dichloroethane	MW-81	4/17/2018		5.8	1.0	ug/L
1,2-dichloroethane	MW-81	10/22/2018		2.9	1.0	ug/L
1,2-dichloroethane	MW-81	4/22/2019		2.1	1.0	ug/L
1,2-dichloroethane	MW-81	4/10/2020		2.4	1.0	ug/L
1,2-dichloroethane	MW-81	10/19/2020		7.7	1.0	ug/L
1,2-dichloroethane	MW-81	4/05/2021		3.9	1.0	ug/L
1,2-dichloroethane	MW-81	10/08/2021		9.8	1.0	ug/L
1,2-dichloroethane	MW-81	4/06/2022		5.7	1.0	ug/L
1,2-dichloroethane	MW-81	10/25/2022		12.8	1.0	ug/L
1,2-dichloroethane	MW-81	4/11/2023		6.9	1.0	ug/L
1,2-dichloroethane	MW-81	10/13/2023		15.6	1.0	ug/L
1,2-dichloroethane	MW-81	4/16/2024		12.3	1.0	ug/L
1,2-dichloropropane	MW-81	3/28/2008		12.2	1.0	ug/L
1,2-dichloropropane	MW-81	6/20/2008		5.1	1.0	ug/L
1,2-dichloropropane	MW-81	8/04/2008		9.1	1.0	ug/L
1,2-dichloropropane	MW-81	12/08/2008		12.0	1.0	ug/L
1,2-dichloropropane	MW-81	4/01/2009		17.3	1.0	ug/L
1,2-dichloropropane	MW-81	10/21/2009		10.0	1.0	ug/L
1,2-dichloropropane	MW-81	4/20/2010		7.0	1.0	ug/L
1,2-dichloropropane	MW-81	10/08/2010		5.9	1.0	ug/L
1,2-dichloropropane	MW-81	4/05/2011		14.7	1.0	ug/L
1,2-dichloropropane	MW-81	10/06/2011		16.7	1.0	ug/L
1,2-dichloropropane	MW-81	4/10/2012		12.6	1.0	ug/L
1,2-dichloropropane	MW-81	10/09/2012		17.5	1.0	ug/L
1,2-dichloropropane	MW-81	4/04/2013		16.7	1.0	ug/L
1,2-dichloropropane	MW-81	10/16/2013		22.7	1.0	ug/L
1,2-dichloropropane	MW-81	4/10/2014		18.1	1.0	ug/L
1,2-dichloropropane	MW-81	10/16/2014		19.6	1.0	ug/L
1,2-dichloropropane	MW-81	4/03/2015		16.1	1.0	ug/L
1,2-dichloropropane	MW-81	10/01/2015		15.8	1.0	ug/L
1,2-dichloropropane	MW-81	4/14/2016		11.1	1.0	ug/L
1,2-dichloropropane	MW-81	10/13/2016		10.6	1.0	ug/L
1,2-dichloropropane	MW-81	4/10/2017		9.1	1.0	ug/L
1,2-dichloropropane	MW-81	10/09/2017		12.6	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,2-dichloropropane	MW-81	4/17/2018		8.6	1.0	ug/L
1,2-dichloropropane	MW-81	10/22/2018		4.9	1.0	ug/L
1,2-dichloropropane	MW-81	4/22/2019		1.9	1.0	ug/L
1,2-dichloropropane	MW-81	10/23/2019		1.5	1.0	ug/L
1,2-dichloropropane	MW-81	4/10/2020		1.1	1.0	ug/L
1,2-dichloropropane	MW-81	10/19/2020		7.9	1.0	ug/L
1,2-dichloropropane	MW-81	4/05/2021		4.0	1.0	ug/L
1,2-dichloropropane	MW-81	10/08/2021		9.3	1.0	ug/L
1,2-dichloropropane	MW-81	4/06/2022		2.6	1.0	ug/L
1,2-dichloropropane	MW-81	10/25/2022		8.1	1.0	ug/L
1,2-dichloropropane	MW-81	4/11/2023		3.5	1.0	ug/L
1,2-dichloropropane	MW-81	10/13/2023		8.4	1.0	ug/L
1,2-dichloropropane	MW-81	4/16/2024		6.5	1.0	ug/L
1,4-dichlorobenzene	MW-81	1/06/2000		1.4	1.0	ug/L
1,4-dichlorobenzene	MW-81	4/13/2000		1.0	1.0	ug/L
1,4-dichlorobenzene	MW-81	7/05/2000		1.4	1.0	ug/L
1,4-dichlorobenzene	MW-81	6/20/2008		2.9	1.0	ug/L
1,4-dichlorobenzene	MW-81	8/04/2008		2.2	1.0	ug/L
1,4-dichlorobenzene	MW-81	12/08/2008		2.0	1.0	ug/L
1,4-dichlorobenzene	MW-81	4/01/2009		1.3	1.0	ug/L
1,4-dichlorobenzene	MW-81	10/21/2009		2.4	1.0	ug/L
1,4-dichlorobenzene	MW-81	4/20/2010		3.5	1.0	ug/L
1,4-dichlorobenzene	MW-81	10/08/2010		1.8	1.0	ug/L
1,4-dichlorobenzene	MW-81	4/05/2011		1.6	1.0	ug/L
1,4-dichlorobenzene	MW-81	10/06/2011		1.9	1.0	ug/L
1,4-dichlorobenzene	MW-81	4/10/2012		2.0	1.0	ug/L
1,4-dichlorobenzene	MW-81	10/09/2012		1.9	1.0	ug/L
1,4-dichlorobenzene	MW-81	4/04/2013		2.3	1.0	ug/L
1,4-dichlorobenzene	MW-81	10/16/2013		2.0	1.0	ug/L
1,4-dichlorobenzene	MW-81	4/10/2014		1.7	1.0	ug/L
1,4-dichlorobenzene	MW-81	10/16/2014		1.6	1.0	ug/L
1,4-dichlorobenzene	MW-81	4/03/2015		1.5	1.0	ug/L
1,4-dichlorobenzene	MW-81	10/01/2015		1.5	1.0	ug/L
1,4-dichlorobenzene	MW-81	4/14/2016		2.2	1.0	ug/L
1,4-dichlorobenzene	MW-81	10/13/2016		3.2	1.0	ug/L
1,4-dichlorobenzene	MW-81	4/10/2017		2.8	1.0	ug/L
1,4-dichlorobenzene	MW-81	10/09/2017		3.4	1.0	ug/L
1,4-dichlorobenzene	MW-81	4/17/2018		4.2	1.0	ug/L
1,4-dichlorobenzene	MW-81	4/22/2019		8.0	1.0	ug/L
1,4-dichlorobenzene	MW-81	10/23/2019		7.6	1.0	ug/L
1,4-dichlorobenzene	MW-81	10/19/2020		6.6	1.0	ug/L
1,4-dichlorobenzene	MW-81	4/05/2021		5.2	1.0	ug/L
1,4-dichlorobenzene	MW-81	10/08/2021		5.0	1.0	ug/L
1,4-dichlorobenzene	MW-81	4/06/2022		4.6	1.0	ug/L
1,4-dichlorobenzene	MW-81	10/25/2022		5.8	1.0	ug/L
1,4-dichlorobenzene	MW-81	4/11/2023		4.6	1.0	ug/L
1,4-dichlorobenzene	MW-81	10/13/2023		5.7	1.0	ug/L
1,4-dichlorobenzene	MW-81	4/16/2024		4.7	1.0	ug/L
Acetone	MW-81	3/28/2008		31.0	10.0	ug/L
Acetone	MW-81	10/21/2009		61.2	10.0	ug/L
Acetone	MW-81	10/22/2018		26.7	10.0	ug/L
Benzene	MW-81	7/13/1993		4.8	1.0	ug/L
Benzene	MW-81	1/25/1994		21.4	10.0	ug/L
Benzene	MW-81	4/14/1994		8.0	1.0	ug/L
Benzene	MW-81	7/08/1994		8.9	1.0	ug/L
Benzene	MW-81	10/20/1994		6.3	1.0	ug/L
Benzene	MW-81	1/04/1995		2.2	1.0	ug/L
Benzene	MW-81	10/08/1996		1.0	1.0	ug/L
Benzene	MW-81	4/19/1999		1.1	1.0	ug/L
Benzene	MW-81	10/04/1999		1.0	1.0	ug/L
Benzene	MW-81	1/06/2000		1.1	1.0	ug/L
Benzene	MW-81	7/05/2000		1.1	1.0	ug/L
Benzene	MW-81	4/24/2002		1.0	1.0	ug/L
Benzene	MW-81	4/22/2003		1.0	1.0	ug/L
Benzene	MW-81	3/28/2008		2.2	1.0	ug/L
Benzene	MW-81	6/20/2008		4.2	1.0	ug/L
Benzene	MW-81	8/04/2008		3.4	1.0	ug/L
Benzene	MW-81	12/08/2008		3.0	1.0	ug/L
Benzene	MW-81	4/01/2009		2.2	1.0	ug/L
Benzene	MW-81	10/21/2009		3.6	1.0	ug/L
Benzene	MW-81	4/20/2010		4.0	1.0	ug/L
Benzene	MW-81	10/08/2010		3.6	1.0	ug/L
Benzene	MW-81	4/05/2011		2.2	1.0	ug/L
Benzene	MW-81	10/06/2011		2.0	1.0	ug/L
Benzene	MW-81	4/10/2012		2.3	1.0	ug/L
Benzene	MW-81	10/09/2012		1.2	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Benzene	MW-81	4/04/2013		1.1	1.0	ug/L
Benzene	MW-81	10/16/2013		1.2	1.0	ug/L
Benzene	MW-81	10/13/2016		1.3	1.0	ug/L
Benzene	MW-81	4/10/2017		1.5	1.0	ug/L
Benzene	MW-81	10/09/2017		1.1	1.0	ug/L
Benzene	MW-81	4/17/2018		1.0	1.0	ug/L
Benzene	MW-81	4/22/2019		2.9	1.0	ug/L
Benzene	MW-81	10/23/2019		2.7	1.0	ug/L
Benzene	MW-81	4/10/2020		2.9	1.0	ug/L
Benzene	MW-81	10/19/2020		1.5	1.0	ug/L
Benzene	MW-81	4/05/2021		1.1	1.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-81	4/03/2015		36	10	ug/L
Chlorobenzene	MW-81	10/13/2016		1.1	1.0	ug/L
Chlorobenzene	MW-81	4/10/2017		1.0	1.0	ug/L
Chlorobenzene	MW-81	10/09/2017		1.1	1.0	ug/L
Chlorobenzene	MW-81	4/17/2018		1.1	1.0	ug/L
Chlorobenzene	MW-81	4/22/2019		1.4	1.0	ug/L
Chlorobenzene	MW-81	10/23/2019		1.4	1.0	ug/L
Chlorobenzene	MW-81	4/10/2020		1.3	1.0	ug/L
Chlorobenzene	MW-81	10/19/2020		1.5	1.0	ug/L
Chlorobenzene	MW-81	4/05/2021		1.2	1.0	ug/L
Chlorobenzene	MW-81	10/08/2021		1.3	1.0	ug/L
Chlorobenzene	MW-81	4/06/2022		1.2	1.0	ug/L
Chlorobenzene	MW-81	10/25/2022		1.7	1.0	ug/L
Chlorobenzene	MW-81	4/11/2023		1.4	1.0	ug/L
Chlorobenzene	MW-81	10/13/2023		1.9	1.0	ug/L
Chlorobenzene	MW-81	4/16/2024		1.7	1.0	ug/L
Chloroethane	MW-81	3/28/2008		13.4	1.0	ug/L
Chloroethane	MW-81	6/20/2008		13.9	1.0	ug/L
Chloroethane	MW-81	8/04/2008		13.4	1.0	ug/L
Chloroethane	MW-81	10/03/2008		14.2	1.0	ug/L
Chloroethane	MW-81	12/08/2008		15.0	1.0	ug/L
Chloroethane	MW-81	4/01/2009		14.0	1.0	ug/L
Chloroethane	MW-81	10/21/2009		18.1	1.0	ug/L
Chloroethane	MW-81	4/20/2010		14.4	1.0	ug/L
Chloroethane	MW-81	10/08/2010		12.9	1.0	ug/L
Chloroethane	MW-81	4/05/2011		14.0	1.0	ug/L
Chloroethane	MW-81	10/06/2011		13.2	1.0	ug/L
Chloroethane	MW-81	4/10/2012		12.2	1.0	ug/L
Chloroethane	MW-81	10/09/2012		11.5	1.0	ug/L
Chloroethane	MW-81	4/04/2013		10.2	1.0	ug/L
Chloroethane	MW-81	10/16/2013		12.5	1.0	ug/L
Chloroethane	MW-81	4/10/2014		13.4	1.0	ug/L
Chloroethane	MW-81	10/16/2014		13.3	1.0	ug/L
Chloroethane	MW-81	4/03/2015		13.7	1.0	ug/L
Chloroethane	MW-81	10/01/2015		8.6	1.0	ug/L
Chloroethane	MW-81	4/14/2016		7.5	1.0	ug/L
Chloroethane	MW-81	10/13/2016		11.5	1.0	ug/L
Chloroethane	MW-81	4/10/2017		9.8	1.0	ug/L
Chloroethane	MW-81	10/09/2017		8.7	1.0	ug/L
Chloroethane	MW-81	4/17/2018		7.1	1.0	ug/L
Chloroethane	MW-81	10/22/2018		5.2	1.0	ug/L
Chloroethane	MW-81	4/22/2019		6.0	1.0	ug/L
Chloroethane	MW-81	10/23/2019		7.8	1.0	ug/L
Chloroethane	MW-81	4/10/2020		6.0	1.0	ug/L
Chloroethane	MW-81	10/19/2020		9.2	1.0	ug/L
Chloroethane	MW-81	4/05/2021		5.6	1.0	ug/L
Chloroethane	MW-81	10/08/2021		5.7	1.0	ug/L
Chloroethane	MW-81	4/06/2022		5.0	1.0	ug/L
Chloroethane	MW-81	10/25/2022		7.2	1.0	ug/L
Chloroethane	MW-81	4/11/2023		5.4	1.0	ug/L
Chloroethane	MW-81	10/13/2023		6.5	1.0	ug/L
Chloroethane	MW-81	4/16/2024		6.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-81	3/28/2008		133	1	ug/L
Cis-1,2-dichloroethylene	MW-81	6/20/2008		209	1	ug/L
Cis-1,2-dichloroethylene	MW-81	8/04/2008		190	1	ug/L
Cis-1,2-dichloroethylene	MW-81	10/03/2008		206	1	ug/L
Cis-1,2-dichloroethylene	MW-81	12/08/2008		218	1	ug/L
Cis-1,2-dichloroethylene	MW-81	12/08/2008		188	5	ug/L
Cis-1,2-dichloroethylene	MW-81	4/01/2009		223	1	ug/L
Cis-1,2-dichloroethylene	MW-81	4/01/2009		215	5	ug/L
Cis-1,2-dichloroethylene	MW-81	10/21/2009		228	1	ug/L
Cis-1,2-dichloroethylene	MW-81	10/21/2009		220	5	ug/L
Cis-1,2-dichloroethylene	MW-81	4/20/2010		245	5	ug/L
Cis-1,2-dichloroethylene	MW-81	10/08/2010		295	5	ug/L
Cis-1,2-dichloroethylene	MW-81	4/05/2011		305	5	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-81	10/06/2011		250	5	ug/L
Cis-1,2-dichloroethylene	MW-81	4/10/2012		267	5	ug/L
Cis-1,2-dichloroethylene	MW-81	10/09/2012		295	5	ug/L
Cis-1,2-dichloroethylene	MW-81	4/04/2013		238	5	ug/L
Cis-1,2-dichloroethylene	MW-81	10/16/2013		268	5	ug/L
Cis-1,2-dichloroethylene	MW-81	4/10/2014		226	10	ug/L
Cis-1,2-dichloroethylene	MW-81	10/16/2014		288	1	ug/L
Cis-1,2-dichloroethylene	MW-81	4/03/2015		252	1	ug/L
Cis-1,2-dichloroethylene	MW-81	10/01/2015		201	1	ug/L
Cis-1,2-dichloroethylene	MW-81	4/14/2016		247	1	ug/L
Cis-1,2-dichloroethylene	MW-81	10/13/2016		243	10	ug/L
Cis-1,2-dichloroethylene	MW-81	4/10/2017		205	1	ug/L
Cis-1,2-dichloroethylene	MW-81	10/09/2017		188	5	ug/L
Cis-1,2-dichloroethylene	MW-81	4/17/2018		195	1	ug/L
Cis-1,2-dichloroethylene	MW-81	10/22/2018		101	1	ug/L
Cis-1,2-dichloroethylene	MW-81	4/22/2019		84	1	ug/L
Cis-1,2-dichloroethylene	MW-81	10/23/2019		127	1	ug/L
Cis-1,2-dichloroethylene	MW-81	4/10/2020		83	1	ug/L
Cis-1,2-dichloroethylene	MW-81	10/19/2020		210	10	ug/L
Cis-1,2-dichloroethylene	MW-81	4/05/2021		148	1	ug/L
Cis-1,2-dichloroethylene	MW-81	10/08/2021		188	1	ug/L
Cis-1,2-dichloroethylene	MW-81	4/06/2022		192	1	ug/L
Cis-1,2-dichloroethylene	MW-81	10/25/2022		225	10	ug/L
Cis-1,2-dichloroethylene	MW-81	4/11/2023		140	1	ug/L
Cis-1,2-dichloroethylene	MW-81	10/13/2023		181	1	ug/L
Cis-1,2-dichloroethylene	MW-81	4/16/2024		164	1	ug/L
Tetrachloroethylene	MW-81	3/28/2008		3.6	1.0	ug/L
Tetrachloroethylene	MW-81	8/04/2008		1.1	1.0	ug/L
Tetrachloroethylene	MW-81	12/08/2008		1.3	1.0	ug/L
Tetrachloroethylene	MW-81	4/01/2009		6.7	1.0	ug/L
Tetrachloroethylene	MW-81	4/05/2011		1.7	1.0	ug/L
Tetrachloroethylene	MW-81	10/06/2011		2.0	1.0	ug/L
Tetrachloroethylene	MW-81	10/09/2012		1.6	1.0	ug/L
Tetrachloroethylene	MW-81	4/04/2013		1.0	1.0	ug/L
Tetrachloroethylene	MW-81	10/16/2013		4.0	1.0	ug/L
Toluene	MW-81	6/20/2008		2.2	1.0	ug/L
Toluene	MW-81	8/04/2008		1.2	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	3/28/2008		2.3	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	6/20/2008		3.8	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	8/04/2008		3.3	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	10/03/2008		2.8	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	12/08/2008		3.0	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	4/01/2009		2.9	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	10/21/2009		4.2	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	4/20/2010		4.2	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	10/08/2010		3.8	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	4/05/2011		3.4	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	10/06/2011		3.2	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	4/10/2012		3.2	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	10/09/2012		2.9	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	4/04/2013		3.1	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	10/16/2013		3.5	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	4/10/2014		2.6	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	10/16/2014		2.5	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	4/03/2015		3.2	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	10/01/2015		2.2	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	4/14/2016		2.6	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	10/13/2016		3.1	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	4/10/2017		3.0	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	10/09/2017		2.6	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	4/17/2018		2.4	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	4/22/2019		2.6	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	10/23/2019		2.2	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	4/10/2020		2.4	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	10/19/2020		4.1	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	4/05/2021		1.8	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	10/08/2021		1.9	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	10/25/2022		2.4	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	4/11/2023		2.2	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	10/13/2023		2.5	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	4/16/2024		2.2	1.0	ug/L
Trichloroethylene	MW-81	4/22/1993		2.8	1.0	ug/L
Trichloroethylene	MW-81	7/13/1993		14.6	1.0	ug/L
Trichloroethylene	MW-81	1/25/1994		61.2	1.0	ug/L
Trichloroethylene	MW-81	4/14/1994		30.0	1.0	ug/L
Trichloroethylene	MW-81	7/08/1994		39.8	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
Trichloroethylene	MW-81	10/20/1994		48.7	1.0	ug/L
Trichloroethylene	MW-81	1/04/1995		59.2	1.0	ug/L
Trichloroethylene	MW-81	4/21/1995		41.2	1.0	ug/L
Trichloroethylene	MW-81	7/07/1995		50.1	1.0	ug/L
Trichloroethylene	MW-81	10/12/1995		64.4	1.0	ug/L
Trichloroethylene	MW-81	1/10/1996		59.7	1.0	ug/L
Trichloroethylene	MW-81	4/15/1996		61.1	1.0	ug/L
Trichloroethylene	MW-81	7/17/1996		34.6	1.0	ug/L
Trichloroethylene	MW-81	10/08/1996		46.0	1.0	ug/L
Trichloroethylene	MW-81	1/21/1997		38.8	1.0	ug/L
Trichloroethylene	MW-81	4/11/1997		42.4	1.0	ug/L
Trichloroethylene	MW-81	7/17/1997		42.9	1.0	ug/L
Trichloroethylene	MW-81	10/15/1997		45.5	1.0	ug/L
Trichloroethylene	MW-81	1/27/1998		44.1	1.0	ug/L
Trichloroethylene	MW-81	4/21/1998		36.7	1.0	ug/L
Trichloroethylene	MW-81	7/21/1998		33.5	1.0	ug/L
Trichloroethylene	MW-81	10/09/1998		35.8	1.0	ug/L
Trichloroethylene	MW-81	1/26/1999		41.2	1.0	ug/L
Trichloroethylene	MW-81	4/19/1999		35.4	1.0	ug/L
Trichloroethylene	MW-81	7/29/1999		33.0	1.0	ug/L
Trichloroethylene	MW-81	10/04/1999		52.8	1.0	ug/L
Trichloroethylene	MW-81	1/06/2000		72.2	1.0	ug/L
Trichloroethylene	MW-81	4/13/2000		57.8	1.0	ug/L
Trichloroethylene	MW-81	7/05/2000		100.0	1.0	ug/L
Trichloroethylene	MW-81	10/08/2000		55.9	1.0	ug/L
Trichloroethylene	MW-81	4/27/2001		57.8	1.0	ug/L
Trichloroethylene	MW-81	10/18/2001		61.9	1.0	ug/L
Trichloroethylene	MW-81	4/24/2002		71.3	1.0	ug/L
Trichloroethylene	MW-81	10/14/2002		41.2	1.0	ug/L
Trichloroethylene	MW-81	4/22/2003		49.9	1.0	ug/L
Trichloroethylene	MW-81	10/06/2003		38.4	1.0	ug/L
Trichloroethylene	MW-81	4/26/2004		39.4	1.0	ug/L
Trichloroethylene	MW-81	4/11/2005		44.5	1.0	ug/L
Trichloroethylene	MW-81	10/05/2005		20.2	1.0	ug/L
Trichloroethylene	MW-81	4/05/2006		32.5	1.0	ug/L
Trichloroethylene	MW-81	10/04/2006		21.1	1.0	ug/L
Trichloroethylene	MW-81	4/12/2007		16.2	1.0	ug/L
Trichloroethylene	MW-81	10/10/2007		37.2	1.0	ug/L
Trichloroethylene	MW-81	3/28/2008		21.3	1.0	ug/L
Trichloroethylene	MW-81	6/20/2008		22.0	1.0	ug/L
Trichloroethylene	MW-81	8/04/2008		15.8	1.0	ug/L
Trichloroethylene	MW-81	10/03/2008		17.8	1.0	ug/L
Trichloroethylene	MW-81	12/08/2008		12.0	1.0	ug/L
Trichloroethylene	MW-81	4/01/2009		36.2	1.0	ug/L
Trichloroethylene	MW-81	10/21/2009		10.2	1.0	ug/L
Trichloroethylene	MW-81	4/20/2010		6.4	1.0	ug/L
Trichloroethylene	MW-81	10/08/2010		5.2	1.0	ug/L
Trichloroethylene	MW-81	4/05/2011		21.2	1.0	ug/L
Trichloroethylene	MW-81	10/06/2011		12.5	1.0	ug/L
Trichloroethylene	MW-81	4/10/2012		10.1	1.0	ug/L
Trichloroethylene	MW-81	10/09/2012		12.2	1.0	ug/L
Trichloroethylene	MW-81	4/04/2013		11.9	1.0	ug/L
Trichloroethylene	MW-81	10/16/2013		18.3	1.0	ug/L
Trichloroethylene	MW-81	4/10/2014		7.1	1.0	ug/L
Trichloroethylene	MW-81	10/16/2014		10.0	1.0	ug/L
Trichloroethylene	MW-81	4/03/2015		6.7	1.0	ug/L
Trichloroethylene	MW-81	10/01/2015		12.2	1.0	ug/L
Trichloroethylene	MW-81	4/14/2016		4.7	1.0	ug/L
Trichloroethylene	MW-81	10/13/2016		2.1	1.0	ug/L
Trichloroethylene	MW-81	4/10/2017		5.4	1.0	ug/L
Trichloroethylene	MW-81	10/09/2017		9.4	1.0	ug/L
Trichloroethylene	MW-81	4/17/2018		4.3	1.0	ug/L
Trichloroethylene	MW-81	10/19/2020		3.0	1.0	ug/L
Trichloroethylene	MW-81	4/05/2021		2.0	1.0	ug/L
Trichloroethylene	MW-81	10/08/2021		2.3	1.0	ug/L
Trichloroethylene	MW-81	4/06/2022		1.0	1.0	ug/L
Trichloroethylene	MW-81	10/25/2022		2.9	1.0	ug/L
Trichloroethylene	MW-81	4/11/2023		2.6	1.0	ug/L
Trichloroethylene	MW-81	10/13/2023		3.3	1.0	ug/L
Trichloroethylene	MW-81	4/16/2024		1.4	1.0	ug/L
Vinyl chloride	MW-81	3/28/2008		7.6	1.0	ug/L
Vinyl chloride	MW-81	6/20/2008		15.7	1.0	ug/L
Vinyl chloride	MW-81	8/04/2008		12.4	1.0	ug/L
Vinyl chloride	MW-81	10/03/2008		7.5	1.0	ug/L
Vinyl chloride	MW-81	12/08/2008		13.2	1.0	ug/L
Vinyl chloride	MW-81	4/01/2009		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
Vinyl chloride	MW-81	10/21/2009		26.8	1.0	ug/L
Vinyl chloride	MW-81	4/20/2010		22.9	1.0	ug/L
Vinyl chloride	MW-81	10/08/2010		21.1	1.0	ug/L
Vinyl chloride	MW-81	4/05/2011		13.8	1.0	ug/L
Vinyl chloride	MW-81	10/06/2011		9.3	1.0	ug/L
Vinyl chloride	MW-81	4/10/2012		12.4	1.0	ug/L
Vinyl chloride	MW-81	10/09/2012		8.4	1.0	ug/L
Vinyl chloride	MW-81	4/04/2013		7.8	1.0	ug/L
Vinyl chloride	MW-81	10/16/2013		9.4	1.0	ug/L
Vinyl chloride	MW-81	4/10/2014		11.0	1.0	ug/L
Vinyl chloride	MW-81	10/16/2014		9.7	1.0	ug/L
Vinyl chloride	MW-81	4/03/2015		12.9	1.0	ug/L
Vinyl chloride	MW-81	10/01/2015		8.8	1.0	ug/L
Vinyl chloride	MW-81	4/14/2016		15.8	1.0	ug/L
Vinyl chloride	MW-81	10/13/2016		20.1	1.0	ug/L
Vinyl chloride	MW-81	4/10/2017		16.5	1.0	ug/L
Vinyl chloride	MW-81	10/09/2017		13.2	1.0	ug/L
Vinyl chloride	MW-81	4/17/2018		13.6	1.0	ug/L
Vinyl chloride	MW-81	10/22/2018		26.6	1.0	ug/L
Vinyl chloride	MW-81	4/22/2019		15.5	1.0	ug/L
Vinyl chloride	MW-81	10/23/2019		24.2	1.0	ug/L
Vinyl chloride	MW-81	4/10/2020		13.9	1.0	ug/L
Vinyl chloride	MW-81	10/19/2020		15.4	1.0	ug/L
Vinyl chloride	MW-81	4/05/2021		11.3	1.0	ug/L
Vinyl chloride	MW-81	10/08/2021		7.2	1.0	ug/L
Vinyl chloride	MW-81	4/06/2022		7.0	1.0	ug/L
Vinyl chloride	MW-81	10/25/2022		8.4	1.0	ug/L
Vinyl chloride	MW-81	4/11/2023		7.7	1.0	ug/L
Vinyl chloride	MW-81	10/13/2023		6.7	1.0	ug/L
Vinyl chloride	MW-81	4/16/2024		6.8	1.0	ug/L
Acetone	MW-85	10/09/2017		15.4	10.0	ug/L
Acetone	MW-87	10/09/2017		18.4	10.0	ug/L
Benzene	MW-87	7/17/1997		1.3	1.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-87	12/08/2008		28	8	ug/L
Bis(2-ethylhexyl) phthalate	MW-87	4/10/2014		13	10	ug/L
1,1-dichloroethane	MW-89	10/09/2012		4	1	ug/L
Acetone	MW-89	10/09/2017		18.2	10.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-89	12/10/2008		60	11	ug/L
Bis(2-ethylhexyl) phthalate	MW-89	10/16/2013		9	8	ug/L
Bis(2-ethylhexyl) phthalate	MW-89	4/10/2014		18	10	ug/L
Bis(2-ethylhexyl) phthalate	MW-89	4/14/2016		19	13	ug/L
1,1,1-trichloroethane	MW-91	9/11/2000		1.1	1.0	ug/L
1,1,1-trichloroethane	MW-91	10/08/2000		1.0	1.0	ug/L
1,1-dichloroethane	MW-91	3/28/2008		5.5	1.0	ug/L
1,1-dichloroethane	MW-91	6/20/2008		4.4	1.0	ug/L
1,1-dichloroethane	MW-91	8/05/2008		6.5	1.0	ug/L
1,1-dichloroethane	MW-91	10/03/2008		9.3	1.0	ug/L
1,1-dichloroethane	MW-91	12/10/2008		6.8	1.0	ug/L
1,1-dichloroethane	MW-91	4/02/2009		5.3	1.0	ug/L
1,1-dichloroethane	MW-91	10/21/2009		2.5	1.0	ug/L
1,1-dichloroethane	MW-91	4/20/2010		4.4	1.0	ug/L
1,1-dichloroethane	MW-91	10/08/2010		4.3	1.0	ug/L
1,1-dichloroethane	MW-91	4/05/2011		4.5	1.0	ug/L
1,1-dichloroethane	MW-91	10/06/2011		3.9	1.0	ug/L
1,1-dichloroethane	MW-91	4/10/2012		3.9	1.0	ug/L
1,1-dichloroethane	MW-91	4/04/2013		1.0	1.0	ug/L
1,1-dichloroethane	MW-91	10/16/2013		3.4	1.0	ug/L
1,1-dichloroethane	MW-91	4/10/2014		1.8	1.0	ug/L
1,1-dichloroethane	MW-91	10/16/2014		2.4	1.0	ug/L
1,1-dichloroethane	MW-91	4/03/2015		6.1	1.0	ug/L
1,1-dichloroethane	MW-91	10/01/2015		3.6	1.0	ug/L
1,1-dichloroethane	MW-91	10/09/2017		2.5	1.0	ug/L
1,1-dichloroethane	MW-91	1/09/2018		1.7	1.0	ug/L
1,1-dichloroethane	MW-91	4/22/2019		2.7	1.0	ug/L
1,1-dichloroethane	MW-91	10/19/2020		1.5	1.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-91	8/05/2008		8	8	ug/L
Bis(2-ethylhexyl) phthalate	MW-91	12/10/2008		9	8	ug/L
Bis(2-ethylhexyl) phthalate	MW-91	10/08/2010		15	10	ug/L
Bis(2-ethylhexyl) phthalate	MW-91	10/16/2013		142	84	ug/L
Carbon disulfide	MW-91	4/06/2022		2.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-91	6/20/2008		1.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-91	8/05/2008		3.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-91	4/20/2010		1.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-91	10/06/2011		1.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-91	4/03/2015		1.5	1.0	ug/L
Tetrachloroethylene	MW-91	12/10/2008		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
Trichloroethylene	MW-91	9/11/2000		1.0	1.0	ug/L
Trichloroethylene	MW-91	1/25/2002		1.1	1.0	ug/L
Trichloroethylene	MW-91	4/24/2002		1.0	1.0	ug/L
Trichloroethylene	MW-91	10/14/2002		1.2	1.0	ug/L
Trichloroethylene	MW-91	10/05/2004		1.2	1.0	ug/L
Trichloroethylene	MW-91	4/11/2005		.3	.3	ug/L
Trichloroethylene	MW-91	10/05/2005		1.9	1.0	ug/L
1,1-dichloroethane	MW-94	1/14/2011		40.0	1.0	ug/L
1,1-dichloroethane	MW-94	4/05/2011		41.9	1.0	ug/L
1,1-dichloroethane	MW-94	6/18/2011		33.4	1.0	ug/L
1,1-dichloroethane	MW-94	8/11/2011		30.9	1.0	ug/L
1,1-dichloroethane	MW-94	10/06/2011		43.5	1.0	ug/L
1,1-dichloroethane	MW-94	4/10/2012		36.2	1.0	ug/L
1,1-dichloroethane	MW-94	10/09/2012		36.0	1.0	ug/L
1,1-dichloroethane	MW-94	4/04/2013		23.3	1.0	ug/L
1,1-dichloroethane	MW-94	10/16/2013		24.3	1.0	ug/L
1,1-dichloroethane	MW-94	4/10/2014		21.1	1.0	ug/L
1,1-dichloroethane	MW-94	10/16/2014		16.1	1.0	ug/L
1,1-dichloroethane	MW-94	4/03/2015		11.3	1.0	ug/L
1,1-dichloroethane	MW-94	10/01/2015		8.2	1.0	ug/L
1,1-dichloroethane	MW-94	4/14/2016		8.6	1.0	ug/L
1,1-dichloroethane	MW-94	10/13/2016		9.8	1.0	ug/L
1,1-dichloroethane	MW-94	4/10/2017		7.7	1.0	ug/L
1,1-dichloroethane	MW-94	10/09/2017		8.3	1.0	ug/L
1,1-dichloroethane	MW-94	4/17/2018		5.7	1.0	ug/L
1,1-dichloroethane	MW-94	10/22/2018		6.0	1.0	ug/L
1,1-dichloroethane	MW-94	4/22/2019		5.4	1.0	ug/L
1,1-dichloroethane	MW-94	10/23/2019		4.3	1.0	ug/L
1,1-dichloroethane	MW-94	4/10/2020		3.5	1.0	ug/L
1,1-dichloroethane	MW-94	10/19/2020		3.8	1.0	ug/L
1,1-dichloroethane	MW-94	4/05/2021		1.8	1.0	ug/L
1,1-dichloroethane	MW-94	10/08/2021		2.6	1.0	ug/L
1,1-dichloroethane	MW-94	4/06/2022		1.9	1.0	ug/L
1,1-dichloroethane	MW-94	10/25/2022		2.4	1.0	ug/L
1,1-dichloroethane	MW-94	4/11/2023		1.6	1.0	ug/L
1,1-dichloroethane	MW-94	10/13/2023		2.4	1.0	ug/L
1,1-dichloroethane	MW-94	4/17/2024		1.3	1.0	ug/L
1,2-dichloroethane	MW-94	10/01/2015		1.1	1.0	ug/L
1,2-dichloroethane	MW-94	10/13/2016		1.9	1.0	ug/L
1,2-dichloroethane	MW-94	4/10/2017		1.4	1.0	ug/L
1,2-dichloroethane	MW-94	10/09/2017		1.5	1.0	ug/L
1,2-dichloroethane	MW-94	4/17/2018		1.3	1.0	ug/L
1,2-dichloropropane	MW-94	1/14/2011		3.7	1.0	ug/L
1,2-dichloropropane	MW-94	10/06/2011		3.0	1.0	ug/L
1,2-dichloropropane	MW-94	4/10/2012		4.0	1.0	ug/L
1,2-dichloropropane	MW-94	4/04/2013		4.4	1.0	ug/L
1,2-dichloropropane	MW-94	10/16/2013		3.8	1.0	ug/L
1,2-dichloropropane	MW-94	10/16/2014		3.8	1.0	ug/L
1,2-dichloropropane	MW-94	10/01/2015		2.4	1.0	ug/L
1,2-dichloropropane	MW-94	10/13/2016		2.8	1.0	ug/L
1,2-dichloropropane	MW-94	4/10/2017		2.7	1.0	ug/L
1,2-dichloropropane	MW-94	10/09/2017		3.2	1.0	ug/L
1,2-dichloropropane	MW-94	4/17/2018		2.9	1.0	ug/L
1,2-dichloropropane	MW-94	10/22/2018		4.5	1.0	ug/L
1,2-dichloropropane	MW-94	4/22/2019		3.0	1.0	ug/L
1,2-dichloropropane	MW-94	10/23/2019		2.4	1.0	ug/L
1,2-dichloropropane	MW-94	4/10/2020		2.2	1.0	ug/L
1,2-dichloropropane	MW-94	10/19/2020		2.7	1.0	ug/L
1,2-dichloropropane	MW-94	4/05/2021		1.6	1.0	ug/L
1,2-dichloropropane	MW-94	10/08/2021		2.2	1.0	ug/L
1,2-dichloropropane	MW-94	4/06/2022		1.7	1.0	ug/L
1,2-dichloropropane	MW-94	10/25/2022		2.1	1.0	ug/L
1,2-dichloropropane	MW-94	4/11/2023		1.4	1.0	ug/L
1,2-dichloropropane	MW-94	10/13/2023		2.2	1.0	ug/L
1,2-dichloropropane	MW-94	4/17/2024		1.1	1.0	ug/L
Acetone	MW-94	1/14/2011		43.5	10.0	ug/L
Acetone	MW-94	10/09/2012		32.1	10.0	ug/L
Acetone	MW-94	10/09/2017		38.8	10.0	ug/L
Acetone	MW-94	10/13/2023		15.6	10.0	ug/L
Benzene	MW-94	1/14/2011		1.1	1.0	ug/L
Benzene	MW-94	4/05/2011		1.2	1.0	ug/L
Benzene	MW-94	4/10/2012		1.3	1.0	ug/L
Benzene	MW-94	10/09/2012		1.2	1.0	ug/L
Benzene	MW-94	4/04/2013		2.0	1.0	ug/L
Benzene	MW-94	10/16/2013		1.6	1.0	ug/L
Benzene	MW-94	4/10/2014		1.4	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Benzene	MW-94	10/16/2014		4.2	1.0	ug/L
Benzene	MW-94	4/03/2015		2.6	1.0	ug/L
Benzene	MW-94	10/01/2015		3.2	1.0	ug/L
Benzene	MW-94	4/14/2016		3.5	1.0	ug/L
Benzene	MW-94	10/13/2016		4.5	1.0	ug/L
Benzene	MW-94	4/10/2017		2.8	1.0	ug/L
Benzene	MW-94	10/09/2017		3.6	1.0	ug/L
Benzene	MW-94	4/17/2018		2.4	1.0	ug/L
Benzene	MW-94	10/22/2018		3.5	1.0	ug/L
Benzene	MW-94	4/22/2019		2.5	1.0	ug/L
Benzene	MW-94	10/23/2019		2.3	1.0	ug/L
Benzene	MW-94	4/10/2020		2.2	1.0	ug/L
Benzene	MW-94	10/19/2020		2.4	1.0	ug/L
Benzene	MW-94	4/05/2021		1.6	1.0	ug/L
Benzene	MW-94	10/08/2021		1.6	1.0	ug/L
Benzene	MW-94	4/06/2022		2.1	1.0	ug/L
Benzene	MW-94	10/25/2022		2.1	1.0	ug/L
Benzene	MW-94	4/11/2023		1.9	1.0	ug/L
Benzene	MW-94	10/13/2023		1.7	1.0	ug/L
Benzene	MW-94	4/17/2024		2.0	1.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-94	10/09/2012		8	8	ug/L
Chloroethane	MW-94	1/14/2011		16.5	1.0	ug/L
Chloroethane	MW-94	4/05/2011		19.0	1.0	ug/L
Chloroethane	MW-94	6/18/2011		6.4	1.0	ug/L
Chloroethane	MW-94	8/11/2011		12.7	1.0	ug/L
Chloroethane	MW-94	10/06/2011		19.8	1.0	ug/L
Chloroethane	MW-94	4/10/2012		16.7	1.0	ug/L
Chloroethane	MW-94	10/09/2012		18.2	1.0	ug/L
Chloroethane	MW-94	4/04/2013		14.3	1.0	ug/L
Chloroethane	MW-94	10/16/2013		17.2	1.0	ug/L
Chloroethane	MW-94	4/10/2014		18.5	1.0	ug/L
Chloroethane	MW-94	10/16/2014		16.4	1.0	ug/L
Chloroethane	MW-94	4/03/2015		13.0	1.0	ug/L
Chloroethane	MW-94	10/01/2015		9.5	1.0	ug/L
Chloroethane	MW-94	4/14/2016		9.2	1.0	ug/L
Chloroethane	MW-94	10/13/2016		11.8	1.0	ug/L
Chloroethane	MW-94	4/10/2017		8.9	1.0	ug/L
Chloroethane	MW-94	10/09/2017		8.6	1.0	ug/L
Chloroethane	MW-94	4/17/2018		5.6	1.0	ug/L
Chloroethane	MW-94	10/22/2018		5.2	1.0	ug/L
Chloroethane	MW-94	4/22/2019		5.4	1.0	ug/L
Chloroethane	MW-94	10/23/2019		6.0	1.0	ug/L
Chloroethane	MW-94	4/10/2020		4.4	1.0	ug/L
Chloroethane	MW-94	10/19/2020		5.2	1.0	ug/L
Chloroethane	MW-94	4/05/2021		3.7	1.0	ug/L
Chloroethane	MW-94	10/08/2021		4.0	1.0	ug/L
Chloroethane	MW-94	4/06/2022		4.6	1.0	ug/L
Chloroethane	MW-94	10/25/2022		4.7	1.0	ug/L
Chloroethane	MW-94	4/11/2023		4.0	1.0	ug/L
Chloroethane	MW-94	10/13/2023		4.5	1.0	ug/L
Chloroethane	MW-94	4/17/2024		4.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	1/14/2011		112.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	4/05/2011		204.0	5.0	ug/L
Cis-1,2-dichloroethylene	MW-94	6/18/2011		114.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	8/11/2011		153.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	10/06/2011		89.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	4/10/2012		131.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	10/09/2012		170.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	4/04/2013		150.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	10/16/2013		140.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	4/10/2014		118.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	10/16/2014		144.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	4/03/2015		102.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	10/01/2015		88.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	4/14/2016		89.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	10/13/2016		63.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	4/10/2017		43.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	10/09/2017		56.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	4/17/2018		28.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	10/22/2018		27.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	4/22/2019		30.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	10/23/2019		23.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	4/10/2020		21.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	10/19/2020		27.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	4/05/2021		13.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	10/08/2021		25.1	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
Cis-1,2-dichloroethylene	MW-94	4/06/2022		18.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	10/25/2022		29.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	4/11/2023		11.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	10/13/2023		29.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	4/17/2024		5.2	1.0	ug/L
Trans-1,2-dichloroethylene	MW-94	1/14/2011		2.5	1.0	ug/L
Trans-1,2-dichloroethylene	MW-94	4/05/2011		4.6	1.0	ug/L
Trans-1,2-dichloroethylene	MW-94	6/18/2011		2.6	1.0	ug/L
Trans-1,2-dichloroethylene	MW-94	8/11/2011		3.8	1.0	ug/L
Trans-1,2-dichloroethylene	MW-94	10/06/2011		2.1	1.0	ug/L
Trans-1,2-dichloroethylene	MW-94	4/10/2012		2.4	1.0	ug/L
Trans-1,2-dichloroethylene	MW-94	10/09/2012		1.8	1.0	ug/L
Trans-1,2-dichloroethylene	MW-94	4/04/2013		1.8	1.0	ug/L
Trans-1,2-dichloroethylene	MW-94	10/16/2013		1.9	1.0	ug/L
Trans-1,2-dichloroethylene	MW-94	4/10/2014		1.6	1.0	ug/L
Trans-1,2-dichloroethylene	MW-94	10/16/2014		1.2	1.0	ug/L
Trans-1,2-dichloroethylene	MW-94	4/03/2015		1.2	1.0	ug/L
Trans-1,2-dichloroethylene	MW-94	10/13/2016		1.2	1.0	ug/L
Trans-1,2-dichloroethylene	MW-94	4/10/2020		1.0	1.0	ug/L
Trans-1,2-dichloroethylene	MW-94	10/19/2020		1.2	1.0	ug/L
Trans-1,2-dichloroethylene	MW-94	10/25/2022		1.2	1.0	ug/L
Trans-1,2-dichloroethylene	MW-94	10/13/2023		1.6	1.0	ug/L
Trichloroethylene	MW-94	1/14/2011		59.7	1.0	ug/L
Trichloroethylene	MW-94	4/05/2011		109.0	1.0	ug/L
Trichloroethylene	MW-94	6/18/2011		58.1	1.0	ug/L
Trichloroethylene	MW-94	8/11/2011		47.4	1.0	ug/L
Trichloroethylene	MW-94	10/06/2011		42.0	1.0	ug/L
Trichloroethylene	MW-94	4/10/2012		37.0	1.0	ug/L
Trichloroethylene	MW-94	10/09/2012		28.1	1.0	ug/L
Trichloroethylene	MW-94	4/04/2013		21.2	1.0	ug/L
Trichloroethylene	MW-94	10/16/2013		7.7	1.0	ug/L
Trichloroethylene	MW-94	4/10/2014		5.4	1.0	ug/L
Trichloroethylene	MW-94	10/16/2014		2.0	1.0	ug/L
Trichloroethylene	MW-94	4/03/2015		1.5	1.0	ug/L
Vinyl chloride	MW-94	1/14/2011		5.0	1.0	ug/L
Vinyl chloride	MW-94	4/05/2011		5.5	1.0	ug/L
Vinyl chloride	MW-94	6/18/2011		4.0	1.0	ug/L
Vinyl chloride	MW-94	8/11/2011		4.1	1.0	ug/L
Vinyl chloride	MW-94	10/06/2011		3.6	1.0	ug/L
Vinyl chloride	MW-94	4/10/2012		4.6	1.0	ug/L
Vinyl chloride	MW-94	10/09/2012		4.6	1.0	ug/L
Vinyl chloride	MW-94	4/04/2013		5.3	1.0	ug/L
Vinyl chloride	MW-94	10/16/2013		4.8	1.0	ug/L
Vinyl chloride	MW-94	4/10/2014		4.4	1.0	ug/L
Vinyl chloride	MW-94	10/16/2014		6.2	1.0	ug/L
Vinyl chloride	MW-94	4/03/2015		4.5	1.0	ug/L
Vinyl chloride	MW-94	10/01/2015		3.6	1.0	ug/L
Vinyl chloride	MW-94	4/14/2016		2.9	1.0	ug/L
Vinyl chloride	MW-94	10/13/2016		2.6	1.0	ug/L
Vinyl chloride	MW-94	4/10/2017		3.2	1.0	ug/L
Vinyl chloride	MW-94	10/09/2017		2.0	1.0	ug/L
Vinyl chloride	MW-94	4/17/2018		2.0	1.0	ug/L
Vinyl chloride	MW-94	10/22/2018		2.2	1.0	ug/L
Vinyl chloride	MW-94	4/22/2019		1.7	1.0	ug/L
Vinyl chloride	MW-94	4/10/2020		1.1	1.0	ug/L
Vinyl chloride	MW-94	10/19/2020		1.1	1.0	ug/L
Vinyl chloride	MW-94	10/25/2022		1.2	1.0	ug/L
Vinyl chloride	MW-94	4/11/2023		2.1	1.0	ug/L
Vinyl chloride	MW-94	10/13/2023		2.0	1.0	ug/L
Vinyl chloride	MW-94	4/17/2024		2.2	1.0	ug/L
Acetone	MW-95	10/13/2023		10.7	10.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-96	10/09/2012		8	8	ug/L
Cis-1,2-dichloroethylene	MW-96	1/14/2011		1.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-96	4/05/2011		1.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-96	6/18/2011		1.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-96	8/11/2011		1.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-96	10/09/2012		1.0	1.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-96R	10/08/2021		6	6	ug/L
Acetone	MW-98	10/09/2017		18.4	10.0	ug/L
1,1-dichloroethane	SRAMP A	4/22/2019		1.4	1.0	ug/L
1,2-dichloropropane	SRAMP A	4/22/2019		1.7	1.0	ug/L
Cis-1,2-dichloroethylene	SRAMP A	4/10/2017		1.3	1.0	ug/L
Cis-1,2-dichloroethylene	SRAMP A	4/22/2019		2.8	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

Attachment G

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-49	4	1.450	0.265	1.176	1.139	1.761	140.000	dec	
1,2-dichloroethane	ug/L	MW-49	4	0.500	0.000	1.176	0.500	0.500	5.000		
1,2-dichloropropane	ug/L	MW-49	4	0.500	0.000	1.176	0.500	0.500	5.000		
1,4-dichlorobenzene	ug/L	MW-49	4	5.775	1.746	1.176	3.721	7.829	75.000		
Acetone	ug/L	MW-49	4	5.000	0.000	1.176	5.000	5.000	6300.000		
Benzene	ug/L	MW-49	4	1.725	1.115	1.176	0.414	3.036	5.000		
Bis(2-ethylhexyl) phthalate	ug/L	MW-49	4	5.000	0.000	1.176	5.000	5.000	6.000		
Chlorobenzene	ug/L	MW-49	4	0.775	0.320	1.176	0.398	1.152	100.000		
Chloroethane	ug/L	MW-49	4	6.300	1.194	1.176	4.895	7.705	2800.000	dec	
Cis-1,2-dichloroethylene	ug/L	MW-49	4	1.650	0.835	1.176	0.668	2.632	70.000	dec	
Tetrachloroethylene	ug/L	MW-49	4	0.500	0.000	1.176	0.500	0.500	5.000		
Trans-1,2-dichloroethylene	ug/L	MW-49	4	0.500	0.000	1.176	0.500	0.500	100.000		
Trichloroethylene	ug/L	MW-49	4	0.500	0.000	1.176	0.500	0.500	5.000		
Vinyl chloride	ug/L	MW-49	4	0.500	0.000	1.176	0.500	0.500	2.000	dec	
1,1-dichloroethane	ug/L	MW-54	4	0.650	0.300	1.176	0.297	1.003	140.000		
1,2-dichloroethane	ug/L	MW-54	4	0.500	0.000	1.176	0.500	0.500	5.000		
1,2-dichloropropane	ug/L	MW-54	4	0.500	0.000	1.176	0.500	0.500	5.000		
1,4-dichlorobenzene	ug/L	MW-54	4	2.775	1.075	1.176	1.510	4.040	75.000	inc	
Acetone	ug/L	MW-54	4	5.000	0.000	1.176	5.000	5.000	6300.000		
Benzene	ug/L	MW-54	4	0.500	0.000	1.176	0.500	0.500	5.000		
Bis(2-ethylhexyl) phthalate	ug/L	MW-54	4	5.000	0.000	1.176	5.000	5.000	6.000		
Chlorobenzene	ug/L	MW-54	4	0.500	0.000	1.176	0.500	0.500	100.000		
Chloroethane	ug/L	MW-54	4	0.775	0.550	1.176	0.128	1.422	2800.000	dec	
Cis-1,2-dichloroethylene	ug/L	MW-54	4	0.500	0.000	1.176	0.500	0.500	70.000	dec	
Tetrachloroethylene	ug/L	MW-54	4	0.500	0.000	1.176	0.500	0.500	5.000		
Trans-1,2-dichloroethylene	ug/L	MW-54	4	0.500	0.000	1.176	0.500	0.500	100.000		
Trichloroethylene	ug/L	MW-54	4	0.500	0.000	1.176	0.500	0.500	5.000	dec	
Vinyl chloride	ug/L	MW-54	4	0.500	0.000	1.176	0.500	0.500	2.000		
1,1-dichloroethane	ug/L	MW-81	4	27.450	2.565	1.176	24.433	30.467	140.000	dec	
1,2-dichloroethane	ug/L	MW-81	4	11.900	3.636	1.176	7.623	16.177	5.000	inc	**
1,2-dichloropropane	ug/L	MW-81	4	6.625	2.244	1.176	3.985	9.265	5.000		
1,4-dichlorobenzene	ug/L	MW-81	4	5.200	0.638	1.176	4.450	5.950	75.000	inc	
Acetone	ug/L	MW-81	4	5.000	0.000	1.176	5.000	5.000	6300.000		
Benzene	ug/L	MW-81	4	0.500	0.000	1.176	0.500	0.500	5.000		
Bis(2-ethylhexyl) phthalate	ug/L	MW-81	4	5.000	0.000	1.176	5.000	5.000	6.000		
Chlorobenzene	ug/L	MW-81	4	1.675	0.206	1.176	1.433	1.917	100.000		
Chloroethane	ug/L	MW-81	4	6.475	0.772	1.176	5.567	7.383	2800.000	dec	
Cis-1,2-dichloroethylene	ug/L	MW-81	4	177.500	35.856	1.176	135.323	219.677	70.000		**
Tetrachloroethylene	ug/L	MW-81	4	0.500	0.000	1.176	0.500	0.500	5.000		
Trans-1,2-dichloroethylene	ug/L	MW-81	4	2.325	0.150	1.176	2.149	2.501	100.000	dec	
Trichloroethylene	ug/L	MW-81	4	2.550	0.819	1.176	1.587	3.513	5.000	dec	
Vinyl chloride	ug/L	MW-81	4	7.400	0.804	1.176	6.454	8.346	2.000		**
1,1-dichloroethane	ug/L	MW-89	4	0.500	0.000	1.176	0.500	0.500	140.000		
1,2-dichloroethane	ug/L	MW-89	4	0.500	0.000	1.176	0.500	0.500	5.000		
1,2-dichloropropane	ug/L	MW-89	4	0.500	0.000	1.176	0.500	0.500	5.000		
1,4-dichlorobenzene	ug/L	MW-89	4	0.500	0.000	1.176	0.500	0.500	75.000		
Acetone	ug/L	MW-89	4	5.000	0.000	1.176	5.000	5.000	6300.000		
Benzene	ug/L	MW-89	4	0.500	0.000	1.176	0.500	0.500	5.000		
Bis(2-ethylhexyl) phthalate	ug/L	MW-89	4	8.500	7.000	1.176	0.266	16.734	6.000		
Chlorobenzene	ug/L	MW-89	4	0.500	0.000	1.176	0.500	0.500	100.000		
Chloroethane	ug/L	MW-89	4	0.500	0.000	1.176	0.500	0.500	2800.000		
Cis-1,2-dichloroethylene	ug/L	MW-89	4	0.500	0.000	1.176	0.500	0.500	70.000		
Tetrachloroethylene	ug/L	MW-89	4	0.500	0.000	1.176	0.500	0.500	5.000		
Trans-1,2-dichloroethylene	ug/L	MW-89	4	0.500	0.000	1.176	0.500	0.500	100.000		
Trichloroethylene	ug/L	MW-89	4	0.500	0.000	1.176	0.500	0.500	5.000		
Vinyl chloride	ug/L	MW-89	4	0.500	0.000	1.176	0.500	0.500	2.000		
1,1-dichloroethane	ug/L	MW-91	4	0.500	0.000	1.176	0.500	0.500	140.000	dec	
1,2-dichloroethane	ug/L	MW-91	4	0.500	0.000	1.176	0.500	0.500	5.000		
1,2-dichloropropane	ug/L	MW-91	4	0.500	0.000	1.176	0.500	0.500	5.000		
1,4-dichlorobenzene	ug/L	MW-91	4	0.500	0.000	1.176	0.500	0.500	75.000		
Acetone	ug/L	MW-91	4	5.000	0.000	1.176	5.000	5.000	6300.000		
Benzene	ug/L	MW-91	4	0.500	0.000	1.176	0.500	0.500	5.000		
Bis(2-ethylhexyl) phthalate	ug/L	MW-91	4	5.000	0.000	1.176	5.000	5.000	6.000		
Chlorobenzene	ug/L	MW-91	4	0.500	0.000	1.176	0.500	0.500	100.000		
Chloroethane	ug/L	MW-91	4	0.500	0.000	1.176	0.500	0.500	2800.000		
Cis-1,2-dichloroethylene	ug/L	MW-91	4	0.500	0.000	1.176	0.500	0.500	70.000		
Tetrachloroethylene	ug/L	MW-91	4	0.500	0.000	1.176	0.500	0.500	5.000		
Trans-1,2-dichloroethylene	ug/L	MW-91	4	0.500	0.000	1.176	0.500	0.500	100.000		
Trichloroethylene	ug/L	MW-91	4	0.500	0.000	1.176	0.500	0.500	5.000		
Vinyl chloride	ug/L	MW-91	4	0.500	0.000	1.176	0.500	0.500	2.000		
1,1-dichloroethane	ug/L	MW-94	4	1.925	0.562	1.176	1.264	2.586	140.000	dec	
1,2-dichloroethane	ug/L	MW-94	4	0.500	0.000	1.176	0.500	0.500	5.000		

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

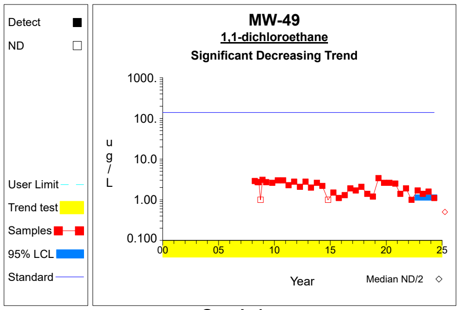
Table 1

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

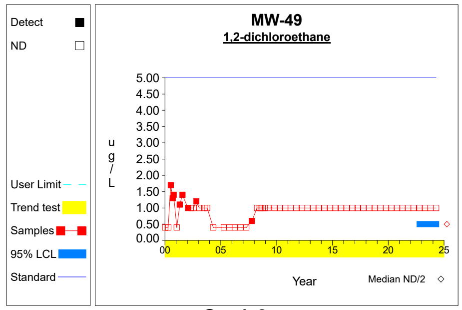
Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend	
1,2-dichloropropane	ug/L	MW-94	4	1.700	0.535	1.176	1.070	2.330	5.000		
1,4-dichlorobenzene	ug/L	MW-94	4	0.500	0.000	1.176	0.500	0.500	75.000		
Acetone	ug/L	MW-94	4	7.650	5.300	1.176	1.416	13.884	6300.000		
Benzene	ug/L	MW-94	4	1.925	0.171	1.176	1.724	2.126	5.000		
Bis(2-ethylhexyl) phthalate	ug/L	MW-94	4	5.000	0.000	1.176	5.000	5.000	6.000		
Chlorobenzene	ug/L	MW-94	4	0.500	0.000	1.176	0.500	0.500	100.000		
Chloroethane	ug/L	MW-94	4	4.375	0.299	1.176	4.024	4.726	2800.000	dec	
Cis-1,2-dichloroethylene	ug/L	MW-94	4	18.850	12.442	1.176	4.214	33.486	70.000	dec	
Tetrachloroethylene	ug/L	MW-94	4	0.500	0.000	1.176	0.500	0.500	5.000		
Trans-1,2-dichloroethylene	ug/L	MW-94	4	0.950	0.545	1.176	0.309	1.591	100.000	dec	
Trichloroethylene	ug/L	MW-94	4	0.500	0.000	1.176	0.500	0.500	5.000	dec	
Vinyl chloride	ug/L	MW-94	4	1.875	0.457	1.176	1.337	2.413	2.000	dec	
1,1-dichloroethane	ug/L	MW-95	4	0.500	0.000	1.176	0.500	0.500	140.000		
1,2-dichloroethane	ug/L	MW-95	4	0.500	0.000	1.176	0.500	0.500	5.000		
1,2-dichloropropane	ug/L	MW-95	4	0.500	0.000	1.176	0.500	0.500	5.000		
1,4-dichlorobenzene	ug/L	MW-95	4	0.500	0.000	1.176	0.500	0.500	75.000		
Acetone	ug/L	MW-95	4	6.425	2.850	1.176	3.073	9.777	6300.000		
Benzene	ug/L	MW-95	4	0.500	0.000	1.176	0.500	0.500	5.000		
Bis(2-ethylhexyl) phthalate	ug/L	MW-95	0								*
Chlorobenzene	ug/L	MW-95	4	0.500	0.000	1.176	0.500	0.500	100.000		
Chloroethane	ug/L	MW-95	4	0.500	0.000	1.176	0.500	0.500	2800.000		
Cis-1,2-dichloroethylene	ug/L	MW-95	4	0.500	0.000	1.176	0.500	0.500	70.000		
Tetrachloroethylene	ug/L	MW-95	4	0.500	0.000	1.176	0.500	0.500	5.000		
Trans-1,2-dichloroethylene	ug/L	MW-95	4	0.500	0.000	1.176	0.500	0.500	100.000		
Trichloroethylene	ug/L	MW-95	4	0.500	0.000	1.176	0.500	0.500	5.000		
Vinyl chloride	ug/L	MW-95	4	0.500	0.000	1.176	0.500	0.500	2.000		
1,1-dichloroethane	ug/L	MW-96R	4	0.500	0.000	1.176	0.500	0.500	140.000		
1,2-dichloroethane	ug/L	MW-96R	4	0.500	0.000	1.176	0.500	0.500	5.000		
1,2-dichloropropane	ug/L	MW-96R	4	0.500	0.000	1.176	0.500	0.500	5.000		
1,4-dichlorobenzene	ug/L	MW-96R	4	0.500	0.000	1.176	0.500	0.500	75.000		
Acetone	ug/L	MW-96R	4	5.000	0.000	1.176	5.000	5.000	6300.000		
Benzene	ug/L	MW-96R	4	0.500	0.000	1.176	0.500	0.500	5.000		
Bis(2-ethylhexyl) phthalate	ug/L	MW-96R	2								*
Chlorobenzene	ug/L	MW-96R	4	0.500	0.000	1.176	0.500	0.500	100.000		
Chloroethane	ug/L	MW-96R	4	0.500	0.000	1.176	0.500	0.500	2800.000		
Cis-1,2-dichloroethylene	ug/L	MW-96R	4	0.500	0.000	1.176	0.500	0.500	70.000		
Tetrachloroethylene	ug/L	MW-96R	4	0.500	0.000	1.176	0.500	0.500	5.000		
Trans-1,2-dichloroethylene	ug/L	MW-96R	4	0.500	0.000	1.176	0.500	0.500	100.000		
Trichloroethylene	ug/L	MW-96R	4	0.500	0.000	1.176	0.500	0.500	5.000		
Vinyl chloride	ug/L	MW-96R	4	0.500	0.000	1.176	0.500	0.500	2.000		

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

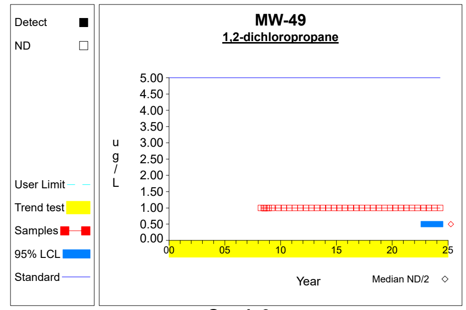
Confidence Limits (Assessment)



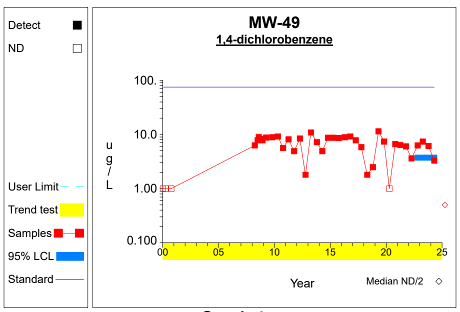
Graph 1



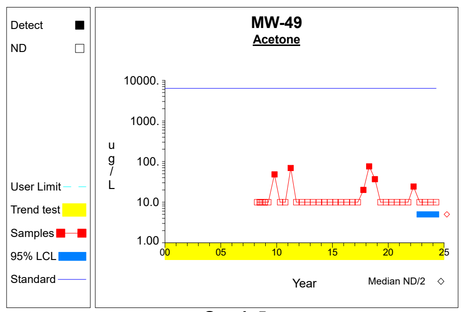
Graph 2



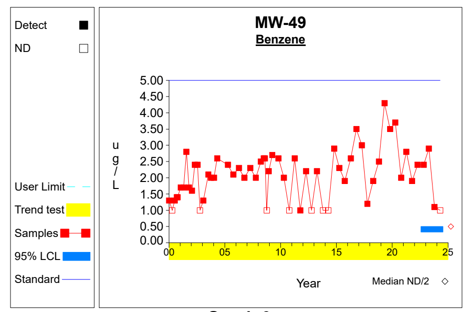
Graph 3



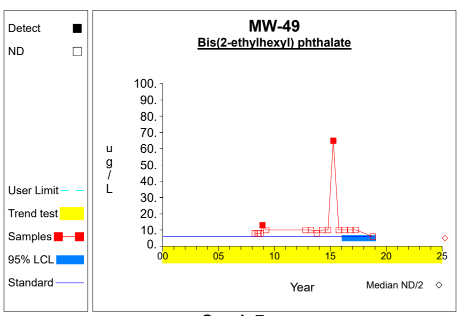
Graph 4



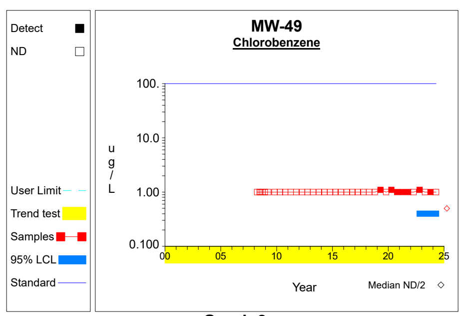
Graph 5



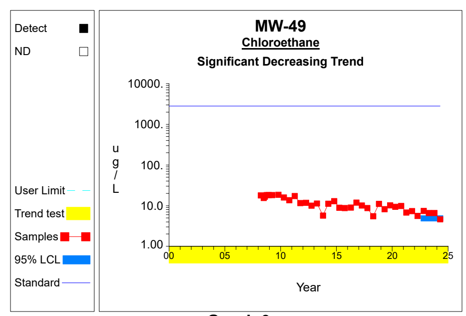
Graph 6



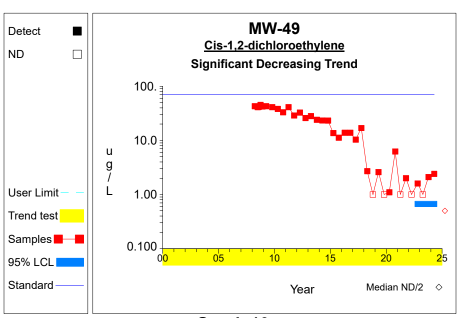
Graph 7



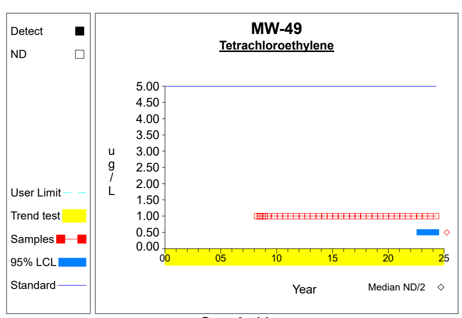
Graph 8



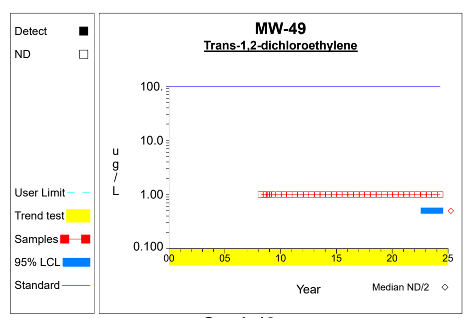
Graph 9



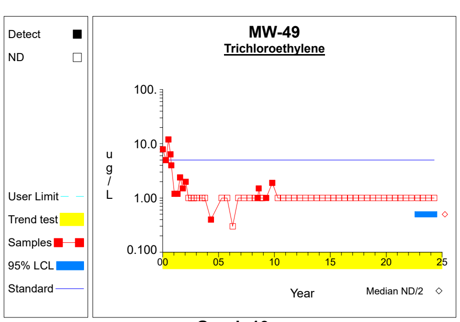
Graph 10



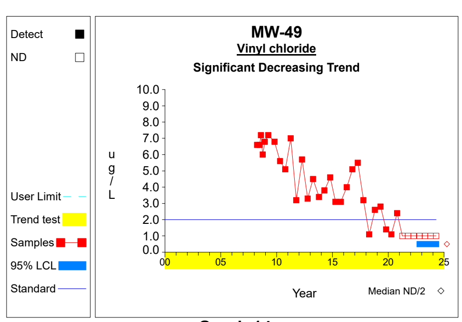
Graph 11



Graph 12



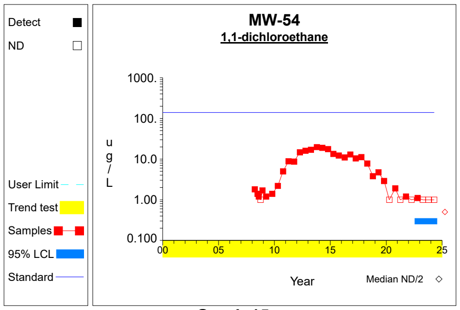
Graph 13



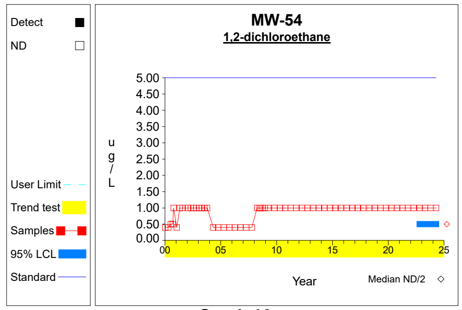
Graph 14

Prepared by: Otter Creek Environmental

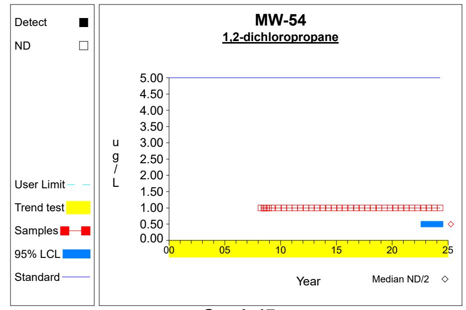
Confidence Limits (Assessment)



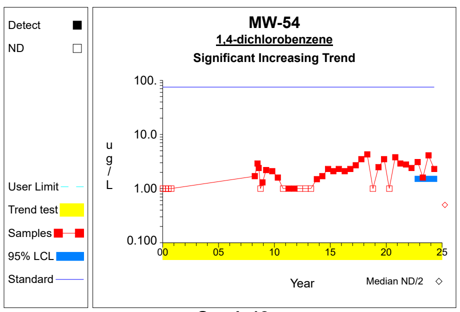
Graph 15



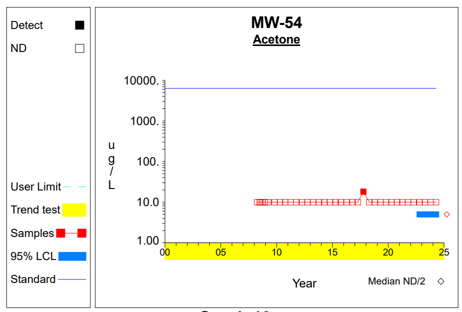
Graph 16



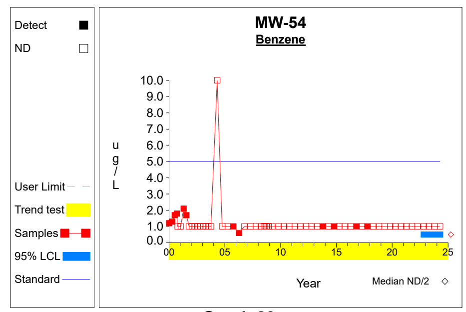
Graph 17



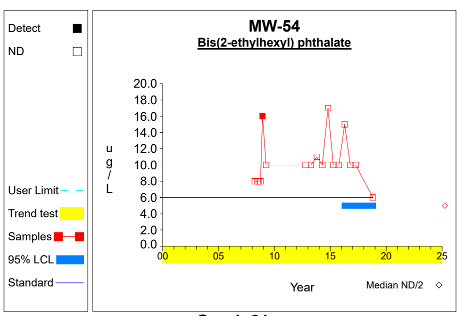
Graph 18



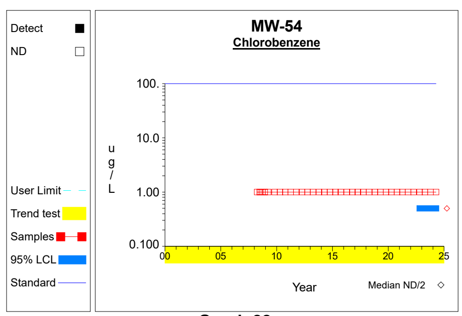
Graph 19



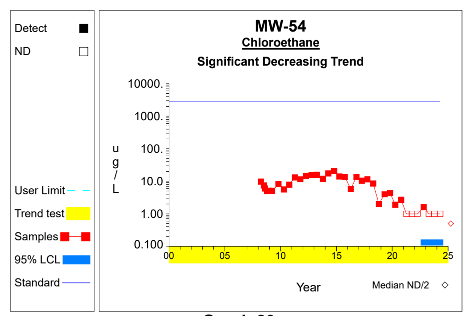
Graph 20



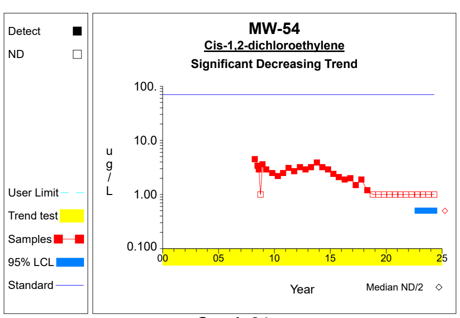
Graph 21



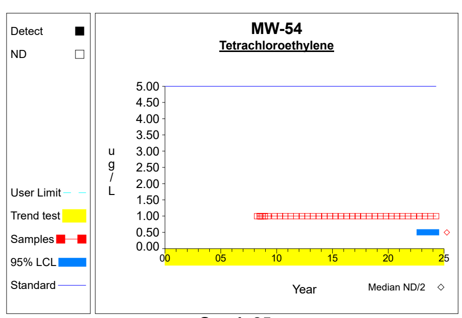
Graph 22



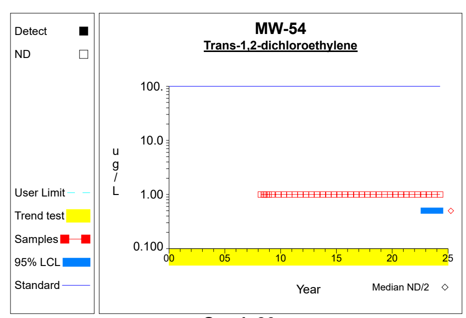
Graph 23



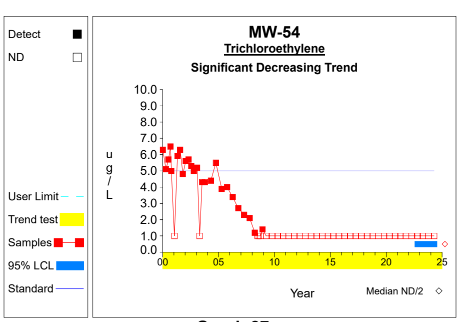
Graph 24



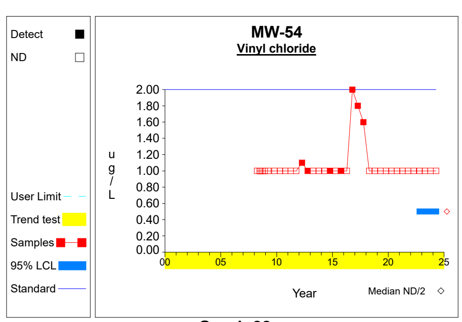
Graph 25



Graph 26

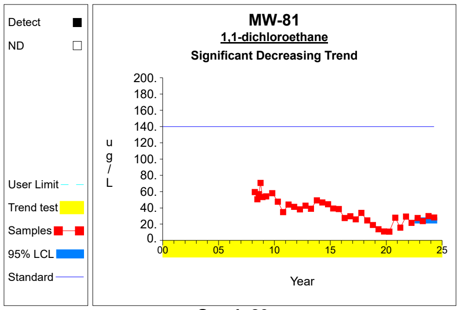


Graph 27

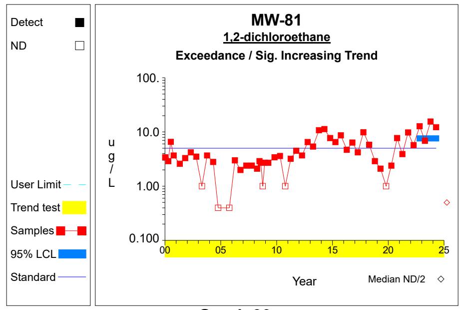


Graph 28

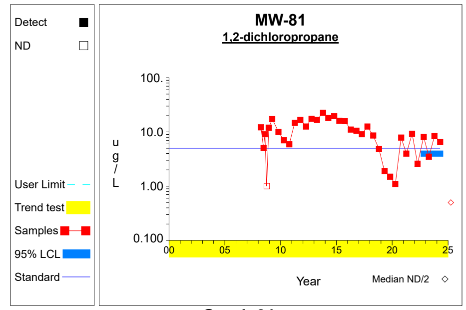
Confidence Limits (Assessment)



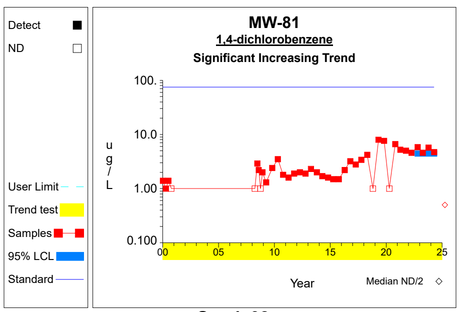
Graph 29



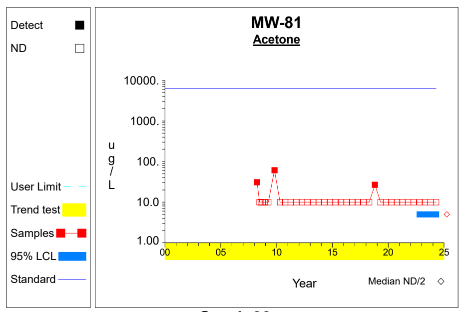
Graph 30



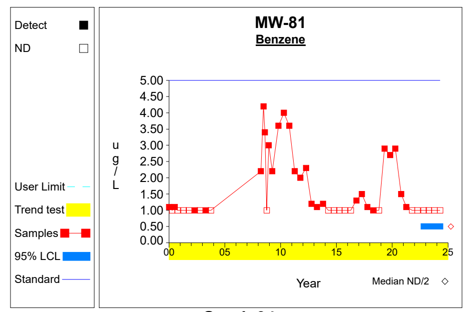
Graph 31



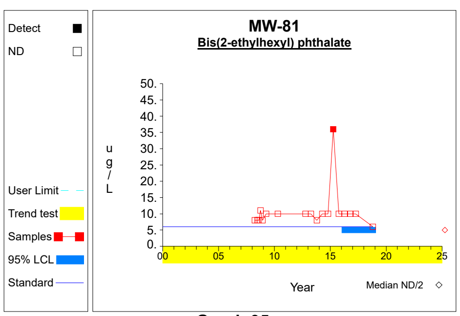
Graph 32



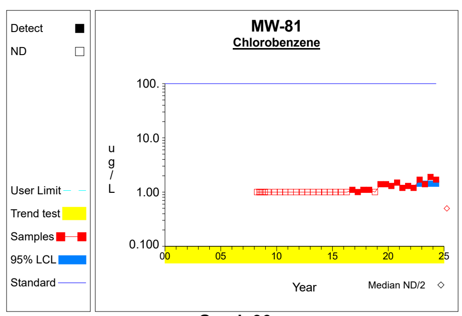
Graph 33



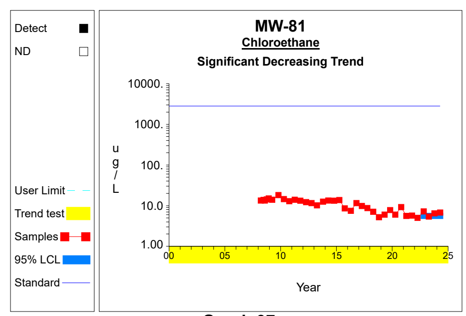
Graph 34



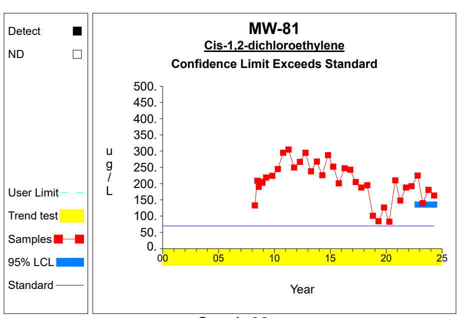
Graph 35



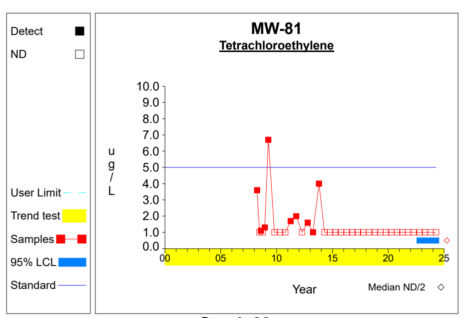
Graph 36



Graph 37



Graph 38



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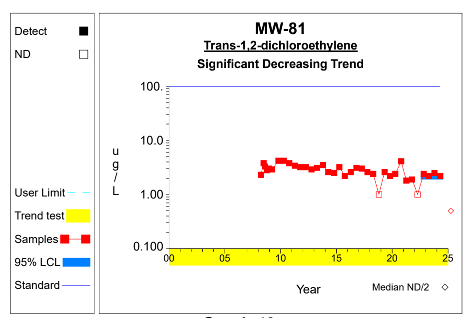

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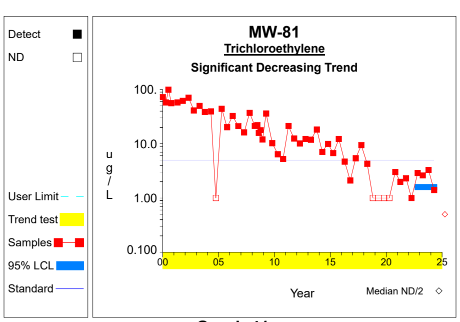
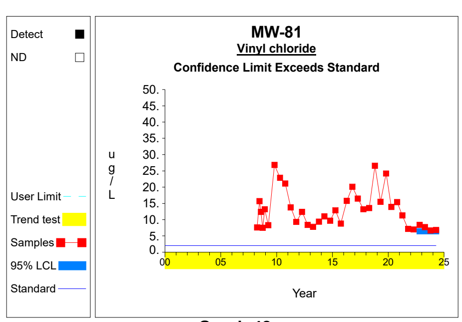
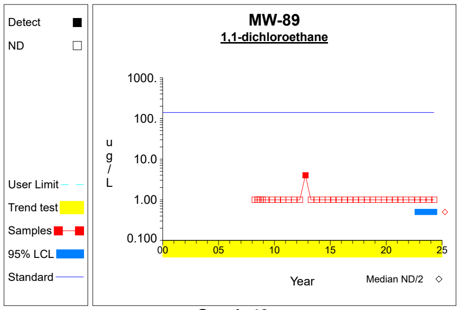


Graph 41

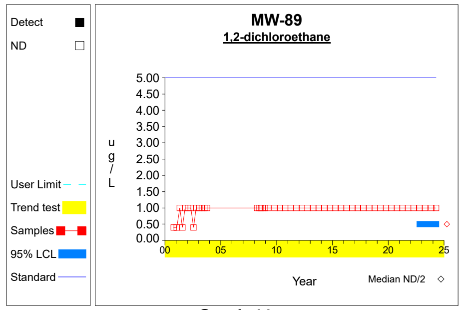


Graph 42

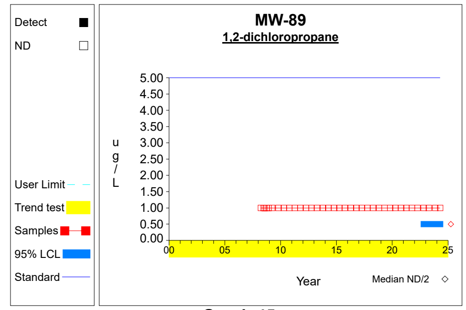
Confidence Limits (Assessment)



Graph 43



Graph 44



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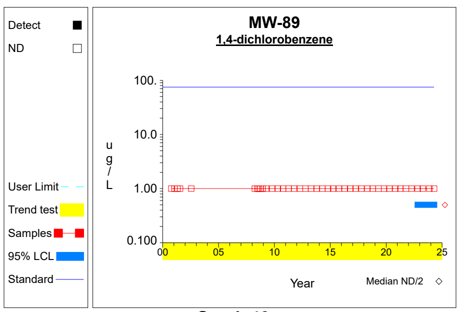

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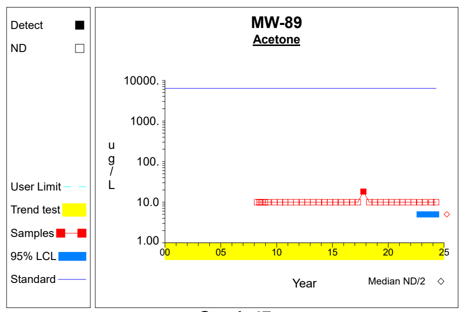

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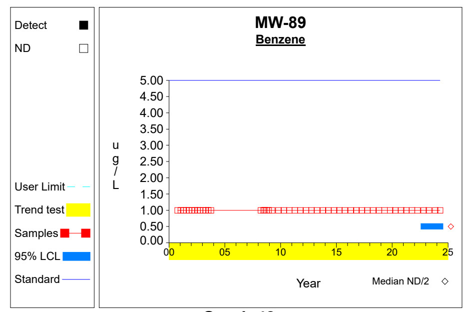

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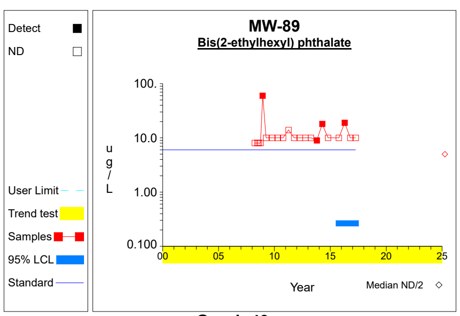
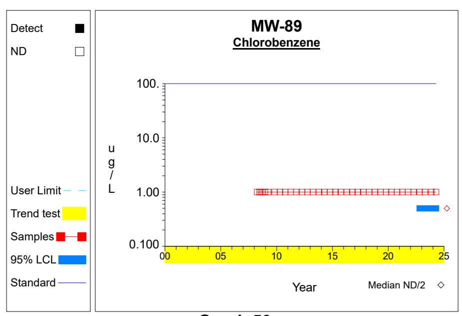


Graph 49



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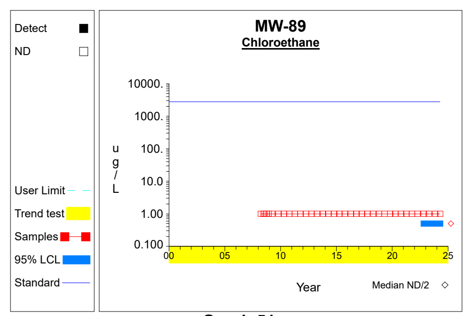

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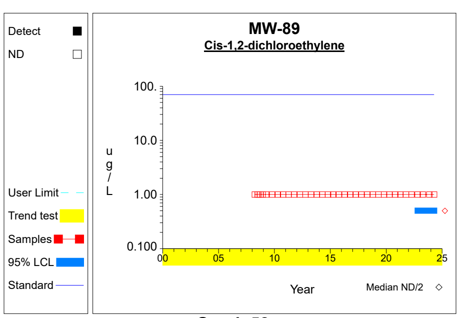

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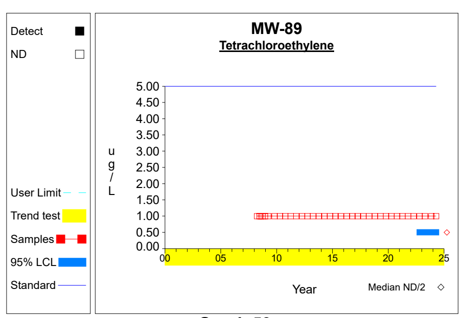

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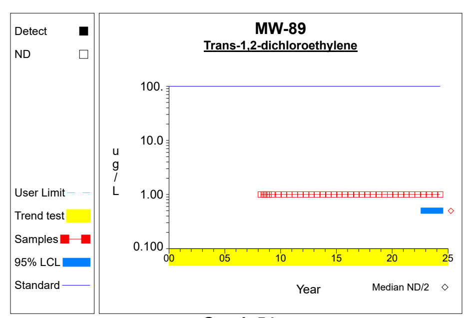

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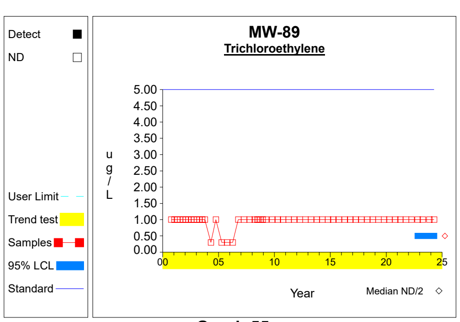
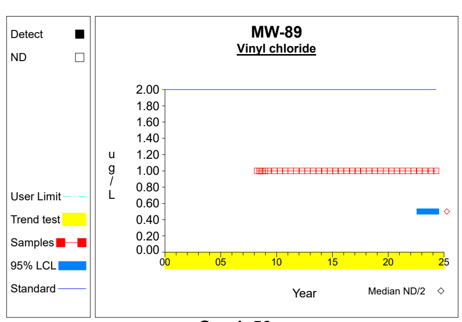
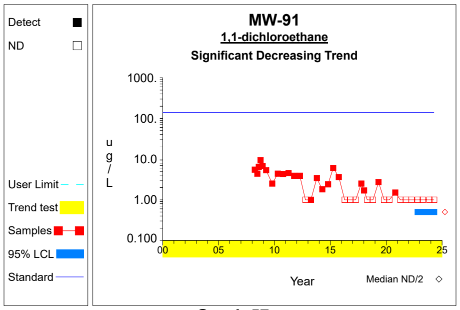


Graph 55

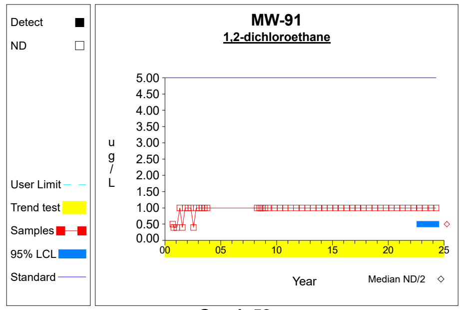


Graph 56

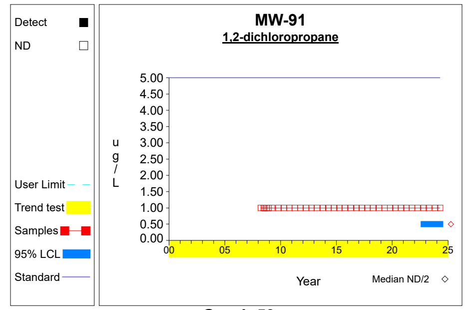
Confidence Limits (Assessment)



Graph 57



Graph 58



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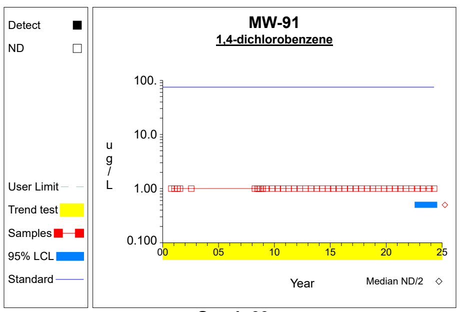
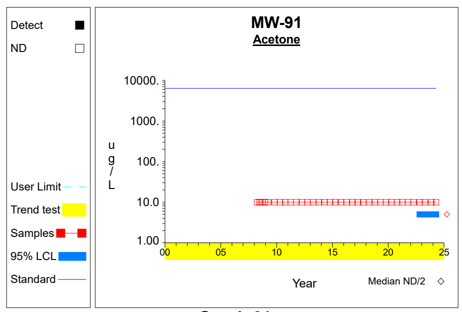
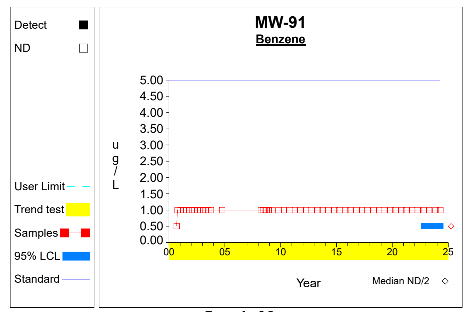


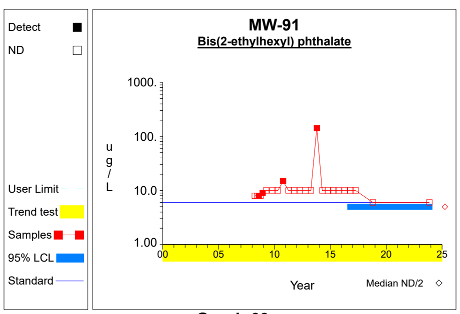
Graph 60



Graph 61



Graph 62



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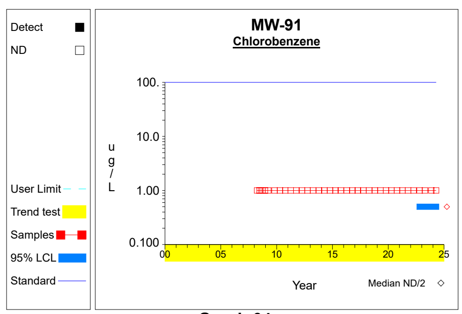

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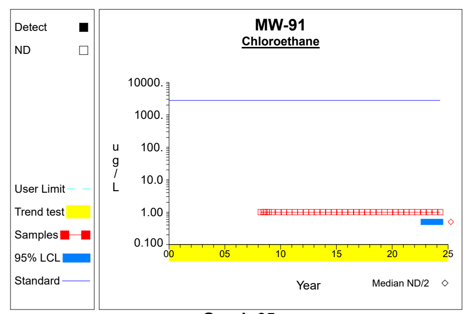

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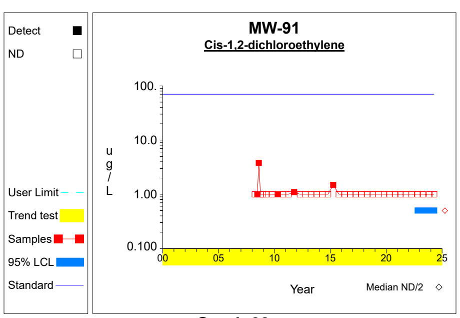

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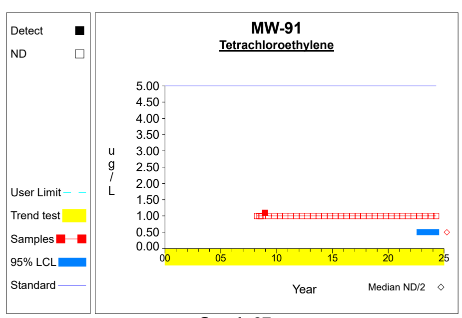

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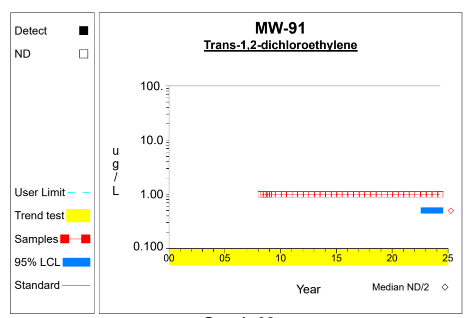

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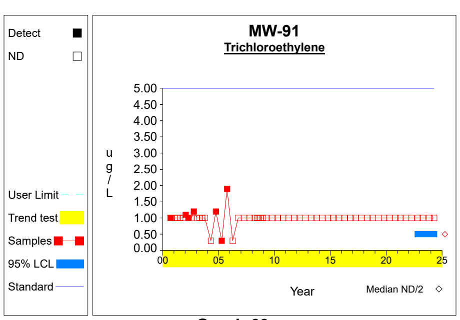
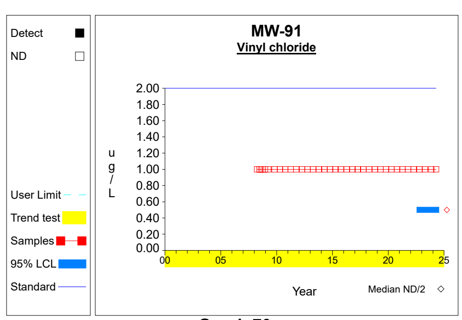
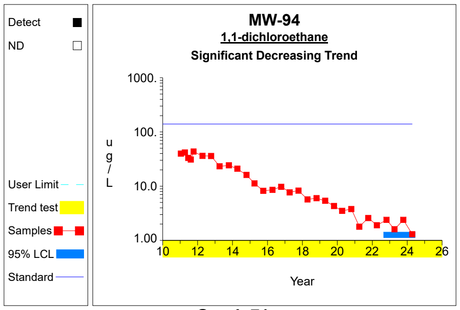


Graph 69



Graph 70

Confidence Limits (Assessment)



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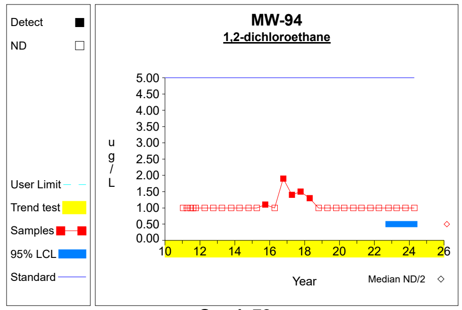
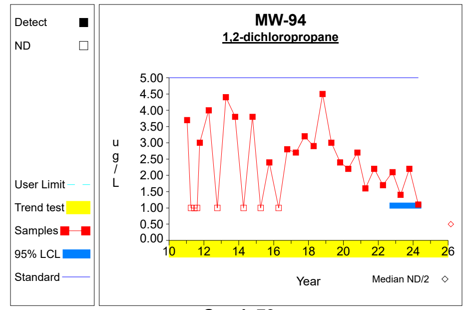


Graph 72



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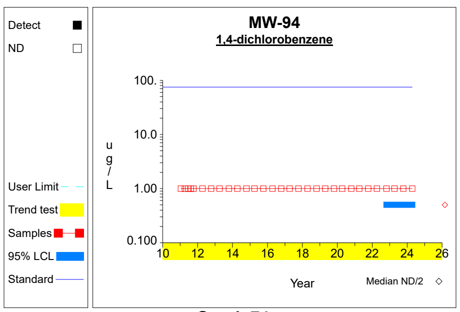

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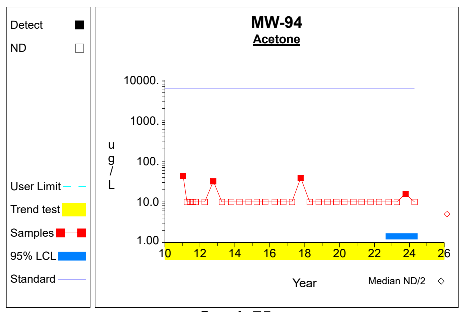

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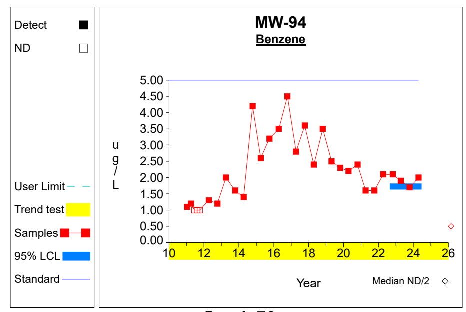
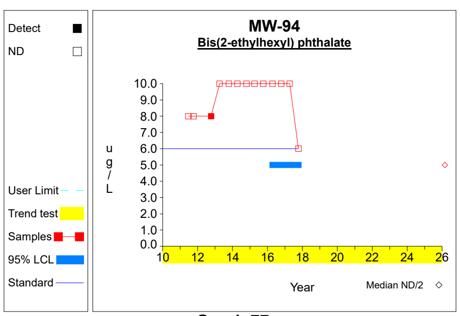
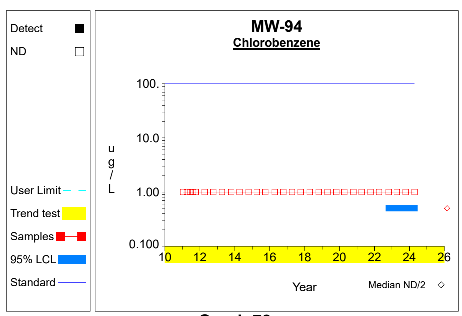


Graph 76



Graph 77



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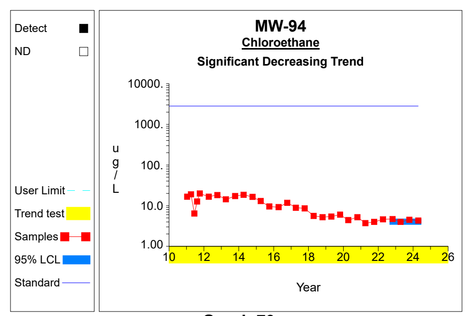

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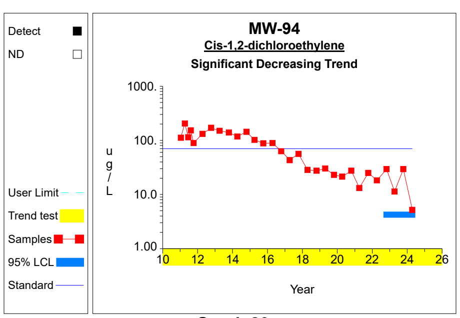

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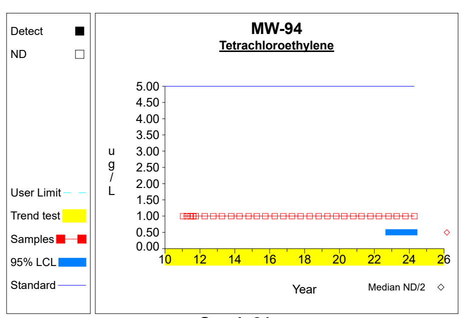

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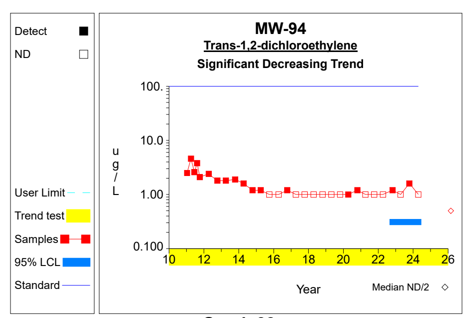

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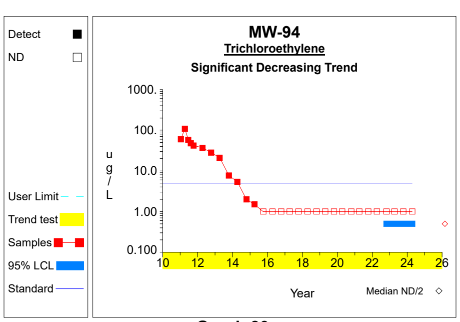
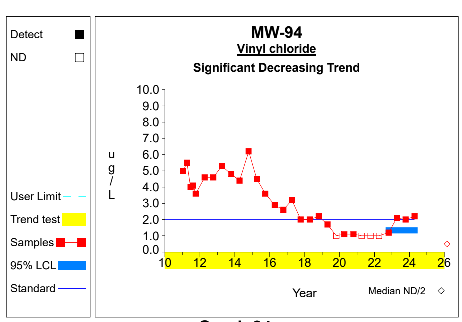


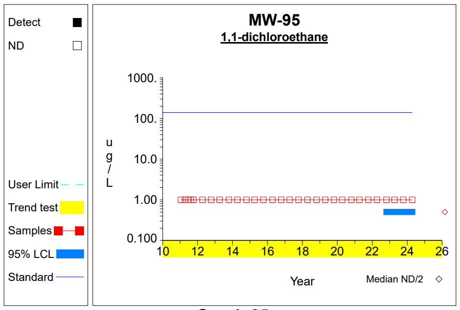
Graph 83



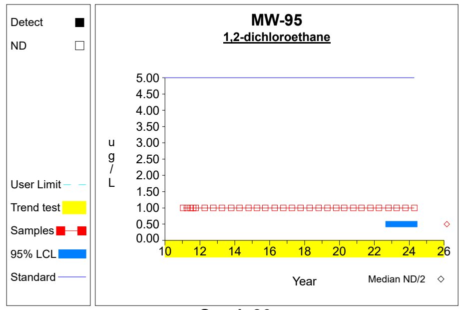
Graph 84

Prepared by: Otter Creek Environmental

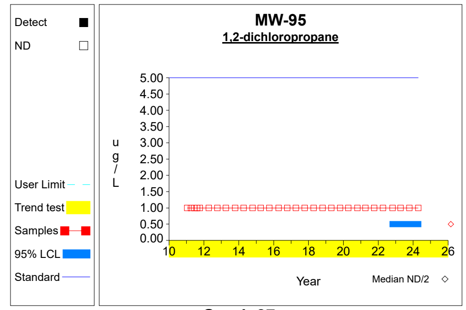
Confidence Limits (Assessment)



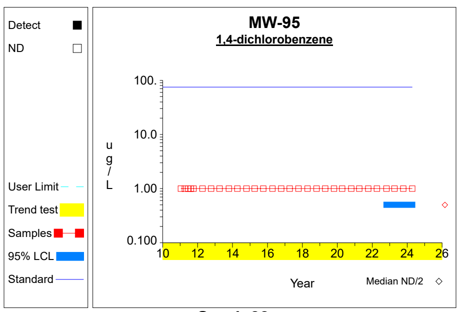
Graph 85



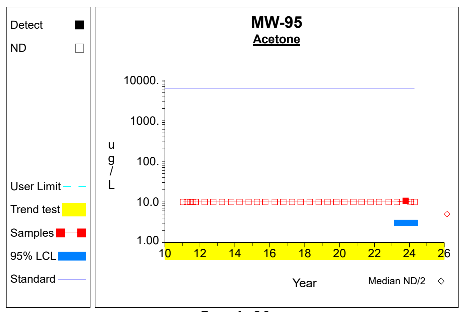
Graph 86



Graph 87



Graph 88



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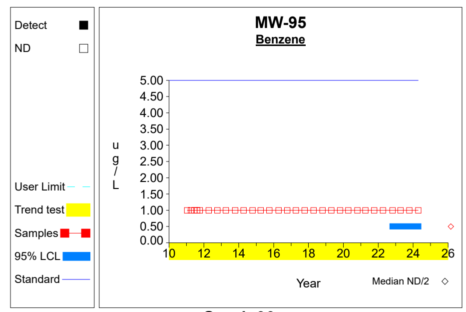
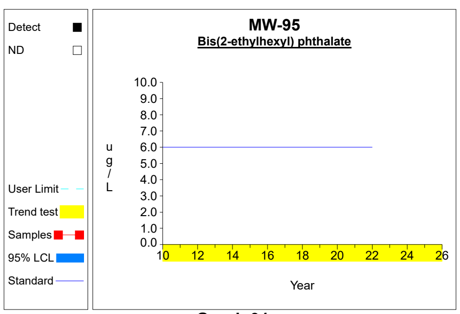


Graph 90



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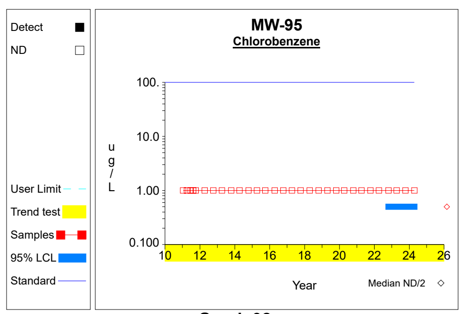

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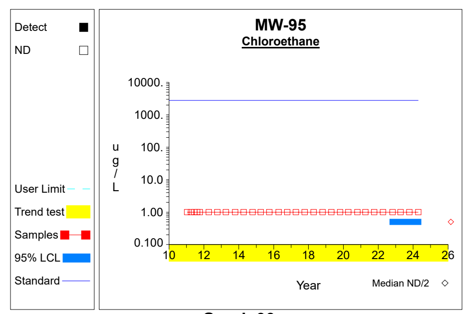

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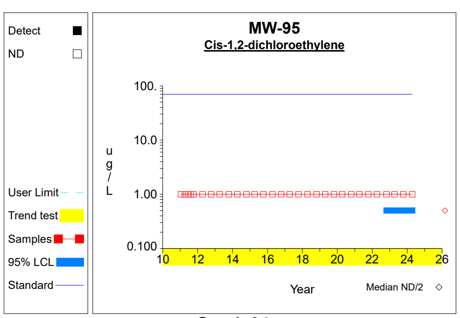

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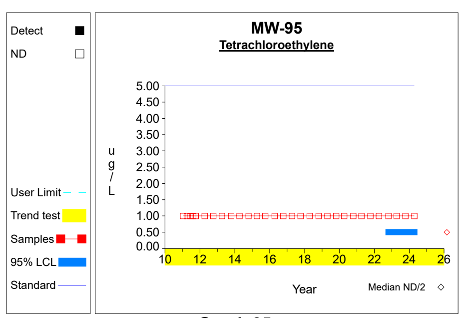

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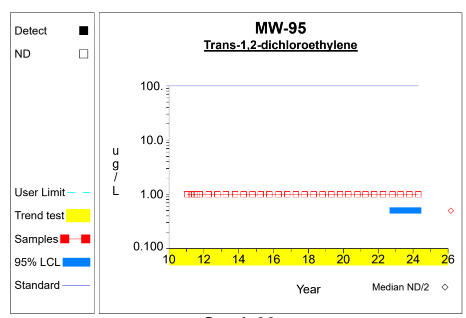
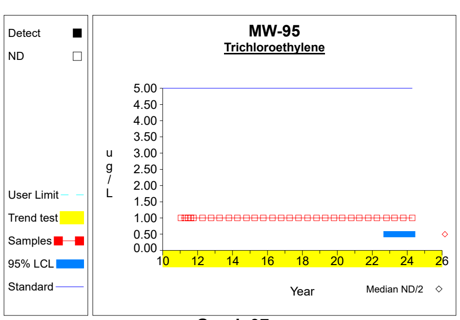
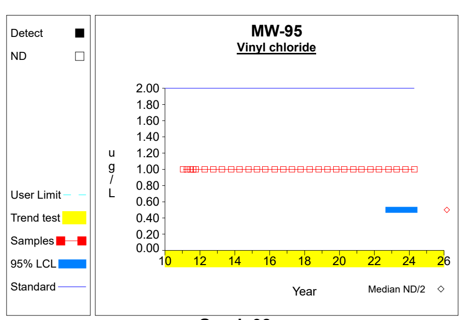


Graph 96

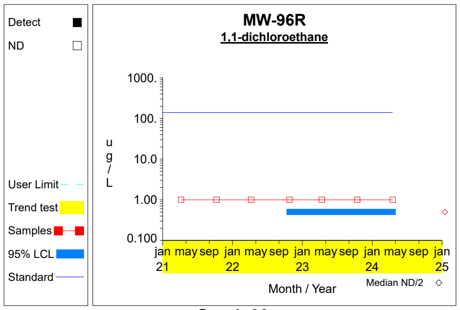


Graph 97

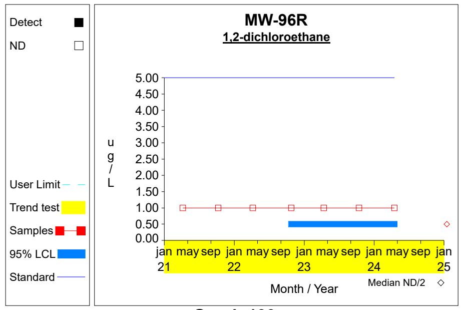


Graph 98

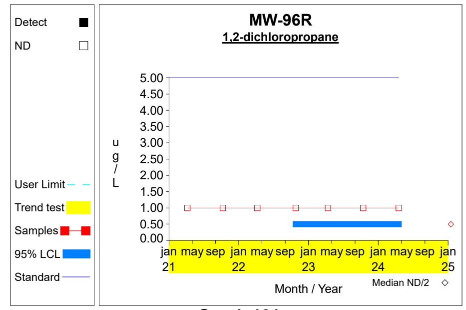
Confidence Limits (Assessment)



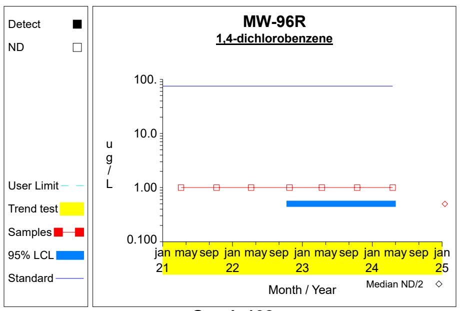
Graph 99



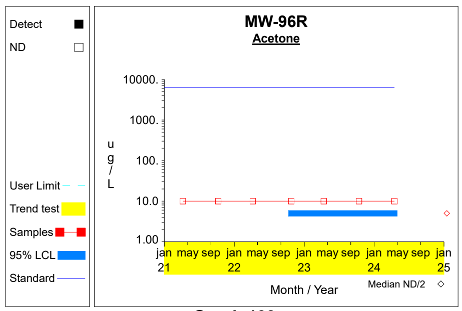
Graph 100



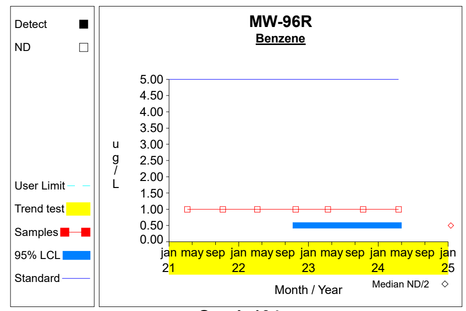
Graph 101



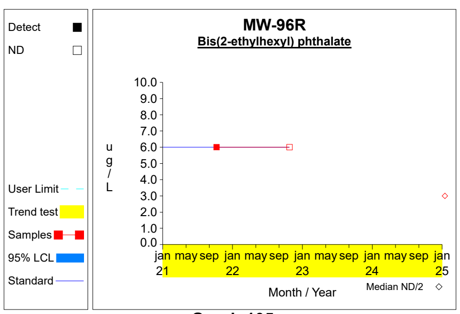
Graph 102



Graph 103



Graph 104



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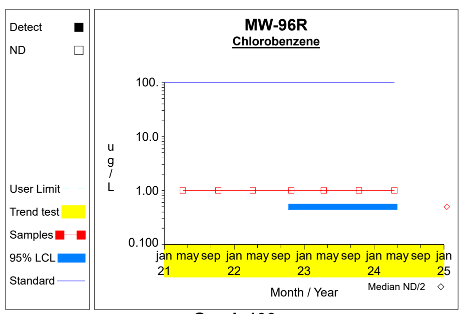
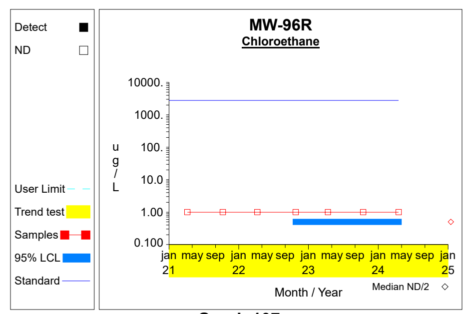
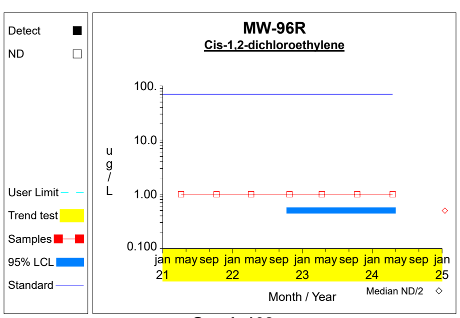


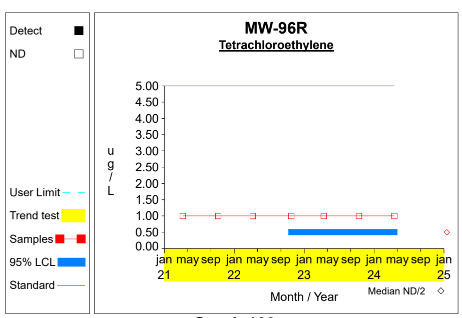
Graph 106



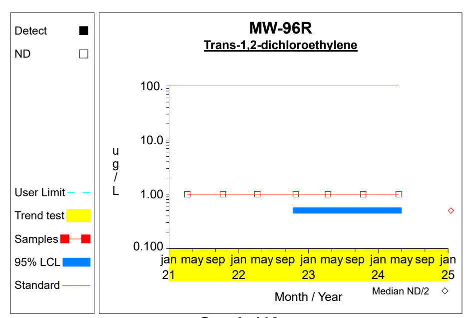
Graph 107



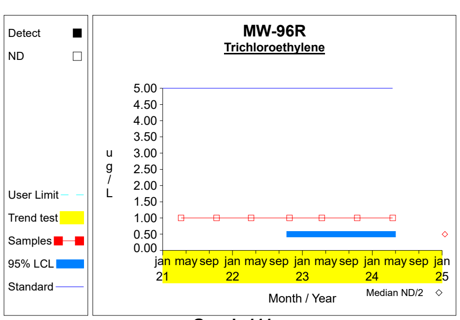
Graph 108



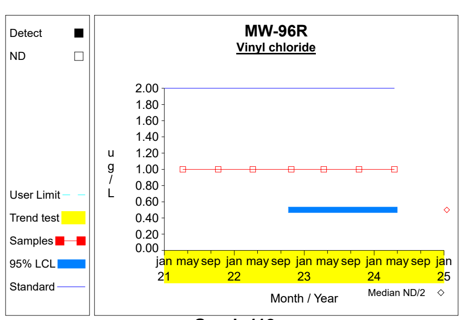
Graph 109



Graph 110



Graph 111



Graph 112

Prepared by: Otter Creek Environmental

Appendix B.2 – Fall Statistical Evaluation Report

GROUND WATER STATISTICS

FOR THE

MARSHALL COUNTY SANITARY LANDFILL

Second Semi-Annual Monitoring Event in 2024

Prepared for:
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November 2024

INTRODUCTION

This report summarizes the results of the statistical analysis used to evaluate the ground water quality data obtained during the second semi-annual monitoring event in 2024 at the Marshall County Sanitary Landfill in Marshall 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 method is described and then applied to the Marshall County Landfill data. The statistical plan conforms with IAC 567, Chapter 113.10 and the USEPA Unified Guidance document (“*Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities”*, March 2009).

Ground Water Monitoring Program

The groundwater monitoring network for Marshall County Sanitary Landfill includes upgradient wells MW-66, MW-85, MW-98, and MW-99 and downgradient detection sample points GU-2, GU-3, MW-49, MW-54, MW-81, MW-87, MW-89, MW-91, MW-93, MW-94, MW-95, MW-96(R), and MW-97. Detections of volatile organic compounds (VOCs) at wells along the north and west edges of the facility prompted a site remedial and mitigating action plan (SRAMP). Wells MW-89, MW-91, and MW-87 were installed to monitor the effectiveness of the SRAMP. Monitoring well MW-93 was installed adjacent to the leachate holding lagoon. Each of the groundwater monitoring wells is to be sampled at least semiannually and analyzed for the detection monitoring parameters listed in 113.10(5), which includes 15 inorganic constituents and 47 organic compounds, summarized in Table 1 below.

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

Organic Compounds:

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

Inorganic constituents:

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

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

STATISTICAL METHODOLOGIES FOR DETECTION MONITORING

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

Interwell Statistics: Upgradient versus Downgradient Comparisons

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

Results of the Interwell Statistics

The background data used in this statistical analysis includes the ground water data collected from ground water wells MW-66, MW-85, MW-98, and MW-99 during the period from October 2014 through the current data. A summary of the background data from monitoring wells MW-66, MW-85, MW-98, and MW-99, 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-87, MW-89, MW-91, MW-93, MW-95, MW-96R, and MW-97 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-93	Arsenic	15.2	7.8000	Nonparametric	Verified
	Cobalt	9.9	5.9879	Normal	Verified
	Nickel	27.1	8.8000	Nonparametric	Verified
MW-96R	Cobalt	10.5	5.9879	Normal	Awaiting Verification

The detection frequencies of the parameters in the up and down gradient monitoring wells are summarized in Table 3. Excluding barium and cobalt, these constituents are rarely detected in the upgradient wells. With the detection frequencies being less than 50% for all but barium and cobalt, nonparametric site prediction limits are used for those trace metals. Table 4 summarizes the results of the Shapiro-Wilk test. Table 5 is a summary of the statistics and prediction limits determined for the metals. Time series graphs of each of the parameters at each well with the corresponding prediction limits are attached.

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

The 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 cobalt at MW-93 (8.367 µg/L) exceeds the Iowa Statewide Standard of 2.1 µg/L. The remainder of the calculated 95% LCLs are below the respective GWPS.

Supplemental Wells

Monitoring wells MW-49, MW-54, MW-81, MW-94, and MW-96R are designated as supplemental wells, where only trend analysis is required. The data for each well is tested for existing trends using Sen's nonparametric estimate of trend (Attachment D). An increasing trend was identified for arsenic at MW-94. Decreasing trends were identified for nickel at MW-54, cobalt and nickel at MW-94, and barium at MW96R.

Intrawell statistics

Because MW-93 monitors a leachate storage lagoon, the current data was also compared to background using intrawell statistics. MW-96R is also evaluated by intrawell statistics at the request of the IDNR. Intrawell statistics are appropriate for facilities where the upgradient wells do not accurately characterize the natural ground water conditions downgradient from the facility. This may be due to different hydrogeological conditions where the wells are screened, having too few upgradient wells to account for the spatial variability, or the site exhibiting no definable hydraulic gradient. Intrawell statistics compare new measurements to the historical data at each ground water monitoring well independently. It is recommended that at least eight background samples be obtained prior to performing the statistics.

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

The combined Shewhart-CUSUM control chart assumes that the data are independent and normally distributed with a fixed mean and a constant variance. Independent data is much more critical than the normality assumption. To achieve independence, it is recommended that data are collected no more frequently than quarterly to account for seasonal variation. The combined Shewhart-CUSUM control chart is extremely robust to deviations from normality. Because the control charts do not use a specific multiplier based on a normal distribution, it is more conservative to assume normality.

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

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

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

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

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

Results of the Intrawell Statistics

The Appendix I trace metals data from well MW-93 and MW-96R were evaluated using the combined Shewhart-CUSUM control chart method. The previous background at MW-93 included the data obtained from October 2014 through April 2018. As ground water monitoring at a municipal solid waste facility proceeds, it is recommended to update background data sets periodically with valid detection monitoring results that are representative of background groundwater quality not affected by leakage from a monitored unit. Failure to update background will exclude factors such as natural temporal variation, changes in field or laboratory methodologies, and changes in the water table due to meteorological conditions or other influences. Ongoing operations at a facility such as excavations or drainage control may affect the ground water flow direction and water quality. An increase in the number of statistical failures, not related to the landfill, is routinely observed for sites neglecting to update the statistical background with valid data points.

Since there were no exceedances attributed to the lagoon and also that there was insufficient background to determine nonparametric limits, the background was updated to include data collected from October 2014 through 2020 for MW-93. There is generally insufficient background data at MW-96R.

A summary of the intrawell statistics is included in Attachment E, Table 1 "Summary Statistics and Intermediate Computations for Combined Shewhart-CUSUM Control Charts." The control charts or time series graphs follow the summary table.

For the parameters compared to background, there were no control limit exceedances detected. No increasing trends were detected in the background data.

A control chart factor was selected to provide a balance of the site-wide false positive and false negative rates. A statistical power curve indicates the expected false assessments for the site as a whole. For intrawell analysis, the site-wide false positive rate is 5% and the test becomes sensitive to 3 standard deviation units over background.

Volatile Organic Compounds

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

VOCs Detected During the Second Semi-Annual Monitoring Event in 2024

Well	VOC Detected	Result, µg/L	Reporting Limit, µg/L	Verified or Awaiting Verification	Ground Water Standard
MW-49	1,1-Dichloroethane	1.2	1	Verified	140[b]
	1,4-Dichlorobenzene	7.9	1	Verified	75[a]
	Benzene	3.7	1	Verified	75[a]
	Chlorobenzene	1.1	1	Verified	100[a]
	Chloroethane	5.5	1	Verified	2800[b]
MW-54	1,4-Dichlorobenzene	2.9	1	Verified	75[a]
MW-81	1,1-Dichloroethane	24.8	1	Verified	140[b]
	1,2-Dichloroethane	11.2	1	Verified	5[a]
	1,2-Dichloropropane	6.9	1	Verified	5[a]
	1,4-Dichlorobenzene	5.6	1	Verified	75[a]
	Chlorobenzene	1.8	1	Verified	100[a]
	Chloroethane	6.0	1	Verified	2800[b]
	cis-1,2-Dichloroethene	127	1	Verified	70[a]
	trans-1,2-Dichloroethene	2.4	1	Verified	100[a]
	Trichloroethene	2.2	1	Verified	5[a]
	Vinyl chloride	6.5	1	Verified	2[a]
MW-94	1,1-Dichloroethane	1.0	1	Verified	140[b]
	1,2-Dichloropropane	1.0	1	Verified	5[a]
	Benzene	1.8	1	Verified	75[a]
	Chloroethane	3.0	1	Verified	2800[b]
	cis-1,2-Dichloroethene	6.0	1	Verified	70[a]
	Vinyl chloride	2.0	1	Verified	2[a]

a - USEPA MCL
b – Iowa Statewide Standard

This table indicates that these VOCs are generally verified detections. A site remedial and mitigating action plan was implemented due to the presence of these VOCs. Historical VOC detections are summarized in Attachment F.

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 (Attachment G).

The 95% LCL for 1,2-dichloropropane at MW-81 (7.275 µg/L) exceeds the USEPA MCL of 5 µg/L.

The 95% LCL for *cis*-1,2-dichloroethene at MW-81 (124.590 µg/L) exceeds the USEPA MCL of 70 µg/L. The 95% LCL for vinyl chloride at MW-81 (6.300 µg/L) exceeds the USEPA MCL of 2 µg/L.

The remainder of the verified VOC detections are statistically below the respective 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 10/15/2024

Constituents	Units	LW-75	MW-213	MW-49	MW-54	MW-81	MW-85	MW-87	MW-89	MW-91	MW-93	MW-94	MW-95	MW-96R	MW-97	MW-98	MW-99
1,1,1,2-tetrachloroethane	ug/L		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L		1.9	1.2	<1.0	24.8	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-dichloroethylene	ug/L		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	ug/L		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L		<1.0	<1.0	<1.0	11.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,2-dichloropropane	ug/L		3.8	<1.0	<1.0	6.9	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,4-dichlorobenzene	ug/L		<1.0	7.9	2.9	5.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
2-butanone (mek)	ug/L		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-hexanone (mbk)	ug/L		<5	<5	<5	<5	<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	<5	<5	<5	<5
Acetone	ug/L		<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	ug/L		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Alkalinity, as caco3	mg/L	1730		1170	612	907						752					
Antimony, total	ug/L		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	17.6	<4.0	520.0	5.4	6.0	<4.0	<4.0	<4.0	<4.0	15.2	75.8	<4.0	6.6	<4.0	<4.0	<4.0
Barium, total	ug/L		720.0	213.0	481.0	1580.0	136.0	100.0	215.0	242.0	242.0	305.0	32.3	338.0	274.0	137.0	88.8
Benzene	ug/L		<1.0	3.7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.8	<1.0	<1.0	<1.0	<1.0	<1.0
Beryllium, total	ug/L		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Bod (5 day)	mg/L	82															
Bromochloromethane	ug/L		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L		<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chemical oxygen demand	mg/L	1050															
Chloride	mg/L	1220															
Chlorobenzene	ug/L		<1.0	1.1	<1.0	1.8	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroethane	ug/L		1.4	5.5	<1.0	6.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	ug/L		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	ug/L		<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	ug/L		19	<1	<1	127	<1	<1	<1	<1	<1	6	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	18.8	<.4	66.9	9.9	8.2	<.4	<.4	<.4	<.4	9.9	8.8	<.4	10.5	<.4	1.9	.9
Copper, total	ug/L		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Dibromochloromethane	ug/L		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethane	ug/L	<5		<5	<5	<5						<5					
Ethene	ug/L	<5		<5	<5	<5						<5					
Ethylbenzene	ug/L		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	ug/L		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methane	ug/L	5530		4770	78	560						1380					
Methyl iodide	ug/L		<1	<1	<1	<1	<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	<5	<5	<5	<5
Nickel, total	ug/L		<4.0	33.9	22.6	9.4	<4.0	<4.0	<4.0	<4.0	27.1	7.4	<4.0	4.6	<4.0	<4.0	<4.0
Nitrogen, ammonia	mg/L	109															

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

Table 1

Analytical Data Summary for 10/15/2024

Constituents	Units	LW-75	MW-213	MW-49	MW-54	MW-81	MW-85	MW-87	MW-89	MW-91	MW-93	MW-94	MW-95	MW-96R	MW-97	MW-98	MW-99
pH	pH	6.6		6.3	6.4	6.3						6.4					
Selenium, total	ug/L		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L		<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total dissolved	mg/L	3780															
Solids, total suspended	mg/L	7															
Styrene	ug/L		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate	mg/L	138															
Tetrachloroethylene	ug/L		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L		<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Toluene	ug/L		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	ug/L		<1.0	<1.0	<1.0	2.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<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	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L		<1.0	<1.0	<1.0	2.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trichlorofluoromethane	ug/L		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L		<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L		<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L		1.4	<1.0	<1.0	6.5	<1.0	<1.0	<1.0	<1.0	<1.0	2.0	<1.0	<1.0	<1.0	<1.0	<1.0
Xylenes, total	ug/L		<2	<2	<2	<2	<2	<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	<20.0	<20.0	<20.0	20.3	<20.0	<20.0	<20.0	<20.0

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

Attachment B

Summary Tables and Graphs for the Interwell Comparisons

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Antimony, total	ug/L	MW-66	10/16/2014	ND	2.0000		
Antimony, total	ug/L	MW-66	01/14/2015	ND	2.0000		
Antimony, total	ug/L	MW-66	04/03/2015	ND	2.0000		
Antimony, total	ug/L	MW-66	07/06/2015	ND	2.0000		
Antimony, total	ug/L	MW-66	10/01/2015	ND	2.0000		
Antimony, total	ug/L	MW-66	04/14/2016	ND	2.0000		
Antimony, total	ug/L	MW-66	10/13/2016	ND	2.0000		
Antimony, total	ug/L	MW-66	04/10/2017	ND	2.0000		
Arsenic, total	ug/L	MW-66	10/16/2014	ND	4.0000		
Arsenic, total	ug/L	MW-66	01/14/2015	ND	4.0000		
Arsenic, total	ug/L	MW-66	04/03/2015	ND	4.0000		
Arsenic, total	ug/L	MW-66	07/06/2015	ND	4.0000		
Arsenic, total	ug/L	MW-66	10/01/2015	ND	4.0000		
Arsenic, total	ug/L	MW-66	04/14/2016	ND	4.0000		
Arsenic, total	ug/L	MW-66	10/13/2016	ND	4.0000		
Arsenic, total	ug/L	MW-66	04/10/2017	ND	4.0000		
Barium, total	ug/L	MW-66	10/16/2014		325.0000		
Barium, total	ug/L	MW-66	01/14/2015		412.0000		
Barium, total	ug/L	MW-66	04/03/2015		524.0000		
Barium, total	ug/L	MW-66	07/06/2015		560.0000		
Barium, total	ug/L	MW-66	10/01/2015		612.0000		
Barium, total	ug/L	MW-66	04/14/2016		395.0000		
Barium, total	ug/L	MW-66	10/13/2016		413.0000		
Barium, total	ug/L	MW-66	04/10/2017		371.0000		
Beryllium, total	ug/L	MW-66	10/16/2014	ND	4.0000		
Beryllium, total	ug/L	MW-66	01/14/2015	ND	4.0000		
Beryllium, total	ug/L	MW-66	04/03/2015	ND	4.0000		
Beryllium, total	ug/L	MW-66	07/06/2015	ND	4.0000		
Beryllium, total	ug/L	MW-66	10/01/2015	ND	4.0000		
Beryllium, total	ug/L	MW-66	04/14/2016	ND	4.0000		
Beryllium, total	ug/L	MW-66	10/13/2016	ND	4.0000		
Beryllium, total	ug/L	MW-66	04/10/2017	ND	4.0000		
Cadmium, total	ug/L	MW-66	10/16/2014	ND	0.8000		
Cadmium, total	ug/L	MW-66	01/14/2015	ND	0.8000		
Cadmium, total	ug/L	MW-66	04/03/2015	ND	0.8000		
Cadmium, total	ug/L	MW-66	07/06/2015	ND	0.8000		
Cadmium, total	ug/L	MW-66	10/01/2015	ND	0.8000		
Cadmium, total	ug/L	MW-66	04/14/2016	ND	0.8000		
Cadmium, total	ug/L	MW-66	10/13/2016	ND	0.8000		
Cadmium, total	ug/L	MW-66	04/10/2017	ND	0.8000		
Chromium, total	ug/L	MW-66	10/16/2014	ND	8.0000		
Chromium, total	ug/L	MW-66	01/14/2015	ND	8.0000		
Chromium, total	ug/L	MW-66	04/03/2015	ND	8.0000		
Chromium, total	ug/L	MW-66	07/06/2015	ND	8.0000		
Chromium, total	ug/L	MW-66	10/01/2015	ND	8.0000		
Chromium, total	ug/L	MW-66	04/14/2016	ND	8.0000		
Chromium, total	ug/L	MW-66	10/13/2016	ND	8.0000		
Chromium, total	ug/L	MW-66	04/10/2017	ND	8.0000		
Cobalt, total	ug/L	MW-66	10/16/2014	ND	0.8000		
Cobalt, total	ug/L	MW-66	01/14/2015	ND	0.8000		
Cobalt, total	ug/L	MW-66	04/03/2015	ND	0.8000		
Cobalt, total	ug/L	MW-66	07/06/2015	ND	0.8000		
Cobalt, total	ug/L	MW-66	10/01/2015	ND	0.8000		
Cobalt, total	ug/L	MW-66	04/14/2016	ND	0.8000		
Cobalt, total	ug/L	MW-66	10/13/2016		0.9000		
Cobalt, total	ug/L	MW-66	04/10/2017	ND	0.8000		
Copper, total	ug/L	MW-66	10/16/2014	ND	4.0000		
Copper, total	ug/L	MW-66	01/14/2015	ND	4.0000		
Copper, total	ug/L	MW-66	04/03/2015	ND	4.0000		
Copper, total	ug/L	MW-66	07/06/2015	ND	4.0000		
Copper, total	ug/L	MW-66	10/01/2015	ND	4.0000		
Copper, total	ug/L	MW-66	04/14/2016	ND	4.0000		
Copper, total	ug/L	MW-66	10/13/2016	ND	4.0000		
Copper, total	ug/L	MW-66	04/10/2017	ND	4.0000		
Lead, total	ug/L	MW-66	10/16/2014	ND	4.0000		
Lead, total	ug/L	MW-66	01/14/2015	ND	4.0000		
Lead, total	ug/L	MW-66	04/03/2015	ND	4.0000		
Lead, total	ug/L	MW-66	07/06/2015	ND	4.0000		
Lead, total	ug/L	MW-66	10/01/2015	ND	4.0000		
Lead, total	ug/L	MW-66	04/14/2016	ND	4.0000		
Lead, total	ug/L	MW-66	10/13/2016	ND	4.0000		
Lead, total	ug/L	MW-66	04/10/2017	ND	4.0000		
Nickel, total	ug/L	MW-66	10/16/2014	ND	4.0000		
Nickel, total	ug/L	MW-66	01/14/2015	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-66	04/03/2015	ND	4.0000		
Nickel, total	ug/L	MW-66	07/06/2015	ND	4.0000		
Nickel, total	ug/L	MW-66	10/01/2015	ND	4.0000		
Nickel, total	ug/L	MW-66	04/14/2016	ND	4.0000		
Nickel, total	ug/L	MW-66	10/13/2016	ND	4.0000		
Nickel, total	ug/L	MW-66	04/10/2017	ND	4.0000		
Selenium, total	ug/L	MW-66	10/16/2014	ND	4.0000		
Selenium, total	ug/L	MW-66	01/14/2015	ND	4.0000		
Selenium, total	ug/L	MW-66	04/03/2015	ND	4.0000		
Selenium, total	ug/L	MW-66	07/06/2015	ND	4.0000		
Selenium, total	ug/L	MW-66	10/01/2015	ND	4.0000		
Selenium, total	ug/L	MW-66	04/14/2016	ND	4.0000		
Selenium, total	ug/L	MW-66	10/13/2016	ND	4.0000		
Selenium, total	ug/L	MW-66	04/10/2017	ND	4.0000		
Silver, total	ug/L	MW-66	10/16/2014	ND	4.0000		
Silver, total	ug/L	MW-66	01/14/2015	ND	4.0000		
Silver, total	ug/L	MW-66	04/03/2015	ND	4.0000		
Silver, total	ug/L	MW-66	07/06/2015	ND	4.0000		
Silver, total	ug/L	MW-66	10/01/2015	ND	4.0000		
Silver, total	ug/L	MW-66	04/14/2016	ND	4.0000		
Silver, total	ug/L	MW-66	10/13/2016	ND	4.0000		
Silver, total	ug/L	MW-66	04/10/2017	ND	4.0000		
Thallium, total	ug/L	MW-66	10/16/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-66	01/14/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-66	04/03/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-66	07/06/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-66	10/01/2015	ND	1.0000	2.0000	**
Thallium, total	ug/L	MW-66	04/14/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-66	10/13/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-66	04/10/2017	ND	4.0000	2.0000	**
Vanadium, total	ug/L	MW-66	10/16/2014	ND	20.0000		
Vanadium, total	ug/L	MW-66	01/14/2015	ND	20.0000		
Vanadium, total	ug/L	MW-66	04/03/2015	ND	20.0000		
Vanadium, total	ug/L	MW-66	07/06/2015	ND	20.0000		
Vanadium, total	ug/L	MW-66	10/01/2015	ND	20.0000		
Vanadium, total	ug/L	MW-66	04/14/2016	ND	20.0000		
Vanadium, total	ug/L	MW-66	10/13/2016	ND	20.0000		
Vanadium, total	ug/L	MW-66	04/10/2017	ND	20.0000		
Zinc, total	ug/L	MW-66	10/16/2014	ND	20.0000		
Zinc, total	ug/L	MW-66	01/14/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-66	04/03/2015		54.6000		
Zinc, total	ug/L	MW-66	07/06/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-66	10/01/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-66	04/14/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-66	10/13/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-66	04/10/2017	ND	8.0000	20.0000	**
Antimony, total	ug/L	MW-85	10/16/2014	ND	2.0000		
Antimony, total	ug/L	MW-85	01/14/2015	ND	2.0000		
Antimony, total	ug/L	MW-85	04/03/2015	ND	2.0000		
Antimony, total	ug/L	MW-85	07/06/2015	ND	2.0000		
Antimony, total	ug/L	MW-85	10/01/2015	ND	2.0000		
Antimony, total	ug/L	MW-85	04/14/2016	ND	2.0000		
Antimony, total	ug/L	MW-85	10/13/2016	ND	2.0000		
Antimony, total	ug/L	MW-85	04/10/2017	ND	2.0000		
Antimony, total	ug/L	MW-85	10/09/2017	ND	2.0000		
Antimony, total	ug/L	MW-85	04/17/2018	ND	2.0000		
Antimony, total	ug/L	MW-85	10/22/2018	ND	2.0000		
Antimony, total	ug/L	MW-85	04/22/2019	ND	2.0000		
Antimony, total	ug/L	MW-85	10/23/2019	ND	2.0000		
Antimony, total	ug/L	MW-85	04/10/2020	ND	2.0000		
Antimony, total	ug/L	MW-85	10/19/2020	ND	2.0000		
Antimony, total	ug/L	MW-85	04/05/2021	ND	2.0000		
Antimony, total	ug/L	MW-85	10/08/2021	ND	2.0000		
Antimony, total	ug/L	MW-85	04/06/2022	ND	2.0000		
Antimony, total	ug/L	MW-85	10/25/2022	ND	2.0000		
Antimony, total	ug/L	MW-85	04/11/2023	ND	2.0000		
Antimony, total	ug/L	MW-85	10/13/2023	ND	2.0000		
Antimony, total	ug/L	MW-85	04/17/2024	ND	2.0000		
Antimony, total	ug/L	MW-85	10/15/2024	ND	2.0000		
Arsenic, total	ug/L	MW-85	10/16/2014	ND	4.0000		
Arsenic, total	ug/L	MW-85	01/14/2015	ND	4.0000		
Arsenic, total	ug/L	MW-85	04/03/2015	ND	4.0000		
Arsenic, total	ug/L	MW-85	07/06/2015	ND	4.0000		
Arsenic, total	ug/L	MW-85	10/01/2015	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	
Arsenic, total	ug/L	MW-85	04/14/2016	ND	4.0000		
Arsenic, total	ug/L	MW-85	10/13/2016	ND	4.0000		
Arsenic, total	ug/L	MW-85	04/10/2017	ND	4.0000		
Arsenic, total	ug/L	MW-85	10/09/2017	ND	4.0000		
Arsenic, total	ug/L	MW-85	04/17/2018	ND	4.0000		
Arsenic, total	ug/L	MW-85	10/22/2018	ND	4.0000		
Arsenic, total	ug/L	MW-85	04/22/2019	ND	4.0000		
Arsenic, total	ug/L	MW-85	10/23/2019	ND	4.0000		
Arsenic, total	ug/L	MW-85	04/10/2020	ND	4.0000		
Arsenic, total	ug/L	MW-85	10/19/2020	ND	4.0000		
Arsenic, total	ug/L	MW-85	04/05/2021	ND	4.0000		
Arsenic, total	ug/L	MW-85	10/08/2021	ND	4.0000		
Arsenic, total	ug/L	MW-85	04/06/2022	ND	4.0000		
Arsenic, total	ug/L	MW-85	10/25/2022	ND	4.0000		
Arsenic, total	ug/L	MW-85	04/11/2023	ND	4.0000		
Arsenic, total	ug/L	MW-85	10/13/2023	ND	4.0000		
Arsenic, total	ug/L	MW-85	04/17/2024	ND	4.0000		
Arsenic, total	ug/L	MW-85	10/15/2024	ND	4.0000		
Barium, total	ug/L	MW-85	10/16/2014		138.0000		
Barium, total	ug/L	MW-85	01/14/2015		157.0000		
Barium, total	ug/L	MW-85	04/03/2015		167.0000		
Barium, total	ug/L	MW-85	07/06/2015		143.0000		
Barium, total	ug/L	MW-85	10/01/2015		135.0000		
Barium, total	ug/L	MW-85	04/14/2016		155.0000		
Barium, total	ug/L	MW-85	10/13/2016		149.0000		
Barium, total	ug/L	MW-85	04/10/2017		175.0000		
Barium, total	ug/L	MW-85	10/09/2017		143.0000		
Barium, total	ug/L	MW-85	04/17/2018		142.0000		
Barium, total	ug/L	MW-85	10/22/2018		146.0000		
Barium, total	ug/L	MW-85	04/22/2019		152.0000		
Barium, total	ug/L	MW-85	10/23/2019		126.0000		
Barium, total	ug/L	MW-85	04/10/2020		160.0000		
Barium, total	ug/L	MW-85	10/19/2020		151.0000		
Barium, total	ug/L	MW-85	04/05/2021		135.0000		
Barium, total	ug/L	MW-85	10/08/2021		121.0000		
Barium, total	ug/L	MW-85	04/06/2022		133.0000		
Barium, total	ug/L	MW-85	10/25/2022		138.0000		
Barium, total	ug/L	MW-85	04/11/2023		141.0000		
Barium, total	ug/L	MW-85	10/13/2023		143.0000		
Barium, total	ug/L	MW-85	04/17/2024		144.0000		
Barium, total	ug/L	MW-85	10/15/2024		136.0000		
Beryllium, total	ug/L	MW-85	10/16/2014	ND	4.0000		
Beryllium, total	ug/L	MW-85	01/14/2015	ND	4.0000		
Beryllium, total	ug/L	MW-85	04/03/2015	ND	4.0000		
Beryllium, total	ug/L	MW-85	07/06/2015	ND	4.0000		
Beryllium, total	ug/L	MW-85	10/01/2015	ND	4.0000		
Beryllium, total	ug/L	MW-85	04/14/2016	ND	4.0000		
Beryllium, total	ug/L	MW-85	10/13/2016	ND	4.0000		
Beryllium, total	ug/L	MW-85	04/10/2017	ND	4.0000		
Beryllium, total	ug/L	MW-85	10/09/2017	ND	4.0000		
Beryllium, total	ug/L	MW-85	04/17/2018	ND	4.0000		
Beryllium, total	ug/L	MW-85	10/22/2018	ND	4.0000		
Beryllium, total	ug/L	MW-85	04/22/2019	ND	4.0000		
Beryllium, total	ug/L	MW-85	10/23/2019	ND	4.0000		
Beryllium, total	ug/L	MW-85	04/10/2020	ND	4.0000		
Beryllium, total	ug/L	MW-85	10/19/2020	ND	4.0000		
Beryllium, total	ug/L	MW-85	04/05/2021	ND	4.0000		
Beryllium, total	ug/L	MW-85	10/08/2021	ND	4.0000		
Beryllium, total	ug/L	MW-85	04/06/2022	ND	4.0000		
Beryllium, total	ug/L	MW-85	10/25/2022	ND	4.0000		
Beryllium, total	ug/L	MW-85	04/11/2023	ND	4.0000		
Beryllium, total	ug/L	MW-85	10/13/2023	ND	4.0000		
Beryllium, total	ug/L	MW-85	04/17/2024	ND	4.0000		
Beryllium, total	ug/L	MW-85	10/15/2024	ND	4.0000		
Cadmium, total	ug/L	MW-85	10/16/2014	ND	0.8000		
Cadmium, total	ug/L	MW-85	01/14/2015	ND	0.8000		
Cadmium, total	ug/L	MW-85	04/03/2015	ND	0.8000		
Cadmium, total	ug/L	MW-85	07/06/2015	ND	0.8000		
Cadmium, total	ug/L	MW-85	10/01/2015	ND	0.8000		
Cadmium, total	ug/L	MW-85	04/14/2016	ND	0.8000		
Cadmium, total	ug/L	MW-85	10/13/2016	ND	0.8000		
Cadmium, total	ug/L	MW-85	04/10/2017	ND	0.8000		
Cadmium, total	ug/L	MW-85	10/09/2017	ND	0.8000		
Cadmium, total	ug/L	MW-85	04/17/2018	ND	0.8000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Cadmium, total	ug/L	MW-85	10/22/2018	ND	0.8000		
Cadmium, total	ug/L	MW-85	04/22/2019	ND	0.8000		
Cadmium, total	ug/L	MW-85	10/23/2019	ND	0.8000		
Cadmium, total	ug/L	MW-85	04/10/2020	ND	0.8000		
Cadmium, total	ug/L	MW-85	10/19/2020	ND	0.8000		
Cadmium, total	ug/L	MW-85	04/05/2021	ND	0.8000		
Cadmium, total	ug/L	MW-85	10/08/2021	ND	0.8000		
Cadmium, total	ug/L	MW-85	04/06/2022	ND	0.8000		
Cadmium, total	ug/L	MW-85	10/25/2022	ND	0.8000		
Cadmium, total	ug/L	MW-85	04/11/2023	ND	0.8000		
Cadmium, total	ug/L	MW-85	10/13/2023	ND	0.8000		
Cadmium, total	ug/L	MW-85	04/17/2024	ND	0.8000		
Cadmium, total	ug/L	MW-85	10/15/2024	ND	0.8000		
Chromium, total	ug/L	MW-85	10/16/2014	ND	8.0000		
Chromium, total	ug/L	MW-85	01/14/2015	ND	8.0000		
Chromium, total	ug/L	MW-85	04/03/2015	ND	8.0000		
Chromium, total	ug/L	MW-85	07/06/2015	ND	8.0000		
Chromium, total	ug/L	MW-85	10/01/2015	ND	8.0000		
Chromium, total	ug/L	MW-85	04/14/2016	ND	8.0000		
Chromium, total	ug/L	MW-85	10/13/2016	ND	8.0000		
Chromium, total	ug/L	MW-85	04/10/2017	ND	8.0000		
Chromium, total	ug/L	MW-85	10/09/2017	ND	8.0000		
Chromium, total	ug/L	MW-85	04/17/2018	ND	8.0000		
Chromium, total	ug/L	MW-85	10/22/2018	ND	8.0000		
Chromium, total	ug/L	MW-85	04/22/2019	ND	8.0000		
Chromium, total	ug/L	MW-85	10/23/2019	ND	8.0000		
Chromium, total	ug/L	MW-85	04/10/2020	ND	8.0000		
Chromium, total	ug/L	MW-85	10/19/2020	ND	8.0000		
Chromium, total	ug/L	MW-85	04/05/2021	ND	8.0000		
Chromium, total	ug/L	MW-85	10/08/2021	ND	8.0000		
Chromium, total	ug/L	MW-85	04/06/2022	ND	8.0000		
Chromium, total	ug/L	MW-85	10/25/2022	ND	8.0000		
Chromium, total	ug/L	MW-85	04/11/2023	ND	8.0000		
Chromium, total	ug/L	MW-85	10/13/2023	ND	8.0000		
Chromium, total	ug/L	MW-85	04/17/2024	ND	8.0000		
Chromium, total	ug/L	MW-85	10/15/2024	ND	8.0000		
Cobalt, total	ug/L	MW-85	10/16/2014	ND	0.8000		
Cobalt, total	ug/L	MW-85	01/14/2015	ND	0.8000		
Cobalt, total	ug/L	MW-85	04/03/2015	ND	0.8000		
Cobalt, total	ug/L	MW-85	07/06/2015	ND	0.8000		
Cobalt, total	ug/L	MW-85	10/01/2015	ND	0.8000		
Cobalt, total	ug/L	MW-85	04/14/2016	ND	0.8000		
Cobalt, total	ug/L	MW-85	10/13/2016	ND	0.8000		
Cobalt, total	ug/L	MW-85	04/10/2017	ND	0.8000		
Cobalt, total	ug/L	MW-85	10/09/2017	ND	0.8000		
Cobalt, total	ug/L	MW-85	04/17/2018	ND	0.8000		
Cobalt, total	ug/L	MW-85	10/22/2018	ND	0.8000		
Cobalt, total	ug/L	MW-85	04/22/2019	ND	0.8000		
Cobalt, total	ug/L	MW-85	10/23/2019	ND	0.8000		
Cobalt, total	ug/L	MW-85	04/10/2020		0.4000		
Cobalt, total	ug/L	MW-85	10/19/2020		0.4000		
Cobalt, total	ug/L	MW-85	04/05/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-85	10/08/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-85	04/06/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-85	10/25/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-85	04/11/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-85	10/13/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-85	04/17/2024		0.4000		
Cobalt, total	ug/L	MW-85	10/15/2024	ND	0.4000	0.8000	**
Copper, total	ug/L	MW-85	10/16/2014	ND	4.0000		
Copper, total	ug/L	MW-85	01/14/2015	ND	4.0000		
Copper, total	ug/L	MW-85	04/03/2015	ND	4.0000		
Copper, total	ug/L	MW-85	07/06/2015	ND	4.0000		
Copper, total	ug/L	MW-85	10/01/2015	ND	4.0000		
Copper, total	ug/L	MW-85	04/14/2016	ND	4.0000		
Copper, total	ug/L	MW-85	10/13/2016	ND	4.0000		
Copper, total	ug/L	MW-85	04/10/2017	ND	4.0000		
Copper, total	ug/L	MW-85	10/09/2017	ND	4.0000		
Copper, total	ug/L	MW-85	04/17/2018	ND	4.0000		
Copper, total	ug/L	MW-85	10/22/2018		4.8000		
Copper, total	ug/L	MW-85	04/22/2019	ND	4.0000		
Copper, total	ug/L	MW-85	10/23/2019		4.0000		
Copper, total	ug/L	MW-85	04/10/2020	ND	4.0000		
Copper, total	ug/L	MW-85	10/19/2020	ND	4.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Copper, total	ug/L	MW-85	04/05/2021	ND	4.0000		
Copper, total	ug/L	MW-85	10/08/2021	ND	4.0000		
Copper, total	ug/L	MW-85	04/06/2022	ND	4.0000		
Copper, total	ug/L	MW-85	10/25/2022	ND	4.0000		
Copper, total	ug/L	MW-85	04/11/2023	ND	4.0000		
Copper, total	ug/L	MW-85	10/13/2023	ND	4.0000		
Copper, total	ug/L	MW-85	04/17/2024	ND	4.0000		
Copper, total	ug/L	MW-85	10/15/2024	ND	4.0000		
Lead, total	ug/L	MW-85	10/16/2014	ND	4.0000		
Lead, total	ug/L	MW-85	01/14/2015	ND	4.0000		
Lead, total	ug/L	MW-85	04/03/2015	ND	4.0000		
Lead, total	ug/L	MW-85	07/06/2015	ND	4.0000		
Lead, total	ug/L	MW-85	10/01/2015	ND	4.0000		
Lead, total	ug/L	MW-85	04/14/2016	ND	4.0000		
Lead, total	ug/L	MW-85	10/13/2016	ND	4.0000		
Lead, total	ug/L	MW-85	04/10/2017	ND	4.0000		
Lead, total	ug/L	MW-85	10/09/2017	ND	4.0000		
Lead, total	ug/L	MW-85	04/17/2018	ND	4.0000		
Lead, total	ug/L	MW-85	10/22/2018	ND	4.0000		
Lead, total	ug/L	MW-85	04/22/2019	ND	4.0000		
Lead, total	ug/L	MW-85	10/23/2019	ND	4.0000		
Lead, total	ug/L	MW-85	04/10/2020	ND	4.0000		
Lead, total	ug/L	MW-85	10/19/2020	ND	4.0000		
Lead, total	ug/L	MW-85	04/05/2021	ND	4.0000		
Lead, total	ug/L	MW-85	10/08/2021	ND	4.0000		
Lead, total	ug/L	MW-85	04/06/2022	ND	4.0000		
Lead, total	ug/L	MW-85	10/25/2022	ND	4.0000		
Lead, total	ug/L	MW-85	04/11/2023	ND	4.0000		
Lead, total	ug/L	MW-85	10/13/2023	ND	4.0000		
Lead, total	ug/L	MW-85	04/17/2024	ND	4.0000		
Lead, total	ug/L	MW-85	10/15/2024	ND	4.0000		
Nickel, total	ug/L	MW-85	10/16/2014	ND	4.0000		
Nickel, total	ug/L	MW-85	01/14/2015	ND	4.0000		
Nickel, total	ug/L	MW-85	04/03/2015	ND	4.0000		
Nickel, total	ug/L	MW-85	07/06/2015	ND	4.0000		
Nickel, total	ug/L	MW-85	10/01/2015	ND	4.0000		
Nickel, total	ug/L	MW-85	04/14/2016	ND	4.0000		
Nickel, total	ug/L	MW-85	10/13/2016	ND	4.0000		
Nickel, total	ug/L	MW-85	04/10/2017	ND	4.0000		
Nickel, total	ug/L	MW-85	10/09/2017	ND	4.0000		
Nickel, total	ug/L	MW-85	04/17/2018	ND	4.0000		
Nickel, total	ug/L	MW-85	10/22/2018		20.6000		*
Nickel, total	ug/L	MW-85	04/22/2019	ND	4.0000		
Nickel, total	ug/L	MW-85	10/23/2019	ND	4.0000		
Nickel, total	ug/L	MW-85	04/10/2020	ND	4.0000		
Nickel, total	ug/L	MW-85	10/19/2020	ND	4.0000		
Nickel, total	ug/L	MW-85	04/05/2021	ND	4.0000		
Nickel, total	ug/L	MW-85	10/08/2021	ND	4.0000		
Nickel, total	ug/L	MW-85	04/06/2022	ND	4.0000		
Nickel, total	ug/L	MW-85	10/25/2022	ND	4.0000		
Nickel, total	ug/L	MW-85	04/11/2023	ND	4.0000		
Nickel, total	ug/L	MW-85	10/13/2023	ND	4.0000		
Nickel, total	ug/L	MW-85	04/17/2024	ND	4.0000		
Nickel, total	ug/L	MW-85	10/15/2024	ND	4.0000		
Selenium, total	ug/L	MW-85	10/16/2014	ND	4.0000		
Selenium, total	ug/L	MW-85	01/14/2015	ND	4.0000		
Selenium, total	ug/L	MW-85	04/03/2015	ND	4.0000		
Selenium, total	ug/L	MW-85	07/06/2015	ND	4.0000		
Selenium, total	ug/L	MW-85	10/01/2015	ND	4.0000		
Selenium, total	ug/L	MW-85	04/14/2016	ND	4.0000		
Selenium, total	ug/L	MW-85	10/13/2016	ND	4.0000		
Selenium, total	ug/L	MW-85	04/10/2017	ND	4.0000		
Selenium, total	ug/L	MW-85	10/09/2017	ND	4.0000		
Selenium, total	ug/L	MW-85	04/17/2018	ND	4.0000		
Selenium, total	ug/L	MW-85	10/22/2018	ND	4.0000		
Selenium, total	ug/L	MW-85	04/22/2019	ND	4.0000		
Selenium, total	ug/L	MW-85	10/23/2019	ND	4.0000		
Selenium, total	ug/L	MW-85	04/10/2020	ND	4.0000		
Selenium, total	ug/L	MW-85	10/19/2020	ND	4.0000		
Selenium, total	ug/L	MW-85	04/05/2021	ND	4.0000		
Selenium, total	ug/L	MW-85	10/08/2021	ND	4.0000		
Selenium, total	ug/L	MW-85	04/06/2022	ND	4.0000		
Selenium, total	ug/L	MW-85	10/25/2022	ND	4.0000		
Selenium, total	ug/L	MW-85	04/11/2023	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	
Selenium, total	ug/L	MW-85	10/13/2023	ND	4.0000		
Selenium, total	ug/L	MW-85	04/17/2024	ND	4.0000		
Selenium, total	ug/L	MW-85	10/15/2024	ND	4.0000		
Silver, total	ug/L	MW-85	10/16/2014	ND	4.0000		
Silver, total	ug/L	MW-85	01/14/2015	ND	4.0000		
Silver, total	ug/L	MW-85	04/03/2015	ND	4.0000		
Silver, total	ug/L	MW-85	07/06/2015	ND	4.0000		
Silver, total	ug/L	MW-85	10/01/2015	ND	4.0000		
Silver, total	ug/L	MW-85	04/14/2016	ND	4.0000		
Silver, total	ug/L	MW-85	10/13/2016	ND	4.0000		
Silver, total	ug/L	MW-85	04/10/2017	ND	4.0000		
Silver, total	ug/L	MW-85	10/09/2017	ND	4.0000		
Silver, total	ug/L	MW-85	04/17/2018	ND	4.0000		
Silver, total	ug/L	MW-85	10/22/2018	ND	4.0000		
Silver, total	ug/L	MW-85	04/22/2019	ND	4.0000		
Silver, total	ug/L	MW-85	10/23/2019	ND	4.0000		
Silver, total	ug/L	MW-85	04/10/2020	ND	4.0000		
Silver, total	ug/L	MW-85	10/19/2020	ND	4.0000		
Silver, total	ug/L	MW-85	04/05/2021	ND	4.0000		
Silver, total	ug/L	MW-85	10/08/2021	ND	4.0000		
Silver, total	ug/L	MW-85	04/06/2022	ND	4.0000		
Silver, total	ug/L	MW-85	10/25/2022	ND	4.0000		
Silver, total	ug/L	MW-85	04/11/2023	ND	4.0000		
Silver, total	ug/L	MW-85	10/13/2023	ND	4.0000		
Silver, total	ug/L	MW-85	04/17/2024	ND	4.0000		
Silver, total	ug/L	MW-85	10/15/2024	ND	4.0000		
Thallium, total	ug/L	MW-85	10/16/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-85	01/14/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-85	04/03/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-85	07/06/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-85	10/01/2015	ND	1.0000	2.0000	**
Thallium, total	ug/L	MW-85	04/14/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-85	10/13/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-85	04/10/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-85	10/09/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-85	04/17/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-85	10/22/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-85	04/22/2019	ND	2.0000		
Thallium, total	ug/L	MW-85	10/23/2019	ND	2.0000		
Thallium, total	ug/L	MW-85	04/10/2020	ND	2.0000		
Thallium, total	ug/L	MW-85	10/19/2020	ND	2.0000		
Thallium, total	ug/L	MW-85	04/05/2021	ND	2.0000		
Thallium, total	ug/L	MW-85	10/08/2021	ND	2.0000		
Thallium, total	ug/L	MW-85	04/06/2022	ND	2.0000		
Thallium, total	ug/L	MW-85	10/25/2022	ND	2.0000		
Thallium, total	ug/L	MW-85	04/11/2023	ND	2.0000		
Thallium, total	ug/L	MW-85	10/13/2023	ND	2.0000		
Thallium, total	ug/L	MW-85	04/17/2024	ND	2.0000		
Thallium, total	ug/L	MW-85	10/15/2024	ND	2.0000		
Vanadium, total	ug/L	MW-85	10/16/2014	ND	20.0000		
Vanadium, total	ug/L	MW-85	01/14/2015	ND	20.0000		
Vanadium, total	ug/L	MW-85	04/03/2015	ND	20.0000		
Vanadium, total	ug/L	MW-85	07/06/2015	ND	20.0000		
Vanadium, total	ug/L	MW-85	10/01/2015	ND	20.0000		
Vanadium, total	ug/L	MW-85	04/14/2016	ND	20.0000		
Vanadium, total	ug/L	MW-85	10/13/2016	ND	20.0000		
Vanadium, total	ug/L	MW-85	04/10/2017	ND	20.0000		
Vanadium, total	ug/L	MW-85	10/09/2017	ND	20.0000		
Vanadium, total	ug/L	MW-85	04/17/2018	ND	20.0000		
Vanadium, total	ug/L	MW-85	10/22/2018	ND	20.0000		
Vanadium, total	ug/L	MW-85	04/22/2019	ND	20.0000		
Vanadium, total	ug/L	MW-85	10/23/2019	ND	20.0000		
Vanadium, total	ug/L	MW-85	04/10/2020	ND	20.0000		
Vanadium, total	ug/L	MW-85	10/19/2020	ND	20.0000		
Vanadium, total	ug/L	MW-85	04/05/2021	ND	20.0000		
Vanadium, total	ug/L	MW-85	10/08/2021	ND	20.0000		
Vanadium, total	ug/L	MW-85	04/06/2022	ND	20.0000		
Vanadium, total	ug/L	MW-85	10/25/2022	ND	20.0000		
Vanadium, total	ug/L	MW-85	04/11/2023	ND	20.0000		
Vanadium, total	ug/L	MW-85	10/13/2023	ND	20.0000		
Vanadium, total	ug/L	MW-85	04/17/2024	ND	20.0000		
Vanadium, total	ug/L	MW-85	10/15/2024	ND	20.0000		
Zinc, total	ug/L	MW-85	10/16/2014	ND	20.0000		
Zinc, total	ug/L	MW-85	01/14/2015	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-85	04/03/2015		27.0000		
Zinc, total	ug/L	MW-85	07/06/2015		9.1000		
Zinc, total	ug/L	MW-85	10/01/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-85	04/14/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-85	10/13/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-85	04/10/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-85	10/09/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-85	04/17/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-85	10/22/2018		125.0000		*
Zinc, total	ug/L	MW-85	04/22/2019	ND	20.0000		
Zinc, total	ug/L	MW-85	10/23/2019	ND	20.0000		
Zinc, total	ug/L	MW-85	04/10/2020	ND	20.0000		
Zinc, total	ug/L	MW-85	10/19/2020	ND	20.0000		
Zinc, total	ug/L	MW-85	04/05/2021	ND	20.0000		
Zinc, total	ug/L	MW-85	10/08/2021	ND	20.0000		
Zinc, total	ug/L	MW-85	04/06/2022	ND	20.0000		
Zinc, total	ug/L	MW-85	10/25/2022	ND	20.0000		
Zinc, total	ug/L	MW-85	04/11/2023	ND	20.0000		
Zinc, total	ug/L	MW-85	10/13/2023	ND	20.0000		
Zinc, total	ug/L	MW-85	04/17/2024	ND	20.0000		
Zinc, total	ug/L	MW-85	10/15/2024	ND	20.0000		
Antimony, total	ug/L	MW-98	10/13/2016	ND	2.0000		
Antimony, total	ug/L	MW-98	04/10/2017	ND	2.0000		
Antimony, total	ug/L	MW-98	10/09/2017	ND	2.0000		
Antimony, total	ug/L	MW-98	04/17/2018	ND	2.0000		
Antimony, total	ug/L	MW-98	10/22/2018	ND	2.0000		
Antimony, total	ug/L	MW-98	04/22/2019	ND	2.0000		
Antimony, total	ug/L	MW-98	10/23/2019	ND	2.0000		
Antimony, total	ug/L	MW-98	04/10/2020	ND	2.0000		
Antimony, total	ug/L	MW-98	10/19/2020	ND	2.0000		
Antimony, total	ug/L	MW-98	04/05/2021	ND	2.0000		
Antimony, total	ug/L	MW-98	10/08/2021	ND	2.0000		
Antimony, total	ug/L	MW-98	04/06/2022	ND	2.0000		
Antimony, total	ug/L	MW-98	10/25/2022	ND	2.0000		
Antimony, total	ug/L	MW-98	04/11/2023	ND	2.0000		
Antimony, total	ug/L	MW-98	10/13/2023	ND	2.0000		
Antimony, total	ug/L	MW-98	04/17/2024	ND	2.0000		
Antimony, total	ug/L	MW-98	10/15/2024	ND	2.0000		
Arsenic, total	ug/L	MW-98	10/13/2016		7.4000		
Arsenic, total	ug/L	MW-98	04/10/2017		25.3000		*
Arsenic, total	ug/L	MW-98	10/09/2017	ND	4.0000		
Arsenic, total	ug/L	MW-98	04/17/2018		7.8000		
Arsenic, total	ug/L	MW-98	10/22/2018	ND	4.0000		
Arsenic, total	ug/L	MW-98	04/22/2019	ND	4.0000		
Arsenic, total	ug/L	MW-98	10/23/2019		4.8000		
Arsenic, total	ug/L	MW-98	04/10/2020	ND	4.0000		
Arsenic, total	ug/L	MW-98	10/19/2020	ND	4.0000		
Arsenic, total	ug/L	MW-98	04/05/2021	ND	4.0000		
Arsenic, total	ug/L	MW-98	10/08/2021	ND	4.0000		
Arsenic, total	ug/L	MW-98	04/06/2022	ND	4.0000		
Arsenic, total	ug/L	MW-98	10/25/2022	ND	4.0000		
Arsenic, total	ug/L	MW-98	04/11/2023		6.4000		
Arsenic, total	ug/L	MW-98	10/13/2023		6.3000		
Arsenic, total	ug/L	MW-98	04/17/2024		48.0000		*
Arsenic, total	ug/L	MW-98	10/15/2024	ND	4.0000		
Barium, total	ug/L	MW-98	10/13/2016		171.0000		
Barium, total	ug/L	MW-98	04/10/2017		241.0000		
Barium, total	ug/L	MW-98	10/09/2017		129.0000		
Barium, total	ug/L	MW-98	04/17/2018		193.0000		
Barium, total	ug/L	MW-98	10/22/2018		102.0000		
Barium, total	ug/L	MW-98	04/22/2019		133.0000		
Barium, total	ug/L	MW-98	10/23/2019		94.4000		
Barium, total	ug/L	MW-98	04/10/2020		157.0000		
Barium, total	ug/L	MW-98	10/19/2020		147.0000		
Barium, total	ug/L	MW-98	04/05/2021		125.0000		
Barium, total	ug/L	MW-98	10/08/2021		149.0000		
Barium, total	ug/L	MW-98	04/06/2022		117.0000		
Barium, total	ug/L	MW-98	10/25/2022		183.0000		
Barium, total	ug/L	MW-98	04/11/2023		136.0000		
Barium, total	ug/L	MW-98	10/13/2023		217.0000		
Barium, total	ug/L	MW-98	04/17/2024		325.0000		
Barium, total	ug/L	MW-98	10/15/2024		137.0000		
Beryllium, total	ug/L	MW-98	10/13/2016	ND	4.0000		
Beryllium, total	ug/L	MW-98	04/10/2017	ND	4.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Beryllium, total	ug/L	MW-98	10/09/2017	ND	4.0000		
Beryllium, total	ug/L	MW-98	04/17/2018	ND	4.0000		
Beryllium, total	ug/L	MW-98	10/22/2018	ND	4.0000		
Beryllium, total	ug/L	MW-98	04/22/2019	ND	4.0000		
Beryllium, total	ug/L	MW-98	10/23/2019	ND	4.0000		
Beryllium, total	ug/L	MW-98	04/10/2020	ND	4.0000		
Beryllium, total	ug/L	MW-98	10/19/2020	ND	4.0000		
Beryllium, total	ug/L	MW-98	04/05/2021	ND	4.0000		
Beryllium, total	ug/L	MW-98	10/08/2021	ND	4.0000		
Beryllium, total	ug/L	MW-98	04/06/2022	ND	4.0000		
Beryllium, total	ug/L	MW-98	10/25/2022	ND	4.0000		
Beryllium, total	ug/L	MW-98	04/11/2023	ND	4.0000		
Beryllium, total	ug/L	MW-98	10/13/2023	ND	4.0000		
Beryllium, total	ug/L	MW-98	04/17/2024	ND	4.0000		
Beryllium, total	ug/L	MW-98	10/15/2024	ND	4.0000		
Cadmium, total	ug/L	MW-98	10/13/2016	ND	0.8000		
Cadmium, total	ug/L	MW-98	04/10/2017	ND	0.8000		
Cadmium, total	ug/L	MW-98	10/09/2017	ND	0.8000		
Cadmium, total	ug/L	MW-98	04/17/2018	ND	0.8000		
Cadmium, total	ug/L	MW-98	10/22/2018	ND	0.8000		
Cadmium, total	ug/L	MW-98	04/22/2019	ND	0.8000		
Cadmium, total	ug/L	MW-98	10/23/2019	ND	0.8000		
Cadmium, total	ug/L	MW-98	04/10/2020	ND	0.8000		
Cadmium, total	ug/L	MW-98	10/19/2020	ND	0.8000		
Cadmium, total	ug/L	MW-98	04/05/2021	ND	0.8000		
Cadmium, total	ug/L	MW-98	10/08/2021	ND	0.8000		
Cadmium, total	ug/L	MW-98	04/06/2022	ND	0.8000		
Cadmium, total	ug/L	MW-98	10/25/2022	ND	0.8000		
Cadmium, total	ug/L	MW-98	04/11/2023	ND	0.8000		
Cadmium, total	ug/L	MW-98	10/13/2023	ND	0.8000		
Cadmium, total	ug/L	MW-98	04/17/2024	ND	0.8000		
Cadmium, total	ug/L	MW-98	10/15/2024	ND	0.8000		
Chromium, total	ug/L	MW-98	10/13/2016	ND	8.0000		
Chromium, total	ug/L	MW-98	04/10/2017		9.8000		
Chromium, total	ug/L	MW-98	10/09/2017	ND	8.0000		
Chromium, total	ug/L	MW-98	04/17/2018	ND	8.0000		
Chromium, total	ug/L	MW-98	10/22/2018	ND	8.0000		
Chromium, total	ug/L	MW-98	04/22/2019	ND	8.0000		
Chromium, total	ug/L	MW-98	10/23/2019	ND	8.0000		
Chromium, total	ug/L	MW-98	04/10/2020	ND	8.0000		
Chromium, total	ug/L	MW-98	10/19/2020	ND	8.0000		
Chromium, total	ug/L	MW-98	04/05/2021	ND	8.0000		
Chromium, total	ug/L	MW-98	10/08/2021	ND	8.0000		
Chromium, total	ug/L	MW-98	04/06/2022	ND	8.0000		
Chromium, total	ug/L	MW-98	10/25/2022	ND	8.0000		
Chromium, total	ug/L	MW-98	04/11/2023	ND	8.0000		
Chromium, total	ug/L	MW-98	10/13/2023	ND	8.0000		
Chromium, total	ug/L	MW-98	04/17/2024	ND	8.0000		
Chromium, total	ug/L	MW-98	10/15/2024	ND	8.0000		
Cobalt, total	ug/L	MW-98	10/13/2016		3.0000		
Cobalt, total	ug/L	MW-98	04/10/2017		4.4000		
Cobalt, total	ug/L	MW-98	10/09/2017		0.8000		
Cobalt, total	ug/L	MW-98	04/17/2018		5.0000		
Cobalt, total	ug/L	MW-98	10/22/2018	ND	0.8000		
Cobalt, total	ug/L	MW-98	04/22/2019		1.3000		
Cobalt, total	ug/L	MW-98	10/23/2019		2.4000		
Cobalt, total	ug/L	MW-98	04/10/2020		2.0000		
Cobalt, total	ug/L	MW-98	10/19/2020		2.2000		
Cobalt, total	ug/L	MW-98	04/05/2021		0.6000		
Cobalt, total	ug/L	MW-98	10/08/2021		2.2000		
Cobalt, total	ug/L	MW-98	04/06/2022		0.7000		
Cobalt, total	ug/L	MW-98	10/25/2022		3.6000		
Cobalt, total	ug/L	MW-98	04/11/2023		2.1000		
Cobalt, total	ug/L	MW-98	10/13/2023		5.5000		
Cobalt, total	ug/L	MW-98	04/17/2024		4.7000		
Cobalt, total	ug/L	MW-98	10/15/2024		1.9000		
Copper, total	ug/L	MW-98	10/13/2016	ND	4.0000		
Copper, total	ug/L	MW-98	04/10/2017	ND	4.0000		
Copper, total	ug/L	MW-98	10/09/2017	ND	4.0000		
Copper, total	ug/L	MW-98	04/17/2018	ND	4.0000		
Copper, total	ug/L	MW-98	10/22/2018	ND	4.0000		
Copper, total	ug/L	MW-98	04/22/2019	ND	4.0000		
Copper, total	ug/L	MW-98	10/23/2019	ND	4.0000		
Copper, total	ug/L	MW-98	04/10/2020	ND	4.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Copper, total	ug/L	MW-98	10/19/2020	ND	4.0000		
Copper, total	ug/L	MW-98	04/05/2021		4.1000		
Copper, total	ug/L	MW-98	10/08/2021	ND	4.0000		
Copper, total	ug/L	MW-98	04/06/2022	ND	4.0000		
Copper, total	ug/L	MW-98	10/25/2022	ND	4.0000		
Copper, total	ug/L	MW-98	04/11/2023	ND	4.0000		
Copper, total	ug/L	MW-98	10/13/2023	ND	4.0000		
Copper, total	ug/L	MW-98	04/17/2024	ND	4.0000		
Copper, total	ug/L	MW-98	10/15/2024	ND	4.0000		
Lead, total	ug/L	MW-98	10/13/2016	ND	4.0000		
Lead, total	ug/L	MW-98	04/10/2017	ND	4.0000		
Lead, total	ug/L	MW-98	10/09/2017	ND	4.0000		
Lead, total	ug/L	MW-98	04/17/2018	ND	4.0000		
Lead, total	ug/L	MW-98	10/22/2018	ND	4.0000		
Lead, total	ug/L	MW-98	04/22/2019	ND	4.0000		
Lead, total	ug/L	MW-98	10/23/2019	ND	4.0000		
Lead, total	ug/L	MW-98	04/10/2020	ND	4.0000		
Lead, total	ug/L	MW-98	10/19/2020	ND	4.0000		
Lead, total	ug/L	MW-98	04/05/2021	ND	4.0000		
Lead, total	ug/L	MW-98	10/08/2021	ND	4.0000		
Lead, total	ug/L	MW-98	04/06/2022	ND	4.0000		
Lead, total	ug/L	MW-98	10/25/2022	ND	4.0000		
Lead, total	ug/L	MW-98	04/11/2023	ND	4.0000		
Lead, total	ug/L	MW-98	10/13/2023	ND	4.0000		
Lead, total	ug/L	MW-98	04/17/2024	ND	4.0000		
Lead, total	ug/L	MW-98	10/15/2024	ND	4.0000		
Nickel, total	ug/L	MW-98	10/13/2016	ND	4.0000		
Nickel, total	ug/L	MW-98	04/10/2017	ND	4.0000		
Nickel, total	ug/L	MW-98	10/09/2017	ND	4.0000		
Nickel, total	ug/L	MW-98	04/17/2018	ND	4.0000		
Nickel, total	ug/L	MW-98	10/22/2018	ND	4.0000		
Nickel, total	ug/L	MW-98	04/22/2019	ND	4.0000		
Nickel, total	ug/L	MW-98	10/23/2019	ND	4.0000		
Nickel, total	ug/L	MW-98	04/10/2020	ND	4.0000		
Nickel, total	ug/L	MW-98	10/19/2020	ND	4.0000		
Nickel, total	ug/L	MW-98	04/05/2021	ND	4.0000		
Nickel, total	ug/L	MW-98	10/08/2021	ND	4.0000		
Nickel, total	ug/L	MW-98	04/06/2022	ND	4.0000		
Nickel, total	ug/L	MW-98	10/25/2022	ND	4.0000		
Nickel, total	ug/L	MW-98	04/11/2023	ND	4.0000		
Nickel, total	ug/L	MW-98	10/13/2023	ND	4.0000		
Nickel, total	ug/L	MW-98	04/17/2024	ND	4.0000		
Nickel, total	ug/L	MW-98	10/15/2024	ND	4.0000		
Selenium, total	ug/L	MW-98	10/13/2016	ND	4.0000		
Selenium, total	ug/L	MW-98	04/10/2017	ND	4.0000		
Selenium, total	ug/L	MW-98	10/09/2017	ND	4.0000		
Selenium, total	ug/L	MW-98	04/17/2018	ND	4.0000		
Selenium, total	ug/L	MW-98	10/22/2018	ND	4.0000		
Selenium, total	ug/L	MW-98	04/22/2019	ND	4.0000		
Selenium, total	ug/L	MW-98	10/23/2019	ND	4.0000		
Selenium, total	ug/L	MW-98	04/10/2020	ND	4.0000		
Selenium, total	ug/L	MW-98	10/19/2020	ND	4.0000		
Selenium, total	ug/L	MW-98	04/05/2021	ND	4.0000		
Selenium, total	ug/L	MW-98	10/08/2021	ND	4.0000		
Selenium, total	ug/L	MW-98	04/06/2022	ND	4.0000		
Selenium, total	ug/L	MW-98	10/25/2022	ND	4.0000		
Selenium, total	ug/L	MW-98	04/11/2023	ND	4.0000		
Selenium, total	ug/L	MW-98	10/13/2023	ND	4.0000		
Selenium, total	ug/L	MW-98	04/17/2024	ND	4.0000		
Selenium, total	ug/L	MW-98	10/15/2024	ND	4.0000		
Silver, total	ug/L	MW-98	10/13/2016	ND	4.0000		
Silver, total	ug/L	MW-98	04/10/2017	ND	4.0000		
Silver, total	ug/L	MW-98	10/09/2017	ND	4.0000		
Silver, total	ug/L	MW-98	04/17/2018	ND	4.0000		
Silver, total	ug/L	MW-98	10/22/2018	ND	4.0000		
Silver, total	ug/L	MW-98	04/22/2019	ND	4.0000		
Silver, total	ug/L	MW-98	10/23/2019	ND	4.0000		
Silver, total	ug/L	MW-98	04/10/2020	ND	4.0000		
Silver, total	ug/L	MW-98	10/19/2020	ND	4.0000		
Silver, total	ug/L	MW-98	04/05/2021	ND	4.0000		
Silver, total	ug/L	MW-98	10/08/2021	ND	4.0000		
Silver, total	ug/L	MW-98	04/06/2022	ND	4.0000		
Silver, total	ug/L	MW-98	10/25/2022	ND	4.0000		
Silver, total	ug/L	MW-98	04/11/2023	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	
Silver, total	ug/L	MW-98	10/13/2023	ND	4.0000		
Silver, total	ug/L	MW-98	04/17/2024	ND	4.0000		
Silver, total	ug/L	MW-98	10/15/2024	ND	4.0000		
Thallium, total	ug/L	MW-98	10/13/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-98	04/10/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-98	10/09/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-98	04/17/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-98	10/22/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-98	04/22/2019	ND	2.0000		
Thallium, total	ug/L	MW-98	10/23/2019	ND	2.0000		
Thallium, total	ug/L	MW-98	04/10/2020	ND	2.0000		
Thallium, total	ug/L	MW-98	10/19/2020	ND	2.0000		
Thallium, total	ug/L	MW-98	04/05/2021	ND	2.0000		
Thallium, total	ug/L	MW-98	10/08/2021	ND	2.0000		
Thallium, total	ug/L	MW-98	04/06/2022	ND	2.0000		
Thallium, total	ug/L	MW-98	10/25/2022	ND	2.0000		
Thallium, total	ug/L	MW-98	04/11/2023	ND	2.0000		
Thallium, total	ug/L	MW-98	10/13/2023	ND	2.0000		
Thallium, total	ug/L	MW-98	04/17/2024	ND	2.0000		
Thallium, total	ug/L	MW-98	10/15/2024	ND	2.0000		
Vanadium, total	ug/L	MW-98	10/13/2016	ND	20.0000		
Vanadium, total	ug/L	MW-98	04/10/2017	ND	20.0000		
Vanadium, total	ug/L	MW-98	10/09/2017	ND	20.0000		
Vanadium, total	ug/L	MW-98	04/17/2018	ND	20.0000		
Vanadium, total	ug/L	MW-98	10/22/2018	ND	20.0000		
Vanadium, total	ug/L	MW-98	04/22/2019	ND	20.0000		
Vanadium, total	ug/L	MW-98	10/23/2019	ND	20.0000		
Vanadium, total	ug/L	MW-98	04/10/2020	ND	20.0000		
Vanadium, total	ug/L	MW-98	10/19/2020	ND	20.0000		
Vanadium, total	ug/L	MW-98	04/05/2021	ND	20.0000		
Vanadium, total	ug/L	MW-98	10/08/2021	ND	20.0000		
Vanadium, total	ug/L	MW-98	04/06/2022	ND	20.0000		
Vanadium, total	ug/L	MW-98	10/25/2022	ND	20.0000		
Vanadium, total	ug/L	MW-98	04/11/2023	ND	20.0000		
Vanadium, total	ug/L	MW-98	10/13/2023	ND	20.0000		
Vanadium, total	ug/L	MW-98	04/17/2024	ND	20.0000		
Vanadium, total	ug/L	MW-98	10/15/2024	ND	20.0000		
Zinc, total	ug/L	MW-98	10/13/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-98	04/10/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-98	10/09/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-98	04/17/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-98	10/22/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-98	04/22/2019	ND	20.0000		
Zinc, total	ug/L	MW-98	10/23/2019	ND	20.0000		
Zinc, total	ug/L	MW-98	04/10/2020	ND	20.0000		
Zinc, total	ug/L	MW-98	10/19/2020	ND	20.0000		
Zinc, total	ug/L	MW-98	04/05/2021	ND	20.0000		
Zinc, total	ug/L	MW-98	10/08/2021	ND	20.0000		
Zinc, total	ug/L	MW-98	04/06/2022	ND	20.0000		
Zinc, total	ug/L	MW-98	10/25/2022	ND	20.0000		
Zinc, total	ug/L	MW-98	04/11/2023	ND	20.0000		
Zinc, total	ug/L	MW-98	10/13/2023	ND	20.0000		
Zinc, total	ug/L	MW-98	04/17/2024	ND	20.0000		
Zinc, total	ug/L	MW-98	10/15/2024	ND	20.0000		
Antimony, total	ug/L	MW-99	10/13/2016	ND	2.0000		
Antimony, total	ug/L	MW-99	04/10/2017	ND	2.0000		
Antimony, total	ug/L	MW-99	10/09/2017	ND	2.0000		
Antimony, total	ug/L	MW-99	04/17/2018	ND	2.0000		
Antimony, total	ug/L	MW-99	10/22/2018	ND	2.0000		
Antimony, total	ug/L	MW-99	04/22/2019	ND	2.0000		
Antimony, total	ug/L	MW-99	10/23/2019	ND	2.0000		
Antimony, total	ug/L	MW-99	04/10/2020	ND	2.0000		
Antimony, total	ug/L	MW-99	10/19/2020	ND	2.0000		
Antimony, total	ug/L	MW-99	04/05/2021	ND	2.0000		
Antimony, total	ug/L	MW-99	10/08/2021	ND	2.0000		
Antimony, total	ug/L	MW-99	04/06/2022	ND	2.0000		
Antimony, total	ug/L	MW-99	10/25/2022	ND	2.0000		
Antimony, total	ug/L	MW-99	04/11/2023	ND	2.0000		
Antimony, total	ug/L	MW-99	10/13/2023	ND	2.0000		
Antimony, total	ug/L	MW-99	04/18/2024	ND	2.0000		
Antimony, total	ug/L	MW-99	10/15/2024	ND	2.0000		
Arsenic, total	ug/L	MW-99	10/13/2016	ND	4.0000		
Arsenic, total	ug/L	MW-99	04/10/2017	ND	4.0000		
Arsenic, total	ug/L	MW-99	10/09/2017	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	
Arsenic, total	ug/L	MW-99	04/17/2018	ND	4.0000		
Arsenic, total	ug/L	MW-99	10/22/2018	ND	4.0000		
Arsenic, total	ug/L	MW-99	04/22/2019	ND	4.0000		
Arsenic, total	ug/L	MW-99	10/23/2019	ND	4.0000		
Arsenic, total	ug/L	MW-99	04/10/2020	ND	4.0000		
Arsenic, total	ug/L	MW-99	10/19/2020	ND	4.0000		
Arsenic, total	ug/L	MW-99	04/05/2021	ND	4.0000		
Arsenic, total	ug/L	MW-99	10/08/2021	ND	4.0000		
Arsenic, total	ug/L	MW-99	04/06/2022	ND	4.0000		
Arsenic, total	ug/L	MW-99	10/25/2022	ND	4.0000		
Arsenic, total	ug/L	MW-99	04/11/2023	ND	4.0000		
Arsenic, total	ug/L	MW-99	10/13/2023	ND	4.0000		
Arsenic, total	ug/L	MW-99	04/18/2024	ND	4.0000		
Arsenic, total	ug/L	MW-99	10/15/2024	ND	4.0000		
Barium, total	ug/L	MW-99	10/13/2016		131.0000		
Barium, total	ug/L	MW-99	04/10/2017		109.0000		
Barium, total	ug/L	MW-99	10/09/2017		140.0000		
Barium, total	ug/L	MW-99	04/17/2018		93.9000		
Barium, total	ug/L	MW-99	10/22/2018		81.0000		
Barium, total	ug/L	MW-99	04/22/2019		110.0000		
Barium, total	ug/L	MW-99	10/23/2019		123.0000		
Barium, total	ug/L	MW-99	04/10/2020		124.0000		
Barium, total	ug/L	MW-99	10/19/2020		118.0000		
Barium, total	ug/L	MW-99	04/05/2021		117.0000		
Barium, total	ug/L	MW-99	10/08/2021		130.0000		
Barium, total	ug/L	MW-99	04/06/2022		110.0000		
Barium, total	ug/L	MW-99	10/25/2022		134.0000		
Barium, total	ug/L	MW-99	04/11/2023		89.4000		
Barium, total	ug/L	MW-99	10/13/2023		134.0000		
Barium, total	ug/L	MW-99	04/18/2024		164.0000		
Barium, total	ug/L	MW-99	10/15/2024		88.8000		
Beryllium, total	ug/L	MW-99	10/13/2016	ND	4.0000		
Beryllium, total	ug/L	MW-99	04/10/2017	ND	4.0000		
Beryllium, total	ug/L	MW-99	10/09/2017	ND	4.0000		
Beryllium, total	ug/L	MW-99	04/17/2018	ND	4.0000		
Beryllium, total	ug/L	MW-99	10/22/2018	ND	4.0000		
Beryllium, total	ug/L	MW-99	04/22/2019	ND	4.0000		
Beryllium, total	ug/L	MW-99	10/23/2019	ND	4.0000		
Beryllium, total	ug/L	MW-99	04/10/2020	ND	4.0000		
Beryllium, total	ug/L	MW-99	10/19/2020	ND	4.0000		
Beryllium, total	ug/L	MW-99	04/05/2021	ND	4.0000		
Beryllium, total	ug/L	MW-99	10/08/2021	ND	4.0000		
Beryllium, total	ug/L	MW-99	04/06/2022	ND	4.0000		
Beryllium, total	ug/L	MW-99	10/25/2022	ND	4.0000		
Beryllium, total	ug/L	MW-99	04/11/2023	ND	4.0000		
Beryllium, total	ug/L	MW-99	10/13/2023	ND	4.0000		
Beryllium, total	ug/L	MW-99	04/18/2024	ND	4.0000		
Beryllium, total	ug/L	MW-99	10/15/2024	ND	4.0000		
Cadmium, total	ug/L	MW-99	10/13/2016	ND	0.8000		
Cadmium, total	ug/L	MW-99	04/10/2017	ND	0.8000		
Cadmium, total	ug/L	MW-99	10/09/2017	ND	0.8000		
Cadmium, total	ug/L	MW-99	04/17/2018	ND	0.8000		
Cadmium, total	ug/L	MW-99	10/22/2018	ND	0.8000		
Cadmium, total	ug/L	MW-99	04/22/2019	ND	0.8000		
Cadmium, total	ug/L	MW-99	10/23/2019	ND	0.8000		
Cadmium, total	ug/L	MW-99	04/10/2020	ND	0.8000		
Cadmium, total	ug/L	MW-99	10/19/2020	ND	0.8000		
Cadmium, total	ug/L	MW-99	04/05/2021	ND	0.8000		
Cadmium, total	ug/L	MW-99	10/08/2021	ND	0.8000		
Cadmium, total	ug/L	MW-99	04/06/2022	ND	0.8000		
Cadmium, total	ug/L	MW-99	10/25/2022	ND	0.8000		
Cadmium, total	ug/L	MW-99	04/11/2023	ND	0.8000		
Cadmium, total	ug/L	MW-99	10/13/2023	ND	0.8000		
Cadmium, total	ug/L	MW-99	04/18/2024	ND	0.8000		
Cadmium, total	ug/L	MW-99	10/15/2024	ND	0.8000		
Chromium, total	ug/L	MW-99	10/13/2016	ND	8.0000		
Chromium, total	ug/L	MW-99	04/10/2017		23.4000		
Chromium, total	ug/L	MW-99	10/09/2017	ND	8.0000		
Chromium, total	ug/L	MW-99	04/17/2018	ND	8.0000		
Chromium, total	ug/L	MW-99	10/22/2018	ND	8.0000		
Chromium, total	ug/L	MW-99	04/22/2019	ND	8.0000		
Chromium, total	ug/L	MW-99	10/23/2019	ND	8.0000		
Chromium, total	ug/L	MW-99	04/10/2020	ND	8.0000		
Chromium, total	ug/L	MW-99	10/19/2020	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-99	04/05/2021	ND	8.0000		
Chromium, total	ug/L	MW-99	10/08/2021	ND	8.0000		
Chromium, total	ug/L	MW-99	04/06/2022	ND	8.0000		
Chromium, total	ug/L	MW-99	10/25/2022	ND	8.0000		
Chromium, total	ug/L	MW-99	04/11/2023	ND	8.0000		
Chromium, total	ug/L	MW-99	10/13/2023	ND	8.0000		
Chromium, total	ug/L	MW-99	04/18/2024	ND	8.0000		
Chromium, total	ug/L	MW-99	10/15/2024	ND	8.0000		
Cobalt, total	ug/L	MW-99	10/13/2016		5.2000		
Cobalt, total	ug/L	MW-99	04/10/2017		3.4000		
Cobalt, total	ug/L	MW-99	10/09/2017		6.0000		
Cobalt, total	ug/L	MW-99	04/17/2018		2.5000		
Cobalt, total	ug/L	MW-99	10/22/2018		0.8000		*
Cobalt, total	ug/L	MW-99	04/22/2019		3.1000		
Cobalt, total	ug/L	MW-99	10/23/2019		2.7000		
Cobalt, total	ug/L	MW-99	04/10/2020		4.1000		
Cobalt, total	ug/L	MW-99	10/19/2020		3.8000		
Cobalt, total	ug/L	MW-99	04/05/2021		3.2000		
Cobalt, total	ug/L	MW-99	10/08/2021		4.0000		
Cobalt, total	ug/L	MW-99	04/06/2022		3.5000		
Cobalt, total	ug/L	MW-99	10/25/2022		3.6000		
Cobalt, total	ug/L	MW-99	04/11/2023		2.2000		
Cobalt, total	ug/L	MW-99	10/13/2023		3.3000		
Cobalt, total	ug/L	MW-99	04/18/2024		4.1000		
Cobalt, total	ug/L	MW-99	10/15/2024		0.9000		*
Copper, total	ug/L	MW-99	10/13/2016	ND	4.0000		
Copper, total	ug/L	MW-99	04/10/2017	ND	4.0000		
Copper, total	ug/L	MW-99	10/09/2017	ND	4.0000		
Copper, total	ug/L	MW-99	04/17/2018	ND	4.0000		
Copper, total	ug/L	MW-99	10/22/2018	ND	4.0000		
Copper, total	ug/L	MW-99	04/22/2019	ND	4.0000		
Copper, total	ug/L	MW-99	10/23/2019	ND	4.0000		
Copper, total	ug/L	MW-99	04/10/2020	ND	4.0000		
Copper, total	ug/L	MW-99	10/19/2020	ND	4.0000		
Copper, total	ug/L	MW-99	04/05/2021		5.3000		
Copper, total	ug/L	MW-99	10/08/2021	ND	4.0000		
Copper, total	ug/L	MW-99	04/06/2022	ND	4.0000		
Copper, total	ug/L	MW-99	10/25/2022	ND	4.0000		
Copper, total	ug/L	MW-99	04/11/2023	ND	4.0000		
Copper, total	ug/L	MW-99	10/13/2023	ND	4.0000		
Copper, total	ug/L	MW-99	04/18/2024	ND	4.0000		
Copper, total	ug/L	MW-99	10/15/2024	ND	4.0000		
Lead, total	ug/L	MW-99	10/13/2016	ND	4.0000		
Lead, total	ug/L	MW-99	04/10/2017	ND	4.0000		
Lead, total	ug/L	MW-99	10/09/2017	ND	4.0000		
Lead, total	ug/L	MW-99	04/17/2018	ND	4.0000		
Lead, total	ug/L	MW-99	10/22/2018	ND	4.0000		
Lead, total	ug/L	MW-99	04/22/2019	ND	4.0000		
Lead, total	ug/L	MW-99	10/23/2019	ND	4.0000		
Lead, total	ug/L	MW-99	04/10/2020	ND	4.0000		
Lead, total	ug/L	MW-99	10/19/2020	ND	4.0000		
Lead, total	ug/L	MW-99	04/05/2021	ND	4.0000		
Lead, total	ug/L	MW-99	10/08/2021	ND	4.0000		
Lead, total	ug/L	MW-99	04/06/2022	ND	4.0000		
Lead, total	ug/L	MW-99	10/25/2022	ND	4.0000		
Lead, total	ug/L	MW-99	04/11/2023	ND	4.0000		
Lead, total	ug/L	MW-99	10/13/2023	ND	4.0000		
Lead, total	ug/L	MW-99	04/18/2024	ND	4.0000		
Lead, total	ug/L	MW-99	10/15/2024	ND	4.0000		
Nickel, total	ug/L	MW-99	10/13/2016		5.6000		
Nickel, total	ug/L	MW-99	04/10/2017		5.1000		
Nickel, total	ug/L	MW-99	10/09/2017		8.8000		
Nickel, total	ug/L	MW-99	04/17/2018		4.3000		
Nickel, total	ug/L	MW-99	10/22/2018	ND	4.0000		
Nickel, total	ug/L	MW-99	04/22/2019		5.1000		
Nickel, total	ug/L	MW-99	10/23/2019		7.1000		
Nickel, total	ug/L	MW-99	04/10/2020		6.5000		
Nickel, total	ug/L	MW-99	10/19/2020		6.9000		
Nickel, total	ug/L	MW-99	04/05/2021		5.1000		
Nickel, total	ug/L	MW-99	10/08/2021		5.5000		
Nickel, total	ug/L	MW-99	04/06/2022		5.3000		
Nickel, total	ug/L	MW-99	10/25/2022		6.2000		
Nickel, total	ug/L	MW-99	04/11/2023	ND	4.0000		
Nickel, total	ug/L	MW-99	10/13/2023		5.3000		

* - 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	
Nickel, total	ug/L	MW-99	04/18/2024		6.3000		
Nickel, total	ug/L	MW-99	10/15/2024	ND	4.0000		
Selenium, total	ug/L	MW-99	10/13/2016	ND	4.0000		
Selenium, total	ug/L	MW-99	04/10/2017	ND	4.0000		
Selenium, total	ug/L	MW-99	10/09/2017	ND	4.0000		
Selenium, total	ug/L	MW-99	04/17/2018	ND	4.0000		
Selenium, total	ug/L	MW-99	10/22/2018	ND	4.0000		
Selenium, total	ug/L	MW-99	04/22/2019	ND	4.0000		
Selenium, total	ug/L	MW-99	10/23/2019	ND	4.0000		
Selenium, total	ug/L	MW-99	04/10/2020	ND	4.0000		
Selenium, total	ug/L	MW-99	10/19/2020	ND	4.0000		
Selenium, total	ug/L	MW-99	04/05/2021	ND	4.0000		
Selenium, total	ug/L	MW-99	10/08/2021	ND	4.0000		
Selenium, total	ug/L	MW-99	04/06/2022	ND	4.0000		
Selenium, total	ug/L	MW-99	10/25/2022	ND	4.0000		
Selenium, total	ug/L	MW-99	04/11/2023	ND	4.0000		
Selenium, total	ug/L	MW-99	10/13/2023	ND	4.0000		
Selenium, total	ug/L	MW-99	04/18/2024	ND	4.0000		
Selenium, total	ug/L	MW-99	10/15/2024	ND	4.0000		
Silver, total	ug/L	MW-99	10/13/2016	ND	4.0000		
Silver, total	ug/L	MW-99	04/10/2017	ND	4.0000		
Silver, total	ug/L	MW-99	10/09/2017	ND	4.0000		
Silver, total	ug/L	MW-99	04/17/2018	ND	4.0000		
Silver, total	ug/L	MW-99	10/22/2018	ND	4.0000		
Silver, total	ug/L	MW-99	04/22/2019	ND	4.0000		
Silver, total	ug/L	MW-99	10/23/2019	ND	4.0000		
Silver, total	ug/L	MW-99	04/10/2020	ND	4.0000		
Silver, total	ug/L	MW-99	10/19/2020	ND	4.0000		
Silver, total	ug/L	MW-99	04/05/2021	ND	4.0000		
Silver, total	ug/L	MW-99	10/08/2021	ND	4.0000		
Silver, total	ug/L	MW-99	04/06/2022	ND	4.0000		
Silver, total	ug/L	MW-99	10/25/2022	ND	4.0000		
Silver, total	ug/L	MW-99	04/11/2023	ND	4.0000		
Silver, total	ug/L	MW-99	10/13/2023	ND	4.0000		
Silver, total	ug/L	MW-99	04/18/2024	ND	4.0000		
Silver, total	ug/L	MW-99	10/15/2024	ND	4.0000		
Thallium, total	ug/L	MW-99	10/13/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-99	04/10/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-99	10/09/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-99	04/17/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-99	10/22/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-99	04/22/2019	ND	2.0000		
Thallium, total	ug/L	MW-99	10/23/2019	ND	2.0000		
Thallium, total	ug/L	MW-99	04/10/2020	ND	2.0000		
Thallium, total	ug/L	MW-99	10/19/2020	ND	2.0000		
Thallium, total	ug/L	MW-99	04/05/2021	ND	2.0000		
Thallium, total	ug/L	MW-99	10/08/2021	ND	2.0000		
Thallium, total	ug/L	MW-99	04/06/2022	ND	2.0000		
Thallium, total	ug/L	MW-99	10/25/2022	ND	2.0000		
Thallium, total	ug/L	MW-99	04/11/2023	ND	2.0000		
Thallium, total	ug/L	MW-99	10/13/2023	ND	2.0000		
Thallium, total	ug/L	MW-99	04/18/2024	ND	2.0000		
Thallium, total	ug/L	MW-99	10/15/2024	ND	2.0000		
Vanadium, total	ug/L	MW-99	10/13/2016	ND	20.0000		
Vanadium, total	ug/L	MW-99	04/10/2017	ND	20.0000		
Vanadium, total	ug/L	MW-99	10/09/2017	ND	20.0000		
Vanadium, total	ug/L	MW-99	04/17/2018	ND	20.0000		
Vanadium, total	ug/L	MW-99	10/22/2018	ND	20.0000		
Vanadium, total	ug/L	MW-99	04/22/2019	ND	20.0000		
Vanadium, total	ug/L	MW-99	10/23/2019	ND	20.0000		
Vanadium, total	ug/L	MW-99	04/10/2020	ND	20.0000		
Vanadium, total	ug/L	MW-99	10/19/2020	ND	20.0000		
Vanadium, total	ug/L	MW-99	04/05/2021	ND	20.0000		
Vanadium, total	ug/L	MW-99	10/08/2021	ND	20.0000		
Vanadium, total	ug/L	MW-99	04/06/2022	ND	20.0000		
Vanadium, total	ug/L	MW-99	10/25/2022	ND	20.0000		
Vanadium, total	ug/L	MW-99	04/11/2023	ND	20.0000		
Vanadium, total	ug/L	MW-99	10/13/2023	ND	20.0000		
Vanadium, total	ug/L	MW-99	04/18/2024	ND	20.0000		
Vanadium, total	ug/L	MW-99	10/15/2024	ND	20.0000		
Zinc, total	ug/L	MW-99	10/13/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-99	04/10/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-99	10/09/2017		11.2000		
Zinc, total	ug/L	MW-99	04/17/2018	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-99	10/22/2018		23.6000		
Zinc, total	ug/L	MW-99	04/22/2019		27.8000		
Zinc, total	ug/L	MW-99	10/23/2019		20.8000		
Zinc, total	ug/L	MW-99	04/10/2020	ND	20.0000		
Zinc, total	ug/L	MW-99	10/19/2020	ND	20.0000		
Zinc, total	ug/L	MW-99	04/05/2021	ND	20.0000		
Zinc, total	ug/L	MW-99	10/08/2021	ND	20.0000		
Zinc, total	ug/L	MW-99	04/06/2022	ND	20.0000		
Zinc, total	ug/L	MW-99	10/25/2022	ND	20.0000		
Zinc, total	ug/L	MW-99	04/11/2023	ND	20.0000		
Zinc, total	ug/L	MW-99	10/13/2023	ND	20.0000		
Zinc, total	ug/L	MW-99	04/18/2024	ND	20.0000		
Zinc, total	ug/L	MW-99	10/15/2024	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-87	10/15/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-87	10/15/2024	ND	4.0000		7.8000
Barium, total	ug/L	MW-87	10/15/2024		100.0000		452.8909
Beryllium, total	ug/L	MW-87	10/15/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-87	10/15/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-87	10/15/2024	ND	8.0000		23.4000
Cobalt, total	ug/L	MW-87	10/15/2024	ND	0.4000		5.9879
Copper, total	ug/L	MW-87	10/15/2024	ND	4.0000		5.3000
Lead, total	ug/L	MW-87	10/15/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-87	10/15/2024	ND	4.0000		8.8000
Selenium, total	ug/L	MW-87	10/15/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-87	10/15/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-87	10/15/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-87	10/15/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-87	10/15/2024	ND	20.0000		54.6000
Antimony, total	ug/L	MW-89	10/15/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-89	10/15/2024	ND	4.0000		7.8000
Barium, total	ug/L	MW-89	10/15/2024		215.0000		452.8909
Beryllium, total	ug/L	MW-89	10/15/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-89	10/15/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-89	10/15/2024	ND	8.0000		23.4000
Cobalt, total	ug/L	MW-89	10/15/2024	ND	0.4000		5.9879
Copper, total	ug/L	MW-89	10/15/2024	ND	4.0000		5.3000
Lead, total	ug/L	MW-89	10/15/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-89	10/15/2024	ND	4.0000		8.8000
Selenium, total	ug/L	MW-89	10/15/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-89	10/15/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-89	10/15/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-89	10/15/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-89	10/15/2024	ND	20.0000		54.6000
Antimony, total	ug/L	MW-91	10/15/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-91	10/15/2024	ND	4.0000		7.8000
Barium, total	ug/L	MW-91	10/15/2024		242.0000		452.8909
Beryllium, total	ug/L	MW-91	10/15/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-91	10/15/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-91	10/15/2024	ND	8.0000		23.4000
Cobalt, total	ug/L	MW-91	10/15/2024	ND	0.4000		5.9879
Copper, total	ug/L	MW-91	10/15/2024	ND	4.0000		5.3000
Lead, total	ug/L	MW-91	10/15/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-91	10/15/2024	ND	4.0000		8.8000
Selenium, total	ug/L	MW-91	10/15/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-91	10/15/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-91	10/15/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-91	10/15/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-91	10/15/2024	ND	20.0000		54.6000
Antimony, total	ug/L	MW-93	10/15/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-93	10/15/2024		15.2000	***	7.8000
Barium, total	ug/L	MW-93	10/15/2024		242.0000		452.8909
Beryllium, total	ug/L	MW-93	10/15/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-93	10/15/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-93	10/15/2024	ND	8.0000		23.4000
Cobalt, total	ug/L	MW-93	10/15/2024		9.9000	***	5.9879
Copper, total	ug/L	MW-93	10/15/2024	ND	4.0000		5.3000
Lead, total	ug/L	MW-93	10/15/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-93	10/15/2024		27.1000	***	8.8000
Selenium, total	ug/L	MW-93	10/15/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-93	10/15/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-93	10/15/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-93	10/15/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-93	10/15/2024	ND	20.0000		54.6000
Antimony, total	ug/L	MW-95	10/15/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-95	10/15/2024	ND	4.0000		7.8000
Barium, total	ug/L	MW-95	10/15/2024		32.3000		452.8909
Beryllium, total	ug/L	MW-95	10/15/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-95	10/15/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-95	10/15/2024	ND	8.0000		23.4000
Cobalt, total	ug/L	MW-95	10/15/2024	ND	0.4000		5.9879
Copper, total	ug/L	MW-95	10/15/2024	ND	4.0000		5.3000
Lead, total	ug/L	MW-95	10/15/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-95	10/15/2024	ND	4.0000		8.8000
Selenium, total	ug/L	MW-95	10/15/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-95	10/15/2024	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-95	10/15/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-95	10/15/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-95	10/15/2024	ND	20.0000		54.6000
Antimony, total	ug/L	MW-97	10/15/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-97	10/15/2024	ND	4.0000		7.8000
Barium, total	ug/L	MW-97	10/15/2024		274.0000		452.8909
Beryllium, total	ug/L	MW-97	10/15/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-97	10/15/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-97	10/15/2024	ND	8.0000		23.4000
Cobalt, total	ug/L	MW-97	10/15/2024	ND	0.4000		5.9879
Copper, total	ug/L	MW-97	10/15/2024	ND	4.0000		5.3000
Lead, total	ug/L	MW-97	10/15/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-97	10/15/2024	ND	4.0000		8.8000
Selenium, total	ug/L	MW-97	10/15/2024	ND	4.0000		4.0000
Silver, total	ug/L	MW-97	10/15/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-97	10/15/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-97	10/15/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-97	10/15/2024	ND	20.0000		54.6000

* - 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 Detect	Upgradient N	Upgradient Proportion	Downgradient Detect	Downgradient N	Downgradient Proportion
Antimony, total	0	65	0.000	0	196	0.000
Arsenic, total	5	63	0.079	42	202	0.208
Barium, total	65	65	1.000	198	198	1.000
Beryllium, total	0	65	0.000	0	196	0.000
Cadmium, total	0	65	0.000	5	196	0.026
Chromium, total	2	65	0.031	7	196	0.036
Cobalt, total	35	63	0.556	37	201	0.184
Copper, total	4	65	0.062	31	201	0.154
Lead, total	0	65	0.000	12	196	0.061
Nickel, total	14	64	0.219	76	198	0.384
Selenium, total	0	65	0.000	5	200	0.025
Silver, total	0	65	0.000	0	196	0.000
Thallium, total	0	65	0.000	0	196	0.000
Vanadium, total	0	65	0.000	11	197	0.056
Zinc, total	7	64	0.109	53	197	0.269

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	65	0.000									nonpar
Arsenic, total	5	63	0.079	0.427	0.013					2.326	normal	nonpar
Barium, total	65	65	1.000	0.569	1.099					2.326	normal	normal
Beryllium, total	0	65	0.000									nonpar
Cadmium, total	0	65	0.000									nonpar
Chromium, total	2	65	0.031									nonpar
Cobalt, total	35	63	0.556	1.125	0.053					2.326	normal	normal
Copper, total	4	65	0.062									nonpar
Lead, total	0	65	0.000									nonpar
Nickel, total	14	64	0.219	1.049	0.057					2.326	normal	nonpar
Selenium, total	0	65	0.000									nonpar
Silver, total	0	65	0.000									nonpar
Thallium, total	0	65	0.000									nonpar
Vanadium, total	0	65	0.000									nonpar
Zinc, total	7	64	0.109	0.439	0.418					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	65					2.0000	nonpar	***	0.99
Arsenic, total	ug/L	5	63					7.8000	nonpar		0.99
Barium, total	ug/L	65	65	179.9308	113.5302	0.0100	2.4043	452.8909	normal		
Beryllium, total	ug/L	0	65					4.0000	nonpar	***	0.99
Cadmium, total	ug/L	0	65					0.8000	nonpar	***	0.99
Chromium, total	ug/L	2	65					23.4000	nonpar		0.99
Cobalt, total	ug/L	35	63	1.5746	1.8336	0.0100	2.4069	5.9879	normal		
Copper, total	ug/L	4	65					5.3000	nonpar		0.99
Lead, total	ug/L	0	65					4.0000	nonpar	***	0.99
Nickel, total	ug/L	14	64					8.8000	nonpar		0.99
Selenium, total	ug/L	0	65					4.0000	nonpar	***	0.99
Silver, total	ug/L	0	65					4.0000	nonpar	***	0.99
Thallium, total	ug/L	0	65					2.0000	nonpar	***	0.99
Vanadium, total	ug/L	0	65					20.0000	nonpar	***	0.99
Zinc, total	ug/L	7	64					54.6000	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
Arsenic, total	ug/L	MW-98	04/17/2024	48.0000		10/13/2016-10/15/2024	16	0.5973
Cobalt, total	ug/L	MW-99	10/22/2018	0.8000		10/13/2016-10/15/2024	17	0.5973
Cobalt, total	ug/L	MW-99	10/15/2024	0.9000		10/13/2016-10/15/2024	17	0.5973

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-93	08/21/2008	ND	20.0000		7.8000
Arsenic, total	ug/L	MW-93	10/03/2008	ND	4.0000		7.8000
Arsenic, total	ug/L	MW-93	12/08/2008	ND	4.0000		7.8000
Arsenic, total	ug/L	MW-93	02/11/2009	ND	4.0000		7.8000
Arsenic, total	ug/L	MW-93	04/02/2009	ND	4.0000		7.8000
Arsenic, total	ug/L	MW-93	10/16/2009	ND	4.0000		7.8000
Arsenic, total	ug/L	MW-93	04/20/2010		10.9000	*	7.8000
Arsenic, total	ug/L	MW-93	10/08/2010		11.1000	*	7.8000
Arsenic, total	ug/L	MW-93	04/05/2011	ND	4.0000		7.8000
Arsenic, total	ug/L	MW-93	10/06/2011	ND	4.0000		7.8000
Arsenic, total	ug/L	MW-93	04/10/2012		4.2000		7.8000
Arsenic, total	ug/L	MW-93	10/09/2012		4.4000		7.8000
Arsenic, total	ug/L	MW-93	04/04/2013	ND	4.0000		7.8000
Arsenic, total	ug/L	MW-93	10/16/2013	ND	4.0000		7.8000
Arsenic, total	ug/L	MW-93	04/10/2014		9.2000	*	7.8000
Arsenic, total	ug/L	MW-93	10/16/2014		5.1000		7.8000
Arsenic, total	ug/L	MW-93	04/06/2015		5.9000		7.8000
Arsenic, total	ug/L	MW-93	10/01/2015		5.2000		7.8000
Arsenic, total	ug/L	MW-93	04/14/2016		16.1000	*	7.8000
Arsenic, total	ug/L	MW-93	10/13/2016		6.5000		7.8000
Arsenic, total	ug/L	MW-93	04/10/2017		5.5000		7.8000
Arsenic, total	ug/L	MW-93	10/09/2017	ND	4.0000		7.8000
Arsenic, total	ug/L	MW-93	04/17/2018		5.4000		7.8000
Arsenic, total	ug/L	MW-93	10/22/2018		18.4000	*	7.8000
Arsenic, total	ug/L	MW-93	04/22/2019		67.3000	*	7.8000
Arsenic, total	ug/L	MW-93	10/23/2019		13.6000	*	7.8000
Arsenic, total	ug/L	MW-93	04/10/2020		17.5000	*	7.8000
Arsenic, total	ug/L	MW-93	10/19/2020		4.8000		7.8000
Arsenic, total	ug/L	MW-93	04/05/2021		10.5000	*	7.8000
Arsenic, total	ug/L	MW-93	10/08/2021		11.4000	*	7.8000
Arsenic, total	ug/L	MW-93	04/06/2022		11.1000	*	7.8000
Arsenic, total	ug/L	MW-93	10/25/2022		58.5000	*	7.8000
Arsenic, total	ug/L	MW-93	04/11/2023		9.3000	*	7.8000
Arsenic, total	ug/L	MW-93	10/13/2023		59.6000	*	7.8000
Arsenic, total	ug/L	MW-93	04/16/2024		11.9000	*	7.8000
Arsenic, total	ug/L	MW-93	10/15/2024		15.2000	*	7.8000
Cobalt, total	ug/L	MW-93	08/21/2008	ND	10.0000		5.9879
Cobalt, total	ug/L	MW-93	10/03/2008	ND	4.0000		5.9879
Cobalt, total	ug/L	MW-93	12/08/2008	ND	4.0000		5.9879
Cobalt, total	ug/L	MW-93	02/11/2009	ND	4.0000		5.9879
Cobalt, total	ug/L	MW-93	04/02/2009	ND	4.0000		5.9879
Cobalt, total	ug/L	MW-93	10/16/2009	ND	4.0000		5.9879
Cobalt, total	ug/L	MW-93	04/20/2010		11.6000	*	5.9879
Cobalt, total	ug/L	MW-93	10/08/2010		16.2000	*	5.9879
Cobalt, total	ug/L	MW-93	04/05/2011		9.2000	*	5.9879
Cobalt, total	ug/L	MW-93	10/06/2011		8.6000	*	5.9879
Cobalt, total	ug/L	MW-93	04/10/2012		4.8000		5.9879
Cobalt, total	ug/L	MW-93	10/09/2012		4.5000		5.9879
Cobalt, total	ug/L	MW-93	04/04/2013		4.5000		5.9879
Cobalt, total	ug/L	MW-93	10/16/2013		4.6000		5.9879
Cobalt, total	ug/L	MW-93	04/10/2014		11.2000	*	5.9879
Cobalt, total	ug/L	MW-93	10/16/2014		7.3000	*	5.9879
Cobalt, total	ug/L	MW-93	04/06/2015		9.7000	*	5.9879
Cobalt, total	ug/L	MW-93	10/01/2015		7.5000	*	5.9879
Cobalt, total	ug/L	MW-93	04/14/2016		14.7000	*	5.9879
Cobalt, total	ug/L	MW-93	10/13/2016		6.6000	*	5.9879
Cobalt, total	ug/L	MW-93	04/10/2017		8.6000	*	5.9879
Cobalt, total	ug/L	MW-93	10/09/2017		5.2000		5.9879
Cobalt, total	ug/L	MW-93	04/17/2018		5.9000		5.9879
Cobalt, total	ug/L	MW-93	10/22/2018		9.9000	*	5.9879
Cobalt, total	ug/L	MW-93	04/22/2019		18.9000	*	5.9879
Cobalt, total	ug/L	MW-93	10/23/2019		8.3000	*	5.9879
Cobalt, total	ug/L	MW-93	04/10/2020		11.3000	*	5.9879
Cobalt, total	ug/L	MW-93	10/19/2020		4.6000		5.9879
Cobalt, total	ug/L	MW-93	04/05/2021		7.9000	*	5.9879
Cobalt, total	ug/L	MW-93	10/08/2021		7.1000	*	5.9879
Cobalt, total	ug/L	MW-93	04/06/2022		8.7000	*	5.9879
Cobalt, total	ug/L	MW-93	10/25/2022		8.6000	*	5.9879
Cobalt, total	ug/L	MW-93	04/11/2023		9.0000	*	5.9879
Cobalt, total	ug/L	MW-93	10/13/2023		8.3000	*	5.9879
Cobalt, total	ug/L	MW-93	04/16/2024		9.8000	*	5.9879

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

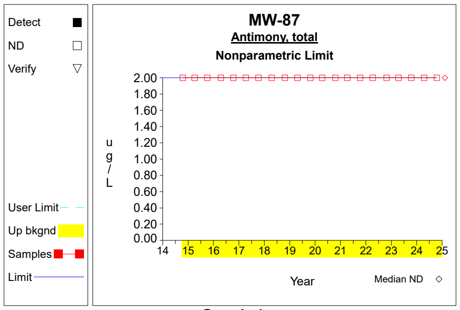
Table 8

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

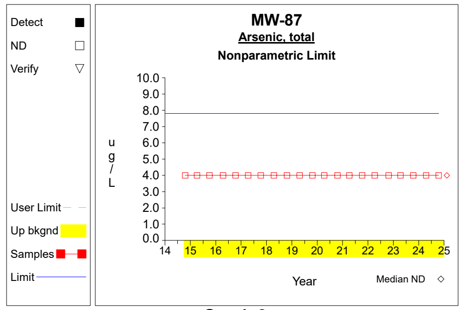
Constituent	Units	Well	Date		Result		Pred. Limit
Cobalt, total	ug/L	MW-93	10/15/2024		9.9000	*	5.9879
Nickel, total	ug/L	MW-93	08/21/2008		29.0000	*	8.8000
Nickel, total	ug/L	MW-93	10/03/2008		28.9000	*	8.8000
Nickel, total	ug/L	MW-93	12/08/2008		23.8000	*	8.8000
Nickel, total	ug/L	MW-93	02/11/2009		30.4000	*	8.8000
Nickel, total	ug/L	MW-93	04/02/2009		32.1000	*	8.8000
Nickel, total	ug/L	MW-93	10/16/2009		30.2000	*	8.8000
Nickel, total	ug/L	MW-93	01/29/2010		35.3000	*	8.8000
Nickel, total	ug/L	MW-93	04/20/2010		45.5000	*	8.8000
Nickel, total	ug/L	MW-93	10/08/2010		69.8000	*	8.8000
Nickel, total	ug/L	MW-93	04/05/2011		37.5000	*	8.8000
Nickel, total	ug/L	MW-93	10/06/2011		31.9000	*	8.8000
Nickel, total	ug/L	MW-93	04/10/2012		29.6000	*	8.8000
Nickel, total	ug/L	MW-93	10/09/2012		23.5000	*	8.8000
Nickel, total	ug/L	MW-93	04/04/2013		13.8000	*	8.8000
Nickel, total	ug/L	MW-93	10/16/2013		21.5000	*	8.8000
Nickel, total	ug/L	MW-93	04/10/2014		43.1000	*	8.8000
Nickel, total	ug/L	MW-93	10/16/2014		34.6000	*	8.8000
Nickel, total	ug/L	MW-93	04/06/2015		42.6000	*	8.8000
Nickel, total	ug/L	MW-93	10/01/2015		36.0000	*	8.8000
Nickel, total	ug/L	MW-93	04/14/2016		26.5000	*	8.8000
Nickel, total	ug/L	MW-93	10/13/2016		31.8000	*	8.8000
Nickel, total	ug/L	MW-93	04/10/2017		27.3000	*	8.8000
Nickel, total	ug/L	MW-93	10/09/2017		28.2000	*	8.8000
Nickel, total	ug/L	MW-93	04/17/2018		26.2000	*	8.8000
Nickel, total	ug/L	MW-93	10/22/2018		35.7000	*	8.8000
Nickel, total	ug/L	MW-93	04/22/2019		24.2000	*	8.8000
Nickel, total	ug/L	MW-93	10/23/2019		26.3000	*	8.8000
Nickel, total	ug/L	MW-93	04/10/2020		18.1000	*	8.8000
Nickel, total	ug/L	MW-93	10/19/2020		27.6000	*	8.8000
Nickel, total	ug/L	MW-93	04/05/2021		23.1000	*	8.8000
Nickel, total	ug/L	MW-93	10/08/2021		21.3000	*	8.8000
Nickel, total	ug/L	MW-93	04/06/2022		20.2000	*	8.8000
Nickel, total	ug/L	MW-93	10/25/2022		27.9000	*	8.8000
Nickel, total	ug/L	MW-93	04/11/2023		31.8000	*	8.8000
Nickel, total	ug/L	MW-93	10/13/2023		28.8000	*	8.8000
Nickel, total	ug/L	MW-93	04/16/2024		25.5000	*	8.8000
Nickel, total	ug/L	MW-93	10/15/2024		27.1000	*	8.8000

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

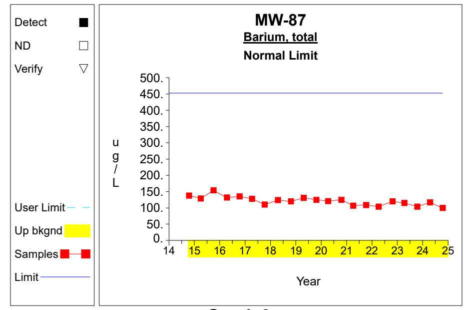
Up vs. Down Prediction Limits



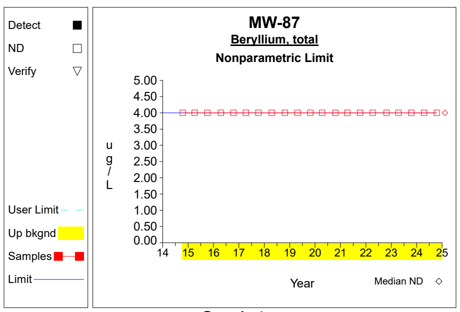
Graph 1



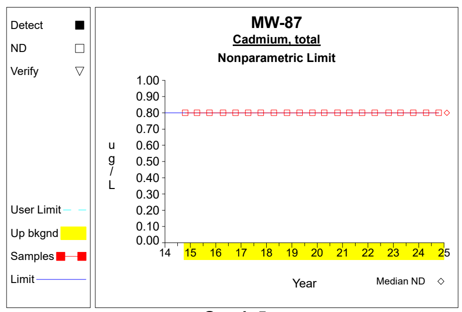
Graph 2



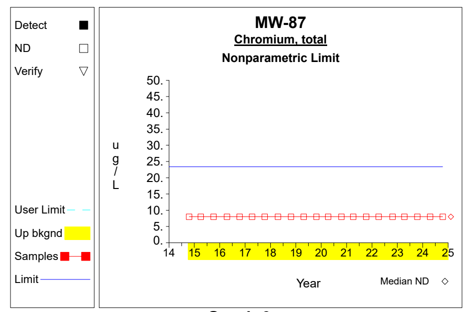
Graph 3



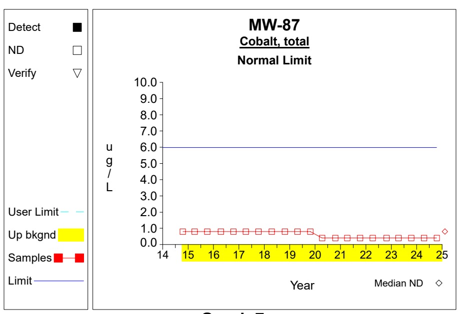
Graph 4



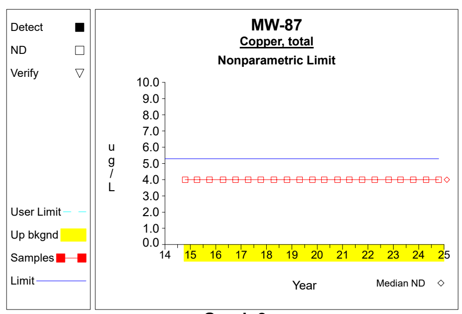
Graph 5



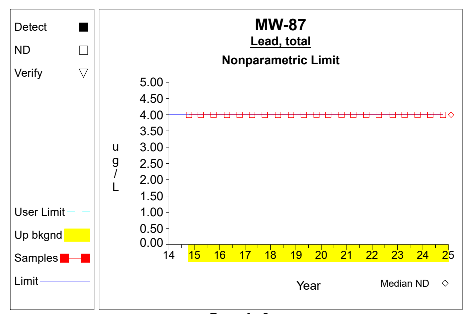
Graph 6



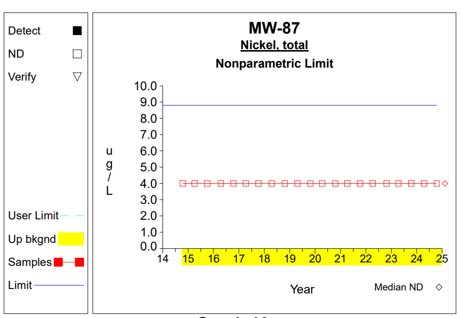
Graph 7



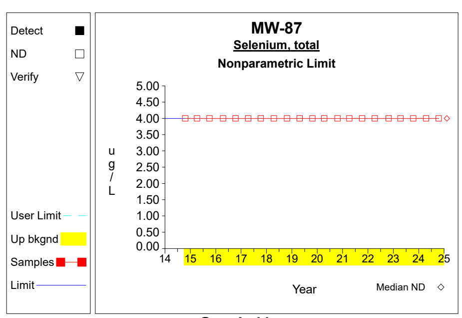
Graph 8



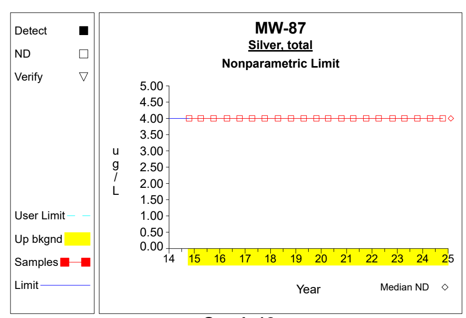
Graph 9



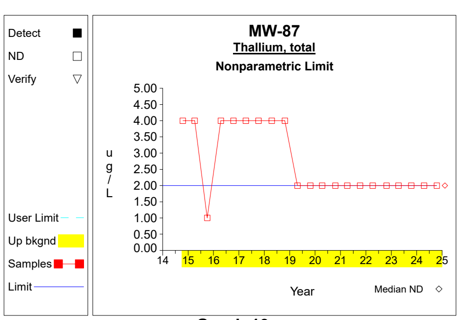
Graph 10



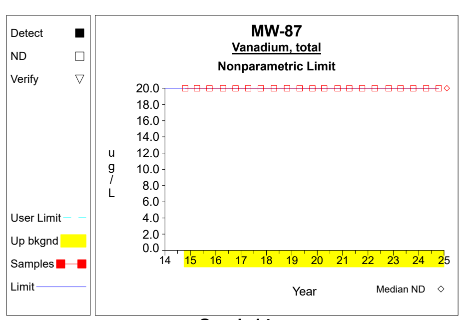
Graph 11



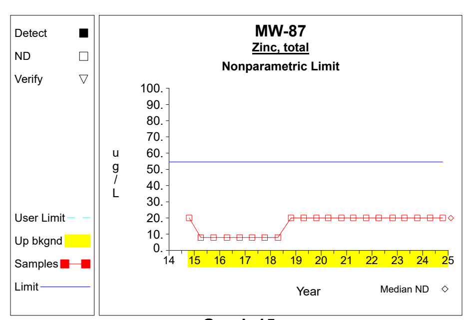
Graph 12



Graph 13

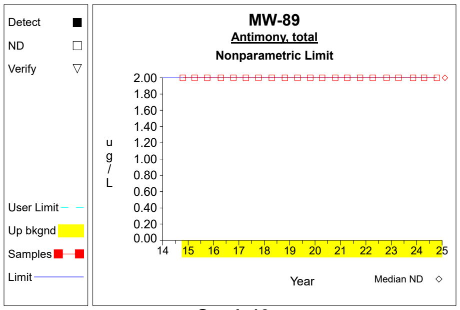


Graph 14

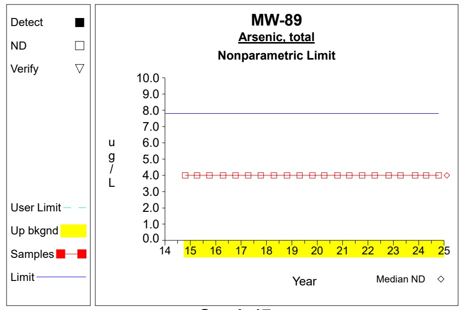


Graph 15

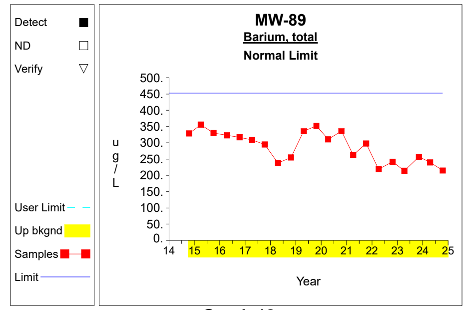
Up vs. Down Prediction Limits



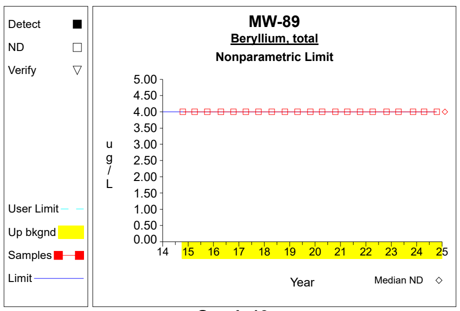
Graph 16



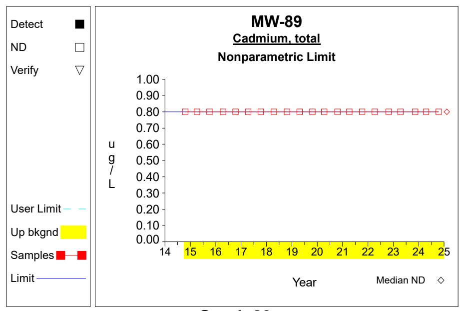
Graph 17



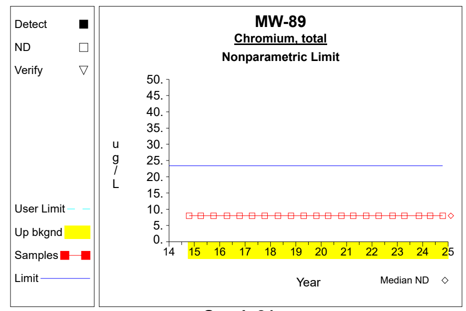
Graph 18



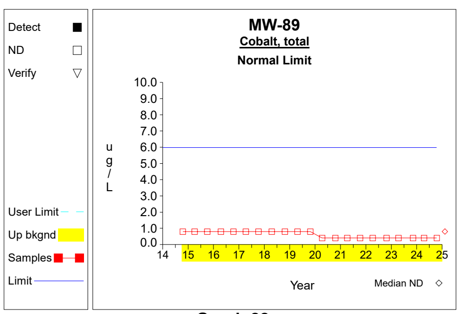
Graph 19



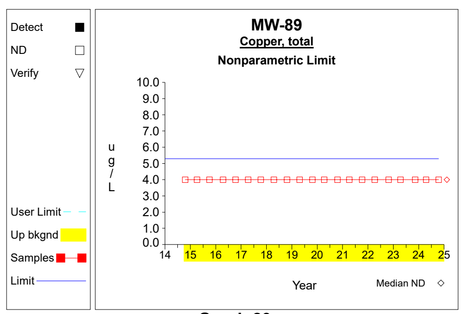
Graph 20



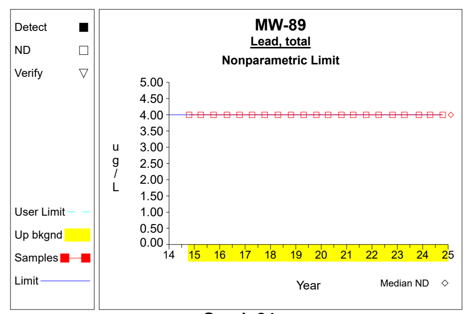
Graph 21



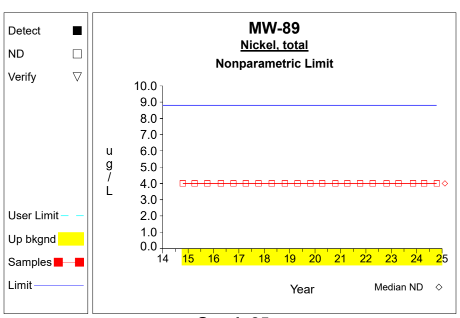
Graph 22



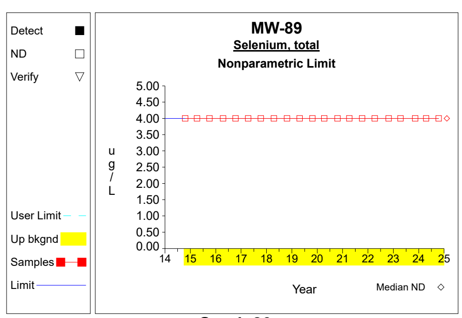
Graph 23



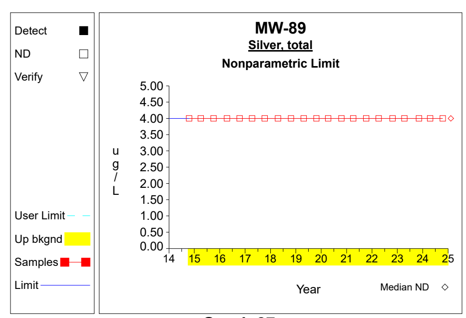
Graph 24



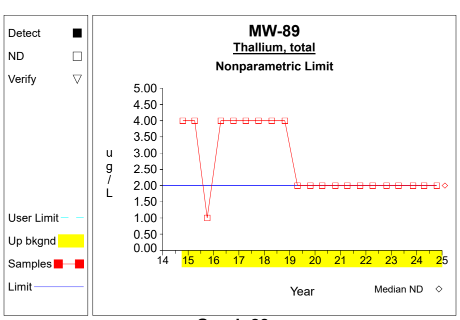
Graph 25



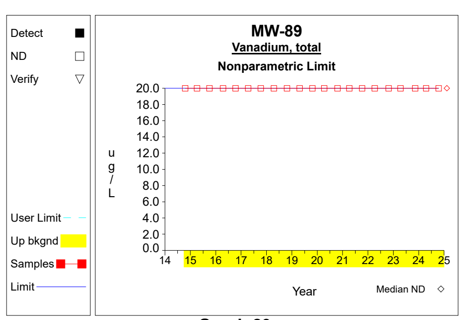
Graph 26



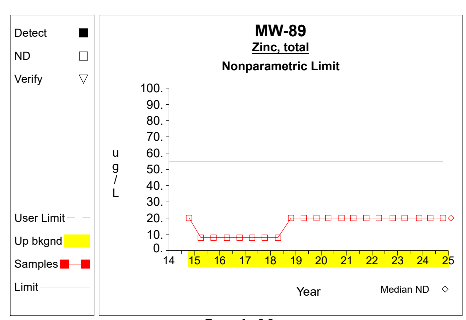
Graph 27



Graph 28

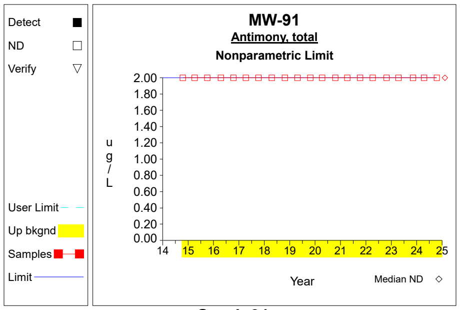


Graph 29

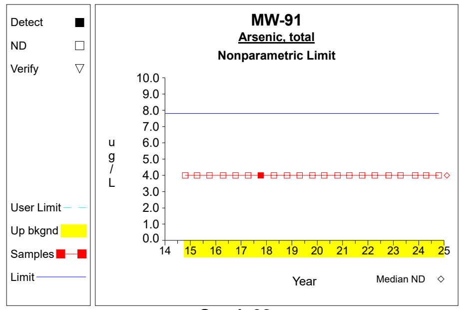


Graph 30

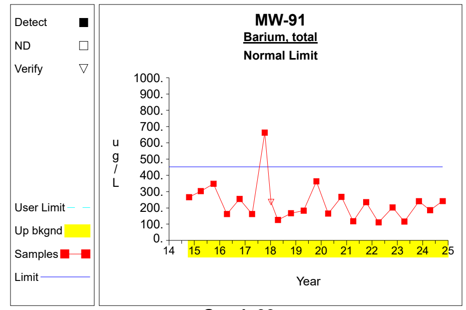
Up vs. Down Prediction Limits



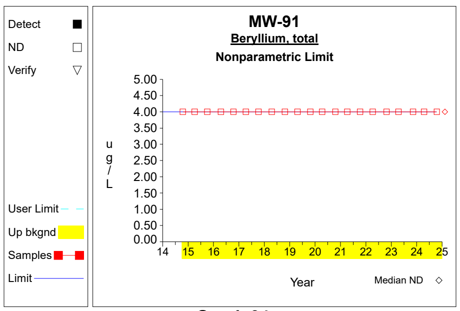
Graph 31



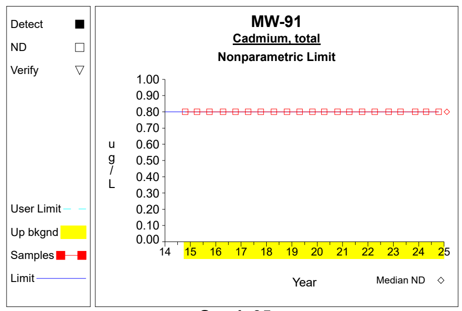
Graph 32



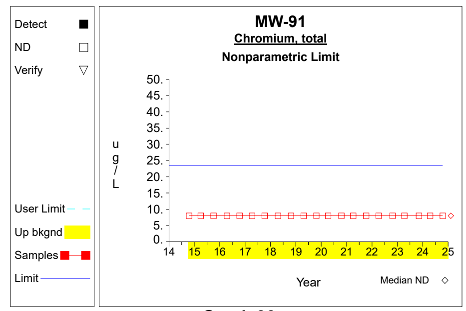
Graph 33



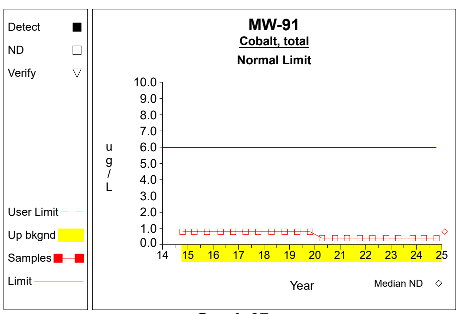
Graph 34



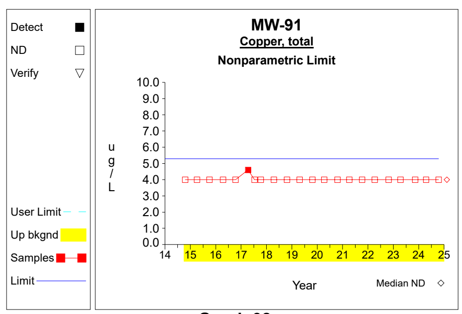
Graph 35



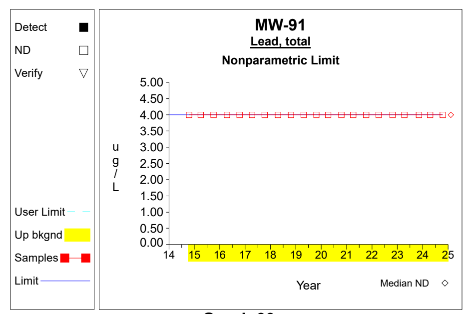
Graph 36



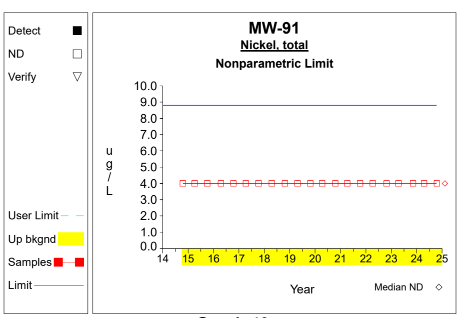
Graph 37



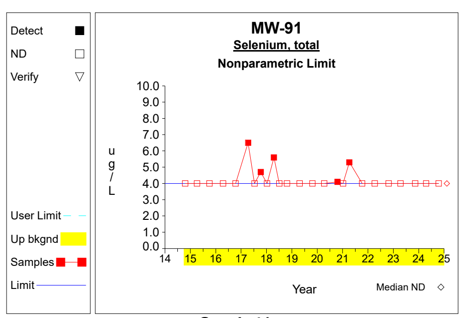
Graph 38



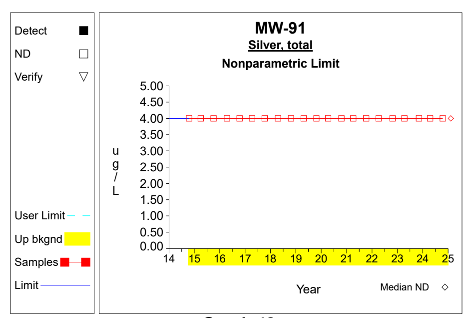
Graph 39



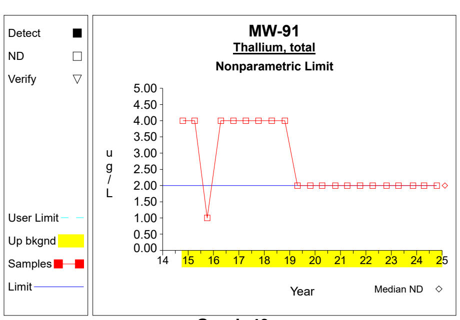
Graph 40



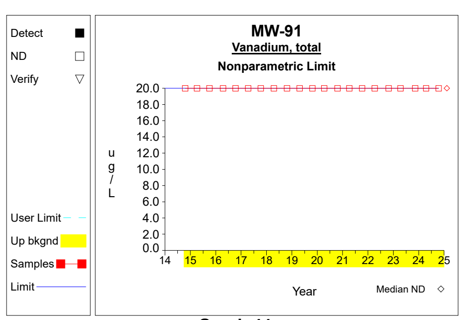
Graph 41



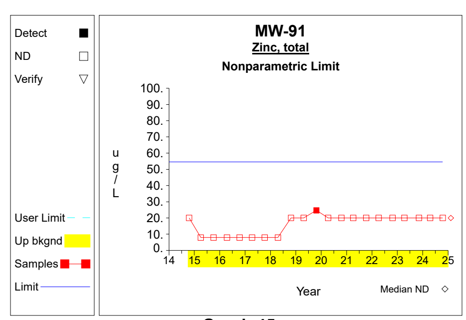
Graph 42



Graph 43

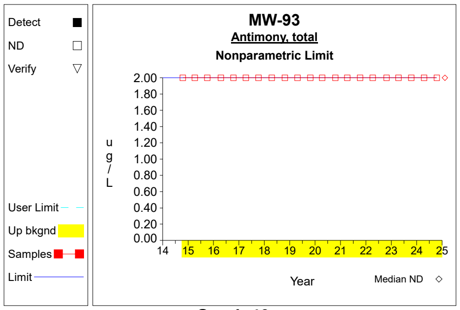


Graph 44

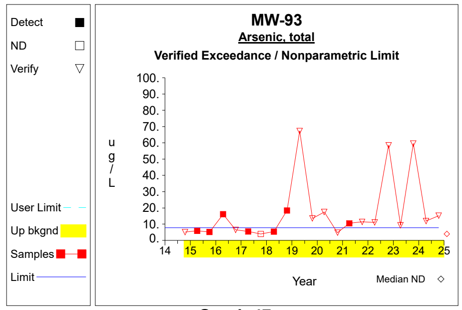


Graph 45

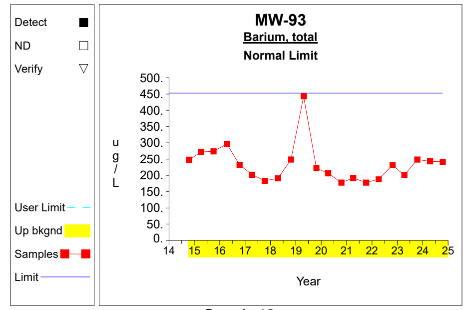
Up vs. Down Prediction Limits



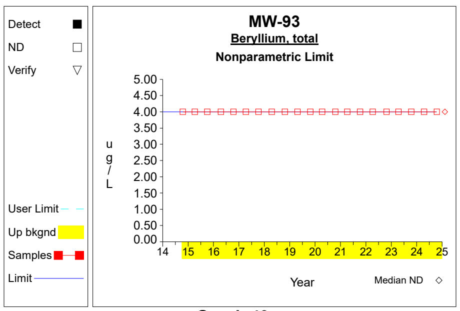
Graph 46



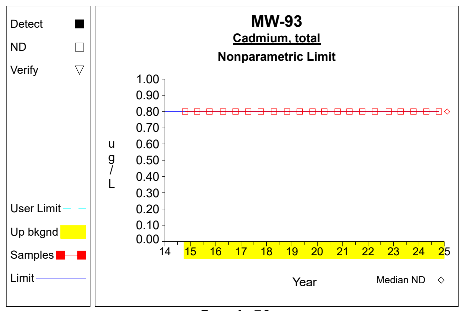
Graph 47



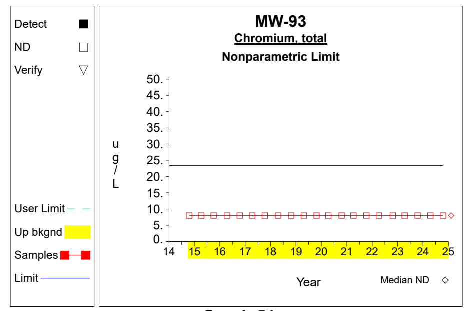
Graph 48



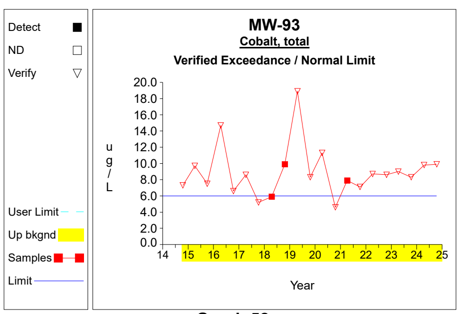
Graph 49



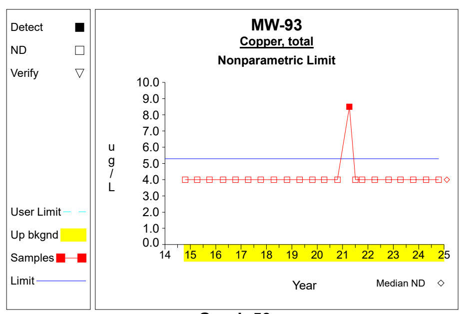
Graph 50



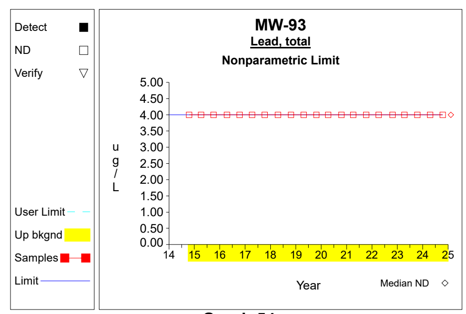
Graph 51



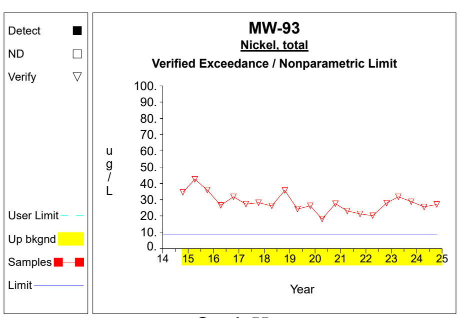
Graph 52



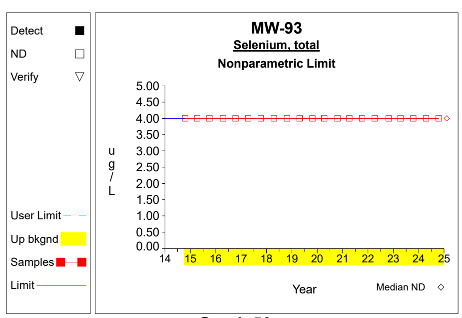
Graph 53



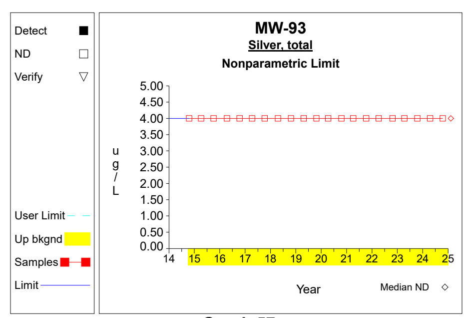
Graph 54



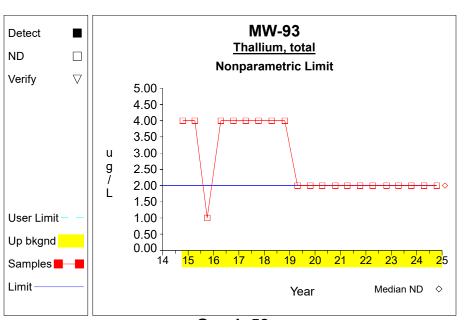
Graph 55



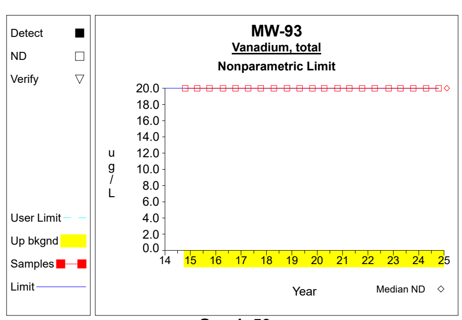
Graph 56



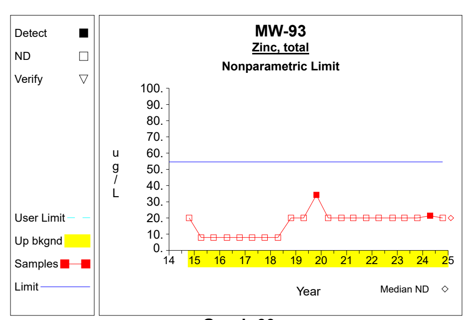
Graph 57



Graph 58



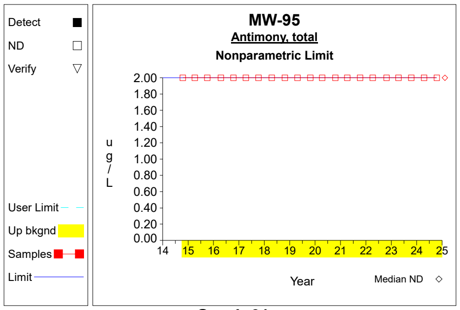
Graph 59



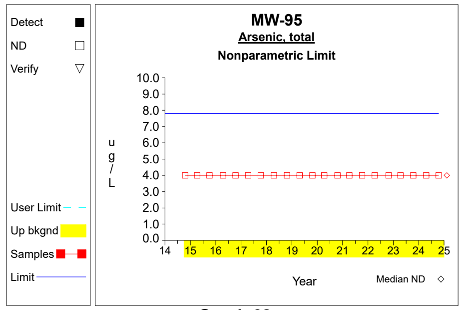
Graph 60

Prepared by: Otter Creek Environmental

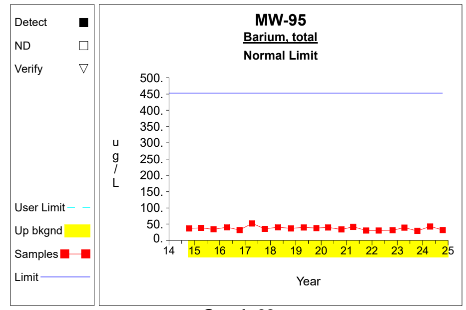
Up vs. Down Prediction Limits



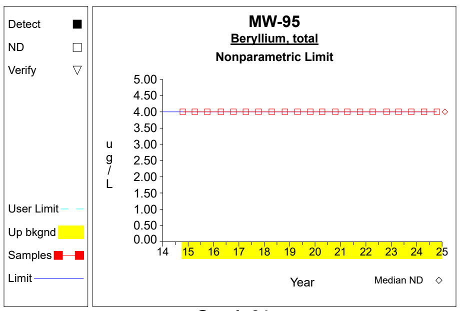
Graph 61



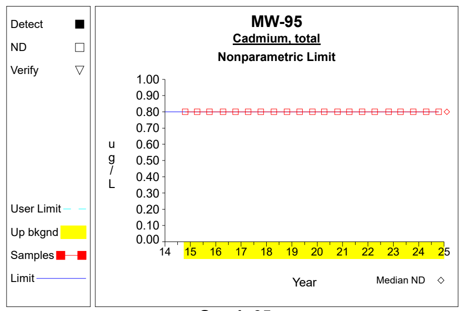
Graph 62



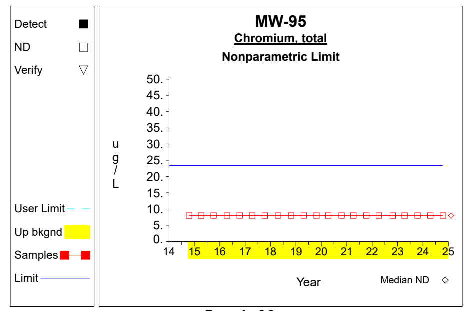
Graph 63



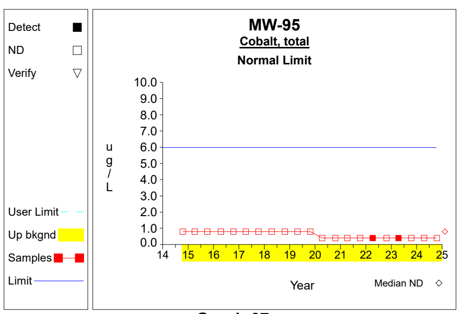
Graph 64



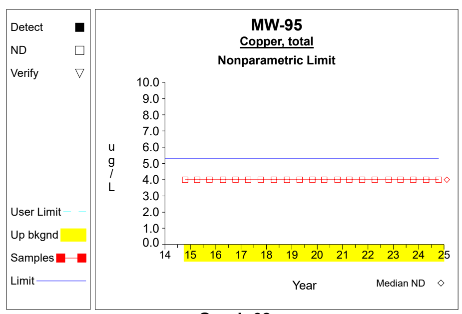
Graph 65



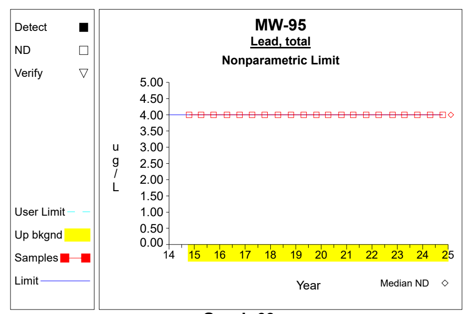
Graph 66



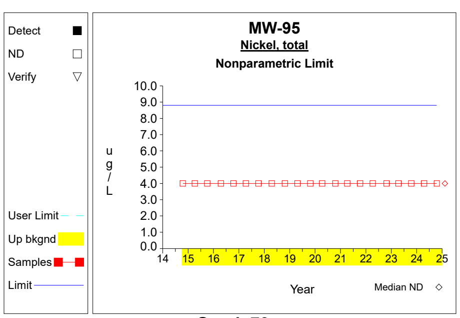
Graph 67



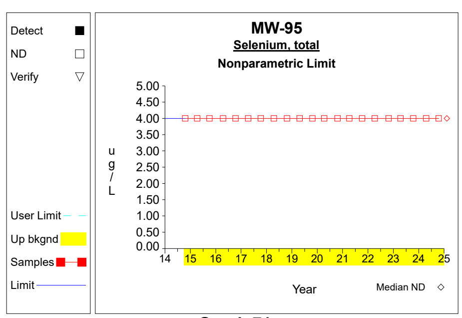
Graph 68



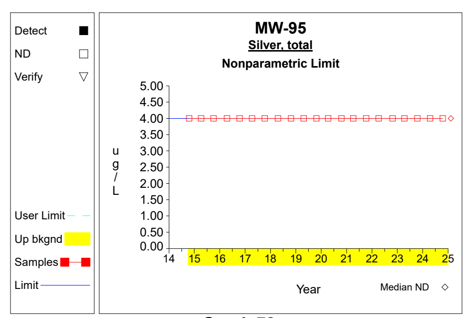
Graph 69



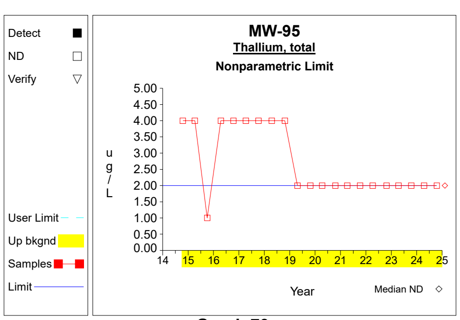
Graph 70



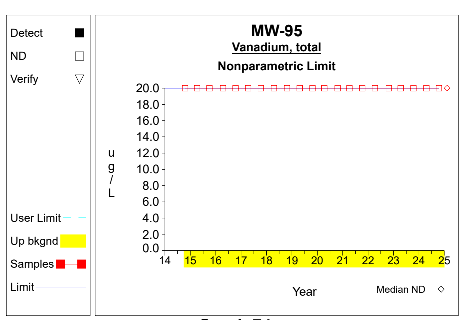
Graph 71



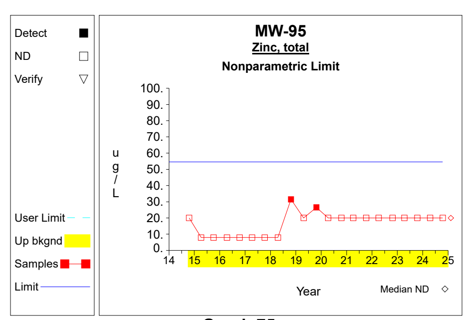
Graph 72



Graph 73

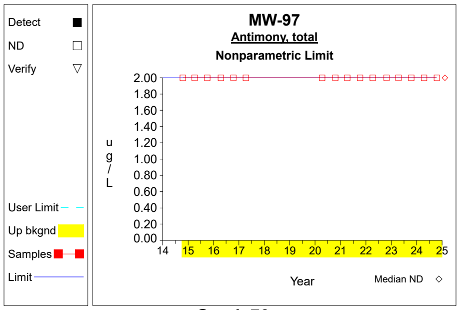


Graph 74

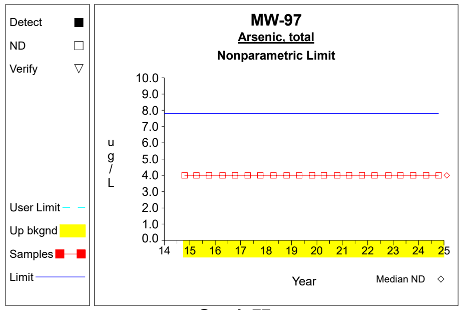


Graph 75

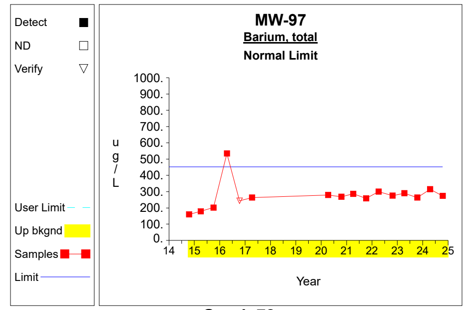
Up vs. Down Prediction Limits



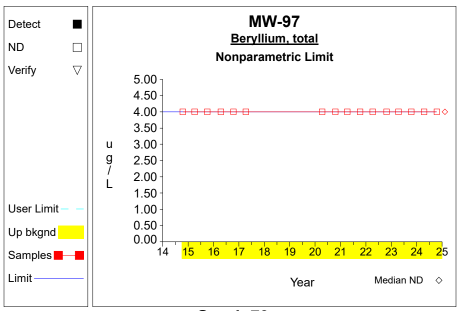
Graph 76



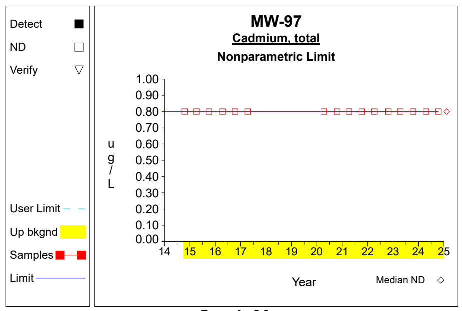
Graph 77



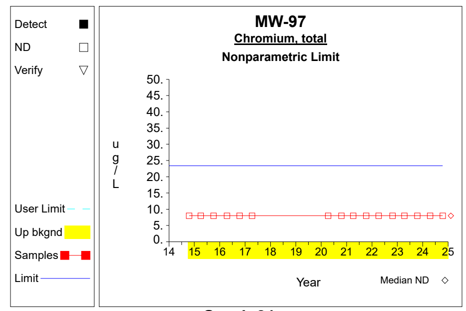
Graph 78



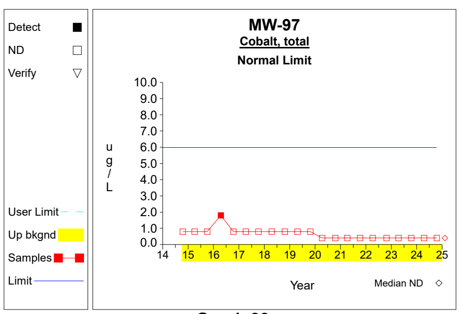
Graph 79



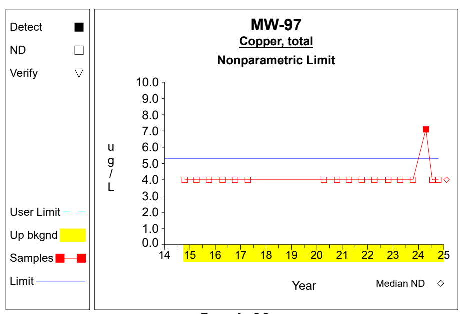
Graph 80



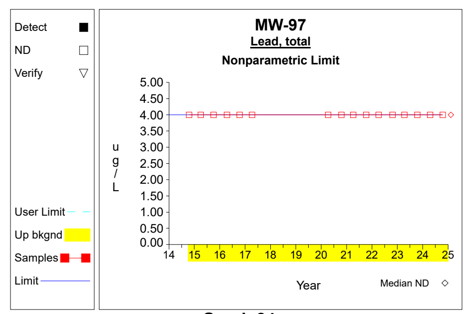
Graph 81



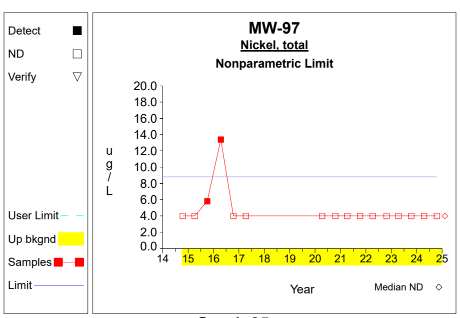
Graph 82



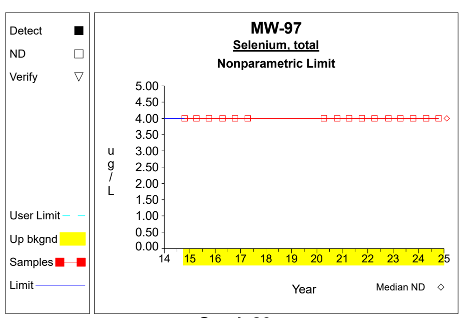
Graph 83



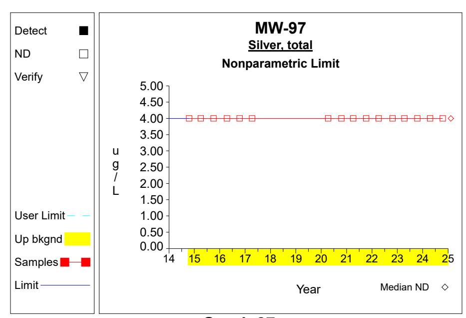
Graph 84



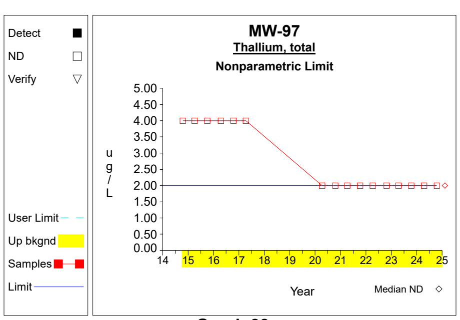
Graph 85



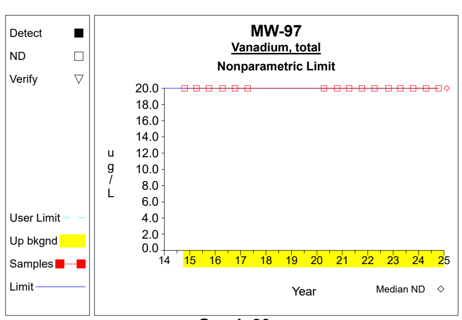
Graph 86



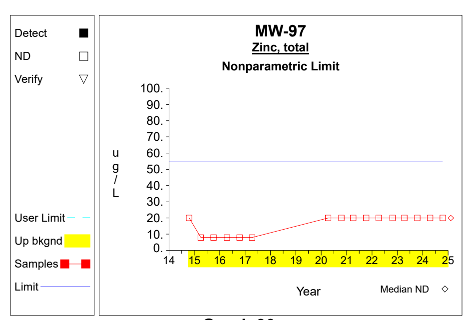
Graph 87



Graph 88

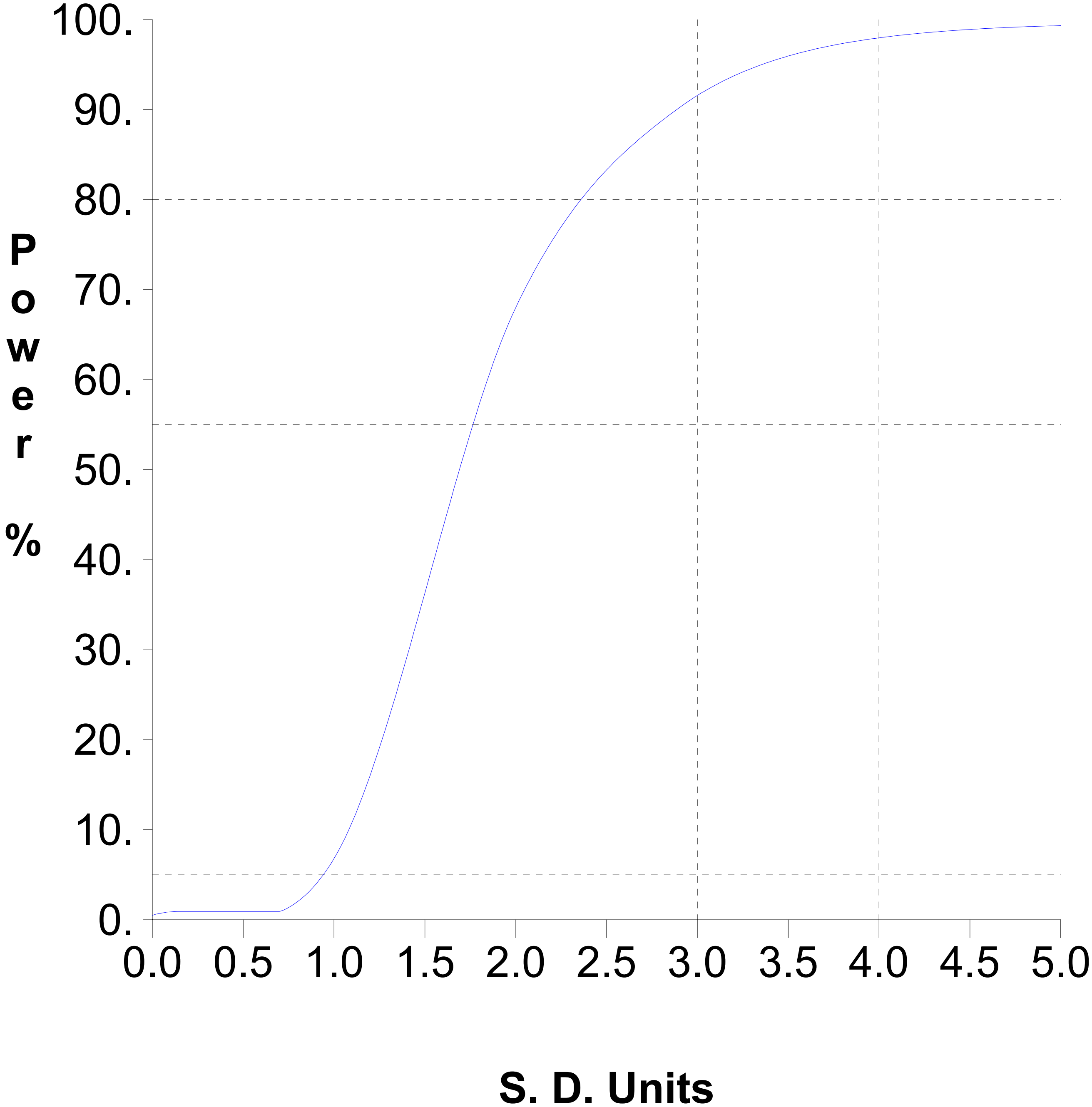


Graph 89



Graph 90

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



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

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

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

Step	Equation	Description
1	PL = max(X) = **7.8**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	$\bar{X} = \mathbf{sum[X]} / \mathbf{N}$ $= \mathbf{11695.5} / \mathbf{65}$ $= \mathbf{179.931}$	Compute upgradient mean.
2	$S = ((\mathbf{sum[X^2]} - \mathbf{sum[X]}^2/\mathbf{N}) / (\mathbf{N}-1))^{1/2}$ $= ((\mathbf{2.93}\times\mathbf{10^6} - \mathbf{1.37}\times\mathbf{10^8}/\mathbf{65}) / (\mathbf{65}-1))^{1/2}$ $= \mathbf{113.53}$	Compute upgradient sd.
3	$alpha = \min[(1-.95^{1/\mathbf{K}})^{1/2}, .01]$ $= \min[(1-.95^{1/\mathbf{90}})^{1/2}, .01]$ $= \mathbf{0.01}$	Adjusted per comparison false positive rate. Pass initial or 1 resample.
4	$PL = \bar{\mathbf{X}} + \mathbf{tS}(1+1/\mathbf{N})^{1/2}$ $= \mathbf{179.931} + (\mathbf{2.386}*\mathbf{113.53})(1+1/\mathbf{65})^{1/2}$ $= \mathbf{452.891}$	One-sided normal prediction limit (t is Student's t on N-1 degrees of freedom and 1-alpha confidence level).

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

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

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

Step	Equation	Description
1	PL = median(X) = **0.8**	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
Chromium, total (ug/L)
Nonparametric Prediction Limit

Step	Equation	Description
1	PL = max(X) = **23.4**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

Step	Equation	Description
1	$\bar{X}_1 = \mathbf{sum[X_1]} / \mathbf{N_1}$ $= \mathbf{99.2} / \mathbf{35}$ $= \mathbf{2.834}$	Compute mean of N_1 detected measurements.
2	$S_1 = ((\mathbf{sum[X_1^2]\text{-}sum[X_1]^2/N_1}) / (\mathbf{N_1}\text{-}1))^{1/2}$ $= ((\mathbf{363.58\text{-}9840.64/35}) / (\mathbf{35}\text{-}1))^{1/2}$ $= \mathbf{1.557}$	Compute sd of N_1 detected measurements.
3	$\bar{X} = (1 - \mathbf{N_0}/\mathbf{N})\ \mathbf{\bar{X}_1}$ $= (1 - \mathbf{28}/\mathbf{63})\ \mathbf{2.834}$ $= \mathbf{1.575}$	Use Aitchison's method to adjust mean for presence of nondetects.
4	$S = [(1 - \mathbf{N_0}/\mathbf{N}) * \mathbf{S_1}^2 +$ $(\mathbf{N_0}/\mathbf{N}) (1 - (\mathbf{N_0}\text{-}1)/(\mathbf{N}\text{-}1))\ \mathbf{\bar{X}_1}^2]^{1/2}$ $= [(1 - \mathbf{28}/\mathbf{63}) * \mathbf{1.557}^2 +$ $(\mathbf{28}/\mathbf{63}) (1 - (\mathbf{28}\text{-}1)/(\mathbf{63}\text{-}1))\ \mathbf{2.834}^2]^{1/2}$ $= \mathbf{1.834}$	Use Aitchison's method to adjust sd for presence of nondetects.
5	$\text{alpha} = \min[(1\text{-}.95^{1/\mathbf{K}})^{1/2}, .01]$ $= \min[(1\text{-}.95^{1/\mathbf{90}})^{1/2}, .01]$ $= \mathbf{0.01}$	Adjusted per comparison false positive rate. Pass initial or 1 resample.
6	$PL = \mathbf{\bar{X}} + \mathbf{tS}(1+1/\mathbf{N})^{1/2}$ $= \mathbf{1.575}$ $+ (\mathbf{2.388}*\mathbf{1.834})(1+1/\mathbf{63})^{1/2}$ $= \mathbf{5.988}$	One-sided normal prediction limit (t is Student's t on N-1 degrees of freedom and 1-alpha confidence level).

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

Step	Equation	Description
1	PL = max(X) = **5.3**	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

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

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

Step	Equation	Description
1	PL = max(X) = **8.8**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

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

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

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

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

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

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

Step	Equation	Description
1	PL = median(X) = **20.0**	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
Zinc, total (ug/L)
Nonparametric Prediction Limit

Step	Equation	Description
1	PL = max(X) = **54.6**	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).

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Antimony, total	ug/L	MW-66	10/16/2014	ND	2.0000		
Antimony, total	ug/L	MW-66	01/14/2015	ND	2.0000		
Antimony, total	ug/L	MW-66	04/03/2015	ND	2.0000		
Antimony, total	ug/L	MW-66	07/06/2015	ND	2.0000		
Antimony, total	ug/L	MW-66	10/01/2015	ND	2.0000		
Antimony, total	ug/L	MW-66	04/14/2016	ND	2.0000		
Antimony, total	ug/L	MW-66	10/13/2016	ND	2.0000		
Antimony, total	ug/L	MW-66	04/10/2017	ND	2.0000		
Arsenic, total	ug/L	MW-66	10/16/2014	ND	4.0000		
Arsenic, total	ug/L	MW-66	01/14/2015	ND	4.0000		
Arsenic, total	ug/L	MW-66	04/03/2015	ND	4.0000		
Arsenic, total	ug/L	MW-66	07/06/2015	ND	4.0000		
Arsenic, total	ug/L	MW-66	10/01/2015	ND	4.0000		
Arsenic, total	ug/L	MW-66	04/14/2016	ND	4.0000		
Arsenic, total	ug/L	MW-66	10/13/2016	ND	4.0000		
Arsenic, total	ug/L	MW-66	04/10/2017	ND	4.0000		
Barium, total	ug/L	MW-66	10/16/2014		325.0000		
Barium, total	ug/L	MW-66	01/14/2015		412.0000		
Barium, total	ug/L	MW-66	04/03/2015		524.0000		
Barium, total	ug/L	MW-66	07/06/2015		560.0000		
Barium, total	ug/L	MW-66	10/01/2015		612.0000		
Barium, total	ug/L	MW-66	04/14/2016		395.0000		
Barium, total	ug/L	MW-66	10/13/2016		413.0000		
Barium, total	ug/L	MW-66	04/10/2017		371.0000		
Beryllium, total	ug/L	MW-66	10/16/2014	ND	4.0000		
Beryllium, total	ug/L	MW-66	01/14/2015	ND	4.0000		
Beryllium, total	ug/L	MW-66	04/03/2015	ND	4.0000		
Beryllium, total	ug/L	MW-66	07/06/2015	ND	4.0000		
Beryllium, total	ug/L	MW-66	10/01/2015	ND	4.0000		
Beryllium, total	ug/L	MW-66	04/14/2016	ND	4.0000		
Beryllium, total	ug/L	MW-66	10/13/2016	ND	4.0000		
Beryllium, total	ug/L	MW-66	04/10/2017	ND	4.0000		
Cadmium, total	ug/L	MW-66	10/16/2014	ND	0.8000		
Cadmium, total	ug/L	MW-66	01/14/2015	ND	0.8000		
Cadmium, total	ug/L	MW-66	04/03/2015	ND	0.8000		
Cadmium, total	ug/L	MW-66	07/06/2015	ND	0.8000		
Cadmium, total	ug/L	MW-66	10/01/2015	ND	0.8000		
Cadmium, total	ug/L	MW-66	04/14/2016	ND	0.8000		
Cadmium, total	ug/L	MW-66	10/13/2016	ND	0.8000		
Cadmium, total	ug/L	MW-66	04/10/2017	ND	0.8000		
Chromium, total	ug/L	MW-66	10/16/2014	ND	8.0000		
Chromium, total	ug/L	MW-66	01/14/2015	ND	8.0000		
Chromium, total	ug/L	MW-66	04/03/2015	ND	8.0000		
Chromium, total	ug/L	MW-66	07/06/2015	ND	8.0000		
Chromium, total	ug/L	MW-66	10/01/2015	ND	8.0000		
Chromium, total	ug/L	MW-66	04/14/2016	ND	8.0000		
Chromium, total	ug/L	MW-66	10/13/2016	ND	8.0000		
Chromium, total	ug/L	MW-66	04/10/2017	ND	8.0000		
Cobalt, total	ug/L	MW-66	10/16/2014	ND	0.8000		
Cobalt, total	ug/L	MW-66	01/14/2015	ND	0.8000		
Cobalt, total	ug/L	MW-66	04/03/2015	ND	0.8000		
Cobalt, total	ug/L	MW-66	07/06/2015	ND	0.8000		
Cobalt, total	ug/L	MW-66	10/01/2015	ND	0.8000		
Cobalt, total	ug/L	MW-66	04/14/2016	ND	0.8000		
Cobalt, total	ug/L	MW-66	10/13/2016		0.9000		
Cobalt, total	ug/L	MW-66	04/10/2017	ND	0.8000		
Copper, total	ug/L	MW-66	10/16/2014	ND	4.0000		
Copper, total	ug/L	MW-66	01/14/2015	ND	4.0000		
Copper, total	ug/L	MW-66	04/03/2015	ND	4.0000		
Copper, total	ug/L	MW-66	07/06/2015	ND	4.0000		
Copper, total	ug/L	MW-66	10/01/2015	ND	4.0000		
Copper, total	ug/L	MW-66	04/14/2016	ND	4.0000		
Copper, total	ug/L	MW-66	10/13/2016	ND	4.0000		
Copper, total	ug/L	MW-66	04/10/2017	ND	4.0000		
Lead, total	ug/L	MW-66	10/16/2014	ND	4.0000		
Lead, total	ug/L	MW-66	01/14/2015	ND	4.0000		
Lead, total	ug/L	MW-66	04/03/2015	ND	4.0000		
Lead, total	ug/L	MW-66	07/06/2015	ND	4.0000		
Lead, total	ug/L	MW-66	10/01/2015	ND	4.0000		
Lead, total	ug/L	MW-66	04/14/2016	ND	4.0000		
Lead, total	ug/L	MW-66	10/13/2016	ND	4.0000		
Lead, total	ug/L	MW-66	04/10/2017	ND	4.0000		
Nickel, total	ug/L	MW-66	10/16/2014	ND	4.0000		
Nickel, total	ug/L	MW-66	01/14/2015	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-66	04/03/2015	ND	4.0000		
Nickel, total	ug/L	MW-66	07/06/2015	ND	4.0000		
Nickel, total	ug/L	MW-66	10/01/2015	ND	4.0000		
Nickel, total	ug/L	MW-66	04/14/2016	ND	4.0000		
Nickel, total	ug/L	MW-66	10/13/2016	ND	4.0000		
Nickel, total	ug/L	MW-66	04/10/2017	ND	4.0000		
Selenium, total	ug/L	MW-66	10/16/2014	ND	4.0000		
Selenium, total	ug/L	MW-66	01/14/2015	ND	4.0000		
Selenium, total	ug/L	MW-66	04/03/2015	ND	4.0000		
Selenium, total	ug/L	MW-66	07/06/2015	ND	4.0000		
Selenium, total	ug/L	MW-66	10/01/2015	ND	4.0000		
Selenium, total	ug/L	MW-66	04/14/2016	ND	4.0000		
Selenium, total	ug/L	MW-66	10/13/2016	ND	4.0000		
Selenium, total	ug/L	MW-66	04/10/2017	ND	4.0000		
Silver, total	ug/L	MW-66	10/16/2014	ND	4.0000		
Silver, total	ug/L	MW-66	01/14/2015	ND	4.0000		
Silver, total	ug/L	MW-66	04/03/2015	ND	4.0000		
Silver, total	ug/L	MW-66	07/06/2015	ND	4.0000		
Silver, total	ug/L	MW-66	10/01/2015	ND	4.0000		
Silver, total	ug/L	MW-66	04/14/2016	ND	4.0000		
Silver, total	ug/L	MW-66	10/13/2016	ND	4.0000		
Silver, total	ug/L	MW-66	04/10/2017	ND	4.0000		
Thallium, total	ug/L	MW-66	10/16/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-66	01/14/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-66	04/03/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-66	07/06/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-66	10/01/2015	ND	1.0000	2.0000	**
Thallium, total	ug/L	MW-66	04/14/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-66	10/13/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-66	04/10/2017	ND	4.0000	2.0000	**
Vanadium, total	ug/L	MW-66	10/16/2014	ND	20.0000		
Vanadium, total	ug/L	MW-66	01/14/2015	ND	20.0000		
Vanadium, total	ug/L	MW-66	04/03/2015	ND	20.0000		
Vanadium, total	ug/L	MW-66	07/06/2015	ND	20.0000		
Vanadium, total	ug/L	MW-66	10/01/2015	ND	20.0000		
Vanadium, total	ug/L	MW-66	04/14/2016	ND	20.0000		
Vanadium, total	ug/L	MW-66	10/13/2016	ND	20.0000		
Vanadium, total	ug/L	MW-66	04/10/2017	ND	20.0000		
Zinc, total	ug/L	MW-66	10/16/2014	ND	20.0000		
Zinc, total	ug/L	MW-66	01/14/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-66	04/03/2015		54.6000		
Zinc, total	ug/L	MW-66	07/06/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-66	10/01/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-66	04/14/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-66	10/13/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-66	04/10/2017	ND	8.0000	20.0000	**
Antimony, total	ug/L	MW-85	10/16/2014	ND	2.0000		
Antimony, total	ug/L	MW-85	01/14/2015	ND	2.0000		
Antimony, total	ug/L	MW-85	04/03/2015	ND	2.0000		
Antimony, total	ug/L	MW-85	07/06/2015	ND	2.0000		
Antimony, total	ug/L	MW-85	10/01/2015	ND	2.0000		
Antimony, total	ug/L	MW-85	04/14/2016	ND	2.0000		
Antimony, total	ug/L	MW-85	10/13/2016	ND	2.0000		
Antimony, total	ug/L	MW-85	04/10/2017	ND	2.0000		
Antimony, total	ug/L	MW-85	10/09/2017	ND	2.0000		
Antimony, total	ug/L	MW-85	04/17/2018	ND	2.0000		
Antimony, total	ug/L	MW-85	10/22/2018	ND	2.0000		
Antimony, total	ug/L	MW-85	04/22/2019	ND	2.0000		
Antimony, total	ug/L	MW-85	10/23/2019	ND	2.0000		
Antimony, total	ug/L	MW-85	04/10/2020	ND	2.0000		
Antimony, total	ug/L	MW-85	10/19/2020	ND	2.0000		
Antimony, total	ug/L	MW-85	04/05/2021	ND	2.0000		
Antimony, total	ug/L	MW-85	10/08/2021	ND	2.0000		
Antimony, total	ug/L	MW-85	04/06/2022	ND	2.0000		
Antimony, total	ug/L	MW-85	10/25/2022	ND	2.0000		
Antimony, total	ug/L	MW-85	04/11/2023	ND	2.0000		
Antimony, total	ug/L	MW-85	10/13/2023	ND	2.0000		
Antimony, total	ug/L	MW-85	04/17/2024	ND	2.0000		
Antimony, total	ug/L	MW-85	10/15/2024	ND	2.0000		
Arsenic, total	ug/L	MW-85	10/16/2014	ND	4.0000		
Arsenic, total	ug/L	MW-85	01/14/2015	ND	4.0000		
Arsenic, total	ug/L	MW-85	04/03/2015	ND	4.0000		
Arsenic, total	ug/L	MW-85	07/06/2015	ND	4.0000		
Arsenic, total	ug/L	MW-85	10/01/2015	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	
Arsenic, total	ug/L	MW-85	04/14/2016	ND	4.0000		
Arsenic, total	ug/L	MW-85	10/13/2016	ND	4.0000		
Arsenic, total	ug/L	MW-85	04/10/2017	ND	4.0000		
Arsenic, total	ug/L	MW-85	10/09/2017	ND	4.0000		
Arsenic, total	ug/L	MW-85	04/17/2018	ND	4.0000		
Arsenic, total	ug/L	MW-85	10/22/2018	ND	4.0000		
Arsenic, total	ug/L	MW-85	04/22/2019	ND	4.0000		
Arsenic, total	ug/L	MW-85	10/23/2019	ND	4.0000		
Arsenic, total	ug/L	MW-85	04/10/2020	ND	4.0000		
Arsenic, total	ug/L	MW-85	10/19/2020	ND	4.0000		
Arsenic, total	ug/L	MW-85	04/05/2021	ND	4.0000		
Arsenic, total	ug/L	MW-85	10/08/2021	ND	4.0000		
Arsenic, total	ug/L	MW-85	04/06/2022	ND	4.0000		
Arsenic, total	ug/L	MW-85	10/25/2022	ND	4.0000		
Arsenic, total	ug/L	MW-85	04/11/2023	ND	4.0000		
Arsenic, total	ug/L	MW-85	10/13/2023	ND	4.0000		
Arsenic, total	ug/L	MW-85	04/17/2024	ND	4.0000		
Arsenic, total	ug/L	MW-85	10/15/2024	ND	4.0000		
Barium, total	ug/L	MW-85	10/16/2014		138.0000		
Barium, total	ug/L	MW-85	01/14/2015		157.0000		
Barium, total	ug/L	MW-85	04/03/2015		167.0000		
Barium, total	ug/L	MW-85	07/06/2015		143.0000		
Barium, total	ug/L	MW-85	10/01/2015		135.0000		
Barium, total	ug/L	MW-85	04/14/2016		155.0000		
Barium, total	ug/L	MW-85	10/13/2016		149.0000		
Barium, total	ug/L	MW-85	04/10/2017		175.0000		
Barium, total	ug/L	MW-85	10/09/2017		143.0000		
Barium, total	ug/L	MW-85	04/17/2018		142.0000		
Barium, total	ug/L	MW-85	10/22/2018		146.0000		
Barium, total	ug/L	MW-85	04/22/2019		152.0000		
Barium, total	ug/L	MW-85	10/23/2019		126.0000		
Barium, total	ug/L	MW-85	04/10/2020		160.0000		
Barium, total	ug/L	MW-85	10/19/2020		151.0000		
Barium, total	ug/L	MW-85	04/05/2021		135.0000		
Barium, total	ug/L	MW-85	10/08/2021		121.0000		
Barium, total	ug/L	MW-85	04/06/2022		133.0000		
Barium, total	ug/L	MW-85	10/25/2022		138.0000		
Barium, total	ug/L	MW-85	04/11/2023		141.0000		
Barium, total	ug/L	MW-85	10/13/2023		143.0000		
Barium, total	ug/L	MW-85	04/17/2024		144.0000		
Barium, total	ug/L	MW-85	10/15/2024		136.0000		
Beryllium, total	ug/L	MW-85	10/16/2014	ND	4.0000		
Beryllium, total	ug/L	MW-85	01/14/2015	ND	4.0000		
Beryllium, total	ug/L	MW-85	04/03/2015	ND	4.0000		
Beryllium, total	ug/L	MW-85	07/06/2015	ND	4.0000		
Beryllium, total	ug/L	MW-85	10/01/2015	ND	4.0000		
Beryllium, total	ug/L	MW-85	04/14/2016	ND	4.0000		
Beryllium, total	ug/L	MW-85	10/13/2016	ND	4.0000		
Beryllium, total	ug/L	MW-85	04/10/2017	ND	4.0000		
Beryllium, total	ug/L	MW-85	10/09/2017	ND	4.0000		
Beryllium, total	ug/L	MW-85	04/17/2018	ND	4.0000		
Beryllium, total	ug/L	MW-85	10/22/2018	ND	4.0000		
Beryllium, total	ug/L	MW-85	04/22/2019	ND	4.0000		
Beryllium, total	ug/L	MW-85	10/23/2019	ND	4.0000		
Beryllium, total	ug/L	MW-85	04/10/2020	ND	4.0000		
Beryllium, total	ug/L	MW-85	10/19/2020	ND	4.0000		
Beryllium, total	ug/L	MW-85	04/05/2021	ND	4.0000		
Beryllium, total	ug/L	MW-85	10/08/2021	ND	4.0000		
Beryllium, total	ug/L	MW-85	04/06/2022	ND	4.0000		
Beryllium, total	ug/L	MW-85	10/25/2022	ND	4.0000		
Beryllium, total	ug/L	MW-85	04/11/2023	ND	4.0000		
Beryllium, total	ug/L	MW-85	10/13/2023	ND	4.0000		
Beryllium, total	ug/L	MW-85	04/17/2024	ND	4.0000		
Beryllium, total	ug/L	MW-85	10/15/2024	ND	4.0000		
Cadmium, total	ug/L	MW-85	10/16/2014	ND	0.8000		
Cadmium, total	ug/L	MW-85	01/14/2015	ND	0.8000		
Cadmium, total	ug/L	MW-85	04/03/2015	ND	0.8000		
Cadmium, total	ug/L	MW-85	07/06/2015	ND	0.8000		
Cadmium, total	ug/L	MW-85	10/01/2015	ND	0.8000		
Cadmium, total	ug/L	MW-85	04/14/2016	ND	0.8000		
Cadmium, total	ug/L	MW-85	10/13/2016	ND	0.8000		
Cadmium, total	ug/L	MW-85	04/10/2017	ND	0.8000		
Cadmium, total	ug/L	MW-85	10/09/2017	ND	0.8000		
Cadmium, total	ug/L	MW-85	04/17/2018	ND	0.8000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Cadmium, total	ug/L	MW-85	10/22/2018	ND	0.8000		
Cadmium, total	ug/L	MW-85	04/22/2019	ND	0.8000		
Cadmium, total	ug/L	MW-85	10/23/2019	ND	0.8000		
Cadmium, total	ug/L	MW-85	04/10/2020	ND	0.8000		
Cadmium, total	ug/L	MW-85	10/19/2020	ND	0.8000		
Cadmium, total	ug/L	MW-85	04/05/2021	ND	0.8000		
Cadmium, total	ug/L	MW-85	10/08/2021	ND	0.8000		
Cadmium, total	ug/L	MW-85	04/06/2022	ND	0.8000		
Cadmium, total	ug/L	MW-85	10/25/2022	ND	0.8000		
Cadmium, total	ug/L	MW-85	04/11/2023	ND	0.8000		
Cadmium, total	ug/L	MW-85	10/13/2023	ND	0.8000		
Cadmium, total	ug/L	MW-85	04/17/2024	ND	0.8000		
Cadmium, total	ug/L	MW-85	10/15/2024	ND	0.8000		
Chromium, total	ug/L	MW-85	10/16/2014	ND	8.0000		
Chromium, total	ug/L	MW-85	01/14/2015	ND	8.0000		
Chromium, total	ug/L	MW-85	04/03/2015	ND	8.0000		
Chromium, total	ug/L	MW-85	07/06/2015	ND	8.0000		
Chromium, total	ug/L	MW-85	10/01/2015	ND	8.0000		
Chromium, total	ug/L	MW-85	04/14/2016	ND	8.0000		
Chromium, total	ug/L	MW-85	10/13/2016	ND	8.0000		
Chromium, total	ug/L	MW-85	04/10/2017	ND	8.0000		
Chromium, total	ug/L	MW-85	10/09/2017	ND	8.0000		
Chromium, total	ug/L	MW-85	04/17/2018	ND	8.0000		
Chromium, total	ug/L	MW-85	10/22/2018	ND	8.0000		
Chromium, total	ug/L	MW-85	04/22/2019	ND	8.0000		
Chromium, total	ug/L	MW-85	10/23/2019	ND	8.0000		
Chromium, total	ug/L	MW-85	04/10/2020	ND	8.0000		
Chromium, total	ug/L	MW-85	10/19/2020	ND	8.0000		
Chromium, total	ug/L	MW-85	04/05/2021	ND	8.0000		
Chromium, total	ug/L	MW-85	10/08/2021	ND	8.0000		
Chromium, total	ug/L	MW-85	04/06/2022	ND	8.0000		
Chromium, total	ug/L	MW-85	10/25/2022	ND	8.0000		
Chromium, total	ug/L	MW-85	04/11/2023	ND	8.0000		
Chromium, total	ug/L	MW-85	10/13/2023	ND	8.0000		
Chromium, total	ug/L	MW-85	04/17/2024	ND	8.0000		
Chromium, total	ug/L	MW-85	10/15/2024	ND	8.0000		
Cobalt, total	ug/L	MW-85	10/16/2014	ND	0.8000		
Cobalt, total	ug/L	MW-85	01/14/2015	ND	0.8000		
Cobalt, total	ug/L	MW-85	04/03/2015	ND	0.8000		
Cobalt, total	ug/L	MW-85	07/06/2015	ND	0.8000		
Cobalt, total	ug/L	MW-85	10/01/2015	ND	0.8000		
Cobalt, total	ug/L	MW-85	04/14/2016	ND	0.8000		
Cobalt, total	ug/L	MW-85	10/13/2016	ND	0.8000		
Cobalt, total	ug/L	MW-85	04/10/2017	ND	0.8000		
Cobalt, total	ug/L	MW-85	10/09/2017	ND	0.8000		
Cobalt, total	ug/L	MW-85	04/17/2018	ND	0.8000		
Cobalt, total	ug/L	MW-85	10/22/2018	ND	0.8000		
Cobalt, total	ug/L	MW-85	04/22/2019	ND	0.8000		
Cobalt, total	ug/L	MW-85	10/23/2019	ND	0.8000		
Cobalt, total	ug/L	MW-85	04/10/2020		0.4000		
Cobalt, total	ug/L	MW-85	10/19/2020		0.4000		
Cobalt, total	ug/L	MW-85	04/05/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-85	10/08/2021	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-85	04/06/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-85	10/25/2022	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-85	04/11/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-85	10/13/2023	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-85	04/17/2024		0.4000		
Cobalt, total	ug/L	MW-85	10/15/2024	ND	0.4000	0.8000	**
Copper, total	ug/L	MW-85	10/16/2014	ND	4.0000		
Copper, total	ug/L	MW-85	01/14/2015	ND	4.0000		
Copper, total	ug/L	MW-85	04/03/2015	ND	4.0000		
Copper, total	ug/L	MW-85	07/06/2015	ND	4.0000		
Copper, total	ug/L	MW-85	10/01/2015	ND	4.0000		
Copper, total	ug/L	MW-85	04/14/2016	ND	4.0000		
Copper, total	ug/L	MW-85	10/13/2016	ND	4.0000		
Copper, total	ug/L	MW-85	04/10/2017	ND	4.0000		
Copper, total	ug/L	MW-85	10/09/2017	ND	4.0000		
Copper, total	ug/L	MW-85	04/17/2018	ND	4.0000		
Copper, total	ug/L	MW-85	10/22/2018		4.8000		
Copper, total	ug/L	MW-85	04/22/2019	ND	4.0000		
Copper, total	ug/L	MW-85	10/23/2019		4.0000		
Copper, total	ug/L	MW-85	04/10/2020	ND	4.0000		
Copper, total	ug/L	MW-85	10/19/2020	ND	4.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Copper, total	ug/L	MW-85	04/05/2021	ND	4.0000		
Copper, total	ug/L	MW-85	10/08/2021	ND	4.0000		
Copper, total	ug/L	MW-85	04/06/2022	ND	4.0000		
Copper, total	ug/L	MW-85	10/25/2022	ND	4.0000		
Copper, total	ug/L	MW-85	04/11/2023	ND	4.0000		
Copper, total	ug/L	MW-85	10/13/2023	ND	4.0000		
Copper, total	ug/L	MW-85	04/17/2024	ND	4.0000		
Copper, total	ug/L	MW-85	10/15/2024	ND	4.0000		
Lead, total	ug/L	MW-85	10/16/2014	ND	4.0000		
Lead, total	ug/L	MW-85	01/14/2015	ND	4.0000		
Lead, total	ug/L	MW-85	04/03/2015	ND	4.0000		
Lead, total	ug/L	MW-85	07/06/2015	ND	4.0000		
Lead, total	ug/L	MW-85	10/01/2015	ND	4.0000		
Lead, total	ug/L	MW-85	04/14/2016	ND	4.0000		
Lead, total	ug/L	MW-85	10/13/2016	ND	4.0000		
Lead, total	ug/L	MW-85	04/10/2017	ND	4.0000		
Lead, total	ug/L	MW-85	10/09/2017	ND	4.0000		
Lead, total	ug/L	MW-85	04/17/2018	ND	4.0000		
Lead, total	ug/L	MW-85	10/22/2018	ND	4.0000		
Lead, total	ug/L	MW-85	04/22/2019	ND	4.0000		
Lead, total	ug/L	MW-85	10/23/2019	ND	4.0000		
Lead, total	ug/L	MW-85	04/10/2020	ND	4.0000		
Lead, total	ug/L	MW-85	10/19/2020	ND	4.0000		
Lead, total	ug/L	MW-85	04/05/2021	ND	4.0000		
Lead, total	ug/L	MW-85	10/08/2021	ND	4.0000		
Lead, total	ug/L	MW-85	04/06/2022	ND	4.0000		
Lead, total	ug/L	MW-85	10/25/2022	ND	4.0000		
Lead, total	ug/L	MW-85	04/11/2023	ND	4.0000		
Lead, total	ug/L	MW-85	10/13/2023	ND	4.0000		
Lead, total	ug/L	MW-85	04/17/2024	ND	4.0000		
Lead, total	ug/L	MW-85	10/15/2024	ND	4.0000		
Nickel, total	ug/L	MW-85	10/16/2014	ND	4.0000		
Nickel, total	ug/L	MW-85	01/14/2015	ND	4.0000		
Nickel, total	ug/L	MW-85	04/03/2015	ND	4.0000		
Nickel, total	ug/L	MW-85	07/06/2015	ND	4.0000		
Nickel, total	ug/L	MW-85	10/01/2015	ND	4.0000		
Nickel, total	ug/L	MW-85	04/14/2016	ND	4.0000		
Nickel, total	ug/L	MW-85	10/13/2016	ND	4.0000		
Nickel, total	ug/L	MW-85	04/10/2017	ND	4.0000		
Nickel, total	ug/L	MW-85	10/09/2017	ND	4.0000		
Nickel, total	ug/L	MW-85	04/17/2018	ND	4.0000		
Nickel, total	ug/L	MW-85	10/22/2018		20.6000		*
Nickel, total	ug/L	MW-85	04/22/2019	ND	4.0000		
Nickel, total	ug/L	MW-85	10/23/2019	ND	4.0000		
Nickel, total	ug/L	MW-85	04/10/2020	ND	4.0000		
Nickel, total	ug/L	MW-85	10/19/2020	ND	4.0000		
Nickel, total	ug/L	MW-85	04/05/2021	ND	4.0000		
Nickel, total	ug/L	MW-85	10/08/2021	ND	4.0000		
Nickel, total	ug/L	MW-85	04/06/2022	ND	4.0000		
Nickel, total	ug/L	MW-85	10/25/2022	ND	4.0000		
Nickel, total	ug/L	MW-85	04/11/2023	ND	4.0000		
Nickel, total	ug/L	MW-85	10/13/2023	ND	4.0000		
Nickel, total	ug/L	MW-85	04/17/2024	ND	4.0000		
Nickel, total	ug/L	MW-85	10/15/2024	ND	4.0000		
Selenium, total	ug/L	MW-85	10/16/2014	ND	4.0000		
Selenium, total	ug/L	MW-85	01/14/2015	ND	4.0000		
Selenium, total	ug/L	MW-85	04/03/2015	ND	4.0000		
Selenium, total	ug/L	MW-85	07/06/2015	ND	4.0000		
Selenium, total	ug/L	MW-85	10/01/2015	ND	4.0000		
Selenium, total	ug/L	MW-85	04/14/2016	ND	4.0000		
Selenium, total	ug/L	MW-85	10/13/2016	ND	4.0000		
Selenium, total	ug/L	MW-85	04/10/2017	ND	4.0000		
Selenium, total	ug/L	MW-85	10/09/2017	ND	4.0000		
Selenium, total	ug/L	MW-85	04/17/2018	ND	4.0000		
Selenium, total	ug/L	MW-85	10/22/2018	ND	4.0000		
Selenium, total	ug/L	MW-85	04/22/2019	ND	4.0000		
Selenium, total	ug/L	MW-85	10/23/2019	ND	4.0000		
Selenium, total	ug/L	MW-85	04/10/2020	ND	4.0000		
Selenium, total	ug/L	MW-85	10/19/2020	ND	4.0000		
Selenium, total	ug/L	MW-85	04/05/2021	ND	4.0000		
Selenium, total	ug/L	MW-85	10/08/2021	ND	4.0000		
Selenium, total	ug/L	MW-85	04/06/2022	ND	4.0000		
Selenium, total	ug/L	MW-85	10/25/2022	ND	4.0000		
Selenium, total	ug/L	MW-85	04/11/2023	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	
Selenium, total	ug/L	MW-85	10/13/2023	ND	4.0000		
Selenium, total	ug/L	MW-85	04/17/2024	ND	4.0000		
Selenium, total	ug/L	MW-85	10/15/2024	ND	4.0000		
Silver, total	ug/L	MW-85	10/16/2014	ND	4.0000		
Silver, total	ug/L	MW-85	01/14/2015	ND	4.0000		
Silver, total	ug/L	MW-85	04/03/2015	ND	4.0000		
Silver, total	ug/L	MW-85	07/06/2015	ND	4.0000		
Silver, total	ug/L	MW-85	10/01/2015	ND	4.0000		
Silver, total	ug/L	MW-85	04/14/2016	ND	4.0000		
Silver, total	ug/L	MW-85	10/13/2016	ND	4.0000		
Silver, total	ug/L	MW-85	04/10/2017	ND	4.0000		
Silver, total	ug/L	MW-85	10/09/2017	ND	4.0000		
Silver, total	ug/L	MW-85	04/17/2018	ND	4.0000		
Silver, total	ug/L	MW-85	10/22/2018	ND	4.0000		
Silver, total	ug/L	MW-85	04/22/2019	ND	4.0000		
Silver, total	ug/L	MW-85	10/23/2019	ND	4.0000		
Silver, total	ug/L	MW-85	04/10/2020	ND	4.0000		
Silver, total	ug/L	MW-85	10/19/2020	ND	4.0000		
Silver, total	ug/L	MW-85	04/05/2021	ND	4.0000		
Silver, total	ug/L	MW-85	10/08/2021	ND	4.0000		
Silver, total	ug/L	MW-85	04/06/2022	ND	4.0000		
Silver, total	ug/L	MW-85	10/25/2022	ND	4.0000		
Silver, total	ug/L	MW-85	04/11/2023	ND	4.0000		
Silver, total	ug/L	MW-85	10/13/2023	ND	4.0000		
Silver, total	ug/L	MW-85	04/17/2024	ND	4.0000		
Silver, total	ug/L	MW-85	10/15/2024	ND	4.0000		
Thallium, total	ug/L	MW-85	10/16/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-85	01/14/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-85	04/03/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-85	07/06/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-85	10/01/2015	ND	1.0000	2.0000	**
Thallium, total	ug/L	MW-85	04/14/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-85	10/13/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-85	04/10/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-85	10/09/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-85	04/17/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-85	10/22/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-85	04/22/2019	ND	2.0000		
Thallium, total	ug/L	MW-85	10/23/2019	ND	2.0000		
Thallium, total	ug/L	MW-85	04/10/2020	ND	2.0000		
Thallium, total	ug/L	MW-85	10/19/2020	ND	2.0000		
Thallium, total	ug/L	MW-85	04/05/2021	ND	2.0000		
Thallium, total	ug/L	MW-85	10/08/2021	ND	2.0000		
Thallium, total	ug/L	MW-85	04/06/2022	ND	2.0000		
Thallium, total	ug/L	MW-85	10/25/2022	ND	2.0000		
Thallium, total	ug/L	MW-85	04/11/2023	ND	2.0000		
Thallium, total	ug/L	MW-85	10/13/2023	ND	2.0000		
Thallium, total	ug/L	MW-85	04/17/2024	ND	2.0000		
Thallium, total	ug/L	MW-85	10/15/2024	ND	2.0000		
Vanadium, total	ug/L	MW-85	10/16/2014	ND	20.0000		
Vanadium, total	ug/L	MW-85	01/14/2015	ND	20.0000		
Vanadium, total	ug/L	MW-85	04/03/2015	ND	20.0000		
Vanadium, total	ug/L	MW-85	07/06/2015	ND	20.0000		
Vanadium, total	ug/L	MW-85	10/01/2015	ND	20.0000		
Vanadium, total	ug/L	MW-85	04/14/2016	ND	20.0000		
Vanadium, total	ug/L	MW-85	10/13/2016	ND	20.0000		
Vanadium, total	ug/L	MW-85	04/10/2017	ND	20.0000		
Vanadium, total	ug/L	MW-85	10/09/2017	ND	20.0000		
Vanadium, total	ug/L	MW-85	04/17/2018	ND	20.0000		
Vanadium, total	ug/L	MW-85	10/22/2018	ND	20.0000		
Vanadium, total	ug/L	MW-85	04/22/2019	ND	20.0000		
Vanadium, total	ug/L	MW-85	10/23/2019	ND	20.0000		
Vanadium, total	ug/L	MW-85	04/10/2020	ND	20.0000		
Vanadium, total	ug/L	MW-85	10/19/2020	ND	20.0000		
Vanadium, total	ug/L	MW-85	04/05/2021	ND	20.0000		
Vanadium, total	ug/L	MW-85	10/08/2021	ND	20.0000		
Vanadium, total	ug/L	MW-85	04/06/2022	ND	20.0000		
Vanadium, total	ug/L	MW-85	10/25/2022	ND	20.0000		
Vanadium, total	ug/L	MW-85	04/11/2023	ND	20.0000		
Vanadium, total	ug/L	MW-85	10/13/2023	ND	20.0000		
Vanadium, total	ug/L	MW-85	04/17/2024	ND	20.0000		
Vanadium, total	ug/L	MW-85	10/15/2024	ND	20.0000		
Zinc, total	ug/L	MW-85	10/16/2014	ND	20.0000		
Zinc, total	ug/L	MW-85	01/14/2015	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-85	04/03/2015		27.0000		
Zinc, total	ug/L	MW-85	07/06/2015		9.1000		
Zinc, total	ug/L	MW-85	10/01/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-85	04/14/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-85	10/13/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-85	04/10/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-85	10/09/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-85	04/17/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-85	10/22/2018		125.0000		*
Zinc, total	ug/L	MW-85	04/22/2019	ND	20.0000		
Zinc, total	ug/L	MW-85	10/23/2019	ND	20.0000		
Zinc, total	ug/L	MW-85	04/10/2020	ND	20.0000		
Zinc, total	ug/L	MW-85	10/19/2020	ND	20.0000		
Zinc, total	ug/L	MW-85	04/05/2021	ND	20.0000		
Zinc, total	ug/L	MW-85	10/08/2021	ND	20.0000		
Zinc, total	ug/L	MW-85	04/06/2022	ND	20.0000		
Zinc, total	ug/L	MW-85	10/25/2022	ND	20.0000		
Zinc, total	ug/L	MW-85	04/11/2023	ND	20.0000		
Zinc, total	ug/L	MW-85	10/13/2023	ND	20.0000		
Zinc, total	ug/L	MW-85	04/17/2024	ND	20.0000		
Zinc, total	ug/L	MW-85	10/15/2024	ND	20.0000		
Antimony, total	ug/L	MW-98	10/13/2016	ND	2.0000		
Antimony, total	ug/L	MW-98	04/10/2017	ND	2.0000		
Antimony, total	ug/L	MW-98	10/09/2017	ND	2.0000		
Antimony, total	ug/L	MW-98	04/17/2018	ND	2.0000		
Antimony, total	ug/L	MW-98	10/22/2018	ND	2.0000		
Antimony, total	ug/L	MW-98	04/22/2019	ND	2.0000		
Antimony, total	ug/L	MW-98	10/23/2019	ND	2.0000		
Antimony, total	ug/L	MW-98	04/10/2020	ND	2.0000		
Antimony, total	ug/L	MW-98	10/19/2020	ND	2.0000		
Antimony, total	ug/L	MW-98	04/05/2021	ND	2.0000		
Antimony, total	ug/L	MW-98	10/08/2021	ND	2.0000		
Antimony, total	ug/L	MW-98	04/06/2022	ND	2.0000		
Antimony, total	ug/L	MW-98	10/25/2022	ND	2.0000		
Antimony, total	ug/L	MW-98	04/11/2023	ND	2.0000		
Antimony, total	ug/L	MW-98	10/13/2023	ND	2.0000		
Antimony, total	ug/L	MW-98	04/17/2024	ND	2.0000		
Antimony, total	ug/L	MW-98	10/15/2024	ND	2.0000		
Arsenic, total	ug/L	MW-98	10/13/2016		7.4000		
Arsenic, total	ug/L	MW-98	04/10/2017		25.3000		*
Arsenic, total	ug/L	MW-98	10/09/2017	ND	4.0000		
Arsenic, total	ug/L	MW-98	04/17/2018		7.8000		
Arsenic, total	ug/L	MW-98	10/22/2018	ND	4.0000		
Arsenic, total	ug/L	MW-98	04/22/2019	ND	4.0000		
Arsenic, total	ug/L	MW-98	10/23/2019		4.8000		
Arsenic, total	ug/L	MW-98	04/10/2020	ND	4.0000		
Arsenic, total	ug/L	MW-98	10/19/2020	ND	4.0000		
Arsenic, total	ug/L	MW-98	04/05/2021	ND	4.0000		
Arsenic, total	ug/L	MW-98	10/08/2021	ND	4.0000		
Arsenic, total	ug/L	MW-98	04/06/2022	ND	4.0000		
Arsenic, total	ug/L	MW-98	10/25/2022	ND	4.0000		
Arsenic, total	ug/L	MW-98	04/11/2023		6.4000		
Arsenic, total	ug/L	MW-98	10/13/2023		6.3000		
Arsenic, total	ug/L	MW-98	04/17/2024		48.0000		*
Arsenic, total	ug/L	MW-98	10/15/2024	ND	4.0000		
Barium, total	ug/L	MW-98	10/13/2016		171.0000		
Barium, total	ug/L	MW-98	04/10/2017		241.0000		
Barium, total	ug/L	MW-98	10/09/2017		129.0000		
Barium, total	ug/L	MW-98	04/17/2018		193.0000		
Barium, total	ug/L	MW-98	10/22/2018		102.0000		
Barium, total	ug/L	MW-98	04/22/2019		133.0000		
Barium, total	ug/L	MW-98	10/23/2019		94.4000		
Barium, total	ug/L	MW-98	04/10/2020		157.0000		
Barium, total	ug/L	MW-98	10/19/2020		147.0000		
Barium, total	ug/L	MW-98	04/05/2021		125.0000		
Barium, total	ug/L	MW-98	10/08/2021		149.0000		
Barium, total	ug/L	MW-98	04/06/2022		117.0000		
Barium, total	ug/L	MW-98	10/25/2022		183.0000		
Barium, total	ug/L	MW-98	04/11/2023		136.0000		
Barium, total	ug/L	MW-98	10/13/2023		217.0000		
Barium, total	ug/L	MW-98	04/17/2024		325.0000		
Barium, total	ug/L	MW-98	10/15/2024		137.0000		
Beryllium, total	ug/L	MW-98	10/13/2016	ND	4.0000		
Beryllium, total	ug/L	MW-98	04/10/2017	ND	4.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Beryllium, total	ug/L	MW-98	10/09/2017	ND	4.0000		
Beryllium, total	ug/L	MW-98	04/17/2018	ND	4.0000		
Beryllium, total	ug/L	MW-98	10/22/2018	ND	4.0000		
Beryllium, total	ug/L	MW-98	04/22/2019	ND	4.0000		
Beryllium, total	ug/L	MW-98	10/23/2019	ND	4.0000		
Beryllium, total	ug/L	MW-98	04/10/2020	ND	4.0000		
Beryllium, total	ug/L	MW-98	10/19/2020	ND	4.0000		
Beryllium, total	ug/L	MW-98	04/05/2021	ND	4.0000		
Beryllium, total	ug/L	MW-98	10/08/2021	ND	4.0000		
Beryllium, total	ug/L	MW-98	04/06/2022	ND	4.0000		
Beryllium, total	ug/L	MW-98	10/25/2022	ND	4.0000		
Beryllium, total	ug/L	MW-98	04/11/2023	ND	4.0000		
Beryllium, total	ug/L	MW-98	10/13/2023	ND	4.0000		
Beryllium, total	ug/L	MW-98	04/17/2024	ND	4.0000		
Beryllium, total	ug/L	MW-98	10/15/2024	ND	4.0000		
Cadmium, total	ug/L	MW-98	10/13/2016	ND	0.8000		
Cadmium, total	ug/L	MW-98	04/10/2017	ND	0.8000		
Cadmium, total	ug/L	MW-98	10/09/2017	ND	0.8000		
Cadmium, total	ug/L	MW-98	04/17/2018	ND	0.8000		
Cadmium, total	ug/L	MW-98	10/22/2018	ND	0.8000		
Cadmium, total	ug/L	MW-98	04/22/2019	ND	0.8000		
Cadmium, total	ug/L	MW-98	10/23/2019	ND	0.8000		
Cadmium, total	ug/L	MW-98	04/10/2020	ND	0.8000		
Cadmium, total	ug/L	MW-98	10/19/2020	ND	0.8000		
Cadmium, total	ug/L	MW-98	04/05/2021	ND	0.8000		
Cadmium, total	ug/L	MW-98	10/08/2021	ND	0.8000		
Cadmium, total	ug/L	MW-98	04/06/2022	ND	0.8000		
Cadmium, total	ug/L	MW-98	10/25/2022	ND	0.8000		
Cadmium, total	ug/L	MW-98	04/11/2023	ND	0.8000		
Cadmium, total	ug/L	MW-98	10/13/2023	ND	0.8000		
Cadmium, total	ug/L	MW-98	04/17/2024	ND	0.8000		
Cadmium, total	ug/L	MW-98	10/15/2024	ND	0.8000		
Chromium, total	ug/L	MW-98	10/13/2016	ND	8.0000		
Chromium, total	ug/L	MW-98	04/10/2017		9.8000		
Chromium, total	ug/L	MW-98	10/09/2017	ND	8.0000		
Chromium, total	ug/L	MW-98	04/17/2018	ND	8.0000		
Chromium, total	ug/L	MW-98	10/22/2018	ND	8.0000		
Chromium, total	ug/L	MW-98	04/22/2019	ND	8.0000		
Chromium, total	ug/L	MW-98	10/23/2019	ND	8.0000		
Chromium, total	ug/L	MW-98	04/10/2020	ND	8.0000		
Chromium, total	ug/L	MW-98	10/19/2020	ND	8.0000		
Chromium, total	ug/L	MW-98	04/05/2021	ND	8.0000		
Chromium, total	ug/L	MW-98	10/08/2021	ND	8.0000		
Chromium, total	ug/L	MW-98	04/06/2022	ND	8.0000		
Chromium, total	ug/L	MW-98	10/25/2022	ND	8.0000		
Chromium, total	ug/L	MW-98	04/11/2023	ND	8.0000		
Chromium, total	ug/L	MW-98	10/13/2023	ND	8.0000		
Chromium, total	ug/L	MW-98	04/17/2024	ND	8.0000		
Chromium, total	ug/L	MW-98	10/15/2024	ND	8.0000		
Cobalt, total	ug/L	MW-98	10/13/2016		3.0000		
Cobalt, total	ug/L	MW-98	04/10/2017		4.4000		
Cobalt, total	ug/L	MW-98	10/09/2017		0.8000		
Cobalt, total	ug/L	MW-98	04/17/2018		5.0000		
Cobalt, total	ug/L	MW-98	10/22/2018	ND	0.8000		
Cobalt, total	ug/L	MW-98	04/22/2019		1.3000		
Cobalt, total	ug/L	MW-98	10/23/2019		2.4000		
Cobalt, total	ug/L	MW-98	04/10/2020		2.0000		
Cobalt, total	ug/L	MW-98	10/19/2020		2.2000		
Cobalt, total	ug/L	MW-98	04/05/2021		0.6000		
Cobalt, total	ug/L	MW-98	10/08/2021		2.2000		
Cobalt, total	ug/L	MW-98	04/06/2022		0.7000		
Cobalt, total	ug/L	MW-98	10/25/2022		3.6000		
Cobalt, total	ug/L	MW-98	04/11/2023		2.1000		
Cobalt, total	ug/L	MW-98	10/13/2023		5.5000		
Cobalt, total	ug/L	MW-98	04/17/2024		4.7000		
Cobalt, total	ug/L	MW-98	10/15/2024		1.9000		
Copper, total	ug/L	MW-98	10/13/2016	ND	4.0000		
Copper, total	ug/L	MW-98	04/10/2017	ND	4.0000		
Copper, total	ug/L	MW-98	10/09/2017	ND	4.0000		
Copper, total	ug/L	MW-98	04/17/2018	ND	4.0000		
Copper, total	ug/L	MW-98	10/22/2018	ND	4.0000		
Copper, total	ug/L	MW-98	04/22/2019	ND	4.0000		
Copper, total	ug/L	MW-98	10/23/2019	ND	4.0000		
Copper, total	ug/L	MW-98	04/10/2020	ND	4.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Copper, total	ug/L	MW-98	10/19/2020	ND	4.0000		
Copper, total	ug/L	MW-98	04/05/2021		4.1000		
Copper, total	ug/L	MW-98	10/08/2021	ND	4.0000		
Copper, total	ug/L	MW-98	04/06/2022	ND	4.0000		
Copper, total	ug/L	MW-98	10/25/2022	ND	4.0000		
Copper, total	ug/L	MW-98	04/11/2023	ND	4.0000		
Copper, total	ug/L	MW-98	10/13/2023	ND	4.0000		
Copper, total	ug/L	MW-98	04/17/2024	ND	4.0000		
Copper, total	ug/L	MW-98	10/15/2024	ND	4.0000		
Lead, total	ug/L	MW-98	10/13/2016	ND	4.0000		
Lead, total	ug/L	MW-98	04/10/2017	ND	4.0000		
Lead, total	ug/L	MW-98	10/09/2017	ND	4.0000		
Lead, total	ug/L	MW-98	04/17/2018	ND	4.0000		
Lead, total	ug/L	MW-98	10/22/2018	ND	4.0000		
Lead, total	ug/L	MW-98	04/22/2019	ND	4.0000		
Lead, total	ug/L	MW-98	10/23/2019	ND	4.0000		
Lead, total	ug/L	MW-98	04/10/2020	ND	4.0000		
Lead, total	ug/L	MW-98	10/19/2020	ND	4.0000		
Lead, total	ug/L	MW-98	04/05/2021	ND	4.0000		
Lead, total	ug/L	MW-98	10/08/2021	ND	4.0000		
Lead, total	ug/L	MW-98	04/06/2022	ND	4.0000		
Lead, total	ug/L	MW-98	10/25/2022	ND	4.0000		
Lead, total	ug/L	MW-98	04/11/2023	ND	4.0000		
Lead, total	ug/L	MW-98	10/13/2023	ND	4.0000		
Lead, total	ug/L	MW-98	04/17/2024	ND	4.0000		
Lead, total	ug/L	MW-98	10/15/2024	ND	4.0000		
Nickel, total	ug/L	MW-98	10/13/2016	ND	4.0000		
Nickel, total	ug/L	MW-98	04/10/2017	ND	4.0000		
Nickel, total	ug/L	MW-98	10/09/2017	ND	4.0000		
Nickel, total	ug/L	MW-98	04/17/2018	ND	4.0000		
Nickel, total	ug/L	MW-98	10/22/2018	ND	4.0000		
Nickel, total	ug/L	MW-98	04/22/2019	ND	4.0000		
Nickel, total	ug/L	MW-98	10/23/2019	ND	4.0000		
Nickel, total	ug/L	MW-98	04/10/2020	ND	4.0000		
Nickel, total	ug/L	MW-98	10/19/2020	ND	4.0000		
Nickel, total	ug/L	MW-98	04/05/2021	ND	4.0000		
Nickel, total	ug/L	MW-98	10/08/2021	ND	4.0000		
Nickel, total	ug/L	MW-98	04/06/2022	ND	4.0000		
Nickel, total	ug/L	MW-98	10/25/2022	ND	4.0000		
Nickel, total	ug/L	MW-98	04/11/2023	ND	4.0000		
Nickel, total	ug/L	MW-98	10/13/2023	ND	4.0000		
Nickel, total	ug/L	MW-98	04/17/2024	ND	4.0000		
Nickel, total	ug/L	MW-98	10/15/2024	ND	4.0000		
Selenium, total	ug/L	MW-98	10/13/2016	ND	4.0000		
Selenium, total	ug/L	MW-98	04/10/2017	ND	4.0000		
Selenium, total	ug/L	MW-98	10/09/2017	ND	4.0000		
Selenium, total	ug/L	MW-98	04/17/2018	ND	4.0000		
Selenium, total	ug/L	MW-98	10/22/2018	ND	4.0000		
Selenium, total	ug/L	MW-98	04/22/2019	ND	4.0000		
Selenium, total	ug/L	MW-98	10/23/2019	ND	4.0000		
Selenium, total	ug/L	MW-98	04/10/2020	ND	4.0000		
Selenium, total	ug/L	MW-98	10/19/2020	ND	4.0000		
Selenium, total	ug/L	MW-98	04/05/2021	ND	4.0000		
Selenium, total	ug/L	MW-98	10/08/2021	ND	4.0000		
Selenium, total	ug/L	MW-98	04/06/2022	ND	4.0000		
Selenium, total	ug/L	MW-98	10/25/2022	ND	4.0000		
Selenium, total	ug/L	MW-98	04/11/2023	ND	4.0000		
Selenium, total	ug/L	MW-98	10/13/2023	ND	4.0000		
Selenium, total	ug/L	MW-98	04/17/2024	ND	4.0000		
Selenium, total	ug/L	MW-98	10/15/2024	ND	4.0000		
Silver, total	ug/L	MW-98	10/13/2016	ND	4.0000		
Silver, total	ug/L	MW-98	04/10/2017	ND	4.0000		
Silver, total	ug/L	MW-98	10/09/2017	ND	4.0000		
Silver, total	ug/L	MW-98	04/17/2018	ND	4.0000		
Silver, total	ug/L	MW-98	10/22/2018	ND	4.0000		
Silver, total	ug/L	MW-98	04/22/2019	ND	4.0000		
Silver, total	ug/L	MW-98	10/23/2019	ND	4.0000		
Silver, total	ug/L	MW-98	04/10/2020	ND	4.0000		
Silver, total	ug/L	MW-98	10/19/2020	ND	4.0000		
Silver, total	ug/L	MW-98	04/05/2021	ND	4.0000		
Silver, total	ug/L	MW-98	10/08/2021	ND	4.0000		
Silver, total	ug/L	MW-98	04/06/2022	ND	4.0000		
Silver, total	ug/L	MW-98	10/25/2022	ND	4.0000		
Silver, total	ug/L	MW-98	04/11/2023	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	
Silver, total	ug/L	MW-98	10/13/2023	ND	4.0000		
Silver, total	ug/L	MW-98	04/17/2024	ND	4.0000		
Silver, total	ug/L	MW-98	10/15/2024	ND	4.0000		
Thallium, total	ug/L	MW-98	10/13/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-98	04/10/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-98	10/09/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-98	04/17/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-98	10/22/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-98	04/22/2019	ND	2.0000		
Thallium, total	ug/L	MW-98	10/23/2019	ND	2.0000		
Thallium, total	ug/L	MW-98	04/10/2020	ND	2.0000		
Thallium, total	ug/L	MW-98	10/19/2020	ND	2.0000		
Thallium, total	ug/L	MW-98	04/05/2021	ND	2.0000		
Thallium, total	ug/L	MW-98	10/08/2021	ND	2.0000		
Thallium, total	ug/L	MW-98	04/06/2022	ND	2.0000		
Thallium, total	ug/L	MW-98	10/25/2022	ND	2.0000		
Thallium, total	ug/L	MW-98	04/11/2023	ND	2.0000		
Thallium, total	ug/L	MW-98	10/13/2023	ND	2.0000		
Thallium, total	ug/L	MW-98	04/17/2024	ND	2.0000		
Thallium, total	ug/L	MW-98	10/15/2024	ND	2.0000		
Vanadium, total	ug/L	MW-98	10/13/2016	ND	20.0000		
Vanadium, total	ug/L	MW-98	04/10/2017	ND	20.0000		
Vanadium, total	ug/L	MW-98	10/09/2017	ND	20.0000		
Vanadium, total	ug/L	MW-98	04/17/2018	ND	20.0000		
Vanadium, total	ug/L	MW-98	10/22/2018	ND	20.0000		
Vanadium, total	ug/L	MW-98	04/22/2019	ND	20.0000		
Vanadium, total	ug/L	MW-98	10/23/2019	ND	20.0000		
Vanadium, total	ug/L	MW-98	04/10/2020	ND	20.0000		
Vanadium, total	ug/L	MW-98	10/19/2020	ND	20.0000		
Vanadium, total	ug/L	MW-98	04/05/2021	ND	20.0000		
Vanadium, total	ug/L	MW-98	10/08/2021	ND	20.0000		
Vanadium, total	ug/L	MW-98	04/06/2022	ND	20.0000		
Vanadium, total	ug/L	MW-98	10/25/2022	ND	20.0000		
Vanadium, total	ug/L	MW-98	04/11/2023	ND	20.0000		
Vanadium, total	ug/L	MW-98	10/13/2023	ND	20.0000		
Vanadium, total	ug/L	MW-98	04/17/2024	ND	20.0000		
Vanadium, total	ug/L	MW-98	10/15/2024	ND	20.0000		
Zinc, total	ug/L	MW-98	10/13/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-98	04/10/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-98	10/09/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-98	04/17/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-98	10/22/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-98	04/22/2019	ND	20.0000		
Zinc, total	ug/L	MW-98	10/23/2019	ND	20.0000		
Zinc, total	ug/L	MW-98	04/10/2020	ND	20.0000		
Zinc, total	ug/L	MW-98	10/19/2020	ND	20.0000		
Zinc, total	ug/L	MW-98	04/05/2021	ND	20.0000		
Zinc, total	ug/L	MW-98	10/08/2021	ND	20.0000		
Zinc, total	ug/L	MW-98	04/06/2022	ND	20.0000		
Zinc, total	ug/L	MW-98	10/25/2022	ND	20.0000		
Zinc, total	ug/L	MW-98	04/11/2023	ND	20.0000		
Zinc, total	ug/L	MW-98	10/13/2023	ND	20.0000		
Zinc, total	ug/L	MW-98	04/17/2024	ND	20.0000		
Zinc, total	ug/L	MW-98	10/15/2024	ND	20.0000		
Antimony, total	ug/L	MW-99	10/13/2016	ND	2.0000		
Antimony, total	ug/L	MW-99	04/10/2017	ND	2.0000		
Antimony, total	ug/L	MW-99	10/09/2017	ND	2.0000		
Antimony, total	ug/L	MW-99	04/17/2018	ND	2.0000		
Antimony, total	ug/L	MW-99	10/22/2018	ND	2.0000		
Antimony, total	ug/L	MW-99	04/22/2019	ND	2.0000		
Antimony, total	ug/L	MW-99	10/23/2019	ND	2.0000		
Antimony, total	ug/L	MW-99	04/10/2020	ND	2.0000		
Antimony, total	ug/L	MW-99	10/19/2020	ND	2.0000		
Antimony, total	ug/L	MW-99	04/05/2021	ND	2.0000		
Antimony, total	ug/L	MW-99	10/08/2021	ND	2.0000		
Antimony, total	ug/L	MW-99	04/06/2022	ND	2.0000		
Antimony, total	ug/L	MW-99	10/25/2022	ND	2.0000		
Antimony, total	ug/L	MW-99	04/11/2023	ND	2.0000		
Antimony, total	ug/L	MW-99	10/13/2023	ND	2.0000		
Antimony, total	ug/L	MW-99	04/18/2024	ND	2.0000		
Antimony, total	ug/L	MW-99	10/15/2024	ND	2.0000		
Arsenic, total	ug/L	MW-99	10/13/2016	ND	4.0000		
Arsenic, total	ug/L	MW-99	04/10/2017	ND	4.0000		
Arsenic, total	ug/L	MW-99	10/09/2017	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	
Arsenic, total	ug/L	MW-99	04/17/2018	ND	4.0000		
Arsenic, total	ug/L	MW-99	10/22/2018	ND	4.0000		
Arsenic, total	ug/L	MW-99	04/22/2019	ND	4.0000		
Arsenic, total	ug/L	MW-99	10/23/2019	ND	4.0000		
Arsenic, total	ug/L	MW-99	04/10/2020	ND	4.0000		
Arsenic, total	ug/L	MW-99	10/19/2020	ND	4.0000		
Arsenic, total	ug/L	MW-99	04/05/2021	ND	4.0000		
Arsenic, total	ug/L	MW-99	10/08/2021	ND	4.0000		
Arsenic, total	ug/L	MW-99	04/06/2022	ND	4.0000		
Arsenic, total	ug/L	MW-99	10/25/2022	ND	4.0000		
Arsenic, total	ug/L	MW-99	04/11/2023	ND	4.0000		
Arsenic, total	ug/L	MW-99	10/13/2023	ND	4.0000		
Arsenic, total	ug/L	MW-99	04/18/2024	ND	4.0000		
Arsenic, total	ug/L	MW-99	10/15/2024	ND	4.0000		
Barium, total	ug/L	MW-99	10/13/2016		131.0000		
Barium, total	ug/L	MW-99	04/10/2017		109.0000		
Barium, total	ug/L	MW-99	10/09/2017		140.0000		
Barium, total	ug/L	MW-99	04/17/2018		93.9000		
Barium, total	ug/L	MW-99	10/22/2018		81.0000		
Barium, total	ug/L	MW-99	04/22/2019		110.0000		
Barium, total	ug/L	MW-99	10/23/2019		123.0000		
Barium, total	ug/L	MW-99	04/10/2020		124.0000		
Barium, total	ug/L	MW-99	10/19/2020		118.0000		
Barium, total	ug/L	MW-99	04/05/2021		117.0000		
Barium, total	ug/L	MW-99	10/08/2021		130.0000		
Barium, total	ug/L	MW-99	04/06/2022		110.0000		
Barium, total	ug/L	MW-99	10/25/2022		134.0000		
Barium, total	ug/L	MW-99	04/11/2023		89.4000		
Barium, total	ug/L	MW-99	10/13/2023		134.0000		
Barium, total	ug/L	MW-99	04/18/2024		164.0000		
Barium, total	ug/L	MW-99	10/15/2024		88.8000		
Beryllium, total	ug/L	MW-99	10/13/2016	ND	4.0000		
Beryllium, total	ug/L	MW-99	04/10/2017	ND	4.0000		
Beryllium, total	ug/L	MW-99	10/09/2017	ND	4.0000		
Beryllium, total	ug/L	MW-99	04/17/2018	ND	4.0000		
Beryllium, total	ug/L	MW-99	10/22/2018	ND	4.0000		
Beryllium, total	ug/L	MW-99	04/22/2019	ND	4.0000		
Beryllium, total	ug/L	MW-99	10/23/2019	ND	4.0000		
Beryllium, total	ug/L	MW-99	04/10/2020	ND	4.0000		
Beryllium, total	ug/L	MW-99	10/19/2020	ND	4.0000		
Beryllium, total	ug/L	MW-99	04/05/2021	ND	4.0000		
Beryllium, total	ug/L	MW-99	10/08/2021	ND	4.0000		
Beryllium, total	ug/L	MW-99	04/06/2022	ND	4.0000		
Beryllium, total	ug/L	MW-99	10/25/2022	ND	4.0000		
Beryllium, total	ug/L	MW-99	04/11/2023	ND	4.0000		
Beryllium, total	ug/L	MW-99	10/13/2023	ND	4.0000		
Beryllium, total	ug/L	MW-99	04/18/2024	ND	4.0000		
Beryllium, total	ug/L	MW-99	10/15/2024	ND	4.0000		
Cadmium, total	ug/L	MW-99	10/13/2016	ND	0.8000		
Cadmium, total	ug/L	MW-99	04/10/2017	ND	0.8000		
Cadmium, total	ug/L	MW-99	10/09/2017	ND	0.8000		
Cadmium, total	ug/L	MW-99	04/17/2018	ND	0.8000		
Cadmium, total	ug/L	MW-99	10/22/2018	ND	0.8000		
Cadmium, total	ug/L	MW-99	04/22/2019	ND	0.8000		
Cadmium, total	ug/L	MW-99	10/23/2019	ND	0.8000		
Cadmium, total	ug/L	MW-99	04/10/2020	ND	0.8000		
Cadmium, total	ug/L	MW-99	10/19/2020	ND	0.8000		
Cadmium, total	ug/L	MW-99	04/05/2021	ND	0.8000		
Cadmium, total	ug/L	MW-99	10/08/2021	ND	0.8000		
Cadmium, total	ug/L	MW-99	04/06/2022	ND	0.8000		
Cadmium, total	ug/L	MW-99	10/25/2022	ND	0.8000		
Cadmium, total	ug/L	MW-99	04/11/2023	ND	0.8000		
Cadmium, total	ug/L	MW-99	10/13/2023	ND	0.8000		
Cadmium, total	ug/L	MW-99	04/18/2024	ND	0.8000		
Cadmium, total	ug/L	MW-99	10/15/2024	ND	0.8000		
Chromium, total	ug/L	MW-99	10/13/2016	ND	8.0000		
Chromium, total	ug/L	MW-99	04/10/2017		23.4000		
Chromium, total	ug/L	MW-99	10/09/2017	ND	8.0000		
Chromium, total	ug/L	MW-99	04/17/2018	ND	8.0000		
Chromium, total	ug/L	MW-99	10/22/2018	ND	8.0000		
Chromium, total	ug/L	MW-99	04/22/2019	ND	8.0000		
Chromium, total	ug/L	MW-99	10/23/2019	ND	8.0000		
Chromium, total	ug/L	MW-99	04/10/2020	ND	8.0000		
Chromium, total	ug/L	MW-99	10/19/2020	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-99	04/05/2021	ND	8.0000		
Chromium, total	ug/L	MW-99	10/08/2021	ND	8.0000		
Chromium, total	ug/L	MW-99	04/06/2022	ND	8.0000		
Chromium, total	ug/L	MW-99	10/25/2022	ND	8.0000		
Chromium, total	ug/L	MW-99	04/11/2023	ND	8.0000		
Chromium, total	ug/L	MW-99	10/13/2023	ND	8.0000		
Chromium, total	ug/L	MW-99	04/18/2024	ND	8.0000		
Chromium, total	ug/L	MW-99	10/15/2024	ND	8.0000		
Cobalt, total	ug/L	MW-99	10/13/2016		5.2000		
Cobalt, total	ug/L	MW-99	04/10/2017		3.4000		
Cobalt, total	ug/L	MW-99	10/09/2017		6.0000		
Cobalt, total	ug/L	MW-99	04/17/2018		2.5000		
Cobalt, total	ug/L	MW-99	10/22/2018		0.8000		*
Cobalt, total	ug/L	MW-99	04/22/2019		3.1000		
Cobalt, total	ug/L	MW-99	10/23/2019		2.7000		
Cobalt, total	ug/L	MW-99	04/10/2020		4.1000		
Cobalt, total	ug/L	MW-99	10/19/2020		3.8000		
Cobalt, total	ug/L	MW-99	04/05/2021		3.2000		
Cobalt, total	ug/L	MW-99	10/08/2021		4.0000		
Cobalt, total	ug/L	MW-99	04/06/2022		3.5000		
Cobalt, total	ug/L	MW-99	10/25/2022		3.6000		
Cobalt, total	ug/L	MW-99	04/11/2023		2.2000		
Cobalt, total	ug/L	MW-99	10/13/2023		3.3000		
Cobalt, total	ug/L	MW-99	04/18/2024		4.1000		
Cobalt, total	ug/L	MW-99	10/15/2024		0.9000		*
Copper, total	ug/L	MW-99	10/13/2016	ND	4.0000		
Copper, total	ug/L	MW-99	04/10/2017	ND	4.0000		
Copper, total	ug/L	MW-99	10/09/2017	ND	4.0000		
Copper, total	ug/L	MW-99	04/17/2018	ND	4.0000		
Copper, total	ug/L	MW-99	10/22/2018	ND	4.0000		
Copper, total	ug/L	MW-99	04/22/2019	ND	4.0000		
Copper, total	ug/L	MW-99	10/23/2019	ND	4.0000		
Copper, total	ug/L	MW-99	04/10/2020	ND	4.0000		
Copper, total	ug/L	MW-99	10/19/2020	ND	4.0000		
Copper, total	ug/L	MW-99	04/05/2021		5.3000		
Copper, total	ug/L	MW-99	10/08/2021	ND	4.0000		
Copper, total	ug/L	MW-99	04/06/2022	ND	4.0000		
Copper, total	ug/L	MW-99	10/25/2022	ND	4.0000		
Copper, total	ug/L	MW-99	04/11/2023	ND	4.0000		
Copper, total	ug/L	MW-99	10/13/2023	ND	4.0000		
Copper, total	ug/L	MW-99	04/18/2024	ND	4.0000		
Copper, total	ug/L	MW-99	10/15/2024	ND	4.0000		
Lead, total	ug/L	MW-99	10/13/2016	ND	4.0000		
Lead, total	ug/L	MW-99	04/10/2017	ND	4.0000		
Lead, total	ug/L	MW-99	10/09/2017	ND	4.0000		
Lead, total	ug/L	MW-99	04/17/2018	ND	4.0000		
Lead, total	ug/L	MW-99	10/22/2018	ND	4.0000		
Lead, total	ug/L	MW-99	04/22/2019	ND	4.0000		
Lead, total	ug/L	MW-99	10/23/2019	ND	4.0000		
Lead, total	ug/L	MW-99	04/10/2020	ND	4.0000		
Lead, total	ug/L	MW-99	10/19/2020	ND	4.0000		
Lead, total	ug/L	MW-99	04/05/2021	ND	4.0000		
Lead, total	ug/L	MW-99	10/08/2021	ND	4.0000		
Lead, total	ug/L	MW-99	04/06/2022	ND	4.0000		
Lead, total	ug/L	MW-99	10/25/2022	ND	4.0000		
Lead, total	ug/L	MW-99	04/11/2023	ND	4.0000		
Lead, total	ug/L	MW-99	10/13/2023	ND	4.0000		
Lead, total	ug/L	MW-99	04/18/2024	ND	4.0000		
Lead, total	ug/L	MW-99	10/15/2024	ND	4.0000		
Nickel, total	ug/L	MW-99	10/13/2016		5.6000		
Nickel, total	ug/L	MW-99	04/10/2017		5.1000		
Nickel, total	ug/L	MW-99	10/09/2017		8.8000		
Nickel, total	ug/L	MW-99	04/17/2018		4.3000		
Nickel, total	ug/L	MW-99	10/22/2018	ND	4.0000		
Nickel, total	ug/L	MW-99	04/22/2019		5.1000		
Nickel, total	ug/L	MW-99	10/23/2019		7.1000		
Nickel, total	ug/L	MW-99	04/10/2020		6.5000		
Nickel, total	ug/L	MW-99	10/19/2020		6.9000		
Nickel, total	ug/L	MW-99	04/05/2021		5.1000		
Nickel, total	ug/L	MW-99	10/08/2021		5.5000		
Nickel, total	ug/L	MW-99	04/06/2022		5.3000		
Nickel, total	ug/L	MW-99	10/25/2022		6.2000		
Nickel, total	ug/L	MW-99	04/11/2023	ND	4.0000		
Nickel, total	ug/L	MW-99	10/13/2023		5.3000		

* - 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	
Nickel, total	ug/L	MW-99	04/18/2024		6.3000		
Nickel, total	ug/L	MW-99	10/15/2024	ND	4.0000		
Selenium, total	ug/L	MW-99	10/13/2016	ND	4.0000		
Selenium, total	ug/L	MW-99	04/10/2017	ND	4.0000		
Selenium, total	ug/L	MW-99	10/09/2017	ND	4.0000		
Selenium, total	ug/L	MW-99	04/17/2018	ND	4.0000		
Selenium, total	ug/L	MW-99	10/22/2018	ND	4.0000		
Selenium, total	ug/L	MW-99	04/22/2019	ND	4.0000		
Selenium, total	ug/L	MW-99	10/23/2019	ND	4.0000		
Selenium, total	ug/L	MW-99	04/10/2020	ND	4.0000		
Selenium, total	ug/L	MW-99	10/19/2020	ND	4.0000		
Selenium, total	ug/L	MW-99	04/05/2021	ND	4.0000		
Selenium, total	ug/L	MW-99	10/08/2021	ND	4.0000		
Selenium, total	ug/L	MW-99	04/06/2022	ND	4.0000		
Selenium, total	ug/L	MW-99	10/25/2022	ND	4.0000		
Selenium, total	ug/L	MW-99	04/11/2023	ND	4.0000		
Selenium, total	ug/L	MW-99	10/13/2023	ND	4.0000		
Selenium, total	ug/L	MW-99	04/18/2024	ND	4.0000		
Selenium, total	ug/L	MW-99	10/15/2024	ND	4.0000		
Silver, total	ug/L	MW-99	10/13/2016	ND	4.0000		
Silver, total	ug/L	MW-99	04/10/2017	ND	4.0000		
Silver, total	ug/L	MW-99	10/09/2017	ND	4.0000		
Silver, total	ug/L	MW-99	04/17/2018	ND	4.0000		
Silver, total	ug/L	MW-99	10/22/2018	ND	4.0000		
Silver, total	ug/L	MW-99	04/22/2019	ND	4.0000		
Silver, total	ug/L	MW-99	10/23/2019	ND	4.0000		
Silver, total	ug/L	MW-99	04/10/2020	ND	4.0000		
Silver, total	ug/L	MW-99	10/19/2020	ND	4.0000		
Silver, total	ug/L	MW-99	04/05/2021	ND	4.0000		
Silver, total	ug/L	MW-99	10/08/2021	ND	4.0000		
Silver, total	ug/L	MW-99	04/06/2022	ND	4.0000		
Silver, total	ug/L	MW-99	10/25/2022	ND	4.0000		
Silver, total	ug/L	MW-99	04/11/2023	ND	4.0000		
Silver, total	ug/L	MW-99	10/13/2023	ND	4.0000		
Silver, total	ug/L	MW-99	04/18/2024	ND	4.0000		
Silver, total	ug/L	MW-99	10/15/2024	ND	4.0000		
Thallium, total	ug/L	MW-99	10/13/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-99	04/10/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-99	10/09/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-99	04/17/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-99	10/22/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-99	04/22/2019	ND	2.0000		
Thallium, total	ug/L	MW-99	10/23/2019	ND	2.0000		
Thallium, total	ug/L	MW-99	04/10/2020	ND	2.0000		
Thallium, total	ug/L	MW-99	10/19/2020	ND	2.0000		
Thallium, total	ug/L	MW-99	04/05/2021	ND	2.0000		
Thallium, total	ug/L	MW-99	10/08/2021	ND	2.0000		
Thallium, total	ug/L	MW-99	04/06/2022	ND	2.0000		
Thallium, total	ug/L	MW-99	10/25/2022	ND	2.0000		
Thallium, total	ug/L	MW-99	04/11/2023	ND	2.0000		
Thallium, total	ug/L	MW-99	10/13/2023	ND	2.0000		
Thallium, total	ug/L	MW-99	04/18/2024	ND	2.0000		
Thallium, total	ug/L	MW-99	10/15/2024	ND	2.0000		
Vanadium, total	ug/L	MW-99	10/13/2016	ND	20.0000		
Vanadium, total	ug/L	MW-99	04/10/2017	ND	20.0000		
Vanadium, total	ug/L	MW-99	10/09/2017	ND	20.0000		
Vanadium, total	ug/L	MW-99	04/17/2018	ND	20.0000		
Vanadium, total	ug/L	MW-99	10/22/2018	ND	20.0000		
Vanadium, total	ug/L	MW-99	04/22/2019	ND	20.0000		
Vanadium, total	ug/L	MW-99	10/23/2019	ND	20.0000		
Vanadium, total	ug/L	MW-99	04/10/2020	ND	20.0000		
Vanadium, total	ug/L	MW-99	10/19/2020	ND	20.0000		
Vanadium, total	ug/L	MW-99	04/05/2021	ND	20.0000		
Vanadium, total	ug/L	MW-99	10/08/2021	ND	20.0000		
Vanadium, total	ug/L	MW-99	04/06/2022	ND	20.0000		
Vanadium, total	ug/L	MW-99	10/25/2022	ND	20.0000		
Vanadium, total	ug/L	MW-99	04/11/2023	ND	20.0000		
Vanadium, total	ug/L	MW-99	10/13/2023	ND	20.0000		
Vanadium, total	ug/L	MW-99	04/18/2024	ND	20.0000		
Vanadium, total	ug/L	MW-99	10/15/2024	ND	20.0000		
Zinc, total	ug/L	MW-99	10/13/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-99	04/10/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-99	10/09/2017		11.2000		
Zinc, total	ug/L	MW-99	04/17/2018	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-99	10/22/2018		23.6000		
Zinc, total	ug/L	MW-99	04/22/2019		27.8000		
Zinc, total	ug/L	MW-99	10/23/2019		20.8000		
Zinc, total	ug/L	MW-99	04/10/2020	ND	20.0000		
Zinc, total	ug/L	MW-99	10/19/2020	ND	20.0000		
Zinc, total	ug/L	MW-99	04/05/2021	ND	20.0000		
Zinc, total	ug/L	MW-99	10/08/2021	ND	20.0000		
Zinc, total	ug/L	MW-99	04/06/2022	ND	20.0000		
Zinc, total	ug/L	MW-99	10/25/2022	ND	20.0000		
Zinc, total	ug/L	MW-99	04/11/2023	ND	20.0000		
Zinc, total	ug/L	MW-99	10/13/2023	ND	20.0000		
Zinc, total	ug/L	MW-99	04/18/2024	ND	20.0000		
Zinc, total	ug/L	MW-99	10/15/2024	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-96R	10/15/2024	ND	2.0000		2.0000
Arsenic, total	ug/L	MW-96R	10/15/2024		6.6000		7.8000
Barium, total	ug/L	MW-96R	10/15/2024		338.0000		452.8909
Beryllium, total	ug/L	MW-96R	10/15/2024	ND	4.0000		4.0000
Cadmium, total	ug/L	MW-96R	10/15/2024	ND	0.8000		0.8000
Chromium, total	ug/L	MW-96R	10/15/2024	ND	8.0000		23.4000
Cobalt, total	ug/L	MW-96R	10/15/2024		10.5000	*	5.9879
Copper, total	ug/L	MW-96R	10/15/2024	ND	4.0000		5.3000
Lead, total	ug/L	MW-96R	10/15/2024	ND	4.0000		4.0000
Nickel, total	ug/L	MW-96R	10/15/2024		4.6000		8.8000
Selenium, total	ug/L	MW-96R	10/15/2024	ND	4.0000	**	4.0000
Silver, total	ug/L	MW-96R	10/15/2024	ND	4.0000		4.0000
Thallium, total	ug/L	MW-96R	10/15/2024	ND	2.0000		2.0000
Vanadium, total	ug/L	MW-96R	10/15/2024	ND	20.0000		20.0000
Zinc, total	ug/L	MW-96R	10/15/2024	ND	20.0000		54.6000

* - 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 Detect	Upgradient N	Upgradient Proportion	Downgradient Detect	Downgradient N	Downgradient Proportion
Antimony, total	0	65	0.000	0	8	0.000
Arsenic, total	5	63	0.079	8	11	0.727
Barium, total	65	65	1.000	9	9	1.000
Beryllium, total	0	65	0.000	0	8	0.000
Cadmium, total	0	65	0.000	0	8	0.000
Chromium, total	2	65	0.031	0	8	0.000
Cobalt, total	35	63	0.556	11	11	1.000
Copper, total	4	65	0.062	0	8	0.000
Lead, total	0	65	0.000	0	8	0.000
Nickel, total	14	64	0.219	8	8	1.000
Selenium, total	0	65	0.000	3	9	0.333
Silver, total	0	65	0.000	0	8	0.000
Thallium, total	0	65	0.000	0	8	0.000
Vanadium, total	0	65	0.000	0	8	0.000
Zinc, total	7	64	0.109	0	8	0.000

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	65	0.000									nonpar
Arsenic, total	5	63	0.079	0.427	0.013					2.326	normal	nonpar
Barium, total	65	65	1.000	0.569	1.099					2.326	normal	normal
Beryllium, total	0	65	0.000									nonpar
Cadmium, total	0	65	0.000									nonpar
Chromium, total	2	65	0.031									nonpar
Cobalt, total	35	63	0.556	1.125	0.053					2.326	normal	normal
Copper, total	4	65	0.062									nonpar
Lead, total	0	65	0.000									nonpar
Nickel, total	14	64	0.219	1.049	0.057					2.326	normal	nonpar
Selenium, total	0	65	0.000									nonpar
Silver, total	0	65	0.000									nonpar
Thallium, total	0	65	0.000									nonpar
Vanadium, total	0	65	0.000									nonpar
Zinc, total	7	64	0.109	0.439	0.418					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	65					2.0000	nonpar	***	0.99
Arsenic, total	ug/L	5	63					7.8000	nonpar		0.99
Barium, total	ug/L	65	65	179.9308	113.5302	0.0100	2.4043	452.8909	normal		
Beryllium, total	ug/L	0	65					4.0000	nonpar	***	0.99
Cadmium, total	ug/L	0	65					0.8000	nonpar	***	0.99
Chromium, total	ug/L	2	65					23.4000	nonpar		0.99
Cobalt, total	ug/L	35	63	1.5746	1.8336	0.0100	2.4069	5.9879	normal		
Copper, total	ug/L	4	65					5.3000	nonpar		0.99
Lead, total	ug/L	0	65					4.0000	nonpar	***	0.99
Nickel, total	ug/L	14	64					8.8000	nonpar		0.99
Selenium, total	ug/L	0	65					4.0000	nonpar	***	0.99
Silver, total	ug/L	0	65					4.0000	nonpar	***	0.99
Thallium, total	ug/L	0	65					2.0000	nonpar	***	0.99
Vanadium, total	ug/L	0	65					20.0000	nonpar	***	0.99
Zinc, total	ug/L	7	64					54.6000	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
Arsenic, total	ug/L	MW-98	04/17/2024	48.0000		10/13/2016-10/15/2024	16	0.5973
Cobalt, total	ug/L	MW-99	10/22/2018	0.8000		10/13/2016-10/15/2024	17	0.5973
Cobalt, total	ug/L	MW-99	10/15/2024	0.9000		10/13/2016-10/15/2024	17	0.5973

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.

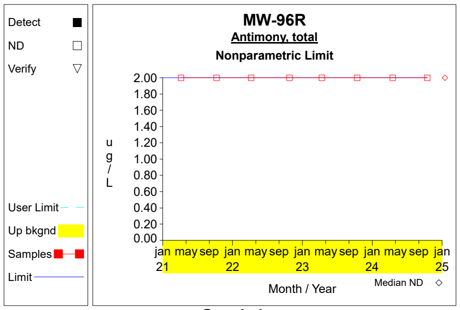
Table 8

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

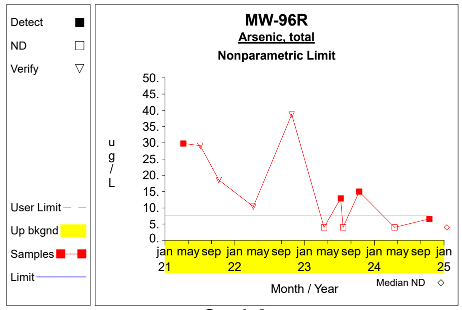
Constituent	Units	Well	Date		Result		Pred. Limit
Cobalt, total	ug/L	MW-96R	04/05/2021		16.8000	*	5.9879
Cobalt, total	ug/L	MW-96R	07/02/2021		11.9000	*	5.9879
Cobalt, total	ug/L	MW-96R	10/08/2021		11.4000	*	5.9879
Cobalt, total	ug/L	MW-96R	04/06/2022		7.6000	*	5.9879
Cobalt, total	ug/L	MW-96R	10/25/2022		11.1000	*	5.9879
Cobalt, total	ug/L	MW-96R	04/11/2023		2.2000		5.9879
Cobalt, total	ug/L	MW-96R	07/07/2023		11.2000	*	5.9879
Cobalt, total	ug/L	MW-96R	07/20/2023		10.0000	*	5.9879
Cobalt, total	ug/L	MW-96R	10/13/2023		10.6000	*	5.9879
Cobalt, total	ug/L	MW-96R	04/16/2024		1.8000		5.9879
Cobalt, total	ug/L	MW-96R	10/15/2024		10.5000	*	5.9879
Selenium, total	ug/L	MW-96R	04/05/2021	ND	4.0000		4.0000
Selenium, total	ug/L	MW-96R	10/08/2021	ND	4.0000		4.0000
Selenium, total	ug/L	MW-96R	04/06/2022		9.1000	*	4.0000
Selenium, total	ug/L	MW-96R	10/25/2022	ND	4.0000		4.0000
Selenium, total	ug/L	MW-96R	04/11/2023		7.8000	*	4.0000
Selenium, total	ug/L	MW-96R	07/07/2023	ND	4.0000		4.0000
Selenium, total	ug/L	MW-96R	10/13/2023	ND	4.0000		4.0000
Selenium, total	ug/L	MW-96R	04/16/2024		7.4000	*	4.0000
Selenium, total	ug/L	MW-96R	10/15/2024	ND	4.0000		4.0000

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

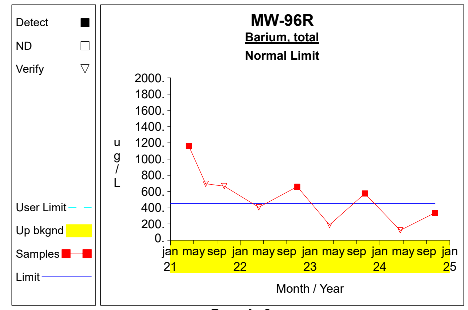
Up vs. Down Prediction Limits



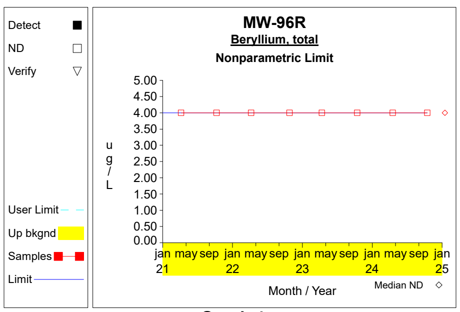
Graph 1



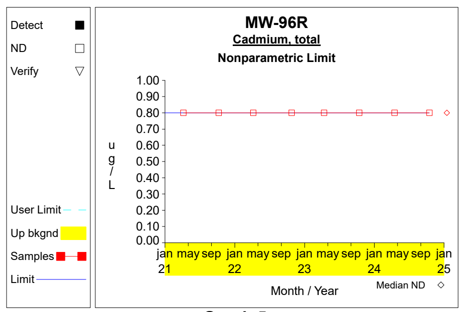
Graph 2



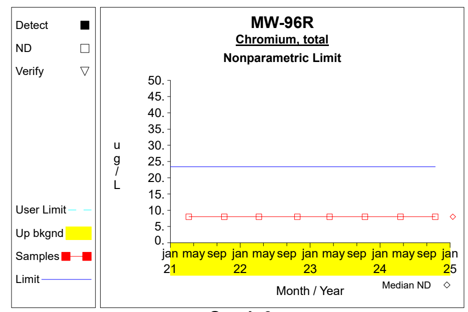
Graph 3



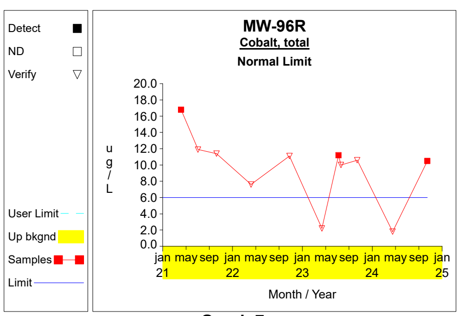
Graph 4



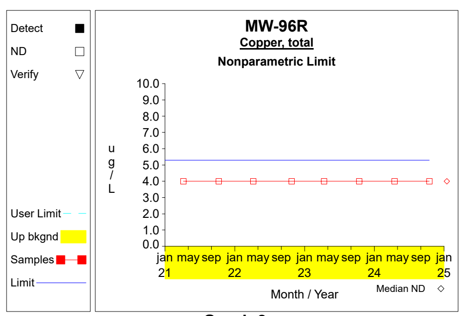
Graph 5



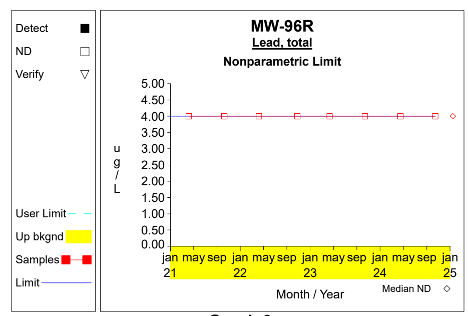
Graph 6



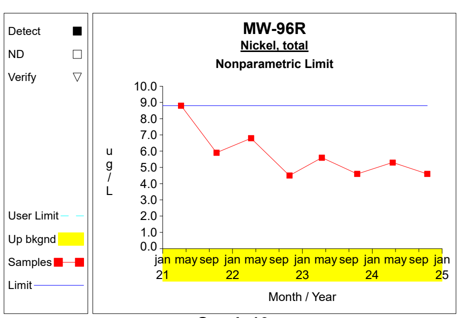
Graph 7



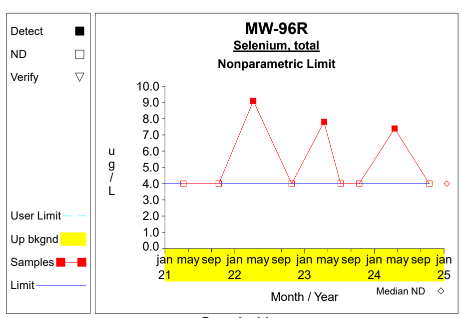
Graph 8



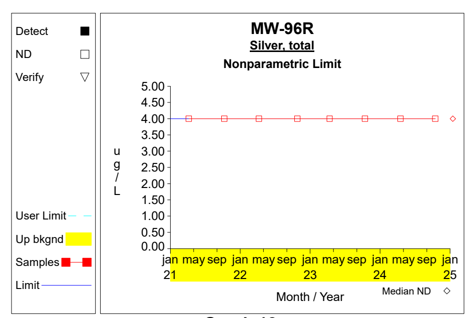
Graph 9



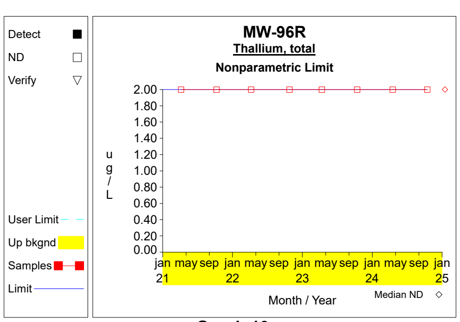
Graph 10



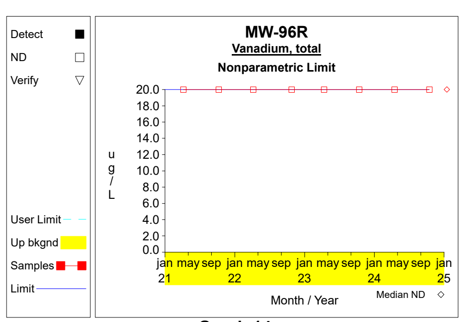
Graph 11



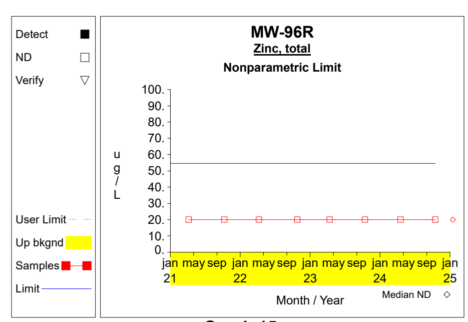
Graph 12



Graph 13



Graph 14



Graph 15

Attachment C

Assessment Statistics for Trace Metals

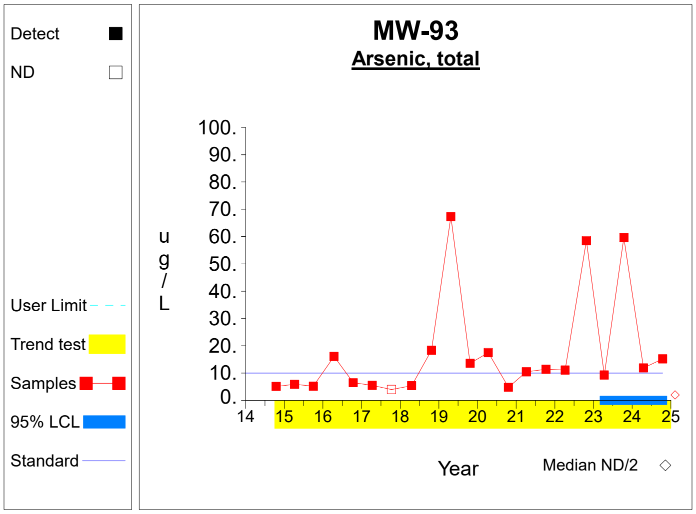
Table 1

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

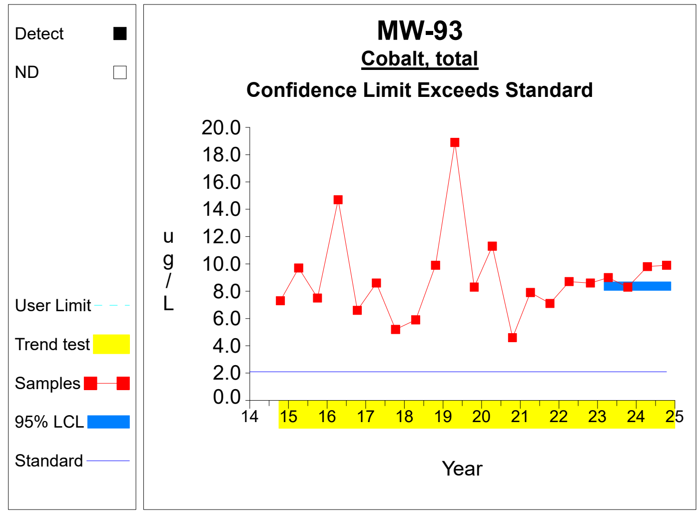
Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend	
Arsenic, total	ug/L	MW-93	4	24.000	23.856	1.176	0.000	52.061	10.000		
Cobalt, total	ug/L	MW-93	4	9.250	0.751	1.176	8.367	10.133	2.100		**
Nickel, total	ug/L	MW-93	4	28.300	2.694	1.176	25.131	31.469	100.000		

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

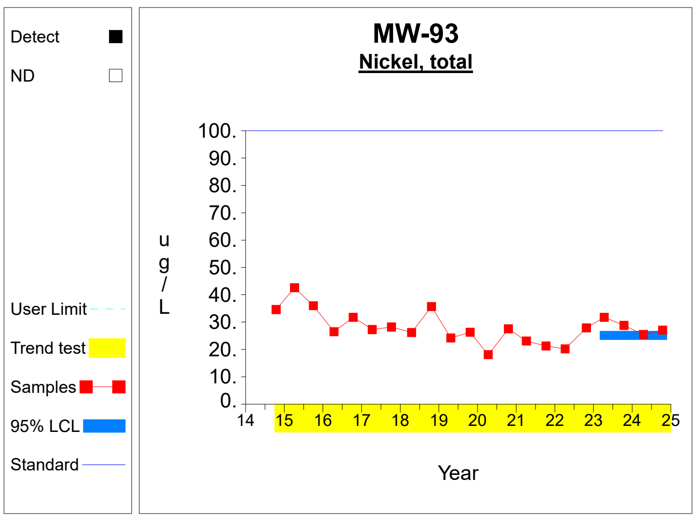
Confidence Limits (Assessment)



Graph 1



Graph 2



Graph 3

Worksheet 6 - Assessment Monitoring
Arsenic, total (ug/L) at MW-93

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N** = **96.0** / **4** = **24.0**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))$^{1/2}$ = ((**4011.3** - **9216.0**/**4**) / (**4**-1))$^{1/2}$ = **23.856**	Compute sd of the last 4 measurements.
3	LCL = $\bar{X}$ - **tS**/**N**$^{1/2}$ = **24.0** - **2.353** * **23.856**/**4**$^{1/2}$ = **0.0**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = $\bar{X}$ + **tS**/**N**$^{1/2}$ = **24.0** + **2.353** * **23.856**/**4**$^{1/2}$ = **52.061**	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 = **0.918**	Sen's estimator of trend.
7	var(S) = **1096.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**$^{1/2}$) / 2 = (**210** ± **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 Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.331**, **3.178**]	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-93

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N** = **37.0** / **4** = **9.25**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2] - sum[X]^2/N**) / (**N**-1))^{½} = ((**343.94** - **1369.0/4**) / (**4**-1))^{½} = **0.751**	Compute sd of the last 4 measurements.
3	LCL = **$\bar{X}$ - tS/N^{½}** = **9.25** - **2.353** * **0.751/4^{½}** = **8.367**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\bar{X}$ + tS/N^{½}** = **9.25** + **2.353** * **0.751/4^{½}** = **10.133**	Compute upper confidence limit for the mean of the last 4 measurements.
5	N' = **N** * (**N**-1) / 2 = **21** * (**21**-1) / 2 = **210**	Number of sample pairs during trend detection period.
6	S = **0.163**	Sen's estimator of trend.
7	var(S) = **1093.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z$_{.995}$** * **var(S)^{½}**) / 2 = (**210** ± **2.576** * **1093.667^{½}**) / 2 = [**62.405**, **147.595**]	Ordinal positions for two-sided lower confidence limits for slope. The LCL and UCL are the Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-0.4**, **0.619**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

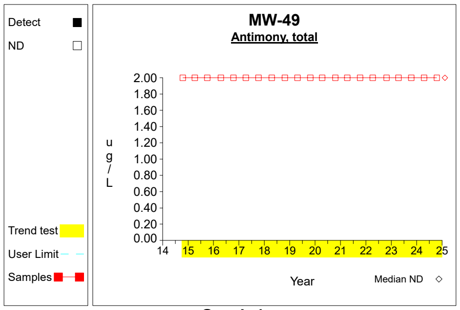
Worksheet 6 - Assessment Monitoring
Nickel, total (ug/L) at MW-93

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N** = **113.2** / **4** = **28.3**	Compute the mean of the last 4 measurements.
2	S = ((**sum[X^2]** - **sum[X]^2**/**N**) / (**N**-1))$^{1/2}$ = ((**3225.34** - **12814.24**/**4**) / (**4**-1))$^{1/2}$ = **2.694**	Compute sd of the last 4 measurements.
3	LCL = **$\bar{X}$** - **tS**/**N**$^{1/2}$ = **28.3** - **2.353** * **2.694**/**4**$^{1/2}$ = **25.131**	Compute lower confidence limit for the mean of the last 4 measurements.
4	UCL = **$\bar{X}$** + **tS**/**N**$^{1/2}$ = **28.3** + **2.353** * **2.694**/**4**$^{1/2}$ = **31.469**	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 = **-0.971**	Sen's estimator of trend.
7	var(S) = **1095.667**	Variance estimate for slope.
8	M(S) = (**N'** ± **Z**$_{.995}$ * **var(S)**$^{1/2}$) / 2 = (**210** ± **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 Mth largest slope estimates for the values shown. When the values are not integers, interpolation is used.
9	CL(S) = [**-2.136**, **0.195**]	Two-sided confidence interval for slope.
10	the interval includes 0	There is no significant trend.

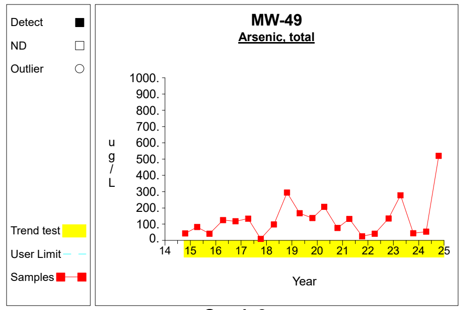
Attachment D

Supplemental Wells Time Series of Trace Metals

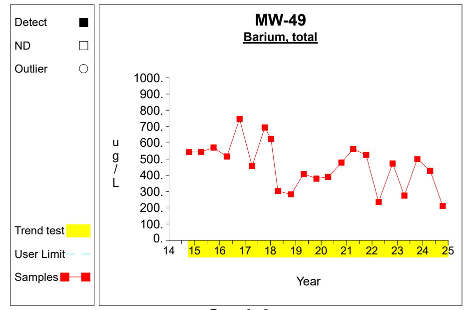
Time Series



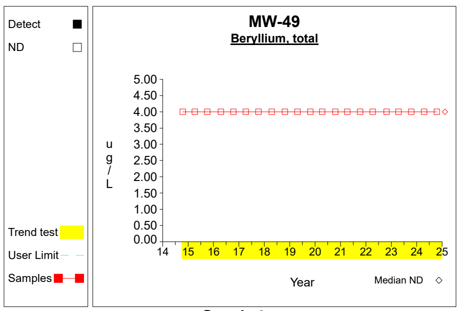
Graph 1



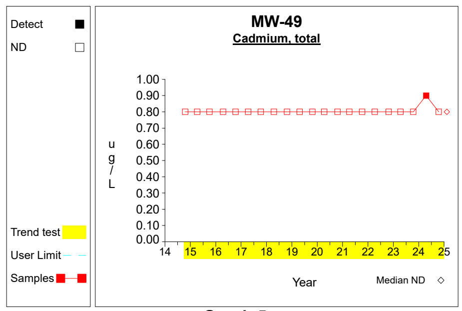
Graph 2



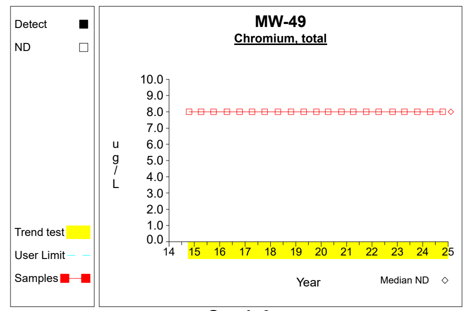
Graph 3



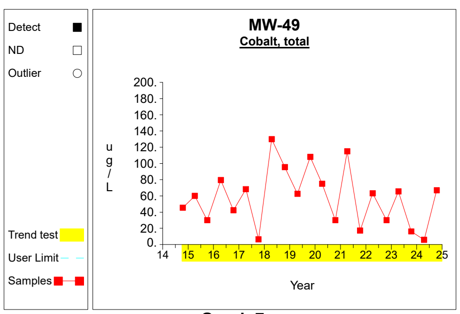
Graph 4



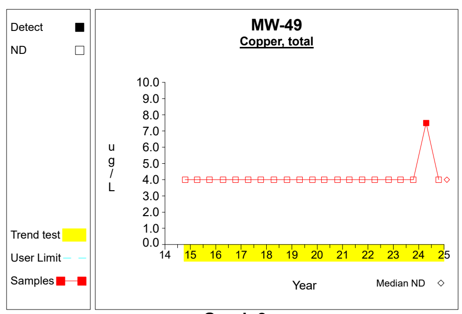
Graph 5



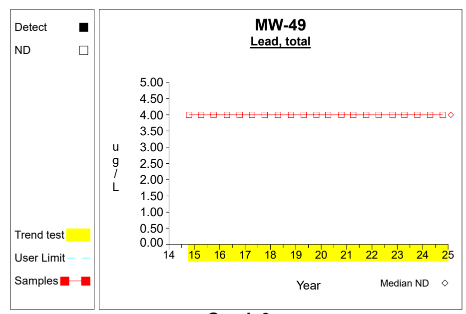
Graph 6



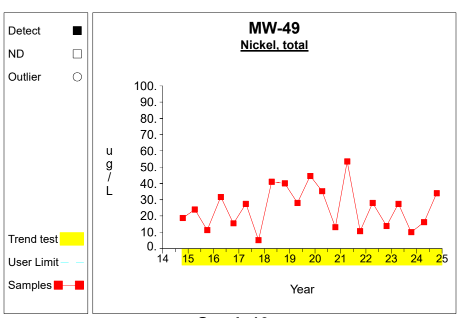
Graph 7



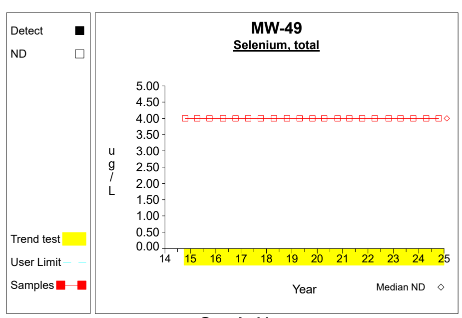
Graph 8



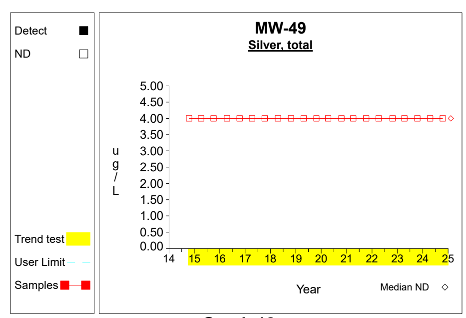
Graph 9



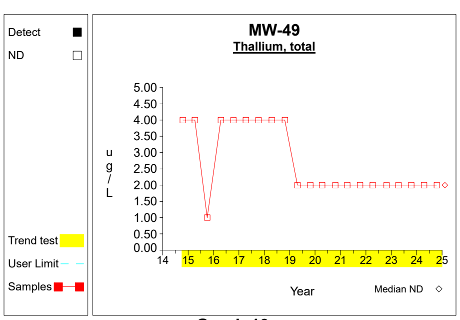
Graph 10



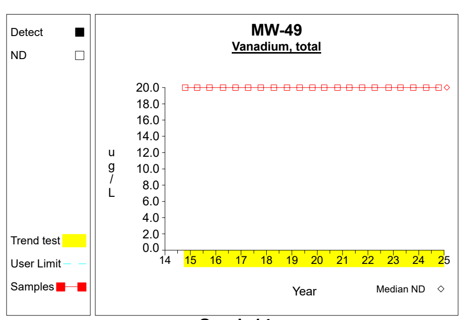
Graph 11



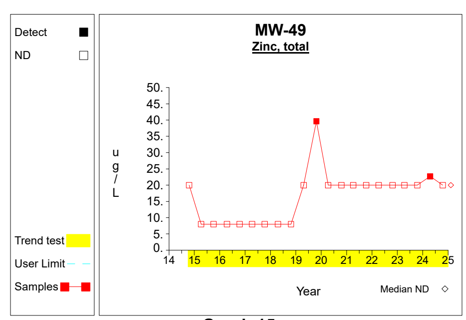
Graph 12



Graph 13

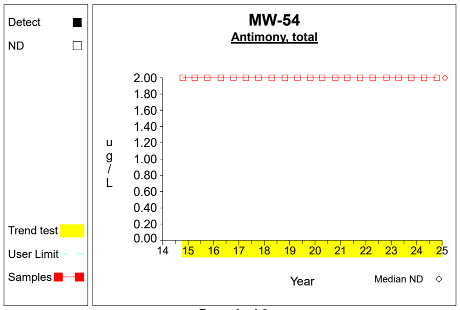


Graph 14

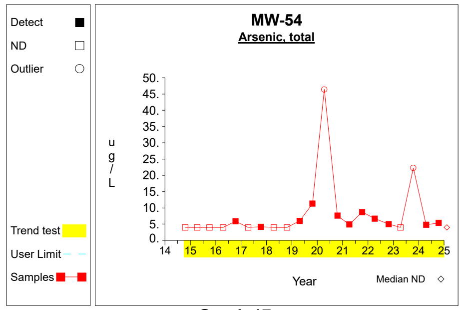


Graph 15

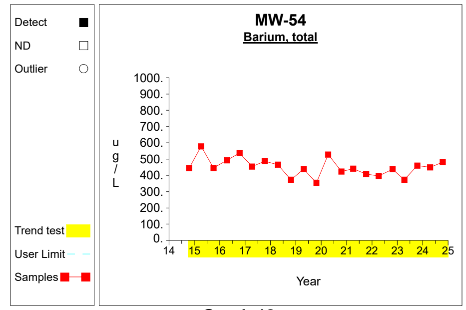
Time Series



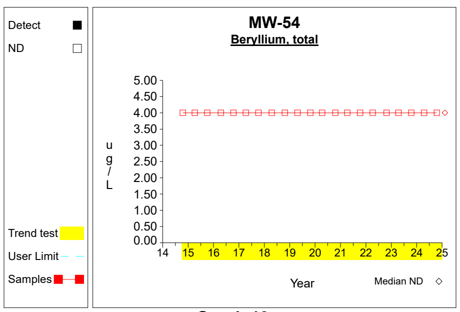
Graph 16



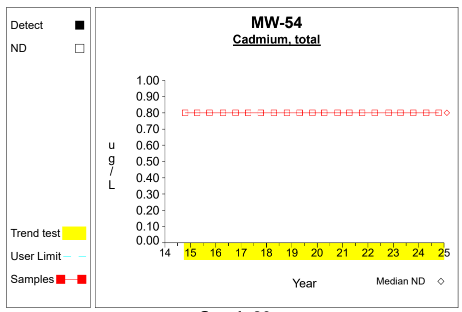
Graph 17



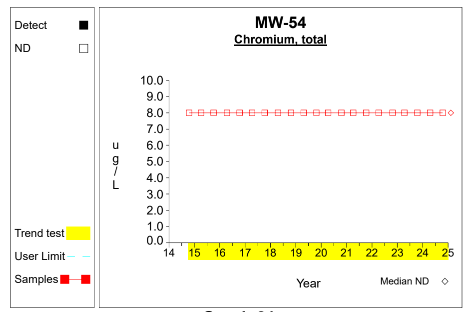
Graph 18



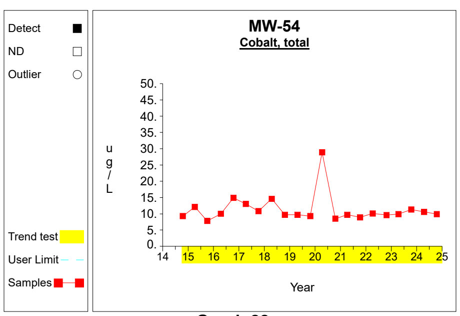
Graph 19



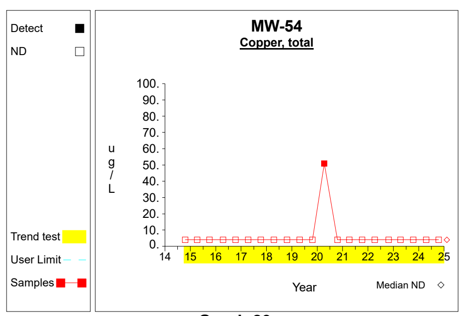
Graph 20



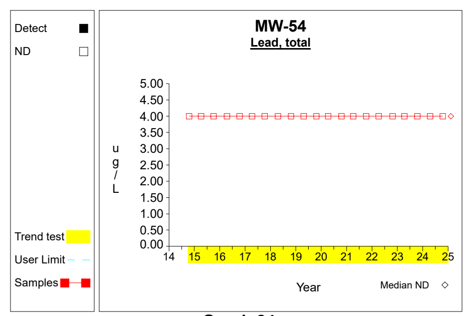
Graph 21



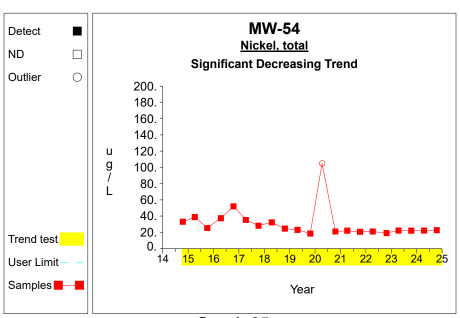
Graph 22



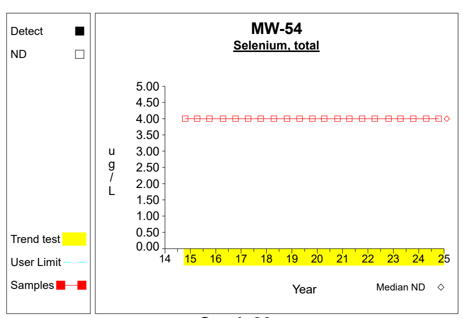
Graph 23



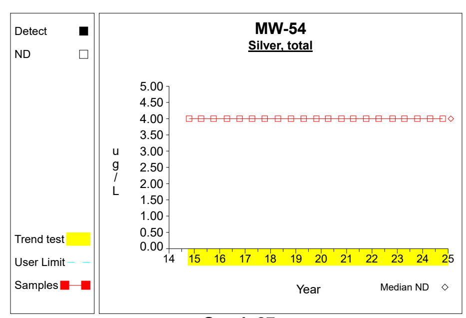
Graph 24



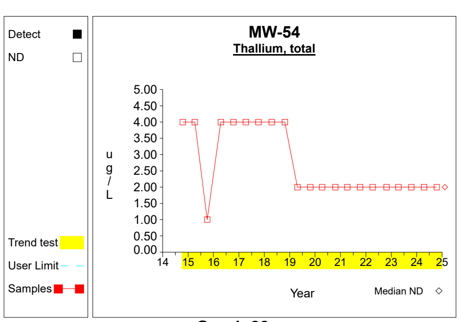
Graph 25



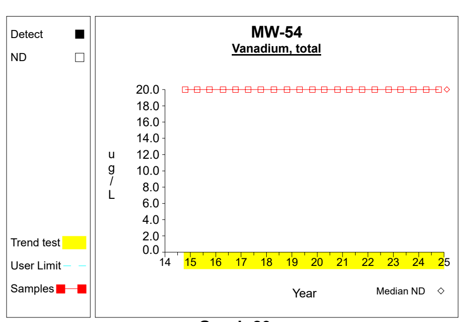
Graph 26



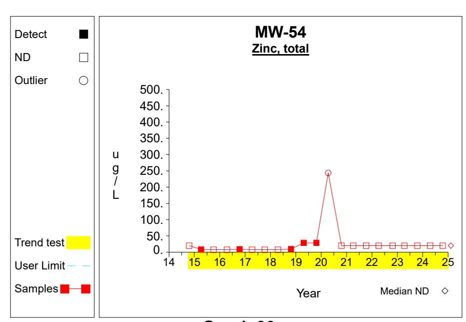
Graph 27



Graph 28

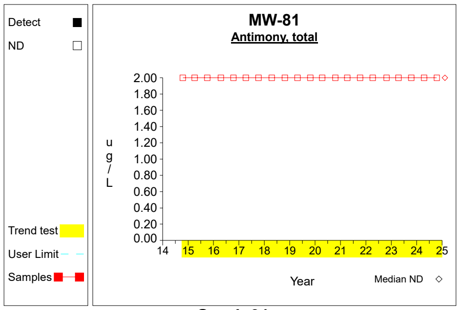


Graph 29

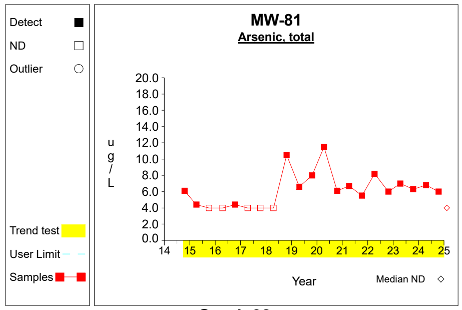


Graph 30

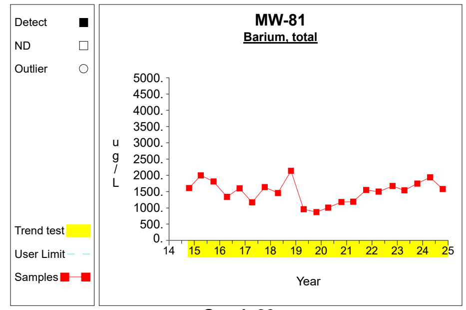
Time Series



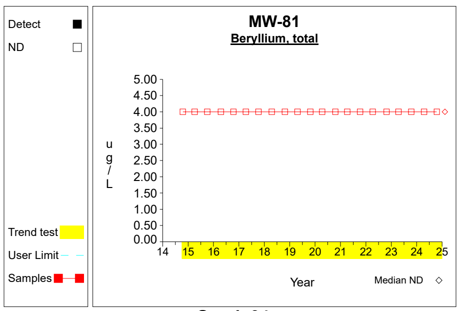
Graph 31



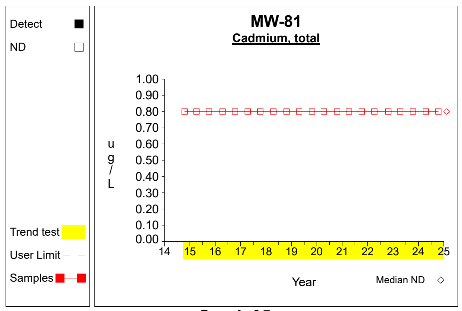
Graph 32



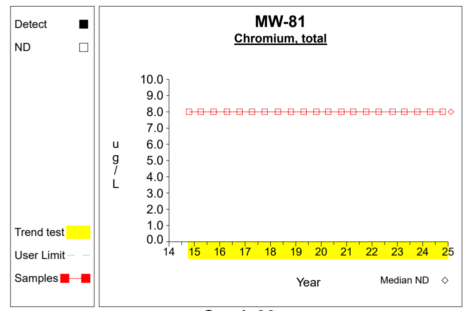
Graph 33



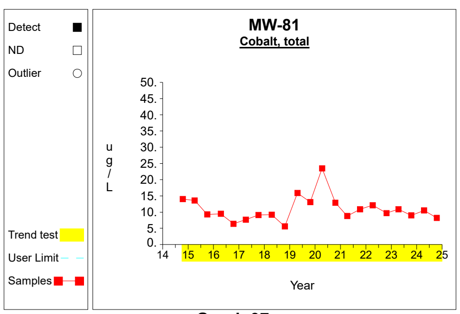
Graph 34



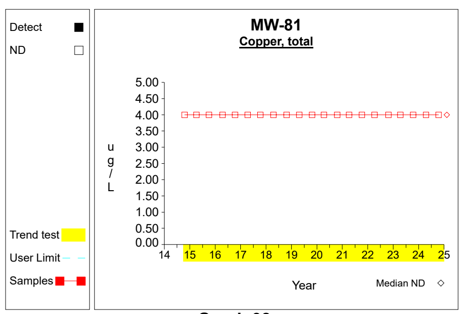
Graph 35



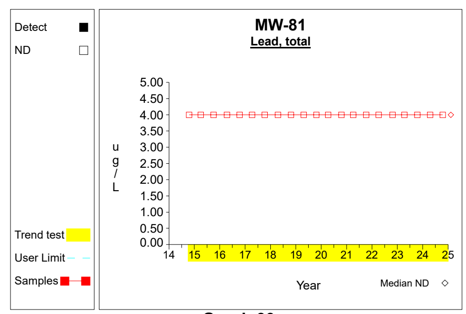
Graph 36



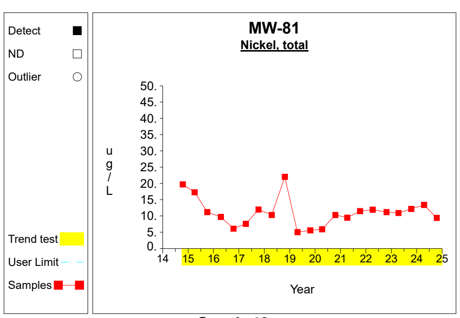
Graph 37



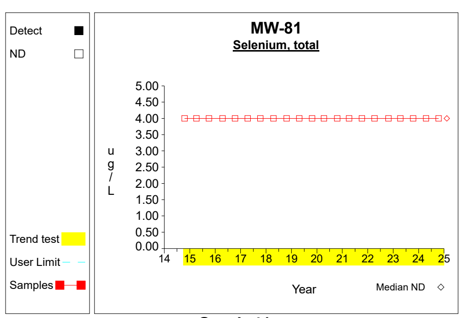
Graph 38



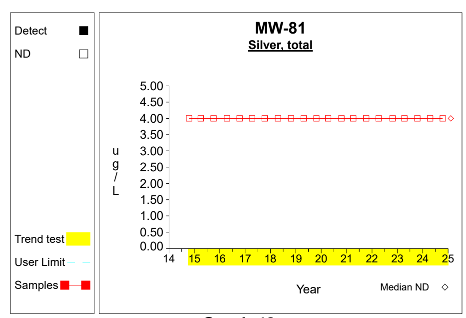
Graph 39



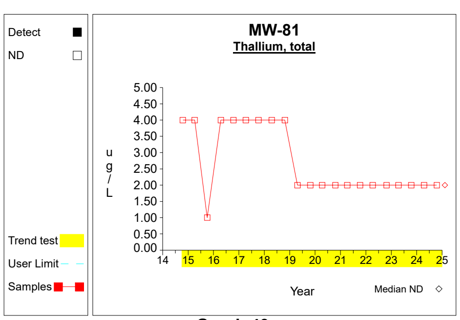
Graph 40



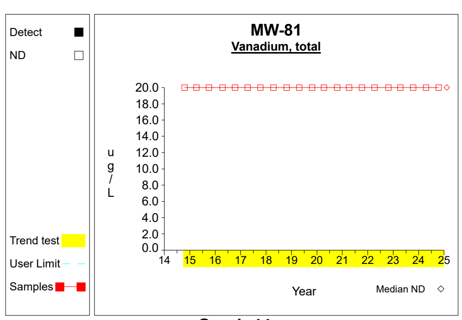
Graph 41



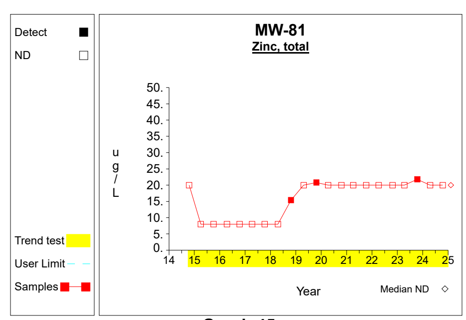
Graph 42



Graph 43

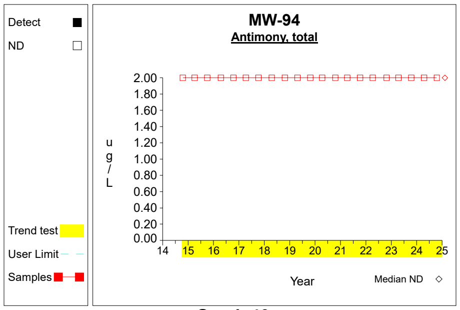


Graph 44

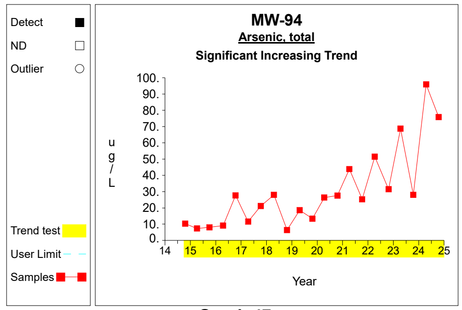


Graph 45

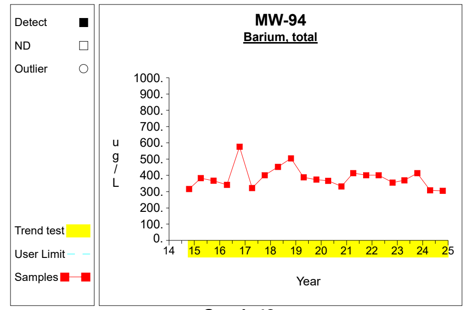
Time Series



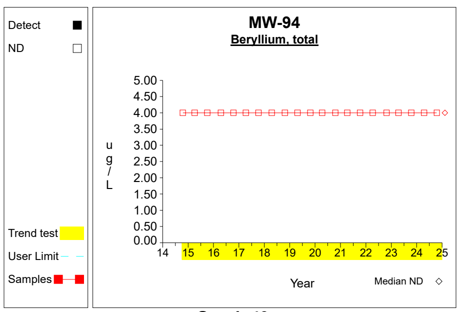
Graph 46



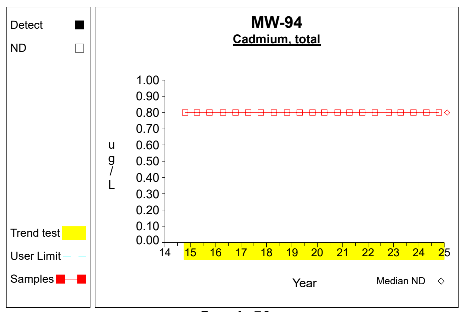
Graph 47



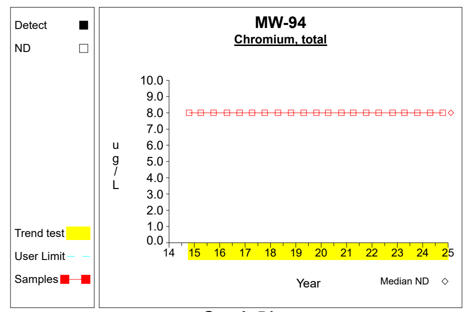
Graph 48



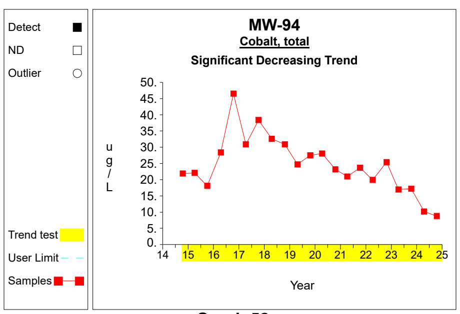
Graph 49



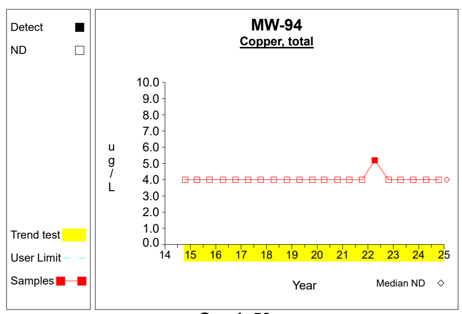
Graph 50



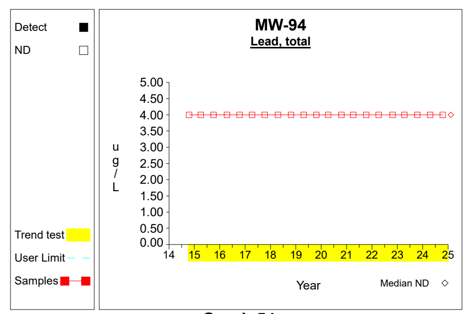
Graph 51



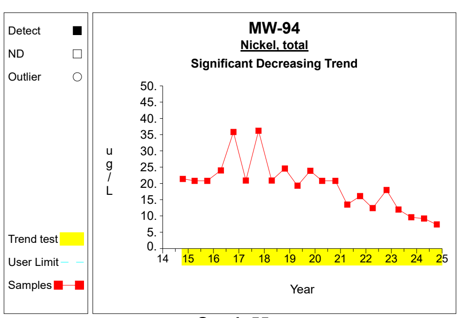
Graph 52



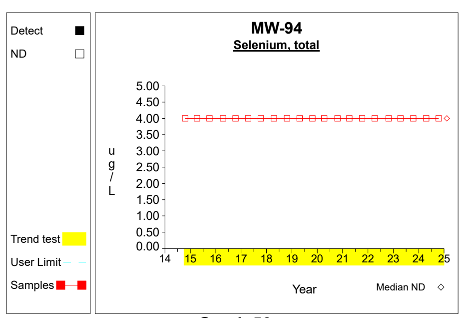
Graph 53



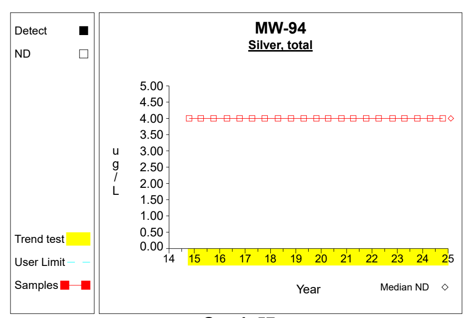
Graph 54



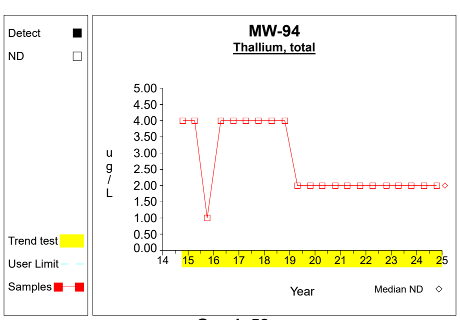
Graph 55



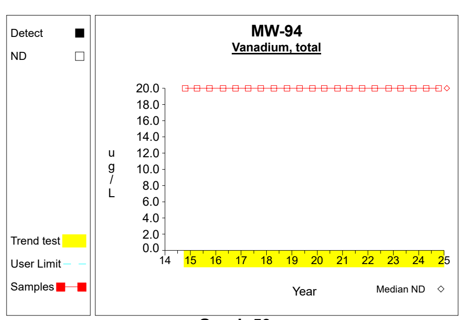
Graph 56



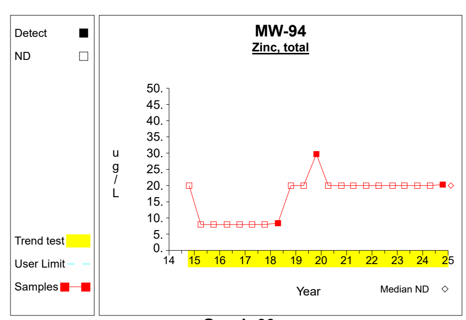
Graph 57



Graph 58



Graph 59



Graph 60

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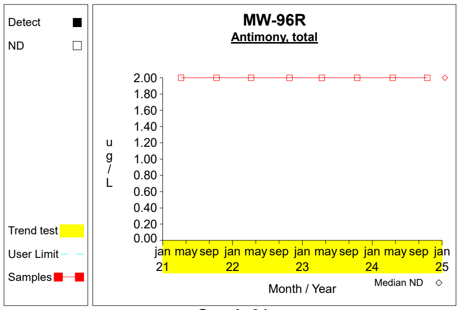
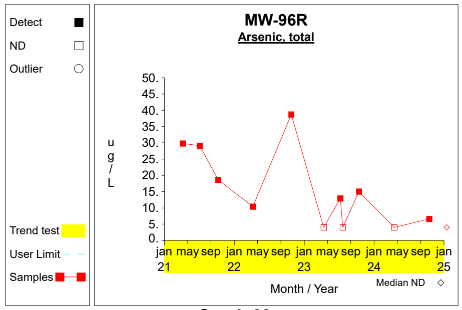
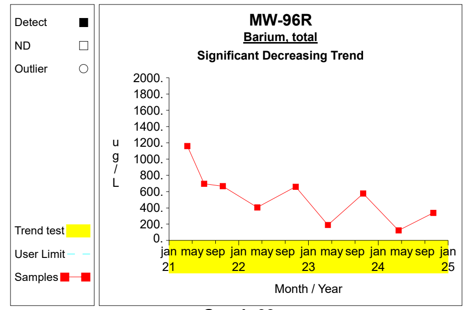
Time Series



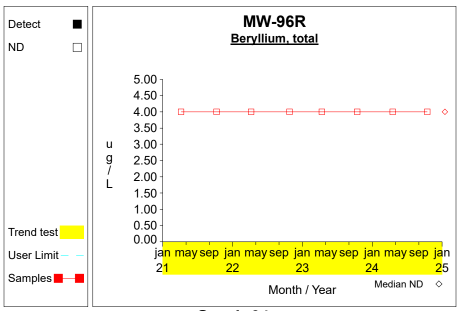
Graph 61



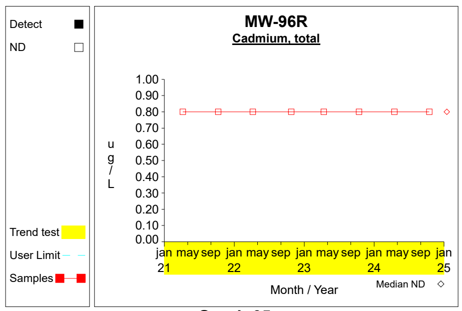
Graph 62



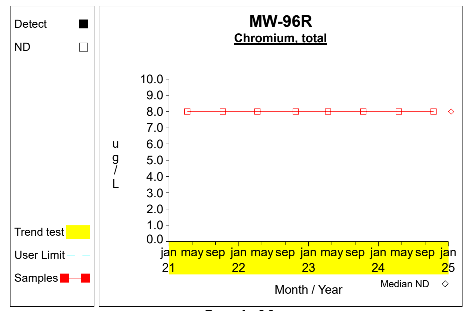
Graph 63



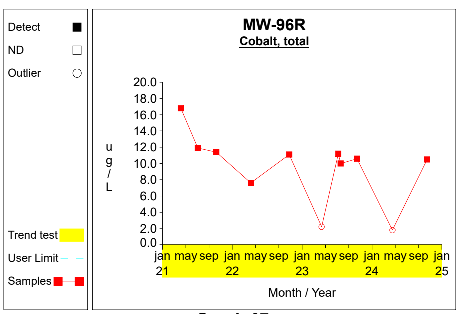
Graph 64



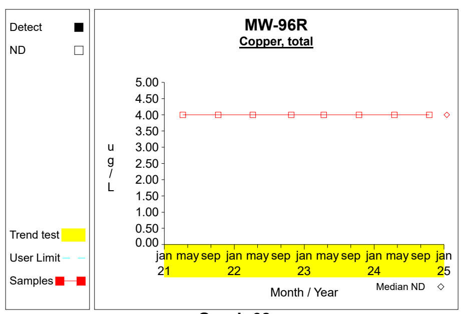
Graph 65



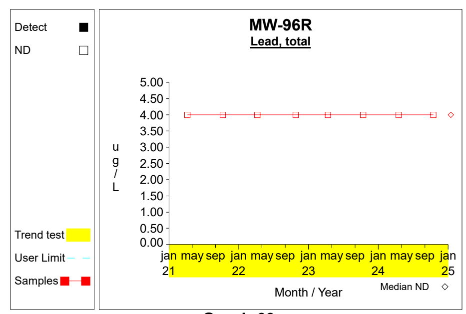
Graph 66



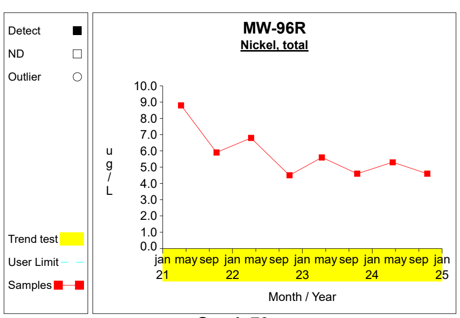
Graph 67



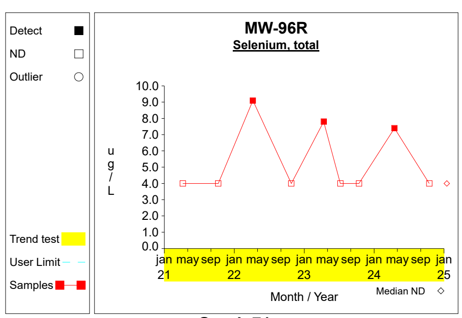
Graph 68



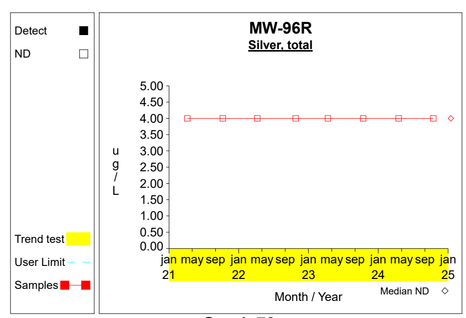
Graph 69



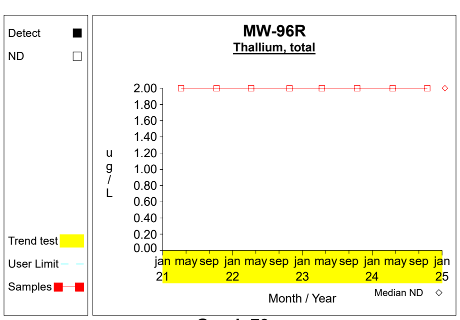
Graph 70



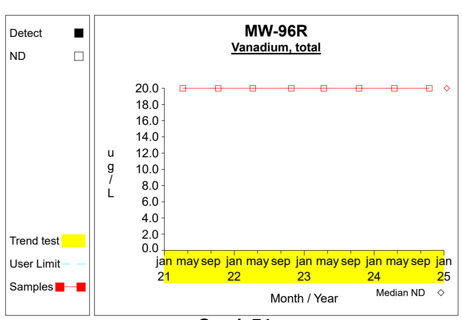
Graph 71



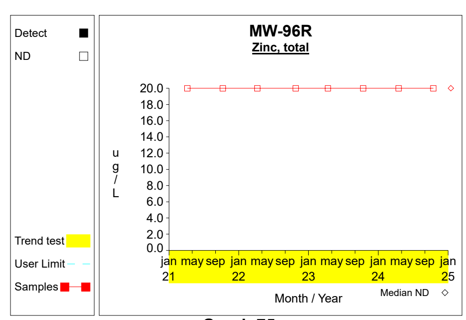
Graph 72



Graph 73



Graph 74



Graph 75

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Attachment E

Summary Table and Graphs – Intrawell Statistics

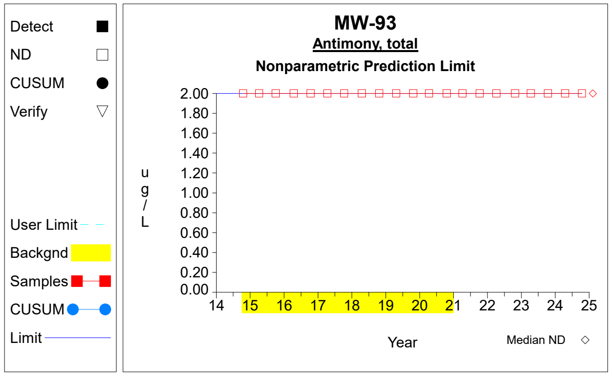
Table 1

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

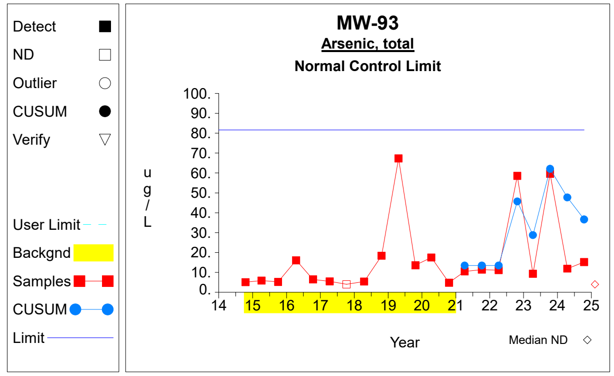
Constituent	Units	Well	N(back)	N(mon)	N(tot)	Mean	SD	R(i-1)	R(i)	S(i-1)	S(i)	Limit	Type	Conf	
Antimony, total	ug/L	MW-93	13	8	36			2.0000	2.0000			2.0000	nonpar	.99	**
Arsenic, total	ug/L	MW-93	13	8	36	13.4846	17.0367	11.9000	15.2000	47.7361	36.6740	81.6313	normal		
Barium, total	ug/L	MW-93	13	8	36	245.9231	70.0053	243.0000	242.0000	245.9231	245.9231	525.9443	normal		
Beryllium, total	ug/L	MW-93	13	8	36			4.0000	4.0000			4.0000	nonpar	.99	**
Cadmium, total	ug/L	MW-93	13	8	36			0.8000	0.8000			0.8000	nonpar	.99	**
Chromium, total	ug/L	MW-93	13	8	36			8.0000	8.0000			8.0000	nonpar	.99	**
Cobalt, total	ug/L	MW-93	13	8	36	9.1154	3.9987	9.8000	9.9000	9.1154	9.1154	25.1103	normal		
Copper, total	ug/L	MW-93	13	9	37			4.0000	4.0000			4.0000	nonpar	.99	**
Lead, total	ug/L	MW-93	13	8	36			4.0000	4.0000			4.0000	nonpar	.99	**
Nickel, total	ug/L	MW-93	13	8	37	29.6231	6.3359	25.5000	27.1000	29.6231	29.6231	54.9667	normal		
Selenium, total	ug/L	MW-93	13	8	36			4.0000	4.0000			4.0000	nonpar	.99	**
Silver, total	ug/L	MW-93	13	8	36			4.0000	4.0000			4.0000	nonpar	.99	**
Thallium, total	ug/L	MW-93	13	8	36			2.0000	2.0000			4.0000	nonpar	.99	**
Vanadium, total	ug/L	MW-93	13	8	36			20.0000	20.0000			20.0000	nonpar	.99	**
Zinc, total	ug/L	MW-93	13	8	36			21.4000	20.0000			34.2000	nonpar	.99	**

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

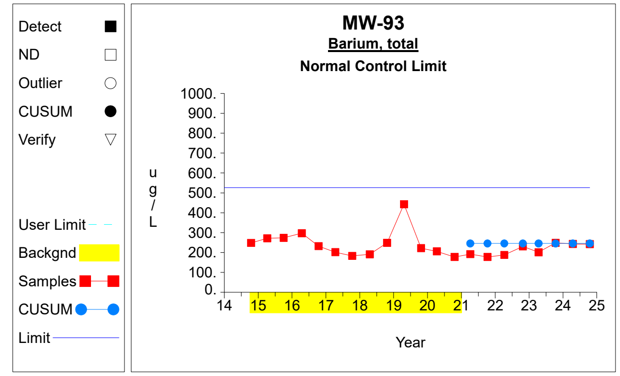
Intra-Well Control Charts / Prediction Limits



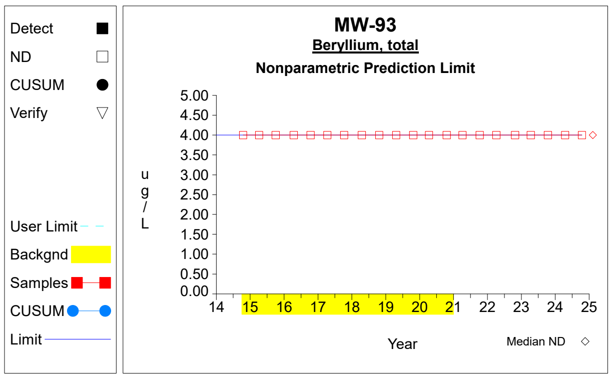
Graph 1



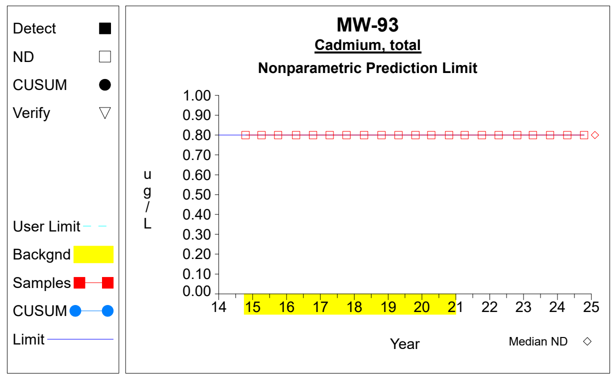
Graph 2



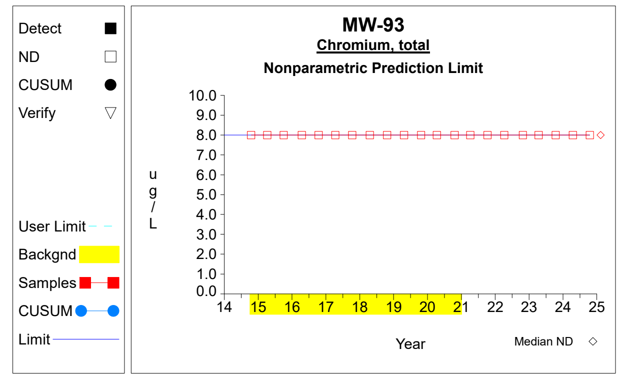
Graph 3



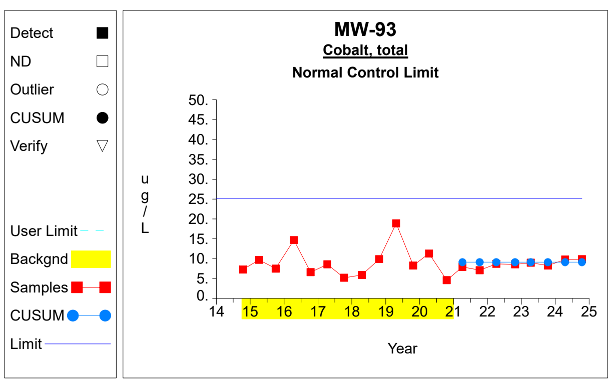
Graph 4



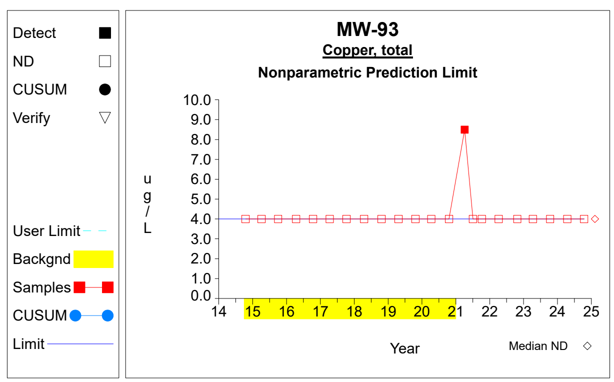
Graph 5



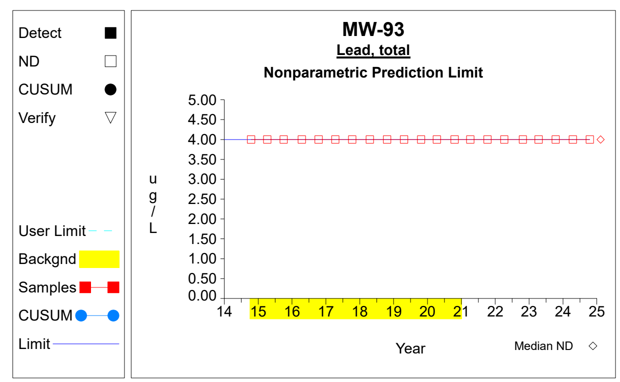
Graph 6



Graph 7



Graph 8



Graph 9

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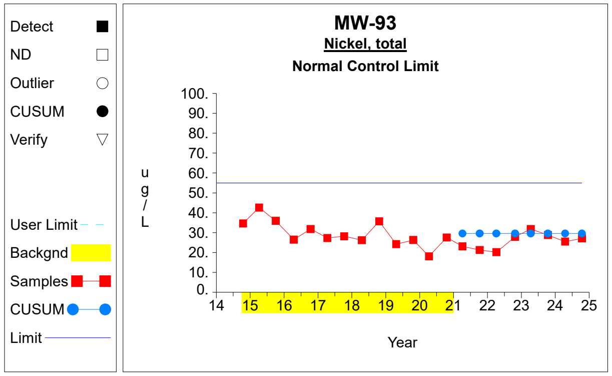
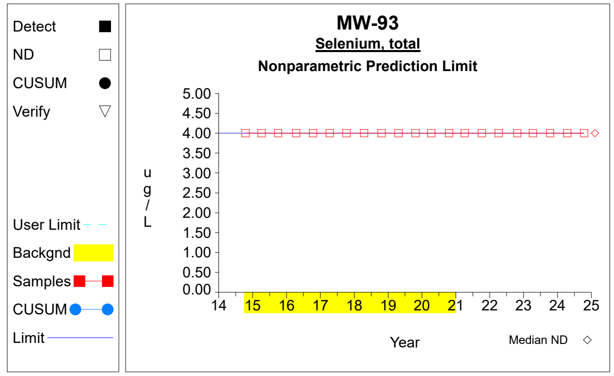
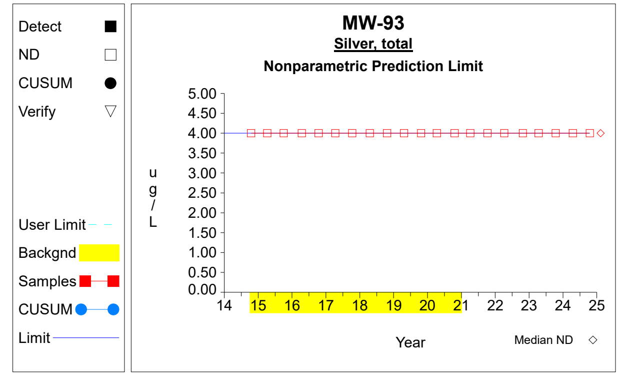
Intra-Well Control Charts / Prediction Limits



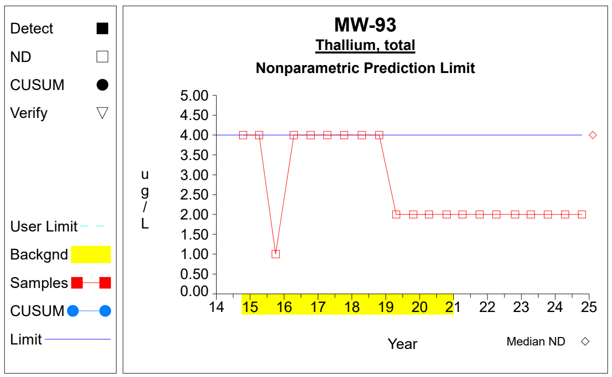
Graph 10



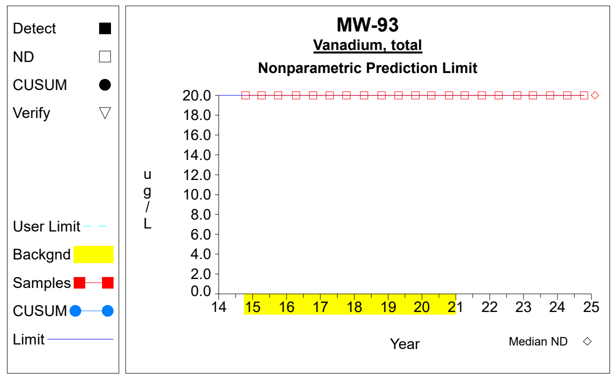
Graph 11



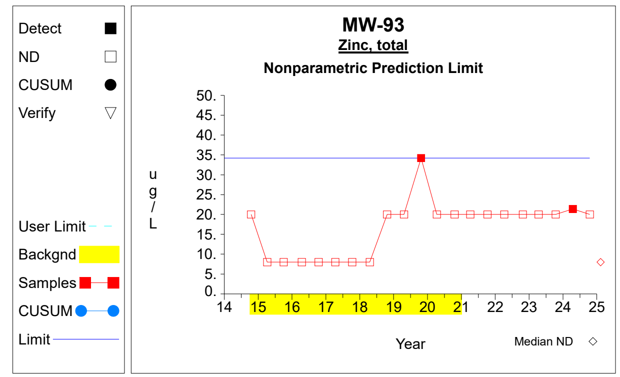
Graph 12



Graph 13



Graph 14



Graph 15

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

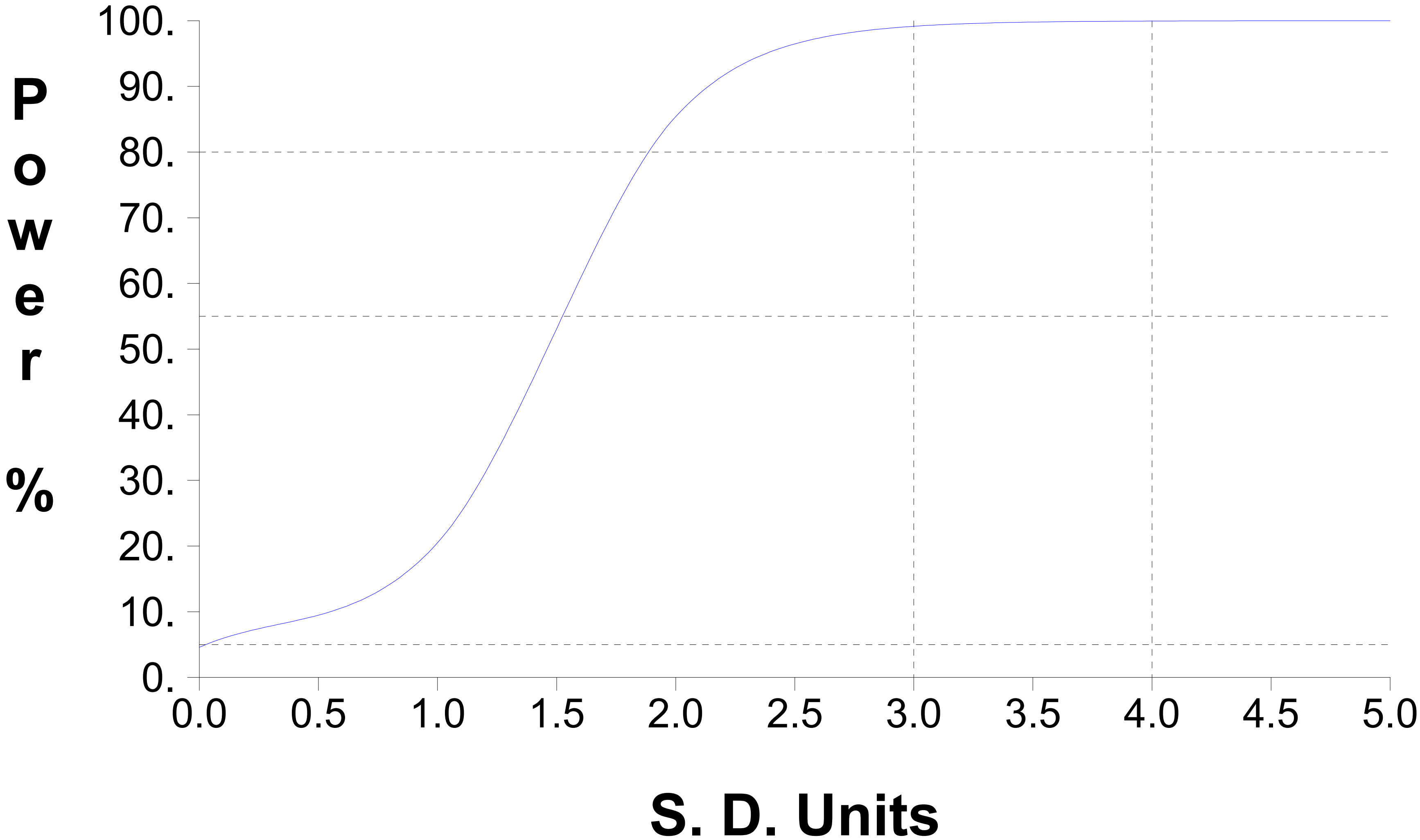

Table 2

Analytical Data and CUSUM Summary

Constituent	Units	Well	Date	Background	Result		Outlier	CUSUM	Adjusted	
Antimony, total	ug/L	MW-93	10/16/2014	yes	2.0000	ND				
Antimony, total	ug/L	MW-93	04/06/2015	yes	2.0000	ND				
Antimony, total	ug/L	MW-93	10/01/2015	yes	2.0000	ND				
Antimony, total	ug/L	MW-93	04/14/2016	yes	2.0000	ND				
Antimony, total	ug/L	MW-93	10/13/2016	yes	2.0000	ND				
Antimony, total	ug/L	MW-93	04/10/2017	yes	2.0000	ND				
Antimony, total	ug/L	MW-93	10/09/2017	yes	2.0000	ND				
Antimony, total	ug/L	MW-93	04/17/2018	yes	2.0000	ND				
Antimony, total	ug/L	MW-93	10/22/2018	yes	2.0000	ND				
Antimony, total	ug/L	MW-93	04/22/2019	yes	2.0000	ND				
Antimony, total	ug/L	MW-93	10/23/2019	yes	2.0000	ND				
Antimony, total	ug/L	MW-93	04/10/2020	yes	2.0000	ND				
Antimony, total	ug/L	MW-93	10/19/2020	yes	2.0000	ND				
Antimony, total	ug/L	MW-93	04/05/2021		2.0000	ND				
Antimony, total	ug/L	MW-93	10/08/2021		2.0000	ND				
Antimony, total	ug/L	MW-93	04/06/2022		2.0000	ND				
Antimony, total	ug/L	MW-93	10/25/2022		2.0000	ND				
Antimony, total	ug/L	MW-93	04/11/2023		2.0000	ND				
Antimony, total	ug/L	MW-93	10/13/2023		2.0000	ND				
Antimony, total	ug/L	MW-93	04/16/2024		2.0000	ND				
Antimony, total	ug/L	MW-93	10/15/2024		2.0000	ND				
Arsenic, total	ug/L	MW-93	10/16/2014	yes	5.1000					
Arsenic, total	ug/L	MW-93	04/06/2015	yes	5.9000					
Arsenic, total	ug/L	MW-93	10/01/2015	yes	5.2000					
Arsenic, total	ug/L	MW-93	04/14/2016	yes	16.1000					
Arsenic, total	ug/L	MW-93	10/13/2016	yes	6.5000					
Arsenic, total	ug/L	MW-93	04/10/2017	yes	5.5000					
Arsenic, total	ug/L	MW-93	10/09/2017	yes	4.0000	ND				
Arsenic, total	ug/L	MW-93	04/17/2018	yes	5.4000					
Arsenic, total	ug/L	MW-93	10/22/2018	yes	18.4000					
Arsenic, total	ug/L	MW-93	04/22/2019	yes	67.3000					
Arsenic, total	ug/L	MW-93	10/23/2019	yes	13.6000					
Arsenic, total	ug/L	MW-93	04/10/2020	yes	17.5000					
Arsenic, total	ug/L	MW-93	10/19/2020	yes	4.8000					
Arsenic, total	ug/L	MW-93	04/05/2021		10.5000			13.4846		
Arsenic, total	ug/L	MW-93	10/08/2021		11.4000			13.4846		
Arsenic, total	ug/L	MW-93	04/06/2022		11.1000			13.4846		
Arsenic, total	ug/L	MW-93	10/25/2022		58.5000			45.7225		
Arsenic, total	ug/L	MW-93	04/11/2023		9.3000			28.7604		
Arsenic, total	ug/L	MW-93	10/13/2023		59.6000			62.0983		
Arsenic, total	ug/L	MW-93	04/16/2024		11.9000			47.7361		
Arsenic, total	ug/L	MW-93	10/15/2024		15.2000			36.6740		
Barium, total	ug/L	MW-93	10/16/2014	yes	248.0000					
Barium, total	ug/L	MW-93	04/06/2015	yes	272.0000					
Barium, total	ug/L	MW-93	10/01/2015	yes	274.0000					
Barium, total	ug/L	MW-93	04/14/2016	yes	297.0000					
Barium, total	ug/L	MW-93	10/13/2016	yes	232.0000					
Barium, total	ug/L	MW-93	04/10/2017	yes	202.0000					
Barium, total	ug/L	MW-93	10/09/2017	yes	183.0000					
Barium, total	ug/L	MW-93	04/17/2018	yes	191.0000					

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Table 2

Analytical Data and CUSUM Summary

Constituent	Units	Well	Date	Background	Result		Outlier	CUSUM	Adjusted	
Barium, total	ug/L	MW-93	10/22/2018	yes	249.0000					
Barium, total	ug/L	MW-93	04/22/2019	yes	443.0000					
Barium, total	ug/L	MW-93	10/23/2019	yes	222.0000					
Barium, total	ug/L	MW-93	04/10/2020	yes	206.0000					
Barium, total	ug/L	MW-93	10/19/2020	yes	178.0000					
Barium, total	ug/L	MW-93	04/05/2021		192.0000			245.9231		
Barium, total	ug/L	MW-93	10/08/2021		178.0000			245.9231		
Barium, total	ug/L	MW-93	04/06/2022		188.0000			245.9231		
Barium, total	ug/L	MW-93	10/25/2022		231.0000			245.9231		
Barium, total	ug/L	MW-93	04/11/2023		201.0000			245.9231		
Barium, total	ug/L	MW-93	10/13/2023		249.0000			245.9231		
Barium, total	ug/L	MW-93	04/16/2024		243.0000			245.9231		
Barium, total	ug/L	MW-93	10/15/2024		242.0000			245.9231		
Beryllium, total	ug/L	MW-93	10/16/2014	yes	4.0000	ND				
Beryllium, total	ug/L	MW-93	04/06/2015	yes	4.0000	ND				
Beryllium, total	ug/L	MW-93	10/01/2015	yes	4.0000	ND				
Beryllium, total	ug/L	MW-93	04/14/2016	yes	4.0000	ND				
Beryllium, total	ug/L	MW-93	10/13/2016	yes	4.0000	ND				
Beryllium, total	ug/L	MW-93	04/10/2017	yes	4.0000	ND				
Beryllium, total	ug/L	MW-93	10/09/2017	yes	4.0000	ND				
Beryllium, total	ug/L	MW-93	04/17/2018	yes	4.0000	ND				
Beryllium, total	ug/L	MW-93	10/22/2018	yes	4.0000	ND				
Beryllium, total	ug/L	MW-93	04/22/2019	yes	4.0000	ND				
Beryllium, total	ug/L	MW-93	10/23/2019	yes	4.0000	ND				
Beryllium, total	ug/L	MW-93	04/10/2020	yes	4.0000	ND				
Beryllium, total	ug/L	MW-93	10/19/2020	yes	4.0000	ND				
Beryllium, total	ug/L	MW-93	04/05/2021		4.0000	ND				
Beryllium, total	ug/L	MW-93	10/08/2021		4.0000	ND				
Beryllium, total	ug/L	MW-93	04/06/2022		4.0000	ND				
Beryllium, total	ug/L	MW-93	10/25/2022		4.0000	ND				
Beryllium, total	ug/L	MW-93	04/11/2023		4.0000	ND				
Beryllium, total	ug/L	MW-93	10/13/2023		4.0000	ND				
Beryllium, total	ug/L	MW-93	04/16/2024		4.0000	ND				
Beryllium, total	ug/L	MW-93	10/15/2024		4.0000	ND				
Cadmium, total	ug/L	MW-93	10/16/2014	yes	0.8000	ND				
Cadmium, total	ug/L	MW-93	04/06/2015	yes	0.8000	ND				
Cadmium, total	ug/L	MW-93	10/01/2015	yes	0.8000	ND				
Cadmium, total	ug/L	MW-93	04/14/2016	yes	0.8000	ND				
Cadmium, total	ug/L	MW-93	10/13/2016	yes	0.8000	ND				
Cadmium, total	ug/L	MW-93	04/10/2017	yes	0.8000	ND				
Cadmium, total	ug/L	MW-93	10/09/2017	yes	0.8000	ND				
Cadmium, total	ug/L	MW-93	04/17/2018	yes	0.8000	ND				
Cadmium, total	ug/L	MW-93	10/22/2018	yes	0.8000	ND				
Cadmium, total	ug/L	MW-93	04/22/2019	yes	0.8000	ND				
Cadmium, total	ug/L	MW-93	10/23/2019	yes	0.8000	ND				
Cadmium, total	ug/L	MW-93	04/10/2020	yes	0.8000	ND				
Cadmium, total	ug/L	MW-93	10/19/2020	yes	0.8000	ND				
Cadmium, total	ug/L	MW-93	04/05/2021		0.8000	ND				
Cadmium, total	ug/L	MW-93	10/08/2021		0.8000	ND				
Cadmium, total	ug/L	MW-93	04/06/2022		0.8000	ND				

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Table 2

Analytical Data and CUSUM Summary

Constituent	Units	Well	Date	Background	Result		Outlier	CUSUM	Adjusted	
Cadmium, total	ug/L	MW-93	10/25/2022		0.8000	ND				
Cadmium, total	ug/L	MW-93	04/11/2023		0.8000	ND				
Cadmium, total	ug/L	MW-93	10/13/2023		0.8000	ND				
Cadmium, total	ug/L	MW-93	04/16/2024		0.8000	ND				
Cadmium, total	ug/L	MW-93	10/15/2024		0.8000	ND				
Chromium, total	ug/L	MW-93	10/16/2014	yes	8.0000	ND				
Chromium, total	ug/L	MW-93	04/06/2015	yes	8.0000	ND				
Chromium, total	ug/L	MW-93	10/01/2015	yes	8.0000	ND				
Chromium, total	ug/L	MW-93	04/14/2016	yes	8.0000	ND				
Chromium, total	ug/L	MW-93	10/13/2016	yes	8.0000	ND				
Chromium, total	ug/L	MW-93	04/10/2017	yes	8.0000	ND				
Chromium, total	ug/L	MW-93	10/09/2017	yes	8.0000	ND				
Chromium, total	ug/L	MW-93	04/17/2018	yes	8.0000	ND				
Chromium, total	ug/L	MW-93	10/22/2018	yes	8.0000	ND				
Chromium, total	ug/L	MW-93	04/22/2019	yes	8.0000	ND				
Chromium, total	ug/L	MW-93	10/23/2019	yes	8.0000	ND				
Chromium, total	ug/L	MW-93	04/10/2020	yes	8.0000	ND				
Chromium, total	ug/L	MW-93	10/19/2020	yes	8.0000	ND				
Chromium, total	ug/L	MW-93	04/05/2021		8.0000	ND				
Chromium, total	ug/L	MW-93	10/08/2021		8.0000	ND				
Chromium, total	ug/L	MW-93	04/06/2022		8.0000	ND				
Chromium, total	ug/L	MW-93	10/25/2022		8.0000	ND				
Chromium, total	ug/L	MW-93	04/11/2023		8.0000	ND				
Chromium, total	ug/L	MW-93	10/13/2023		8.0000	ND				
Chromium, total	ug/L	MW-93	04/16/2024		8.0000	ND				
Chromium, total	ug/L	MW-93	10/15/2024		8.0000	ND				
Cobalt, total	ug/L	MW-93	10/16/2014	yes	7.3000					
Cobalt, total	ug/L	MW-93	04/06/2015	yes	9.7000					
Cobalt, total	ug/L	MW-93	10/01/2015	yes	7.5000					
Cobalt, total	ug/L	MW-93	04/14/2016	yes	14.7000					
Cobalt, total	ug/L	MW-93	10/13/2016	yes	6.6000					
Cobalt, total	ug/L	MW-93	04/10/2017	yes	8.6000					
Cobalt, total	ug/L	MW-93	10/09/2017	yes	5.2000					
Cobalt, total	ug/L	MW-93	04/17/2018	yes	5.9000					
Cobalt, total	ug/L	MW-93	10/22/2018	yes	9.9000					
Cobalt, total	ug/L	MW-93	04/22/2019	yes	18.9000					
Cobalt, total	ug/L	MW-93	10/23/2019	yes	8.3000					
Cobalt, total	ug/L	MW-93	04/10/2020	yes	11.3000					
Cobalt, total	ug/L	MW-93	10/19/2020	yes	4.6000					
Cobalt, total	ug/L	MW-93	04/05/2021		7.9000			9.1154		
Cobalt, total	ug/L	MW-93	10/08/2021		7.1000			9.1154		
Cobalt, total	ug/L	MW-93	04/06/2022		8.7000			9.1154		
Cobalt, total	ug/L	MW-93	10/25/2022		8.6000			9.1154		
Cobalt, total	ug/L	MW-93	04/11/2023		9.0000			9.1154		
Cobalt, total	ug/L	MW-93	10/13/2023		8.3000			9.1154		
Cobalt, total	ug/L	MW-93	04/16/2024		9.8000			9.1154		
Cobalt, total	ug/L	MW-93	10/15/2024		9.9000			9.1154		
Copper, total	ug/L	MW-93	10/16/2014	yes	4.0000	ND				
Copper, total	ug/L	MW-93	04/06/2015	yes	4.0000	ND				
Copper, total	ug/L	MW-93	10/01/2015	yes	4.0000	ND				

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Table 2

Analytical Data and CUSUM Summary

Constituent	Units	Well	Date	Background	Result		Outlier	CUSUM	Adjusted	
Copper, total	ug/L	MW-93	04/14/2016	yes	4.0000	ND				
Copper, total	ug/L	MW-93	10/13/2016	yes	4.0000	ND				
Copper, total	ug/L	MW-93	04/10/2017	yes	4.0000	ND				
Copper, total	ug/L	MW-93	10/09/2017	yes	4.0000	ND				
Copper, total	ug/L	MW-93	04/17/2018	yes	4.0000	ND				
Copper, total	ug/L	MW-93	10/22/2018	yes	4.0000	ND				
Copper, total	ug/L	MW-93	04/22/2019	yes	4.0000	ND				
Copper, total	ug/L	MW-93	10/23/2019	yes	4.0000	ND				
Copper, total	ug/L	MW-93	04/10/2020	yes	4.0000	ND				
Copper, total	ug/L	MW-93	10/19/2020	yes	4.0000	ND				
Copper, total	ug/L	MW-93	04/05/2021		8.5000					**
Copper, total	ug/L	MW-93	07/02/2021		4.0000	ND				
Copper, total	ug/L	MW-93	10/08/2021		4.0000	ND				
Copper, total	ug/L	MW-93	04/06/2022		4.0000	ND				
Copper, total	ug/L	MW-93	10/25/2022		4.0000	ND				
Copper, total	ug/L	MW-93	04/11/2023		4.0000	ND				
Copper, total	ug/L	MW-93	10/13/2023		4.0000	ND				
Copper, total	ug/L	MW-93	04/16/2024		4.0000	ND				
Copper, total	ug/L	MW-93	10/15/2024		4.0000	ND				
Lead, total	ug/L	MW-93	10/16/2014	yes	4.0000	ND				
Lead, total	ug/L	MW-93	04/06/2015	yes	4.0000	ND				
Lead, total	ug/L	MW-93	10/01/2015	yes	4.0000	ND				
Lead, total	ug/L	MW-93	04/14/2016	yes	4.0000	ND				
Lead, total	ug/L	MW-93	10/13/2016	yes	4.0000	ND				
Lead, total	ug/L	MW-93	04/10/2017	yes	4.0000	ND				
Lead, total	ug/L	MW-93	10/09/2017	yes	4.0000	ND				
Lead, total	ug/L	MW-93	04/17/2018	yes	4.0000	ND				
Lead, total	ug/L	MW-93	10/22/2018	yes	4.0000	ND				
Lead, total	ug/L	MW-93	04/22/2019	yes	4.0000	ND				
Lead, total	ug/L	MW-93	10/23/2019	yes	4.0000	ND				
Lead, total	ug/L	MW-93	04/10/2020	yes	4.0000	ND				
Lead, total	ug/L	MW-93	10/19/2020	yes	4.0000	ND				
Lead, total	ug/L	MW-93	04/05/2021		4.0000	ND				
Lead, total	ug/L	MW-93	10/08/2021		4.0000	ND				
Lead, total	ug/L	MW-93	04/06/2022		4.0000	ND				
Lead, total	ug/L	MW-93	10/25/2022		4.0000	ND				
Lead, total	ug/L	MW-93	04/11/2023		4.0000	ND				
Lead, total	ug/L	MW-93	10/13/2023		4.0000	ND				
Lead, total	ug/L	MW-93	04/16/2024		4.0000	ND				
Lead, total	ug/L	MW-93	10/15/2024		4.0000	ND				
Nickel, total	ug/L	MW-93	10/16/2014	yes	34.6000					
Nickel, total	ug/L	MW-93	04/06/2015	yes	42.6000					
Nickel, total	ug/L	MW-93	10/01/2015	yes	36.0000					
Nickel, total	ug/L	MW-93	04/14/2016	yes	26.5000					
Nickel, total	ug/L	MW-93	10/13/2016	yes	31.8000					
Nickel, total	ug/L	MW-93	04/10/2017	yes	27.3000					
Nickel, total	ug/L	MW-93	10/09/2017	yes	28.2000					
Nickel, total	ug/L	MW-93	04/17/2018	yes	26.2000					
Nickel, total	ug/L	MW-93	10/22/2018	yes	35.7000					
Nickel, total	ug/L	MW-93	04/22/2019	yes	24.2000					

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Table 2

Analytical Data and CUSUM Summary

Constituent	Units	Well	Date	Background	Result		Outlier	CUSUM	Adjusted	
Nickel, total	ug/L	MW-93	10/23/2019	yes	26.3000					
Nickel, total	ug/L	MW-93	04/10/2020	yes	18.1000					
Nickel, total	ug/L	MW-93	10/19/2020	yes	27.6000					
Nickel, total	ug/L	MW-93	04/05/2021		23.1000			29.6231		
Nickel, total	ug/L	MW-93	10/08/2021		21.3000			29.6231		
Nickel, total	ug/L	MW-93	04/06/2022		20.2000			29.6231		
Nickel, total	ug/L	MW-93	10/25/2022		27.9000			29.6231		
Nickel, total	ug/L	MW-93	04/11/2023		31.8000			29.6231		
Nickel, total	ug/L	MW-93	10/13/2023		28.8000			29.6231		
Nickel, total	ug/L	MW-93	04/16/2024		25.5000			29.6231		
Nickel, total	ug/L	MW-93	10/15/2024		27.1000			29.6231		
Selenium, total	ug/L	MW-93	10/16/2014	yes	4.0000	ND				
Selenium, total	ug/L	MW-93	04/06/2015	yes	4.0000	ND				
Selenium, total	ug/L	MW-93	10/01/2015	yes	4.0000	ND				
Selenium, total	ug/L	MW-93	04/14/2016	yes	4.0000	ND				
Selenium, total	ug/L	MW-93	10/13/2016	yes	4.0000	ND				
Selenium, total	ug/L	MW-93	04/10/2017	yes	4.0000	ND				
Selenium, total	ug/L	MW-93	10/09/2017	yes	4.0000	ND				
Selenium, total	ug/L	MW-93	04/17/2018	yes	4.0000	ND				
Selenium, total	ug/L	MW-93	10/22/2018	yes	4.0000	ND				
Selenium, total	ug/L	MW-93	04/22/2019	yes	4.0000	ND				
Selenium, total	ug/L	MW-93	10/23/2019	yes	4.0000	ND				
Selenium, total	ug/L	MW-93	04/10/2020	yes	4.0000	ND				
Selenium, total	ug/L	MW-93	10/19/2020	yes	4.0000	ND				
Selenium, total	ug/L	MW-93	04/05/2021		4.0000	ND				
Selenium, total	ug/L	MW-93	10/08/2021		4.0000	ND				
Selenium, total	ug/L	MW-93	04/06/2022		4.0000	ND				
Selenium, total	ug/L	MW-93	10/25/2022		4.0000	ND				
Selenium, total	ug/L	MW-93	04/11/2023		4.0000	ND				
Selenium, total	ug/L	MW-93	10/13/2023		4.0000	ND				
Selenium, total	ug/L	MW-93	04/16/2024		4.0000	ND				
Selenium, total	ug/L	MW-93	10/15/2024		4.0000	ND				
Silver, total	ug/L	MW-93	10/16/2014	yes	4.0000	ND				
Silver, total	ug/L	MW-93	04/06/2015	yes	4.0000	ND				
Silver, total	ug/L	MW-93	10/01/2015	yes	4.0000	ND				
Silver, total	ug/L	MW-93	04/14/2016	yes	4.0000	ND				
Silver, total	ug/L	MW-93	10/13/2016	yes	4.0000	ND				
Silver, total	ug/L	MW-93	04/10/2017	yes	4.0000	ND				
Silver, total	ug/L	MW-93	10/09/2017	yes	4.0000	ND				
Silver, total	ug/L	MW-93	04/17/2018	yes	4.0000	ND				
Silver, total	ug/L	MW-93	10/22/2018	yes	4.0000	ND				
Silver, total	ug/L	MW-93	04/22/2019	yes	4.0000	ND				
Silver, total	ug/L	MW-93	10/23/2019	yes	4.0000	ND				
Silver, total	ug/L	MW-93	04/10/2020	yes	4.0000	ND				
Silver, total	ug/L	MW-93	10/19/2020	yes	4.0000	ND				
Silver, total	ug/L	MW-93	04/05/2021		4.0000	ND				
Silver, total	ug/L	MW-93	10/08/2021		4.0000	ND				
Silver, total	ug/L	MW-93	04/06/2022		4.0000	ND				
Silver, total	ug/L	MW-93	10/25/2022		4.0000	ND				
Silver, total	ug/L	MW-93	04/11/2023		4.0000	ND				

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Table 2

Analytical Data and CUSUM Summary

Constituent	Units	Well	Date	Background	Result		Outlier	CUSUM	Adjusted	
Silver, total	ug/L	MW-93	10/13/2023		4.0000	ND				
Silver, total	ug/L	MW-93	04/16/2024		4.0000	ND				
Silver, total	ug/L	MW-93	10/15/2024		4.0000	ND				
Thallium, total	ug/L	MW-93	10/16/2014	yes	4.0000	ND				
Thallium, total	ug/L	MW-93	04/06/2015	yes	4.0000	ND				
Thallium, total	ug/L	MW-93	10/01/2015	yes	1.0000	ND			4.0000	***
Thallium, total	ug/L	MW-93	04/14/2016	yes	4.0000	ND				
Thallium, total	ug/L	MW-93	10/13/2016	yes	4.0000	ND				
Thallium, total	ug/L	MW-93	04/10/2017	yes	4.0000	ND				
Thallium, total	ug/L	MW-93	10/09/2017	yes	4.0000	ND				
Thallium, total	ug/L	MW-93	04/17/2018	yes	4.0000	ND				
Thallium, total	ug/L	MW-93	10/22/2018	yes	4.0000	ND				
Thallium, total	ug/L	MW-93	04/22/2019	yes	2.0000	ND			4.0000	***
Thallium, total	ug/L	MW-93	10/23/2019	yes	2.0000	ND			4.0000	***
Thallium, total	ug/L	MW-93	04/10/2020	yes	2.0000	ND			4.0000	***
Thallium, total	ug/L	MW-93	10/19/2020	yes	2.0000	ND			4.0000	***
Thallium, total	ug/L	MW-93	04/05/2021		2.0000	ND				
Thallium, total	ug/L	MW-93	10/08/2021		2.0000	ND				
Thallium, total	ug/L	MW-93	04/06/2022		2.0000	ND				
Thallium, total	ug/L	MW-93	10/25/2022		2.0000	ND				
Thallium, total	ug/L	MW-93	04/11/2023		2.0000	ND				
Thallium, total	ug/L	MW-93	10/13/2023		2.0000	ND				
Thallium, total	ug/L	MW-93	04/16/2024		2.0000	ND				
Thallium, total	ug/L	MW-93	10/15/2024		2.0000	ND				
Vanadium, total	ug/L	MW-93	10/16/2014	yes	20.0000	ND				
Vanadium, total	ug/L	MW-93	04/06/2015	yes	20.0000	ND				
Vanadium, total	ug/L	MW-93	10/01/2015	yes	20.0000	ND				
Vanadium, total	ug/L	MW-93	04/14/2016	yes	20.0000	ND				
Vanadium, total	ug/L	MW-93	10/13/2016	yes	20.0000	ND				
Vanadium, total	ug/L	MW-93	04/10/2017	yes	20.0000	ND				
Vanadium, total	ug/L	MW-93	10/09/2017	yes	20.0000	ND				
Vanadium, total	ug/L	MW-93	04/17/2018	yes	20.0000	ND				
Vanadium, total	ug/L	MW-93	10/22/2018	yes	20.0000	ND				
Vanadium, total	ug/L	MW-93	04/22/2019	yes	20.0000	ND				
Vanadium, total	ug/L	MW-93	10/23/2019	yes	20.0000	ND				
Vanadium, total	ug/L	MW-93	04/10/2020	yes	20.0000	ND				
Vanadium, total	ug/L	MW-93	10/19/2020	yes	20.0000	ND				
Vanadium, total	ug/L	MW-93	04/05/2021		20.0000	ND				
Vanadium, total	ug/L	MW-93	10/08/2021		20.0000	ND				
Vanadium, total	ug/L	MW-93	04/06/2022		20.0000	ND				
Vanadium, total	ug/L	MW-93	10/25/2022		20.0000	ND				
Vanadium, total	ug/L	MW-93	04/11/2023		20.0000	ND				
Vanadium, total	ug/L	MW-93	10/13/2023		20.0000	ND				
Vanadium, total	ug/L	MW-93	04/16/2024		20.0000	ND				
Vanadium, total	ug/L	MW-93	10/15/2024		20.0000	ND				
Zinc, total	ug/L	MW-93	10/16/2014	yes	20.0000	ND			8.0000	***
Zinc, total	ug/L	MW-93	04/06/2015	yes	8.0000	ND				
Zinc, total	ug/L	MW-93	10/01/2015	yes	8.0000	ND				
Zinc, total	ug/L	MW-93	04/14/2016	yes	8.0000	ND				
Zinc, total	ug/L	MW-93	10/13/2016	yes	8.0000	ND				

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

Table 2

Analytical Data and CUSUM Summary

Constituent	Units	Well	Date	Background	Result		Outlier	CUSUM	Adjusted	
Zinc, total	ug/L	MW-93	04/10/2017	yes	8.0000	ND				
Zinc, total	ug/L	MW-93	10/09/2017	yes	8.0000	ND				
Zinc, total	ug/L	MW-93	04/17/2018	yes	8.0000	ND				
Zinc, total	ug/L	MW-93	10/22/2018	yes	20.0000	ND			8.0000	***
Zinc, total	ug/L	MW-93	04/22/2019	yes	20.0000	ND			8.0000	***
Zinc, total	ug/L	MW-93	10/23/2019	yes	34.2000					
Zinc, total	ug/L	MW-93	04/10/2020	yes	20.0000	ND			8.0000	***
Zinc, total	ug/L	MW-93	10/19/2020	yes	20.0000	ND			8.0000	***
Zinc, total	ug/L	MW-93	04/05/2021		20.0000	ND				
Zinc, total	ug/L	MW-93	10/08/2021		20.0000	ND				
Zinc, total	ug/L	MW-93	04/06/2022		20.0000	ND				
Zinc, total	ug/L	MW-93	10/25/2022		20.0000	ND				
Zinc, total	ug/L	MW-93	04/11/2023		20.0000	ND				
Zinc, total	ug/L	MW-93	10/13/2023		20.0000	ND				
Zinc, total	ug/L	MW-93	04/16/2024		21.4000					
Zinc, total	ug/L	MW-93	10/15/2024		20.0000	ND				

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

Worksheet 2 - Intra-Well Control Charts / Prediction Limits
Antimony, total (ug/L) at MW-93
Nonparametric Prediction Limit

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

Worksheet 2 - Intra-Well Control Charts / Prediction Limits
Arsenic, total (ug/L) at MW-93
Normal Control Limit

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **175.3** / **13** = **13.485**	Compute background mean.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**5846.83** - **30730.09**/**13**) / (**13**-1))^{½} = **17.037**	Compute background sd.
3	SCL = $\overline{\mathbf{X}}$ + **F** * **S** = **13.485** + **4.0** * **17.037** = **81.631**	Compute combined Shewhart-CUSUM normal control limit.
4	N' = **N** * (**N**-1) / 2 = **13** * (**13**-1) / 2 = **78**	Number of sample pairs during trend detection period.
5	S = **0.549**	Sen's estimator of trend.
6	var(S) = **268.667**	Variance estimate for slope.
7	M_1(S) = (**N'** - **Z**$_{.99}$ * **var(S)**^{½}) / 2 = (**78** - **2.326** * **268.667**^{½}) / 2 = **19.937**	Ordinal position for one-sided lower confidence limit for slope. The LCL is the M_1th largest slope estimate. When M_1 is not an integer, interpolation is used.
8	LCL(S) = **-0.619**	One-sided lower confidence limit for slope.

Worksheet 2 - Intra-Well Control Charts / Prediction Limits
Barium, total (ug/L) at MW-93
Normal Control Limit

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N** = **3197.0** / **13** = **245.923**	Compute background mean.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**845025.0** - **1.02**x**10^7**/**13**) / (**13**-1))^{½} = **70.005**	Compute background sd.
3	SCL = $\bar{X}$ + **F** * **S** = **245.923** + **4.0** * **70.005** = **525.944**	Compute combined Shewhart-CUSUM normal control limit.
4	N' = **N** * (**N**-1) / 2 = **13** * (**13**-1) / 2 = **78**	Number of sample pairs during trend detection period.
5	S = **-11.322**	Sen's estimator of trend.
6	var(S) = **268.667**	Variance estimate for slope.
7	M_1(S) = (**N'** - **Z**$_{.99}$ * **var(S)**^{½}) / 2 = (**78** - **2.326** * **268.667**^{½}) / 2 = **19.937**	Ordinal position for one-sided lower confidence limit for slope. The LCL is the M_1th largest slope estimate. When M_1 is not an integer, interpolation is used.
8	LCL(S) = **-32.756**	One-sided lower confidence limit for slope.

Worksheet 2 - Intra-Well Control Charts / Prediction Limits
Beryllium, total (ug/L) at MW-93
Nonparametric Prediction Limit

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

Worksheet 2 - Intra-Well Control Charts / Prediction Limits
Cadmium, total (ug/L) at MW-93
Nonparametric Prediction Limit

Step	Equation	Description
1	PL = median(X) = **0.8**	Compute nonparametric prediction limit as median reporting limit in background.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

Worksheet 2 - Intra-Well Control Charts / Prediction Limits
Chromium, total (ug/L) at MW-93
Nonparametric Prediction Limit

Step	Equation	Description
1	PL = median(X) = **8.0**	Compute nonparametric prediction limit as median reporting limit in background.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

Worksheet 2 - Intra-Well Control Charts / Prediction Limits
Cobalt, total (ug/L) at MW-93
Normal Control Limit

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N** = **118.5** / **13** = **9.115**	Compute background mean.
2	$S = ((\mathbf{sum[X^2]} - \mathbf{sum[X]}^2/\mathbf{N}) / (\mathbf{N}-1))^{½}$ $= ((\mathbf{1272.05} - \mathbf{14042.25}/\mathbf{13}) / (\mathbf{13}-1))^{½}$ = **3.999**	Compute background sd.
3	SCL = $\bar{\mathbf{X}}$ + **F** * **S** = **9.115** + **4.0** * **3.999** = **25.11**	Compute combined Shewhart-CUSUM normal control limit.
4	N' = **N** * (**N**-1) / 2 = **13** * (**13**-1) / 2 = **78**	Number of sample pairs during trend detection period.
5	S = **-0.031**	Sen's estimator of trend.
6	var(S) = **268.667**	Variance estimate for slope.
7	$M_1(S) = (\mathbf{N'} - \mathbf{Z}_{.99} * \mathbf{var(S)}^{½}) / 2$ $= (\mathbf{78} - \mathbf{2.326} * \mathbf{268.667}^{½}) / 2$ = **19.937**	Ordinal position for one-sided lower confidence limit for slope. The LCL is the M_1^{th} largest slope estimate. When M_1 is not an integer, interpolation is used.
8	LCL(S) = **-1.428**	One-sided lower confidence limit for slope.

Worksheet 2 - Intra-Well Control Charts / Prediction Limits
Copper, total (ug/L) at MW-93
Nonparametric Prediction Limit

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

Worksheet 2 - Intra-Well Control Charts / Prediction Limits
Lead, total (ug/L) at MW-93
Nonparametric Prediction Limit

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

Worksheet 2 - Intra-Well Control Charts / Prediction Limits
Nickel, total (ug/L) at MW-93
Normal Control Limit

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **385.1** / **13** = **29.623**	Compute background mean.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))$^{1/2}$ = ((**11889.57** - **148302.01**/**13**) / (**13**-1))$^{1/2}$ = **6.336**	Compute background sd.
3	SCL = $\overline{X}$ + **F** * **S** = **29.623** + **4.0** * **6.336** = **54.967**	Compute combined Shewhart-CUSUM normal control limit.
4	N' = **N** * (**N**-1) / 2 = **13** * (**13**-1) / 2 = **78**	Number of sample pairs during trend detection period.
5	S = **-2.225**	Sen's estimator of trend.
6	var(S) = **268.667**	Variance estimate for slope.
7	M_1(S) = (**N'** - $Z_{.99}$ * **var(S)**$^{1/2}$) / 2 = (**78** - **2.326** * **268.667**$^{1/2}$) / 2 = **19.937**	Ordinal position for one-sided lower confidence limit for slope. The LCL is the M_1th largest slope estimate. When M_1 is not an integer, interpolation is used.
8	LCL(S) = **-4.064**	One-sided lower confidence limit for slope.

Worksheet 2 - Intra-Well Control Charts / Prediction Limits
Selenium, total (ug/L) at MW-93
Nonparametric Prediction Limit

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

Worksheet 2 - Intra-Well Control Charts / Prediction Limits
Silver, total (ug/L) at MW-93
Nonparametric Prediction Limit

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

Worksheet 2 - Intra-Well Control Charts / Prediction Limits
Thallium, total (ug/L) at MW-93
Nonparametric Prediction Limit

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

Worksheet 2 - Intra-Well Control Charts / Prediction Limits
Vanadium, total (ug/L) at MW-93
Nonparametric Prediction Limit

Step	Equation	Description
1	PL = median(X) = **20.0**	Compute nonparametric prediction limit as median reporting limit in background.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

Worksheet 2 - Intra-Well Control Charts / Prediction Limits
Zinc, total (ug/L) at MW-93
Nonparametric Prediction Limit

Step	Equation	Description
1	PL = max(X) = **34.2**	Compute nonparametric prediction limit as largest background measurement.
2	Conf = **0.99**	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

Table 1

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

Constituent	Units	Well	N(back)	N(mon)	N(tot)	Mean	SD	R(i-1)	R(i)	S(i-1)	S(i)	Limit	Type	Conf	
Antimony, total	ug/L	MW-96R	7	1	8								nonpar *		**
Arsenic, total	ug/L	MW-96R	10	1	11	16.6500	12.2649	4.0000	6.6000		16.6500	71.8419	normal		
Barium, total	ug/L	MW-96R	8	1	9	560.0000	327.5698	124.0000	338.0000		560.0000	2034.0643	normal		
Beryllium, total	ug/L	MW-96R	7	1	8								nonpar *		**
Cadmium, total	ug/L	MW-96R	7	1	8								nonpar *		**
Chromium, total	ug/L	MW-96R	7	1	8								nonpar *		**
Cobalt, total	ug/L	MW-96R	8	1	11	11.3250	2.5783	1.8000	10.5000		11.3250	22.9275	normal		
Copper, total	ug/L	MW-96R	7	1	8								nonpar *		**
Lead, total	ug/L	MW-96R	7	1	8								nonpar *		**
Nickel, total	ug/L	MW-96R	7	1	8	5.9286	1.4896	5.3000	4.6000		5.9286	12.6320	normal		
Selenium, total	ug/L	MW-96R	8	1	9	5.5375	2.1745	7.4000	4.0000		5.5375	15.3227	normal		
Silver, total	ug/L	MW-96R	7	1	8								nonpar *		**
Thallium, total	ug/L	MW-96R	7	1	8								nonpar *		**
Vanadium, total	ug/L	MW-96R	7	1	8								nonpar *		**
Zinc, total	ug/L	MW-96R	7	1	8								nonpar *		**

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

Table 2

Analytical Data and CUSUM Summary

Constituent	Units	Well	Date	Background	Result		Outlier	CUSUM	Adjusted	
Antimony, total	ug/L	MW-96R	04/05/2021	yes	2.0000	ND				
Antimony, total	ug/L	MW-96R	10/08/2021	yes	2.0000	ND				
Antimony, total	ug/L	MW-96R	04/06/2022	yes	2.0000	ND				
Antimony, total	ug/L	MW-96R	10/25/2022	yes	2.0000	ND				
Antimony, total	ug/L	MW-96R	04/11/2023	yes	2.0000	ND				
Antimony, total	ug/L	MW-96R	10/13/2023	yes	2.0000	ND				
Antimony, total	ug/L	MW-96R	04/16/2024	yes	2.0000	ND				
Antimony, total	ug/L	MW-96R	10/15/2024		2.0000	ND				
Arsenic, total	ug/L	MW-96R	04/05/2021	yes	29.8000					
Arsenic, total	ug/L	MW-96R	07/02/2021	yes	29.1000					
Arsenic, total	ug/L	MW-96R	10/08/2021	yes	18.6000					
Arsenic, total	ug/L	MW-96R	04/06/2022	yes	10.4000					
Arsenic, total	ug/L	MW-96R	10/25/2022	yes	38.7000					
Arsenic, total	ug/L	MW-96R	04/11/2023	yes	4.0000	ND				
Arsenic, total	ug/L	MW-96R	07/07/2023	yes	12.9000					
Arsenic, total	ug/L	MW-96R	07/20/2023	yes	4.0000	ND				
Arsenic, total	ug/L	MW-96R	10/13/2023	yes	15.0000					
Arsenic, total	ug/L	MW-96R	04/16/2024	yes	4.0000	ND				
Arsenic, total	ug/L	MW-96R	10/15/2024		6.6000			16.6500		
Barium, total	ug/L	MW-96R	04/05/2021	yes	1160.0000					
Barium, total	ug/L	MW-96R	07/02/2021	yes	696.0000					
Barium, total	ug/L	MW-96R	10/08/2021	yes	667.0000					
Barium, total	ug/L	MW-96R	04/06/2022	yes	406.0000					
Barium, total	ug/L	MW-96R	10/25/2022	yes	661.0000					
Barium, total	ug/L	MW-96R	04/11/2023	yes	190.0000					
Barium, total	ug/L	MW-96R	10/13/2023	yes	576.0000					
Barium, total	ug/L	MW-96R	04/16/2024	yes	124.0000					
Barium, total	ug/L	MW-96R	10/15/2024		338.0000			560.0000		
Beryllium, total	ug/L	MW-96R	04/05/2021	yes	4.0000	ND				
Beryllium, total	ug/L	MW-96R	10/08/2021	yes	4.0000	ND				
Beryllium, total	ug/L	MW-96R	04/06/2022	yes	4.0000	ND				
Beryllium, total	ug/L	MW-96R	10/25/2022	yes	4.0000	ND				
Beryllium, total	ug/L	MW-96R	04/11/2023	yes	4.0000	ND				
Beryllium, total	ug/L	MW-96R	10/13/2023	yes	4.0000	ND				
Beryllium, total	ug/L	MW-96R	04/16/2024	yes	4.0000	ND				
Beryllium, total	ug/L	MW-96R	10/15/2024		4.0000	ND				
Cadmium, total	ug/L	MW-96R	04/05/2021	yes	0.8000	ND				
Cadmium, total	ug/L	MW-96R	10/08/2021	yes	0.8000	ND				
Cadmium, total	ug/L	MW-96R	04/06/2022	yes	0.8000	ND				
Cadmium, total	ug/L	MW-96R	10/25/2022	yes	0.8000	ND				
Cadmium, total	ug/L	MW-96R	04/11/2023	yes	0.8000	ND				
Cadmium, total	ug/L	MW-96R	10/13/2023	yes	0.8000	ND				
Cadmium, total	ug/L	MW-96R	04/16/2024	yes	0.8000	ND				
Cadmium, total	ug/L	MW-96R	10/15/2024		0.8000	ND				
Chromium, total	ug/L	MW-96R	04/05/2021	yes	8.0000	ND				
Chromium, total	ug/L	MW-96R	10/08/2021	yes	8.0000	ND				
Chromium, total	ug/L	MW-96R	04/06/2022	yes	8.0000	ND				
Chromium, total	ug/L	MW-96R	10/25/2022	yes	8.0000	ND				
Chromium, total	ug/L	MW-96R	04/11/2023	yes	8.0000	ND				
Chromium, total	ug/L	MW-96R	10/13/2023	yes	8.0000	ND				

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

Table 2

Analytical Data and CUSUM Summary

Constituent	Units	Well	Date	Background	Result		Outlier	CUSUM	Adjusted	
Chromium, total	ug/L	MW-96R	04/16/2024	yes	8.0000	ND				
Chromium, total	ug/L	MW-96R	10/15/2024		8.0000	ND				
Cobalt, total	ug/L	MW-96R	04/05/2021	yes	16.8000					
Cobalt, total	ug/L	MW-96R	07/02/2021	yes	11.9000					
Cobalt, total	ug/L	MW-96R	10/08/2021	yes	11.4000					
Cobalt, total	ug/L	MW-96R	04/06/2022	yes	7.6000					
Cobalt, total	ug/L	MW-96R	10/25/2022	yes	11.1000					
Cobalt, total	ug/L	MW-96R	04/11/2023	yes	2.2000		yes			*
Cobalt, total	ug/L	MW-96R	07/07/2023	yes	11.2000					
Cobalt, total	ug/L	MW-96R	07/20/2023	yes	10.0000					
Cobalt, total	ug/L	MW-96R	10/13/2023	yes	10.6000					
Cobalt, total	ug/L	MW-96R	04/16/2024	yes	1.8000		yes			*
Cobalt, total	ug/L	MW-96R	10/15/2024		10.5000			11.3250		
Copper, total	ug/L	MW-96R	04/05/2021	yes	4.0000	ND				
Copper, total	ug/L	MW-96R	10/08/2021	yes	4.0000	ND				
Copper, total	ug/L	MW-96R	04/06/2022	yes	4.0000	ND				
Copper, total	ug/L	MW-96R	10/25/2022	yes	4.0000	ND				
Copper, total	ug/L	MW-96R	04/11/2023	yes	4.0000	ND				
Copper, total	ug/L	MW-96R	10/13/2023	yes	4.0000	ND				
Copper, total	ug/L	MW-96R	04/16/2024	yes	4.0000	ND				
Copper, total	ug/L	MW-96R	10/15/2024		4.0000	ND				
Lead, total	ug/L	MW-96R	04/05/2021	yes	4.0000	ND				
Lead, total	ug/L	MW-96R	10/08/2021	yes	4.0000	ND				
Lead, total	ug/L	MW-96R	04/06/2022	yes	4.0000	ND				
Lead, total	ug/L	MW-96R	10/25/2022	yes	4.0000	ND				
Lead, total	ug/L	MW-96R	04/11/2023	yes	4.0000	ND				
Lead, total	ug/L	MW-96R	10/13/2023	yes	4.0000	ND				
Lead, total	ug/L	MW-96R	04/16/2024	yes	4.0000	ND				
Lead, total	ug/L	MW-96R	10/15/2024		4.0000	ND				
Nickel, total	ug/L	MW-96R	04/05/2021	yes	8.8000					
Nickel, total	ug/L	MW-96R	10/08/2021	yes	5.9000					
Nickel, total	ug/L	MW-96R	04/06/2022	yes	6.8000					
Nickel, total	ug/L	MW-96R	10/25/2022	yes	4.5000					
Nickel, total	ug/L	MW-96R	04/11/2023	yes	5.6000					
Nickel, total	ug/L	MW-96R	10/13/2023	yes	4.6000					
Nickel, total	ug/L	MW-96R	04/16/2024	yes	5.3000					
Nickel, total	ug/L	MW-96R	10/15/2024		4.6000			5.9286		
Selenium, total	ug/L	MW-96R	04/05/2021	yes	4.0000	ND				
Selenium, total	ug/L	MW-96R	10/08/2021	yes	4.0000	ND				
Selenium, total	ug/L	MW-96R	04/06/2022	yes	9.1000					
Selenium, total	ug/L	MW-96R	10/25/2022	yes	4.0000	ND				
Selenium, total	ug/L	MW-96R	04/11/2023	yes	7.8000					
Selenium, total	ug/L	MW-96R	07/07/2023	yes	4.0000	ND				
Selenium, total	ug/L	MW-96R	10/13/2023	yes	4.0000	ND				
Selenium, total	ug/L	MW-96R	04/16/2024	yes	7.4000					
Selenium, total	ug/L	MW-96R	10/15/2024		4.0000	ND		5.5375		
Silver, total	ug/L	MW-96R	04/05/2021	yes	4.0000	ND				
Silver, total	ug/L	MW-96R	10/08/2021	yes	4.0000	ND				
Silver, total	ug/L	MW-96R	04/06/2022	yes	4.0000	ND				
Silver, total	ug/L	MW-96R	10/25/2022	yes	4.0000	ND				

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

Table 2

Analytical Data and CUSUM Summary

Constituent	Units	Well	Date	Background	Result		Outlier	CUSUM	Adjusted	
Silver, total	ug/L	MW-96R	04/11/2023	yes	4.0000	ND				
Silver, total	ug/L	MW-96R	10/13/2023	yes	4.0000	ND				
Silver, total	ug/L	MW-96R	04/16/2024	yes	4.0000	ND				
Silver, total	ug/L	MW-96R	10/15/2024		4.0000	ND				
Thallium, total	ug/L	MW-96R	04/05/2021	yes	2.0000	ND				
Thallium, total	ug/L	MW-96R	10/08/2021	yes	2.0000	ND				
Thallium, total	ug/L	MW-96R	04/06/2022	yes	2.0000	ND				
Thallium, total	ug/L	MW-96R	10/25/2022	yes	2.0000	ND				
Thallium, total	ug/L	MW-96R	04/11/2023	yes	2.0000	ND				
Thallium, total	ug/L	MW-96R	10/13/2023	yes	2.0000	ND				
Thallium, total	ug/L	MW-96R	04/16/2024	yes	2.0000	ND				
Thallium, total	ug/L	MW-96R	10/15/2024		2.0000	ND				
Vanadium, total	ug/L	MW-96R	04/05/2021	yes	20.0000	ND				
Vanadium, total	ug/L	MW-96R	10/08/2021	yes	20.0000	ND				
Vanadium, total	ug/L	MW-96R	04/06/2022	yes	20.0000	ND				
Vanadium, total	ug/L	MW-96R	10/25/2022	yes	20.0000	ND				
Vanadium, total	ug/L	MW-96R	04/11/2023	yes	20.0000	ND				
Vanadium, total	ug/L	MW-96R	10/13/2023	yes	20.0000	ND				
Vanadium, total	ug/L	MW-96R	04/16/2024	yes	20.0000	ND				
Vanadium, total	ug/L	MW-96R	10/15/2024		20.0000	ND				
Zinc, total	ug/L	MW-96R	04/05/2021	yes	20.0000	ND				
Zinc, total	ug/L	MW-96R	10/08/2021	yes	20.0000	ND				
Zinc, total	ug/L	MW-96R	04/06/2022	yes	20.0000	ND				
Zinc, total	ug/L	MW-96R	10/25/2022	yes	20.0000	ND				
Zinc, total	ug/L	MW-96R	04/11/2023	yes	20.0000	ND				
Zinc, total	ug/L	MW-96R	10/13/2023	yes	20.0000	ND				
Zinc, total	ug/L	MW-96R	04/16/2024	yes	20.0000	ND				
Zinc, total	ug/L	MW-96R	10/15/2024		20.0000	ND				

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

Table 4

Dixon's Test Outliers
1% Significance Level

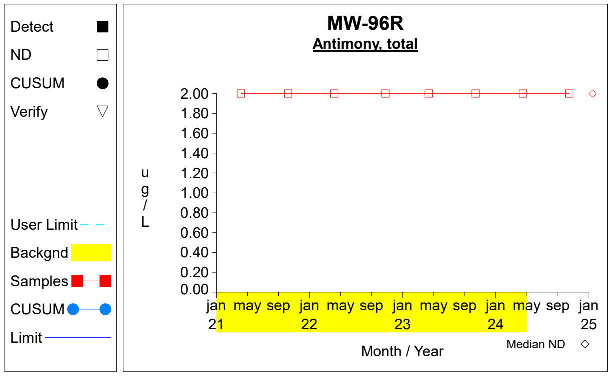
Constituent	Units	Well	Date	Result	ND Qualifier	Date Range	N	Critical Value
Cobalt, total	ug/L	MW-96R	04/11/2023	2.2000		04/05/2021-04/16/2024	10	0.6346
Cobalt, total	ug/L	MW-96R	04/16/2024	1.8000		04/05/2021-04/16/2024	10	0.6346

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.

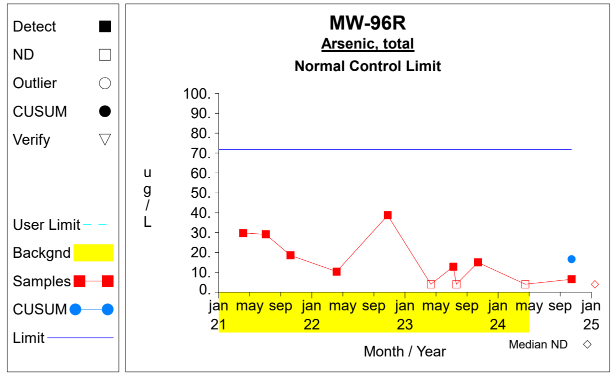
Marshall [GW]

November 2024

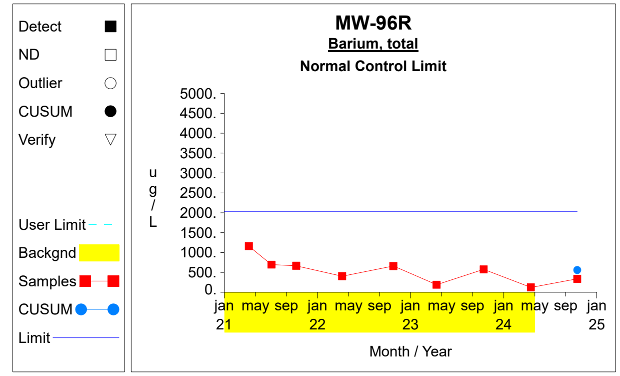
Intra-Well Control Charts / Prediction Limits



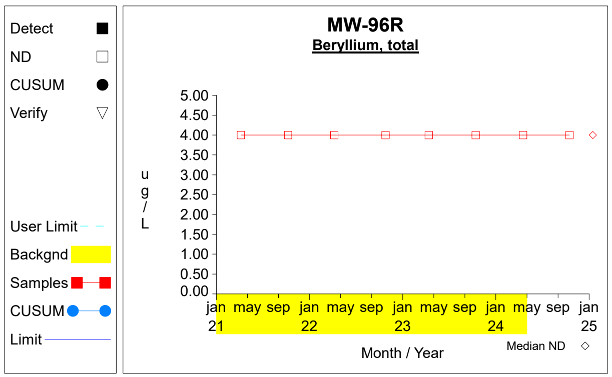
Graph 1



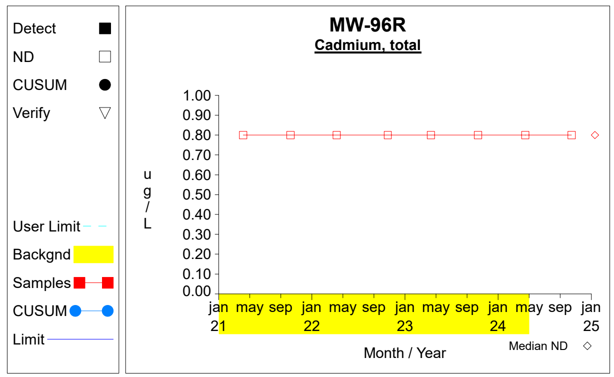
Graph 2



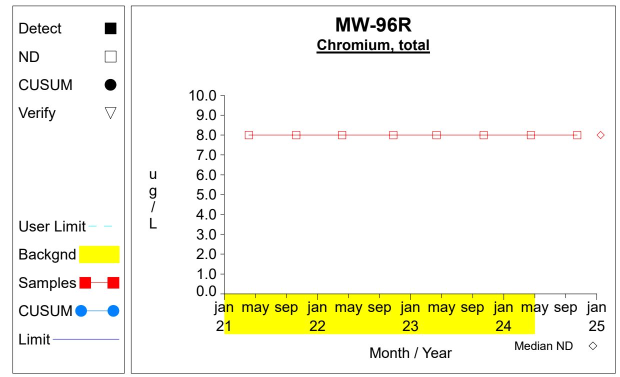
Graph 3



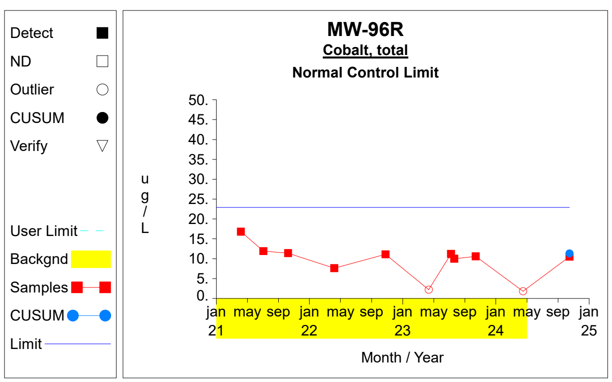
Graph 4



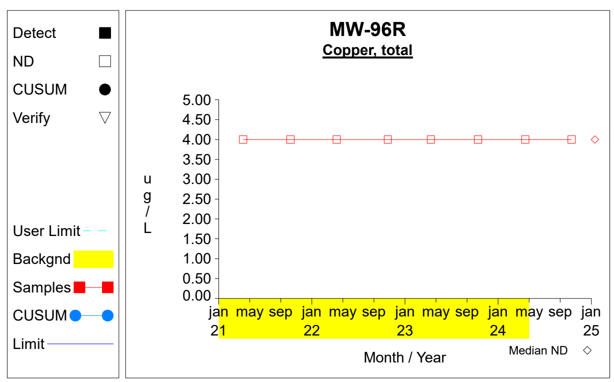
Graph 5



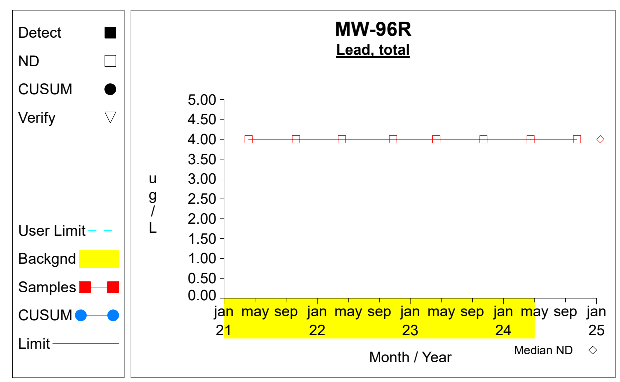
Graph 6



Graph 7



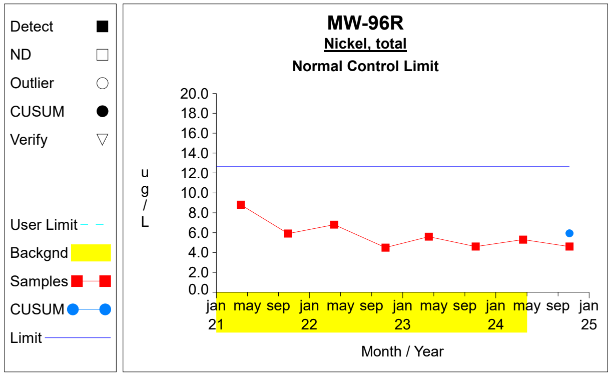
Graph 8



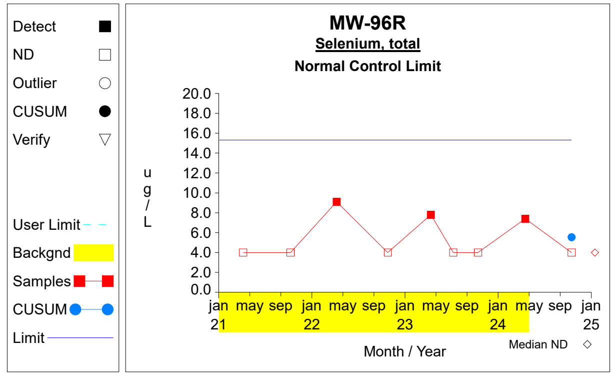
Graph 9

Prepared by: Otter Creek Environmental

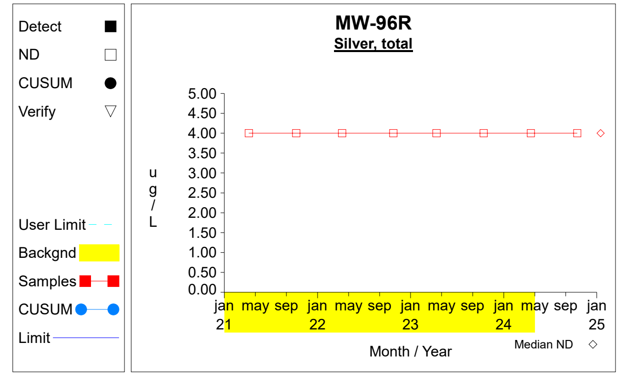
Intra-Well Control Charts / Prediction Limits



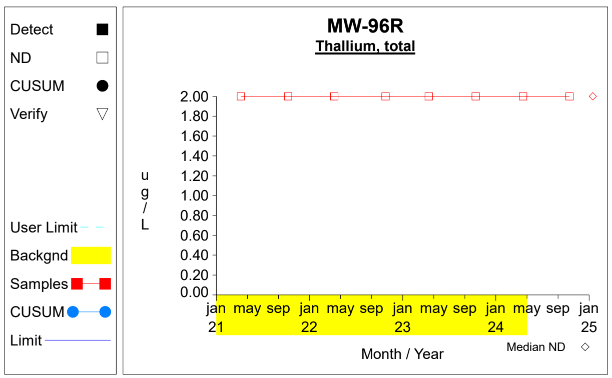
Graph 10



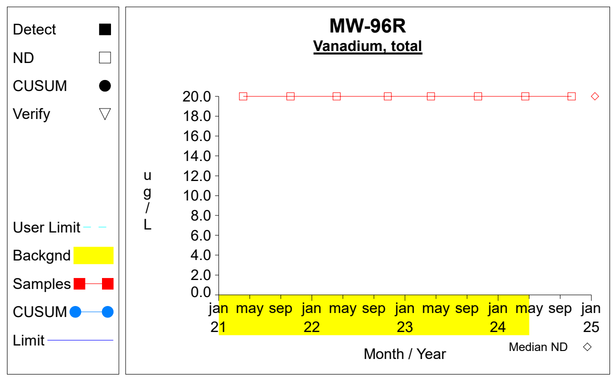
Graph 11



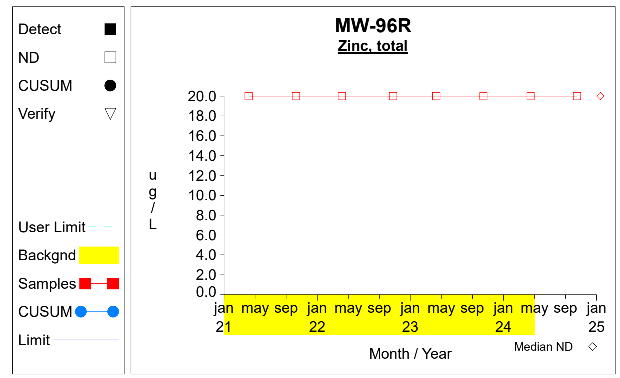
Graph 12



Graph 13



Graph 14



Graph 15

Worksheet 2 - Intra-Well Control Charts / Prediction Limits
Antimony, total (ug/L) at MW-96R

Insufficient data to perform analysis

Worksheet 2 - Intra-Well Control Charts / Prediction Limits
Arsenic, total (ug/L) at MW-96R
Normal Control Limit

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **166.5** / **10** = **16.65**	Compute background mean.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**4126.07** - **27722.25**/**10**) / (**10**-1))^{½} = **12.265**	Compute background sd.
3	SCL = $\overline{X}$ + **F** * **S** = **16.65** + **4.5** * **12.265** = **71.842**	Compute combined Shewhart-CUSUM normal control limit.
4	N' = **N** * (**N**-1) / 2 = **10** * (**10**-1) / 2 = **45**	Number of sample pairs during trend detection period.
5	S = **-7.495**	Sen's estimator of trend.
6	var(S) = **121.333**	Variance estimate for slope.
7	M_1(S) = (**N'** - **$Z_{.99}$** * **var(S)**^{½}) / 2 = (**45** - **2.326** * **121.333**^{½}) / 2 = **9.689**	Ordinal position for one-sided lower confidence limit for slope. The LCL is the M_1^{th} largest slope estimate. When M_1 is not an integer, interpolation is used.
8	LCL(S) = **-21.731**	One-sided lower confidence limit for slope.

Worksheet 2 - Intra-Well Control Charts / Prediction Limits
Barium, total (ug/L) at MW-96R
Normal Control Limit

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **4480.0** / **8** = **560.0**	Compute background mean.
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))^{½} = ((**3.26x10^6** - **2.01x10^7**/**8**) / (**8**-1))^{½} = **327.57**	Compute background sd.
3	SCL = $\overline{X}$ + **F** * **S** = **560.0** + **4.5** * **327.57** = **2034.064**	Compute combined Shewhart-CUSUM normal control limit.
4	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
5	S = **-223.354**	Sen's estimator of trend.
6	var(S) = **65.333**	Variance estimate for slope.
7	M_1(S) = (**N'** - **$Z_{.99}$** * **var(S)**^{½}) / 2 = (**28** - **2.326** * **65.333**^{½}) / 2 = **4.6**	Ordinal position for one-sided lower confidence limit for slope. The LCL is the M_1th largest slope estimate. When M_1 is not an integer, interpolation is used.
8	LCL(S) = **-806.57**	One-sided lower confidence limit for slope.

Worksheet 2 - Intra-Well Control Charts / Prediction Limits
Beryllium, total (ug/L) at MW-96R

Insufficient data to perform analysis

Worksheet 2 - Intra-Well Control Charts / Prediction Limits
Cadmium, total (ug/L) at MW-96R

Insufficient data to perform analysis

Worksheet 2 - Intra-Well Control Charts / Prediction Limits
Chromium, total (ug/L) at MW-96R

Insufficient data to perform analysis

Worksheet 2 - Intra-Well Control Charts / Prediction Limits
Cobalt, total (ug/L) at MW-96R
Normal Control Limit

Step	Equation	Description
1	$\bar{X}$ = **sum[X]** / **N**	Compute background mean.
	= **90.6** / **8**	
	= **11.325**	
2	S = ((**sum[X^2]** - **sum[X]**^{2}/**N**) / (**N**-1))$^{1/2}$	Compute background sd.
	= ((**1072.58** - **8208.36**/**8**) / (**8**-1))$^{1/2}$	
	= **2.578**	
3	SCL = $\bar{X}$ + **F** * **S**	Compute combined Shewhart-CUSUM normal control limit.
	= **11.325** + **4.5** * **2.578**	
	= **22.928**	
4	N' = **N** * (**N**-1) / 2	Number of sample pairs during trend detection period.
	= **8** * (**8**-1) / 2	
	= **28**	
5	S = **-0.857**	Sen's estimator of trend.
6	var(S) = **65.333**	Variance estimate for slope.
7	M_1(S) = (**N'** - **Z**$_{.99}$ * **var(S)**$^{1/2}$) / 2	Ordinal position for one-sided lower confidence limit for slope. The LCL is the M_1th largest slope estimate. When M_1 is not an integer, interpolation is used.
	= (**28** - **2.326** * **65.333**$^{1/2}$) / 2	
	= **4.6**	
8	LCL(S) = **-8.294**	One-sided lower confidence limit for slope.

Worksheet 2 - Intra-Well Control Charts / Prediction Limits
Copper, total (ug/L) at MW-96R

Insufficient data to perform analysis

Worksheet 2 - Intra-Well Control Charts / Prediction Limits
Lead, total (ug/L) at MW-96R

Insufficient data to perform analysis

Worksheet 2 - Intra-Well Control Charts / Prediction Limits
Nickel, total (ug/L) at MW-96R
Normal Control Limit

Step	Equation	Description
1	$\bar{X} = \mathbf{sum[X]} / \mathbf{N}$ $= \mathbf{41.5} / \mathbf{7}$ $= \mathbf{5.929}$	Compute background mean.
2	$S = ((\mathbf{sum[X^2]} - \mathbf{sum[X]}^2/\mathbf{N}) / (\mathbf{N}-1))^{1/2}$ $= ((\mathbf{259.35} - \mathbf{1722.25/7}) / (\mathbf{7}-1))^{1/2}$ $= \mathbf{1.49}$	Compute background sd.
3	$SCL = \bar{\mathbf{X}} + \mathbf{F} * \mathbf{S}$ $= \mathbf{5.929} + \mathbf{4.5} * \mathbf{1.49}$ $= \mathbf{12.632}$	Compute combined Shewhart-CUSUM normal control limit.
4	$N' = \mathbf{N} * (\mathbf{N}-1) / 2$ $= \mathbf{7} * (\mathbf{7}-1) / 2$ $= \mathbf{21}$	Number of sample pairs during trend detection period.
5	$S = \mathbf{-1.154}$	Sen's estimator of trend.
6	$var(S) = \mathbf{44.333}$	Variance estimate for slope.
7	$M_1(S) = (\mathbf{N'} - \mathbf{Z}_{.99} * \mathbf{var(S)}^{1/2}) / 2$ $= (\mathbf{21} - \mathbf{2.326} * \mathbf{44.333}^{1/2}) / 2$ $= \mathbf{2.756}$	Ordinal position for one-sided lower confidence limit for slope. The LCL is the M_1th largest slope estimate. When M_1 is not an integer, interpolation is used.
8	$LCL(S) = \mathbf{-3.103}$	One-sided lower confidence limit for slope.

Worksheet 2 - Intra-Well Control Charts / Prediction Limits
Selenium, total (ug/L) at MW-96R
Normal Control Limit

Step	Equation	Description
1	$\overline{X}$ = **sum[X]** / **N** = **44.3** / **8** = **5.538**	Compute background mean.
2	$S = ((\mathbf{sum[X^2]} - \mathbf{sum[X]}^2/\mathbf{N}) / (\mathbf{N}-1))^{1/2}$ $= ((\mathbf{278.41} - \mathbf{1962.49/8}) / (\mathbf{8}-1))^{1/2}$ = **2.174**	Compute background sd.
3	SCL = $\overline{\mathbf{X}}$ + **F** * **S** = **5.538** + **4.5** * **2.174** = **15.323**	Compute combined Shewhart-CUSUM normal control limit.
4	N' = **N** * (**N**-1) / 2 = **8** * (**8**-1) / 2 = **28**	Number of sample pairs during trend detection period.
5	S = **0.0**	Sen's estimator of trend.
6	var(S) = **48.667**	Variance estimate for slope.
7	$M_1(S) = (\mathbf{N'} - \mathbf{Z}_{.99} * \mathbf{var(S)}^{1/2}) / 2$ $= (\mathbf{28} - \mathbf{2.326} * \mathbf{48.667}^{1/2}) / 2$ = **5.887**	Ordinal position for one-sided lower confidence limit for slope. The LCL is the M_1th largest slope estimate. When M_1 is not an integer, interpolation is used.
8	LCL(S) = **-1.517**	One-sided lower confidence limit for slope.

Worksheet 2 - Intra-Well Control Charts / Prediction Limits
Silver, total (ug/L) at MW-96R

Insufficient data to perform analysis

Worksheet 2 - Intra-Well Control Charts / Prediction Limits
Thallium, total (ug/L) at MW-96R

Insufficient data to perform analysis

Worksheet 2 - Intra-Well Control Charts / Prediction Limits
Vanadium, total (ug/L) at MW-96R

Insufficient data to perform analysis

Worksheet 2 - Intra-Well Control Charts / Prediction Limits
Zinc, total (ug/L) at MW-96R

Insufficient data to perform analysis

Attachment F

Summary Table of Historical VOC Detections

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,1-dichloroethane	GU-2	10/08/2010		2.8	1.0	ug/L
1,1-dichloroethane	GU-2	4/04/2011		4.6	1.0	ug/L
Benzene	GU-2	10/08/2010		1.6	1.0	ug/L
Benzene	GU-2	4/04/2011		2.3	1.0	ug/L
Chloroethane	GU-2	10/08/2010		4.9	1.0	ug/L
Chloroethane	GU-2	4/04/2011		6.8	1.0	ug/L
Cis-1,2-dichloroethylene	GU-2	10/08/2010		2.9	1.0	ug/L
Cis-1,2-dichloroethylene	GU-2	4/04/2011		2.8	1.0	ug/L
Vinyl chloride	GU-2	10/08/2010		4.3	1.0	ug/L
Vinyl chloride	GU-2	4/04/2011		3.4	1.0	ug/L
1,1-dichloroethane	GU-3	8/11/2011		2.8	1.0	ug/L
Benzene	GU-3	8/11/2011		3.5	1.0	ug/L
Chloroethane	GU-3	8/11/2011		7.4	1.0	ug/L
Cis-1,2-dichloroethylene	GU-3	8/11/2011		3.6	1.0	ug/L
Vinyl chloride	GU-3	8/11/2011		4.6	1.0	ug/L
1,1-dichloroethane	LW-75	4/11/2023		3.8	1.0	ug/L
1,1-dichloroethane	LW-75	4/16/2024		7.6	1.0	ug/L
1,2-dichloroethane	LW-75	4/16/2024		1.9	1.0	ug/L
1,4-dichlorobenzene	LW-75	1/15/2019		18.2	5.0	ug/L
1,4-dichlorobenzene	LW-75	1/07/2020		11.2	5.0	ug/L
1,4-dichlorobenzene	LW-75	10/19/2020		9.4	1.0	ug/L
1,4-dichlorobenzene	LW-75	4/05/2021		9.6	1.0	ug/L
1,4-dichlorobenzene	LW-75	4/06/2022		10.0	1.0	ug/L
1,4-dichlorobenzene	LW-75	4/11/2023		67.5	1.0	ug/L
1,4-dichlorobenzene	LW-75	4/16/2024		163.0	1.0	ug/L
4-methyl-2-pentanone (mibk)	LW-75	4/11/2023		11.6	5.0	ug/L
4-methyl-2-pentanone (mibk)	LW-75	4/16/2024		6.1	5.0	ug/L
Acetone	LW-75	10/19/2020		17.0	10.0	ug/L
Acetone	LW-75	4/05/2021		15.5	10.0	ug/L
Acetone	LW-75	4/16/2024		28.8	10.0	ug/L
Benzene	LW-75	1/15/2019		7.8	5.0	ug/L
Benzene	LW-75	10/19/2020		3.4	1.0	ug/L
Benzene	LW-75	4/05/2021		4.8	1.0	ug/L
Benzene	LW-75	4/06/2022		5.2	1.0	ug/L
Benzene	LW-75	4/11/2023		9.4	1.0	ug/L
Benzene	LW-75	4/16/2024		8.9	1.0	ug/L
Carbon disulfide	LW-75	4/11/2023		2.1	1.0	ug/L
Chloroethane	LW-75	10/19/2020		1.6	1.0	ug/L
Chloroethane	LW-75	4/05/2021		4.2	1.0	ug/L
Chloroethane	LW-75	4/06/2022		3.8	1.0	ug/L
Chloroethane	LW-75	4/11/2023		1.9	1.0	ug/L
Chloroethane	LW-75	4/16/2024		3.9	1.0	ug/L
Chloromethane	LW-75	4/16/2024		1	1	ug/L
Cis-1,2-dichloroethylene	LW-75	4/05/2021		1.0	1.0	ug/L
Cis-1,2-dichloroethylene	LW-75	4/11/2023		5.4	1.0	ug/L
Cis-1,2-dichloroethylene	LW-75	4/16/2024		6.8	1.0	ug/L
Ethylbenzene	LW-75	1/15/2019		77.8	5.0	ug/L
Ethylbenzene	LW-75	1/07/2020		48.4	5.0	ug/L
Ethylbenzene	LW-75	10/19/2020		38.6	1.0	ug/L
Ethylbenzene	LW-75	4/05/2021		39.9	1.0	ug/L
Ethylbenzene	LW-75	4/06/2022		35.3	1.0	ug/L
Ethylbenzene	LW-75	4/11/2023		275.0	5.0	ug/L
Ethylbenzene	LW-75	4/16/2024		297.0	5.0	ug/L
Methylene chloride	LW-75	4/11/2023		33.1	5.0	ug/L
Methylene chloride	LW-75	4/16/2024		75.3	5.0	ug/L
Styrene	LW-75	4/11/2023		1.6	1.0	ug/L
Styrene	LW-75	4/16/2024		2.5	1.0	ug/L
Toluene	LW-75	4/06/2022		2.5	1.0	ug/L
Toluene	LW-75	4/11/2023		73.8	1.0	ug/L
Toluene	LW-75	4/16/2024		108.0	1.0	ug/L
Trichloroethylene	LW-75	4/16/2024		1.7	1.0	ug/L
Vinyl chloride	LW-75	4/11/2023		3.4	1.0	ug/L
Vinyl chloride	LW-75	4/16/2024		3.4	1.0	ug/L
Xylenes, total	LW-75	1/15/2019		86.0	10.0	ug/L
Xylenes, total	LW-75	1/07/2020		65.2	10.0	ug/L
Xylenes, total	LW-75	10/19/2020		49.2	2.0	ug/L
Xylenes, total	LW-75	4/05/2021		71.4	2.0	ug/L
Xylenes, total	LW-75	4/06/2022		62.1	2.0	ug/L
Xylenes, total	LW-75	4/11/2023		161.0	2.0	ug/L
Xylenes, total	LW-75	4/16/2024		231.0	2.0	ug/L
1,1-dichloroethane	MW-205	10/14/2016		10.2	1.0	ug/L
1,1-dichloroethane	MW-205	4/10/2017		7.1	1.0	ug/L
1,1-dichloroethane	MW-205	10/09/2017		7.7	1.0	ug/L
1,1-dichloroethane	MW-205	4/17/2018		7.8	1.0	ug/L
1,1-dichloroethane	MW-205	10/22/2018		3.3	1.0	ug/L
1,1-dichloroethane	MW-205	4/22/2019		5.7	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,1-dichloroethane	MW-205	10/23/2020		4.8	1.0	ug/L
1,1-dichloroethane	MW-205	4/05/2021		2.8	1.0	ug/L
1,2-dichlorobenzene	MW-205	4/17/2018		1.1	1.0	ug/L
1,2-dichloropropane	MW-205	4/10/2017		2.0	1.0	ug/L
1,2-dichloropropane	MW-205	4/17/2018		3.3	1.0	ug/L
1,2-dichloropropane	MW-205	4/22/2019		1.3	1.0	ug/L
1,2-dichloropropane	MW-205	4/05/2021		1.4	1.0	ug/L
1,4-dichlorobenzene	MW-205	10/14/2016		7.2	1.0	ug/L
1,4-dichlorobenzene	MW-205	4/10/2017		8.5	1.0	ug/L
1,4-dichlorobenzene	MW-205	10/09/2017		8.0	1.0	ug/L
1,4-dichlorobenzene	MW-205	4/17/2018		11.9	1.0	ug/L
1,4-dichlorobenzene	MW-205	10/22/2018		9.4	1.0	ug/L
1,4-dichlorobenzene	MW-205	10/23/2020		8.7	1.0	ug/L
1,4-dichlorobenzene	MW-205	4/05/2021		10.2	1.0	ug/L
Acetone	MW-205	10/09/2017		22.2	10.0	ug/L
Benzene	MW-205	4/02/2008		4.6	1.0	ug/L
Benzene	MW-205	10/03/2008		5.9	1.0	ug/L
Benzene	MW-205	4/01/2009		5.8	1.0	ug/L
Benzene	MW-205	10/08/2012		4.3	1.0	ug/L
Benzene	MW-205	10/16/2013		5.6	1.0	ug/L
Benzene	MW-205	4/09/2014		3.0	1.0	ug/L
Benzene	MW-205	10/17/2014		7.2	1.0	ug/L
Benzene	MW-205	4/06/2015		10.8	1.0	ug/L
Benzene	MW-205	4/14/2016		12.1	1.0	ug/L
Benzene	MW-205	10/14/2016		12.3	1.0	ug/L
Benzene	MW-205	4/10/2017		10.8	1.0	ug/L
Benzene	MW-205	10/09/2017		8.7	1.0	ug/L
Benzene	MW-205	4/17/2018		5.6	1.0	ug/L
Benzene	MW-205	10/22/2018		10.8	1.0	ug/L
Benzene	MW-205	4/22/2019		11.9	1.0	ug/L
Benzene	MW-205	10/23/2020		13.6	1.0	ug/L
Benzene	MW-205	4/05/2021		7.2	1.0	ug/L
Chlorobenzene	MW-205	10/14/2016		2.9	1.0	ug/L
Chlorobenzene	MW-205	4/10/2017		2.6	1.0	ug/L
Chlorobenzene	MW-205	10/09/2017		1.9	1.0	ug/L
Chlorobenzene	MW-205	4/17/2018		2.4	1.0	ug/L
Chlorobenzene	MW-205	4/22/2019		4.9	1.0	ug/L
Chlorobenzene	MW-205	10/23/2020		3.4	1.0	ug/L
Chlorobenzene	MW-205	4/05/2021		3.2	1.0	ug/L
Chloroethane	MW-205	10/14/2016		7.1	1.0	ug/L
Chloroethane	MW-205	4/10/2017		5.0	1.0	ug/L
Chloroethane	MW-205	10/09/2017		3.8	1.0	ug/L
Chloroethane	MW-205	4/17/2018		3.4	1.0	ug/L
Chloroethane	MW-205	10/22/2018		3.3	1.0	ug/L
Chloroethane	MW-205	4/22/2019		4.3	1.0	ug/L
Chloroethane	MW-205	10/23/2020		3.9	1.0	ug/L
Chloroethane	MW-205	4/05/2021		1.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-205	10/14/2016		6.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-205	4/10/2017		1.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-205	10/09/2017		5.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-205	4/17/2018		5.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-205	4/22/2019		1.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-205	10/23/2020		2.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-205	4/05/2021		1.3	1.0	ug/L
Ethylbenzene	MW-205	10/09/2017		1.1	1.0	ug/L
Ethylbenzene	MW-205	10/22/2018		14.0	1.0	ug/L
Ethylbenzene	MW-205	4/22/2019		4.8	1.0	ug/L
Toluene	MW-205	10/14/2016		1.0	1.0	ug/L
Toluene	MW-205	4/10/2017		1.0	1.0	ug/L
Toluene	MW-205	4/22/2019		1.9	1.0	ug/L
Trans-1,2-dichloroethylene	MW-205	4/17/2018		1	1	ug/L
Trichloroethylene	MW-205	4/02/2008		4.1	1.0	ug/L
Trichloroethylene	MW-205	10/03/2008		8.0	1.0	ug/L
Trichloroethylene	MW-205	4/01/2009		2.3	1.0	ug/L
Trichloroethylene	MW-205	10/08/2012		5.2	1.0	ug/L
Trichloroethylene	MW-205	10/16/2013		5.6	1.0	ug/L
Trichloroethylene	MW-205	4/09/2014		6.1	1.0	ug/L
Trichloroethylene	MW-205	10/17/2014		19.3	1.0	ug/L
Trichloroethylene	MW-205	4/06/2015		8.8	1.0	ug/L
Trichloroethylene	MW-205	4/14/2016		1.2	1.0	ug/L
Trichloroethylene	MW-205	10/14/2016		1.2	1.0	ug/L
Trichloroethylene	MW-205	4/17/2018		1.7	1.0	ug/L
Vinyl chloride	MW-205	10/14/2016		1.8	1.0	ug/L
Vinyl chloride	MW-205	4/10/2017		1.9	1.0	ug/L
Vinyl chloride	MW-205	10/09/2017		1.2	1.0	ug/L
Vinyl chloride	MW-205	4/17/2018		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
Xylenes, total	MW-205	4/22/2019		4	2	ug/L
1,1-dichloroethane	MW-213	4/05/2021		2.2	1.0	ug/L
1,1-dichloroethane	MW-213	4/06/2022		3.3	1.0	ug/L
1,1-dichloroethane	MW-213	10/25/2022		2.7	1.0	ug/L
1,1-dichloroethane	MW-213	4/10/2023		2.5	1.0	ug/L
1,1-dichloroethane	MW-213	10/13/2023		3.2	1.0	ug/L
1,1-dichloroethane	MW-213	10/15/2024		1.9	1.0	ug/L
1,2-dichloropropane	MW-213	4/10/2017		1.6	1.0	ug/L
1,2-dichloropropane	MW-213	4/22/2019		3.8	1.0	ug/L
1,2-dichloropropane	MW-213	10/23/2020		6.1	1.0	ug/L
1,2-dichloropropane	MW-213	4/05/2021		7.6	1.0	ug/L
1,2-dichloropropane	MW-213	4/06/2022		7.7	1.0	ug/L
1,2-dichloropropane	MW-213	10/25/2022		6.5	1.0	ug/L
1,2-dichloropropane	MW-213	4/10/2023		5.6	1.0	ug/L
1,2-dichloropropane	MW-213	10/13/2023		4.1	1.0	ug/L
1,2-dichloropropane	MW-213	10/15/2024		3.8	1.0	ug/L
Benzene	MW-213	10/25/2022		1.1	1.0	ug/L
Benzene	MW-213	4/10/2023		1.0	1.0	ug/L
Benzene	MW-213	10/13/2023		1.4	1.0	ug/L
Chloroethane	MW-213	10/23/2020		1.5	1.0	ug/L
Chloroethane	MW-213	4/05/2021		2.6	1.0	ug/L
Chloroethane	MW-213	4/06/2022		2.6	1.0	ug/L
Chloroethane	MW-213	10/25/2022		3.0	1.0	ug/L
Chloroethane	MW-213	4/10/2023		2.5	1.0	ug/L
Chloroethane	MW-213	10/13/2023		4.2	1.0	ug/L
Chloroethane	MW-213	10/15/2024		1.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-213	10/14/2016		8.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-213	4/10/2017		4.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-213	4/17/2018		1.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-213	10/22/2018		1.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW-213	4/22/2019		19.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-213	10/23/2020		44.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-213	4/05/2021		37.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-213	4/06/2022		43.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW-213	10/25/2022		31.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-213	4/10/2023		21.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-213	10/13/2023		32.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-213	10/15/2024		19.0	1.0	ug/L
Vinyl chloride	MW-213	10/23/2020		1.4	1.0	ug/L
Vinyl chloride	MW-213	4/05/2021		3.0	1.0	ug/L
Vinyl chloride	MW-213	4/06/2022		2.4	1.0	ug/L
Vinyl chloride	MW-213	10/25/2022		3.1	1.0	ug/L
Vinyl chloride	MW-213	4/10/2023		2.5	1.0	ug/L
Vinyl chloride	MW-213	10/13/2023		4.3	1.0	ug/L
Vinyl chloride	MW-213	10/15/2024		1.4	1.0	ug/L
1,1-dichloroethane	MW-214	10/14/2016		1.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-214	10/14/2016		3.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-214	4/10/2017		2.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-214	10/09/2017		2.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-214	4/17/2018		3.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-214	10/22/2018		1.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-214	4/22/2019		4.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-214	10/23/2020		6.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW-214	4/05/2021		3.3	1.0	ug/L
Tetrachloroethylene	MW-214	10/14/2016		12.2	1.0	ug/L
Tetrachloroethylene	MW-214	4/10/2017		9.9	1.0	ug/L
Tetrachloroethylene	MW-214	10/09/2017		8.8	1.0	ug/L
Tetrachloroethylene	MW-214	4/17/2018		8.6	1.0	ug/L
Tetrachloroethylene	MW-214	10/22/2018		4.1	1.0	ug/L
Tetrachloroethylene	MW-214	4/22/2019		8.5	1.0	ug/L
Tetrachloroethylene	MW-214	10/23/2020		7.8	1.0	ug/L
Tetrachloroethylene	MW-214	4/05/2021		5.4	1.0	ug/L
Trichloroethylene	MW-214	4/02/2008		5.2	1.0	ug/L
Trichloroethylene	MW-214	10/03/2008		5.9	1.0	ug/L
Trichloroethylene	MW-214	4/01/2009		4.1	1.0	ug/L
Trichloroethylene	MW-214	10/08/2012		3.6	1.0	ug/L
Trichloroethylene	MW-214	10/16/2013		2.9	1.0	ug/L
Trichloroethylene	MW-214	4/09/2014		2.0	1.0	ug/L
Trichloroethylene	MW-214	10/17/2014		2.0	1.0	ug/L
Trichloroethylene	MW-214	4/06/2015		1.8	1.0	ug/L
Trichloroethylene	MW-214	4/14/2016		2.1	1.0	ug/L
Trichloroethylene	MW-214	10/14/2016		3.0	1.0	ug/L
Trichloroethylene	MW-214	4/10/2017		2.4	1.0	ug/L
Trichloroethylene	MW-214	10/09/2017		2.8	1.0	ug/L
Trichloroethylene	MW-214	4/17/2018		2.6	1.0	ug/L
Trichloroethylene	MW-214	4/22/2019		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
Trichloroethylene	MW-214	10/23/2020		5.8	1.0	ug/L
Trichloroethylene	MW-214	4/05/2021		2.9	1.0	ug/L
1,1,1-trichloroethane	MW-49	10/23/1992		10.5	1.0	ug/L
1,1,1-trichloroethane	MW-49	1/21/1993		17.7	1.0	ug/L
1,1,1-trichloroethane	MW-49	4/22/1993		14.7	1.0	ug/L
1,1,1-trichloroethane	MW-49	7/13/1993		11.4	1.0	ug/L
1,1,1-trichloroethane	MW-49	1/25/1994		18.1	1.0	ug/L
1,1,1-trichloroethane	MW-49	4/14/1994		12.8	1.0	ug/L
1,1,1-trichloroethane	MW-49	7/08/1994		10.1	1.0	ug/L
1,1,1-trichloroethane	MW-49	10/20/1994		7.5	1.0	ug/L
1,1,1-trichloroethane	MW-49	1/04/1995		8.0	1.0	ug/L
1,1,1-trichloroethane	MW-49	4/21/1995		9.0	1.0	ug/L
1,1,1-trichloroethane	MW-49	7/07/1995		9.8	1.0	ug/L
1,1,1-trichloroethane	MW-49	10/12/1995		9.5	1.0	ug/L
1,1,1-trichloroethane	MW-49	1/10/1996		8.1	1.0	ug/L
1,1,1-trichloroethane	MW-49	7/17/1996		4.5	1.0	ug/L
1,1,1-trichloroethane	MW-49	10/08/1996		5.2	1.0	ug/L
1,1,1-trichloroethane	MW-49	1/21/1997		2.7	1.0	ug/L
1,1,1-trichloroethane	MW-49	4/11/1997		2.3	1.0	ug/L
1,1,1-trichloroethane	MW-49	1/27/1998		2.8	1.0	ug/L
1,1,1-trichloroethane	MW-49	1/06/2000		1.0	1.0	ug/L
1,1-dichloroethane	MW-49	3/28/2008		2.9	1.0	ug/L
1,1-dichloroethane	MW-49	6/27/2008		2.7	1.0	ug/L
1,1-dichloroethane	MW-49	8/04/2008		2.7	1.0	ug/L
1,1-dichloroethane	MW-49	12/08/2008		3.1	1.0	ug/L
1,1-dichloroethane	MW-49	4/02/2009		2.7	1.0	ug/L
1,1-dichloroethane	MW-49	10/21/2009		2.6	1.0	ug/L
1,1-dichloroethane	MW-49	4/20/2010		3.0	1.0	ug/L
1,1-dichloroethane	MW-49	10/08/2010		3.0	1.0	ug/L
1,1-dichloroethane	MW-49	4/05/2011		2.3	1.0	ug/L
1,1-dichloroethane	MW-49	10/06/2011		2.8	1.0	ug/L
1,1-dichloroethane	MW-49	4/10/2012		2.1	1.0	ug/L
1,1-dichloroethane	MW-49	10/09/2012		2.8	1.0	ug/L
1,1-dichloroethane	MW-49	4/04/2013		2.0	1.0	ug/L
1,1-dichloroethane	MW-49	10/16/2013		2.6	1.0	ug/L
1,1-dichloroethane	MW-49	4/10/2014		2.2	1.0	ug/L
1,1-dichloroethane	MW-49	4/06/2015		1.5	1.0	ug/L
1,1-dichloroethane	MW-49	10/01/2015		1.1	1.0	ug/L
1,1-dichloroethane	MW-49	4/14/2016		1.3	1.0	ug/L
1,1-dichloroethane	MW-49	10/13/2016		1.9	1.0	ug/L
1,1-dichloroethane	MW-49	4/10/2017		1.7	1.0	ug/L
1,1-dichloroethane	MW-49	10/09/2017		2.1	1.0	ug/L
1,1-dichloroethane	MW-49	4/17/2018		1.4	1.0	ug/L
1,1-dichloroethane	MW-49	10/22/2018		1.2	1.0	ug/L
1,1-dichloroethane	MW-49	4/22/2019		3.4	1.0	ug/L
1,1-dichloroethane	MW-49	10/23/2019		2.6	1.0	ug/L
1,1-dichloroethane	MW-49	4/10/2020		2.6	1.0	ug/L
1,1-dichloroethane	MW-49	10/19/2020		2.5	1.0	ug/L
1,1-dichloroethane	MW-49	4/05/2021		1.4	1.0	ug/L
1,1-dichloroethane	MW-49	10/08/2021		1.9	1.0	ug/L
1,1-dichloroethane	MW-49	4/06/2022		1.0	1.0	ug/L
1,1-dichloroethane	MW-49	10/25/2022		1.7	1.0	ug/L
1,1-dichloroethane	MW-49	4/11/2023		1.4	1.0	ug/L
1,1-dichloroethane	MW-49	10/13/2023		1.6	1.0	ug/L
1,1-dichloroethane	MW-49	4/17/2024		1.1	1.0	ug/L
1,1-dichloroethane	MW-49	10/15/2024		1.2	1.0	ug/L
1,1-dichloroethylene	MW-49	1/25/1994		3.9	1.0	ug/L
1,1-dichloroethylene	MW-49	7/07/1995		1.2	1.0	ug/L
1,1-dichloroethylene	MW-49	10/18/2001		9.1	1.0	ug/L
1,2-dichloroethane	MW-49	10/04/1999		1.4	1.0	ug/L
1,2-dichloroethane	MW-49	7/05/2000		1.7	1.0	ug/L
1,2-dichloroethane	MW-49	9/11/2000		1.3	1.0	ug/L
1,2-dichloroethane	MW-49	10/08/2000		1.4	1.0	ug/L
1,2-dichloroethane	MW-49	4/27/2001		1.1	1.0	ug/L
1,2-dichloroethane	MW-49	7/23/2001		1.4	1.0	ug/L
1,2-dichloroethane	MW-49	1/25/2002		1.0	1.0	ug/L
1,2-dichloroethane	MW-49	10/14/2002		1.2	1.0	ug/L
1,2-dichloroethane	MW-49	10/10/2007		.6	.5	ug/L
1,4-dichlorobenzene	MW-49	3/28/2008		6.3	1.0	ug/L
1,4-dichlorobenzene	MW-49	6/27/2008		7.8	1.0	ug/L
1,4-dichlorobenzene	MW-49	8/04/2008		9.0	1.0	ug/L
1,4-dichlorobenzene	MW-49	10/03/2008		8.3	1.0	ug/L
1,4-dichlorobenzene	MW-49	12/08/2008		7.8	1.0	ug/L
1,4-dichlorobenzene	MW-49	4/02/2009		8.8	1.0	ug/L
1,4-dichlorobenzene	MW-49	10/21/2009		8.9	1.0	ug/L
1,4-dichlorobenzene	MW-49	4/20/2010		9.2	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,4-dichlorobenzene	MW-49	10/08/2010		5.6	1.0	ug/L
1,4-dichlorobenzene	MW-49	4/05/2011		8.1	1.0	ug/L
1,4-dichlorobenzene	MW-49	10/06/2011		4.9	1.0	ug/L
1,4-dichlorobenzene	MW-49	4/10/2012		8.4	1.0	ug/L
1,4-dichlorobenzene	MW-49	10/09/2012		1.8	1.0	ug/L
1,4-dichlorobenzene	MW-49	4/04/2013		10.9	1.0	ug/L
1,4-dichlorobenzene	MW-49	10/16/2013		7.2	1.0	ug/L
1,4-dichlorobenzene	MW-49	4/10/2014		4.9	1.0	ug/L
1,4-dichlorobenzene	MW-49	10/16/2014		8.7	1.0	ug/L
1,4-dichlorobenzene	MW-49	4/06/2015		8.7	1.0	ug/L
1,4-dichlorobenzene	MW-49	10/01/2015		8.6	1.0	ug/L
1,4-dichlorobenzene	MW-49	4/14/2016		8.9	1.0	ug/L
1,4-dichlorobenzene	MW-49	10/13/2016		9.2	1.0	ug/L
1,4-dichlorobenzene	MW-49	4/10/2017		7.8	1.0	ug/L
1,4-dichlorobenzene	MW-49	10/09/2017		5.8	1.0	ug/L
1,4-dichlorobenzene	MW-49	4/17/2018		1.8	1.0	ug/L
1,4-dichlorobenzene	MW-49	10/22/2018		2.5	1.0	ug/L
1,4-dichlorobenzene	MW-49	4/22/2019		11.4	1.0	ug/L
1,4-dichlorobenzene	MW-49	10/23/2019		7.4	1.0	ug/L
1,4-dichlorobenzene	MW-49	10/19/2020		6.6	1.0	ug/L
1,4-dichlorobenzene	MW-49	4/05/2021		6.4	1.0	ug/L
1,4-dichlorobenzene	MW-49	10/08/2021		6.0	1.0	ug/L
1,4-dichlorobenzene	MW-49	4/06/2022		3.6	1.0	ug/L
1,4-dichlorobenzene	MW-49	10/25/2022		6.3	1.0	ug/L
1,4-dichlorobenzene	MW-49	4/11/2023		7.4	1.0	ug/L
1,4-dichlorobenzene	MW-49	10/13/2023		6.1	1.0	ug/L
1,4-dichlorobenzene	MW-49	4/17/2024		3.3	1.0	ug/L
1,4-dichlorobenzene	MW-49	10/15/2024		7.9	1.0	ug/L
Acetone	MW-49	10/21/2009		48.4	10.0	ug/L
Acetone	MW-49	4/05/2011		69.3	10.0	ug/L
Acetone	MW-49	10/09/2017		20.0	10.0	ug/L
Acetone	MW-49	4/17/2018		76.0	10.0	ug/L
Acetone	MW-49	10/22/2018		36.8	10.0	ug/L
Acetone	MW-49	4/06/2022		24.1	10.0	ug/L
Benzene	MW-49	7/07/1995		1.0	1.0	ug/L
Benzene	MW-49	7/17/1996		1.9	1.0	ug/L
Benzene	MW-49	10/08/1996		1.1	1.0	ug/L
Benzene	MW-49	1/21/1997		2.5	1.0	ug/L
Benzene	MW-49	4/11/1997		3.1	1.0	ug/L
Benzene	MW-49	7/17/1997		2.5	1.0	ug/L
Benzene	MW-49	10/15/1997		2.2	1.0	ug/L
Benzene	MW-49	1/27/1998		1.6	1.0	ug/L
Benzene	MW-49	7/21/1998		1.7	1.0	ug/L
Benzene	MW-49	1/26/1999		1.8	1.0	ug/L
Benzene	MW-49	4/19/1999		2.4	1.0	ug/L
Benzene	MW-49	10/04/1999		1.9	1.0	ug/L
Benzene	MW-49	1/06/2000		1.3	1.0	ug/L
Benzene	MW-49	7/05/2000		1.3	1.0	ug/L
Benzene	MW-49	9/11/2000		1.4	1.0	ug/L
Benzene	MW-49	10/08/2000		1.4	1.0	ug/L
Benzene	MW-49	1/18/2001		1.7	1.0	ug/L
Benzene	MW-49	4/27/2001		1.7	1.0	ug/L
Benzene	MW-49	7/23/2001		2.8	1.0	ug/L
Benzene	MW-49	10/18/2001		1.7	1.0	ug/L
Benzene	MW-49	1/25/2002		1.6	1.0	ug/L
Benzene	MW-49	4/24/2002		2.4	1.0	ug/L
Benzene	MW-49	7/22/2002		2.4	1.0	ug/L
Benzene	MW-49	1/29/2003		1.3	1.0	ug/L
Benzene	MW-49	7/11/2003		2.1	1.0	ug/L
Benzene	MW-49	10/06/2003		2.0	1.0	ug/L
Benzene	MW-49	1/12/2004		2.0	1.0	ug/L
Benzene	MW-49	4/26/2004		2.6	1.0	ug/L
Benzene	MW-49	4/11/2005		2.4	1.0	ug/L
Benzene	MW-49	10/05/2005		2.1	1.0	ug/L
Benzene	MW-49	4/05/2006		2.3	1.0	ug/L
Benzene	MW-49	10/04/2006		2.0	1.0	ug/L
Benzene	MW-49	4/12/2007		2.3	1.0	ug/L
Benzene	MW-49	10/10/2007		2.0	1.0	ug/L
Benzene	MW-49	3/28/2008		2.5	1.0	ug/L
Benzene	MW-49	6/27/2008		2.6	1.0	ug/L
Benzene	MW-49	8/04/2008		2.6	1.0	ug/L
Benzene	MW-49	12/08/2008		2.2	1.0	ug/L
Benzene	MW-49	4/02/2009		2.7	1.0	ug/L
Benzene	MW-49	10/21/2009		2.6	1.0	ug/L
Benzene	MW-49	4/20/2010		2.0	1.0	ug/L
Benzene	MW-49	4/05/2011		2.6	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Benzene	MW-49	10/06/2011		1.0	1.0	ug/L
Benzene	MW-49	4/10/2012		2.2	1.0	ug/L
Benzene	MW-49	4/04/2013		2.2	1.0	ug/L
Benzene	MW-49	10/16/2014		2.9	1.0	ug/L
Benzene	MW-49	4/06/2015		2.3	1.0	ug/L
Benzene	MW-49	10/01/2015		1.9	1.0	ug/L
Benzene	MW-49	4/14/2016		2.6	1.0	ug/L
Benzene	MW-49	10/13/2016		3.5	1.0	ug/L
Benzene	MW-49	4/10/2017		3.0	1.0	ug/L
Benzene	MW-49	10/09/2017		1.2	1.0	ug/L
Benzene	MW-49	4/17/2018		1.9	1.0	ug/L
Benzene	MW-49	10/22/2018		2.5	1.0	ug/L
Benzene	MW-49	4/22/2019		4.3	1.0	ug/L
Benzene	MW-49	10/23/2019		3.5	1.0	ug/L
Benzene	MW-49	4/10/2020		3.7	1.0	ug/L
Benzene	MW-49	10/19/2020		2.0	1.0	ug/L
Benzene	MW-49	4/05/2021		2.8	1.0	ug/L
Benzene	MW-49	10/08/2021		1.9	1.0	ug/L
Benzene	MW-49	4/06/2022		2.4	1.0	ug/L
Benzene	MW-49	10/25/2022		2.4	1.0	ug/L
Benzene	MW-49	4/11/2023		2.9	1.0	ug/L
Benzene	MW-49	10/13/2023		1.1	1.0	ug/L
Benzene	MW-49	10/15/2024		3.7	1.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-49	12/08/2008		13	8	ug/L
Bis(2-ethylhexyl) phthalate	MW-49	4/06/2015		65	10	ug/L
Chlorobenzene	MW-49	4/22/2019		1.1	1.0	ug/L
Chlorobenzene	MW-49	4/10/2020		1.1	1.0	ug/L
Chlorobenzene	MW-49	10/19/2020		1.0	1.0	ug/L
Chlorobenzene	MW-49	4/05/2021		1.0	1.0	ug/L
Chlorobenzene	MW-49	10/08/2021		1.0	1.0	ug/L
Chlorobenzene	MW-49	10/25/2022		1.1	1.0	ug/L
Chlorobenzene	MW-49	10/13/2023		1.0	1.0	ug/L
Chlorobenzene	MW-49	10/15/2024		1.1	1.0	ug/L
Chloroethane	MW-49	3/28/2008		17.8	1.0	ug/L
Chloroethane	MW-49	6/27/2008		15.5	1.0	ug/L
Chloroethane	MW-49	8/04/2008		16.5	1.0	ug/L
Chloroethane	MW-49	10/03/2008		18.1	1.0	ug/L
Chloroethane	MW-49	12/08/2008		18.1	1.0	ug/L
Chloroethane	MW-49	4/02/2009		18.1	1.0	ug/L
Chloroethane	MW-49	10/21/2009		18.6	1.0	ug/L
Chloroethane	MW-49	4/20/2010		15.8	1.0	ug/L
Chloroethane	MW-49	10/08/2010		13.6	1.0	ug/L
Chloroethane	MW-49	4/05/2011		17.2	1.0	ug/L
Chloroethane	MW-49	10/06/2011		11.6	1.0	ug/L
Chloroethane	MW-49	4/10/2012		11.8	1.0	ug/L
Chloroethane	MW-49	10/09/2012		10.0	1.0	ug/L
Chloroethane	MW-49	4/04/2013		11.3	1.0	ug/L
Chloroethane	MW-49	10/16/2013		5.7	1.0	ug/L
Chloroethane	MW-49	4/10/2014		11.2	1.0	ug/L
Chloroethane	MW-49	10/16/2014		12.9	1.0	ug/L
Chloroethane	MW-49	4/06/2015		8.9	1.0	ug/L
Chloroethane	MW-49	10/01/2015		8.7	1.0	ug/L
Chloroethane	MW-49	4/14/2016		9.0	1.0	ug/L
Chloroethane	MW-49	10/13/2016		11.9	1.0	ug/L
Chloroethane	MW-49	4/10/2017		10.1	1.0	ug/L
Chloroethane	MW-49	10/09/2017		8.7	1.0	ug/L
Chloroethane	MW-49	4/17/2018		5.5	1.0	ug/L
Chloroethane	MW-49	10/22/2018		11.0	1.0	ug/L
Chloroethane	MW-49	4/22/2019		8.2	1.0	ug/L
Chloroethane	MW-49	10/23/2019		10.2	1.0	ug/L
Chloroethane	MW-49	4/10/2020		9.4	1.0	ug/L
Chloroethane	MW-49	10/19/2020		9.8	1.0	ug/L
Chloroethane	MW-49	4/05/2021		6.8	1.0	ug/L
Chloroethane	MW-49	10/08/2021		7.3	1.0	ug/L
Chloroethane	MW-49	4/06/2022		5.6	1.0	ug/L
Chloroethane	MW-49	10/25/2022		7.4	1.0	ug/L
Chloroethane	MW-49	4/11/2023		6.6	1.0	ug/L
Chloroethane	MW-49	10/13/2023		6.6	1.0	ug/L
Chloroethane	MW-49	4/17/2024		4.6	1.0	ug/L
Chloroethane	MW-49	10/15/2024		5.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	3/28/2008		42.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	6/27/2008		41.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	8/04/2008		41.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	10/03/2008		45.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	12/08/2008		42.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	4/02/2009		42.8	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
Cis-1,2-dichloroethylene	MW-49	10/21/2009		41.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	4/20/2010		38.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	10/08/2010		33.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	4/05/2011		41.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	10/06/2011		28.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	4/10/2012		32.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	10/09/2012		25.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	4/04/2013		28.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	10/16/2013		24.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	4/10/2014		23.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	10/16/2014		23.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	4/06/2015		13.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	10/01/2015		11.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	4/14/2016		13.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	10/13/2016		13.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	4/10/2017		10.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	10/09/2017		16.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	4/17/2018		2.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	4/22/2019		2.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	4/10/2020		1.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	10/19/2020		6.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	10/08/2021		2.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	10/25/2022		1.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	10/13/2023		2.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-49	4/17/2024		2.4	1.0	ug/L
Trichloroethylene	MW-49	1/21/1993		1.2	1.0	ug/L
Trichloroethylene	MW-49	4/22/1993		3.3	1.0	ug/L
Trichloroethylene	MW-49	7/13/1993		5.5	1.0	ug/L
Trichloroethylene	MW-49	1/25/1994		3.2	1.0	ug/L
Trichloroethylene	MW-49	4/14/1994		1.8	1.0	ug/L
Trichloroethylene	MW-49	7/08/1994		2.5	1.0	ug/L
Trichloroethylene	MW-49	10/20/1994		4.7	1.0	ug/L
Trichloroethylene	MW-49	1/04/1995		4.1	1.0	ug/L
Trichloroethylene	MW-49	4/21/1995		4.7	1.0	ug/L
Trichloroethylene	MW-49	7/07/1995		4.4	1.0	ug/L
Trichloroethylene	MW-49	10/12/1995		3.4	1.0	ug/L
Trichloroethylene	MW-49	1/10/1996		2.7	1.0	ug/L
Trichloroethylene	MW-49	7/17/1996		5.7	1.0	ug/L
Trichloroethylene	MW-49	10/08/1996		5.8	1.0	ug/L
Trichloroethylene	MW-49	1/21/1997		9.5	1.0	ug/L
Trichloroethylene	MW-49	4/11/1997		10.4	1.0	ug/L
Trichloroethylene	MW-49	7/17/1997		10.8	1.0	ug/L
Trichloroethylene	MW-49	10/15/1997		9.6	1.0	ug/L
Trichloroethylene	MW-49	1/27/1998		7.6	1.0	ug/L
Trichloroethylene	MW-49	4/21/1998		12.2	1.0	ug/L
Trichloroethylene	MW-49	7/21/1998		12.9	1.0	ug/L
Trichloroethylene	MW-49	10/09/1998		9.5	1.0	ug/L
Trichloroethylene	MW-49	1/26/1999		11.1	1.0	ug/L
Trichloroethylene	MW-49	4/19/1999		13.1	1.0	ug/L
Trichloroethylene	MW-49	7/29/1999		10.4	1.0	ug/L
Trichloroethylene	MW-49	10/04/1999		9.8	1.0	ug/L
Trichloroethylene	MW-49	1/06/2000		7.9	1.0	ug/L
Trichloroethylene	MW-49	4/13/2000		5.0	1.0	ug/L
Trichloroethylene	MW-49	7/05/2000		12.0	1.0	ug/L
Trichloroethylene	MW-49	9/11/2000		6.4	1.0	ug/L
Trichloroethylene	MW-49	10/08/2000		4.0	1.0	ug/L
Trichloroethylene	MW-49	1/18/2001		1.2	1.0	ug/L
Trichloroethylene	MW-49	4/27/2001		1.2	1.0	ug/L
Trichloroethylene	MW-49	7/23/2001		2.4	1.0	ug/L
Trichloroethylene	MW-49	10/18/2001		1.5	1.0	ug/L
Trichloroethylene	MW-49	1/25/2002		2.0	1.0	ug/L
Trichloroethylene	MW-49	4/26/2004		.4	.3	ug/L
Trichloroethylene	MW-49	6/27/2008		1.0	1.0	ug/L
Trichloroethylene	MW-49	8/04/2008		1.5	1.0	ug/L
Trichloroethylene	MW-49	4/02/2009		1.0	1.0	ug/L
Trichloroethylene	MW-49	10/21/2009		1.9	1.0	ug/L
Vinyl chloride	MW-49	3/28/2008		6.6	1.0	ug/L
Vinyl chloride	MW-49	6/27/2008		6.6	1.0	ug/L
Vinyl chloride	MW-49	8/04/2008		7.2	1.0	ug/L
Vinyl chloride	MW-49	10/03/2008		6.0	1.0	ug/L
Vinyl chloride	MW-49	12/08/2008		6.8	1.0	ug/L
Vinyl chloride	MW-49	4/02/2009		7.2	1.0	ug/L
Vinyl chloride	MW-49	10/21/2009		6.8	1.0	ug/L
Vinyl chloride	MW-49	4/20/2010		5.6	1.0	ug/L
Vinyl chloride	MW-49	10/08/2010		5.1	1.0	ug/L
Vinyl chloride	MW-49	4/05/2011		7.0	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
Vinyl chloride	MW-49	10/06/2011		3.2	1.0	ug/L
Vinyl chloride	MW-49	4/10/2012		5.7	1.0	ug/L
Vinyl chloride	MW-49	10/09/2012		3.3	1.0	ug/L
Vinyl chloride	MW-49	4/04/2013		4.5	1.0	ug/L
Vinyl chloride	MW-49	10/16/2013		3.4	1.0	ug/L
Vinyl chloride	MW-49	4/10/2014		3.8	1.0	ug/L
Vinyl chloride	MW-49	10/16/2014		4.6	1.0	ug/L
Vinyl chloride	MW-49	4/06/2015		3.1	1.0	ug/L
Vinyl chloride	MW-49	10/01/2015		3.1	1.0	ug/L
Vinyl chloride	MW-49	4/14/2016		4.0	1.0	ug/L
Vinyl chloride	MW-49	10/13/2016		5.1	1.0	ug/L
Vinyl chloride	MW-49	4/10/2017		5.5	1.0	ug/L
Vinyl chloride	MW-49	10/09/2017		3.2	1.0	ug/L
Vinyl chloride	MW-49	4/17/2018		1.1	1.0	ug/L
Vinyl chloride	MW-49	10/22/2018		2.6	1.0	ug/L
Vinyl chloride	MW-49	4/22/2019		2.8	1.0	ug/L
Vinyl chloride	MW-49	10/23/2019		1.4	1.0	ug/L
Vinyl chloride	MW-49	4/10/2020		1.1	1.0	ug/L
Vinyl chloride	MW-49	10/19/2020		2.4	1.0	ug/L
1,1,1-trichloroethane	MW-54	10/23/1992		16.8	1.0	ug/L
1,1,1-trichloroethane	MW-54	1/21/1993		20.8	1.0	ug/L
1,1,1-trichloroethane	MW-54	4/22/1993		29.4	1.0	ug/L
1,1,1-trichloroethane	MW-54	7/13/1993		49.9	1.0	ug/L
1,1,1-trichloroethane	MW-54	7/26/1999		1.1	1.0	ug/L
1,1,1-trichloroethane	MW-54	10/04/1999		1.4	1.0	ug/L
1,1,1-trichloroethane	MW-54	1/06/2000		1.5	1.0	ug/L
1,1,1-trichloroethane	MW-54	4/13/2000		1.0	1.0	ug/L
1,1,1-trichloroethane	MW-54	7/05/2000		.9	.5	ug/L
1,1,1-trichloroethane	MW-54	9/11/2000		.8	.5	ug/L
1,1-dichloroethane	MW-54	3/28/2008		1.8	1.0	ug/L
1,1-dichloroethane	MW-54	6/25/2008		1.4	1.0	ug/L
1,1-dichloroethane	MW-54	8/04/2008		1.2	1.0	ug/L
1,1-dichloroethane	MW-54	12/08/2008		1.7	1.0	ug/L
1,1-dichloroethane	MW-54	4/02/2009		1.2	1.0	ug/L
1,1-dichloroethane	MW-54	10/21/2009		1.4	1.0	ug/L
1,1-dichloroethane	MW-54	4/20/2010		2.2	1.0	ug/L
1,1-dichloroethane	MW-54	10/08/2010		5.0	1.0	ug/L
1,1-dichloroethane	MW-54	4/05/2011		8.8	1.0	ug/L
1,1-dichloroethane	MW-54	10/06/2011		8.7	1.0	ug/L
1,1-dichloroethane	MW-54	4/10/2012		14.6	1.0	ug/L
1,1-dichloroethane	MW-54	10/09/2012		16.0	1.0	ug/L
1,1-dichloroethane	MW-54	4/04/2013		17.0	1.0	ug/L
1,1-dichloroethane	MW-54	10/16/2013		19.7	1.0	ug/L
1,1-dichloroethane	MW-54	4/10/2014		18.9	1.0	ug/L
1,1-dichloroethane	MW-54	10/16/2014		17.5	1.0	ug/L
1,1-dichloroethane	MW-54	4/06/2015		13.4	1.0	ug/L
1,1-dichloroethane	MW-54	10/01/2015		12.2	1.0	ug/L
1,1-dichloroethane	MW-54	4/14/2016		11.0	1.0	ug/L
1,1-dichloroethane	MW-54	10/13/2016		13.0	1.0	ug/L
1,1-dichloroethane	MW-54	4/10/2017		10.4	1.0	ug/L
1,1-dichloroethane	MW-54	10/09/2017		11.2	1.0	ug/L
1,1-dichloroethane	MW-54	4/17/2018		7.8	1.0	ug/L
1,1-dichloroethane	MW-54	10/22/2018		3.8	1.0	ug/L
1,1-dichloroethane	MW-54	4/22/2019		4.7	1.0	ug/L
1,1-dichloroethane	MW-54	10/23/2019		2.9	1.0	ug/L
1,1-dichloroethane	MW-54	10/19/2020		1.9	1.0	ug/L
1,1-dichloroethane	MW-54	10/08/2021		1.2	1.0	ug/L
1,1-dichloroethane	MW-54	10/25/2022		1.1	1.0	ug/L
1,1-dichloroethylene	MW-54	10/18/2001		18.9	1.0	ug/L
1,4-dichlorobenzene	MW-54	3/28/2008		1.7	1.0	ug/L
1,4-dichlorobenzene	MW-54	6/25/2008		2.9	1.0	ug/L
1,4-dichlorobenzene	MW-54	8/04/2008		2.4	1.0	ug/L
1,4-dichlorobenzene	MW-54	12/08/2008		1.3	1.0	ug/L
1,4-dichlorobenzene	MW-54	4/02/2009		2.2	1.0	ug/L
1,4-dichlorobenzene	MW-54	10/21/2009		2.1	1.0	ug/L
1,4-dichlorobenzene	MW-54	4/20/2010		1.6	1.0	ug/L
1,4-dichlorobenzene	MW-54	4/05/2011		1.0	1.0	ug/L
1,4-dichlorobenzene	MW-54	10/06/2011		1.0	1.0	ug/L
1,4-dichlorobenzene	MW-54	10/16/2013		1.5	1.0	ug/L
1,4-dichlorobenzene	MW-54	4/10/2014		1.7	1.0	ug/L
1,4-dichlorobenzene	MW-54	10/16/2014		2.3	1.0	ug/L
1,4-dichlorobenzene	MW-54	4/06/2015		2.1	1.0	ug/L
1,4-dichlorobenzene	MW-54	10/01/2015		2.3	1.0	ug/L
1,4-dichlorobenzene	MW-54	4/14/2016		2.1	1.0	ug/L
1,4-dichlorobenzene	MW-54	10/13/2016		2.3	1.0	ug/L
1,4-dichlorobenzene	MW-54	4/10/2017		2.7	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,4-dichlorobenzene	MW-54	10/09/2017		3.5	1.0	ug/L
1,4-dichlorobenzene	MW-54	4/17/2018		4.3	1.0	ug/L
1,4-dichlorobenzene	MW-54	4/22/2019		2.5	1.0	ug/L
1,4-dichlorobenzene	MW-54	10/23/2019		3.5	1.0	ug/L
1,4-dichlorobenzene	MW-54	10/19/2020		3.8	1.0	ug/L
1,4-dichlorobenzene	MW-54	4/05/2021		2.9	1.0	ug/L
1,4-dichlorobenzene	MW-54	10/08/2021		2.8	1.0	ug/L
1,4-dichlorobenzene	MW-54	4/06/2022		2.4	1.0	ug/L
1,4-dichlorobenzene	MW-54	10/25/2022		3.1	1.0	ug/L
1,4-dichlorobenzene	MW-54	4/11/2023		1.6	1.0	ug/L
1,4-dichlorobenzene	MW-54	10/13/2023		4.1	1.0	ug/L
1,4-dichlorobenzene	MW-54	4/17/2024		2.3	1.0	ug/L
1,4-dichlorobenzene	MW-54	10/15/2024		2.9	1.0	ug/L
Acetone	MW-54	10/09/2017		18.1	10.0	ug/L
Benzene	MW-54	7/26/1999		2.1	1.0	ug/L
Benzene	MW-54	10/04/1999		1.4	1.0	ug/L
Benzene	MW-54	1/06/2000		1.2	1.0	ug/L
Benzene	MW-54	4/13/2000		1.3	1.0	ug/L
Benzene	MW-54	7/05/2000		1.7	1.0	ug/L
Benzene	MW-54	9/11/2000		1.8	1.0	ug/L
Benzene	MW-54	4/27/2001		2.1	1.0	ug/L
Benzene	MW-54	7/23/2001		1.7	1.0	ug/L
Benzene	MW-54	10/05/2005		1.0	1.0	ug/L
Benzene	MW-54	4/05/2006		.6	.5	ug/L
Benzene	MW-54	10/16/2013		1.0	1.0	ug/L
Benzene	MW-54	10/16/2014		1.0	1.0	ug/L
Benzene	MW-54	10/13/2016		1.0	1.0	ug/L
Benzene	MW-54	10/09/2017		1.0	1.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-54	12/08/2008		16	8	ug/L
Chloroethane	MW-54	3/28/2008		9.7	1.0	ug/L
Chloroethane	MW-54	6/25/2008		7.4	1.0	ug/L
Chloroethane	MW-54	8/04/2008		6.0	1.0	ug/L
Chloroethane	MW-54	10/03/2008		5.0	1.0	ug/L
Chloroethane	MW-54	12/08/2008		5.1	1.0	ug/L
Chloroethane	MW-54	4/02/2009		5.1	1.0	ug/L
Chloroethane	MW-54	10/21/2009		8.2	1.0	ug/L
Chloroethane	MW-54	4/20/2010		5.6	1.0	ug/L
Chloroethane	MW-54	10/08/2010		7.8	1.0	ug/L
Chloroethane	MW-54	4/05/2011		13.0	1.0	ug/L
Chloroethane	MW-54	10/06/2011		11.5	1.0	ug/L
Chloroethane	MW-54	4/10/2012		14.3	1.0	ug/L
Chloroethane	MW-54	10/09/2012		15.6	1.0	ug/L
Chloroethane	MW-54	4/04/2013		15.9	1.0	ug/L
Chloroethane	MW-54	10/16/2013		12.0	1.0	ug/L
Chloroethane	MW-54	4/10/2014		17.3	1.0	ug/L
Chloroethane	MW-54	10/16/2014		20.6	1.0	ug/L
Chloroethane	MW-54	4/06/2015		14.1	1.0	ug/L
Chloroethane	MW-54	10/01/2015		13.6	1.0	ug/L
Chloroethane	MW-54	4/14/2016		5.8	1.0	ug/L
Chloroethane	MW-54	10/13/2016		13.7	1.0	ug/L
Chloroethane	MW-54	4/10/2017		10.5	1.0	ug/L
Chloroethane	MW-54	10/09/2017		11.4	1.0	ug/L
Chloroethane	MW-54	4/17/2018		8.5	1.0	ug/L
Chloroethane	MW-54	10/22/2018		2.0	1.0	ug/L
Chloroethane	MW-54	4/22/2019		4.0	1.0	ug/L
Chloroethane	MW-54	10/23/2019		4.3	1.0	ug/L
Chloroethane	MW-54	4/10/2020		1.9	1.0	ug/L
Chloroethane	MW-54	10/19/2020		2.7	1.0	ug/L
Chloroethane	MW-54	10/25/2022		1.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	3/28/2008		4.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	6/25/2008		3.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	8/04/2008		2.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	12/08/2008		3.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	4/02/2009		2.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	10/21/2009		2.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	4/20/2010		2.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	10/08/2010		2.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	4/05/2011		3.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	10/06/2011		2.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	4/10/2012		3.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	10/09/2012		2.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	4/04/2013		3.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	10/16/2013		3.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	4/10/2014		3.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	10/16/2014		2.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	4/06/2015		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
Cis-1,2-dichloroethylene	MW-54	10/01/2015		2.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	4/14/2016		1.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	10/13/2016		2.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	4/10/2017		1.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	10/09/2017		1.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-54	4/17/2018		1.2	1.0	ug/L
Toluene	MW-54	4/22/2019		1.3	1.0	ug/L
Trichloroethylene	MW-54	1/21/1993		1.0	1.0	ug/L
Trichloroethylene	MW-54	4/22/1993		2.2	1.0	ug/L
Trichloroethylene	MW-54	7/13/1993		4.9	1.0	ug/L
Trichloroethylene	MW-54	7/29/1999		7.0	1.0	ug/L
Trichloroethylene	MW-54	10/04/1999		6.0	1.0	ug/L
Trichloroethylene	MW-54	1/06/2000		6.3	1.0	ug/L
Trichloroethylene	MW-54	4/13/2000		5.1	1.0	ug/L
Trichloroethylene	MW-54	7/05/2000		5.7	1.0	ug/L
Trichloroethylene	MW-54	9/11/2000		6.5	1.0	ug/L
Trichloroethylene	MW-54	10/08/2000		5.0	1.0	ug/L
Trichloroethylene	MW-54	4/27/2001		5.9	1.0	ug/L
Trichloroethylene	MW-54	7/23/2001		6.3	1.0	ug/L
Trichloroethylene	MW-54	10/18/2001		4.8	1.0	ug/L
Trichloroethylene	MW-54	1/25/2002		5.6	1.0	ug/L
Trichloroethylene	MW-54	4/24/2002		5.7	1.0	ug/L
Trichloroethylene	MW-54	7/22/2002		5.3	1.0	ug/L
Trichloroethylene	MW-54	10/14/2002		5.0	1.0	ug/L
Trichloroethylene	MW-54	1/29/2003		5.2	1.0	ug/L
Trichloroethylene	MW-54	7/11/2003		4.3	1.0	ug/L
Trichloroethylene	MW-54	10/06/2003		4.3	1.0	ug/L
Trichloroethylene	MW-54	4/26/2004		4.4	1.0	ug/L
Trichloroethylene	MW-54	10/05/2004		5.5	1.0	ug/L
Trichloroethylene	MW-54	4/11/2005		3.9	1.0	ug/L
Trichloroethylene	MW-54	10/05/2005		4.0	1.0	ug/L
Trichloroethylene	MW-54	4/05/2006		3.4	1.0	ug/L
Trichloroethylene	MW-54	10/04/2006		2.7	1.0	ug/L
Trichloroethylene	MW-54	4/12/2007		2.3	1.0	ug/L
Trichloroethylene	MW-54	10/10/2007		2.1	1.0	ug/L
Trichloroethylene	MW-54	3/28/2008		1.2	1.0	ug/L
Trichloroethylene	MW-54	12/08/2008		1.4	1.0	ug/L
Vinyl chloride	MW-54	4/10/2012		1.1	1.0	ug/L
Vinyl chloride	MW-54	10/09/2012		1.0	1.0	ug/L
Vinyl chloride	MW-54	10/16/2014		1.0	1.0	ug/L
Vinyl chloride	MW-54	10/01/2015		1.0	1.0	ug/L
Vinyl chloride	MW-54	10/13/2016		2.0	1.0	ug/L
Vinyl chloride	MW-54	4/10/2017		1.8	1.0	ug/L
Vinyl chloride	MW-54	10/09/2017		1.6	1.0	ug/L
1,1-dichloroethane	MW-66	8/05/2008		1.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-66	8/05/2008		1.1	1.0	ug/L
1,1,1-trichloroethane	MW-81	7/13/1993		1.1	1.0	ug/L
1,1,1-trichloroethane	MW-81	1/25/1994		2.2	1.0	ug/L
1,1,1-trichloroethane	MW-81	4/14/1994		1.4	1.0	ug/L
1,1,1-trichloroethane	MW-81	7/08/1994		1.2	1.0	ug/L
1,1,1-trichloroethane	MW-81	10/20/1994		1.2	1.0	ug/L
1,1,1-trichloroethane	MW-81	4/21/1995		1.1	1.0	ug/L
1,1,1-trichloroethane	MW-81	7/07/1995		1.3	1.0	ug/L
1,1,1-trichloroethane	MW-81	7/17/1996		1.6	1.0	ug/L
1,1,1-trichloroethane	MW-81	10/08/1996		1.5	1.0	ug/L
1,1,1-trichloroethane	MW-81	1/21/1997		1.4	1.0	ug/L
1,1,1-trichloroethane	MW-81	4/11/1997		2.2	1.0	ug/L
1,1,1-trichloroethane	MW-81	10/09/1998		1.1	1.0	ug/L
1,1-dichloroethane	MW-81	3/28/2008		59.5	1.0	ug/L
1,1-dichloroethane	MW-81	6/20/2008		50.6	1.0	ug/L
1,1-dichloroethane	MW-81	8/04/2008		56.8	1.0	ug/L
1,1-dichloroethane	MW-81	10/03/2008		70.7	1.0	ug/L
1,1-dichloroethane	MW-81	12/08/2008		53.4	1.0	ug/L
1,1-dichloroethane	MW-81	4/01/2009		54.3	1.0	ug/L
1,1-dichloroethane	MW-81	10/21/2009		58.2	1.0	ug/L
1,1-dichloroethane	MW-81	4/20/2010		47.6	1.0	ug/L
1,1-dichloroethane	MW-81	10/08/2010		34.8	1.0	ug/L
1,1-dichloroethane	MW-81	4/05/2011		44.1	1.0	ug/L
1,1-dichloroethane	MW-81	10/06/2011		41.3	1.0	ug/L
1,1-dichloroethane	MW-81	4/10/2012		38.1	1.0	ug/L
1,1-dichloroethane	MW-81	10/09/2012		42.8	1.0	ug/L
1,1-dichloroethane	MW-81	4/04/2013		39.0	1.0	ug/L
1,1-dichloroethane	MW-81	10/16/2013		49.2	1.0	ug/L
1,1-dichloroethane	MW-81	4/10/2014		46.6	1.0	ug/L
1,1-dichloroethane	MW-81	10/16/2014		44.6	1.0	ug/L
1,1-dichloroethane	MW-81	4/03/2015		39.2	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,1-dichloroethane	MW-81	10/01/2015		38.6	1.0	ug/L
1,1-dichloroethane	MW-81	4/14/2016		27.5	1.0	ug/L
1,1-dichloroethane	MW-81	10/13/2016		29.7	1.0	ug/L
1,1-dichloroethane	MW-81	4/10/2017		25.9	1.0	ug/L
1,1-dichloroethane	MW-81	10/09/2017		33.9	1.0	ug/L
1,1-dichloroethane	MW-81	4/17/2018		24.5	1.0	ug/L
1,1-dichloroethane	MW-81	10/22/2018		19.0	1.0	ug/L
1,1-dichloroethane	MW-81	4/22/2019		13.8	1.0	ug/L
1,1-dichloroethane	MW-81	10/23/2019		11.0	1.0	ug/L
1,1-dichloroethane	MW-81	4/10/2020		10.8	1.0	ug/L
1,1-dichloroethane	MW-81	10/19/2020		27.9	1.0	ug/L
1,1-dichloroethane	MW-81	4/05/2021		15.8	1.0	ug/L
1,1-dichloroethane	MW-81	10/08/2021		29.3	1.0	ug/L
1,1-dichloroethane	MW-81	4/06/2022		21.5	1.0	ug/L
1,1-dichloroethane	MW-81	10/25/2022		27.7	1.0	ug/L
1,1-dichloroethane	MW-81	4/11/2023		23.9	1.0	ug/L
1,1-dichloroethane	MW-81	10/13/2023		30.0	1.0	ug/L
1,1-dichloroethane	MW-81	4/16/2024		28.2	1.0	ug/L
1,1-dichloroethane	MW-81	10/15/2024		24.8	1.0	ug/L
1,1-dichloroethylene	MW-81	1/25/1994		3.6	1.0	ug/L
1,1-dichloroethylene	MW-81	7/07/1995		1.2	1.0	ug/L
1,2-dichlorobenzene	MW-81	4/22/2019		1.9	1.0	ug/L
1,2-dichlorobenzene	MW-81	10/23/2019		1.3	1.0	ug/L
1,2-dichlorobenzene	MW-81	4/10/2020		2.0	1.0	ug/L
1,2-dichlorobenzene	MW-81	10/19/2020		1.1	1.0	ug/L
1,2-dichloroethane	MW-81	7/08/1994		2.2	1.0	ug/L
1,2-dichloroethane	MW-81	10/20/1994		2.1	1.0	ug/L
1,2-dichloroethane	MW-81	1/04/1995		2.6	1.0	ug/L
1,2-dichloroethane	MW-81	4/21/1995		1.6	1.0	ug/L
1,2-dichloroethane	MW-81	7/07/1995		1.7	1.0	ug/L
1,2-dichloroethane	MW-81	10/12/1995		3.1	1.0	ug/L
1,2-dichloroethane	MW-81	7/17/1996		1.6	1.0	ug/L
1,2-dichloroethane	MW-81	10/08/1996		3.0	1.0	ug/L
1,2-dichloroethane	MW-81	1/21/1997		2.2	1.0	ug/L
1,2-dichloroethane	MW-81	10/04/1999		3.5	1.0	ug/L
1,2-dichloroethane	MW-81	1/06/2000		3.4	1.0	ug/L
1,2-dichloroethane	MW-81	4/13/2000		2.9	1.0	ug/L
1,2-dichloroethane	MW-81	7/05/2000		6.6	1.0	ug/L
1,2-dichloroethane	MW-81	10/08/2000		3.7	1.0	ug/L
1,2-dichloroethane	MW-81	4/27/2001		2.6	1.0	ug/L
1,2-dichloroethane	MW-81	10/18/2001		3.3	1.0	ug/L
1,2-dichloroethane	MW-81	4/24/2002		4.2	1.0	ug/L
1,2-dichloroethane	MW-81	10/14/2002		3.5	1.0	ug/L
1,2-dichloroethane	MW-81	10/06/2003		3.7	1.0	ug/L
1,2-dichloroethane	MW-81	4/26/2004		2.8	1.0	ug/L
1,2-dichloroethane	MW-81	4/05/2006		3.0	1.0	ug/L
1,2-dichloroethane	MW-81	10/04/2006		2.0	1.0	ug/L
1,2-dichloroethane	MW-81	4/12/2007		2.4	1.0	ug/L
1,2-dichloroethane	MW-81	10/10/2007		2.4	1.0	ug/L
1,2-dichloroethane	MW-81	3/28/2008		2.1	1.0	ug/L
1,2-dichloroethane	MW-81	6/20/2008		2.9	1.0	ug/L
1,2-dichloroethane	MW-81	8/04/2008		2.7	1.0	ug/L
1,2-dichloroethane	MW-81	12/08/2008		2.7	1.0	ug/L
1,2-dichloroethane	MW-81	4/01/2009		2.7	1.0	ug/L
1,2-dichloroethane	MW-81	10/21/2009		3.4	1.0	ug/L
1,2-dichloroethane	MW-81	4/20/2010		3.6	1.0	ug/L
1,2-dichloroethane	MW-81	4/05/2011		3.2	1.0	ug/L
1,2-dichloroethane	MW-81	10/06/2011		4.5	1.0	ug/L
1,2-dichloroethane	MW-81	4/10/2012		3.7	1.0	ug/L
1,2-dichloroethane	MW-81	10/09/2012		6.5	1.0	ug/L
1,2-dichloroethane	MW-81	4/04/2013		5.4	1.0	ug/L
1,2-dichloroethane	MW-81	10/16/2013		10.8	1.0	ug/L
1,2-dichloroethane	MW-81	4/10/2014		11.3	1.0	ug/L
1,2-dichloroethane	MW-81	10/16/2014		7.7	1.0	ug/L
1,2-dichloroethane	MW-81	4/03/2015		6.5	1.0	ug/L
1,2-dichloroethane	MW-81	10/01/2015		8.7	1.0	ug/L
1,2-dichloroethane	MW-81	4/14/2016		4.7	1.0	ug/L
1,2-dichloroethane	MW-81	10/13/2016		6.4	1.0	ug/L
1,2-dichloroethane	MW-81	4/10/2017		4.2	1.0	ug/L
1,2-dichloroethane	MW-81	10/09/2017		9.9	1.0	ug/L
1,2-dichloroethane	MW-81	4/17/2018		5.8	1.0	ug/L
1,2-dichloroethane	MW-81	10/22/2018		2.9	1.0	ug/L
1,2-dichloroethane	MW-81	4/22/2019		2.1	1.0	ug/L
1,2-dichloroethane	MW-81	4/10/2020		2.4	1.0	ug/L
1,2-dichloroethane	MW-81	10/19/2020		7.7	1.0	ug/L
1,2-dichloroethane	MW-81	4/05/2021		3.9	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
1,2-dichloroethane	MW-81	10/08/2021		9.8	1.0	ug/L
1,2-dichloroethane	MW-81	4/06/2022		5.7	1.0	ug/L
1,2-dichloroethane	MW-81	10/25/2022		12.8	1.0	ug/L
1,2-dichloroethane	MW-81	4/11/2023		6.9	1.0	ug/L
1,2-dichloroethane	MW-81	10/13/2023		15.6	1.0	ug/L
1,2-dichloroethane	MW-81	4/16/2024		12.3	1.0	ug/L
1,2-dichloroethane	MW-81	10/15/2024		11.2	1.0	ug/L
1,2-dichloropropane	MW-81	3/28/2008		12.2	1.0	ug/L
1,2-dichloropropane	MW-81	6/20/2008		5.1	1.0	ug/L
1,2-dichloropropane	MW-81	8/04/2008		9.1	1.0	ug/L
1,2-dichloropropane	MW-81	12/08/2008		12.0	1.0	ug/L
1,2-dichloropropane	MW-81	4/01/2009		17.3	1.0	ug/L
1,2-dichloropropane	MW-81	10/21/2009		10.0	1.0	ug/L
1,2-dichloropropane	MW-81	4/20/2010		7.0	1.0	ug/L
1,2-dichloropropane	MW-81	10/08/2010		5.9	1.0	ug/L
1,2-dichloropropane	MW-81	4/05/2011		14.7	1.0	ug/L
1,2-dichloropropane	MW-81	10/06/2011		16.7	1.0	ug/L
1,2-dichloropropane	MW-81	4/10/2012		12.6	1.0	ug/L
1,2-dichloropropane	MW-81	10/09/2012		17.5	1.0	ug/L
1,2-dichloropropane	MW-81	4/04/2013		16.7	1.0	ug/L
1,2-dichloropropane	MW-81	10/16/2013		22.7	1.0	ug/L
1,2-dichloropropane	MW-81	4/10/2014		18.1	1.0	ug/L
1,2-dichloropropane	MW-81	10/16/2014		19.6	1.0	ug/L
1,2-dichloropropane	MW-81	4/03/2015		16.1	1.0	ug/L
1,2-dichloropropane	MW-81	10/01/2015		15.8	1.0	ug/L
1,2-dichloropropane	MW-81	4/14/2016		11.1	1.0	ug/L
1,2-dichloropropane	MW-81	10/13/2016		10.6	1.0	ug/L
1,2-dichloropropane	MW-81	4/10/2017		9.1	1.0	ug/L
1,2-dichloropropane	MW-81	10/09/2017		12.6	1.0	ug/L
1,2-dichloropropane	MW-81	4/17/2018		8.6	1.0	ug/L
1,2-dichloropropane	MW-81	10/22/2018		4.9	1.0	ug/L
1,2-dichloropropane	MW-81	4/22/2019		1.9	1.0	ug/L
1,2-dichloropropane	MW-81	10/23/2019		1.5	1.0	ug/L
1,2-dichloropropane	MW-81	4/10/2020		1.1	1.0	ug/L
1,2-dichloropropane	MW-81	10/19/2020		7.9	1.0	ug/L
1,2-dichloropropane	MW-81	4/05/2021		4.0	1.0	ug/L
1,2-dichloropropane	MW-81	10/08/2021		9.3	1.0	ug/L
1,2-dichloropropane	MW-81	4/06/2022		2.6	1.0	ug/L
1,2-dichloropropane	MW-81	10/25/2022		8.1	1.0	ug/L
1,2-dichloropropane	MW-81	4/11/2023		3.5	1.0	ug/L
1,2-dichloropropane	MW-81	10/13/2023		8.4	1.0	ug/L
1,2-dichloropropane	MW-81	4/16/2024		6.5	1.0	ug/L
1,2-dichloropropane	MW-81	10/15/2024		6.9	1.0	ug/L
1,4-dichlorobenzene	MW-81	1/06/2000		1.4	1.0	ug/L
1,4-dichlorobenzene	MW-81	4/13/2000		1.0	1.0	ug/L
1,4-dichlorobenzene	MW-81	7/05/2000		1.4	1.0	ug/L
1,4-dichlorobenzene	MW-81	6/20/2008		2.9	1.0	ug/L
1,4-dichlorobenzene	MW-81	8/04/2008		2.2	1.0	ug/L
1,4-dichlorobenzene	MW-81	12/08/2008		2.0	1.0	ug/L
1,4-dichlorobenzene	MW-81	4/01/2009		1.3	1.0	ug/L
1,4-dichlorobenzene	MW-81	10/21/2009		2.4	1.0	ug/L
1,4-dichlorobenzene	MW-81	4/20/2010		3.5	1.0	ug/L
1,4-dichlorobenzene	MW-81	10/08/2010		1.8	1.0	ug/L
1,4-dichlorobenzene	MW-81	4/05/2011		1.6	1.0	ug/L
1,4-dichlorobenzene	MW-81	10/06/2011		1.9	1.0	ug/L
1,4-dichlorobenzene	MW-81	4/10/2012		2.0	1.0	ug/L
1,4-dichlorobenzene	MW-81	10/09/2012		1.9	1.0	ug/L
1,4-dichlorobenzene	MW-81	4/04/2013		2.3	1.0	ug/L
1,4-dichlorobenzene	MW-81	10/16/2013		2.0	1.0	ug/L
1,4-dichlorobenzene	MW-81	4/10/2014		1.7	1.0	ug/L
1,4-dichlorobenzene	MW-81	10/16/2014		1.6	1.0	ug/L
1,4-dichlorobenzene	MW-81	4/03/2015		1.5	1.0	ug/L
1,4-dichlorobenzene	MW-81	10/01/2015		1.5	1.0	ug/L
1,4-dichlorobenzene	MW-81	4/14/2016		2.2	1.0	ug/L
1,4-dichlorobenzene	MW-81	10/13/2016		3.2	1.0	ug/L
1,4-dichlorobenzene	MW-81	4/10/2017		2.8	1.0	ug/L
1,4-dichlorobenzene	MW-81	10/09/2017		3.4	1.0	ug/L
1,4-dichlorobenzene	MW-81	4/17/2018		4.2	1.0	ug/L
1,4-dichlorobenzene	MW-81	4/22/2019		8.0	1.0	ug/L
1,4-dichlorobenzene	MW-81	10/23/2019		7.6	1.0	ug/L
1,4-dichlorobenzene	MW-81	10/19/2020		6.6	1.0	ug/L
1,4-dichlorobenzene	MW-81	4/05/2021		5.2	1.0	ug/L
1,4-dichlorobenzene	MW-81	10/08/2021		5.0	1.0	ug/L
1,4-dichlorobenzene	MW-81	4/06/2022		4.6	1.0	ug/L
1,4-dichlorobenzene	MW-81	10/25/2022		5.8	1.0	ug/L
1,4-dichlorobenzene	MW-81	4/11/2023		4.6	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,4-dichlorobenzene	MW-81	10/13/2023		5.7	1.0	ug/L
1,4-dichlorobenzene	MW-81	4/16/2024		4.7	1.0	ug/L
1,4-dichlorobenzene	MW-81	10/15/2024		5.6	1.0	ug/L
Acetone	MW-81	3/28/2008		31.0	10.0	ug/L
Acetone	MW-81	10/21/2009		61.2	10.0	ug/L
Acetone	MW-81	10/22/2018		26.7	10.0	ug/L
Benzene	MW-81	7/13/1993		4.8	1.0	ug/L
Benzene	MW-81	1/25/1994		21.4	10.0	ug/L
Benzene	MW-81	4/14/1994		8.0	1.0	ug/L
Benzene	MW-81	7/08/1994		8.9	1.0	ug/L
Benzene	MW-81	10/20/1994		6.3	1.0	ug/L
Benzene	MW-81	1/04/1995		2.2	1.0	ug/L
Benzene	MW-81	10/08/1996		1.0	1.0	ug/L
Benzene	MW-81	4/19/1999		1.1	1.0	ug/L
Benzene	MW-81	10/04/1999		1.0	1.0	ug/L
Benzene	MW-81	1/06/2000		1.1	1.0	ug/L
Benzene	MW-81	7/05/2000		1.1	1.0	ug/L
Benzene	MW-81	4/24/2002		1.0	1.0	ug/L
Benzene	MW-81	4/22/2003		1.0	1.0	ug/L
Benzene	MW-81	3/28/2008		2.2	1.0	ug/L
Benzene	MW-81	6/20/2008		4.2	1.0	ug/L
Benzene	MW-81	8/04/2008		3.4	1.0	ug/L
Benzene	MW-81	12/08/2008		3.0	1.0	ug/L
Benzene	MW-81	4/01/2009		2.2	1.0	ug/L
Benzene	MW-81	10/21/2009		3.6	1.0	ug/L
Benzene	MW-81	4/20/2010		4.0	1.0	ug/L
Benzene	MW-81	10/08/2010		3.6	1.0	ug/L
Benzene	MW-81	4/05/2011		2.2	1.0	ug/L
Benzene	MW-81	10/06/2011		2.0	1.0	ug/L
Benzene	MW-81	4/10/2012		2.3	1.0	ug/L
Benzene	MW-81	10/09/2012		1.2	1.0	ug/L
Benzene	MW-81	4/04/2013		1.1	1.0	ug/L
Benzene	MW-81	10/16/2013		1.2	1.0	ug/L
Benzene	MW-81	10/13/2016		1.3	1.0	ug/L
Benzene	MW-81	4/10/2017		1.5	1.0	ug/L
Benzene	MW-81	10/09/2017		1.1	1.0	ug/L
Benzene	MW-81	4/17/2018		1.0	1.0	ug/L
Benzene	MW-81	4/22/2019		2.9	1.0	ug/L
Benzene	MW-81	10/23/2019		2.7	1.0	ug/L
Benzene	MW-81	4/10/2020		2.9	1.0	ug/L
Benzene	MW-81	10/19/2020		1.5	1.0	ug/L
Benzene	MW-81	4/05/2021		1.1	1.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-81	4/03/2015		36	10	ug/L
Chlorobenzene	MW-81	10/13/2016		1.1	1.0	ug/L
Chlorobenzene	MW-81	4/10/2017		1.0	1.0	ug/L
Chlorobenzene	MW-81	10/09/2017		1.1	1.0	ug/L
Chlorobenzene	MW-81	4/17/2018		1.1	1.0	ug/L
Chlorobenzene	MW-81	4/22/2019		1.4	1.0	ug/L
Chlorobenzene	MW-81	10/23/2019		1.4	1.0	ug/L
Chlorobenzene	MW-81	4/10/2020		1.3	1.0	ug/L
Chlorobenzene	MW-81	10/19/2020		1.5	1.0	ug/L
Chlorobenzene	MW-81	4/05/2021		1.2	1.0	ug/L
Chlorobenzene	MW-81	10/08/2021		1.3	1.0	ug/L
Chlorobenzene	MW-81	4/06/2022		1.2	1.0	ug/L
Chlorobenzene	MW-81	10/25/2022		1.7	1.0	ug/L
Chlorobenzene	MW-81	4/11/2023		1.4	1.0	ug/L
Chlorobenzene	MW-81	10/13/2023		1.9	1.0	ug/L
Chlorobenzene	MW-81	4/16/2024		1.7	1.0	ug/L
Chlorobenzene	MW-81	10/15/2024		1.8	1.0	ug/L
Chloroethane	MW-81	3/28/2008		13.4	1.0	ug/L
Chloroethane	MW-81	6/20/2008		13.9	1.0	ug/L
Chloroethane	MW-81	8/04/2008		13.4	1.0	ug/L
Chloroethane	MW-81	10/03/2008		14.2	1.0	ug/L
Chloroethane	MW-81	12/08/2008		15.0	1.0	ug/L
Chloroethane	MW-81	4/01/2009		14.0	1.0	ug/L
Chloroethane	MW-81	10/21/2009		18.1	1.0	ug/L
Chloroethane	MW-81	4/20/2010		14.4	1.0	ug/L
Chloroethane	MW-81	10/08/2010		12.9	1.0	ug/L
Chloroethane	MW-81	4/05/2011		14.0	1.0	ug/L
Chloroethane	MW-81	10/06/2011		13.2	1.0	ug/L
Chloroethane	MW-81	4/10/2012		12.2	1.0	ug/L
Chloroethane	MW-81	10/09/2012		11.5	1.0	ug/L
Chloroethane	MW-81	4/04/2013		10.2	1.0	ug/L
Chloroethane	MW-81	10/16/2013		12.5	1.0	ug/L
Chloroethane	MW-81	4/10/2014		13.4	1.0	ug/L
Chloroethane	MW-81	10/16/2014		13.3	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
Chloroethane	MW-81	4/03/2015		13.7	1.0	ug/L
Chloroethane	MW-81	10/01/2015		8.6	1.0	ug/L
Chloroethane	MW-81	4/14/2016		7.5	1.0	ug/L
Chloroethane	MW-81	10/13/2016		11.5	1.0	ug/L
Chloroethane	MW-81	4/10/2017		9.8	1.0	ug/L
Chloroethane	MW-81	10/09/2017		8.7	1.0	ug/L
Chloroethane	MW-81	4/17/2018		7.1	1.0	ug/L
Chloroethane	MW-81	10/22/2018		5.2	1.0	ug/L
Chloroethane	MW-81	4/22/2019		6.0	1.0	ug/L
Chloroethane	MW-81	10/23/2019		7.8	1.0	ug/L
Chloroethane	MW-81	4/10/2020		6.0	1.0	ug/L
Chloroethane	MW-81	10/19/2020		9.2	1.0	ug/L
Chloroethane	MW-81	4/05/2021		5.6	1.0	ug/L
Chloroethane	MW-81	10/08/2021		5.7	1.0	ug/L
Chloroethane	MW-81	4/06/2022		5.0	1.0	ug/L
Chloroethane	MW-81	10/25/2022		7.2	1.0	ug/L
Chloroethane	MW-81	4/11/2023		5.4	1.0	ug/L
Chloroethane	MW-81	10/13/2023		6.5	1.0	ug/L
Chloroethane	MW-81	4/16/2024		6.8	1.0	ug/L
Chloroethane	MW-81	10/15/2024		6.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-81	3/28/2008		133	1	ug/L
Cis-1,2-dichloroethylene	MW-81	6/20/2008		209	1	ug/L
Cis-1,2-dichloroethylene	MW-81	8/04/2008		190	1	ug/L
Cis-1,2-dichloroethylene	MW-81	10/03/2008		206	1	ug/L
Cis-1,2-dichloroethylene	MW-81	12/08/2008		218	1	ug/L
Cis-1,2-dichloroethylene	MW-81	12/08/2008		188	5	ug/L
Cis-1,2-dichloroethylene	MW-81	4/01/2009		223	1	ug/L
Cis-1,2-dichloroethylene	MW-81	4/01/2009		215	5	ug/L
Cis-1,2-dichloroethylene	MW-81	10/21/2009		220	5	ug/L
Cis-1,2-dichloroethylene	MW-81	10/21/2009		228	1	ug/L
Cis-1,2-dichloroethylene	MW-81	4/20/2010		245	5	ug/L
Cis-1,2-dichloroethylene	MW-81	10/08/2010		295	5	ug/L
Cis-1,2-dichloroethylene	MW-81	4/05/2011		305	5	ug/L
Cis-1,2-dichloroethylene	MW-81	10/06/2011		250	5	ug/L
Cis-1,2-dichloroethylene	MW-81	4/10/2012		267	5	ug/L
Cis-1,2-dichloroethylene	MW-81	10/09/2012		295	5	ug/L
Cis-1,2-dichloroethylene	MW-81	4/04/2013		238	5	ug/L
Cis-1,2-dichloroethylene	MW-81	10/16/2013		268	5	ug/L
Cis-1,2-dichloroethylene	MW-81	4/10/2014		226	10	ug/L
Cis-1,2-dichloroethylene	MW-81	10/16/2014		288	1	ug/L
Cis-1,2-dichloroethylene	MW-81	4/03/2015		252	1	ug/L
Cis-1,2-dichloroethylene	MW-81	10/01/2015		201	1	ug/L
Cis-1,2-dichloroethylene	MW-81	4/14/2016		247	1	ug/L
Cis-1,2-dichloroethylene	MW-81	10/13/2016		243	10	ug/L
Cis-1,2-dichloroethylene	MW-81	4/10/2017		205	1	ug/L
Cis-1,2-dichloroethylene	MW-81	10/09/2017		188	5	ug/L
Cis-1,2-dichloroethylene	MW-81	4/17/2018		195	1	ug/L
Cis-1,2-dichloroethylene	MW-81	10/22/2018		101	1	ug/L
Cis-1,2-dichloroethylene	MW-81	4/22/2019		84	1	ug/L
Cis-1,2-dichloroethylene	MW-81	10/23/2019		127	1	ug/L
Cis-1,2-dichloroethylene	MW-81	4/10/2020		83	1	ug/L
Cis-1,2-dichloroethylene	MW-81	10/19/2020		210	10	ug/L
Cis-1,2-dichloroethylene	MW-81	4/05/2021		148	1	ug/L
Cis-1,2-dichloroethylene	MW-81	10/08/2021		188	1	ug/L
Cis-1,2-dichloroethylene	MW-81	4/06/2022		192	1	ug/L
Cis-1,2-dichloroethylene	MW-81	10/25/2022		225	10	ug/L
Cis-1,2-dichloroethylene	MW-81	4/11/2023		140	1	ug/L
Cis-1,2-dichloroethylene	MW-81	10/13/2023		181	1	ug/L
Cis-1,2-dichloroethylene	MW-81	4/16/2024		164	1	ug/L
Cis-1,2-dichloroethylene	MW-81	10/15/2024		127	1	ug/L
Tetrachloroethylene	MW-81	3/28/2008		3.6	1.0	ug/L
Tetrachloroethylene	MW-81	8/04/2008		1.1	1.0	ug/L
Tetrachloroethylene	MW-81	12/08/2008		1.3	1.0	ug/L
Tetrachloroethylene	MW-81	4/01/2009		6.7	1.0	ug/L
Tetrachloroethylene	MW-81	4/05/2011		1.7	1.0	ug/L
Tetrachloroethylene	MW-81	10/06/2011		2.0	1.0	ug/L
Tetrachloroethylene	MW-81	10/09/2012		1.6	1.0	ug/L
Tetrachloroethylene	MW-81	4/04/2013		1.0	1.0	ug/L
Tetrachloroethylene	MW-81	10/16/2013		4.0	1.0	ug/L
Toluene	MW-81	6/20/2008		2.2	1.0	ug/L
Toluene	MW-81	8/04/2008		1.2	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	3/28/2008		2.3	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	6/20/2008		3.8	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	8/04/2008		3.3	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	10/03/2008		2.8	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	12/08/2008		3.0	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
Trans-1,2-dichloroethylene	MW-81	4/01/2009		2.9	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	10/21/2009		4.2	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	4/20/2010		4.2	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	10/08/2010		3.8	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	4/05/2011		3.4	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	10/06/2011		3.2	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	4/10/2012		3.2	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	10/09/2012		2.9	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	4/04/2013		3.1	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	10/16/2013		3.5	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	4/10/2014		2.6	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	10/16/2014		2.5	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	4/03/2015		3.2	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	10/01/2015		2.2	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	4/14/2016		2.6	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	10/13/2016		3.1	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	4/10/2017		3.0	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	10/09/2017		2.6	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	4/17/2018		2.4	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	4/22/2019		2.6	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	10/23/2019		2.2	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	4/10/2020		2.4	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	10/19/2020		4.1	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	4/05/2021		1.8	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	10/08/2021		1.9	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	10/25/2022		2.4	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	4/11/2023		2.2	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	10/13/2023		2.5	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	4/16/2024		2.2	1.0	ug/L
Trans-1,2-dichloroethylene	MW-81	10/15/2024		2.4	1.0	ug/L
Trichloroethylene	MW-81	4/22/1993		2.8	1.0	ug/L
Trichloroethylene	MW-81	7/13/1993		14.6	1.0	ug/L
Trichloroethylene	MW-81	1/25/1994		61.2	1.0	ug/L
Trichloroethylene	MW-81	4/14/1994		30.0	1.0	ug/L
Trichloroethylene	MW-81	7/08/1994		39.8	1.0	ug/L
Trichloroethylene	MW-81	10/20/1994		48.7	1.0	ug/L
Trichloroethylene	MW-81	1/04/1995		59.2	1.0	ug/L
Trichloroethylene	MW-81	4/21/1995		41.2	1.0	ug/L
Trichloroethylene	MW-81	7/07/1995		50.1	1.0	ug/L
Trichloroethylene	MW-81	10/12/1995		64.4	1.0	ug/L
Trichloroethylene	MW-81	1/10/1996		59.7	1.0	ug/L
Trichloroethylene	MW-81	4/15/1996		61.1	1.0	ug/L
Trichloroethylene	MW-81	7/17/1996		34.6	1.0	ug/L
Trichloroethylene	MW-81	10/08/1996		46.0	1.0	ug/L
Trichloroethylene	MW-81	1/21/1997		38.8	1.0	ug/L
Trichloroethylene	MW-81	4/11/1997		42.4	1.0	ug/L
Trichloroethylene	MW-81	7/17/1997		42.9	1.0	ug/L
Trichloroethylene	MW-81	10/15/1997		45.5	1.0	ug/L
Trichloroethylene	MW-81	1/27/1998		44.1	1.0	ug/L
Trichloroethylene	MW-81	4/21/1998		36.7	1.0	ug/L
Trichloroethylene	MW-81	7/21/1998		33.5	1.0	ug/L
Trichloroethylene	MW-81	10/09/1998		35.8	1.0	ug/L
Trichloroethylene	MW-81	1/26/1999		41.2	1.0	ug/L
Trichloroethylene	MW-81	4/19/1999		35.4	1.0	ug/L
Trichloroethylene	MW-81	7/29/1999		33.0	1.0	ug/L
Trichloroethylene	MW-81	10/04/1999		52.8	1.0	ug/L
Trichloroethylene	MW-81	1/06/2000		72.2	1.0	ug/L
Trichloroethylene	MW-81	4/13/2000		57.8	1.0	ug/L
Trichloroethylene	MW-81	7/05/2000		100.0	1.0	ug/L
Trichloroethylene	MW-81	10/08/2000		55.9	1.0	ug/L
Trichloroethylene	MW-81	4/27/2001		57.8	1.0	ug/L
Trichloroethylene	MW-81	10/18/2001		61.9	1.0	ug/L
Trichloroethylene	MW-81	4/24/2002		71.3	1.0	ug/L
Trichloroethylene	MW-81	10/14/2002		41.2	1.0	ug/L
Trichloroethylene	MW-81	4/22/2003		49.9	1.0	ug/L
Trichloroethylene	MW-81	10/06/2003		38.4	1.0	ug/L
Trichloroethylene	MW-81	4/26/2004		39.4	1.0	ug/L
Trichloroethylene	MW-81	4/11/2005		44.5	1.0	ug/L
Trichloroethylene	MW-81	10/05/2005		20.2	1.0	ug/L
Trichloroethylene	MW-81	4/05/2006		32.5	1.0	ug/L
Trichloroethylene	MW-81	10/04/2006		21.1	1.0	ug/L
Trichloroethylene	MW-81	4/12/2007		16.2	1.0	ug/L
Trichloroethylene	MW-81	10/10/2007		37.2	1.0	ug/L
Trichloroethylene	MW-81	3/28/2008		21.3	1.0	ug/L
Trichloroethylene	MW-81	6/20/2008		22.0	1.0	ug/L
Trichloroethylene	MW-81	8/04/2008		15.8	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
Trichloroethylene	MW-81	10/03/2008		17.8	1.0	ug/L
Trichloroethylene	MW-81	12/08/2008		12.0	1.0	ug/L
Trichloroethylene	MW-81	4/01/2009		36.2	1.0	ug/L
Trichloroethylene	MW-81	10/21/2009		10.2	1.0	ug/L
Trichloroethylene	MW-81	4/20/2010		6.4	1.0	ug/L
Trichloroethylene	MW-81	10/08/2010		5.2	1.0	ug/L
Trichloroethylene	MW-81	4/05/2011		21.2	1.0	ug/L
Trichloroethylene	MW-81	10/06/2011		12.5	1.0	ug/L
Trichloroethylene	MW-81	4/10/2012		10.1	1.0	ug/L
Trichloroethylene	MW-81	10/09/2012		12.2	1.0	ug/L
Trichloroethylene	MW-81	4/04/2013		11.9	1.0	ug/L
Trichloroethylene	MW-81	10/16/2013		18.3	1.0	ug/L
Trichloroethylene	MW-81	4/10/2014		7.1	1.0	ug/L
Trichloroethylene	MW-81	10/16/2014		10.0	1.0	ug/L
Trichloroethylene	MW-81	4/03/2015		6.7	1.0	ug/L
Trichloroethylene	MW-81	10/01/2015		12.2	1.0	ug/L
Trichloroethylene	MW-81	4/14/2016		4.7	1.0	ug/L
Trichloroethylene	MW-81	10/13/2016		2.1	1.0	ug/L
Trichloroethylene	MW-81	4/10/2017		5.4	1.0	ug/L
Trichloroethylene	MW-81	10/09/2017		9.4	1.0	ug/L
Trichloroethylene	MW-81	4/17/2018		4.3	1.0	ug/L
Trichloroethylene	MW-81	10/19/2020		3.0	1.0	ug/L
Trichloroethylene	MW-81	4/05/2021		2.0	1.0	ug/L
Trichloroethylene	MW-81	10/08/2021		2.3	1.0	ug/L
Trichloroethylene	MW-81	4/06/2022		1.0	1.0	ug/L
Trichloroethylene	MW-81	10/25/2022		2.9	1.0	ug/L
Trichloroethylene	MW-81	4/11/2023		2.6	1.0	ug/L
Trichloroethylene	MW-81	10/13/2023		3.3	1.0	ug/L
Trichloroethylene	MW-81	4/16/2024		1.4	1.0	ug/L
Trichloroethylene	MW-81	10/15/2024		2.2	1.0	ug/L
Vinyl chloride	MW-81	3/28/2008		7.6	1.0	ug/L
Vinyl chloride	MW-81	6/20/2008		15.7	1.0	ug/L
Vinyl chloride	MW-81	8/04/2008		12.4	1.0	ug/L
Vinyl chloride	MW-81	10/03/2008		7.5	1.0	ug/L
Vinyl chloride	MW-81	12/08/2008		13.2	1.0	ug/L
Vinyl chloride	MW-81	4/01/2009		8.3	1.0	ug/L
Vinyl chloride	MW-81	10/21/2009		26.8	1.0	ug/L
Vinyl chloride	MW-81	4/20/2010		22.9	1.0	ug/L
Vinyl chloride	MW-81	10/08/2010		21.1	1.0	ug/L
Vinyl chloride	MW-81	4/05/2011		13.8	1.0	ug/L
Vinyl chloride	MW-81	10/06/2011		9.3	1.0	ug/L
Vinyl chloride	MW-81	4/10/2012		12.4	1.0	ug/L
Vinyl chloride	MW-81	10/09/2012		8.4	1.0	ug/L
Vinyl chloride	MW-81	4/04/2013		7.8	1.0	ug/L
Vinyl chloride	MW-81	10/16/2013		9.4	1.0	ug/L
Vinyl chloride	MW-81	4/10/2014		11.0	1.0	ug/L
Vinyl chloride	MW-81	10/16/2014		9.7	1.0	ug/L
Vinyl chloride	MW-81	4/03/2015		12.9	1.0	ug/L
Vinyl chloride	MW-81	10/01/2015		8.8	1.0	ug/L
Vinyl chloride	MW-81	4/14/2016		15.8	1.0	ug/L
Vinyl chloride	MW-81	10/13/2016		20.1	1.0	ug/L
Vinyl chloride	MW-81	4/10/2017		16.5	1.0	ug/L
Vinyl chloride	MW-81	10/09/2017		13.2	1.0	ug/L
Vinyl chloride	MW-81	4/17/2018		13.6	1.0	ug/L
Vinyl chloride	MW-81	10/22/2018		26.6	1.0	ug/L
Vinyl chloride	MW-81	4/22/2019		15.5	1.0	ug/L
Vinyl chloride	MW-81	10/23/2019		24.2	1.0	ug/L
Vinyl chloride	MW-81	4/10/2020		13.9	1.0	ug/L
Vinyl chloride	MW-81	10/19/2020		15.4	1.0	ug/L
Vinyl chloride	MW-81	4/05/2021		11.3	1.0	ug/L
Vinyl chloride	MW-81	10/08/2021		7.2	1.0	ug/L
Vinyl chloride	MW-81	4/06/2022		7.0	1.0	ug/L
Vinyl chloride	MW-81	10/25/2022		8.4	1.0	ug/L
Vinyl chloride	MW-81	4/11/2023		7.7	1.0	ug/L
Vinyl chloride	MW-81	10/13/2023		6.7	1.0	ug/L
Vinyl chloride	MW-81	4/16/2024		6.8	1.0	ug/L
Vinyl chloride	MW-81	10/15/2024		6.5	1.0	ug/L
Acetone	MW-85	10/09/2017		15.4	10.0	ug/L
Acetone	MW-87	10/09/2017		18.4	10.0	ug/L
Benzene	MW-87	7/17/1997		1.3	1.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-87	12/08/2008		28	8	ug/L
Bis(2-ethylhexyl) phthalate	MW-87	4/10/2014		13	10	ug/L
1,1-dichloroethane	MW-89	10/09/2012		4	1	ug/L
Acetone	MW-89	10/09/2017		18.2	10.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-89	12/10/2008		60	11	ug/L
Bis(2-ethylhexyl) phthalate	MW-89	10/16/2013		9	8	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Bis(2-ethylhexyl) phthalate	MW-89	4/10/2014		18	10	ug/L
Bis(2-ethylhexyl) phthalate	MW-89	4/14/2016		19	13	ug/L
1,1,1-trichloroethane	MW-91	9/11/2000		1.1	1.0	ug/L
1,1,1-trichloroethane	MW-91	10/08/2000		1.0	1.0	ug/L
1,1-dichloroethane	MW-91	3/28/2008		5.5	1.0	ug/L
1,1-dichloroethane	MW-91	6/20/2008		4.4	1.0	ug/L
1,1-dichloroethane	MW-91	8/05/2008		6.5	1.0	ug/L
1,1-dichloroethane	MW-91	10/03/2008		9.3	1.0	ug/L
1,1-dichloroethane	MW-91	12/10/2008		6.8	1.0	ug/L
1,1-dichloroethane	MW-91	4/02/2009		5.3	1.0	ug/L
1,1-dichloroethane	MW-91	10/21/2009		2.5	1.0	ug/L
1,1-dichloroethane	MW-91	4/20/2010		4.4	1.0	ug/L
1,1-dichloroethane	MW-91	10/08/2010		4.3	1.0	ug/L
1,1-dichloroethane	MW-91	4/05/2011		4.5	1.0	ug/L
1,1-dichloroethane	MW-91	10/06/2011		3.9	1.0	ug/L
1,1-dichloroethane	MW-91	4/10/2012		3.9	1.0	ug/L
1,1-dichloroethane	MW-91	4/04/2013		1.0	1.0	ug/L
1,1-dichloroethane	MW-91	10/16/2013		3.4	1.0	ug/L
1,1-dichloroethane	MW-91	4/10/2014		1.8	1.0	ug/L
1,1-dichloroethane	MW-91	10/16/2014		2.4	1.0	ug/L
1,1-dichloroethane	MW-91	4/03/2015		6.1	1.0	ug/L
1,1-dichloroethane	MW-91	10/01/2015		3.6	1.0	ug/L
1,1-dichloroethane	MW-91	10/09/2017		2.5	1.0	ug/L
1,1-dichloroethane	MW-91	1/09/2018		1.7	1.0	ug/L
1,1-dichloroethane	MW-91	4/22/2019		2.7	1.0	ug/L
1,1-dichloroethane	MW-91	10/19/2020		1.5	1.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-91	8/05/2008		8	8	ug/L
Bis(2-ethylhexyl) phthalate	MW-91	12/10/2008		9	8	ug/L
Bis(2-ethylhexyl) phthalate	MW-91	10/08/2010		15	10	ug/L
Bis(2-ethylhexyl) phthalate	MW-91	10/16/2013		142	84	ug/L
Carbon disulfide	MW-91	4/06/2022		2.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-91	6/20/2008		1.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-91	8/05/2008		3.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-91	4/20/2010		1.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-91	10/06/2011		1.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-91	4/03/2015		1.5	1.0	ug/L
Tetrachloroethylene	MW-91	12/10/2008		1.1	1.0	ug/L
Trichloroethylene	MW-91	9/11/2000		1.0	1.0	ug/L
Trichloroethylene	MW-91	1/25/2002		1.1	1.0	ug/L
Trichloroethylene	MW-91	4/24/2002		1.0	1.0	ug/L
Trichloroethylene	MW-91	10/14/2002		1.2	1.0	ug/L
Trichloroethylene	MW-91	10/05/2004		1.2	1.0	ug/L
Trichloroethylene	MW-91	4/11/2005		.3	.3	ug/L
Trichloroethylene	MW-91	10/05/2005		1.9	1.0	ug/L
1,1-dichloroethane	MW-94	1/14/2011		40.0	1.0	ug/L
1,1-dichloroethane	MW-94	4/05/2011		41.9	1.0	ug/L
1,1-dichloroethane	MW-94	6/18/2011		33.4	1.0	ug/L
1,1-dichloroethane	MW-94	8/11/2011		30.9	1.0	ug/L
1,1-dichloroethane	MW-94	10/06/2011		43.5	1.0	ug/L
1,1-dichloroethane	MW-94	4/10/2012		36.2	1.0	ug/L
1,1-dichloroethane	MW-94	10/09/2012		36.0	1.0	ug/L
1,1-dichloroethane	MW-94	4/04/2013		23.3	1.0	ug/L
1,1-dichloroethane	MW-94	10/16/2013		24.3	1.0	ug/L
1,1-dichloroethane	MW-94	4/10/2014		21.1	1.0	ug/L
1,1-dichloroethane	MW-94	10/16/2014		16.1	1.0	ug/L
1,1-dichloroethane	MW-94	4/03/2015		11.3	1.0	ug/L
1,1-dichloroethane	MW-94	10/01/2015		8.2	1.0	ug/L
1,1-dichloroethane	MW-94	4/14/2016		8.6	1.0	ug/L
1,1-dichloroethane	MW-94	10/13/2016		9.8	1.0	ug/L
1,1-dichloroethane	MW-94	4/10/2017		7.7	1.0	ug/L
1,1-dichloroethane	MW-94	10/09/2017		8.3	1.0	ug/L
1,1-dichloroethane	MW-94	4/17/2018		5.7	1.0	ug/L
1,1-dichloroethane	MW-94	10/22/2018		6.0	1.0	ug/L
1,1-dichloroethane	MW-94	4/22/2019		5.4	1.0	ug/L
1,1-dichloroethane	MW-94	10/23/2019		4.3	1.0	ug/L
1,1-dichloroethane	MW-94	4/10/2020		3.5	1.0	ug/L
1,1-dichloroethane	MW-94	10/19/2020		3.8	1.0	ug/L
1,1-dichloroethane	MW-94	4/05/2021		1.8	1.0	ug/L
1,1-dichloroethane	MW-94	10/08/2021		2.6	1.0	ug/L
1,1-dichloroethane	MW-94	4/06/2022		1.9	1.0	ug/L
1,1-dichloroethane	MW-94	10/25/2022		2.4	1.0	ug/L
1,1-dichloroethane	MW-94	4/11/2023		1.6	1.0	ug/L
1,1-dichloroethane	MW-94	10/13/2023		2.4	1.0	ug/L
1,1-dichloroethane	MW-94	4/17/2024		1.3	1.0	ug/L
1,1-dichloroethane	MW-94	10/15/2024		1.0	1.0	ug/L
1,2-dichloroethane	MW-94	10/01/2015		1.1	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,2-dichloroethane	MW-94	10/13/2016		1.9	1.0	ug/L
1,2-dichloroethane	MW-94	4/10/2017		1.4	1.0	ug/L
1,2-dichloroethane	MW-94	10/09/2017		1.5	1.0	ug/L
1,2-dichloroethane	MW-94	4/17/2018		1.3	1.0	ug/L
1,2-dichloropropane	MW-94	1/14/2011		3.7	1.0	ug/L
1,2-dichloropropane	MW-94	10/06/2011		3.0	1.0	ug/L
1,2-dichloropropane	MW-94	4/10/2012		4.0	1.0	ug/L
1,2-dichloropropane	MW-94	4/04/2013		4.4	1.0	ug/L
1,2-dichloropropane	MW-94	10/16/2013		3.8	1.0	ug/L
1,2-dichloropropane	MW-94	10/16/2014		3.8	1.0	ug/L
1,2-dichloropropane	MW-94	10/01/2015		2.4	1.0	ug/L
1,2-dichloropropane	MW-94	10/13/2016		2.8	1.0	ug/L
1,2-dichloropropane	MW-94	4/10/2017		2.7	1.0	ug/L
1,2-dichloropropane	MW-94	10/09/2017		3.2	1.0	ug/L
1,2-dichloropropane	MW-94	4/17/2018		2.9	1.0	ug/L
1,2-dichloropropane	MW-94	10/22/2018		4.5	1.0	ug/L
1,2-dichloropropane	MW-94	4/22/2019		3.0	1.0	ug/L
1,2-dichloropropane	MW-94	10/23/2019		2.4	1.0	ug/L
1,2-dichloropropane	MW-94	4/10/2020		2.2	1.0	ug/L
1,2-dichloropropane	MW-94	10/19/2020		2.7	1.0	ug/L
1,2-dichloropropane	MW-94	4/05/2021		1.6	1.0	ug/L
1,2-dichloropropane	MW-94	10/08/2021		2.2	1.0	ug/L
1,2-dichloropropane	MW-94	4/06/2022		1.7	1.0	ug/L
1,2-dichloropropane	MW-94	10/25/2022		2.1	1.0	ug/L
1,2-dichloropropane	MW-94	4/11/2023		1.4	1.0	ug/L
1,2-dichloropropane	MW-94	10/13/2023		2.2	1.0	ug/L
1,2-dichloropropane	MW-94	4/17/2024		1.1	1.0	ug/L
1,2-dichloropropane	MW-94	10/15/2024		1.0	1.0	ug/L
Acetone	MW-94	1/14/2011		43.5	10.0	ug/L
Acetone	MW-94	10/09/2012		32.1	10.0	ug/L
Acetone	MW-94	10/09/2017		38.8	10.0	ug/L
Acetone	MW-94	10/13/2023		15.6	10.0	ug/L
Benzene	MW-94	1/14/2011		1.1	1.0	ug/L
Benzene	MW-94	4/05/2011		1.2	1.0	ug/L
Benzene	MW-94	4/10/2012		1.3	1.0	ug/L
Benzene	MW-94	10/09/2012		1.2	1.0	ug/L
Benzene	MW-94	4/04/2013		2.0	1.0	ug/L
Benzene	MW-94	10/16/2013		1.6	1.0	ug/L
Benzene	MW-94	4/10/2014		1.4	1.0	ug/L
Benzene	MW-94	10/16/2014		4.2	1.0	ug/L
Benzene	MW-94	4/03/2015		2.6	1.0	ug/L
Benzene	MW-94	10/01/2015		3.2	1.0	ug/L
Benzene	MW-94	4/14/2016		3.5	1.0	ug/L
Benzene	MW-94	10/13/2016		4.5	1.0	ug/L
Benzene	MW-94	4/10/2017		2.8	1.0	ug/L
Benzene	MW-94	10/09/2017		3.6	1.0	ug/L
Benzene	MW-94	4/17/2018		2.4	1.0	ug/L
Benzene	MW-94	10/22/2018		3.5	1.0	ug/L
Benzene	MW-94	4/22/2019		2.5	1.0	ug/L
Benzene	MW-94	10/23/2019		2.3	1.0	ug/L
Benzene	MW-94	4/10/2020		2.2	1.0	ug/L
Benzene	MW-94	10/19/2020		2.4	1.0	ug/L
Benzene	MW-94	4/05/2021		1.6	1.0	ug/L
Benzene	MW-94	10/08/2021		1.6	1.0	ug/L
Benzene	MW-94	4/06/2022		2.1	1.0	ug/L
Benzene	MW-94	10/25/2022		2.1	1.0	ug/L
Benzene	MW-94	4/11/2023		1.9	1.0	ug/L
Benzene	MW-94	10/13/2023		1.7	1.0	ug/L
Benzene	MW-94	4/17/2024		2.0	1.0	ug/L
Benzene	MW-94	10/15/2024		1.8	1.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-94	10/09/2012		8	8	ug/L
Chloroethane	MW-94	1/14/2011		16.5	1.0	ug/L
Chloroethane	MW-94	4/05/2011		19.0	1.0	ug/L
Chloroethane	MW-94	6/18/2011		6.4	1.0	ug/L
Chloroethane	MW-94	8/11/2011		12.7	1.0	ug/L
Chloroethane	MW-94	10/06/2011		19.8	1.0	ug/L
Chloroethane	MW-94	4/10/2012		16.7	1.0	ug/L
Chloroethane	MW-94	10/09/2012		18.2	1.0	ug/L
Chloroethane	MW-94	4/04/2013		14.3	1.0	ug/L
Chloroethane	MW-94	10/16/2013		17.2	1.0	ug/L
Chloroethane	MW-94	4/10/2014		18.5	1.0	ug/L
Chloroethane	MW-94	10/16/2014		16.4	1.0	ug/L
Chloroethane	MW-94	4/03/2015		13.0	1.0	ug/L
Chloroethane	MW-94	10/01/2015		9.5	1.0	ug/L
Chloroethane	MW-94	4/14/2016		9.2	1.0	ug/L
Chloroethane	MW-94	10/13/2016		11.8	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
Chloroethane	MW-94	4/10/2017		8.9	1.0	ug/L
Chloroethane	MW-94	10/09/2017		8.6	1.0	ug/L
Chloroethane	MW-94	4/17/2018		5.6	1.0	ug/L
Chloroethane	MW-94	10/22/2018		5.2	1.0	ug/L
Chloroethane	MW-94	4/22/2019		5.4	1.0	ug/L
Chloroethane	MW-94	10/23/2019		6.0	1.0	ug/L
Chloroethane	MW-94	4/10/2020		4.4	1.0	ug/L
Chloroethane	MW-94	10/19/2020		5.2	1.0	ug/L
Chloroethane	MW-94	4/05/2021		3.7	1.0	ug/L
Chloroethane	MW-94	10/08/2021		4.0	1.0	ug/L
Chloroethane	MW-94	4/06/2022		4.6	1.0	ug/L
Chloroethane	MW-94	10/25/2022		4.7	1.0	ug/L
Chloroethane	MW-94	4/11/2023		4.0	1.0	ug/L
Chloroethane	MW-94	10/13/2023		4.5	1.0	ug/L
Chloroethane	MW-94	4/17/2024		4.3	1.0	ug/L
Chloroethane	MW-94	10/15/2024		3.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	1/14/2011		112.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	4/05/2011		204.0	5.0	ug/L
Cis-1,2-dichloroethylene	MW-94	6/18/2011		114.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	8/11/2011		153.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	10/06/2011		89.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	4/10/2012		131.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	10/09/2012		170.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	4/04/2013		150.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	10/16/2013		140.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	4/10/2014		118.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	10/16/2014		144.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	4/03/2015		102.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	10/01/2015		88.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	4/14/2016		89.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	10/13/2016		63.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	4/10/2017		43.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	10/09/2017		56.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	4/17/2018		28.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	10/22/2018		27.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	4/22/2019		30.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	10/23/2019		23.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	4/10/2020		21.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	10/19/2020		27.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	4/05/2021		13.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	10/08/2021		25.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	4/06/2022		18.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	10/25/2022		29.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	4/11/2023		11.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	10/13/2023		29.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	4/17/2024		5.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-94	10/15/2024		6.0	1.0	ug/L
Trans-1,2-dichloroethylene	MW-94	1/14/2011		2.5	1.0	ug/L
Trans-1,2-dichloroethylene	MW-94	4/05/2011		4.6	1.0	ug/L
Trans-1,2-dichloroethylene	MW-94	6/18/2011		2.6	1.0	ug/L
Trans-1,2-dichloroethylene	MW-94	8/11/2011		3.8	1.0	ug/L
Trans-1,2-dichloroethylene	MW-94	10/06/2011		2.1	1.0	ug/L
Trans-1,2-dichloroethylene	MW-94	4/10/2012		2.4	1.0	ug/L
Trans-1,2-dichloroethylene	MW-94	10/09/2012		1.8	1.0	ug/L
Trans-1,2-dichloroethylene	MW-94	4/04/2013		1.8	1.0	ug/L
Trans-1,2-dichloroethylene	MW-94	10/16/2013		1.9	1.0	ug/L
Trans-1,2-dichloroethylene	MW-94	4/10/2014		1.6	1.0	ug/L
Trans-1,2-dichloroethylene	MW-94	10/16/2014		1.2	1.0	ug/L
Trans-1,2-dichloroethylene	MW-94	4/03/2015		1.2	1.0	ug/L
Trans-1,2-dichloroethylene	MW-94	10/13/2016		1.2	1.0	ug/L
Trans-1,2-dichloroethylene	MW-94	4/10/2020		1.0	1.0	ug/L
Trans-1,2-dichloroethylene	MW-94	10/19/2020		1.2	1.0	ug/L
Trans-1,2-dichloroethylene	MW-94	10/25/2022		1.2	1.0	ug/L
Trans-1,2-dichloroethylene	MW-94	10/13/2023		1.6	1.0	ug/L
Trichloroethylene	MW-94	1/14/2011		59.7	1.0	ug/L
Trichloroethylene	MW-94	4/05/2011		109.0	1.0	ug/L
Trichloroethylene	MW-94	6/18/2011		58.1	1.0	ug/L
Trichloroethylene	MW-94	8/11/2011		47.4	1.0	ug/L
Trichloroethylene	MW-94	10/06/2011		42.0	1.0	ug/L
Trichloroethylene	MW-94	4/10/2012		37.0	1.0	ug/L
Trichloroethylene	MW-94	10/09/2012		28.1	1.0	ug/L
Trichloroethylene	MW-94	4/04/2013		21.2	1.0	ug/L
Trichloroethylene	MW-94	10/16/2013		7.7	1.0	ug/L
Trichloroethylene	MW-94	4/10/2014		5.4	1.0	ug/L
Trichloroethylene	MW-94	10/16/2014		2.0	1.0	ug/L
Trichloroethylene	MW-94	4/03/2015		1.5	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Vinyl chloride	MW-94	1/14/2011		5.0	1.0	ug/L
Vinyl chloride	MW-94	4/05/2011		5.5	1.0	ug/L
Vinyl chloride	MW-94	6/18/2011		4.0	1.0	ug/L
Vinyl chloride	MW-94	8/11/2011		4.1	1.0	ug/L
Vinyl chloride	MW-94	10/06/2011		3.6	1.0	ug/L
Vinyl chloride	MW-94	4/10/2012		4.6	1.0	ug/L
Vinyl chloride	MW-94	10/09/2012		4.6	1.0	ug/L
Vinyl chloride	MW-94	4/04/2013		5.3	1.0	ug/L
Vinyl chloride	MW-94	10/16/2013		4.8	1.0	ug/L
Vinyl chloride	MW-94	4/10/2014		4.4	1.0	ug/L
Vinyl chloride	MW-94	10/16/2014		6.2	1.0	ug/L
Vinyl chloride	MW-94	4/03/2015		4.5	1.0	ug/L
Vinyl chloride	MW-94	10/01/2015		3.6	1.0	ug/L
Vinyl chloride	MW-94	4/14/2016		2.9	1.0	ug/L
Vinyl chloride	MW-94	10/13/2016		2.6	1.0	ug/L
Vinyl chloride	MW-94	4/10/2017		3.2	1.0	ug/L
Vinyl chloride	MW-94	10/09/2017		2.0	1.0	ug/L
Vinyl chloride	MW-94	4/17/2018		2.0	1.0	ug/L
Vinyl chloride	MW-94	10/22/2018		2.2	1.0	ug/L
Vinyl chloride	MW-94	4/22/2019		1.7	1.0	ug/L
Vinyl chloride	MW-94	4/10/2020		1.1	1.0	ug/L
Vinyl chloride	MW-94	10/19/2020		1.1	1.0	ug/L
Vinyl chloride	MW-94	10/25/2022		1.2	1.0	ug/L
Vinyl chloride	MW-94	4/11/2023		2.1	1.0	ug/L
Vinyl chloride	MW-94	10/13/2023		2.0	1.0	ug/L
Vinyl chloride	MW-94	4/17/2024		2.2	1.0	ug/L
Vinyl chloride	MW-94	10/15/2024		2.0	1.0	ug/L
Acetone	MW-95	10/13/2023		10.7	10.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-96	10/09/2012		8	8	ug/L
Cis-1,2-dichloroethylene	MW-96	1/14/2011		1.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-96	4/05/2011		1.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-96	6/18/2011		1.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-96	8/11/2011		1.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-96	10/09/2012		1.0	1.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-96R	10/08/2021		6	6	ug/L
Acetone	MW-98	10/09/2017		18.4	10.0	ug/L
1,1-dichloroethane	SRAMP A	4/22/2019		1.4	1.0	ug/L
1,2-dichloropropane	SRAMP A	4/22/2019		1.7	1.0	ug/L
Cis-1,2-dichloroethylene	SRAMP A	4/10/2017		1.3	1.0	ug/L
Cis-1,2-dichloroethylene	SRAMP A	4/22/2019		2.8	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

Attachment G

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-49	4	1.325	0.222	1.176	1.064	1.586	140.000	dec	
1,2-dichloroethane	ug/L	MW-49	4	0.500	0.000	1.176	0.500	0.500	5.000		
1,2-dichloropropane	ug/L	MW-49	4	0.500	0.000	1.176	0.500	0.500	5.000		
1,4-dichlorobenzene	ug/L	MW-49	4	6.175	2.061	1.176	3.750	8.600	75.000		
Acetone	ug/L	MW-49	4	5.000	0.000	1.176	5.000	5.000	6300.000		
Benzene	ug/L	MW-49	4	2.050	1.500	1.176	0.286	3.814	5.000		
Bis(2-ethylhexyl) phthalate	ug/L	MW-49	4	5.000	0.000	1.176	5.000	5.000	6.000		
Chlorobenzene	ug/L	MW-49	4	0.775	0.320	1.176	0.398	1.152	100.000		
Chloroethane	ug/L	MW-49	4	5.825	0.967	1.176	4.687	6.963	2800.000	dec	
Cis-1,2-dichloroethylene	ug/L	MW-49	4	1.375	1.018	1.176	0.178	2.572	70.000	dec	
Tetrachloroethylene	ug/L	MW-49	4	0.500	0.000	1.176	0.500	0.500	5.000		
Trans-1,2-dichloroethylene	ug/L	MW-49	4	0.500	0.000	1.176	0.500	0.500	100.000		
Trichloroethylene	ug/L	MW-49	4	0.500	0.000	1.176	0.500	0.500	5.000		
Vinyl chloride	ug/L	MW-49	4	0.500	0.000	1.176	0.500	0.500	2.000	dec	
1,1-dichloroethane	ug/L	MW-54	4	0.500	0.000	1.176	0.500	0.500	140.000		
1,2-dichloroethane	ug/L	MW-54	4	0.500	0.000	1.176	0.500	0.500	5.000		
1,2-dichloropropane	ug/L	MW-54	4	0.500	0.000	1.176	0.500	0.500	5.000		
1,4-dichlorobenzene	ug/L	MW-54	4	2.725	1.059	1.176	1.479	3.971	75.000	inc	
Acetone	ug/L	MW-54	4	5.000	0.000	1.176	5.000	5.000	6300.000		
Benzene	ug/L	MW-54	4	0.500	0.000	1.176	0.500	0.500	5.000		
Bis(2-ethylhexyl) phthalate	ug/L	MW-54	4	5.000	0.000	1.176	5.000	5.000	6.000		
Chlorobenzene	ug/L	MW-54	4	0.500	0.000	1.176	0.500	0.500	100.000		
Chloroethane	ug/L	MW-54	4	0.500	0.000	1.176	0.500	0.500	2800.000	dec	
Cis-1,2-dichloroethylene	ug/L	MW-54	4	0.500	0.000	1.176	0.500	0.500	70.000	dec	
Tetrachloroethylene	ug/L	MW-54	4	0.500	0.000	1.176	0.500	0.500	5.000		
Trans-1,2-dichloroethylene	ug/L	MW-54	4	0.500	0.000	1.176	0.500	0.500	100.000		
Trichloroethylene	ug/L	MW-54	4	0.500	0.000	1.176	0.500	0.500	5.000	dec	
Vinyl chloride	ug/L	MW-54	4	0.500	0.000	1.176	0.500	0.500	2.000		
1,1-dichloroethane	ug/L	MW-81	4	26.725	2.863	1.176	23.357	30.093	140.000	dec	
1,2-dichloroethane	ug/L	MW-81	4	11.500	3.592	1.176	7.275	15.725	5.000	inc	**
1,2-dichloropropane	ug/L	MW-81	4	6.325	2.053	1.176	3.910	8.740	5.000		
1,4-dichlorobenzene	ug/L	MW-81	4	5.150	0.580	1.176	4.467	5.833	75.000	inc	
Acetone	ug/L	MW-81	4	5.000	0.000	1.176	5.000	5.000	6300.000		
Benzene	ug/L	MW-81	4	0.500	0.000	1.176	0.500	0.500	5.000		
Bis(2-ethylhexyl) phthalate	ug/L	MW-81	4	5.000	0.000	1.176	5.000	5.000	6.000		
Chlorobenzene	ug/L	MW-81	4	1.700	0.216	1.176	1.446	1.954	100.000	inc	
Chloroethane	ug/L	MW-81	4	6.175	0.613	1.176	5.454	6.896	2800.000	dec	
Cis-1,2-dichloroethylene	ug/L	MW-81	4	153.000	24.152	1.176	124.590	181.410	70.000	dec	**
Tetrachloroethylene	ug/L	MW-81	4	0.500	0.000	1.176	0.500	0.500	5.000		
Trans-1,2-dichloroethylene	ug/L	MW-81	4	2.325	0.150	1.176	2.149	2.501	100.000	dec	
Trichloroethylene	ug/L	MW-81	4	2.375	0.793	1.176	1.442	3.308	5.000	dec	
Vinyl chloride	ug/L	MW-81	4	6.925	0.532	1.176	6.300	7.550	2.000		**
1,1-dichloroethane	ug/L	MW-89	4	0.500	0.000	1.176	0.500	0.500	140.000		
1,2-dichloroethane	ug/L	MW-89	4	0.500	0.000	1.176	0.500	0.500	5.000		
1,2-dichloropropane	ug/L	MW-89	4	0.500	0.000	1.176	0.500	0.500	5.000		
1,4-dichlorobenzene	ug/L	MW-89	4	0.500	0.000	1.176	0.500	0.500	75.000		
Acetone	ug/L	MW-89	4	5.000	0.000	1.176	5.000	5.000	6300.000		
Benzene	ug/L	MW-89	4	0.500	0.000	1.176	0.500	0.500	5.000		
Bis(2-ethylhexyl) phthalate	ug/L	MW-89	4	8.500	7.000	1.176	0.266	16.734	6.000		
Chlorobenzene	ug/L	MW-89	4	0.500	0.000	1.176	0.500	0.500	100.000		
Chloroethane	ug/L	MW-89	4	0.500	0.000	1.176	0.500	0.500	2800.000		
Cis-1,2-dichloroethylene	ug/L	MW-89	4	0.500	0.000	1.176	0.500	0.500	70.000		
Tetrachloroethylene	ug/L	MW-89	4	0.500	0.000	1.176	0.500	0.500	5.000		
Trans-1,2-dichloroethylene	ug/L	MW-89	4	0.500	0.000	1.176	0.500	0.500	100.000		
Trichloroethylene	ug/L	MW-89	4	0.500	0.000	1.176	0.500	0.500	5.000		
Vinyl chloride	ug/L	MW-89	4	0.500	0.000	1.176	0.500	0.500	2.000		
1,1-dichloroethane	ug/L	MW-91	4	0.500	0.000	1.176	0.500	0.500	140.000	dec	
1,2-dichloroethane	ug/L	MW-91	4	0.500	0.000	1.176	0.500	0.500	5.000		
1,2-dichloropropane	ug/L	MW-91	4	0.500	0.000	1.176	0.500	0.500	5.000		
1,4-dichlorobenzene	ug/L	MW-91	4	0.500	0.000	1.176	0.500	0.500	75.000		
Acetone	ug/L	MW-91	4	5.000	0.000	1.176	5.000	5.000	6300.000		
Benzene	ug/L	MW-91	4	0.500	0.000	1.176	0.500	0.500	5.000		
Bis(2-ethylhexyl) phthalate	ug/L	MW-91	4	5.000	0.000	1.176	5.000	5.000	6.000		
Chlorobenzene	ug/L	MW-91	4	0.500	0.000	1.176	0.500	0.500	100.000		
Chloroethane	ug/L	MW-91	4	0.500	0.000	1.176	0.500	0.500	2800.000		
Cis-1,2-dichloroethylene	ug/L	MW-91	4	0.500	0.000	1.176	0.500	0.500	70.000		
Tetrachloroethylene	ug/L	MW-91	4	0.500	0.000	1.176	0.500	0.500	5.000		
Trans-1,2-dichloroethylene	ug/L	MW-91	4	0.500	0.000	1.176	0.500	0.500	100.000		
Trichloroethylene	ug/L	MW-91	4	0.500	0.000	1.176	0.500	0.500	5.000		
Vinyl chloride	ug/L	MW-91	4	0.500	0.000	1.176	0.500	0.500	2.000		
1,1-dichloroethane	ug/L	MW-94	4	1.575	0.602	1.176	0.867	2.283	140.000	dec	
1,2-dichloroethane	ug/L	MW-94	4	0.500	0.000	1.176	0.500	0.500	5.000		

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

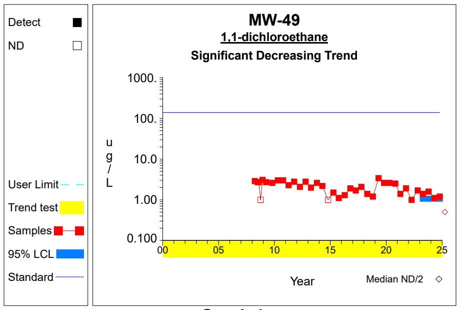
Table 1

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

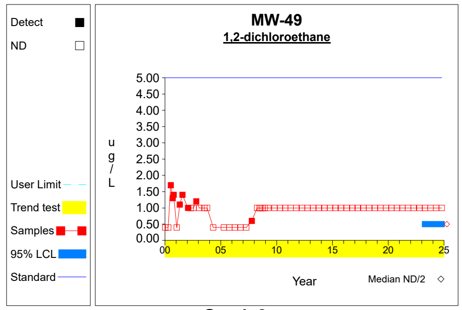
Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend	
1,2-dichloropropane	ug/L	MW-94	4	1.425	0.544	1.176	0.785	2.065	5.000		
1,4-dichlorobenzene	ug/L	MW-94	4	0.500	0.000	1.176	0.500	0.500	75.000		
Acetone	ug/L	MW-94	4	7.650	5.300	1.176	1.416	13.884	6300.000		
Benzene	ug/L	MW-94	4	1.850	0.129	1.176	1.698	2.002	5.000		
Bis(2-ethylhexyl) phthalate	ug/L	MW-94	4	5.000	0.000	1.176	5.000	5.000	6.000		
Chlorobenzene	ug/L	MW-94	4	0.500	0.000	1.176	0.500	0.500	100.000		
Chloroethane	ug/L	MW-94	4	3.950	0.666	1.176	3.167	4.733	2800.000	dec	
Cis-1,2-dichloroethylene	ug/L	MW-94	4	13.000	11.275	1.176	0.000	26.262	70.000	dec	
Tetrachloroethylene	ug/L	MW-94	4	0.500	0.000	1.176	0.500	0.500	5.000		
Trans-1,2-dichloroethylene	ug/L	MW-94	4	0.775	0.550	1.176	0.128	1.422	100.000	dec	
Trichloroethylene	ug/L	MW-94	4	0.500	0.000	1.176	0.500	0.500	5.000		
Vinyl chloride	ug/L	MW-94	4	2.075	0.096	1.176	1.962	2.188	2.000	dec	
1,1-dichloroethane	ug/L	MW-95	4	0.500	0.000	1.176	0.500	0.500	140.000		
1,2-dichloroethane	ug/L	MW-95	4	0.500	0.000	1.176	0.500	0.500	5.000		
1,2-dichloropropane	ug/L	MW-95	4	0.500	0.000	1.176	0.500	0.500	5.000		
1,4-dichlorobenzene	ug/L	MW-95	4	0.500	0.000	1.176	0.500	0.500	75.000		
Acetone	ug/L	MW-95	4	6.425	2.850	1.176	3.073	9.777	6300.000		
Benzene	ug/L	MW-95	4	0.500	0.000	1.176	0.500	0.500	5.000		
Bis(2-ethylhexyl) phthalate	ug/L	MW-95	0								*
Chlorobenzene	ug/L	MW-95	4	0.500	0.000	1.176	0.500	0.500	100.000		
Chloroethane	ug/L	MW-95	4	0.500	0.000	1.176	0.500	0.500	2800.000		
Cis-1,2-dichloroethylene	ug/L	MW-95	4	0.500	0.000	1.176	0.500	0.500	70.000		
Tetrachloroethylene	ug/L	MW-95	4	0.500	0.000	1.176	0.500	0.500	5.000		
Trans-1,2-dichloroethylene	ug/L	MW-95	4	0.500	0.000	1.176	0.500	0.500	100.000		
Trichloroethylene	ug/L	MW-95	4	0.500	0.000	1.176	0.500	0.500	5.000		
Vinyl chloride	ug/L	MW-95	4	0.500	0.000	1.176	0.500	0.500	2.000		
1,1-dichloroethane	ug/L	MW-96R	4	0.500	0.000	1.176	0.500	0.500	140.000		
1,2-dichloroethane	ug/L	MW-96R	4	0.500	0.000	1.176	0.500	0.500	5.000		
1,2-dichloropropane	ug/L	MW-96R	4	0.500	0.000	1.176	0.500	0.500	5.000		
1,4-dichlorobenzene	ug/L	MW-96R	4	0.500	0.000	1.176	0.500	0.500	75.000		
Acetone	ug/L	MW-96R	4	5.000	0.000	1.176	5.000	5.000	6300.000		
Benzene	ug/L	MW-96R	4	0.500	0.000	1.176	0.500	0.500	5.000		
Bis(2-ethylhexyl) phthalate	ug/L	MW-96R	2								*
Chlorobenzene	ug/L	MW-96R	4	0.500	0.000	1.176	0.500	0.500	100.000		
Chloroethane	ug/L	MW-96R	4	0.500	0.000	1.176	0.500	0.500	2800.000		
Cis-1,2-dichloroethylene	ug/L	MW-96R	4	0.500	0.000	1.176	0.500	0.500	70.000		
Tetrachloroethylene	ug/L	MW-96R	4	0.500	0.000	1.176	0.500	0.500	5.000		
Trans-1,2-dichloroethylene	ug/L	MW-96R	4	0.500	0.000	1.176	0.500	0.500	100.000		
Trichloroethylene	ug/L	MW-96R	4	0.500	0.000	1.176	0.500	0.500	5.000		
Vinyl chloride	ug/L	MW-96R	4	0.500	0.000	1.176	0.500	0.500	2.000		

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

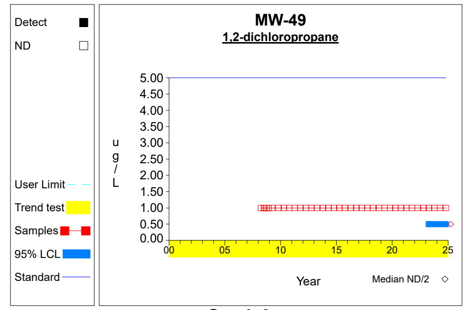
Confidence Limits (Assessment)



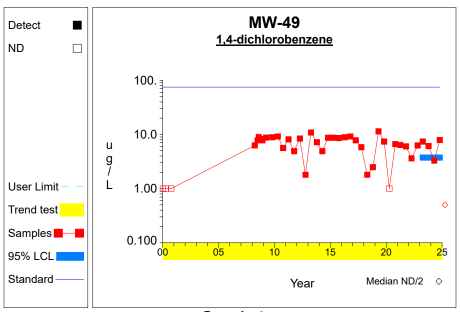
Graph 1



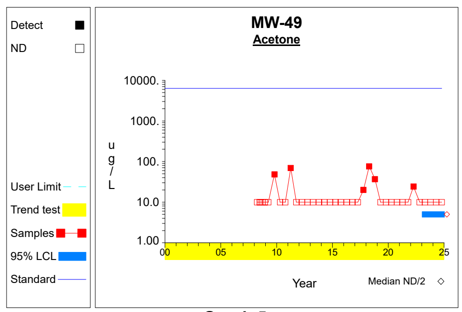
Graph 2



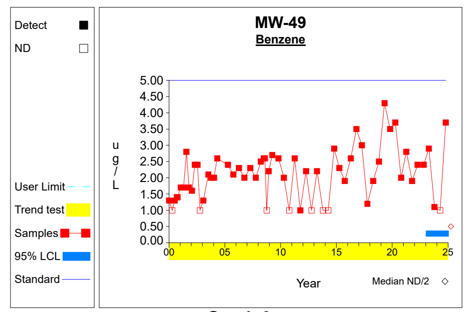
Graph 3



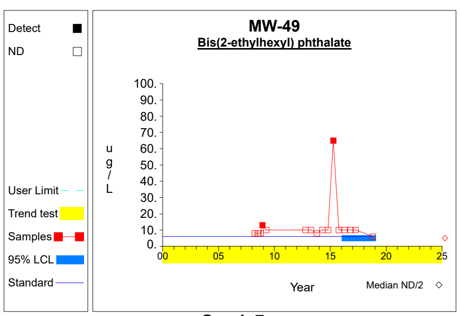
Graph 4



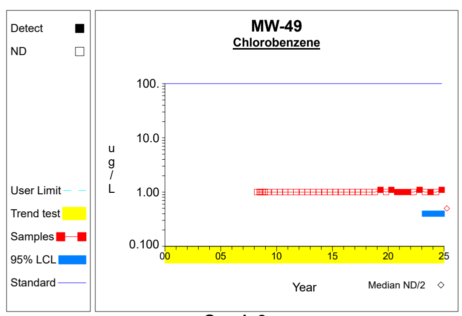
Graph 5



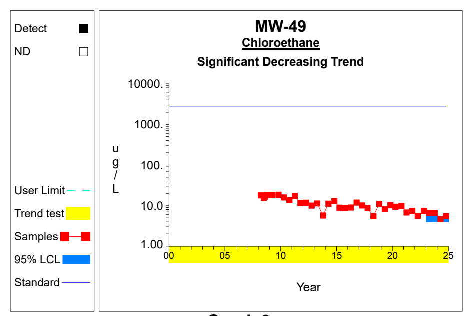
Graph 6



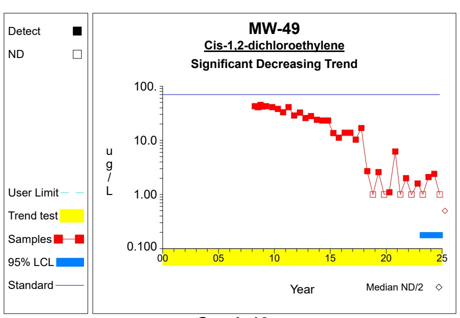
Graph 7



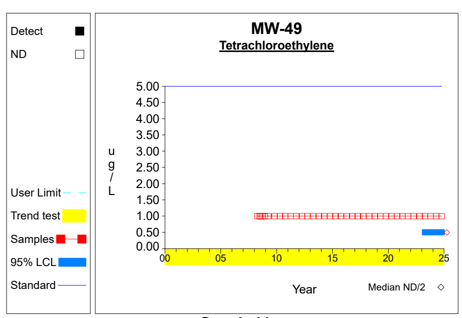
Graph 8



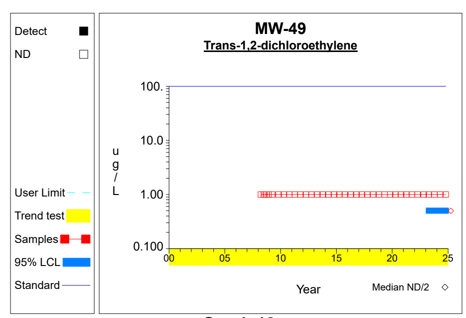
Graph 9



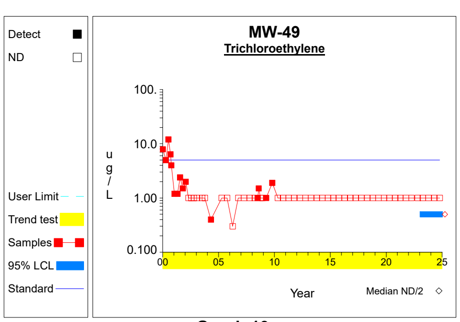
Graph 10



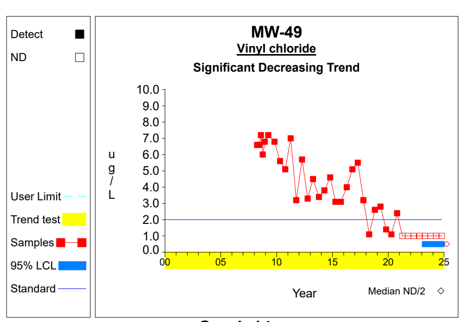
Graph 11



Graph 12



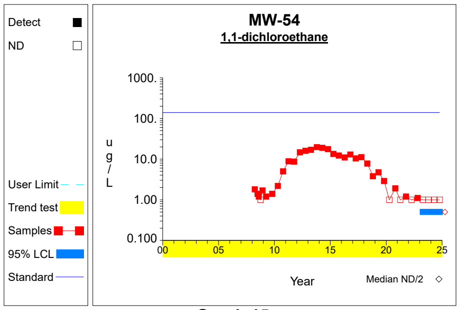
Graph 13



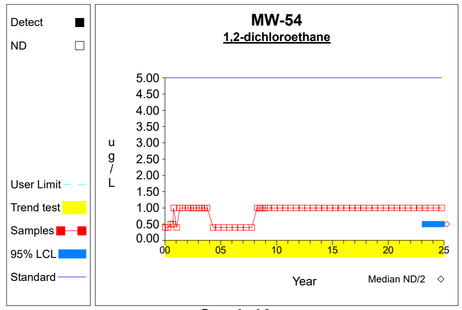
Graph 14

Prepared by: Otter Creek Environmental

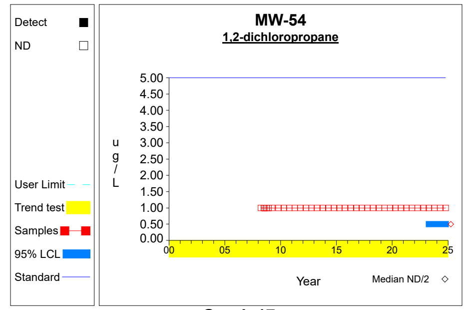
Confidence Limits (Assessment)



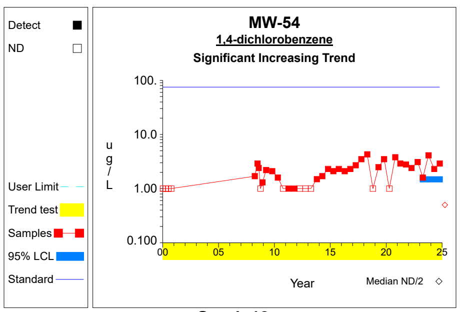
Graph 15



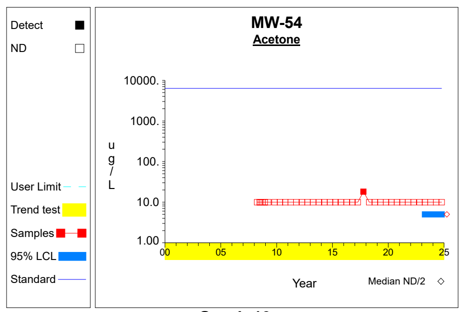
Graph 16



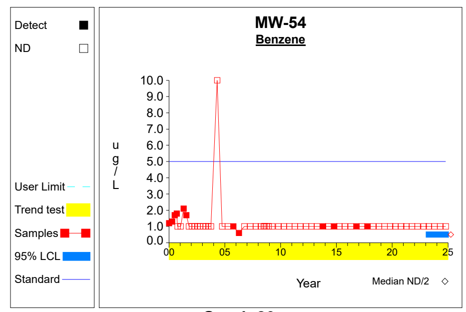
Graph 17



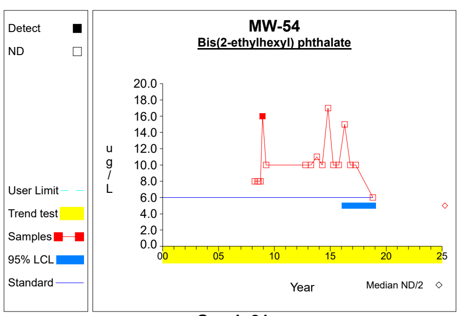
Graph 18



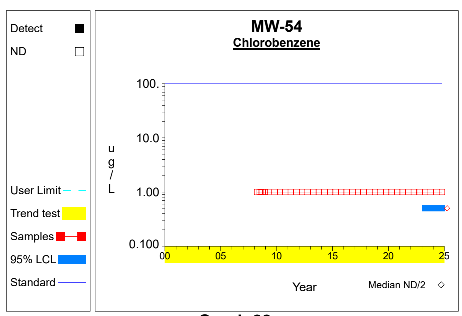
Graph 19



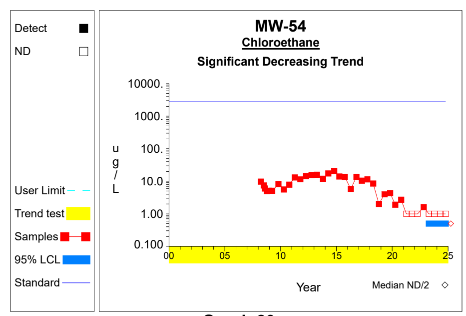
Graph 20



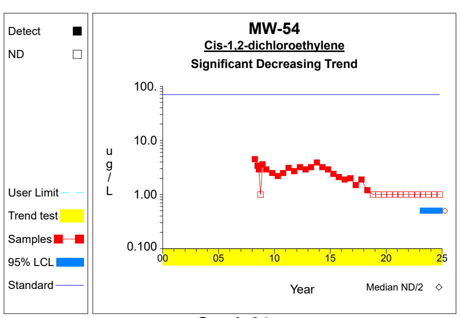
Graph 21



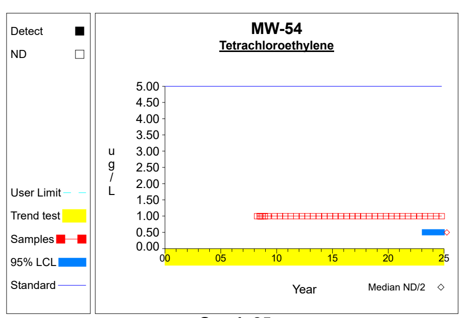
Graph 22



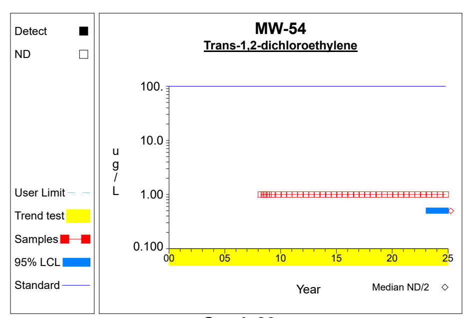
Graph 23



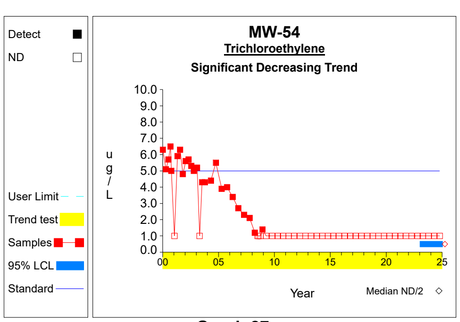
Graph 24



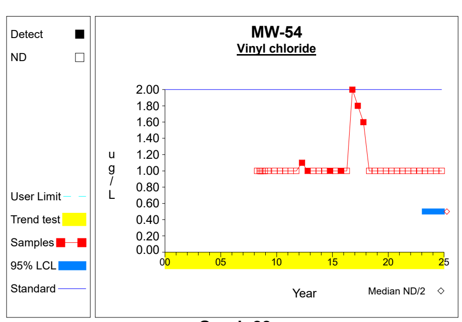
Graph 25



Graph 26

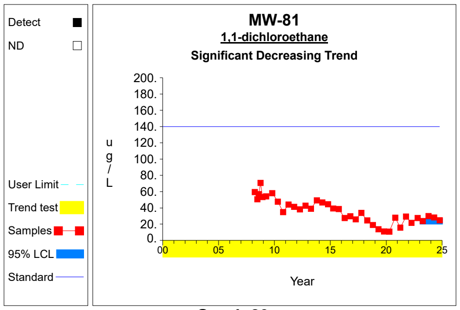


Graph 27

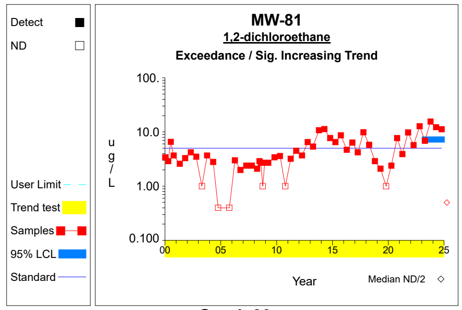


Graph 28

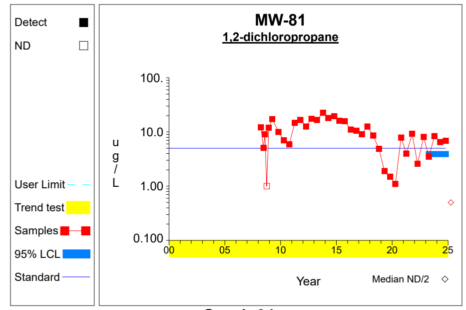
Confidence Limits (Assessment)



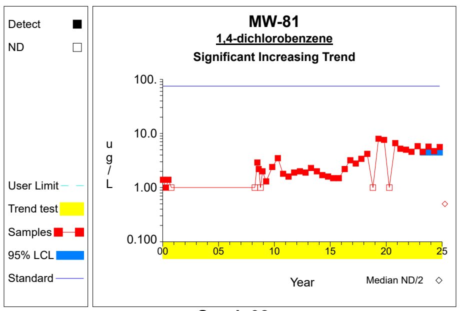
Graph 29



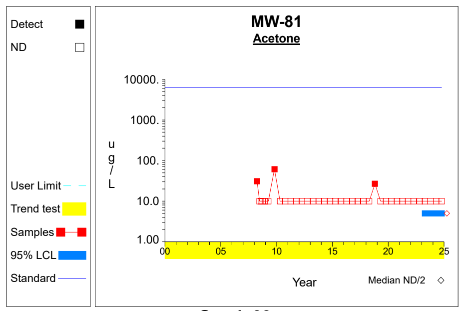
Graph 30



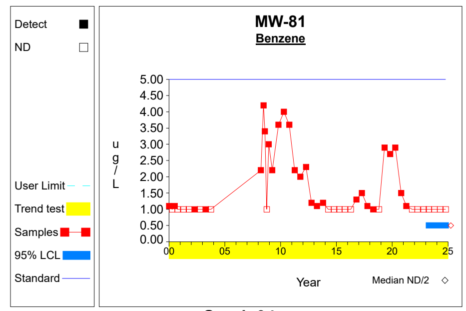
Graph 31



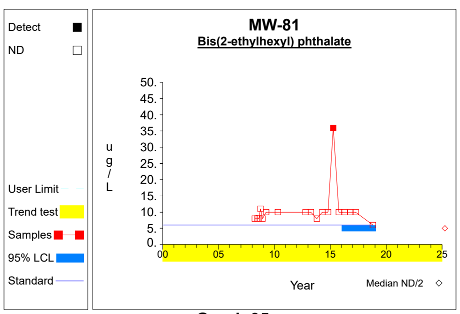
Graph 32



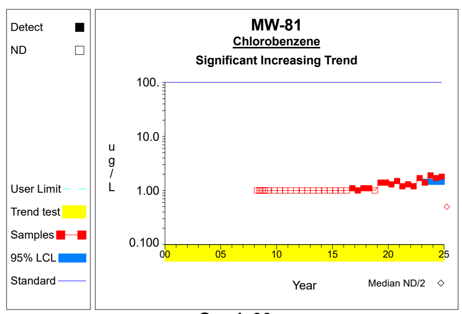
Graph 33



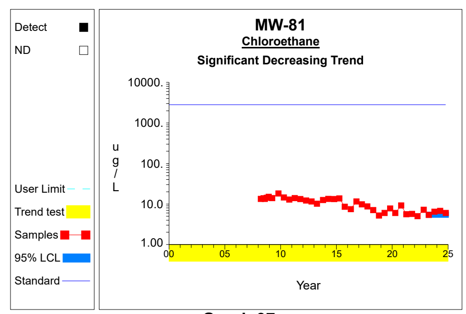
Graph 34



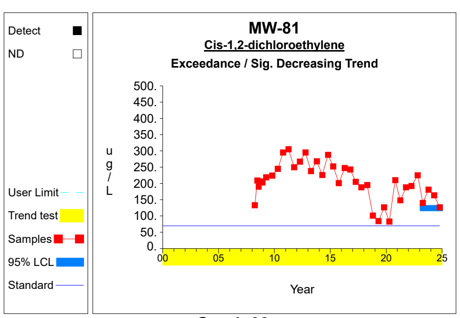
Graph 35



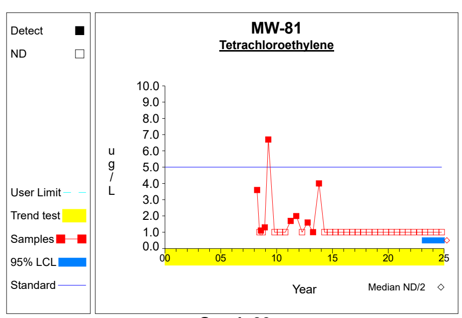
Graph 36



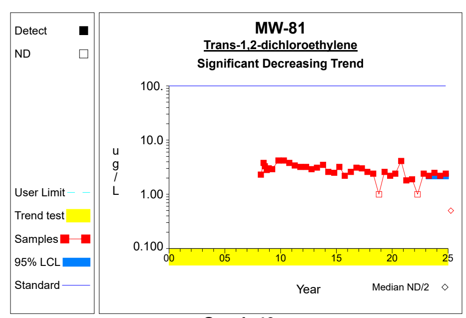
Graph 37



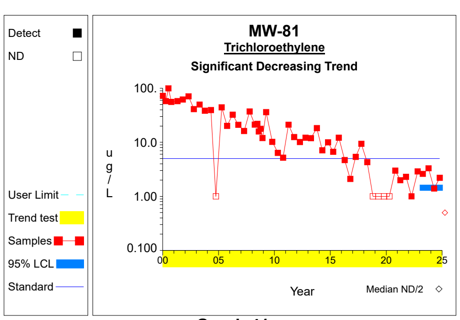
Graph 38



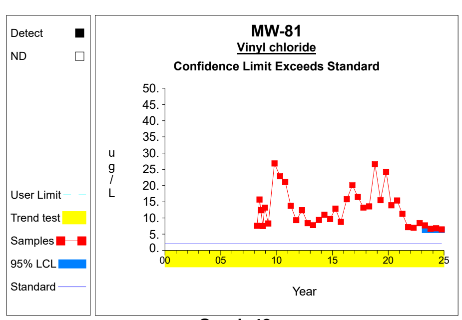
Graph 39



Graph 40

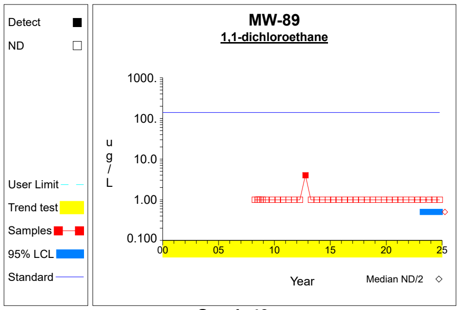


Graph 41

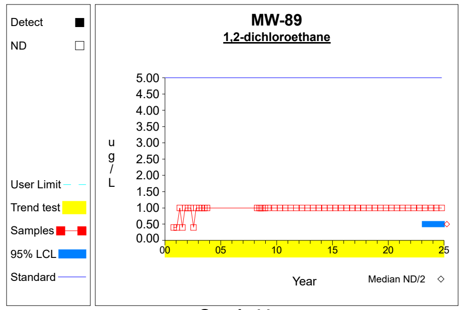


Graph 42

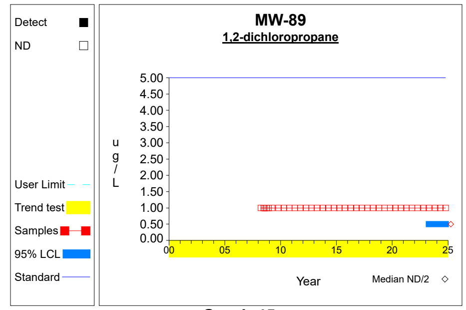
Confidence Limits (Assessment)



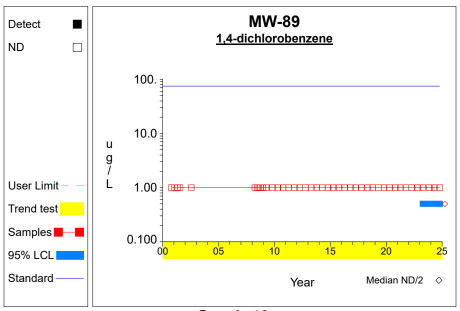
Graph 43



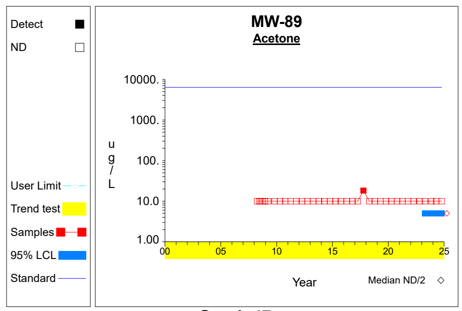
Graph 44



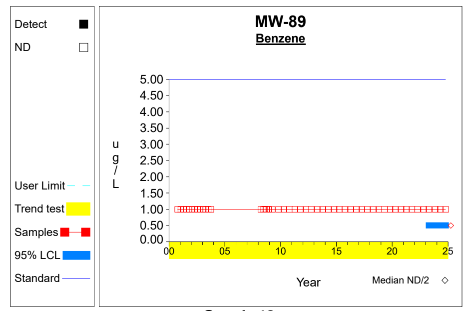
Graph 45



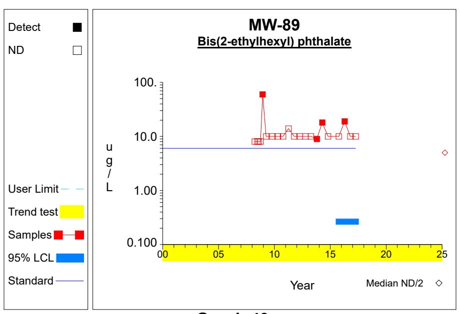
Graph 46



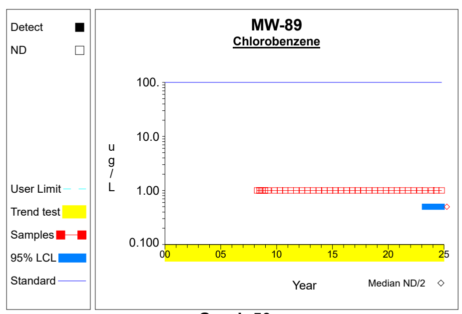
Graph 47



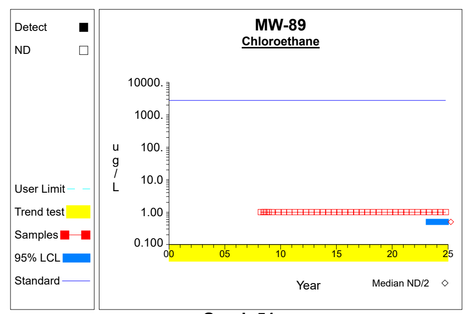
Graph 48



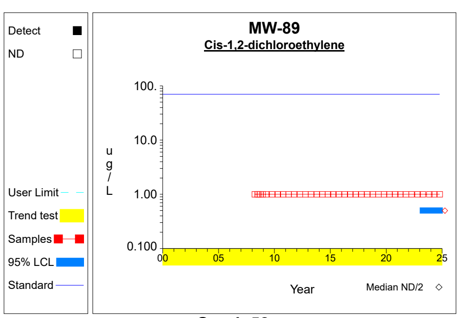
Graph 49



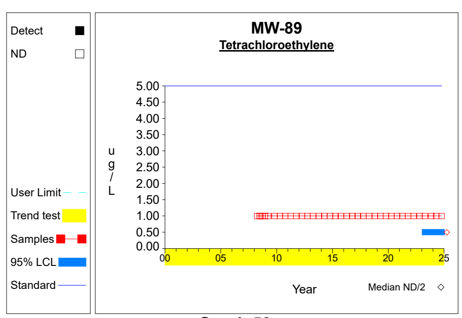
Graph 50



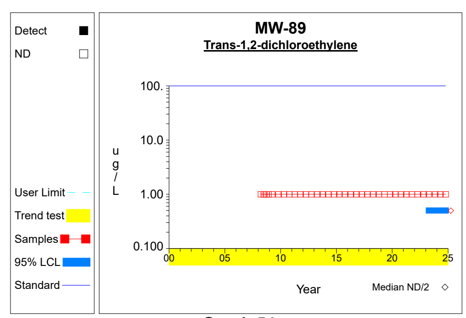
Graph 51



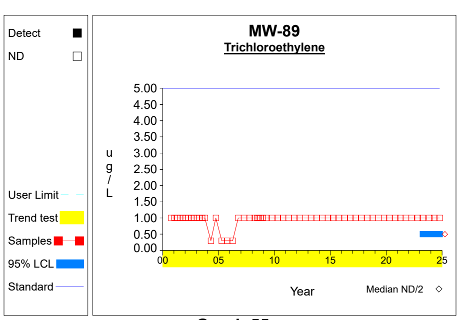
Graph 52



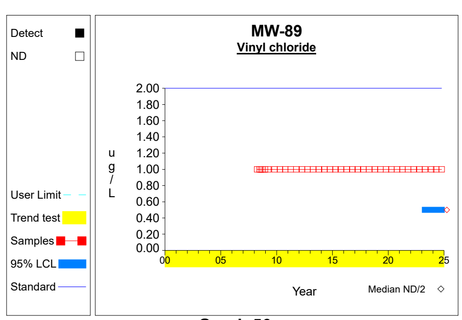
Graph 53



Graph 54

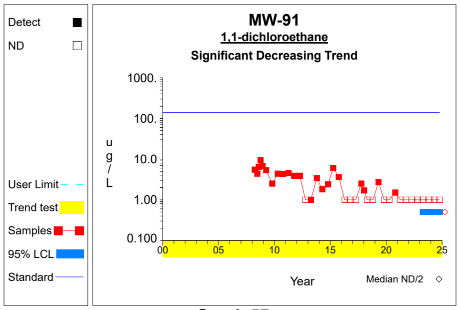


Graph 55

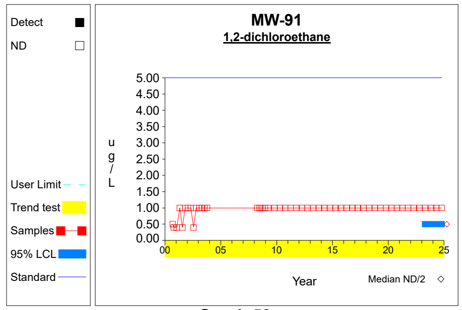


Graph 56

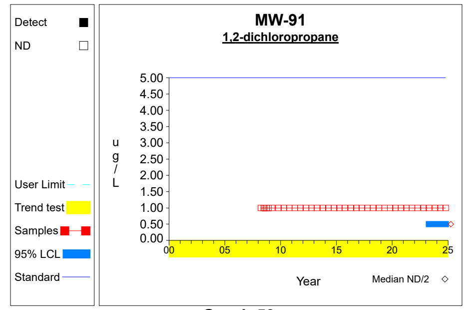
Confidence Limits (Assessment)



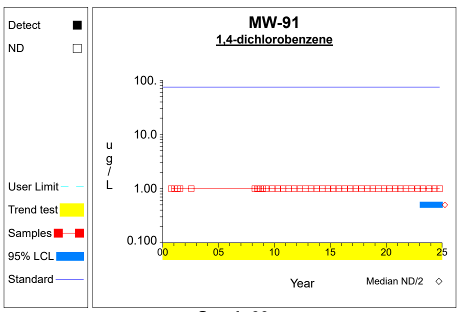
Graph 57



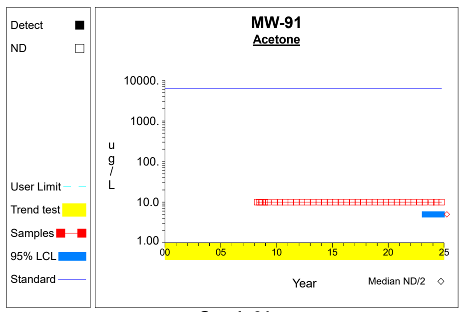
Graph 58



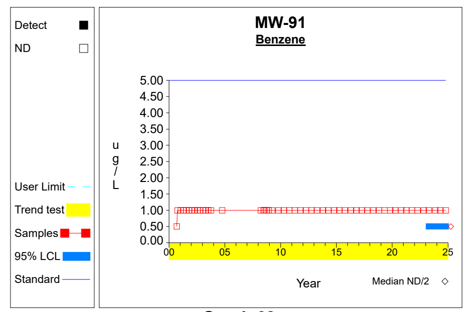
Graph 59



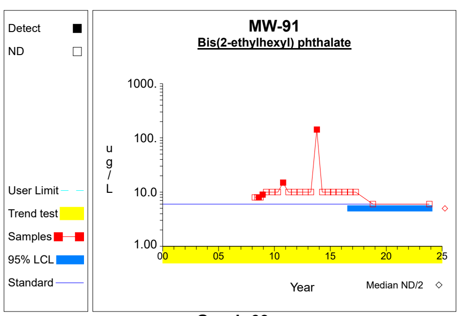
Graph 60



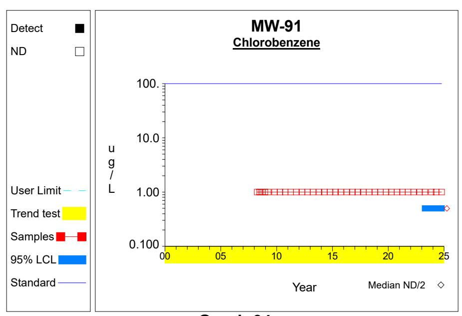
Graph 61



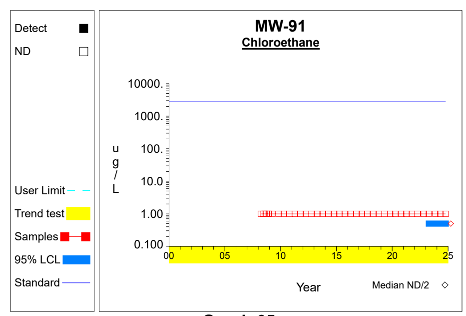
Graph 62



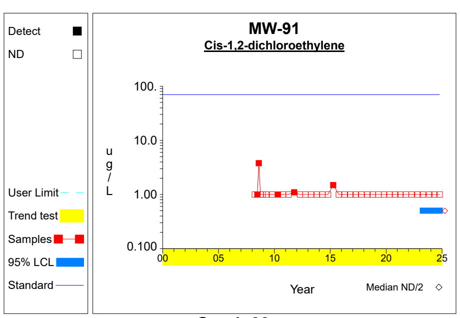
Graph 63



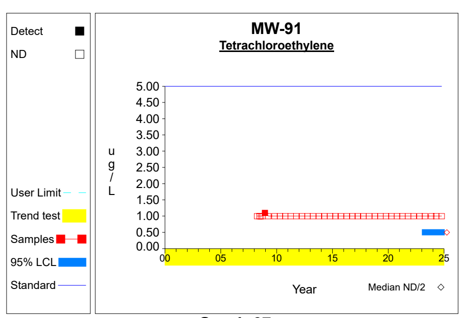
Graph 64



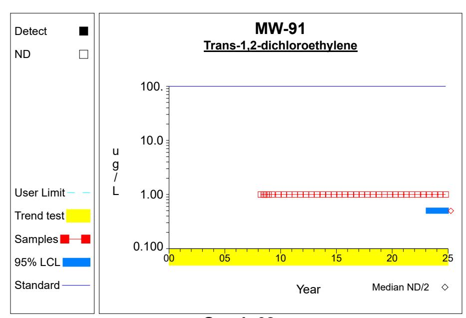
Graph 65



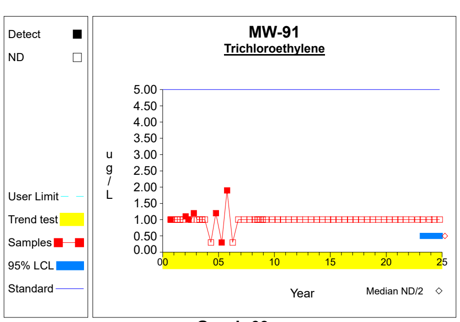
Graph 66



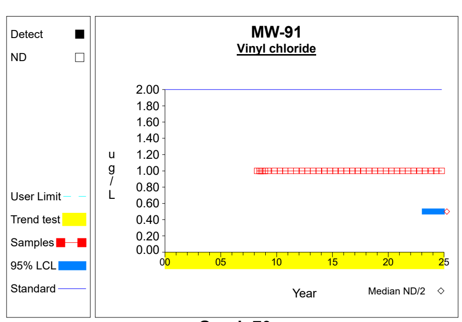
Graph 67



Graph 68

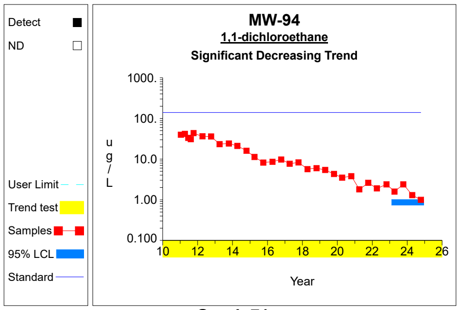


Graph 69

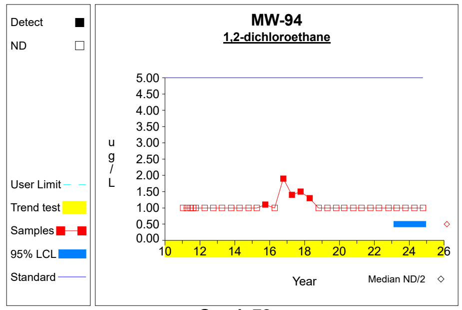


Graph 70

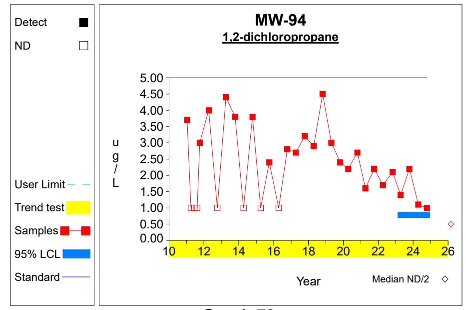
Confidence Limits (Assessment)



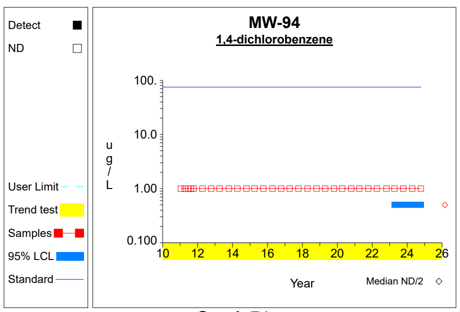
Graph 71



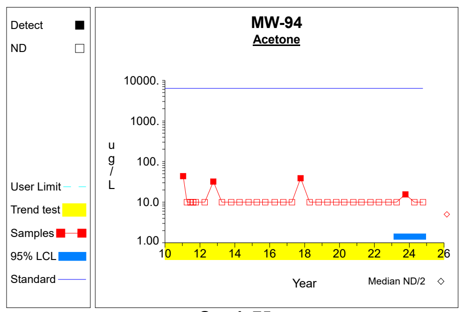
Graph 72



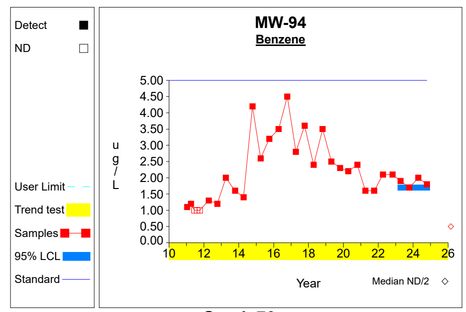
Graph 73



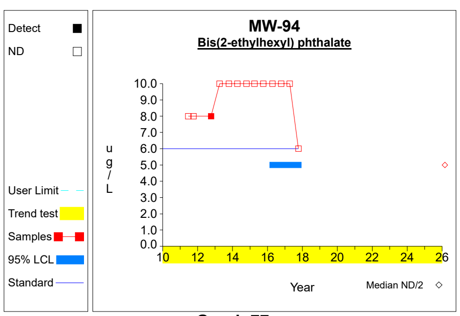
Graph 74



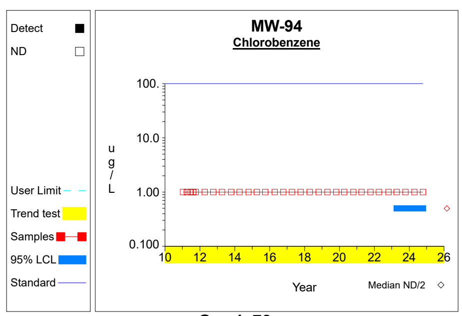
Graph 75



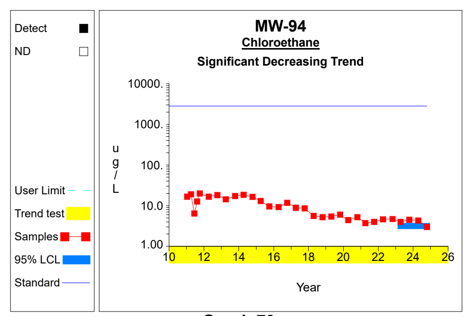
Graph 76



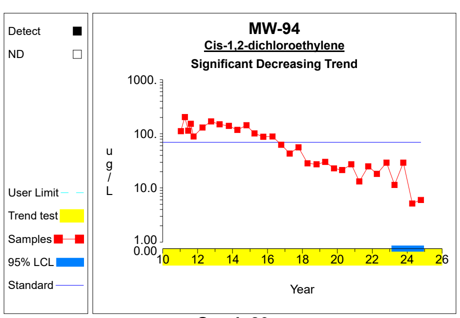
Graph 77



Graph 78



Graph 79



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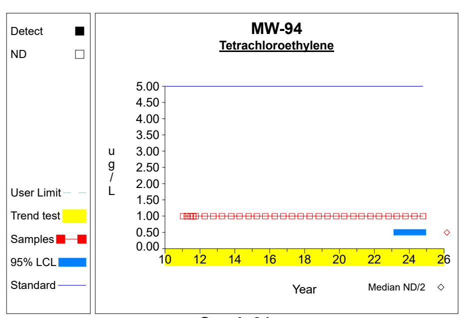
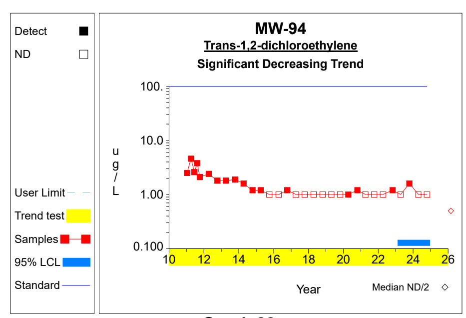
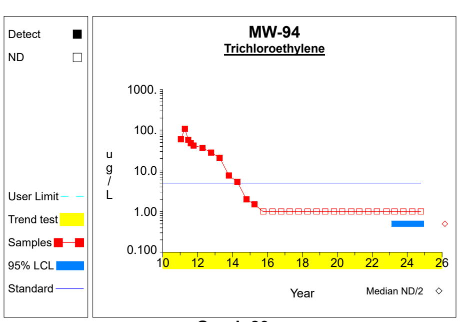


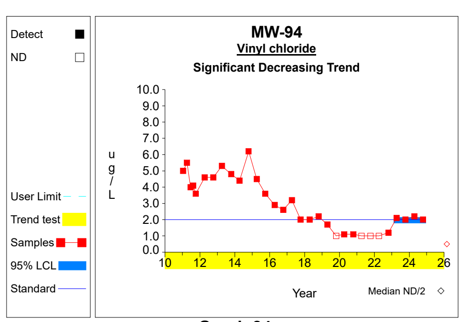
Graph 81



Graph 82

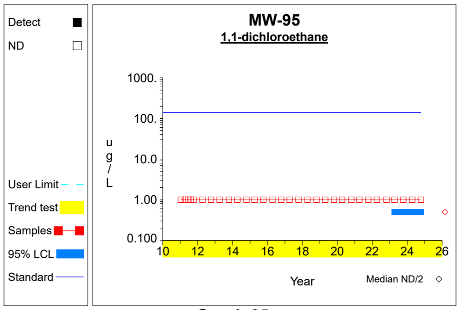


Graph 83

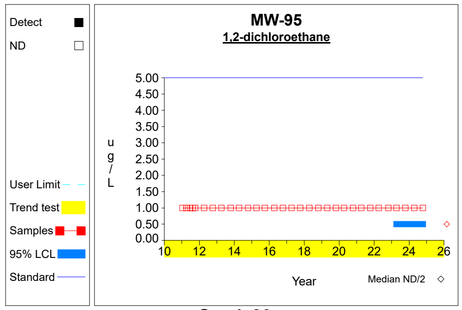


Graph 84

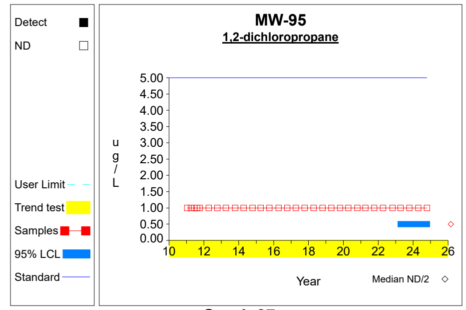
Confidence Limits (Assessment)



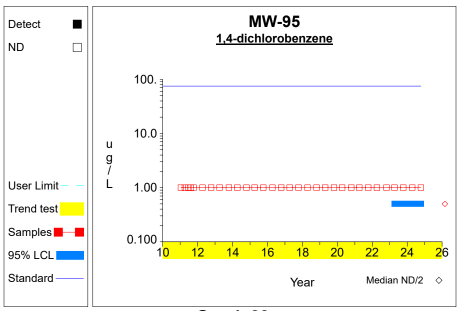
Graph 85



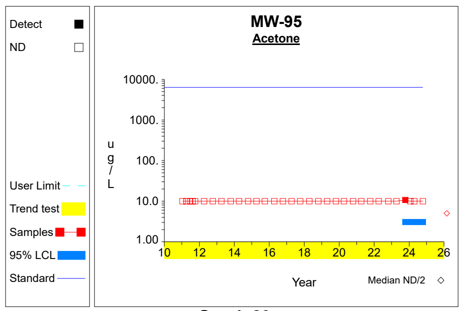
Graph 86



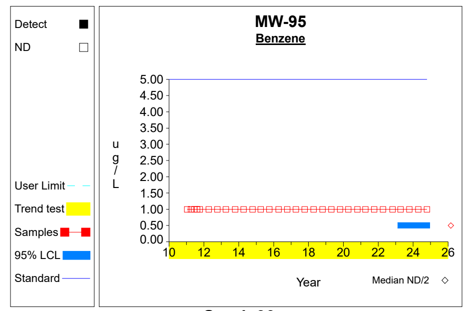
Graph 87



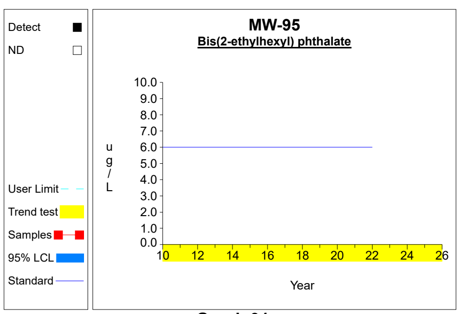
Graph 88



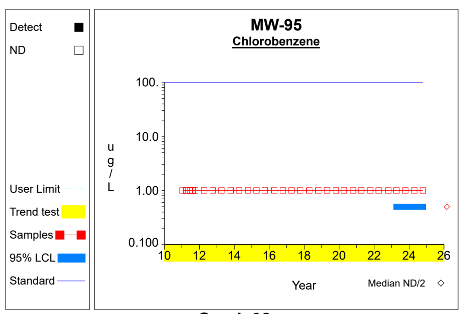
Graph 89



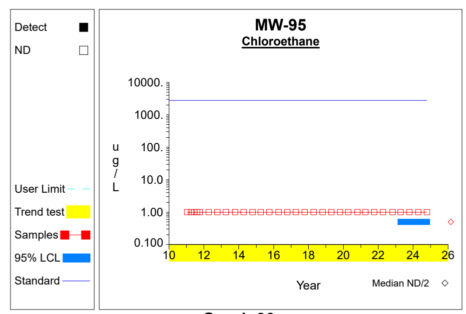
Graph 90



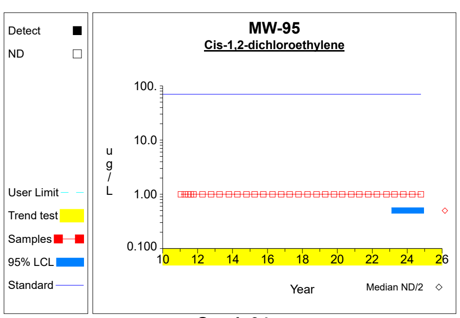
Graph 91



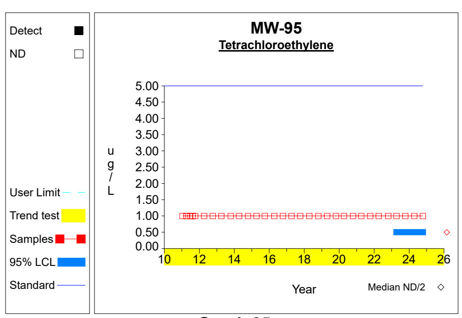
Graph 92



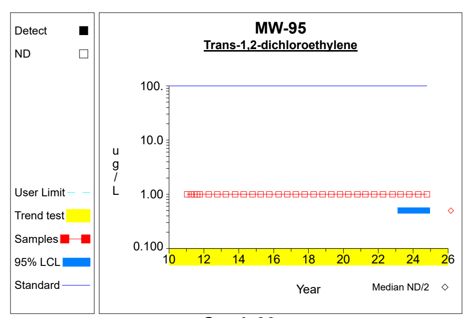
Graph 93



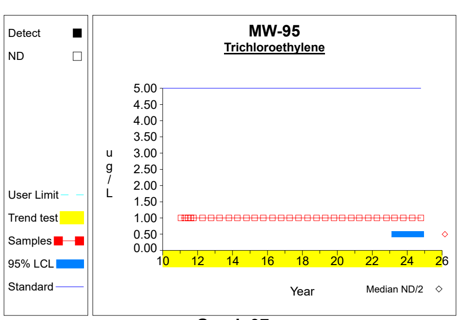
Graph 94



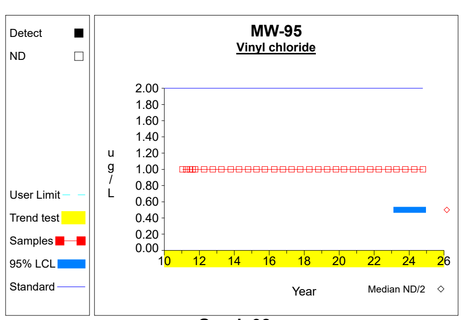
Graph 95



Graph 96

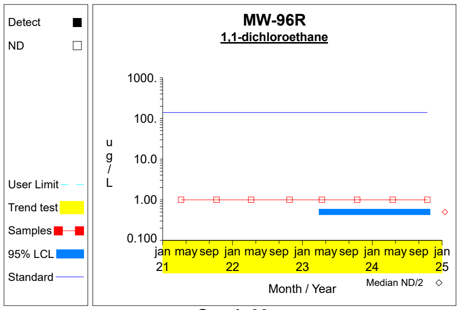


Graph 97

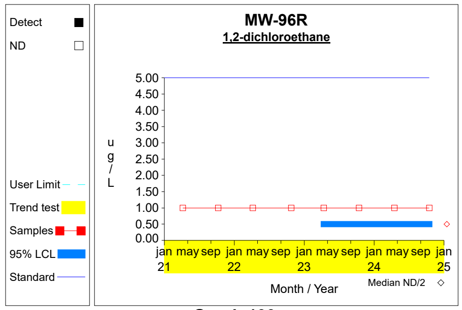


Graph 98

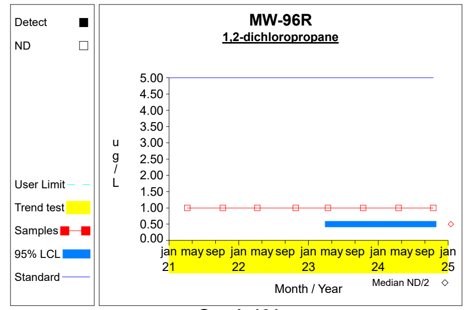
Confidence Limits (Assessment)



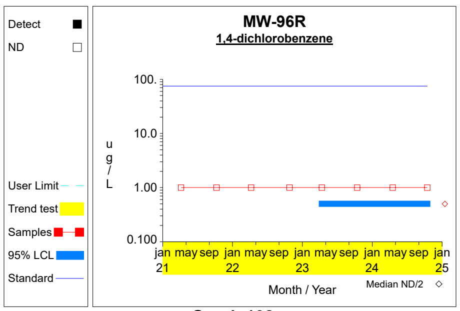
Graph 99



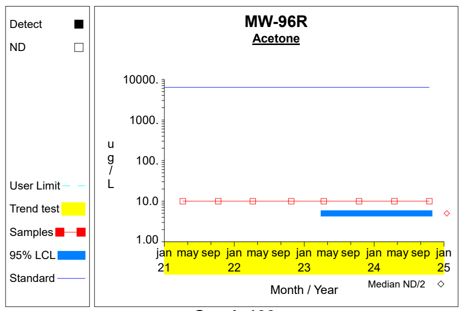
Graph 100



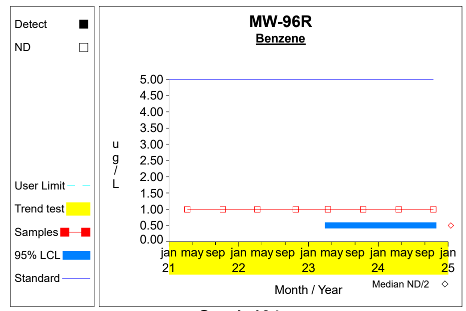
Graph 101



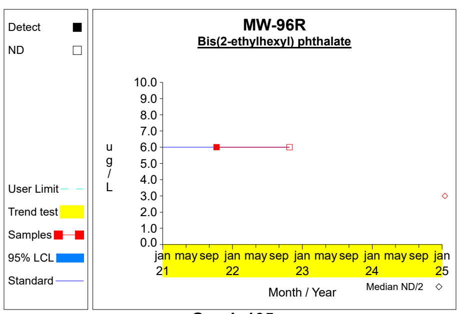
Graph 102



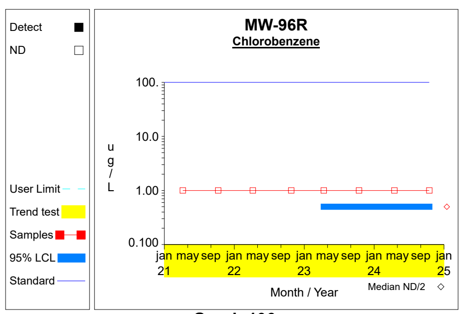
Graph 103



Graph 104



Graph 105



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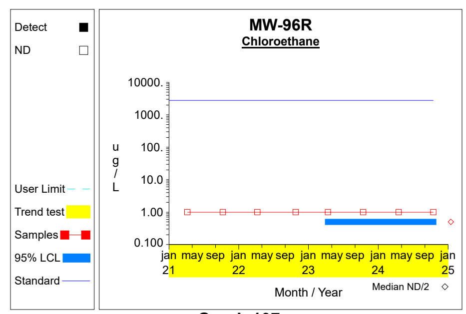
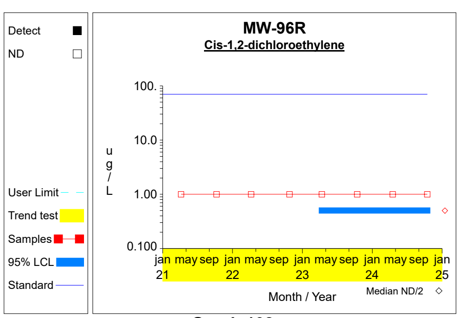


Graph 107



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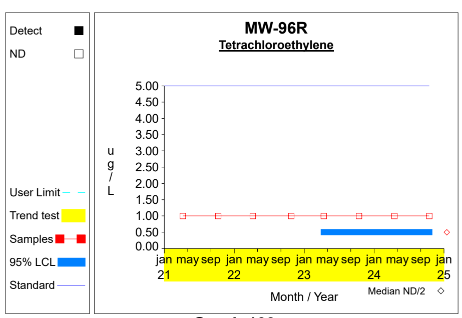
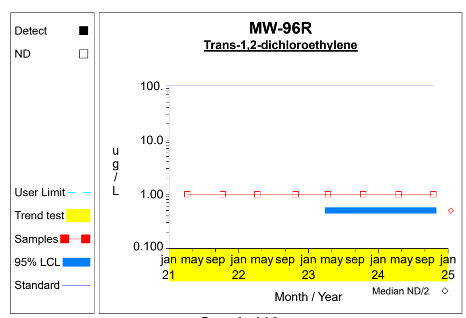
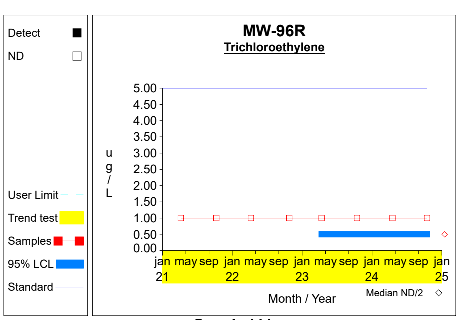


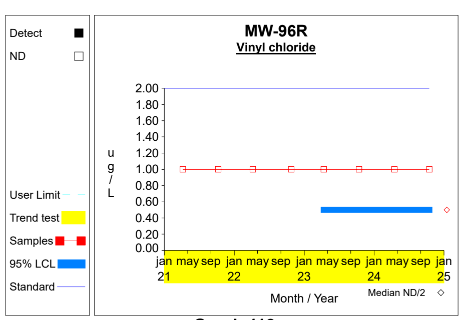
Graph 109



Graph 110



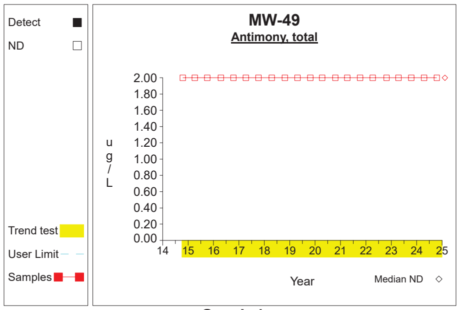
Graph 111



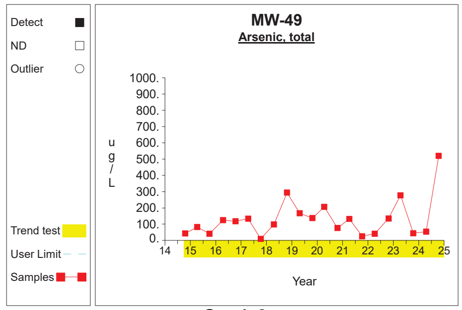
Graph 112

Appendix B.3 – Time Series Graphs/Trend Evaluation – Supplemental Wells

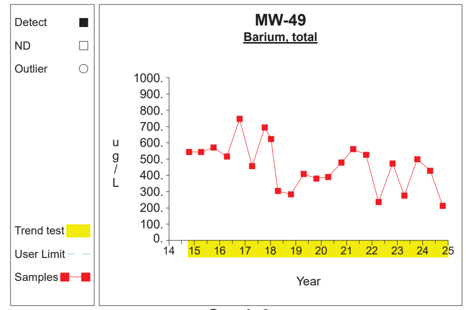
Time Series



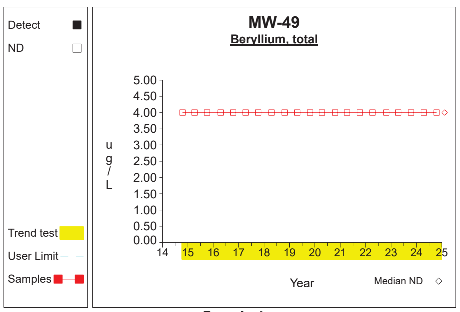
Graph 1



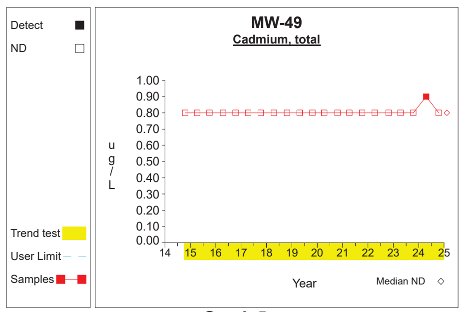
Graph 2



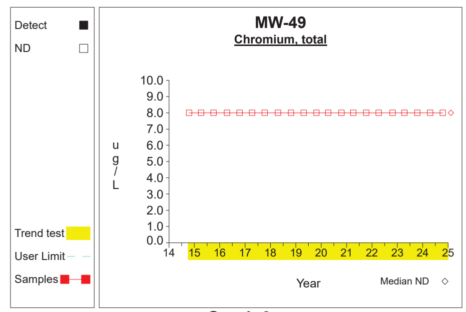
Graph 3



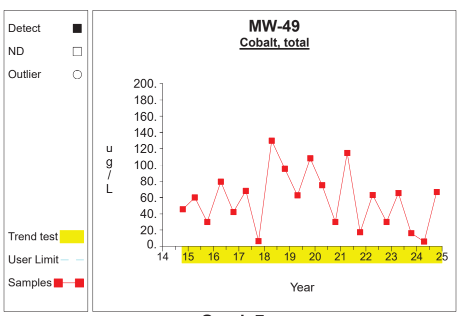
Graph 4



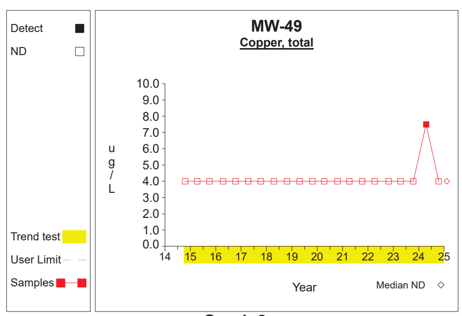
Graph 5



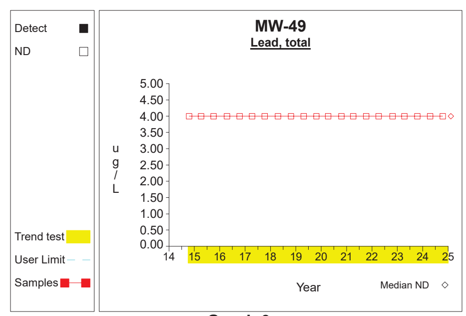
Graph 6



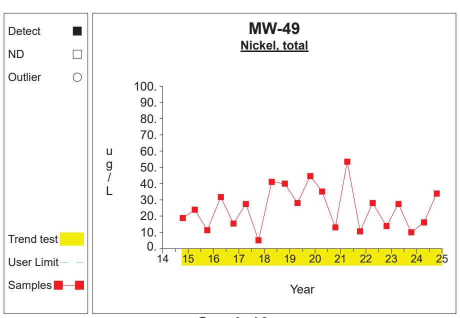
Graph 7



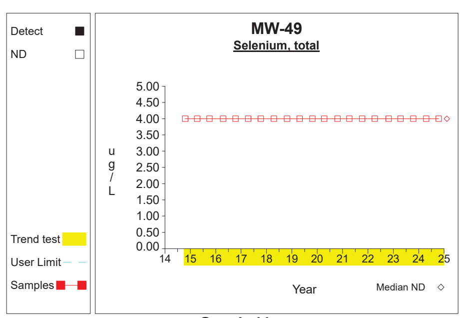
Graph 8



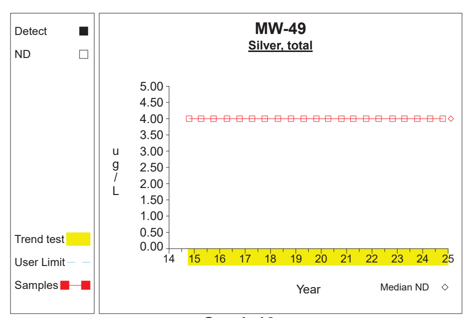
Graph 9



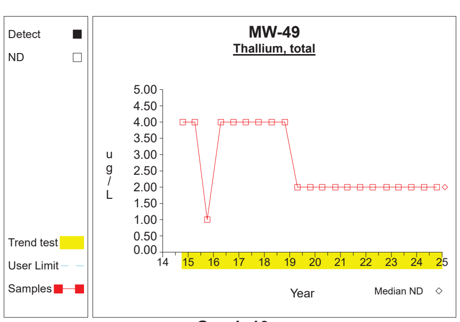
Graph 10



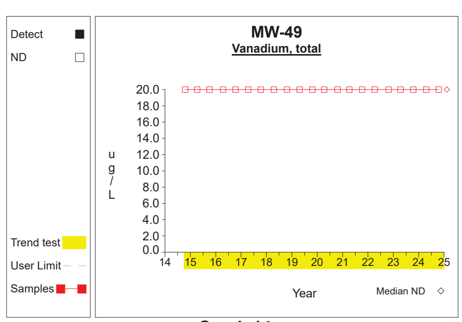
Graph 11



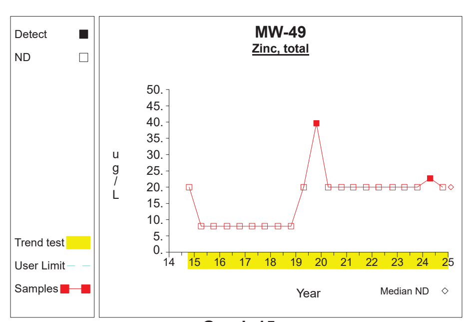
Graph 12



Graph 13

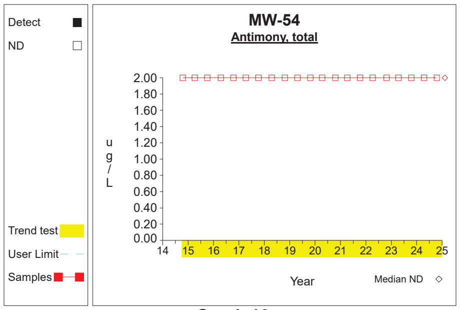


Graph 14

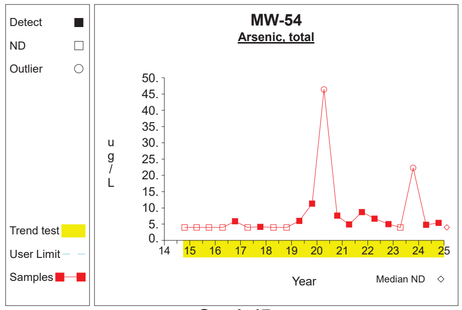


Graph 15

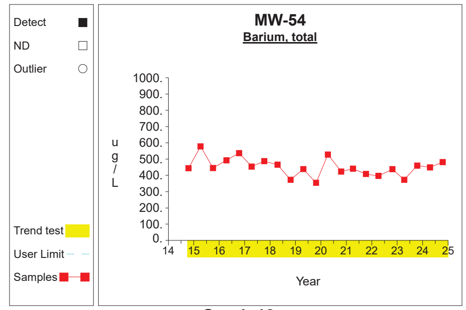
Time Series



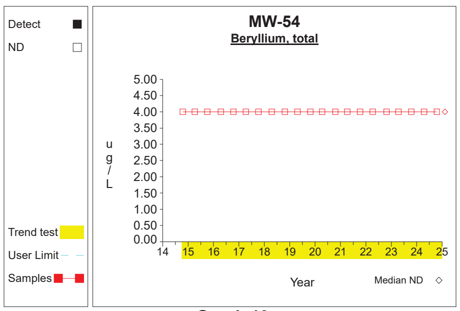
Graph 16



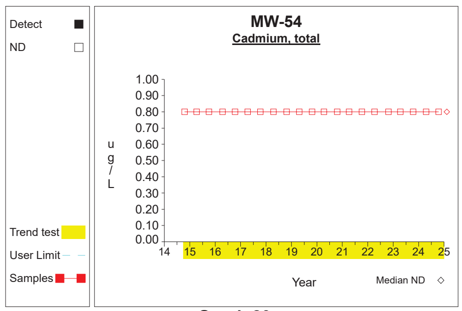
Graph 17



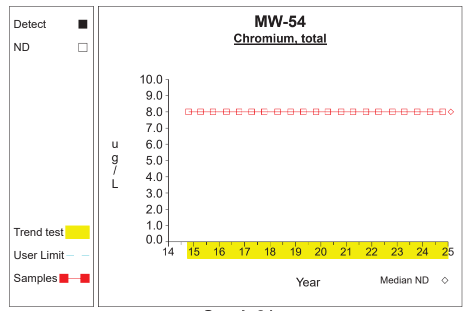
Graph 18



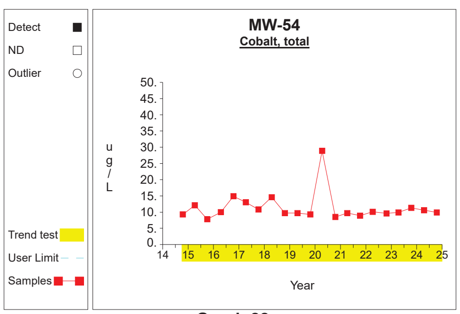
Graph 19



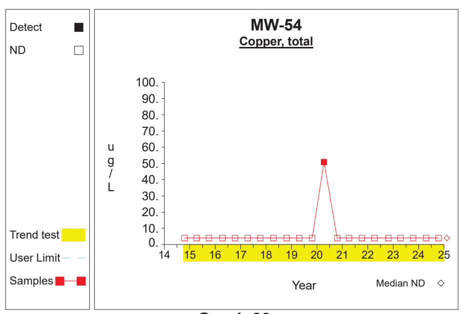
Graph 20



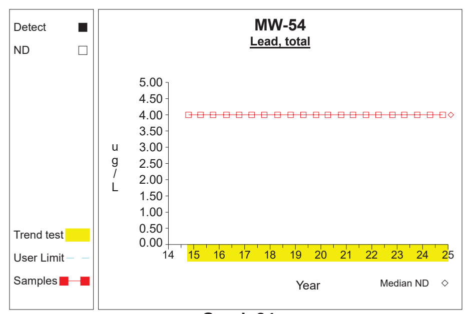
Graph 21



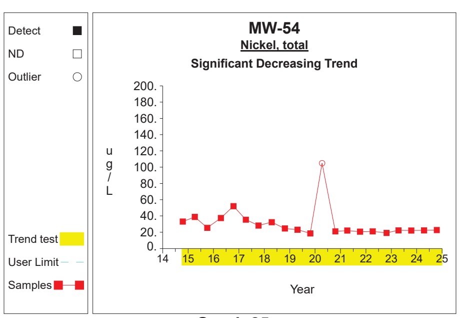
Graph 22



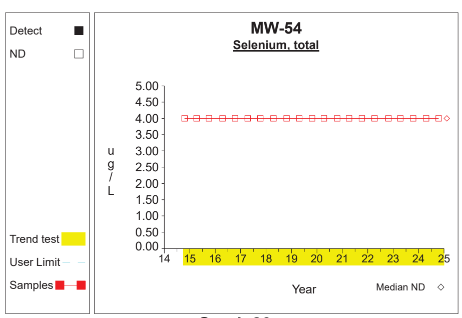
Graph 23



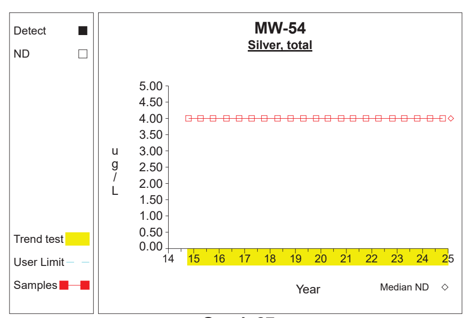
Graph 24



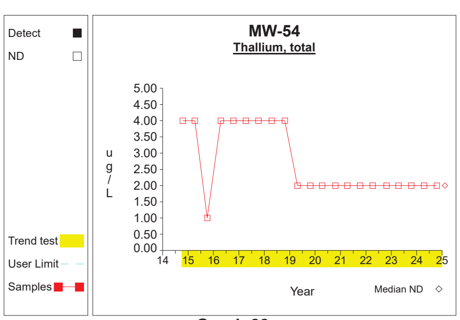
Graph 25



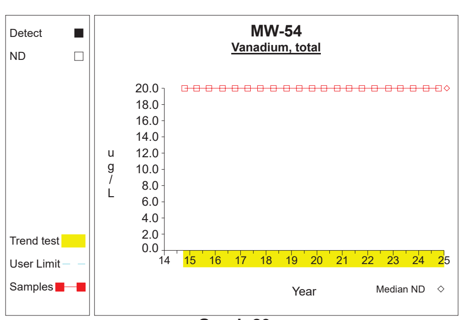
Graph 26



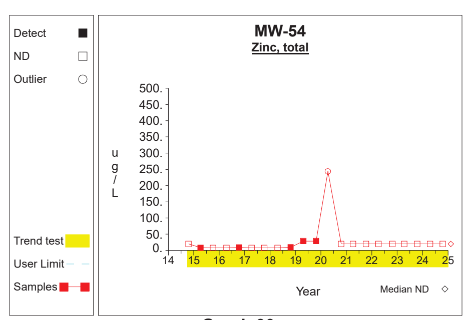
Graph 27



Graph 28

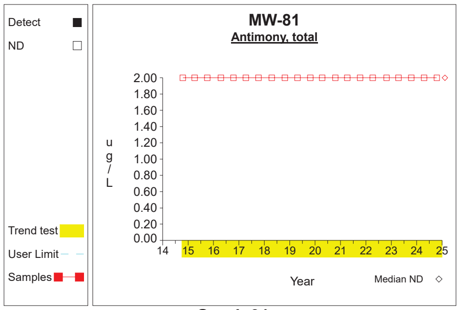


Graph 29

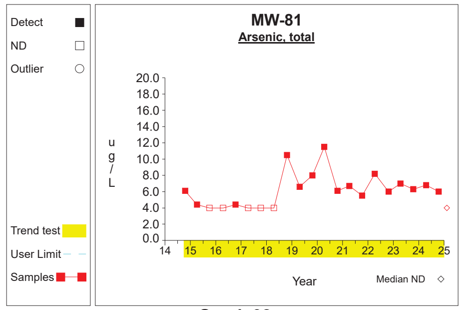


Graph 30

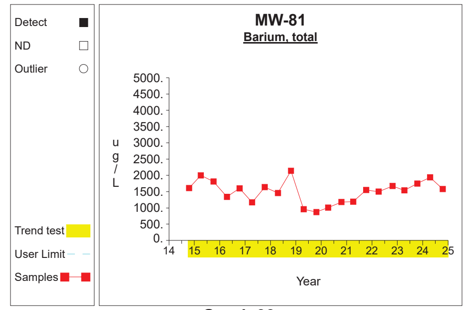
Time Series



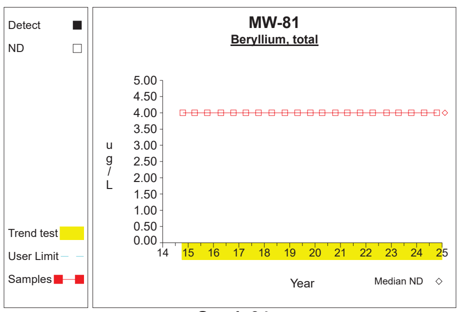
Graph 31



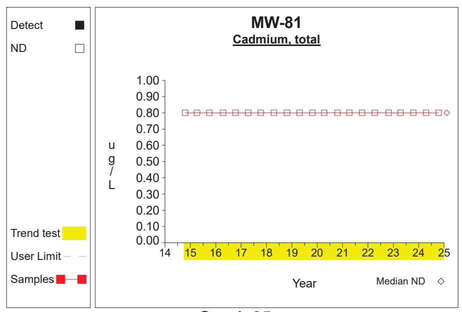
Graph 32



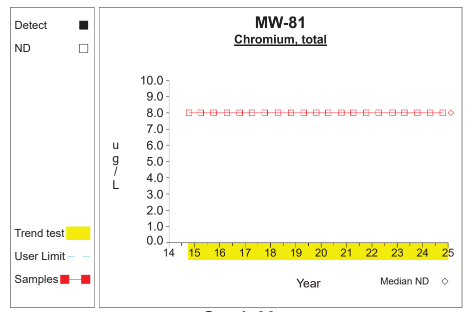
Graph 33



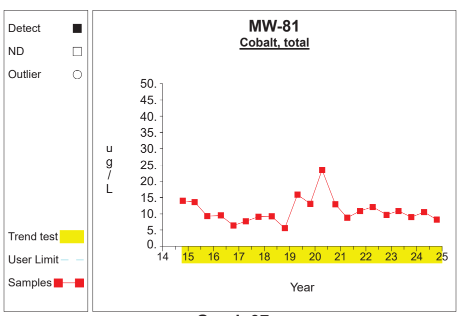
Graph 34



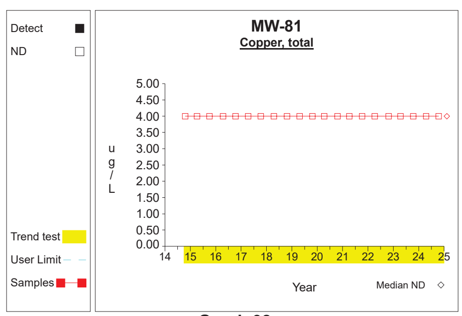
Graph 35



Graph 36



Graph 37



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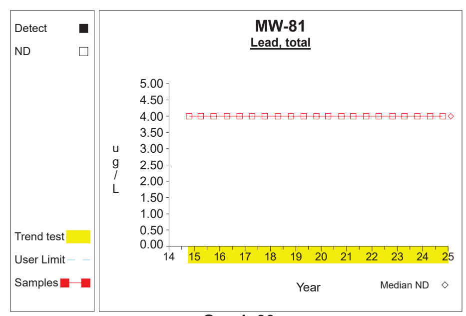
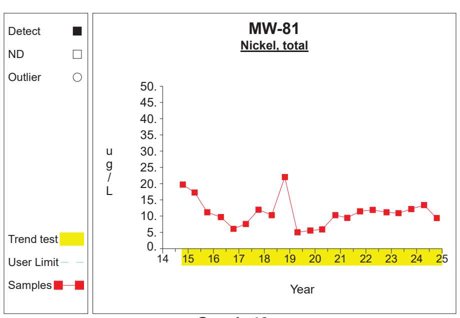


Graph 39



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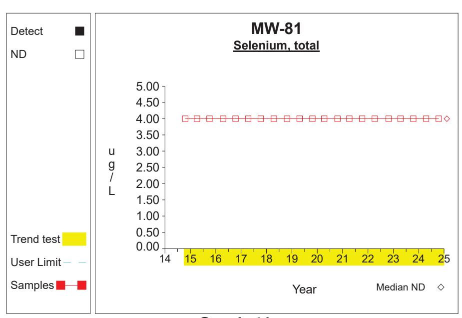

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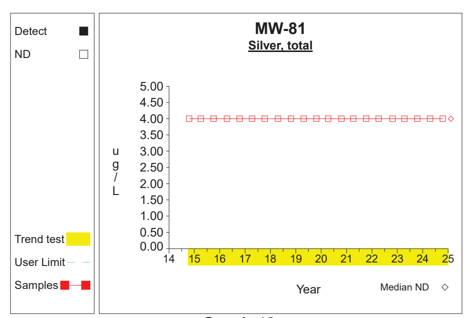

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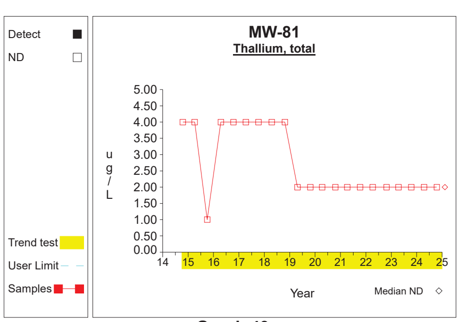

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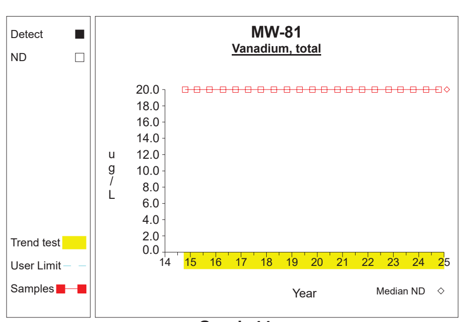
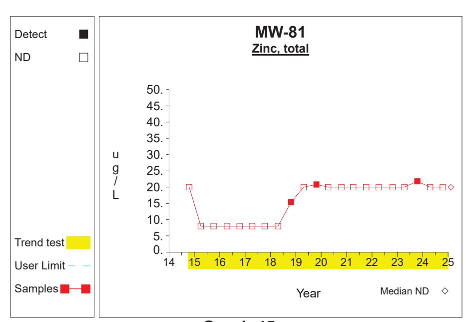
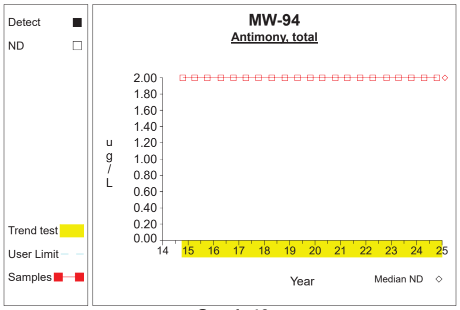


Graph 44



Graph 45

Time Series



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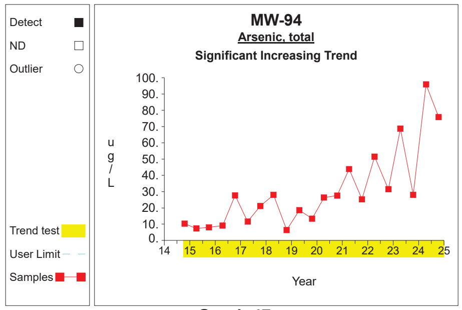

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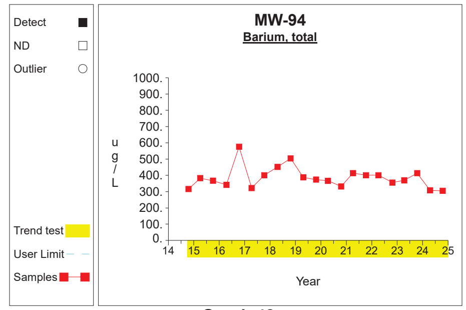
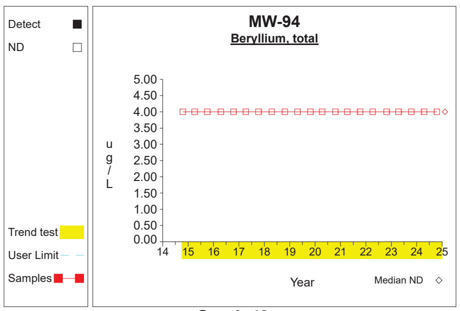
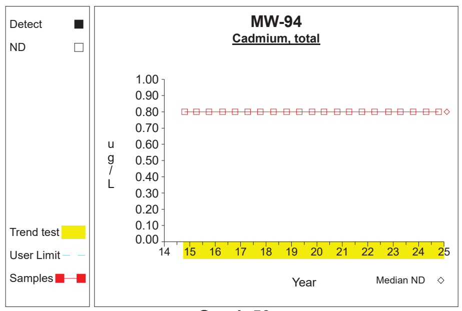


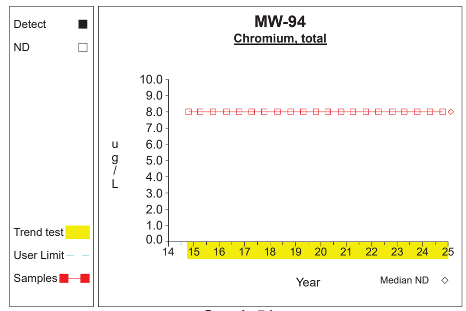
Graph 48



Graph 49



Graph 50



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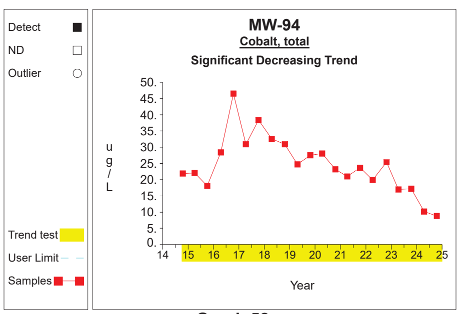

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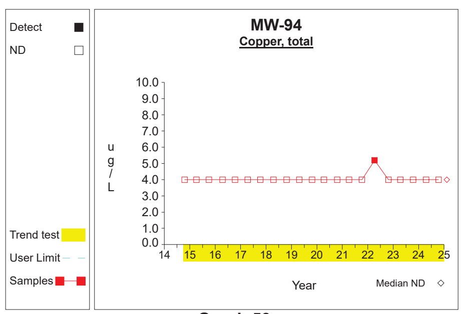

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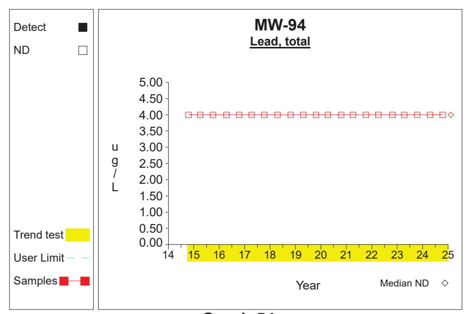

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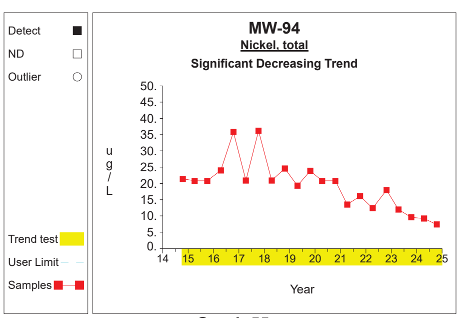

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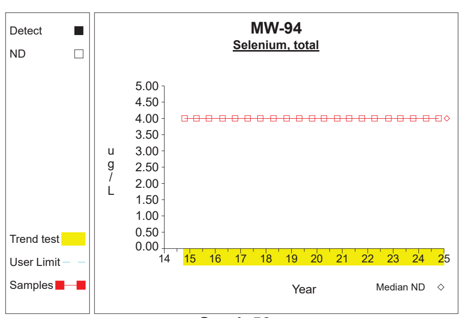

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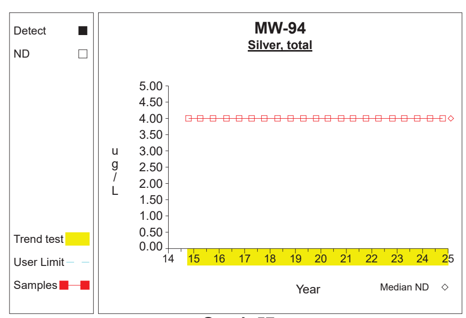
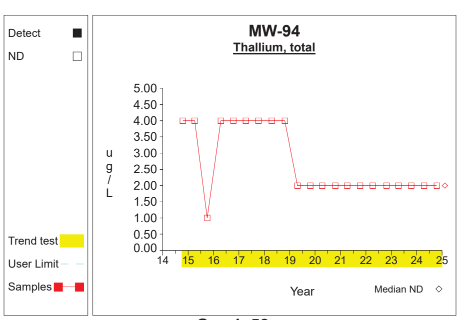


Graph 57



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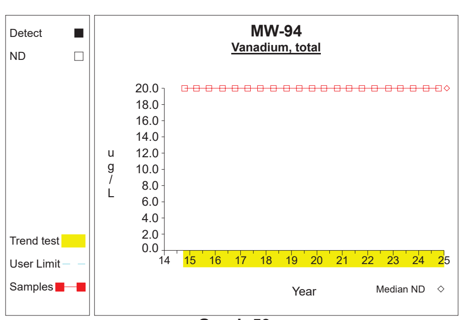
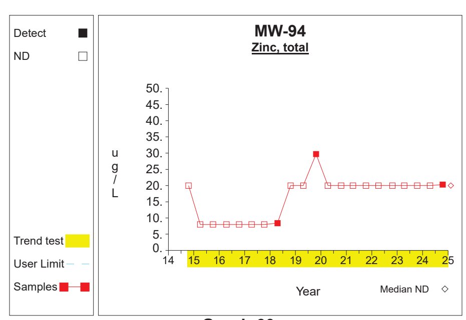
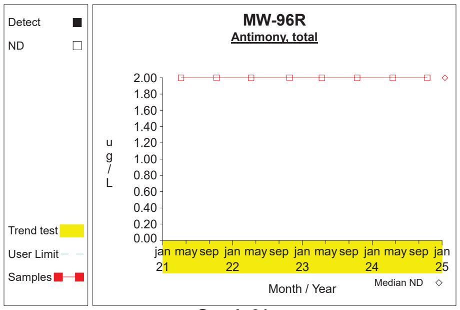


Graph 59

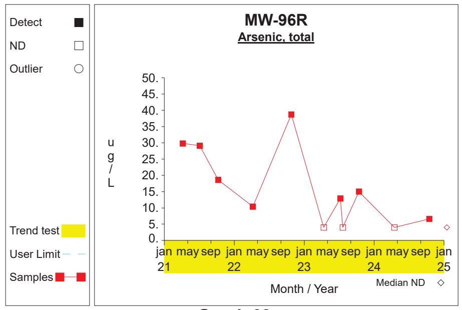


Graph 60

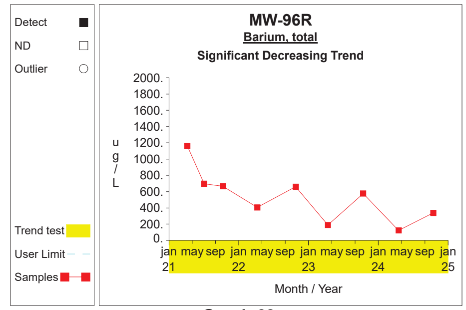
Time Series



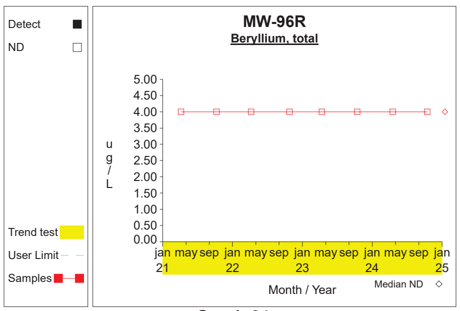
Graph 61



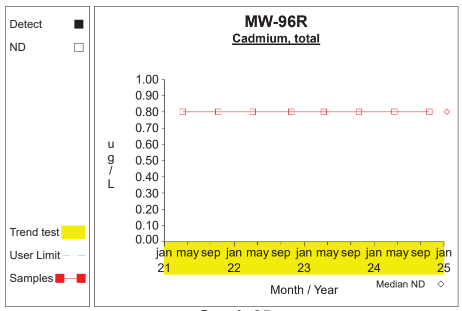
Graph 62



Graph 63



Graph 64



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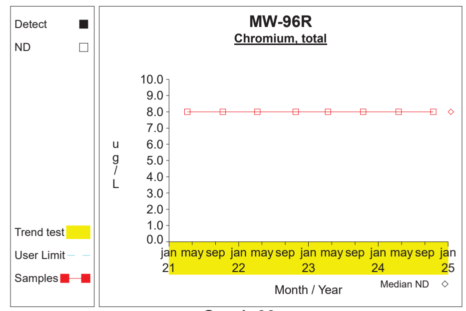
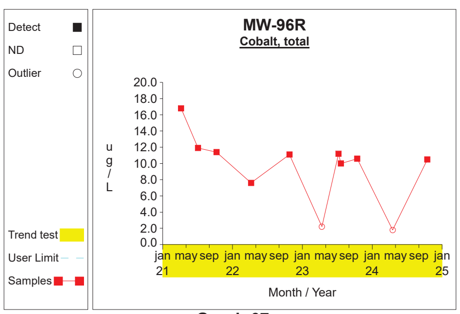


Graph 66



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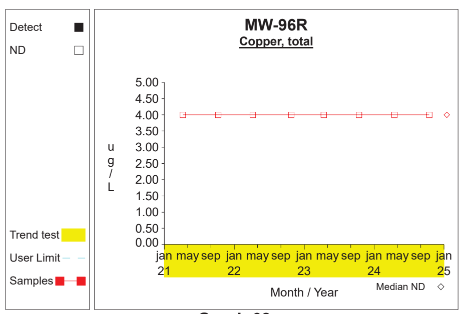

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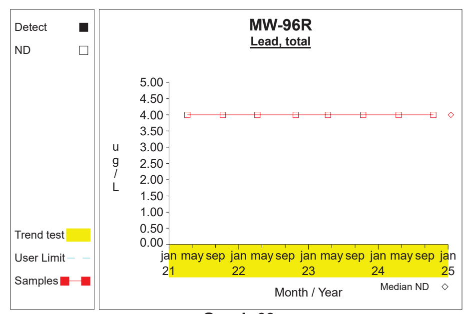

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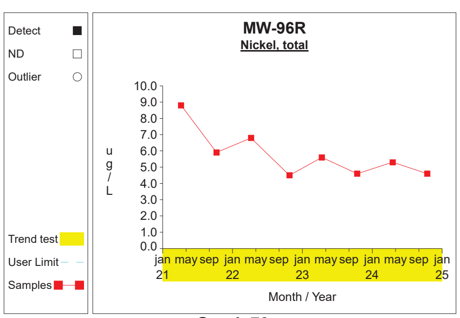

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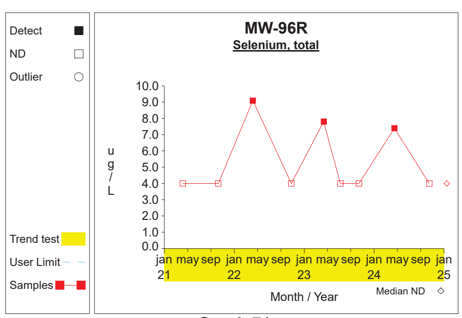

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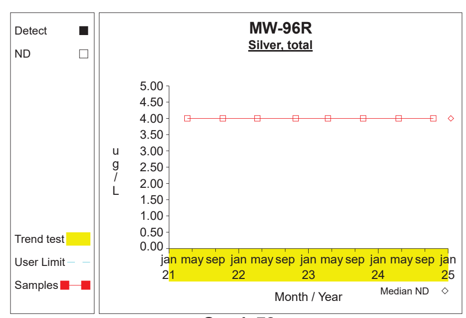

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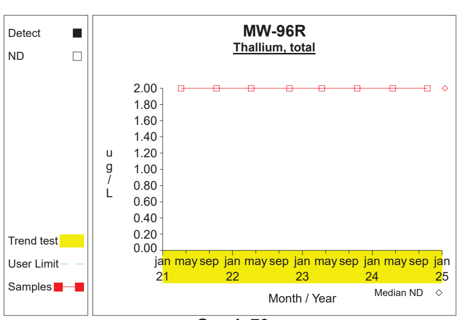

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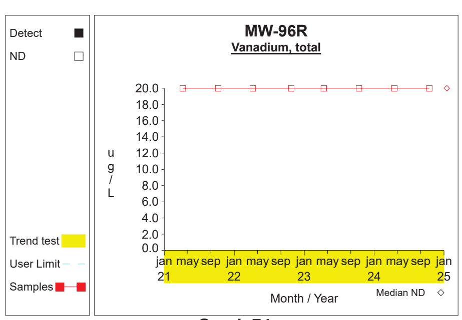
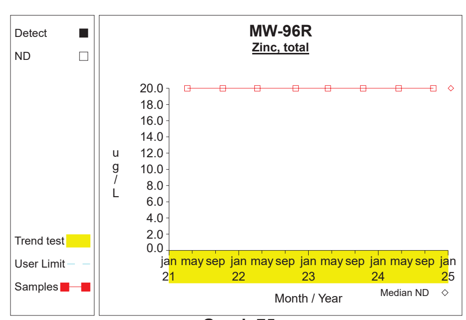
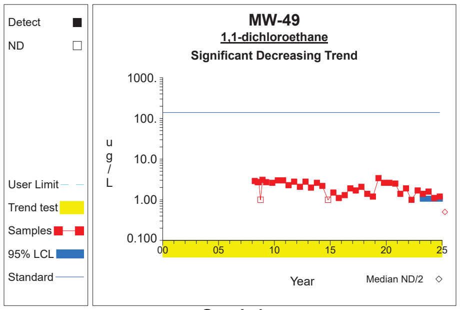


Graph 74

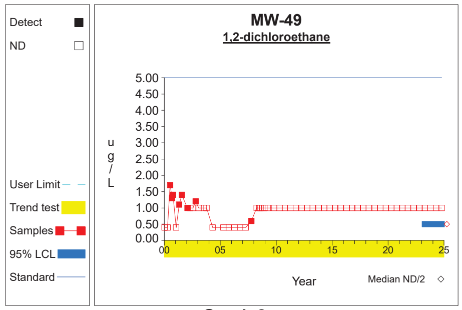


Graph 75

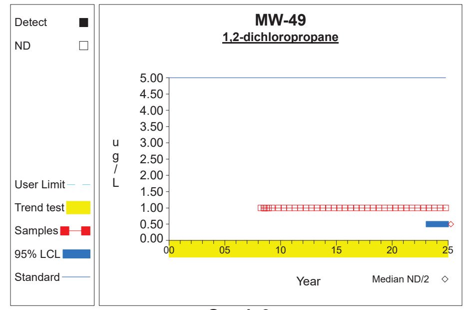
Confidence Limits (Assessment)



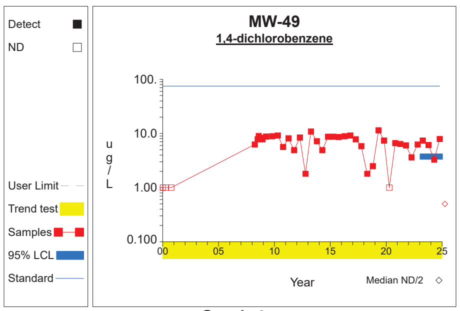
Graph 1



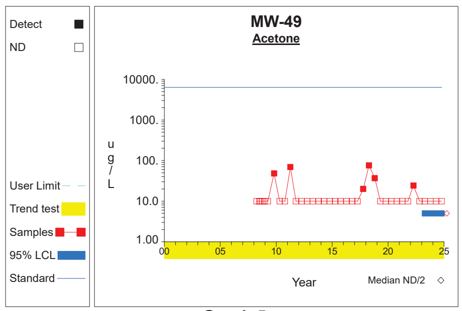
Graph 2



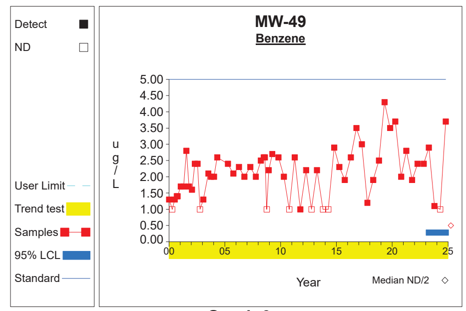
Graph 3



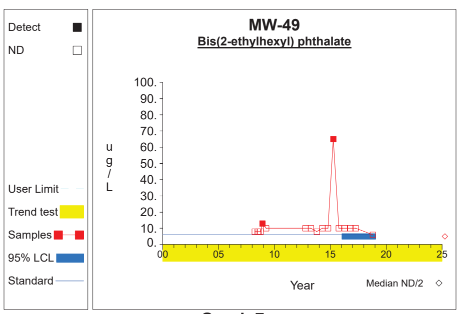
Graph 4



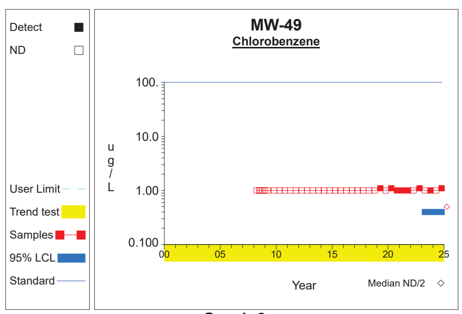
Graph 5



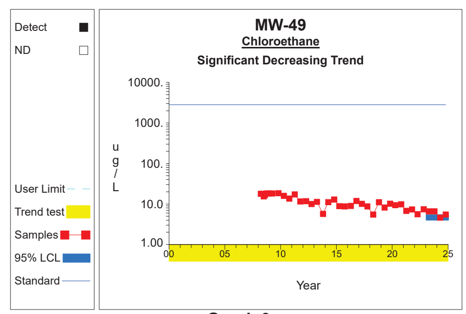
Graph 6



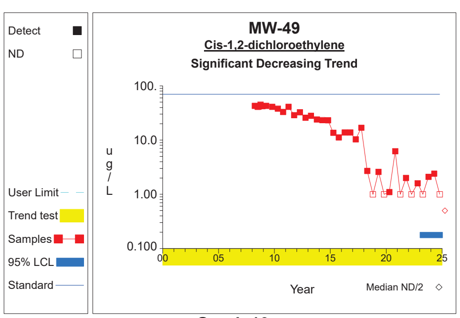
Graph 7



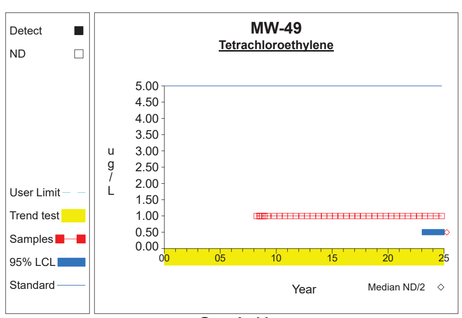
Graph 8



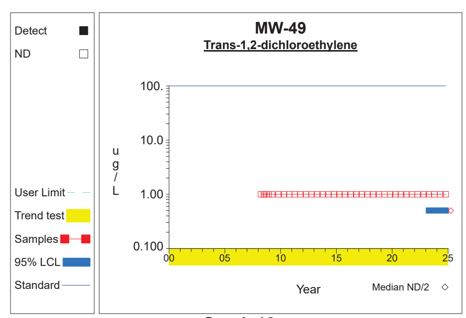
Graph 9



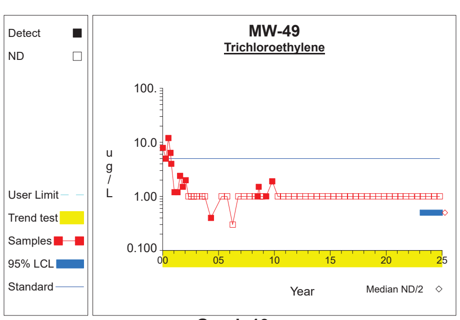
Graph 10



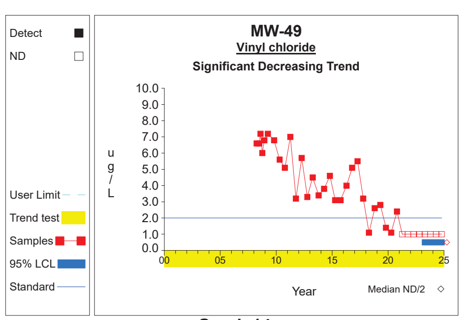
Graph 11



Graph 12

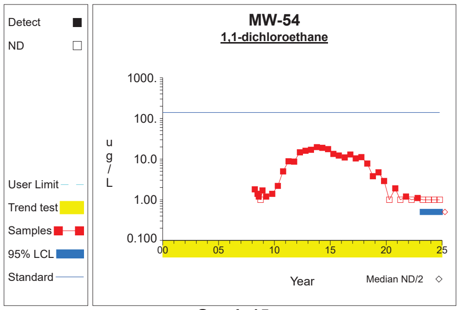


Graph 13

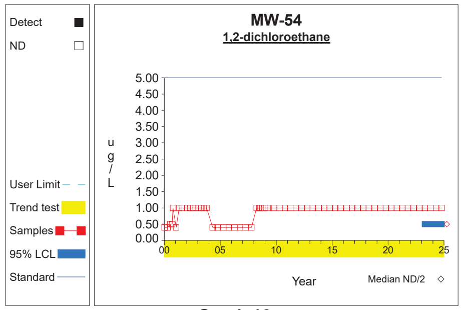


Graph 14

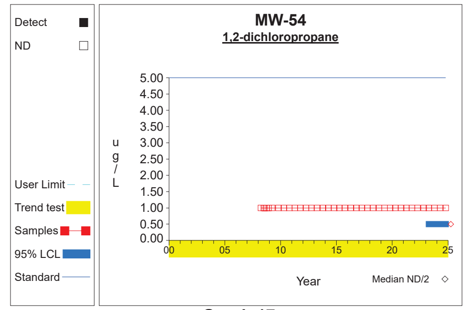
Confidence Limits (Assessment)



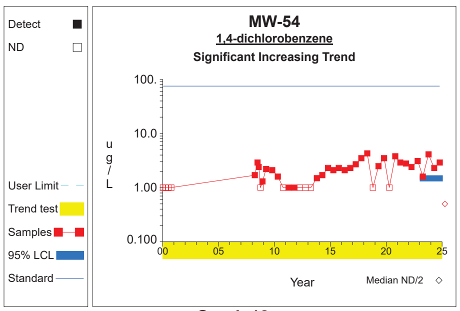
Graph 15



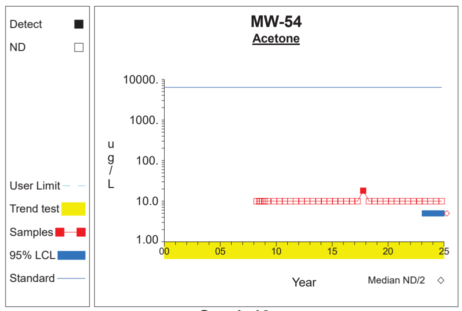
Graph 16



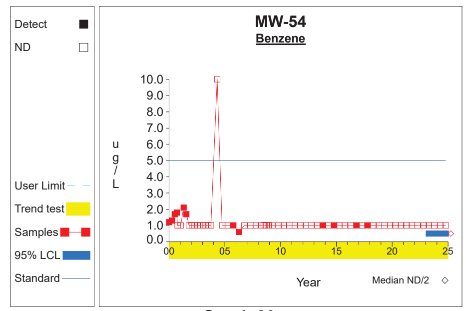
Graph 17



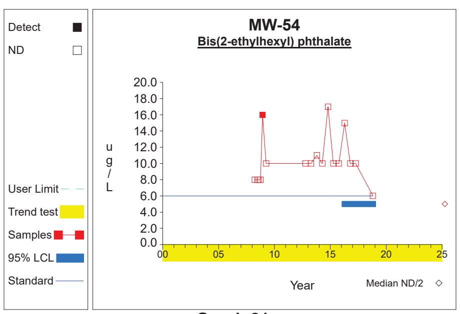
Graph 18



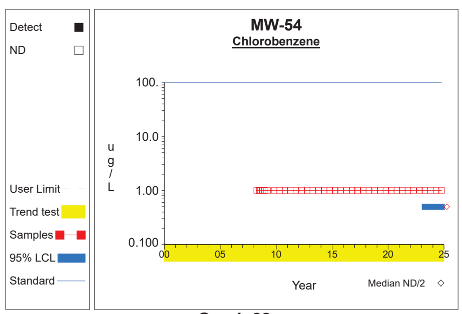
Graph 19



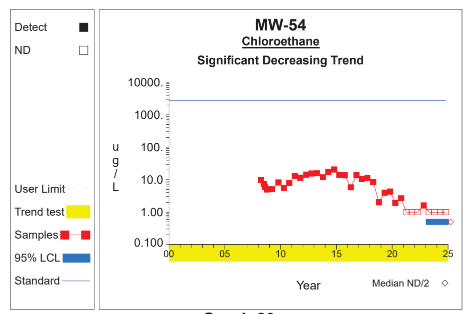
Graph 20



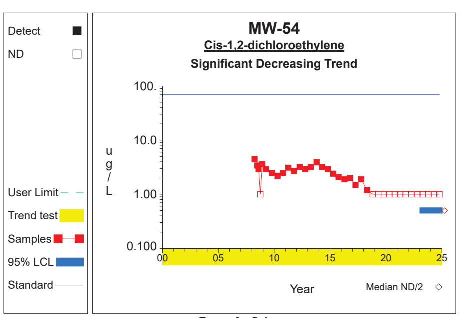
Graph 21



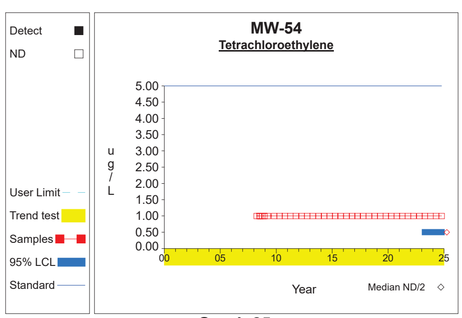
Graph 22



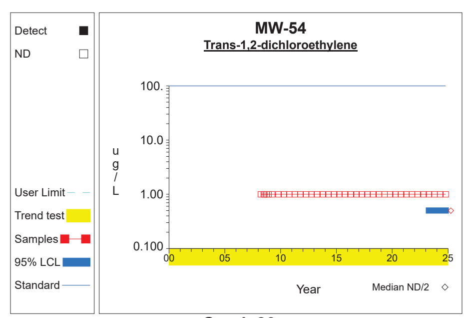
Graph 23



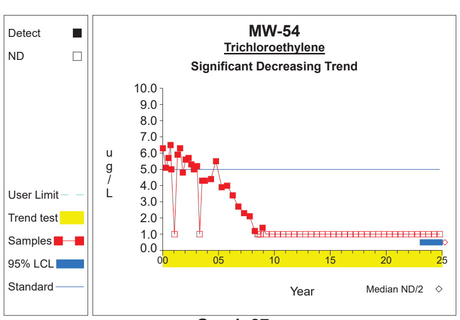
Graph 24



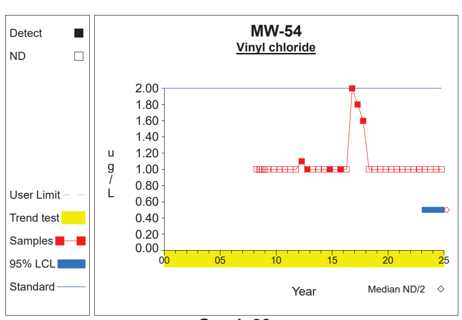
Graph 25



Graph 26

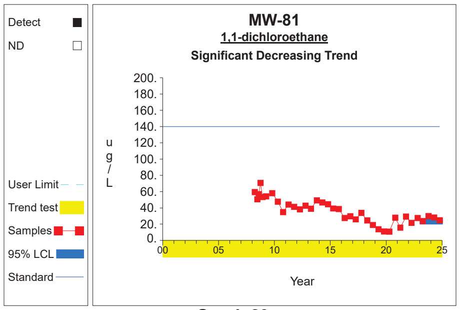


Graph 27

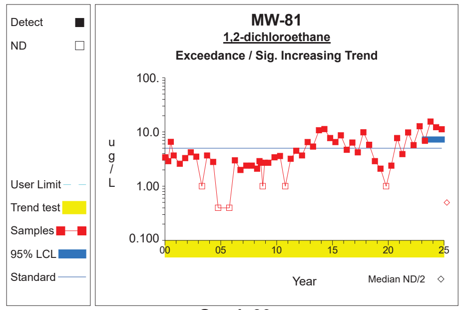


Graph 28

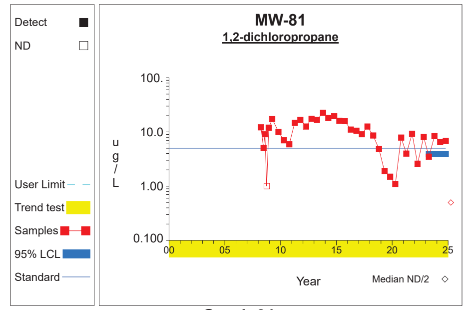
Confidence Limits (Assessment)



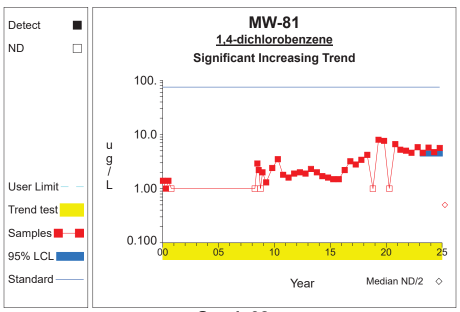
Graph 29



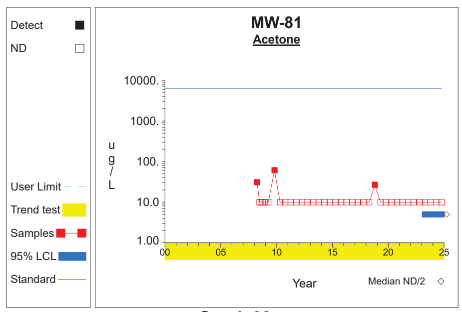
Graph 30



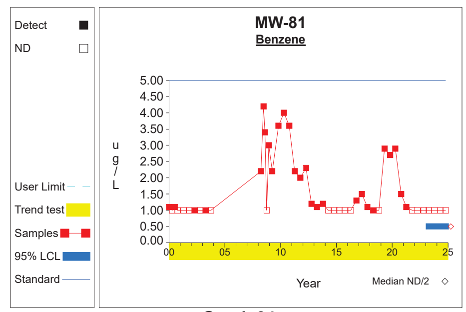
Graph 31



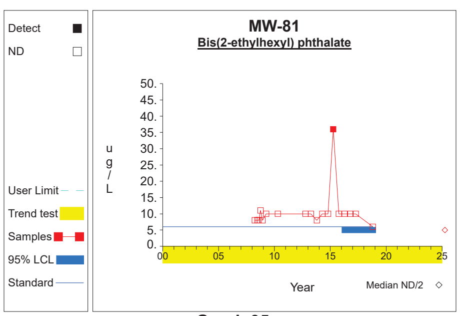
Graph 32



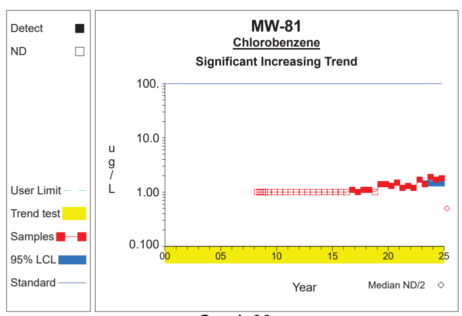
Graph 33



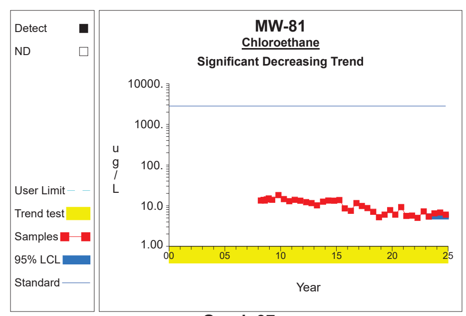
Graph 34



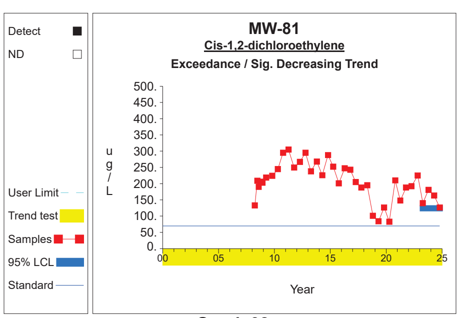
Graph 35



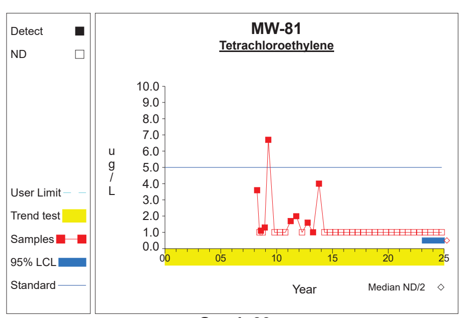
Graph 36



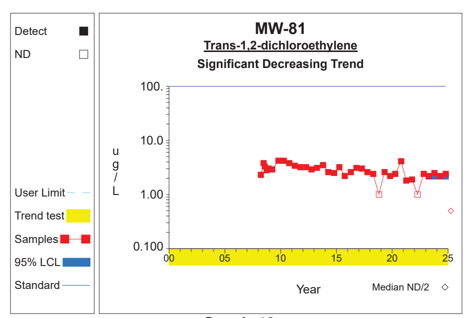
Graph 37



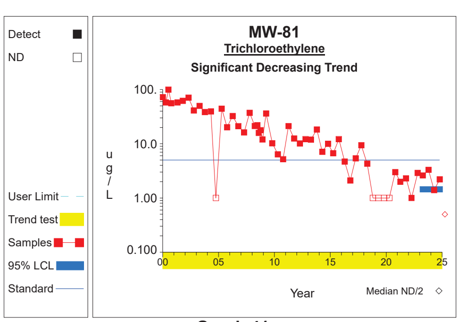
Graph 38



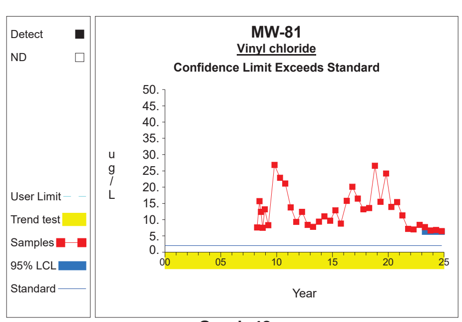
Graph 39



Graph 40



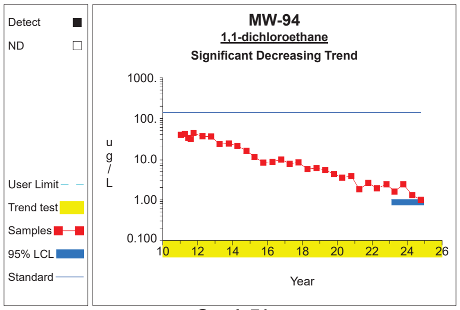
Graph 41



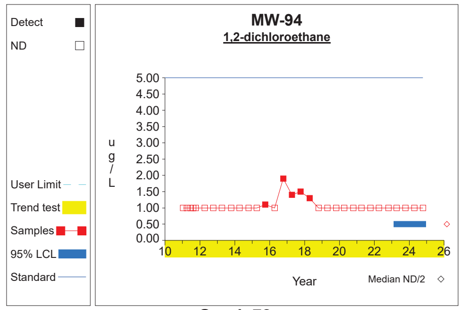
Graph 42

Prepared by: Otter Creek Environmental

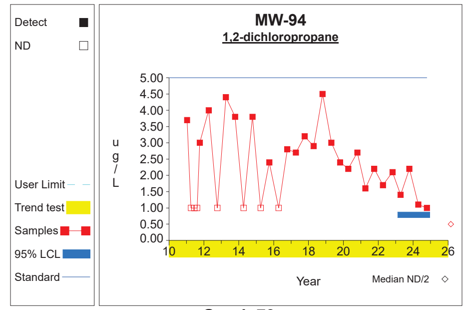
Confidence Limits (Assessment)



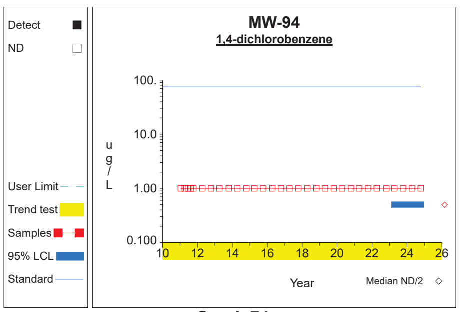
Graph 71



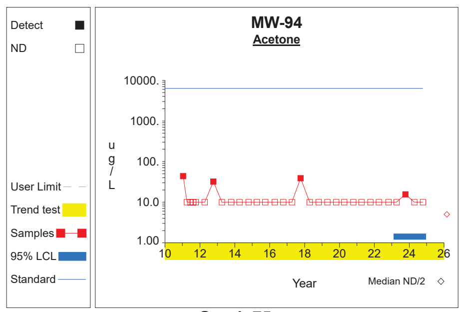
Graph 72



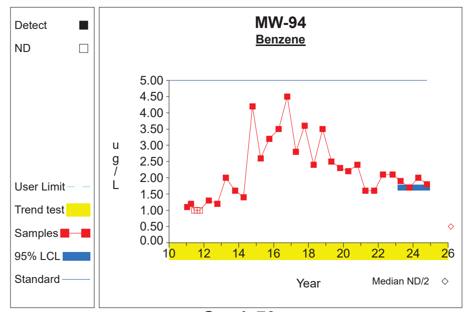
Graph 73



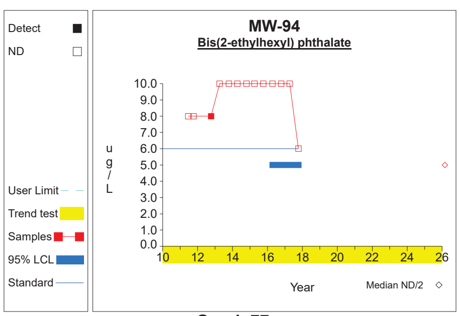
Graph 74



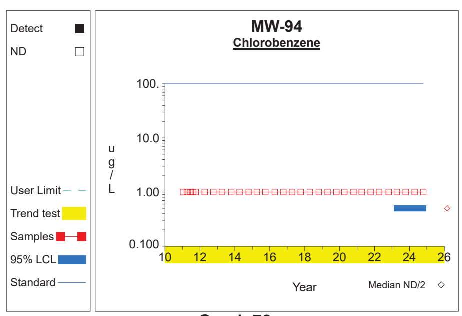
Graph 75



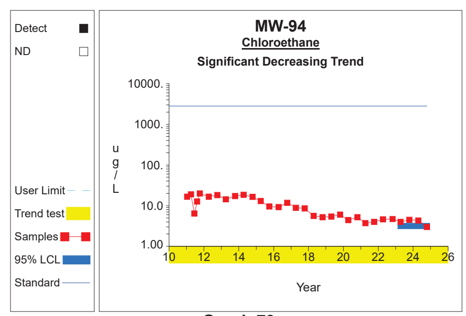
Graph 76



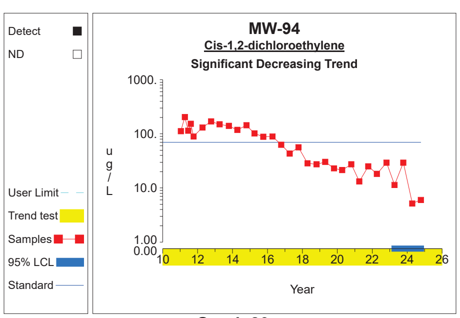
Graph 77



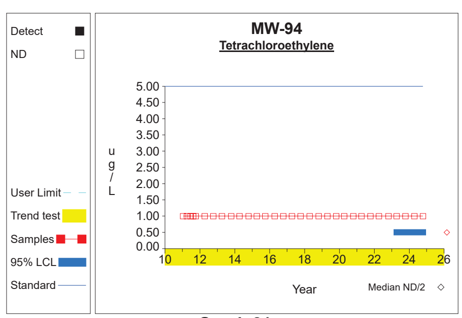
Graph 78



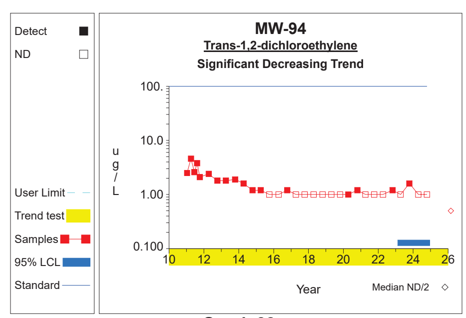
Graph 79



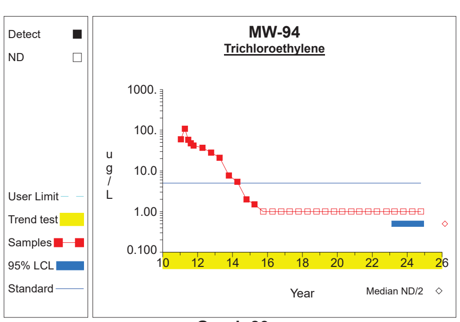
Graph 80



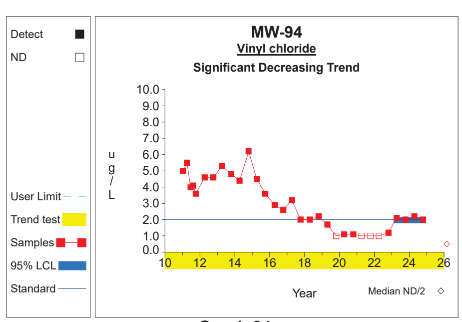
Graph 81



Graph 82

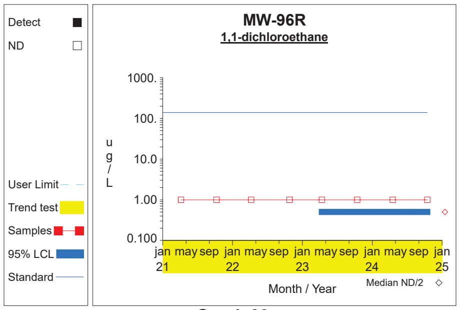


Graph 83

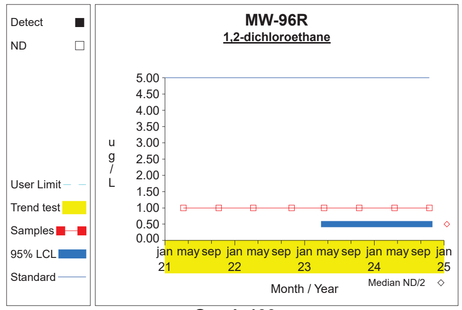


Graph 84

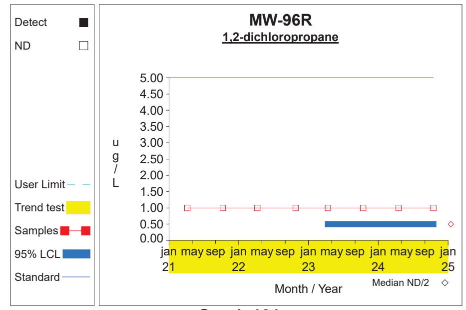
Confidence Limits (Assessment)



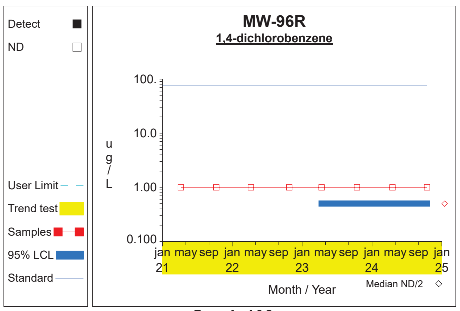
Graph 99



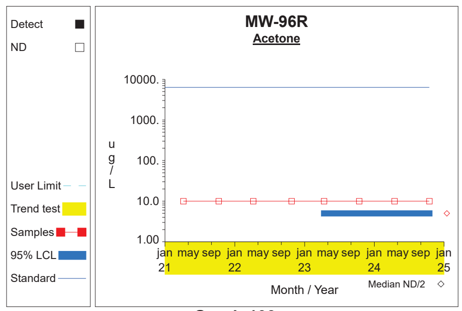
Graph 100



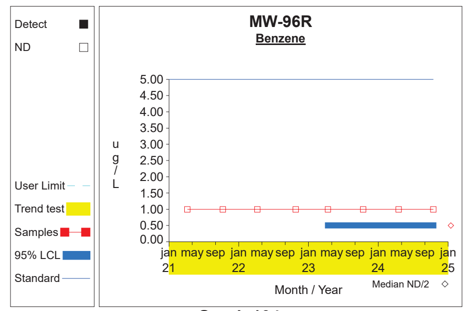
Graph 101



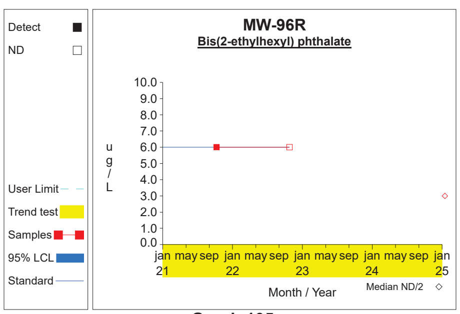
Graph 102



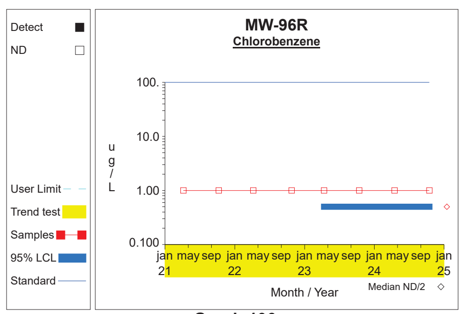
Graph 103



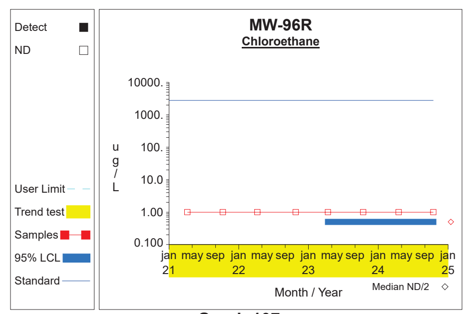
Graph 104



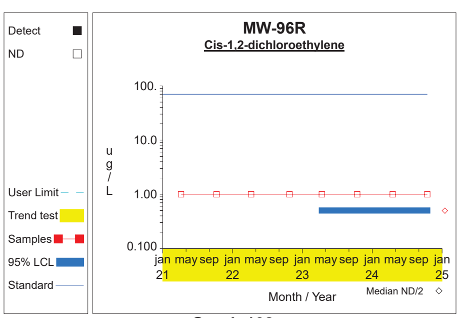
Graph 105



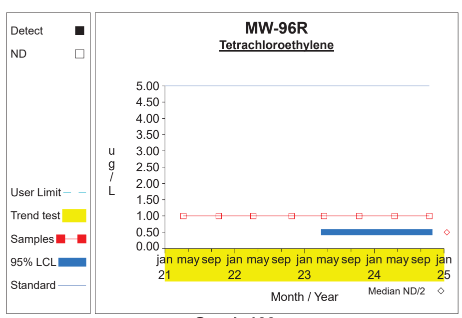
Graph 106



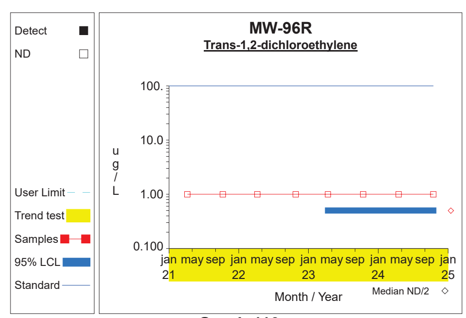
Graph 107



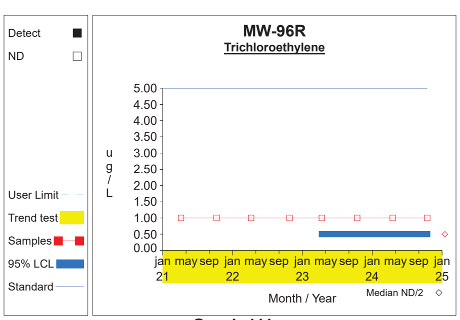
Graph 108



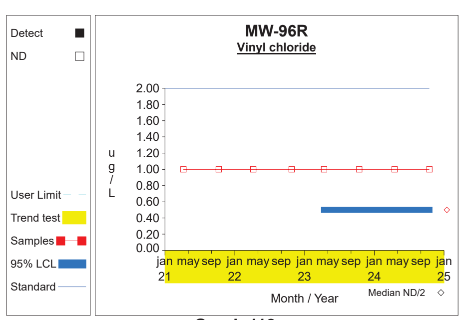
Graph 109



Graph 110



Graph 111



Graph 112

Appendix C

Laboratory Reports for Reporting Period

With Chain of Custody

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HD1532

Project Description

6003

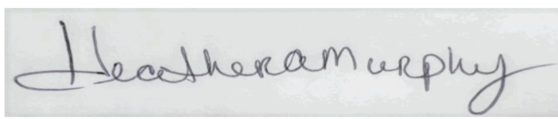
For:

Todd Whipple

HLW Engineering

PO Box 314

Story City, IA 50248



Heather Murphy

Customer Relationship Specialist

Monday, May 20, 2024

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

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

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HD1532

HLW Engineering

Todd Whipple
PO Box 314
Story City, IA 50248

Project Name: 6003

Project / PO Number: N/A
Received: 04/18/2024
Reported: 05/20/2024

Sample Summary Report

Sample Name	Laboratory ID	Client Matrix	Sample Type	Sample Begin	Sample Taken	Lab Received
MW-66 (B)	1HD1532-01	Aqueous	GRAB		04/17/24 07:51	04/18/24 09:39
MW-85 (B)	1HD1532-02	Aqueous	GRAB		04/17/24 07:51	04/18/24 09:39
MW-98 (B)	1HD1532-03	Aqueous	GRAB		04/17/24 09:48	04/18/24 09:39
MW-99 (B)	1HD1532-04	Aqueous	GRAB		04/18/24 00:00	04/18/24 09:39
MW-49	1HD1532-05	Aqueous	GRAB		04/17/24 09:10	04/18/24 09:39
MW-54	1HD1532-06	Aqueous	GRAB		04/17/24 08:46	04/18/24 09:39
MW-81	1HD1532-07	Aqueous	GRAB		04/16/24 11:20	04/18/24 09:39
MW-87	1HD1532-08	Aqueous	GRAB		04/16/24 11:02	04/18/24 09:39
MW-91	1HD1532-09	Aqueous	GRAB		04/16/24 10:05	04/18/24 09:39
MW-93	1HD1532-10	Aqueous	GRAB		04/16/24 11:43	04/18/24 09:39
MW-94	1HD1532-11	Aqueous	GRAB		04/17/24 08:29	04/18/24 09:39
MW-95	1HD1532-12	Aqueous	GRAB		04/17/24 07:35	04/18/24 09:39
MW-96R	1HD1532-13	Aqueous	GRAB		04/16/24 07:55	04/18/24 09:39
MW-97	1HD1532-14	Aqueous	GRAB		04/17/24 08:09	04/18/24 09:39
SRAMP B Tile	1HD1532-15	Aqueous	GRAB		04/16/24 08:30	04/18/24 09:39
Duplicate	1HD1532-16	Aqueous	GRAB		04/16/24 00:00	04/18/24 09:39
MW-89	1HD1532-17	Aqueous	GRAB		04/16/24 10:44	04/18/24 09:39

MICROBAC®

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HD1532

Analytical Testing Parameters

Client Sample ID:	MW-85 (B)		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HD1532-02	**Collection Date:**	04/17/2024 7:51

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
Bromomethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
Chloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
Acetone	<10.0	10.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
Chloroform	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
Benzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
Dibromomethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
Toluene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
Xylenes, total	<2.0	2.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
Styrene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS

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CERTIFICATE OF ANALYSIS

1HD1532

Client Sample ID:	MW-85 (B)		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HD1532-02	**Collection Date:**	04/17/2024 7:51

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Bromoform	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1439	LJS
Surrogate: Dibromofluoromethane	99.1	Limit: 80-126	% Rec	1		04/22/24 0000	04/22/24 1439	LJS
Surrogate: Dibromofluoromethane	99.1	Limit: 75-136	% Rec	1		04/22/24 0000	04/22/24 1439	LJS
Surrogate: 1,2-Dichloroethane-d4	102	Limit: 61-142	% Rec	1		04/22/24 0000	04/22/24 1439	LJS
Surrogate: 1,2-Dichloroethane-d4	102	Limit: 63-138	% Rec	1		04/22/24 0000	04/22/24 1439	LJS
Surrogate: Toluene-d8	98.2	Limit: 87-116	% Rec	1		04/22/24 0000	04/22/24 1439	LJS
Surrogate: Toluene-d8	98.2	Limit: 82-121	% Rec	1		04/22/24 0000	04/22/24 1439	LJS
Surrogate: 4-Bromofluorobenzene	97.5	Limit: 80-116	% Rec	1		04/22/24 0000	04/22/24 1439	LJS
Surrogate: 4-Bromofluorobenzene	97.5	Limit: 85-111	% Rec	1		04/22/24 0000	04/22/24 1439	LJS

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		04/24/24 0716	04/25/24 2320	JAR
Arsenic, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/25/24 2320	JAR
Barium, total	**0.144**	0.0040	mg/L	4		04/24/24 0716	04/25/24 2320	JAR
Beryllium, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/25/24 2320	JAR
Cadmium, total	<0.0008	0.0008	mg/L	4		04/24/24 0716	04/25/24 2320	JAR
Chromium, total	<0.0080	0.0080	mg/L	4		04/24/24 0716	04/25/24 2320	JAR
Cobalt, total	**0.0004**	0.0004	mg/L	4		04/24/24 0716	04/25/24 2320	JAR
Copper, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/25/24 2320	JAR
Lead, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/25/24 2320	JAR
Nickel, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/25/24 2320	JAR
Selenium, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/25/24 2320	JAR
Silver, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/25/24 2320	JAR
Thallium, total	<0.0020	0.0020	mg/L	4		04/24/24 0716	04/25/24 2320	JAR
Vanadium, total	<0.0200	0.0200	mg/L	4		04/24/24 0716	04/25/24 2320	JAR
Zinc, total	<0.0200	0.0200	mg/L	4		04/24/24 0716	04/25/24 2320	JAR

Client Sample ID:	MW-98 (B)		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HD1532-03	**Collection Date:**	04/17/2024 9:48

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
Bromomethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
Chloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
Acetone	<10.0	10.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
Chloroform	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
Benzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
Dibromomethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
Toluene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
Xylenes, total	<2.0	2.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
Styrene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
Bromoform	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS

Client Sample ID:	MW-98 (B)		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HD1532-03	**Collection Date:**	04/17/2024 9:48

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1502	LJS
Surrogate: Dibromofluoromethane	100	Limit: 75-136	% Rec	1		04/22/24 0000	04/22/24 1502	LJS
Surrogate: Dibromofluoromethane	100	Limit: 80-126	% Rec	1		04/22/24 0000	04/22/24 1502	LJS
Surrogate: 1,2-Dichloroethane-d4	105	Limit: 61-142	% Rec	1		04/22/24 0000	04/22/24 1502	LJS
Surrogate: 1,2-Dichloroethane-d4	105	Limit: 63-138	% Rec	1		04/22/24 0000	04/22/24 1502	LJS
Surrogate: Toluene-d8	98.5	Limit: 82-121	% Rec	1		04/22/24 0000	04/22/24 1502	LJS
Surrogate: Toluene-d8	98.5	Limit: 87-116	% Rec	1		04/22/24 0000	04/22/24 1502	LJS
Surrogate: 4-Bromofluorobenzene	97.7	Limit: 80-116	% Rec	1		04/22/24 0000	04/22/24 1502	LJS
Surrogate: 4-Bromofluorobenzene	97.7	Limit: 85-111	% Rec	1		04/22/24 0000	04/22/24 1502	LJS

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		04/24/24 0716	04/25/24 2326	JAR
Arsenic, total	**0.0480**	0.0040	mg/L	4		04/24/24 0716	04/25/24 2326	JAR
Barium, total	**0.325**	0.0040	mg/L	4		04/24/24 0716	04/25/24 2326	JAR
Beryllium, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/25/24 2326	JAR
Cadmium, total	<0.0008	0.0008	mg/L	4		04/24/24 0716	04/25/24 2326	JAR
Chromium, total	<0.0080	0.0080	mg/L	4		04/24/24 0716	04/25/24 2326	JAR
Cobalt, total	**0.0047**	0.0004	mg/L	4		04/24/24 0716	04/25/24 2326	JAR
Copper, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/25/24 2326	JAR
Lead, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/25/24 2326	JAR
Nickel, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/25/24 2326	JAR
Selenium, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/25/24 2326	JAR
Silver, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/25/24 2326	JAR
Thallium, total	<0.0020	0.0020	mg/L	4		04/24/24 0716	04/25/24 2326	JAR
Vanadium, total	<0.0200	0.0200	mg/L	4		04/24/24 0716	04/25/24 2326	JAR
Zinc, total	<0.0200	0.0200	mg/L	4		04/24/24 0716	04/25/24 2326	JAR

Client Sample ID:	MW-99 (B)		
Sample Matrix:	Aqueous	**Collected By:**	
Lab Sample ID:	1HD1532-04	**Collection Date:**	04/18/2024

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
Bromomethane	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
Chloroethane	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
Acetone	<10.0	10.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
Chloroform	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
Benzene	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
Dibromomethane	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
Toluene	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
Xylenes, total	<2.0	2.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
Styrene	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
Bromoform	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS

Client Sample ID:	MW-99 (B)		
Sample Matrix:	Aqueous	**Collected By:**	
Lab Sample ID:	1HD1532-04	**Collection Date:**	04/18/2024

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/23/24 0000	04/23/24 1540	LJS
Surrogate: Dibromofluoromethane	92.6	Limit: 75-136	% Rec	1		04/23/24 0000	04/23/24 1540	LJS
Surrogate: Dibromofluoromethane	92.6	Limit: 80-126	% Rec	1		04/23/24 0000	04/23/24 1540	LJS
Surrogate: 1,2-Dichloroethane-d4	94.5	Limit: 63-138	% Rec	1		04/23/24 0000	04/23/24 1540	LJS
Surrogate: 1,2-Dichloroethane-d4	94.5	Limit: 61-142	% Rec	1		04/23/24 0000	04/23/24 1540	LJS
Surrogate: Toluene-d8	98.2	Limit: 82-121	% Rec	1		04/23/24 0000	04/23/24 1540	LJS
Surrogate: Toluene-d8	98.2	Limit: 87-116	% Rec	1		04/23/24 0000	04/23/24 1540	LJS
Surrogate: 4-Bromofluorobenzene	95.7	Limit: 85-111	% Rec	1		04/23/24 0000	04/23/24 1540	LJS
Surrogate: 4-Bromofluorobenzene	95.7	Limit: 80-116	% Rec	1		04/23/24 0000	04/23/24 1540	LJS

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		04/24/24 1610	04/26/24 0231	JAR
Arsenic, total	<0.0040	0.0040	mg/L	4		04/24/24 1610	04/26/24 0231	JAR
Barium, total	**0.164**	0.0040	mg/L	4		04/24/24 1610	04/26/24 0231	JAR
Beryllium, total	<0.0040	0.0040	mg/L	4		04/24/24 1610	04/26/24 0231	JAR
Cadmium, total	<0.0008	0.0008	mg/L	4		04/24/24 1610	04/26/24 0231	JAR
Chromium, total	<0.0080	0.0080	mg/L	4		04/24/24 1610	04/26/24 0231	JAR
Cobalt, total	**0.0041**	0.0004	mg/L	4		04/24/24 1610	04/26/24 0231	JAR
Copper, total	<0.0040	0.0040	mg/L	4		04/24/24 1610	04/26/24 0231	JAR
Lead, total	<0.0040	0.0040	mg/L	4		04/24/24 1610	04/26/24 0231	JAR
Nickel, total	**0.0063**	0.0040	mg/L	4		04/24/24 1610	04/26/24 0231	JAR
Selenium, total	<0.0040	0.0040	mg/L	4		04/24/24 1610	04/26/24 0231	JAR
Silver, total	<0.0040	0.0040	mg/L	4		04/24/24 1610	04/26/24 0231	JAR
Thallium, total	<0.0020	0.0020	mg/L	4		04/24/24 1610	04/26/24 0231	JAR
Vanadium, total	<0.0200	0.0200	mg/L	4		04/24/24 1610	04/26/24 0231	JAR
Zinc, total	<0.0200	0.0200	mg/L	4		04/24/24 1610	04/26/24 0231	JAR

Client Sample ID:	MW-49		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HD1532-05	**Collection Date:**	04/17/2024 9:10

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
Bromomethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
Chloroethane	**4.6**	1.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
Acetone	<10.0	10.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
1,1-Dichloroethane	**1.1**	1.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
cis-1,2-Dichloroethylene	**2.4**	1.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
Chloroform	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
Benzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
Dibromomethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
Toluene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
Xylenes, total	<2.0	2.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
Styrene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
Bromoform	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS

Client Sample ID:	MW-49		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HD1532-05	**Collection Date:**	04/17/2024 9:10

Determination of Volatile Organic Compounds	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
1,4-Dichlorobenzene	**3.3**	1.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1525	LJS
Surrogate: Dibromofluoromethane	102	Limit: 80-126	% Rec	1		04/22/24 0000	04/22/24 1525	LJS
Surrogate: Dibromofluoromethane	102	Limit: 75-136	% Rec	1		04/22/24 0000	04/22/24 1525	LJS
Surrogate: 1,2-Dichloroethane-d4	105	Limit: 61-142	% Rec	1		04/22/24 0000	04/22/24 1525	LJS
Surrogate: 1,2-Dichloroethane-d4	105	Limit: 63-138	% Rec	1		04/22/24 0000	04/22/24 1525	LJS
Surrogate: Toluene-d8	97.8	Limit: 87-116	% Rec	1		04/22/24 0000	04/22/24 1525	LJS
Surrogate: Toluene-d8	97.8	Limit: 82-121	% Rec	1		04/22/24 0000	04/22/24 1525	LJS
Surrogate: 4-Bromofluorobenzene	99.1	Limit: 80-116	% Rec	1		04/22/24 0000	04/22/24 1525	LJS
Surrogate: 4-Bromofluorobenzene	99.1	Limit: 85-111	% Rec	1		04/22/24 0000	04/22/24 1525	LJS

Determination of Conventional Chemistry Parameters	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
2320B								
Alkalinity, as CaCO3	**652**	50	mg/L	1		04/23/24 0918	04/23/24 1300	BSS
EPA 9040								
pH	**6.5**	0.5	pH	1	**I-03**	04/23/24 0916	04/23/24 1347	BSS

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		04/24/24 0716	04/25/24 2332	JAR
Arsenic, total	**0.0537**	0.0040	mg/L	4		04/24/24 0716	04/25/24 2332	JAR
Barium, total	**0.429**	0.0040	mg/L	4		04/24/24 0716	04/25/24 2332	JAR
Beryllium, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/25/24 2332	JAR
Cadmium, total	**0.0009**	0.0008	mg/L	4		04/24/24 0716	04/25/24 2332	JAR
Chromium, total	<0.0080	0.0080	mg/L	4		04/24/24 0716	04/25/24 2332	JAR
Cobalt, total	**0.0058**	0.0004	mg/L	4		04/24/24 0716	04/25/24 2332	JAR
Copper, total	**0.0075**	0.0040	mg/L	4		04/24/24 0716	04/25/24 2332	JAR
Lead, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/25/24 2332	JAR
Nickel, total	**0.0162**	0.0040	mg/L	4		04/24/24 0716	04/25/24 2332	JAR
Selenium, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/25/24 2332	JAR
Silver, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/25/24 2332	JAR
Thallium, total	<0.0020	0.0020	mg/L	4		04/24/24 0716	04/25/24 2332	JAR
Vanadium, total	<0.0200	0.0200	mg/L	4		04/24/24 0716	04/25/24 2332	JAR
Zinc, total	**0.0227**	0.0200	mg/L	4		04/24/24 0716	04/25/24 2332	JAR

Client Sample ID:	MW-54		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HD1532-06	**Collection Date:**	04/17/2024 8:46

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
Bromomethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
Chloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
Acetone	<10.0	10.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
Chloroform	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
Benzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
Dibromomethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
Toluene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
Xylenes, total	<2.0	2.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
Styrene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
Bromoform	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS

CERTIFICATE OF ANALYSIS

1HD1532

Client Sample ID:	MW-54		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HD1532-06	**Collection Date:**	04/17/2024 8:46

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
1,4-Dichlorobenzene	**2.3**	1.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1548	LJS
Surrogate: Dibromofluoromethane	103	Limit: 80-126	% Rec	1		04/22/24 0000	04/22/24 1548	LJS
Surrogate: Dibromofluoromethane	103	Limit: 75-136	% Rec	1		04/22/24 0000	04/22/24 1548	LJS
Surrogate: 1,2-Dichloroethane-d4	106	Limit: 63-138	% Rec	1		04/22/24 0000	04/22/24 1548	LJS
Surrogate: 1,2-Dichloroethane-d4	106	Limit: 61-142	% Rec	1		04/22/24 0000	04/22/24 1548	LJS
Surrogate: Toluene-d8	98.0	Limit: 82-121	% Rec	1		04/22/24 0000	04/22/24 1548	LJS
Surrogate: Toluene-d8	98.0	Limit: 87-116	% Rec	1		04/22/24 0000	04/22/24 1548	LJS
Surrogate: 4-Bromofluorobenzene	98.5	Limit: 85-111	% Rec	1		04/22/24 0000	04/22/24 1548	LJS
Surrogate: 4-Bromofluorobenzene	98.5	Limit: 80-116	% Rec	1		04/22/24 0000	04/22/24 1548	LJS

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
2320B								
Alkalinity, as CaCO3	**512**	10	mg/L	1		04/23/24 0918	04/23/24 1300	BSS
EPA 9040								
pH	**6.7**	0.5	pH	1	**I-03**	04/23/24 0916	04/23/24 1347	BSS

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		04/24/24 0716	04/25/24 2338	JAR
Arsenic, total	**0.0048**	0.0040	mg/L	4		04/24/24 0716	04/25/24 2338	JAR
Barium, total	**0.449**	0.0040	mg/L	4		04/24/24 0716	04/25/24 2338	JAR
Beryllium, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/25/24 2338	JAR
Cadmium, total	<0.0008	0.0008	mg/L	4		04/24/24 0716	04/25/24 2338	JAR
Chromium, total	<0.0080	0.0080	mg/L	4		04/24/24 0716	04/25/24 2338	JAR
Cobalt, total	**0.0106**	0.0004	mg/L	4		04/24/24 0716	04/25/24 2338	JAR
Copper, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/25/24 2338	JAR
Lead, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/25/24 2338	JAR
Nickel, total	**0.0224**	0.0040	mg/L	4		04/24/24 0716	04/25/24 2338	JAR
Selenium, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/25/24 2338	JAR
Silver, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/25/24 2338	JAR
Thallium, total	<0.0020	0.0020	mg/L	4		04/24/24 0716	04/25/24 2338	JAR
Vanadium, total	<0.0200	0.0200	mg/L	4		04/24/24 0716	04/25/24 2338	JAR
Zinc, total	<0.0200	0.0200	mg/L	4		04/24/24 0716	04/25/24 2338	JAR

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CERTIFICATE OF ANALYSIS

1HD1532

Client Sample ID:	MW-81			
Sample Matrix:	Aqueous		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HD1532-07		**Collection Date:**	04/16/2024 11:20

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		04/22/24 0000	04/22/24 1610	LJS
Vinyl Chloride	**6.8**		1.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
Bromomethane		<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
Chloroethane	**6.8**		1.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
Trichlorofluoromethane		<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
1,1-Dichloroethylene		<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
Acetone		<10.0	10.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
Methyl Iodide		<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
Carbon Disulfide		<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
Methylene Chloride		<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
Acrylonitrile		<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
trans-1,2-Dichloroethylene	**2.2**		1.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
1,1-Dichloroethane	**28.2**		1.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
Vinyl Acetate		<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
cis-1,2-Dichloroethylene	**164**		1.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
2-Butanone (MEK)		<10.0	10.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
Bromochloromethane		<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
Chloroform		<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
1,1,1-Trichloroethane		<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
Carbon Tetrachloride		<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
Benzene		<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
1,2-Dichloroethane	**12.3**		1.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
Trichloroethylene	**1.4**		1.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
1,2-Dichloropropane	**6.5**		1.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
Dibromomethane		<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
Bromodichloromethane		<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
cis-1,3-Dichloropropene		<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
4-Methyl-2-pentanone (MIBK)		<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
Toluene		<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
trans-1,3-Dichloropropene		<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
1,1,2-Trichloroethane		<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
Tetrachloroethylene		<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
2-Hexanone (MBK)		<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
Dibromochloromethane		<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
1,2-Dibromoethane		<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
Chlorobenzene	**1.7**		1.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
1,1,1,2-Tetrachloroethane		<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
Ethylbenzene		<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
Xylenes, total		<2.0	2.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
Styrene		<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
Bromoform		<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
1,2,3-Trichloropropane		<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS

Client Sample ID:	MW-81		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HD1532-07	**Collection Date:**	04/16/2024 11:20

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		04/22/24 0000	04/22/24 1610	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
1,4-Dichlorobenzene	**4.7**	1.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1610	LJS
Surrogate: Dibromofluoromethane	102	Limit: 75-136	% Rec	1		04/22/24 0000	04/22/24 1610	LJS
Surrogate: Dibromofluoromethane	102	Limit: 80-126	% Rec	1		04/22/24 0000	04/22/24 1610	LJS
Surrogate: 1,2-Dichloroethane-d4	104	Limit: 61-142	% Rec	1		04/22/24 0000	04/22/24 1610	LJS
Surrogate: 1,2-Dichloroethane-d4	104	Limit: 63-138	% Rec	1		04/22/24 0000	04/22/24 1610	LJS
Surrogate: Toluene-d8	98.5	Limit: 82-121	% Rec	1		04/22/24 0000	04/22/24 1610	LJS
Surrogate: Toluene-d8	98.5	Limit: 87-116	% Rec	1		04/22/24 0000	04/22/24 1610	LJS
Surrogate: 4-Bromofluorobenzene	98.9	Limit: 80-116	% Rec	1		04/22/24 0000	04/22/24 1610	LJS
Surrogate: 4-Bromofluorobenzene	98.9	Limit: 85-111	% Rec	1		04/22/24 0000	04/22/24 1610	LJS

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
2320B								
Alkalinity, as CaCO3	**886**	50	mg/L	1		04/23/24 0918	04/23/24 1300	BSS
EPA 9040								
pH	**6.6**	0.5	pH	1	**I-03**	04/23/24 0916	04/23/24 1347	BSS

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		04/24/24 0716	04/25/24 2345	JAR
Arsenic, total	**0.0068**	0.0040	mg/L	4		04/24/24 0716	04/25/24 2345	JAR
Barium, total	**1.94**	0.0100	mg/L	10		04/24/24 0716	04/26/24 0748	JAR
Beryllium, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/25/24 2345	JAR
Cadmium, total	<0.0008	0.0008	mg/L	4		04/24/24 0716	04/25/24 2345	JAR
Chromium, total	<0.0080	0.0080	mg/L	4		04/24/24 0716	04/25/24 2345	JAR
Cobalt, total	**0.0105**	0.0004	mg/L	4		04/24/24 0716	04/25/24 2345	JAR
Copper, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/25/24 2345	JAR
Lead, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/25/24 2345	JAR
Nickel, total	**0.0134**	0.0040	mg/L	4		04/24/24 0716	04/25/24 2345	JAR
Selenium, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/25/24 2345	JAR
Silver, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/25/24 2345	JAR
Thallium, total	<0.0020	0.0020	mg/L	4		04/24/24 0716	04/25/24 2345	JAR
Vanadium, total	<0.0200	0.0200	mg/L	4		04/24/24 0716	04/25/24 2345	JAR
Zinc, total	<0.0200	0.0200	mg/L	4		04/24/24 0716	04/25/24 2345	JAR

Client Sample ID:	MW-87		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HD1532-08	**Collection Date:**	04/16/2024 11:02

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		04/22/24 0000	04/22/24 1633	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
Bromomethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
Chloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
Acetone	<10.0	10.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
Chloroform	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
Benzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
Dibromomethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
Toluene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
Xylenes, total	<2.0	2.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
Styrene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
Bromoform	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS

Client Sample ID:	MW-87			
Sample Matrix:	Aqueous		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HD1532-08		**Collection Date:**	04/16/2024 11:02

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		04/22/24 0000	04/22/24 1633	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1633	LJS
Surrogate: Dibromofluoromethane	103	Limit: 75-136	% Rec	1		04/22/24 0000	04/22/24 1633	LJS
Surrogate: Dibromofluoromethane	103	Limit: 80-126	% Rec	1		04/22/24 0000	04/22/24 1633	LJS
Surrogate: 1,2-Dichloroethane-d4	106	Limit: 63-138	% Rec	1		04/22/24 0000	04/22/24 1633	LJS
Surrogate: 1,2-Dichloroethane-d4	106	Limit: 61-142	% Rec	1		04/22/24 0000	04/22/24 1633	LJS
Surrogate: Toluene-d8	98.7	Limit: 82-121	% Rec	1		04/22/24 0000	04/22/24 1633	LJS
Surrogate: Toluene-d8	98.7	Limit: 87-116	% Rec	1		04/22/24 0000	04/22/24 1633	LJS
Surrogate: 4-Bromofluorobenzene	98.3	Limit: 80-116	% Rec	1		04/22/24 0000	04/22/24 1633	LJS
Surrogate: 4-Bromofluorobenzene	98.3	Limit: 85-111	% Rec	1		04/22/24 0000	04/22/24 1633	LJS

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		04/24/24 0716	04/25/24 2351	JAR
Arsenic, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/25/24 2351	JAR
Barium, total	**0.117**	0.0040	mg/L	4		04/24/24 0716	04/25/24 2351	JAR
Beryllium, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/25/24 2351	JAR
Cadmium, total	<0.0008	0.0008	mg/L	4		04/24/24 0716	04/25/24 2351	JAR
Chromium, total	<0.0080	0.0080	mg/L	4		04/24/24 0716	04/25/24 2351	JAR
Cobalt, total	<0.0004	0.0004	mg/L	4		04/24/24 0716	04/25/24 2351	JAR
Copper, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/25/24 2351	JAR
Lead, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/25/24 2351	JAR
Nickel, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/25/24 2351	JAR
Selenium, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/25/24 2351	JAR
Silver, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/25/24 2351	JAR
Thallium, total	<0.0020	0.0020	mg/L	4		04/24/24 0716	04/25/24 2351	JAR
Vanadium, total	<0.0200	0.0200	mg/L	4		04/24/24 0716	04/25/24 2351	JAR
Zinc, total	<0.0200	0.0200	mg/L	4		04/24/24 0716	04/25/24 2351	JAR

Client Sample ID:	MW-91		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HD1532-09	**Collection Date:**	04/16/2024 10:05

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		04/22/24 0000	04/22/24 1656	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
Bromomethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
Chloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
Acetone	<10.0	10.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
Chloroform	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
Benzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
Dibromomethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
Toluene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
Xylenes, total	<2.0	2.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
Styrene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
Bromoform	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS

Client Sample ID:	MW-91		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HD1532-09	**Collection Date:**	04/16/2024 10:05

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		04/22/24 0000	04/22/24 1656	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1656	LJS
Surrogate: Dibromofluoromethane	105	Limit: 75-136	% Rec	1		04/22/24 0000	04/22/24 1656	LJS
Surrogate: Dibromofluoromethane	105	Limit: 80-126	% Rec	1		04/22/24 0000	04/22/24 1656	LJS
Surrogate: 1,2-Dichloroethane-d4	107	Limit: 63-138	% Rec	1		04/22/24 0000	04/22/24 1656	LJS
Surrogate: 1,2-Dichloroethane-d4	107	Limit: 61-142	% Rec	1		04/22/24 0000	04/22/24 1656	LJS
Surrogate: Toluene-d8	98.3	Limit: 82-121	% Rec	1		04/22/24 0000	04/22/24 1656	LJS
Surrogate: Toluene-d8	98.3	Limit: 87-116	% Rec	1		04/22/24 0000	04/22/24 1656	LJS
Surrogate: 4-Bromofluorobenzene	97.2	Limit: 85-111	% Rec	1		04/22/24 0000	04/22/24 1656	LJS
Surrogate: 4-Bromofluorobenzene	97.2	Limit: 80-116	% Rec	1		04/22/24 0000	04/22/24 1656	LJS

Determination of Total Metals	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		04/24/24 0716	04/25/24 2357	JAR
Arsenic, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/25/24 2357	JAR
Barium, total	**0.186**	0.0040	mg/L	4		04/24/24 0716	04/25/24 2357	JAR
Beryllium, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/25/24 2357	JAR
Cadmium, total	<0.0008	0.0008	mg/L	4		04/24/24 0716	04/25/24 2357	JAR
Chromium, total	<0.0080	0.0080	mg/L	4		04/24/24 0716	04/25/24 2357	JAR
Cobalt, total	<0.0004	0.0004	mg/L	4		04/24/24 0716	04/25/24 2357	JAR
Copper, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/25/24 2357	JAR
Lead, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/25/24 2357	JAR
Nickel, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/25/24 2357	JAR
Selenium, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/25/24 2357	JAR
Silver, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/25/24 2357	JAR
Thallium, total	<0.0020	0.0020	mg/L	4		04/24/24 0716	04/25/24 2357	JAR
Vanadium, total	<0.0200	0.0200	mg/L	4		04/24/24 0716	04/25/24 2357	JAR
Zinc, total	<0.0200	0.0200	mg/L	4		04/24/24 0716	04/25/24 2357	JAR

Client Sample ID:	MW-93		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HD1532-10	**Collection Date:**	04/16/2024 11:43

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
Bromomethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
Chloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
Acetone	<10.0	10.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
Chloroform	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
Benzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
Dibromomethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
Toluene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
Xylenes, total	<2.0	2.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
Styrene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
Bromoform	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS

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CERTIFICATE OF ANALYSIS

1HD1532

Client Sample ID:	MW-93		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HD1532-10	**Collection Date:**	04/16/2024 11:43

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1719	LJS
Surrogate: Dibromofluoromethane	105	Limit: 75-136	% Rec	1		04/22/24 0000	04/22/24 1719	LJS
Surrogate: Dibromofluoromethane	105	Limit: 80-126	% Rec	1		04/22/24 0000	04/22/24 1719	LJS
Surrogate: 1,2-Dichloroethane-d4	107	Limit: 63-138	% Rec	1		04/22/24 0000	04/22/24 1719	LJS
Surrogate: 1,2-Dichloroethane-d4	107	Limit: 61-142	% Rec	1		04/22/24 0000	04/22/24 1719	LJS
Surrogate: Toluene-d8	99.1	Limit: 82-121	% Rec	1		04/22/24 0000	04/22/24 1719	LJS
Surrogate: Toluene-d8	99.1	Limit: 87-116	% Rec	1		04/22/24 0000	04/22/24 1719	LJS
Surrogate: 4-Bromofluorobenzene	97.9	Limit: 85-111	% Rec	1		04/22/24 0000	04/22/24 1719	LJS
Surrogate: 4-Bromofluorobenzene	97.9	Limit: 80-116	% Rec	1		04/22/24 0000	04/22/24 1719	LJS

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		04/24/24 0716	04/26/24 0003	JAR
Arsenic, total	**0.0119**	0.0040	mg/L	4		04/24/24 0716	04/26/24 0003	JAR
Barium, total	**0.243**	0.0040	mg/L	4		04/24/24 0716	04/26/24 0003	JAR
Beryllium, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0003	JAR
Cadmium, total	<0.0008	0.0008	mg/L	4		04/24/24 0716	04/26/24 0003	JAR
Chromium, total	<0.0080	0.0080	mg/L	4		04/24/24 0716	04/26/24 0003	JAR
Cobalt, total	**0.0098**	0.0004	mg/L	4		04/24/24 0716	04/26/24 0003	JAR
Copper, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0003	JAR
Lead, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0003	JAR
Nickel, total	**0.0255**	0.0040	mg/L	4		04/24/24 0716	04/26/24 0003	JAR
Selenium, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0003	JAR
Silver, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0003	JAR
Thallium, total	<0.0020	0.0020	mg/L	4		04/24/24 0716	04/26/24 0003	JAR
Vanadium, total	<0.0200	0.0200	mg/L	4		04/24/24 0716	04/26/24 0003	JAR
Zinc, total	**0.0214**	0.0200	mg/L	4		04/24/24 0716	04/26/24 0003	JAR

Client Sample ID:	MW-94		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HD1532-11	**Collection Date:**	04/17/2024 8:29

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
Vinyl Chloride	**2.2**	1.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
Bromomethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
Chloroethane	**4.3**	1.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
Acetone	<10.0	10.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
1,1-Dichloroethane	**1.3**	1.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
cis-1,2-Dichloroethylene	**5.2**	1.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
Chloroform	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
Benzene	**2.0**	1.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
1,2-Dichloropropane	**1.1**	1.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
Dibromomethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
Toluene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
Xylenes, total	<2.0	2.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
Styrene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
Bromoform	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS

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CERTIFICATE OF ANALYSIS

1HD1532

Client Sample ID:	MW-94		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HD1532-11	**Collection Date:**	04/17/2024 8:29

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1741	LJS
Surrogate: Dibromofluoromethane	103	Limit: 75-136	% Rec	1		04/22/24 0000	04/22/24 1741	LJS
Surrogate: Dibromofluoromethane	103	Limit: 80-126	% Rec	1		04/22/24 0000	04/22/24 1741	LJS
Surrogate: 1,2-Dichloroethane-d4	106	Limit: 61-142	% Rec	1		04/22/24 0000	04/22/24 1741	LJS
Surrogate: 1,2-Dichloroethane-d4	106	Limit: 63-138	% Rec	1		04/22/24 0000	04/22/24 1741	LJS
Surrogate: Toluene-d8	98.8	Limit: 87-116	% Rec	1		04/22/24 0000	04/22/24 1741	LJS
Surrogate: Toluene-d8	98.8	Limit: 82-121	% Rec	1		04/22/24 0000	04/22/24 1741	LJS
Surrogate: 4-Bromofluorobenzene	98.1	Limit: 80-116	% Rec	1		04/22/24 0000	04/22/24 1741	LJS
Surrogate: 4-Bromofluorobenzene	98.1	Limit: 85-111	% Rec	1		04/22/24 0000	04/22/24 1741	LJS

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
2320B								
Alkalinity, as CaCO3	**698**	50	mg/L	1		04/23/24 0918	04/23/24 1300	BSS
EPA 9040								
pH	**6.6**	0.5	pH	1	**I-03**	04/23/24 0916	04/23/24 1347	BSS

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		04/24/24 0716	04/26/24 0009	JAR
Arsenic, total	**0.0959**	0.0040	mg/L	4		04/24/24 0716	04/26/24 0009	JAR
Barium, total	**0.308**	0.0040	mg/L	4		04/24/24 0716	04/26/24 0009	JAR
Beryllium, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0009	JAR
Cadmium, total	<0.0008	0.0008	mg/L	4		04/24/24 0716	04/26/24 0009	JAR
Chromium, total	<0.0080	0.0080	mg/L	4		04/24/24 0716	04/26/24 0009	JAR
Cobalt, total	**0.0102**	0.0004	mg/L	4		04/24/24 0716	04/26/24 0009	JAR
Copper, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0009	JAR
Lead, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0009	JAR
Nickel, total	**0.0092**	0.0040	mg/L	4		04/24/24 0716	04/26/24 0009	JAR
Selenium, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0009	JAR
Silver, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0009	JAR
Thallium, total	<0.0020	0.0020	mg/L	4		04/24/24 0716	04/26/24 0009	JAR
Vanadium, total	<0.0200	0.0200	mg/L	4		04/24/24 0716	04/26/24 0009	JAR
Zinc, total	<0.0200	0.0200	mg/L	4		04/24/24 0716	04/26/24 0009	JAR

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CERTIFICATE OF ANALYSIS

1HD1532

Client Sample ID:	MW-95			
Sample Matrix:	Aqueous		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HD1532-12		**Collection Date:**	04/17/2024 7:35

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		04/25/24 0000	04/25/24 1645	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
Bromomethane	<1.0	1.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
Chloroethane	<1.0	1.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
Acetone	<10.0	10.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
Acrylonitrile	<5.0	5.0	ug/L	1	**O-07**	04/25/24 0000	04/25/24 1645	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
Chloroform	<1.0	1.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
Benzene	<1.0	1.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
Dibromomethane	<1.0	1.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
Toluene	<1.0	1.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
Xylenes, total	<2.0	2.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
Styrene	<1.0	1.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
Bromoform	<1.0	1.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS

Client Sample ID:	MW-95		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HD1532-12	**Collection Date:**	04/17/2024 7:35

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		04/25/24 0000	04/25/24 1645	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/25/24 0000	04/25/24 1645	LJS
Surrogate: Dibromofluoromethane	91.2	Limit: 75-136	% Rec	1		04/25/24 0000	04/25/24 1645	LJS
Surrogate: Dibromofluoromethane	91.2	Limit: 80-126	% Rec	1	**O-07**	04/25/24 0000	04/25/24 1645	LJS
Surrogate: 1,2-Dichloroethane-d4	97.5	Limit: 61-142	% Rec	1		04/25/24 0000	04/25/24 1645	LJS
Surrogate: 1,2-Dichloroethane-d4	97.5	Limit: 63-138	% Rec	1	**O-07**	04/25/24 0000	04/25/24 1645	LJS
Surrogate: Toluene-d8	98.0	Limit: 87-116	% Rec	1	**O-07**	04/25/24 0000	04/25/24 1645	LJS
Surrogate: Toluene-d8	98.0	Limit: 82-121	% Rec	1		04/25/24 0000	04/25/24 1645	LJS
Surrogate: 4-Bromofluorobenzene	99.4	Limit: 80-116	% Rec	1		04/25/24 0000	04/25/24 1645	LJS
Surrogate: 4-Bromofluorobenzene	99.4	Limit: 85-111	% Rec	1	**O-07**	04/25/24 0000	04/25/24 1645	LJS

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		04/24/24 0716	04/26/24 0015	JAR
Arsenic, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0015	JAR
Barium, total	**0.0427**	0.0040	mg/L	4		04/24/24 0716	04/26/24 0015	JAR
Beryllium, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0015	JAR
Cadmium, total	<0.0008	0.0008	mg/L	4		04/24/24 0716	04/26/24 0015	JAR
Chromium, total	<0.0080	0.0080	mg/L	4		04/24/24 0716	04/26/24 0015	JAR
Cobalt, total	<0.0004	0.0004	mg/L	4		04/24/24 0716	04/26/24 0015	JAR
Copper, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0015	JAR
Lead, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0015	JAR
Nickel, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0015	JAR
Selenium, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0015	JAR
Silver, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0015	JAR
Thallium, total	<0.0020	0.0020	mg/L	4		04/24/24 0716	04/26/24 0015	JAR
Vanadium, total	<0.0200	0.0200	mg/L	4		04/24/24 0716	04/26/24 0015	JAR
Zinc, total	<0.0200	0.0200	mg/L	4		04/24/24 0716	04/26/24 0015	JAR

Client Sample ID:	MW-96R		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HD1532-13	**Collection Date:**	04/16/2024 7:55

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
Bromomethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
Chloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
Acetone	<10.0	10.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
Chloroform	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
Benzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
Dibromomethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
Toluene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
Xylenes, total	<2.0	2.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
Styrene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
Bromoform	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS

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CERTIFICATE OF ANALYSIS

1HD1532

Client Sample ID:	MW-96R		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HD1532-13	**Collection Date:**	04/16/2024 7:55

Determination of Volatile Organic Compounds	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1804	LJS
Surrogate: Dibromofluoromethane	103	Limit: 75-136	% Rec	1		04/22/24 0000	04/22/24 1804	LJS
Surrogate: Dibromofluoromethane	103	Limit: 80-126	% Rec	1		04/22/24 0000	04/22/24 1804	LJS
Surrogate: 1,2-Dichloroethane-d4	108	Limit: 61-142	% Rec	1		04/22/24 0000	04/22/24 1804	LJS
Surrogate: 1,2-Dichloroethane-d4	108	Limit: 63-138	% Rec	1		04/22/24 0000	04/22/24 1804	LJS
Surrogate: Toluene-d8	99.1	Limit: 87-116	% Rec	1		04/22/24 0000	04/22/24 1804	LJS
Surrogate: Toluene-d8	99.1	Limit: 82-121	% Rec	1		04/22/24 0000	04/22/24 1804	LJS
Surrogate: 4-Bromofluorobenzene	98.5	Limit: 80-116	% Rec	1		04/22/24 0000	04/22/24 1804	LJS
Surrogate: 4-Bromofluorobenzene	98.5	Limit: 85-111	% Rec	1		04/22/24 0000	04/22/24 1804	LJS

Determination of Total Metals	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		04/24/24 0716	04/26/24 0034	JAR
Arsenic, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0034	JAR
Barium, total	**0.124**	0.0040	mg/L	4		04/24/24 0716	04/26/24 0034	JAR
Beryllium, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0034	JAR
Cadmium, total	<0.0008	0.0008	mg/L	4		04/24/24 0716	04/26/24 0034	JAR
Chromium, total	<0.0080	0.0080	mg/L	4		04/24/24 0716	04/26/24 0034	JAR
Cobalt, total	**0.0018**	0.0004	mg/L	4		04/24/24 0716	04/26/24 0034	JAR
Copper, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0034	JAR
Lead, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0034	JAR
Nickel, total	**0.0053**	0.0040	mg/L	4		04/24/24 0716	04/26/24 0034	JAR
Selenium, total	**0.0074**	0.0040	mg/L	4		04/24/24 0716	04/26/24 0034	JAR
Silver, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0034	JAR
Thallium, total	<0.0020	0.0020	mg/L	4		04/24/24 0716	04/26/24 0034	JAR
Vanadium, total	<0.0200	0.0200	mg/L	4		04/24/24 0716	04/26/24 0034	JAR
Zinc, total	<0.0200	0.0200	mg/L	4		04/24/24 0716	04/26/24 0034	JAR

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CERTIFICATE OF ANALYSIS

1HD1532

Client Sample ID:	MW-97		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HD1532-14	**Collection Date:**	04/17/2024 8:09

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		04/23/24 0000	04/23/24 1626	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
Bromomethane	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
Chloroethane	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
Acetone	<10.0	10.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
Chloroform	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
Benzene	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
Dibromomethane	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
Toluene	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
Xylenes, total	<2.0	2.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
Styrene	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
Bromoform	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS

Client Sample ID:	MW-97		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HD1532-14	**Collection Date:**	04/17/2024 8:09

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		04/23/24 0000	04/23/24 1626	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/23/24 0000	04/23/24 1626	LJS
Surrogate: Dibromofluoromethane	97.1	Limit: 80-126	% Rec	1		04/23/24 0000	04/23/24 1626	LJS
Surrogate: Dibromofluoromethane	97.1	Limit: 75-136	% Rec	1		04/23/24 0000	04/23/24 1626	LJS
Surrogate: 1,2-Dichloroethane-d4	101	Limit: 63-138	% Rec	1		04/23/24 0000	04/23/24 1626	LJS
Surrogate: 1,2-Dichloroethane-d4	101	Limit: 61-142	% Rec	1		04/23/24 0000	04/23/24 1626	LJS
Surrogate: Toluene-d8	97.3	Limit: 82-121	% Rec	1		04/23/24 0000	04/23/24 1626	LJS
Surrogate: Toluene-d8	97.3	Limit: 87-116	% Rec	1		04/23/24 0000	04/23/24 1626	LJS
Surrogate: 4-Bromofluorobenzene	95.4	Limit: 85-111	% Rec	1		04/23/24 0000	04/23/24 1626	LJS
Surrogate: 4-Bromofluorobenzene	95.4	Limit: 80-116	% Rec	1		04/23/24 0000	04/23/24 1626	LJS

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		04/24/24 0716	04/26/24 0040	JAR
Arsenic, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0040	JAR
Barium, total	**0.315**	0.0040	mg/L	4		04/24/24 0716	04/26/24 0040	JAR
Beryllium, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0040	JAR
Cadmium, total	<0.0008	0.0008	mg/L	4		04/24/24 0716	04/26/24 0040	JAR
Chromium, total	<0.0080	0.0080	mg/L	4		04/24/24 0716	04/26/24 0040	JAR
Cobalt, total	<0.0004	0.0004	mg/L	4		04/24/24 0716	04/26/24 0040	JAR
Copper, total	**0.0071**	0.0040	mg/L	4		04/24/24 0716	04/26/24 0040	JAR
Lead, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0040	JAR
Nickel, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0040	JAR
Selenium, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0040	JAR
Silver, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0040	JAR
Thallium, total	<0.0020	0.0020	mg/L	4		04/24/24 0716	04/26/24 0040	JAR
Vanadium, total	<0.0200	0.0200	mg/L	4		04/24/24 0716	04/26/24 0040	JAR
Zinc, total	<0.0200	0.0200	mg/L	4		04/24/24 0716	04/26/24 0040	JAR

Client Sample ID:	SRAMP B Tile		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HD1532-15	**Collection Date:**	04/16/2024 8:30

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
Bromomethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
Chloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
Acetone	<10.0	10.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
Chloroform	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
Benzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
Dibromomethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
Toluene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
Xylenes, total	<2.0	2.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
Styrene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
Bromoform	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS

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CERTIFICATE OF ANALYSIS

1HD1532

Client Sample ID:	SRAMP B Tile			
Sample Matrix:	Aqueous		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HD1532-15		**Collection Date:**	04/16/2024 8:30

Determination of Volatile Organic Compounds	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1827	LJS
Surrogate: Dibromofluoromethane	105	Limit: 80-126	% Rec	1		04/22/24 0000	04/22/24 1827	LJS
Surrogate: Dibromofluoromethane	105	Limit: 75-136	% Rec	1		04/22/24 0000	04/22/24 1827	LJS
Surrogate: 1,2-Dichloroethane-d4	108	Limit: 63-138	% Rec	1		04/22/24 0000	04/22/24 1827	LJS
Surrogate: 1,2-Dichloroethane-d4	108	Limit: 61-142	% Rec	1		04/22/24 0000	04/22/24 1827	LJS
Surrogate: Toluene-d8	98.5	Limit: 82-121	% Rec	1		04/22/24 0000	04/22/24 1827	LJS
Surrogate: Toluene-d8	98.5	Limit: 87-116	% Rec	1		04/22/24 0000	04/22/24 1827	LJS
Surrogate: 4-Bromofluorobenzene	97.8	Limit: 85-111	% Rec	1		04/22/24 0000	04/22/24 1827	LJS
Surrogate: 4-Bromofluorobenzene	97.8	Limit: 80-116	% Rec	1		04/22/24 0000	04/22/24 1827	LJS

Determination of Total Metals	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		04/24/24 0716	04/26/24 0046	JAR
Arsenic, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0046	JAR
Barium, total	**0.0161**	0.0040	mg/L	4		04/24/24 0716	04/26/24 0046	JAR
Beryllium, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0046	JAR
Cadmium, total	<0.0008	0.0008	mg/L	4		04/24/24 0716	04/26/24 0046	JAR
Chromium, total	<0.0080	0.0080	mg/L	4		04/24/24 0716	04/26/24 0046	JAR
Cobalt, total	<0.0004	0.0004	mg/L	4		04/24/24 0716	04/26/24 0046	JAR
Copper, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0046	JAR
Lead, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0046	JAR
Nickel, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0046	JAR
Selenium, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0046	JAR
Silver, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0046	JAR
Thallium, total	<0.0020	0.0020	mg/L	4		04/24/24 0716	04/26/24 0046	JAR
Vanadium, total	<0.0200	0.0200	mg/L	4		04/24/24 0716	04/26/24 0046	JAR
Zinc, total	<0.0200	0.0200	mg/L	4		04/24/24 0716	04/26/24 0046	JAR

CERTIFICATE OF ANALYSIS

1HD1532

Client Sample ID:	Duplicate		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HD1532-16	**Collection Date:**	04/16/2024

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		04/24/24 0716	04/26/24 0052	JAR
Arsenic, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0052	JAR
Barium, total	**0.130**	0.0040	mg/L	4		04/24/24 0716	04/26/24 0052	JAR
Beryllium, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0052	JAR
Cadmium, total	<0.0008	0.0008	mg/L	4		04/24/24 0716	04/26/24 0052	JAR
Chromium, total	<0.0080	0.0080	mg/L	4		04/24/24 0716	04/26/24 0052	JAR
Cobalt, total	**0.0019**	0.0004	mg/L	4		04/24/24 0716	04/26/24 0052	JAR
Copper, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0052	JAR
Lead, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0052	JAR
Nickel, total	**0.0052**	0.0040	mg/L	4		04/24/24 0716	04/26/24 0052	JAR
Selenium, total	**0.0076**	0.0040	mg/L	4		04/24/24 0716	04/26/24 0052	JAR
Silver, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0052	JAR
Thallium, total	<0.0020	0.0020	mg/L	4		04/24/24 0716	04/26/24 0052	JAR
Vanadium, total	<0.0200	0.0200	mg/L	4		04/24/24 0716	04/26/24 0052	JAR
Zinc, total	<0.0200	0.0200	mg/L	4		04/24/24 0716	04/26/24 0052	JAR

Client Sample ID:	MW-89			
Sample Matrix:	Aqueous		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HD1532-17		**Collection Date:**	04/16/2024 10:44

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		04/22/24 0000	04/22/24 1850	LJS
Vinyl Chloride	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
Bromomethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
Chloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
Acetone	<10.0	10.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
Methylene Chloride	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
1,1-Dichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
Chloroform	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
Benzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
1,2-Dichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
Trichloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
Dibromomethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
Toluene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
Ethylbenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
Xylenes, total	<2.0	2.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
Styrene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
Bromoform	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS

Client Sample ID:	MW-89		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HD1532-17	**Collection Date:**	04/16/2024 10:44

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		04/22/24 0000	04/22/24 1850	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/22/24 0000	04/22/24 1850	LJS
Surrogate: Dibromofluoromethane	105	Limit: 80-126	% Rec	1		04/22/24 0000	04/22/24 1850	LJS
Surrogate: Dibromofluoromethane	105	Limit: 75-136	% Rec	1		04/22/24 0000	04/22/24 1850	LJS
Surrogate: 1,2-Dichloroethane-d4	109	Limit: 63-138	% Rec	1		04/22/24 0000	04/22/24 1850	LJS
Surrogate: 1,2-Dichloroethane-d4	109	Limit: 61-142	% Rec	1		04/22/24 0000	04/22/24 1850	LJS
Surrogate: Toluene-d8	98.4	Limit: 87-116	% Rec	1		04/22/24 0000	04/22/24 1850	LJS
Surrogate: Toluene-d8	98.4	Limit: 82-121	% Rec	1		04/22/24 0000	04/22/24 1850	LJS
Surrogate: 4-Bromofluorobenzene	97.2	Limit: 85-111	% Rec	1		04/22/24 0000	04/22/24 1850	LJS
Surrogate: 4-Bromofluorobenzene	97.2	Limit: 80-116	% Rec	1		04/22/24 0000	04/22/24 1850	LJS

Determination of Total Metals	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		04/24/24 0716	04/26/24 0058	JAR
Arsenic, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0058	JAR
Barium, total	**0.240**	0.0040	mg/L	4		04/24/24 0716	04/26/24 0058	JAR
Beryllium, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0058	JAR
Cadmium, total	<0.0008	0.0008	mg/L	4		04/24/24 0716	04/26/24 0058	JAR
Chromium, total	<0.0080	0.0080	mg/L	4		04/24/24 0716	04/26/24 0058	JAR
Cobalt, total	<0.0004	0.0004	mg/L	4		04/24/24 0716	04/26/24 0058	JAR
Copper, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0058	JAR
Lead, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0058	JAR
Nickel, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0058	JAR
Selenium, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0058	JAR
Silver, total	<0.0040	0.0040	mg/L	4		04/24/24 0716	04/26/24 0058	JAR
Thallium, total	<0.0020	0.0020	mg/L	4		04/24/24 0716	04/26/24 0058	JAR
Vanadium, total	<0.0200	0.0200	mg/L	4		04/24/24 0716	04/26/24 0058	JAR
Zinc, total	<0.0200	0.0200	mg/L	4		04/24/24 0716	04/26/24 0058	JAR

Batch Log Summary

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260B	1HD1347	1HD1347-BS1	
		1HD1347-BSD1	
		1HD1347-BLK1	
		1HD1532-02	MW-85 (B)
		1HD1532-03	MW-98 (B)
		1HD1532-05	MW-49
		1HD1532-06	MW-54
		1HD1532-07	MW-81
		1HD1532-08	MW-87
		1HD1532-09	MW-91
		1HD1532-10	MW-93
		1HD1532-11	MW-94
		1HD1532-13	MW-96R
		1HD1532-15	SRAMP B Tile
		1HD1532-17	MW-89
		1HD1347-MS1	1HD1532-07
		1HD1347-MSD1	1HD1532-07

Method	Batch	Laboratory ID	Client / Source ID
EPA 9040	1HD1357	1HD1357-SRM2	
		1HD1357-SRM1	
		1HD1357-DUP1	1HD1532-05
		1HD1532-05	MW-49
		1HD1532-06	MW-54
		1HD1532-07	MW-81
		1HD1532-11	MW-94

Method	Batch	Laboratory ID	Client / Source ID
2320B	1HD1358	1HD1532-06	MW-54
		1HD1358-BS1	
		1HD1358-MS1	1HD1532-05
		1HD1358-BLK1	
		1HD1532-05	MW-49
		1HD1532-07	MW-81
		1HD1532-11	MW-94
		1HD1358-MSD1	1HD1532-05

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260B	1HD1408	1HD1408-BS1	
		1HD1408-BSD1	

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260B	1HD1408	1HD1408-BLK1	
		1HD1532-04	MW-99 (B)
		1HD1532-14	MW-97
		1HD1408-MS1	1HD1532-04
		1HD1408-MSD1	1HD1532-04

Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	1HD1412	1HD1412-BLK1	
		1HD1412-BS1	
		1HD1412-MS1	1HD1511-01
		1HD1412-MSD1	1HD1511-01
		1HD1412-PS1	1HD1511-01
		1HD1532-02	MW-85 (B)
		1HD1532-03	MW-98 (B)
		1HD1532-05	MW-49
		1HD1532-06	MW-54
		1HD1532-07	MW-81
		1HD1532-08	MW-87
		1HD1532-09	MW-91
		1HD1532-10	MW-93
		1HD1532-11	MW-94
		1HD1532-12	MW-95
		1HD1532-13	MW-96R
		1HD1532-14	MW-97
		1HD1532-15	SRAMP B Tile
		1HD1532-16	Duplicate
		1HD1532-17	MW-89
		1HD1532-07RE1	MW-81

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
		1HD1532-04	MW-99 (B)

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260B	1HD1572	1HD1572-BS1	
		1HD1572-BSD1	
		1HD1572-BLK1	
		1HD1532-12	MW-95
		1HD1532-12RE1	MW-95
		1HD1572-MS1	1HD1698-01

EPA 8260B	1HD1572	1HD1572-MSD1	1HD1698-01

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

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1347 - EPA 5030B - EPA 8260B										
Blank (1HD1347-BLK1)				Prepared: 04/22/24 00:00 Analyzed: 04/22/24 13:28						
Chloromethane	<1.0	1.0	ug/L							
Vinyl Chloride	<1.0	1.0	ug/L							
Bromomethane	<1.0	1.0	ug/L							
Chloroethane	<1.0	1.0	ug/L							
Trichlorofluoromethane	<1.0	1.0	ug/L							
1,1-Dichloroethylene	<1.0	1.0	ug/L							
Acetone	<10.0	10.0	ug/L							
Methyl Iodide	<1.0	1.0	ug/L							
Carbon Disulfide	<1.0	1.0	ug/L							
Methylene Chloride	<5.0	5.0	ug/L							
Acrylonitrile	<5.0	5.0	ug/L							
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L							
1,1-Dichloroethane	<1.0	1.0	ug/L							
Vinyl Acetate	<5.0	5.0	ug/L							
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L							
2-Butanone (MEK)	<10.0	10.0	ug/L							
Bromochloromethane	<1.0	1.0	ug/L							
Chloroform	<1.0	1.0	ug/L							
1,1,1-Trichloroethane	<1.0	1.0	ug/L							
Carbon Tetrachloride	<1.0	1.0	ug/L							
Benzene	<1.0	1.0	ug/L							
1,2-Dichloroethane	<1.0	1.0	ug/L							
Trichloroethylene	<1.0	1.0	ug/L							
1,2-Dichloropropane	<1.0	1.0	ug/L							
Dibromomethane	<1.0	1.0	ug/L							
Bromodichloromethane	<1.0	1.0	ug/L							
cis-1,3-Dichloropropene	<1.0	1.0	ug/L							
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L							
Toluene	<1.0	1.0	ug/L							
trans-1,3-Dichloropropene	<1.0	1.0	ug/L							
1,1,2-Trichloroethane	<1.0	1.0	ug/L							
Tetrachloroethylene	<1.0	1.0	ug/L							
2-Hexanone (MBK)	<5.0	5.0	ug/L							
Dibromochloromethane	<1.0	1.0	ug/L							
1,2-Dibromoethane	<1.0	1.0	ug/L							
Chlorobenzene	<1.0	1.0	ug/L							
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L							
Ethylbenzene	<1.0	1.0	ug/L							
Xylenes, total	<2.0	2.0	ug/L							
Styrene	<1.0	1.0	ug/L							

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1347 - EPA 5030B - EPA 8260B										
Blank (1HD1347-BLK1)				Prepared: 04/22/24 00:00 Analyzed: 04/22/24 13:28						
Bromoform	<1.0	1.0	ug/L							
1,2,3-Trichloropropane	<1.0	1.0	ug/L							
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L							
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L							
1,4-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L							
Surrogate: Dibromofluoromethane	*48.8*		ug/L	*50.2*		*97.3*	*80-126*			
Surrogate: Dibromofluoromethane	*48.8*		ug/L	*50.2*		*97.3*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*50.2*		ug/L	*50.1*		*100*	*61-142*			
Surrogate: 1,2-Dichloroethane-d4	*50.2*		ug/L	*50.1*		*100*	*63-138*			
Surrogate: Toluene-d8	*49.2*		ug/L	*50.4*		*97.7*	*87-116*			
Surrogate: Toluene-d8	*49.2*		ug/L	*50.4*		*97.7*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*49.7*		ug/L	*50.1*		*99.1*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*49.7*		ug/L	*50.1*		*99.1*	*80-116*			
LCS (1HD1347-BS1)				Prepared: 04/22/24 00:00 Analyzed: 04/22/24 12:20						
Chloromethane	28.57	1.0	ug/L	30.0		95.1	63-155			
Vinyl Chloride	30.89	1.0	ug/L	30.0		103	70-154			
Bromomethane	22.26	1.0	ug/L	30.1		74.0	52-176			
Chloroethane	31.35	1.0	ug/L	30.0		104	72-148			
Trichlorofluoromethane	29.88	1.0	ug/L	30.0		99.6	70-152			
1,1-Dichloroethylene	49.24	1.0	ug/L	50.1		98.2	70-148			
Acetone	81.46	10.0	ug/L	100		81.4	43-172			
Methyl Iodide	94.04	1.0	ug/L	100		93.9	69-170			
Carbon Disulfide	97.23	1.0	ug/L	100		97.1	72-162			
Methylene Chloride	47.77	5.0	ug/L	50.2		95.2	68-142			
Acrylonitrile	48.44	5.0	ug/L	50.0		96.9	67-144			
trans-1,2-Dichloroethylene	48.72	1.0	ug/L	50.3		96.9	66-148			
1,1-Dichloroethane	47.66	1.0	ug/L	50.3		94.8	66-143			
Vinyl Acetate	156.9	5.0	ug/L	162		97.2	43-153			
cis-1,2-Dichloroethylene	47.39	1.0	ug/L	50.5		93.8	71-149			
2-Butanone (MEK)	104.7	10.0	ug/L	100		105	52-159			
Bromochloromethane	48.03	1.0	ug/L	50.4		95.2	69-143			
Chloroform	46.73	1.0	ug/L	50.2		93.1	69-144			
1,1,1-Trichloroethane	47.51	1.0	ug/L	50.3		94.4	62-129			
Carbon Tetrachloride	49.48	1.0	ug/L	50.2		98.5	63-141			
Benzene	48.51	1.0	ug/L	50.4		96.2	71-134			
1,2-Dichloroethane	46.99	1.0	ug/L	50.2		93.6	72-132			
Trichloroethylene	48.85	1.0	ug/L	50.3		97.0	71-135			
1,2-Dichloropropane	48.30	1.0	ug/L	50.2		96.2	69-136			
Dibromomethane	49.33	1.0	ug/L	50.5		97.7	73-147			
Bromodichloromethane	48.80	1.0	ug/L	50.3		97.1	68-129			
cis-1,3-Dichloropropene	49.55	1.0	ug/L	50.2		98.7	65-134			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1347 - EPA 5030B - EPA 8260B										
LCS (1HD1347-BS1)				Prepared: 04/22/24 00:00 Analyzed: 04/22/24 12:20						
4-Methyl-2-pentanone (MIBK)	104.2	5.0	ug/L	100		104	58-147			
Toluene	47.32	1.0	ug/L	50.5		93.7	72-133			
trans-1,3-Dichloropropene	49.84	1.0	ug/L	50.3		99.1	67-130			
1,1,2-Trichloroethane	48.86	1.0	ug/L	50.2		97.3	69-135			
Tetrachloroethylene	48.97	1.0	ug/L	50.2		97.5	69-130			
2-Hexanone (MBK)	109.4	5.0	ug/L	100		109	55-144			
Dibromochloromethane	50.52	1.0	ug/L	50.3		100	73-127			
1,2-Dibromoethane	49.61	1.0	ug/L	50.4		98.3	67-132			
Chlorobenzene	49.00	1.0	ug/L	50.2		97.5	72-123			
1,1,1,2-Tetrachloroethane	49.70	1.0	ug/L	50.4		98.5	73-127			
Ethylbenzene	50.21	1.0	ug/L	50.5		99.5	71-127			
Xylenes, total	153.1	2.0	ug/L	151		101	74-127			
Styrene	51.90	1.0	ug/L	50.4		103	66-126			
Bromoform	49.89	1.0	ug/L	50.2		99.3	68-130			
1,2,3-Trichloropropane	49.45	1.0	ug/L	50.4		98.0	63-136			
trans-1,4-Dichloro-2-butene	104.2	5.0	ug/L	100		104	54-134			
1,1,2,2-Tetrachloroethane	49.30	1.0	ug/L	50.2		98.2	61-131			
1,4-Dichlorobenzene	48.57	1.0	ug/L	50.2		96.8	70-129			
1,2-Dichlorobenzene	48.80	1.0	ug/L	50.2		97.3	69-126			
1,2-Dibromo-3-chloropropane	51.81	5.0	ug/L	50.5		103	50-143			
Surrogate: Dibromofluoromethane	*48.4*		ug/L	*50.2*		*96.5*	*80-126*			
Surrogate: Dibromofluoromethane	*48.4*		ug/L	*50.2*		*96.5*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*48.4*		ug/L	*50.1*		*96.6*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*48.4*		ug/L	*50.1*		*96.6*	*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	*50.2*		ug/L	*50.1*		*100*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*50.2*		ug/L	*50.1*		*100*	*80-116*			
LCS Dup (1HD1347-BSD1)				Prepared: 04/22/24 00:00 Analyzed: 04/22/24 12:42						
Chloromethane	28.16	1.0	ug/L	30.0		93.8	63-155	1.45	24	
Vinyl Chloride	30.36	1.0	ug/L	30.0		101	70-154	1.73	25	
Bromomethane	23.59	1.0	ug/L	30.1		78.4	52-176	5.80	27	
Chloroethane	30.71	1.0	ug/L	30.0		102	72-148	2.06	25	
Trichlorofluoromethane	30.06	1.0	ug/L	30.0		100	70-152	0.601	26	
1,1-Dichloroethylene	47.54	1.0	ug/L	50.1		94.8	70-148	3.51	24	
Acetone	89.77	10.0	ug/L	100		89.7	43-172	9.71	30	
Methyl Iodide	93.11	1.0	ug/L	100		92.9	69-170	0.994	30	
Carbon Disulfide	95.11	1.0	ug/L	100		95.0	72-162	2.20	24	
Methylene Chloride	48.52	5.0	ug/L	50.2		96.7	68-142	1.56	21	
Acrylonitrile	51.37	5.0	ug/L	50.0		103	67-144	5.87	24	
trans-1,2-Dichloroethylene	47.81	1.0	ug/L	50.3		95.1	66-148	1.89	27	
1,1-Dichloroethane	47.44	1.0	ug/L	50.3		94.4	66-143	0.463	24	
Vinyl Acetate	155.4	5.0	ug/L	162		96.2	43-153	0.993	30	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1347 - EPA 5030B - EPA 8260B										
LCS Dup (1HD1347-BSD1)			Prepared: 04/22/24 00:00 Analyzed: 04/22/24 12:42							
cis-1,2-Dichloroethylene	56.58	1.0	ug/L	50.5		112	71-149	17.7	26	
2-Butanone (MEK)	114.8	10.0	ug/L	100		115	52-159	9.17	27	
Bromochloromethane	48.52	1.0	ug/L	50.4		96.2	69-143	1.02	23	
Chloroform	46.70	1.0	ug/L	50.2		93.1	69-144	0.0642	23	
1,1,1-Trichloroethane	46.90	1.0	ug/L	50.3		93.2	62-129	1.29	24	
Carbon Tetrachloride	48.67	1.0	ug/L	50.2		96.9	63-141	1.65	25	
Benzene	48.30	1.0	ug/L	50.4		95.7	71-134	0.434	24	
1,2-Dichloroethane	47.62	1.0	ug/L	50.2		94.9	72-132	1.33	24	
Trichloroethylene	48.14	1.0	ug/L	50.3		95.6	71-135	1.46	24	
1,2-Dichloropropane	49.17	1.0	ug/L	50.2		97.9	69-136	1.79	24	
Dibromomethane	49.60	1.0	ug/L	50.5		98.3	73-147	0.546	25	
Bromodichloromethane	48.87	1.0	ug/L	50.3		97.2	68-129	0.143	22	
cis-1,3-Dichloropropene	50.06	1.0	ug/L	50.2		99.7	65-134	1.02	23	
4-Methyl-2-pentanone (MIBK)	109.8	5.0	ug/L	100		110	58-147	5.19	27	
Toluene	47.56	1.0	ug/L	50.5		94.2	72-133	0.506	24	
trans-1,3-Dichloropropene	50.90	1.0	ug/L	50.3		101	67-130	2.10	24	
1,1,2-Trichloroethane	49.28	1.0	ug/L	50.2		98.1	69-135	0.856	23	
Tetrachloroethylene	47.89	1.0	ug/L	50.2		95.4	69-130	2.23	25	
2-Hexanone (MBK)	112.9	5.0	ug/L	100		113	55-144	3.20	25	
Dibromochloromethane	50.84	1.0	ug/L	50.3		101	73-127	0.631	22	
1,2-Dibromoethane	49.79	1.0	ug/L	50.4		98.7	67-132	0.362	24	
Chlorobenzene	48.95	1.0	ug/L	50.2		97.4	72-123	0.102	23	
1,1,1,2-Tetrachloroethane	49.82	1.0	ug/L	50.4		98.8	73-127	0.241	24	
Ethylbenzene	50.17	1.0	ug/L	50.5		99.4	71-127	0.0797	26	
Xylenes, total	152.4	2.0	ug/L	151		101	74-127	0.504	25	
Styrene	51.79	1.0	ug/L	50.4		103	66-126	0.212	23	
Bromoform	50.35	1.0	ug/L	50.2		100	68-130	0.918	23	
1,2,3-Trichloropropane	50.79	1.0	ug/L	50.4		101	63-136	2.67	24	
trans-1,4-Dichloro-2-butene	107.0	5.0	ug/L	100		107	54-134	2.65	27	
1,1,2,2-Tetrachloroethane	50.15	1.0	ug/L	50.2		99.9	61-131	1.71	29	
1,4-Dichlorobenzene	48.31	1.0	ug/L	50.2		96.3	70-129	0.537	24	
1,2-Dichlorobenzene	48.50	1.0	ug/L	50.2		96.7	69-126	0.617	26	
1,2-Dibromo-3-chloropropane	53.28	5.0	ug/L	50.5		106	50-143	2.80	30	
Surrogate: Dibromofluoromethane	*48.7*		ug/L	*50.2*		*97.1*	*80-126*			
Surrogate: Dibromofluoromethane	*48.7*		ug/L	*50.2*		*97.1*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*48.7*		ug/L	*50.1*		*97.2*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*48.7*		ug/L	*50.1*		*97.2*	*61-142*			
Surrogate: Toluene-d8	*50.0*		ug/L	*50.4*		*99.3*	*87-116*			
Surrogate: Toluene-d8	*50.0*		ug/L	*50.4*		*99.3*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*51.0*		ug/L	*50.1*		*102*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*51.0*		ug/L	*50.1*		*102*	*80-116*			
Matrix Spike (1HD1347-MS1)	**Source: 1HD1532-07**		Prepared: 04/22/24 00:00 Analyzed: 04/22/24 21:30							
Chloromethane	299.4	10.0	ug/L	300	ND	99.7	61-152			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1347 - EPA 5030B - EPA 8260B										
Matrix Spike (1HD1347-MS1)		**Source: 1HD1532-07**	Prepared: 04/22/24 00:00 Analyzed: 04/22/24 21:30							
Vinyl Chloride	337.5	10.0	ug/L	300	6.82	110	66-149			
Bromomethane	257.6	10.0	ug/L	301	ND	85.6	43-171			
Chloroethane	342.4	10.0	ug/L	300	6.83	112	69-148			
Trichlorofluoromethane	316.6	10.0	ug/L	300	ND	106	62-163			
1,1-Dichloroethylene	523.9	10.0	ug/L	501	ND	104	70-148			
Acetone	860.2	100	ug/L	1000	ND	85.9	45-173			
Methyl Iodide	682.6	10.0	ug/L	1000	ND	68.1	62-167			
Carbon Disulfide	1053	10.0	ug/L	1000	ND	105	71-163			
Methylene Chloride	522.5	50.0	ug/L	502	ND	104	69-140			
Acrylonitrile	482.2	50.0	ug/L	500	ND	96.4	58-151			
trans-1,2-Dichloroethylene	510.4	10.0	ug/L	503	ND	102	69-144			
1,1-Dichloroethane	527.0	10.0	ug/L	503	28.18	99.2	70-138			
Vinyl Acetate	1506	50.0	ug/L	1620	ND	93.3	58-142			
cis-1,2-Dichloroethylene	640.6	10.0	ug/L	505	164.2	94.3	68-151			
2-Butanone (MEK)	1013	100	ug/L	1000	ND	101	50-160			
Bromochloromethane	500.1	10.0	ug/L	504	ND	99.2	65-143			
Chloroform	490.2	10.0	ug/L	502	ND	97.7	71-143			
1,1,1-Trichloroethane	495.5	10.0	ug/L	503	ND	98.5	63-133			
Carbon Tetrachloride	511.0	10.0	ug/L	502	ND	102	63-142			
Benzene	485.9	10.0	ug/L	504	ND	96.3	69-133			
1,2-Dichloroethane	472.1	10.0	ug/L	502	12.26	91.6	63-138			
Trichloroethylene	488.4	10.0	ug/L	503	ND	97.0	71-133			
1,2-Dichloropropane	485.1	10.0	ug/L	502	6.53	95.3	69-132			
Dibromomethane	485.4	10.0	ug/L	505	ND	96.2	70-147			
Bromodichloromethane	477.7	10.0	ug/L	503	ND	95.0	67-130			
cis-1,3-Dichloropropene	465.3	10.0	ug/L	502	ND	92.7	61-126			
4-Methyl-2-pentanone (MIBK)	989.2	50.0	ug/L	1000	ND	98.7	55-147			
Toluene	477.5	10.0	ug/L	505	ND	94.6	71-133			
trans-1,3-Dichloropropene	466.5	10.0	ug/L	503	ND	92.8	63-124			
1,1,2-Trichloroethane	484.5	10.0	ug/L	502	ND	96.5	69-133			
Tetrachloroethylene	479.2	10.0	ug/L	502	ND	95.4	70-124			
2-Hexanone (MBK)	1003	50.0	ug/L	1000	ND	100	53-141			
Dibromochloromethane	483.9	10.0	ug/L	503	ND	96.1	74-122			
1,2-Dibromoethane	481.2	10.0	ug/L	504	ND	95.4	66-127			
Chlorobenzene	486.5	10.0	ug/L	502	ND	96.8	76-116			
1,1,1,2-Tetrachloroethane	481.5	10.0	ug/L	504	ND	95.5	77-121			
Ethylbenzene	498.2	10.0	ug/L	505	ND	98.7	73-124			
Xylenes, total	1512	20.0	ug/L	1510	ND	99.9	75-123			
Styrene	510.7	10.0	ug/L	504	ND	101	70-120			
Bromoform	462.1	10.0	ug/L	502	ND	92.0	70-124			
1,2,3-Trichloropropane	483.9	10.0	ug/L	504	ND	95.9	62-135			
trans-1,4-Dichloro-2-butene	945.3	50.0	ug/L	1000	ND	94.3	50-120			
1,1,2,2-Tetrachloroethane	471.1	10.0	ug/L	502	ND	93.8	63-126			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1347 - EPA 5030B - EPA 8260B										
Matrix Spike (1HD1347-MS1)	**Source: 1HD1532-07**	Prepared: 04/22/24 00:00 Analyzed: 04/22/24 21:30								
1,4-Dichlorobenzene	474.8	10.0	ug/L	502	ND	94.6	72-119			
1,2-Dichlorobenzene	477.5	10.0	ug/L	502	ND	95.2	71-117			
1,2-Dibromo-3-chloropropane	466.1	50.0	ug/L	505	ND	92.3	49-134			
Surrogate: Dibromofluoromethane	*524*		ug/L	*502*		*104*	*80-126*			
Surrogate: Dibromofluoromethane	*524*		ug/L	*502*		*104*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*518*		ug/L	*501*		*103*	*61-142*			
Surrogate: 1,2-Dichloroethane-d4	*518*		ug/L	*501*		*103*	*63-138*			
Surrogate: Toluene-d8	*506*		ug/L	*504*		*100*	*87-116*			
Surrogate: Toluene-d8	*506*		ug/L	*504*		*100*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*498*		ug/L	*501*		*99.4*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*498*		ug/L	*501*		*99.4*	*80-116*			
Matrix Spike Dup (1HD1347-MSD1)	**Source: 1HD1532-07**	Prepared: 04/22/24 00:00 Analyzed: 04/22/24 21:53								
Chloromethane	284.9	10.0	ug/L	300	ND	94.9	61-152	4.96	26	
Vinyl Chloride	315.8	10.0	ug/L	300	6.82	103	66-149	6.64	23	
Bromomethane	242.2	10.0	ug/L	301	ND	80.5	43-171	6.16	29	
Chloroethane	320.5	10.0	ug/L	300	6.83	105	69-148	6.61	25	
Trichlorofluoromethane	298.9	10.0	ug/L	300	ND	99.7	62-163	5.75	25	
1,1-Dichloroethylene	497.8	10.0	ug/L	501	ND	99.3	70-148	5.11	22	
Acetone	873.2	100	ug/L	1000	ND	87.2	45-173	1.50	30	
Methyl Iodide	777.0	10.0	ug/L	1000	ND	77.5	62-167	12.9	24	
Carbon Disulfide	991.7	10.0	ug/L	1000	ND	99.1	71-163	6.01	22	
Methylene Chloride	496.7	50.0	ug/L	502	ND	99.0	69-140	5.06	19	
Acrylonitrile	475.1	50.0	ug/L	500	ND	95.0	58-151	1.48	15	
trans-1,2-Dichloroethylene	481.0	10.0	ug/L	503	ND	95.7	69-144	5.93	22	
1,1-Dichloroethane	505.2	10.0	ug/L	503	28.18	94.9	70-138	4.22	20	
Vinyl Acetate	1487	50.0	ug/L	1620	ND	92.1	58-142	1.32	24	
cis-1,2-Dichloroethylene	611.6	10.0	ug/L	505	164.2	88.6	68-151	4.63	22	
2-Butanone (MEK)	991.4	100	ug/L	1000	ND	99.0	50-160	2.16	23	
Bromochloromethane	485.6	10.0	ug/L	504	ND	96.3	65-143	2.94	22	
Chloroform	473.8	10.0	ug/L	502	ND	94.4	71-143	3.40	21	
1,1,1-Trichloroethane	472.5	10.0	ug/L	503	ND	93.9	63-133	4.75	23	
Carbon Tetrachloride	487.6	10.0	ug/L	502	ND	97.1	63-142	4.69	22	
Benzene	467.8	10.0	ug/L	504	ND	92.7	69-133	3.80	18	
1,2-Dichloroethane	460.9	10.0	ug/L	502	12.26	89.4	63-138	2.40	20	
Trichloroethylene	468.7	10.0	ug/L	503	ND	93.1	71-133	4.12	23	
1,2-Dichloropropane	471.1	10.0	ug/L	502	6.53	92.5	69-132	2.93	20	
Dibromomethane	474.5	10.0	ug/L	505	ND	94.0	70-147	2.27	22	
Bromodichloromethane	465.3	10.0	ug/L	503	ND	92.6	67-130	2.63	21	
cis-1,3-Dichloropropene	458.7	10.0	ug/L	502	ND	91.4	61-126	1.43	21	
4-Methyl-2-pentanone (MIBK)	985.0	50.0	ug/L	1000	ND	98.3	55-147	0.425	23	
Toluene	458.4	10.0	ug/L	505	ND	90.8	71-133	4.08	19	
trans-1,3-Dichloropropene	458.5	10.0	ug/L	503	ND	91.2	63-124	1.73	21	
1,1,2-Trichloroethane	477.0	10.0	ug/L	502	ND	95.0	69-133	1.56	19	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch 1HD1347 - EPA 5030B - EPA 8260B

Matrix Spike Dup (1HD1347-MSD1) **Source: 1HD1532-07** Prepared: 04/22/24 00:00 Analyzed: 04/22/24 21:53

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Tetrachloroethylene	458.6	10.0	ug/L	502	ND	91.3	70-124	4.39	24	
2-Hexanone (MBK)	1010	50.0	ug/L	1000	ND	101	53-141	0.735	24	
Dibromochloromethane	479.4	10.0	ug/L	503	ND	95.2	74-122	0.934	21	
1,2-Dibromoethane	471.0	10.0	ug/L	504	ND	93.4	66-127	2.14	23	
Chlorobenzene	468.8	10.0	ug/L	502	ND	93.3	76-116	3.71	21	
1,1,1,2-Tetrachloroethane	472.6	10.0	ug/L	504	ND	93.7	77-121	1.87	25	
Ethylbenzene	479.5	10.0	ug/L	505	ND	95.0	73-124	3.83	20	
Xylenes, total	1455	20.0	ug/L	1510	ND	96.1	75-123	3.89	20	
Styrene	494.5	10.0	ug/L	504	ND	98.1	70-120	3.22	23	
Bromoform	459.7	10.0	ug/L	502	ND	91.5	70-124	0.521	22	
1,2,3-Trichloropropane	479.1	10.0	ug/L	504	ND	95.0	62-135	0.997	28	
trans-1,4-Dichloro-2-butene	937.3	50.0	ug/L	1000	ND	93.5	50-120	0.850	26	
1,1,2,2-Tetrachloroethane	472.0	10.0	ug/L	502	ND	94.0	63-126	0.191	24	
1,4-Dichlorobenzene	464.6	10.0	ug/L	502	ND	92.6	72-119	2.17	24	
1,2-Dichlorobenzene	465.4	10.0	ug/L	502	ND	92.8	71-117	2.57	24	
1,2-Dibromo-3-chloropropane	476.2	50.0	ug/L	505	ND	94.3	49-134	2.14	28	

Surrogate	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Surrogate: Dibromofluoromethane	*514*		ug/L	*502*		*102*	*80-126*			
Surrogate: Dibromofluoromethane	*514*		ug/L	*502*		*102*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*510*		ug/L	*501*		*102*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*510*		ug/L	*501*		*102*	*61-142*			
Surrogate: Toluene-d8	*504*		ug/L	*504*		*99.9*	*87-116*			
Surrogate: Toluene-d8	*504*		ug/L	*504*		*99.9*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*500*		ug/L	*501*		*99.6*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*500*		ug/L	*501*		*99.6*	*80-116*			

Batch 1HD1408 - EPA 5030B - EPA 8260B

Blank (1HD1408-BLK1) Prepared: 04/23/24 00:00 Analyzed: 04/23/24 10:46

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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							

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1408 - EPA 5030B - EPA 8260B										
Blank (1HD1408-BLK1)				Prepared: 04/23/24 00:00 Analyzed: 04/23/24 10:46						
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	*50.8*		ug/L	*50.2*		*101*	*80-126*			
Surrogate: Dibromofluoromethane	*50.8*		ug/L	*50.2*		*101*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*51.8*		ug/L	*50.1*		*103*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*51.8*		ug/L	*50.1*		*103*	*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*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*48.6*		ug/L	*50.1*		*96.9*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*48.6*		ug/L	*50.1*		*96.9*	*80-116*			
LCS (1HD1408-BS1)				Prepared: 04/23/24 00:00 Analyzed: 04/23/24 09:38						
Chloromethane	35.96	1.0	ug/L	30.6		117	63-155			
Vinyl Chloride	35.51	1.0	ug/L	30.2		117	70-154			
Bromomethane	30.25	1.0	ug/L	28.8		105	52-176			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1408 - EPA 5030B - EPA 8260B										
LCS (1HD1408-BS1)				Prepared: 04/23/24 00:00 Analyzed: 04/23/24 09:38						
Chloroethane	38.95	1.0	ug/L	31.6		123	72-148			
Trichlorofluoromethane	35.99	1.0	ug/L	32.6		110	70-152			
1,1-Dichloroethylene	54.20	1.0	ug/L	50.0		108	70-148			
Acetone	83.64	10.0	ug/L	101		82.6	43-172			
Methyl Iodide	100.8	1.0	ug/L	102		98.9	69-170			
Carbon Disulfide	121.4	1.0	ug/L	103		118	72-162			
Methylene Chloride	51.84	5.0	ug/L	50.0		104	68-142			
Acrylonitrile	94.62	5.0	ug/L	100		94.3	67-144			
trans-1,2-Dichloroethylene	53.70	1.0	ug/L	50.0		107	66-148			
1,1-Dichloroethane	51.84	1.0	ug/L	50.0		104	66-143			
Vinyl Acetate	97.50	5.0	ug/L	100		97.5	43-153			
cis-1,2-Dichloroethylene	50.21	1.0	ug/L	50.0		100	71-149			
2-Butanone (MEK)	91.25	10.0	ug/L	102		89.6	52-159			
Bromochloromethane	52.63	1.0	ug/L	50.0		105	69-143			
Chloroform	50.51	1.0	ug/L	50.0		101	69-144			
1,1,1-Trichloroethane	49.46	1.0	ug/L	50.0		98.9	62-129			
Carbon Tetrachloride	52.74	1.0	ug/L	50.0		105	63-141			
Benzene	50.94	1.0	ug/L	50.0		102	71-134			
1,2-Dichloroethane	48.82	1.0	ug/L	50.0		97.6	72-132			
Trichloroethylene	50.80	1.0	ug/L	50.0		102	71-135			
1,2-Dichloropropane	50.57	1.0	ug/L	50.0		101	69-136			
Dibromomethane	51.42	1.0	ug/L	50.0		103	73-147			
Bromodichloromethane	49.96	1.0	ug/L	50.0		99.9	68-129			
cis-1,3-Dichloropropene	49.40	1.0	ug/L	50.0		98.8	65-134			
4-Methyl-2-pentanone (MIBK)	101.2	5.0	ug/L	100		101	58-147			
Toluene	48.89	1.0	ug/L	50.0		97.8	72-133			
trans-1,3-Dichloropropene	50.85	1.0	ug/L	50.0		102	67-130			
1,1,2-Trichloroethane	50.24	1.0	ug/L	50.0		100	69-135			
Tetrachloroethylene	50.30	1.0	ug/L	50.0		101	69-130			
2-Hexanone (MBK)	104.0	5.0	ug/L	99.3		105	55-144			
Dibromochloromethane	51.03	1.0	ug/L	50.0		102	73-127			
1,2-Dibromoethane	50.10	1.0	ug/L	50.0		100	67-132			
Chlorobenzene	50.14	1.0	ug/L	50.0		100	72-123			
1,1,1,2-Tetrachloroethane	51.71	1.0	ug/L	50.0		103	73-127			
Ethylbenzene	51.98	1.0	ug/L	50.0		104	71-127			
Xylenes, total	157.3	2.0	ug/L	150		105	74-127			
Styrene	53.55	1.0	ug/L	50.0		107	66-126			
Bromoform	48.10	1.0	ug/L	50.0		96.2	68-130			
1,2,3-Trichloropropane	49.51	1.0	ug/L	50.0		99.0	63-136			
trans-1,4-Dichloro-2-butene	91.95	5.0	ug/L	103		89.4	54-134			
1,1,2,2-Tetrachloroethane	48.77	1.0	ug/L	50.0		97.5	61-131			
1,4-Dichlorobenzene	49.35	1.0	ug/L	50.0		98.7	70-129			
1,2-Dichlorobenzene	50.94	1.0	ug/L	50.0		102	69-126			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1408 - EPA 5030B - EPA 8260B										
LCS (1HD1408-BS1)				Prepared: 04/23/24 00:00 Analyzed: 04/23/24 09:38						
1,2-Dibromo-3-chloropropane	46.92	5.0	ug/L	50.0		93.8	50-143			
Surrogate: Dibromofluoromethane	*50.9*		ug/L	*50.2*		*102*	*80-126*			
Surrogate: Dibromofluoromethane	*50.9*		ug/L	*50.2*		*102*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*50.6*		ug/L	*50.1*		*101*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*50.6*		ug/L	*50.1*		*101*	*61-142*			
Surrogate: Toluene-d8	*50.3*		ug/L	*50.4*		*99.8*	*87-116*			
Surrogate: Toluene-d8	*50.3*		ug/L	*50.4*		*99.8*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*50.4*		ug/L	*50.1*		*101*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*50.4*		ug/L	*50.1*		*101*	*80-116*			
LCS Dup (1HD1408-BSD1)				Prepared: 04/23/24 00:00 Analyzed: 04/23/24 10:01						
Chloromethane	34.15	1.0	ug/L	30.6		111	63-155	5.16	24	
Vinyl Chloride	33.22	1.0	ug/L	30.2		110	70-154	6.66	25	
Bromomethane	30.50	1.0	ug/L	28.8		106	52-176	0.823	27	
Chloroethane	37.41	1.0	ug/L	31.6		118	72-148	4.03	25	
Trichlorofluoromethane	33.93	1.0	ug/L	32.6		104	70-152	5.89	26	
1,1-Dichloroethylene	51.03	1.0	ug/L	50.0		102	70-148	6.02	24	
Acetone	73.24	10.0	ug/L	101		72.4	43-172	13.3	30	
Methyl Iodide	98.09	1.0	ug/L	102		96.3	69-170	2.68	30	
Carbon Disulfide	114.3	1.0	ug/L	103		111	72-162	5.97	24	
Methylene Chloride	50.42	5.0	ug/L	50.0		101	68-142	2.78	21	
Acrylonitrile	88.84	5.0	ug/L	100		88.5	67-144	6.30	24	
trans-1,2-Dichloroethylene	50.79	1.0	ug/L	50.0		102	66-148	5.57	27	
1,1-Dichloroethane	48.98	1.0	ug/L	50.0		98.0	66-143	5.67	24	
Vinyl Acetate	94.18	5.0	ug/L	100		94.2	43-153	3.46	30	
cis-1,2-Dichloroethylene	47.83	1.0	ug/L	50.0		95.7	71-149	4.86	26	
2-Butanone (MEK)	79.76	10.0	ug/L	102		78.3	52-159	13.4	27	
Bromochloromethane	51.02	1.0	ug/L	50.0		102	69-143	3.11	23	
Chloroform	48.30	1.0	ug/L	50.0		96.6	69-144	4.47	23	
1,1,1-Trichloroethane	46.64	1.0	ug/L	50.0		93.3	62-129	5.87	24	
Carbon Tetrachloride	49.78	1.0	ug/L	50.0		99.6	63-141	5.77	25	
Benzene	48.87	1.0	ug/L	50.0		97.7	71-134	4.15	24	
1,2-Dichloroethane	47.62	1.0	ug/L	50.0		95.2	72-132	2.49	24	
Trichloroethylene	49.00	1.0	ug/L	50.0		98.0	71-135	3.61	24	
1,2-Dichloropropane	49.30	1.0	ug/L	50.0		98.6	69-136	2.54	24	
Dibromomethane	50.60	1.0	ug/L	50.0		101	73-147	1.61	25	
Bromodichloromethane	48.54	1.0	ug/L	50.0		97.1	68-129	2.88	22	
cis-1,3-Dichloropropene	48.22	1.0	ug/L	50.0		96.4	65-134	2.42	23	
4-Methyl-2-pentanone (MIBK)	98.38	5.0	ug/L	100		98.3	58-147	2.88	27	
Toluene	47.13	1.0	ug/L	50.0		94.3	72-133	3.67	24	
trans-1,3-Dichloropropene	49.94	1.0	ug/L	50.0		99.9	67-130	1.81	24	
1,1,2-Trichloroethane	49.57	1.0	ug/L	50.0		99.1	69-135	1.34	23	
Tetrachloroethylene	48.32	1.0	ug/L	50.0		96.6	69-130	4.02	25	
2-Hexanone (MBK)	100.7	5.0	ug/L	99.3		101	55-144	3.17	25	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1408 - EPA 5030B - EPA 8260B										
LCS Dup (1HD1408-BSD1)			Prepared: 04/23/24 00:00 Analyzed: 04/23/24 10:01							
Dibromochloromethane	50.39	1.0	ug/L	50.0		101	73-127	1.26	22	
1,2-Dibromoethane	49.13	1.0	ug/L	50.0		98.3	67-132	1.96	24	
Chlorobenzene	48.76	1.0	ug/L	50.0		97.5	72-123	2.79	23	
1,1,1,2-Tetrachloroethane	49.84	1.0	ug/L	50.0		99.7	73-127	3.68	24	
Ethylbenzene	49.99	1.0	ug/L	50.0		100	71-127	3.90	26	
Xylenes, total	151.5	2.0	ug/L	150		101	74-127	3.78	25	
Styrene	51.92	1.0	ug/L	50.0		104	66-126	3.09	23	
Bromoform	47.28	1.0	ug/L	50.0		94.6	68-130	1.72	23	
1,2,3-Trichloropropane	48.94	1.0	ug/L	50.0		97.9	63-136	1.16	24	
trans-1,4-Dichloro-2-butene	90.17	5.0	ug/L	103		87.7	54-134	1.95	27	
1,1,2,2-Tetrachloroethane	48.79	1.0	ug/L	50.0		97.6	61-131	0.0410	29	
1,4-Dichlorobenzene	47.97	1.0	ug/L	50.0		95.9	70-129	2.84	24	
1,2-Dichlorobenzene	50.06	1.0	ug/L	50.0		100	69-126	1.74	26	
1,2-Dibromo-3-chloropropane	47.42	5.0	ug/L	50.0		94.8	50-143	1.06	30	
Surrogate: Dibromofluoromethane	*50.9*		ug/L	*50.2*		*102*	*80-126*			
Surrogate: Dibromofluoromethane	*50.9*		ug/L	*50.2*		*102*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*49.9*		ug/L	*50.1*		*99.6*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*49.9*		ug/L	*50.1*		*99.6*	*61-142*			
Surrogate: Toluene-d8	*50.3*		ug/L	*50.4*		*99.8*	*87-116*			
Surrogate: Toluene-d8	*50.3*		ug/L	*50.4*		*99.8*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*50.3*		ug/L	*50.1*		*100*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*50.3*		ug/L	*50.1*		*100*	*80-116*			
Matrix Spike (1HD1408-MS1)	**Source: 1HD1532-04**		Prepared: 04/23/24 00:00 Analyzed: 04/23/24 19:51							
Chloromethane	321.3	10.0	ug/L	306	ND	105	61-152			
Vinyl Chloride	319.2	10.0	ug/L	302	ND	106	66-149			
Bromomethane	222.6	10.0	ug/L	288	ND	77.3	43-171			
Chloroethane	351.5	10.0	ug/L	316	ND	111	69-148			
Trichlorofluoromethane	326.4	10.0	ug/L	326	ND	100	62-163			
1,1-Dichloroethylene	470.3	10.0	ug/L	500	ND	94.1	70-148			
Acetone	873.1	100	ug/L	1010	ND	86.3	45-173			
Methyl Iodide	983.3	10.0	ug/L	1020	ND	96.5	62-167			
Carbon Disulfide	1080	10.0	ug/L	1030	ND	105	71-163			
Methylene Chloride	464.0	50.0	ug/L	500	ND	92.8	69-140			
Acrylonitrile	933.4	50.0	ug/L	1000	ND	93.0	58-151			
trans-1,2-Dichloroethylene	473.0	10.0	ug/L	500	ND	94.6	69-144			
1,1-Dichloroethane	465.8	10.0	ug/L	500	ND	93.2	70-138			
Vinyl Acetate	903.2	50.0	ug/L	1000	ND	90.3	58-142			
cis-1,2-Dichloroethylene	541.4	10.0	ug/L	500	ND	108	68-151			
2-Butanone (MEK)	982.2	100	ug/L	1020	ND	96.5	50-160			
Bromochloromethane	480.7	10.0	ug/L	500	ND	96.1	65-143			
Chloroform	452.5	10.0	ug/L	500	ND	90.5	71-143			
1,1,1-Trichloroethane	439.5	10.0	ug/L	500	ND	87.9	63-133			
Carbon Tetrachloride	431.3	10.0	ug/L	500	ND	86.3	63-142			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1408 - EPA 5030B - EPA 8260B										
Matrix Spike (1HD1408-MS1)	**Source: 1HD1532-04**	Prepared: 04/23/24 00:00 Analyzed: 04/23/24 19:51								
Benzene	485.0	10.0	ug/L	500	ND	97.0	69-133			
1,2-Dichloroethane	475.0	10.0	ug/L	500	ND	95.0	63-138			
Trichloroethylene	480.4	10.0	ug/L	500	ND	96.1	71-133			
1,2-Dichloropropane	487.6	10.0	ug/L	500	ND	97.5	69-132			
Dibromomethane	503.7	10.0	ug/L	500	ND	101	70-147			
Bromodichloromethane	469.7	10.0	ug/L	500	ND	93.9	67-130			
cis-1,3-Dichloropropene	458.1	10.0	ug/L	500	ND	91.6	61-126			
4-Methyl-2-pentanone (MIBK)	1065	50.0	ug/L	1000	ND	106	55-147			
Toluene	468.3	10.0	ug/L	500	ND	93.7	71-133			
trans-1,3-Dichloropropene	480.0	10.0	ug/L	500	ND	96.0	63-124			
1,1,2-Trichloroethane	494.9	10.0	ug/L	500	ND	99.0	69-133			
Tetrachloroethylene	482.8	10.0	ug/L	500	ND	96.6	70-124			
2-Hexanone (MBK)	1110	50.0	ug/L	993	ND	112	53-141			
Dibromochloromethane	488.7	10.0	ug/L	500	ND	97.7	74-122			
1,2-Dibromoethane	506.1	10.0	ug/L	500	ND	101	66-127			
Chlorobenzene	487.5	10.0	ug/L	500	ND	97.5	76-116			
1,1,1,2-Tetrachloroethane	492.3	10.0	ug/L	500	ND	98.5	77-121			
Ethylbenzene	501.3	10.0	ug/L	500	ND	100	73-124			
Xylenes, total	1511	20.0	ug/L	1500	ND	101	75-123			
Styrene	521.7	10.0	ug/L	500	ND	104	70-120			
Bromoform	468.8	10.0	ug/L	500	ND	93.8	70-124			
1,2,3-Trichloropropane	503.8	10.0	ug/L	500	ND	101	62-135			
trans-1,4-Dichloro-2-butene	896.7	50.0	ug/L	1030	ND	87.2	50-120			
1,1,2,2-Tetrachloroethane	499.7	10.0	ug/L	500	ND	99.9	63-126			
1,4-Dichlorobenzene	481.2	10.0	ug/L	500	ND	96.2	72-119			
1,2-Dichlorobenzene	500.8	10.0	ug/L	500	ND	100	71-117			
1,2-Dibromo-3-chloropropane	494.5	50.0	ug/L	500	ND	98.9	49-134			
Surrogate: Dibromofluoromethane	*472*		ug/L	*502*		*94.1*	*80-126*			
Surrogate: Dibromofluoromethane	*472*		ug/L	*502*		*94.1*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*471*		ug/L	*501*		*94.0*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*471*		ug/L	*501*		*94.0*	*61-142*			
Surrogate: Toluene-d8	*499*		ug/L	*504*		*99.0*	*87-116*			
Surrogate: Toluene-d8	*499*		ug/L	*504*		*99.0*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*499*		ug/L	*501*		*99.5*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*499*		ug/L	*501*		*99.5*	*80-116*			
Matrix Spike Dup (1HD1408-MSD1)	**Source: 1HD1532-04**	Prepared: 04/23/24 00:00 Analyzed: 04/23/24 20:14								
Chloromethane	302.2	10.0	ug/L	306	ND	98.6	61-152	6.13	26	
Vinyl Chloride	300.5	10.0	ug/L	302	ND	99.4	66-149	6.04	23	
Bromomethane	229.6	10.0	ug/L	288	ND	79.7	43-171	3.10	29	
Chloroethane	336.9	10.0	ug/L	316	ND	106	69-148	4.24	25	
Trichlorofluoromethane	314.4	10.0	ug/L	326	ND	96.4	62-163	3.75	25	
1,1-Dichloroethylene	448.3	10.0	ug/L	500	ND	89.7	70-148	4.79	22	
Acetone	851.0	100	ug/L	1010	ND	84.1	45-173	2.56	30	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1408 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1HD1408-MSD1)	**Source: 1HD1532-04**	Prepared: 04/23/24 00:00 Analyzed: 04/23/24 20:14								
Methyl Iodide	1030	10.0	ug/L	1020	ND	101	62-167	4.65	24	
Carbon Disulfide	1014	10.0	ug/L	1030	ND	98.7	71-163	6.31	22	
Methylene Chloride	447.2	50.0	ug/L	500	ND	89.4	69-140	3.69	19	
Acrylonitrile	914.8	50.0	ug/L	1000	ND	91.2	58-151	2.01	15	
trans-1,2-Dichloroethylene	450.8	10.0	ug/L	500	ND	90.2	69-144	4.81	22	
1,1-Dichloroethane	444.2	10.0	ug/L	500	ND	88.8	70-138	4.75	20	
Vinyl Acetate	988.4	50.0	ug/L	1000	ND	98.8	58-142	9.01	24	
cis-1,2-Dichloroethylene	520.3	10.0	ug/L	500	ND	104	68-151	3.97	22	
2-Butanone (MEK)	963.8	100	ug/L	1020	ND	94.7	50-160	1.89	23	
Bromochloromethane	456.4	10.0	ug/L	500	ND	91.3	65-143	5.19	22	
Chloroform	435.1	10.0	ug/L	500	ND	87.0	71-143	3.92	21	
1,1,1-Trichloroethane	423.1	10.0	ug/L	500	ND	84.6	63-133	3.80	23	
Carbon Tetrachloride	436.9	10.0	ug/L	500	ND	87.4	63-142	1.29	22	
Benzene	469.9	10.0	ug/L	500	ND	94.0	69-133	3.16	18	
1,2-Dichloroethane	459.9	10.0	ug/L	500	ND	92.0	63-138	3.23	20	
Trichloroethylene	462.8	10.0	ug/L	500	ND	92.6	71-133	3.73	23	
1,2-Dichloropropane	469.6	10.0	ug/L	500	ND	93.9	69-132	3.76	20	
Dibromomethane	488.3	10.0	ug/L	500	ND	97.7	70-147	3.10	22	
Bromodichloromethane	458.7	10.0	ug/L	500	ND	91.7	67-130	2.37	21	
cis-1,3-Dichloropropene	443.2	10.0	ug/L	500	ND	88.6	61-126	3.31	21	
4-Methyl-2-pentanone (MIBK)	1047	50.0	ug/L	1000	ND	105	55-147	1.70	23	
Toluene	454.6	10.0	ug/L	500	ND	90.9	71-133	2.97	19	
trans-1,3-Dichloropropene	463.1	10.0	ug/L	500	ND	92.6	63-124	3.58	21	
1,1,2-Trichloroethane	483.8	10.0	ug/L	500	ND	96.8	69-133	2.27	19	
Tetrachloroethylene	475.0	10.0	ug/L	500	ND	95.0	70-124	1.63	24	
2-Hexanone (MBK)	1090	50.0	ug/L	993	ND	110	53-141	1.75	24	
Dibromochloromethane	483.7	10.0	ug/L	500	ND	96.7	74-122	1.03	21	
1,2-Dibromoethane	493.1	10.0	ug/L	500	ND	98.6	66-127	2.60	23	
Chlorobenzene	472.5	10.0	ug/L	500	ND	94.5	76-116	3.12	21	
1,1,1,2-Tetrachloroethane	482.4	10.0	ug/L	500	ND	96.5	77-121	2.03	25	
Ethylbenzene	489.5	10.0	ug/L	500	ND	97.9	73-124	2.38	20	
Xylenes, total	1481	20.0	ug/L	1500	ND	98.7	75-123	1.99	20	
Styrene	507.0	10.0	ug/L	500	ND	101	70-120	2.86	23	
Bromoform	468.7	10.0	ug/L	500	ND	93.7	70-124	0.0213	22	
1,2,3-Trichloropropane	501.0	10.0	ug/L	500	ND	100	62-135	0.557	28	
trans-1,4-Dichloro-2-butene	889.4	50.0	ug/L	1030	ND	86.5	50-120	0.817	26	
1,1,2,2-Tetrachloroethane	491.2	10.0	ug/L	500	ND	98.2	63-126	1.72	24	
1,4-Dichlorobenzene	465.2	10.0	ug/L	500	ND	93.0	72-119	3.38	24	
1,2-Dichlorobenzene	484.4	10.0	ug/L	500	ND	96.9	71-117	3.33	24	
1,2-Dibromo-3-chloropropane	483.8	50.0	ug/L	500	ND	96.8	49-134	2.19	28	
Surrogate: Dibromofluoromethane	*469*		ug/L	*502*		*93.5*	*80-126*			
Surrogate: Dibromofluoromethane	*469*		ug/L	*502*		*93.5*	*75-136*			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1408 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1HD1408-MSD1)	**Source: 1HD1532-04**		Prepared: 04/23/24 00:00 Analyzed: 04/23/24 20:14							
Surrogate: 1,2-Dichloroethane-d4	*464*		ug/L	*501*		*92.7*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*464*		ug/L	*501*		*92.7*	*61-142*			
Surrogate: Toluene-d8	*497*		ug/L	*504*		*98.7*	*87-116*			
Surrogate: Toluene-d8	*497*		ug/L	*504*		*98.7*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*499*		ug/L	*501*		*99.5*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*499*		ug/L	*501*		*99.5*	*80-116*			
Batch 1HD1572 - EPA 5030B - EPA 8260B										
Blank (1HD1572-BLK1)			Prepared: 04/25/24 00:00 Analyzed: 04/25/24 10:53							
Chloromethane	<1.0	1.0	ug/L							
Vinyl Chloride	<1.0	1.0	ug/L							
Bromomethane	<1.0	1.0	ug/L							
Chloroethane	<1.0	1.0	ug/L							
Trichlorofluoromethane	<1.0	1.0	ug/L							
1,1-Dichloroethylene	<1.0	1.0	ug/L							
Acetone	<10.0	10.0	ug/L							
Methyl Iodide	<1.0	1.0	ug/L							
Carbon Disulfide	<1.0	1.0	ug/L							
Methylene Chloride	<5.0	5.0	ug/L							
Acrylonitrile	<5.0	5.0	ug/L							
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L							
1,1-Dichloroethane	<1.0	1.0	ug/L							
Vinyl Acetate	<5.0	5.0	ug/L							
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L							
2-Butanone (MEK)	<10.0	10.0	ug/L							
Bromochloromethane	<1.0	1.0	ug/L							
Chloroform	<1.0	1.0	ug/L							
1,1,1-Trichloroethane	<1.0	1.0	ug/L							
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							

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1572 - EPA 5030B - EPA 8260B										
Blank (1HD1572-BLK1)				Prepared: 04/25/24 00:00 Analyzed: 04/25/24 10:53						
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	*45.9*		ug/L	*50.2*		*91.4*	*80-126*			
Surrogate: Dibromofluoromethane	*45.9*		ug/L	*50.2*		*91.4*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*47.5*		ug/L	*50.1*		*94.9*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*47.5*		ug/L	*50.1*		*94.9*	*61-142*			
Surrogate: Toluene-d8	*49.0*		ug/L	*50.4*		*97.2*	*87-116*			
Surrogate: Toluene-d8	*49.0*		ug/L	*50.4*		*97.2*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*48.4*		ug/L	*50.1*		*96.6*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*48.4*		ug/L	*50.1*		*96.6*	*80-116*			
LCS (1HD1572-BS1)				Prepared: 04/25/24 00:00 Analyzed: 04/25/24 09:45						
Chloromethane	31.87	1.0	ug/L	30.6		104	63-155			
Vinyl Chloride	31.27	1.0	ug/L	30.2		103	70-154			
Bromomethane	27.29	1.0	ug/L	28.8		94.8	52-176			
Chloroethane	34.72	1.0	ug/L	31.6		110	72-148			
Trichlorofluoromethane	31.60	1.0	ug/L	32.6		96.9	70-152			
1,1-Dichloroethylene	46.16	1.0	ug/L	50.0		92.3	70-148			
Acetone	77.88	10.0	ug/L	101		77.0	43-172			
Methyl Iodide	90.24	1.0	ug/L	102		88.6	69-170			
Carbon Disulfide	103.5	1.0	ug/L	103		101	72-162			
Methylene Chloride	45.98	5.0	ug/L	50.0		92.0	68-142			
Acrylonitrile	89.09	5.0	ug/L	100		88.8	67-144			
trans-1,2-Dichloroethylene	47.10	1.0	ug/L	50.0		94.2	66-148			
1,1-Dichloroethane	46.09	1.0	ug/L	50.0		92.2	66-143			
Vinyl Acetate	103.5	5.0	ug/L	100		103	43-153			
cis-1,2-Dichloroethylene	44.41	1.0	ug/L	50.0		88.8	71-149			
2-Butanone (MEK)	98.28	10.0	ug/L	102		96.5	52-159			
Bromochloromethane	46.58	1.0	ug/L	50.0		93.2	69-143			
Chloroform	44.67	1.0	ug/L	50.0		89.3	69-144			
1,1,1-Trichloroethane	43.41	1.0	ug/L	50.0		86.8	62-129			
Carbon Tetrachloride	46.00	1.0	ug/L	50.0		92.0	63-141			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch 1HD1572 - EPA 5030B - EPA 8260B

LCS (1HD1572-BS1) Prepared: 04/25/24 00:00 Analyzed: 04/25/24 09:45

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Benzene	48.21	1.0	ug/L	50.0		96.4	71-134			
1,2-Dichloroethane	46.27	1.0	ug/L	50.0		92.5	72-132			
Trichloroethylene	47.24	1.0	ug/L	50.0		94.5	71-135			
1,2-Dichloropropane	48.29	1.0	ug/L	50.0		96.6	69-136			
Dibromomethane	48.39	1.0	ug/L	50.0		96.8	73-147			
Bromodichloromethane	46.91	1.0	ug/L	50.0		93.8	68-129			
cis-1,3-Dichloropropene	46.00	1.0	ug/L	50.0		92.0	65-134			
4-Methyl-2-pentanone (MIBK)	99.66	5.0	ug/L	100		99.6	58-147			
Toluene	46.08	1.0	ug/L	50.0		92.2	72-133			
trans-1,3-Dichloropropene	48.01	1.0	ug/L	50.0		96.0	67-130			
1,1,2-Trichloroethane	48.29	1.0	ug/L	50.0		96.6	69-135			
Tetrachloroethylene	47.47	1.0	ug/L	50.0		94.9	69-130			
2-Hexanone (MBK)	104.2	5.0	ug/L	99.3		105	55-144			
Dibromochloromethane	49.44	1.0	ug/L	50.0		98.9	73-127			
1,2-Dibromoethane	48.54	1.0	ug/L	50.0		97.1	67-132			
Chlorobenzene	48.15	1.0	ug/L	50.0		96.3	72-123			
1,1,1,2-Tetrachloroethane	49.04	1.0	ug/L	50.0		98.1	73-127			
Ethylbenzene	49.63	1.0	ug/L	50.0		99.3	71-127			
Xylenes, total	150.2	2.0	ug/L	150		100	74-127			
Styrene	51.38	1.0	ug/L	50.0		103	66-126			
Bromoform	46.93	1.0	ug/L	50.0		93.9	68-130			
1,2,3-Trichloropropane	48.22	1.0	ug/L	50.0		96.4	63-136			
trans-1,4-Dichloro-2-butene	88.46	5.0	ug/L	103		86.1	54-134			
1,1,2,2-Tetrachloroethane	49.14	1.0	ug/L	50.0		98.3	61-131			
1,4-Dichlorobenzene	47.71	1.0	ug/L	50.0		95.4	70-129			
1,2-Dichlorobenzene	49.58	1.0	ug/L	50.0		99.2	69-126			
1,2-Dibromo-3-chloropropane	47.66	5.0	ug/L	50.0		95.3	50-143			
Surrogate: Dibromofluoromethane	*46.3*		ug/L	*50.2*		*92.2*	*80-126*			
Surrogate: Dibromofluoromethane	*46.3*		ug/L	*50.2*		*92.2*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*46.8*		ug/L	*50.1*		*93.5*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*46.8*		ug/L	*50.1*		*93.5*	*61-142*			
Surrogate: Toluene-d8	*49.6*		ug/L	*50.4*		*98.3*	*87-116*			
Surrogate: Toluene-d8	*49.6*		ug/L	*50.4*		*98.3*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*50.0*		ug/L	*50.1*		*99.8*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*50.0*		ug/L	*50.1*		*99.8*	*80-116*			

LCS Dup (1HD1572-BSD1) Prepared: 04/25/24 00:00 Analyzed: 04/25/24 10:07

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Chloromethane	30.48	1.0	ug/L	30.6		99.5	63-155	4.46	24	
Vinyl Chloride	29.91	1.0	ug/L	30.2		99.0	70-154	4.45	25	
Bromomethane	26.94	1.0	ug/L	28.8		93.5	52-176	1.29	27	
Chloroethane	33.02	1.0	ug/L	31.6		104	72-148	5.02	25	
Trichlorofluoromethane	30.17	1.0	ug/L	32.6		92.5	70-152	4.63	26	
1,1-Dichloroethylene	44.10	1.0	ug/L	50.0		88.2	70-148	4.56	24	
Acetone	79.15	10.0	ug/L	101		78.2	43-172	1.62	30	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1572 - EPA 5030B - EPA 8260B										
LCS Dup (1HD1572-BSD1)				Prepared: 04/25/24 00:00 Analyzed: 04/25/24 10:07						
Methyl Iodide	85.49	1.0	ug/L	102		83.9	69-170	5.41	30	
Carbon Disulfide	98.52	1.0	ug/L	103		95.9	72-162	4.91	24	
Methylene Chloride	44.51	5.0	ug/L	50.0		89.0	68-142	3.25	21	
Acrylonitrile	88.98	5.0	ug/L	100		88.7	67-144	0.124	24	
trans-1,2-Dichloroethylene	44.92	1.0	ug/L	50.0		89.8	66-148	4.74	27	
1,1-Dichloroethane	44.42	1.0	ug/L	50.0		88.8	66-143	3.69	24	
Vinyl Acetate	97.13	5.0	ug/L	100		97.1	43-153	6.31	30	
cis-1,2-Dichloroethylene	52.28	1.0	ug/L	50.0		105	71-149	16.3	26	
2-Butanone (MEK)	92.77	10.0	ug/L	102		91.1	52-159	5.77	27	
Bromochloromethane	44.92	1.0	ug/L	50.0		89.8	69-143	3.63	23	
Chloroform	43.06	1.0	ug/L	50.0		86.1	69-144	3.67	23	
1,1,1-Trichloroethane	41.29	1.0	ug/L	50.0		82.6	62-129	5.01	24	
Carbon Tetrachloride	43.89	1.0	ug/L	50.0		87.8	63-141	4.69	25	
Benzene	46.39	1.0	ug/L	50.0		92.8	71-134	3.85	24	
1,2-Dichloroethane	45.26	1.0	ug/L	50.0		90.5	72-132	2.21	24	
Trichloroethylene	45.57	1.0	ug/L	50.0		91.1	71-135	3.60	24	
1,2-Dichloropropane	46.95	1.0	ug/L	50.0		93.9	69-136	2.81	24	
Dibromomethane	47.71	1.0	ug/L	50.0		95.4	73-147	1.42	25	
Bromodichloromethane	45.70	1.0	ug/L	50.0		91.4	68-129	2.61	22	
cis-1,3-Dichloropropene	45.21	1.0	ug/L	50.0		90.4	65-134	1.73	23	
4-Methyl-2-pentanone (MIBK)	100.4	5.0	ug/L	100		100	58-147	0.750	27	
Toluene	44.67	1.0	ug/L	50.0		89.3	72-133	3.11	24	
trans-1,3-Dichloropropene	47.20	1.0	ug/L	50.0		94.4	67-130	1.70	24	
1,1,2-Trichloroethane	47.28	1.0	ug/L	50.0		94.6	69-135	2.11	23	
Tetrachloroethylene	45.29	1.0	ug/L	50.0		90.6	69-130	4.70	25	
2-Hexanone (MBK)	104.5	5.0	ug/L	99.3		105	55-144	0.230	25	
Dibromochloromethane	48.16	1.0	ug/L	50.0		96.3	73-127	2.62	22	
1,2-Dibromoethane	47.80	1.0	ug/L	50.0		95.6	67-132	1.54	24	
Chlorobenzene	46.58	1.0	ug/L	50.0		93.2	72-123	3.31	23	
1,1,1,2-Tetrachloroethane	47.89	1.0	ug/L	50.0		95.8	73-127	2.37	24	
Ethylbenzene	47.82	1.0	ug/L	50.0		95.6	71-127	3.71	26	
Xylenes, total	145.6	2.0	ug/L	150		97.0	74-127	3.12	25	
Styrene	49.77	1.0	ug/L	50.0		99.5	66-126	3.18	23	
Bromoform	46.69	1.0	ug/L	50.0		93.4	68-130	0.513	23	
1,2,3-Trichloropropane	47.89	1.0	ug/L	50.0		95.8	63-136	0.687	24	
trans-1,4-Dichloro-2-butene	88.16	5.0	ug/L	103		85.8	54-134	0.340	27	
1,1,2,2-Tetrachloroethane	48.31	1.0	ug/L	50.0		96.6	61-131	1.70	29	
1,4-Dichlorobenzene	46.06	1.0	ug/L	50.0		92.1	70-129	3.52	24	
1,2-Dichlorobenzene	47.96	1.0	ug/L	50.0		95.9	69-126	3.32	26	
1,2-Dibromo-3-chloropropane	48.25	5.0	ug/L	50.0		96.5	50-143	1.23	30	
Surrogate: Dibromofluoromethane	*46.2*		ug/L	*50.2*		*92.2*	*80-126*			
Surrogate: Dibromofluoromethane	*46.2*		ug/L	*50.2*		*92.2*	*75-136*			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1572 - EPA 5030B - EPA 8260B										
LCS Dup (1HD1572-BSD1)			Prepared: 04/25/24 00:00 Analyzed: 04/25/24 10:07							
Surrogate: 1,2-Dichloroethane-d4	*46.2*		ug/L	*50.1*		*92.2*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*46.2*		ug/L	*50.1*		*92.2*	*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	*50.3*		ug/L	*50.1*		*100*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*50.3*		ug/L	*50.1*		*100*	*80-116*			
Matrix Spike (1HD1572-MS1)	**Source: 1HD1698-01**		Prepared: 04/25/24 00:00 Analyzed: 04/25/24 19:02							
Chloromethane	276.8	10.0	ug/L	300	ND	92.2	61-152			
Vinyl Chloride	304.3	10.0	ug/L	300	ND	101	66-149			
Bromomethane	210.2	10.0	ug/L	301	ND	69.8	43-171			
Chloroethane	308.6	10.0	ug/L	300	ND	103	69-148			
Trichlorofluoromethane	291.8	10.0	ug/L	300	ND	97.3	62-163			
1,1-Dichloroethylene	472.9	10.0	ug/L	501	ND	94.3	70-148			
Acetone	813.9	100	ug/L	1000	ND	81.3	45-173			
Methyl Iodide	737.0	10.0	ug/L	1000	ND	73.6	62-167			
Carbon Disulfide	937.9	10.0	ug/L	1000	ND	93.7	71-163			
Methylene Chloride	465.7	50.0	ug/L	502	ND	92.8	69-140			
Acrylonitrile	477.0	50.0	ug/L	500	ND	95.4	58-151			
trans-1,2-Dichloroethylene	476.3	10.0	ug/L	503	ND	94.7	69-144			
1,1-Dichloroethane	469.8	10.0	ug/L	503	ND	93.5	70-138			
Vinyl Acetate	846.4	50.0	ug/L	1620	ND	52.4	58-142			QM-05
cis-1,2-Dichloroethylene	546.4	10.0	ug/L	505	ND	108	68-151			
2-Butanone (MEK)	943.1	100	ug/L	1000	ND	94.2	50-160			
Bromochloromethane	469.3	10.0	ug/L	504	ND	93.0	65-143			
Chloroform	455.5	10.0	ug/L	502	ND	90.8	71-143			
1,1,1-Trichloroethane	460.7	10.0	ug/L	503	ND	91.6	63-133			
Carbon Tetrachloride	470.6	10.0	ug/L	502	ND	93.7	63-142			
Benzene	487.8	10.0	ug/L	504	ND	96.7	69-133			
1,2-Dichloroethane	462.2	10.0	ug/L	502	ND	92.1	63-138			
Trichloroethylene	486.2	10.0	ug/L	503	ND	96.6	71-133			
1,2-Dichloropropane	486.5	10.0	ug/L	502	ND	96.9	69-132			
Dibromomethane	484.7	10.0	ug/L	505	ND	96.0	70-147			
Bromodichloromethane	477.9	10.0	ug/L	503	ND	95.1	67-130			
cis-1,3-Dichloropropene	476.4	10.0	ug/L	502	ND	94.9	61-126			
4-Methyl-2-pentanone (MIBK)	1057	50.0	ug/L	1000	ND	105	55-147			
Toluene	479.4	10.0	ug/L	505	ND	95.0	71-133			
trans-1,3-Dichloropropene	477.7	10.0	ug/L	503	ND	95.0	63-124			
1,1,2-Trichloroethane	489.0	10.0	ug/L	502	ND	97.4	69-133			
Tetrachloroethylene	485.1	10.0	ug/L	502	ND	96.6	70-124			
2-Hexanone (MBK)	1090	50.0	ug/L	1000	ND	109	53-141			
Dibromochloromethane	486.1	10.0	ug/L	503	ND	96.6	74-122			
1,2-Dibromoethane	495.9	10.0	ug/L	504	ND	98.3	66-127			
Chlorobenzene	491.8	10.0	ug/L	502	ND	97.9	76-116			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1572 - EPA 5030B - EPA 8260B										
Matrix Spike (1HD1572-MS1)	**Source: 1HD1698-01**	Prepared: 04/25/24 00:00 Analyzed: 04/25/24 19:02								
1,1,1,2-Tetrachloroethane	485.6	10.0	ug/L	504	ND	96.3	77-121			
Ethylbenzene	507.9	10.0	ug/L	505	ND	101	73-124			
Xylenes, total	1537	20.0	ug/L	1510	ND	102	75-123			
Styrene	517.3	10.0	ug/L	504	ND	103	70-120			
Bromoform	470.4	10.0	ug/L	502	ND	93.7	70-124			
1,2,3-Trichloropropane	496.6	10.0	ug/L	504	ND	98.5	62-135			
trans-1,4-Dichloro-2-butene	1006	50.0	ug/L	1000	ND	100	50-120			
1,1,2,2-Tetrachloroethane	498.5	10.0	ug/L	502	ND	99.3	63-126			
1,4-Dichlorobenzene	483.9	10.0	ug/L	502	ND	96.4	72-119			
1,2-Dichlorobenzene	481.6	10.0	ug/L	502	ND	96.0	71-117			
1,2-Dibromo-3-chloropropane	485.6	50.0	ug/L	505	ND	96.2	49-134			
Surrogate: Dibromofluoromethane	*467*		ug/L	*502*		*93.2*	*80-126*			
Surrogate: Dibromofluoromethane	*467*		ug/L	*502*		*93.2*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*474*		ug/L	*501*		*94.7*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*474*		ug/L	*501*		*94.7*	*61-142*			
Surrogate: Toluene-d8	*499*		ug/L	*504*		*99.0*	*87-116*			
Surrogate: Toluene-d8	*499*		ug/L	*504*		*99.0*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*500*		ug/L	*501*		*99.6*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*500*		ug/L	*501*		*99.6*	*80-116*			
Matrix Spike Dup (1HD1572-MSD1)	**Source: 1HD1698-01**	Prepared: 04/25/24 00:00 Analyzed: 04/25/24 19:25								
Chloromethane	264.9	10.0	ug/L	300	ND	88.2	61-152	4.39	26	
Vinyl Chloride	291.2	10.0	ug/L	300	ND	97.0	66-149	4.40	23	
Bromomethane	227.3	10.0	ug/L	301	ND	75.5	43-171	7.82	29	
Chloroethane	296.6	10.0	ug/L	300	ND	98.8	69-148	3.97	25	
Trichlorofluoromethane	287.3	10.0	ug/L	300	ND	95.8	62-163	1.55	25	
1,1-Dichloroethylene	456.6	10.0	ug/L	501	ND	91.1	70-148	3.51	22	
Acetone	783.7	100	ug/L	1000	ND	78.3	45-173	3.78	30	
Methyl Iodide	801.1	10.0	ug/L	1000	ND	80.0	62-167	8.33	24	
Carbon Disulfide	902.2	10.0	ug/L	1000	ND	90.1	71-163	3.88	22	
Methylene Chloride	450.2	50.0	ug/L	502	ND	89.7	69-140	3.38	19	
Acrylonitrile	464.6	50.0	ug/L	500	ND	92.9	58-151	2.63	15	
trans-1,2-Dichloroethylene	454.5	10.0	ug/L	503	ND	90.4	69-144	4.68	22	
1,1-Dichloroethane	450.4	10.0	ug/L	503	ND	89.6	70-138	4.22	20	
Vinyl Acetate	899.2	50.0	ug/L	1620	ND	55.7	58-142	6.05	24	QM-05
cis-1,2-Dichloroethylene	527.8	10.0	ug/L	505	ND	105	68-151	3.46	22	
2-Butanone (MEK)	969.7	100	ug/L	1000	ND	96.8	50-160	2.78	23	
Bromochloromethane	457.9	10.0	ug/L	504	ND	90.8	65-143	2.46	22	
Chloroform	436.1	10.0	ug/L	502	ND	86.9	71-143	4.35	21	
1,1,1-Trichloroethane	444.5	10.0	ug/L	503	ND	88.3	63-133	3.58	23	
Carbon Tetrachloride	452.8	10.0	ug/L	502	ND	90.2	63-142	3.86	22	
Benzene	466.8	10.0	ug/L	504	ND	92.5	69-133	4.40	18	
1,2-Dichloroethane	450.5	10.0	ug/L	502	ND	89.8	63-138	2.56	20	
Trichloroethylene	464.9	10.0	ug/L	503	ND	92.3	71-133	4.48	23	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1572 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1HD1572-MSD1)		**Source: 1HD1698-01**	Prepared: 04/25/24 00:00 Analyzed: 04/25/24 19:25							
1,2-Dichloropropane	471.3	10.0	ug/L	502	ND	93.8	69-132	3.17	20	
Dibromomethane	472.6	10.0	ug/L	505	ND	93.6	70-147	2.53	22	
Bromodichloromethane	464.0	10.0	ug/L	503	ND	92.3	67-130	2.95	21	
cis-1,3-Dichloropropene	463.0	10.0	ug/L	502	ND	92.2	61-126	2.85	21	
4-Methyl-2-pentanone (MIBK)	1024	50.0	ug/L	1000	ND	102	55-147	3.14	23	
Toluene	456.5	10.0	ug/L	505	ND	90.4	71-133	4.89	19	
trans-1,3-Dichloropropene	470.2	10.0	ug/L	503	ND	93.5	63-124	1.58	21	
1,1,2-Trichloroethane	474.2	10.0	ug/L	502	ND	94.4	69-133	3.07	19	
Tetrachloroethylene	463.0	10.0	ug/L	502	ND	92.2	70-124	4.66	24	
2-Hexanone (MBK)	1065	50.0	ug/L	1000	ND	106	53-141	2.32	24	
Dibromochloromethane	477.4	10.0	ug/L	503	ND	94.8	74-122	1.81	21	
1,2-Dibromoethane	484.9	10.0	ug/L	504	ND	96.1	66-127	2.24	23	
Chlorobenzene	469.2	10.0	ug/L	502	ND	93.4	76-116	4.70	21	
1,1,1,2-Tetrachloroethane	469.9	10.0	ug/L	504	ND	93.2	77-121	3.29	25	
Ethylbenzene	484.5	10.0	ug/L	505	ND	96.0	73-124	4.72	20	
Xylenes, total	1462	20.0	ug/L	1510	ND	96.6	75-123	4.97	20	
Styrene	496.6	10.0	ug/L	504	ND	98.5	70-120	4.08	23	
Bromoform	466.8	10.0	ug/L	502	ND	92.9	70-124	0.768	22	
1,2,3-Trichloropropane	479.7	10.0	ug/L	504	ND	95.1	62-135	3.46	28	
trans-1,4-Dichloro-2-butene	990.8	50.0	ug/L	1000	ND	98.8	50-120	1.48	26	
1,1,2,2-Tetrachloroethane	484.6	10.0	ug/L	502	ND	96.5	63-126	2.83	24	
1,4-Dichlorobenzene	463.5	10.0	ug/L	502	ND	92.4	72-119	4.31	24	
1,2-Dichlorobenzene	466.7	10.0	ug/L	502	ND	93.0	71-117	3.14	24	
1,2-Dibromo-3-chloropropane	484.3	50.0	ug/L	505	ND	95.9	49-134	0.268	28	
Surrogate: Dibromofluoromethane	*471*		ug/L	*502*		*93.8*	*80-126*			
Surrogate: Dibromofluoromethane	*471*		ug/L	*502*		*93.8*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*473*		ug/L	*501*		*94.4*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*473*		ug/L	*501*		*94.4*	*61-142*			
Surrogate: Toluene-d8	*498*		ug/L	*504*		*98.8*	*87-116*			
Surrogate: Toluene-d8	*498*		ug/L	*504*		*98.8*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*500*		ug/L	*501*		*99.8*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*500*		ug/L	*501*		*99.8*	*80-116*			

Determination of Conventional Chemistry Parameters	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1357 - Wet Chem Preparation - EPA 9040										
Duplicate (1HD1357-DUP1)		**Source: 1HD1532-05**	Prepared: 04/23/24 09:16 Analyzed: 04/23/24 13:47							
pH	6.52	0.5	pH		6.51			0.123	10	
Reference (1HD1357-SRM1)			Prepared: 04/23/24 09:16 Analyzed: 04/23/24 13:47							
pH	7.02	0.5	pH	7.00		100	90-110			

Determination of Conventional Chemistry Parameters	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1357 - Wet Chem Preparation - EPA 9040										
Reference (1HD1357-SRM2)			Prepared: 04/23/24 09:16 Analyzed: 04/23/24 13:47							
pH	6.99	0.5	pH	7.00		99.9	90-110			
Batch 1HD1358 - Wet Chem Preparation - 2320B										
Blank (1HD1358-BLK1)			Prepared: 04/23/24 09:18 Analyzed: 04/23/24 13:00							
Alkalinity, as CaCO3	<10	10	mg/L							
LCS (1HD1358-BS1)			Prepared: 04/23/24 09:18 Analyzed: 04/23/24 13:00							
Alkalinity, as CaCO3	224	10	mg/L	235		95.2	88-114			
Matrix Spike (1HD1358-MS1)	**Source: 1HD1532-05**		Prepared: 04/23/24 09:18 Analyzed: 04/23/24 13:00							
Alkalinity, as CaCO3	1760	50	mg/L	1180	652	94.7	74-122			
Matrix Spike Dup (1HD1358-MSD1)	**Source: 1HD1532-05**		Prepared: 04/23/24 09:18 Analyzed: 04/23/24 13:00							
Alkalinity, as CaCO3	1740	50	mg/L	1180	652	92.2	74-122	1.66	10	

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1412 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1HD1412-BLK1)			Prepared: 04/24/24 07:16 Analyzed: 04/25/24 22:31							
Antimony, total	<0.0020	0.0020	mg/L							
Arsenic, total	<0.0040	0.0040	mg/L							
Barium, total	<0.0040	0.0040	mg/L							
Beryllium, total	<0.0040	0.0040	mg/L							
Cadmium, total	<0.0008	0.0008	mg/L							
Chromium, total	<0.0080	0.0080	mg/L							
Cobalt, total	<0.0004	0.0004	mg/L							
Copper, total	<0.0040	0.0040	mg/L							
Lead, total	<0.0040	0.0040	mg/L							
Nickel, total	<0.0040	0.0040	mg/L							
Selenium, total	<0.0040	0.0040	mg/L							
Silver, total	<0.0040	0.0040	mg/L							
Thallium, total	<0.0020	0.0020	mg/L							
Vanadium, total	<0.0200	0.0200	mg/L							
Zinc, total	<0.0200	0.0200	mg/L							QB-12
LCS (1HD1412-BS1)			Prepared: 04/24/24 07:16 Analyzed: 04/25/24 22:37							
Antimony, total	0.0958	0.0020	mg/L	0.100		95.8	80-120			
Arsenic, total	0.100	0.0040	mg/L	0.100		100	80-120			
Barium, total	0.108	0.0040	mg/L	0.100		108	80-120			
Beryllium, total	0.0989	0.0040	mg/L	0.100		98.9	80-120			
Cadmium, total	0.101	0.0008	mg/L	0.100		101	80-120			
Chromium, total	0.0974	0.0080	mg/L	0.100		97.4	80-120			
Cobalt, total	0.104	0.0004	mg/L	0.100		104	80-120			
Copper, total	0.105	0.0040	mg/L	0.100		105	80-120			

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1412 - EPA 3005A Total Recoverable Metals - EPA 6020A										
LCS (1HD1412-BS1)			Prepared: 04/24/24 07:16 Analyzed: 04/25/24 22:37							
Lead, total	0.104	0.0040	mg/L	0.100		104	80-120			
Nickel, total	0.105	0.0040	mg/L	0.100		105	80-120			
Selenium, total	0.1028	0.0040	mg/L	0.100		103	80-120			
Silver, total	0.103	0.0040	mg/L	0.100		103	80-120			
Thallium, total	0.105	0.0020	mg/L	0.100		105	80-120			
Vanadium, total	0.103	0.0200	mg/L	0.100		103	80-120			
Zinc, total	0.108	0.0200	mg/L	0.100		108	80-120			
Matrix Spike (1HD1412-MS1)	**Source: 1HD1511-01**		Prepared: 04/24/24 07:16 Analyzed: 04/25/24 22:49							
Antimony, total	0.0951	0.0020	mg/L	0.100	0.0020	93.2	75-125			
Arsenic, total	0.121	0.0040	mg/L	0.100	0.0214	99.7	75-125			
Barium, total	1.50	0.0040	mg/L	0.100	1.36	141	75-125			QM-4X
Beryllium, total	0.0879	0.0040	mg/L	0.100	ND	87.9	75-125			
Cadmium, total	0.0872	0.0008	mg/L	0.100	ND	87.2	75-125			
Chromium, total	0.0976	0.0080	mg/L	0.100	0.0080	89.7	75-125			
Cobalt, total	0.130	0.0004	mg/L	0.100	0.0221	108	75-125			
Copper, total	0.0970	0.0040	mg/L	0.100	0.0074	89.6	75-125			
Lead, total	0.0963	0.0040	mg/L	0.100	0.0061	90.2	75-125			
Nickel, total	0.208	0.0040	mg/L	0.100	0.103	105	75-125			
Selenium, total	0.0361	0.0040	mg/L	0.100	ND	36.1	75-125			QM-07
Silver, total	0.0921	0.0040	mg/L	0.100	ND	92.1	75-125			
Thallium, total	0.0936	0.0020	mg/L	0.100	0.0002	93.4	75-125			
Vanadium, total	0.123	0.0200	mg/L	0.100	0.0296	93.7	75-125			
Zinc, total	0.0983	0.0200	mg/L	0.100	ND	98.3	75-125			
Matrix Spike Dup (1HD1412-MSD1)	**Source: 1HD1511-01**		Prepared: 04/24/24 07:16 Analyzed: 04/25/24 22:56							
Antimony, total	0.0956	0.0020	mg/L	0.100	0.0020	93.6	75-125	0.452	20	
Arsenic, total	0.120	0.0040	mg/L	0.100	0.0214	98.3	75-125	1.16	20	
Barium, total	1.51	0.0040	mg/L	0.100	1.36	159	75-125	1.23	20	QM-4X
Beryllium, total	0.0881	0.0040	mg/L	0.100	ND	88.1	75-125	0.220	20	
Cadmium, total	0.0872	0.0008	mg/L	0.100	ND	87.2	75-125	0.0138	20	
Chromium, total	0.0973	0.0080	mg/L	0.100	0.0080	89.3	75-125	0.376	20	
Cobalt, total	0.129	0.0004	mg/L	0.100	0.0221	107	75-125	0.903	20	
Copper, total	0.0962	0.0040	mg/L	0.100	0.0074	88.7	75-125	0.890	20	
Lead, total	0.0959	0.0040	mg/L	0.100	0.0061	89.8	75-125	0.431	20	
Nickel, total	0.204	0.0040	mg/L	0.100	0.103	101	75-125	1.87	20	
Selenium, total	0.0359	0.0040	mg/L	0.100	ND	35.9	75-125	0.348	20	QM-07
Silver, total	0.0927	0.0040	mg/L	0.100	ND	92.7	75-125	0.668	20	
Thallium, total	0.0932	0.0020	mg/L	0.100	0.0002	93.0	75-125	0.413	20	
Vanadium, total	0.123	0.0200	mg/L	0.100	0.0296	93.3	75-125	0.346	20	
Zinc, total	0.0995	0.0200	mg/L	0.100	ND	99.5	75-125	1.19	20	
Post Spike (1HD1412-PS1)	**Source: 1HD1511-01**		Prepared: 04/24/24 07:16 Analyzed: 04/25/24 23:02							
Antimony, total	0.0782		mg/L	0.0800	0.0020	95.3	80-120			
Arsenic, total	0.101		mg/L	0.0800	0.0214	99.7	80-120			
Barium, total	1.47		mg/L	0.0800	1.36	140	80-120			PS-4X

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1412 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Post Spike (1HD1412-PS1)	**Source: 1HD1511-01**	Prepared: 04/24/24 07:16 Analyzed: 04/25/24 23:02								
Beryllium, total	0.0720		mg/L	0.0800	0.00007	89.9	80-120			
Cadmium, total	0.0707		mg/L	0.0800	0.00003	88.3	80-120			
Chromium, total	0.0813		mg/L	0.0800	0.0080	91.7	80-120			
Cobalt, total	0.109		mg/L	0.0800	0.0221	108	80-120			
Copper, total	0.0802		mg/L	0.0800	0.0074	91.0	80-120			
Lead, total	0.0791		mg/L	0.0800	0.0061	91.3	80-120			
Nickel, total	0.186		mg/L	0.0800	0.103	104	80-120			
Selenium, total	0.0781		mg/L	0.0800	0.0012	96.2	80-120			
Silver, total	0.0755		mg/L	0.0800	0.0001	94.2	80-120			
Thallium, total	0.0763		mg/L	0.0800	0.0002	95.1	80-120			
Vanadium, total	0.106		mg/L	0.0800	0.0296	94.9	80-120			
Zinc, total	0.0796		mg/L	0.0800	0.0121	84.5	80-120			
Batch 1HD1478 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1HD1478-BLK1)		Prepared: 04/24/24 16:10 Analyzed: 04/26/24 01:29								
Antimony, total	<0.0020	0.0020	mg/L							
Arsenic, total	<0.0040	0.0040	mg/L							
Barium, total	<0.0040	0.0040	mg/L							
Beryllium, total	<0.0040	0.0040	mg/L							
Cadmium, total	<0.0008	0.0008	mg/L							
Chromium, total	<0.0080	0.0080	mg/L							
Cobalt, total	<0.0004	0.0004	mg/L							
Copper, total	<0.0040	0.0040	mg/L							
Lead, total	<0.0040	0.0040	mg/L							
Nickel, total	<0.0040	0.0040	mg/L							
Selenium, total	<0.0040	0.0040	mg/L							
Silver, total	<0.0040	0.0040	mg/L							
Thallium, total	<0.0020	0.0020	mg/L							
Vanadium, total	<0.0200	0.0200	mg/L							
Zinc, total	<0.0200	0.0200	mg/L							
LCS (1HD1478-BS1)		Prepared: 04/24/24 16:10 Analyzed: 04/26/24 01:47								
Antimony, total	0.0956	0.0020	mg/L	0.100		95.6	80-120			
Arsenic, total	0.100	0.0040	mg/L	0.100		100	80-120			
Barium, total	0.110	0.0040	mg/L	0.100		110	80-120			
Beryllium, total	0.0957	0.0040	mg/L	0.100		95.7	80-120			
Cadmium, total	0.0986	0.0008	mg/L	0.100		98.6	80-120			
Chromium, total	0.0969	0.0080	mg/L	0.100		96.9	80-120			
Cobalt, total	0.103	0.0004	mg/L	0.100		103	80-120			
Copper, total	0.105	0.0040	mg/L	0.100		105	80-120			
Lead, total	0.102	0.0040	mg/L	0.100		102	80-120			
Nickel, total	0.102	0.0040	mg/L	0.100		102	80-120			
Selenium, total	0.1045	0.0040	mg/L	0.100		104	80-120			
Silver, total	0.104	0.0040	mg/L	0.100		104	80-120			

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										
LCS (1HD1478-BS1)			Prepared: 04/24/24 16:10 Analyzed: 04/26/24 01:47							
Thallium, total	0.103	0.0020	mg/L	0.100		103	80-120			
Vanadium, total	0.0974	0.0200	mg/L	0.100		97.4	80-120			
Zinc, total	0.105	0.0200	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							
Antimony, total	0.0956	0.0020	mg/L	0.100	ND	95.6	75-125			
Arsenic, total	0.101	0.0040	mg/L	0.100	0.0015	99.6	75-125			
Barium, total	0.356	0.0040	mg/L	0.100	0.262	94.0	75-125			
Beryllium, total	0.0934	0.0040	mg/L	0.100	ND	93.4	75-125			
Cadmium, total	0.0955	0.0008	mg/L	0.100	ND	95.5	75-125			
Chromium, total	0.0944	0.0080	mg/L	0.100	0.0007	93.6	75-125			
Cobalt, total	0.101	0.0004	mg/L	0.100	ND	101	75-125			
Copper, total	0.251	0.0040	mg/L	0.100	0.135	116	75-125			
Lead, total	0.0986	0.0040	mg/L	0.100	ND	98.6	75-125			
Nickel, total	0.0998	0.0040	mg/L	0.100	ND	99.8	75-125			
Selenium, total	0.1018	0.0040	mg/L	0.100	ND	102	75-125			
Silver, total	0.101	0.0040	mg/L	0.100	ND	101	75-125			
Thallium, total	0.101	0.0020	mg/L	0.100	0.0003	101	75-125			
Vanadium, total	0.102	0.0200	mg/L	0.100	ND	102	75-125			
Zinc, total	0.103	0.0200	mg/L	0.100	ND	103	75-125			
Matrix Spike Dup (1HD1478-MSD1)	**Source: 1HD0315-03RE3**		Prepared: 04/24/24 16:10 Analyzed: 04/26/24 02:06							
Antimony, total	0.0972	0.0020	mg/L	0.100	ND	97.2	75-125	1.65	20	
Arsenic, total	0.103	0.0040	mg/L	0.100	0.0015	101	75-125	1.43	20	
Barium, total	0.366	0.0040	mg/L	0.100	0.262	104	75-125	2.91	20	
Beryllium, total	0.0944	0.0040	mg/L	0.100	ND	94.4	75-125	1.02	20	
Cadmium, total	0.0963	0.0008	mg/L	0.100	ND	96.3	75-125	0.835	20	
Chromium, total	0.0954	0.0080	mg/L	0.100	0.0007	94.6	75-125	1.07	20	
Cobalt, total	0.104	0.0004	mg/L	0.100	ND	104	75-125	2.44	20	
Copper, total	0.339	0.0040	mg/L	0.100	0.135	204	75-125	29.8	20	QM-07
Lead, total	0.0999	0.0040	mg/L	0.100	ND	99.9	75-125	1.22	20	
Nickel, total	0.102	0.0040	mg/L	0.100	ND	102	75-125	2.55	20	
Selenium, total	0.1011	0.0040	mg/L	0.100	ND	101	75-125	0.694	20	
Silver, total	0.100	0.0040	mg/L	0.100	ND	100	75-125	0.878	20	
Thallium, total	0.102	0.0020	mg/L	0.100	0.0003	101	75-125	0.679	20	
Vanadium, total	0.102	0.0200	mg/L	0.100	ND	102	75-125	0.427	20	
Zinc, total	0.104	0.0200	mg/L	0.100	ND	104	75-125	1.05	20	
Post Spike (1HD1478-PS1)	**Source: 1HD0315-03RE3**		Prepared: 04/24/24 16:10 Analyzed: 04/26/24 02:12							
Antimony, total	0.0750		mg/L	0.0800	0.0002	93.5	80-120			
Arsenic, total	0.0818		mg/L	0.0800	0.0015	100	80-120			
Barium, total	0.343		mg/L	0.0800	0.262	102	80-120			
Beryllium, total	0.0735		mg/L	0.0800	0.000002	91.9	80-120			
Cadmium, total	0.0747		mg/L	0.0800	0.00004	93.3	80-120			
Chromium, total	0.0758		mg/L	0.0800	0.0007	93.8	80-120			
Cobalt, total	0.0831		mg/L	0.0800	0.00008	104	80-120			

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										
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			
Lead, total	0.0797		mg/L	0.0800	0.0001	99.4	80-120			
Nickel, total	0.0816		mg/L	0.0800	0.0006	101	80-120			
Selenium, total	0.0760		mg/L	0.0800	0.0002	94.8	80-120			
Silver, total	0.0805		mg/L	0.0800	0.0001	100	80-120			
Thallium, total	0.0819		mg/L	0.0800	0.0003	102	80-120			
Vanadium, total	0.0836		mg/L	0.0800	0.0056	97.5	80-120			
Zinc, total	0.0840		mg/L	0.0800	0.0075	95.6	80-120			

Definitions

I-03: Analyte required to be analyzed within 15 minutes of sampling. Analysis performed upon receipt of sample at laboratory.

O-07: The original analysis of this sample yielded QC recoveries outside acceptance criteria. It was re-analyzed after the recommended maximum hold time.

PS-4X: The spike recovery was outside of QC acceptance limits for the Post Spike due to analyte concentration at 4 times or greater the spike concentration.

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-05: The spike recovery and/or RPD was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.

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.

QM-4X: The spike recovery was outside of QC acceptance limits for the MS and/or MSD due to analyte concentration at 4 times or greater the spike concentration.

RL: Reporting Limit

RPD: Relative Percent Difference

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 0.8°C

Cooler Inspection Checklist

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

Report Comments

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

Reviewed and Approved By:

Heather Murphy

Heather Murphy
Customer Relationship Specialist
heather.murphy@microbac.com
05/20/24 11:04

CHAIN OF CUSTODY RECORD

Keystone LABORATORIES A Microbac Company

600 East 17th Street South
Newton, IA 50208
641-792-8451

1HD1532
HLW Engineering
PM: Heather Murphy

...ted: 3/20/2024 8:31:53A

www.keystonelabs.com

SITE INFORMATION

Sampler: Todd Whipple

Project: Marshall Sanitary Landfill-B1 6003

REPORT TO

Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50248

INVOICE TO

Don Ballalatak
Marshall County Landfill
2313 Marshalltown Blvd
Marshalltown, IA 50158

SPECIAL INSTRUCTIONS

None

Turn Around Time
☐ Standard ☐ RUSH, need by __/__/__

LAB USE ONLY

Work Order: 1HD1532
Temperature: 0.8
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-66 (B) DRY	Water	GRAB	4/16/24	—	0	lndfill-app1-voc-group, lndfll-app1-metals-6020	01
-001	MW-85 (B)	Water	GRAB	4/17/24	7:51	7	lndfill-app1-voc-group, lndfll-app1-metals-6020	02
-001	MW-98 (B)	Water	GRAB	4/17/24	9:48	7	lndfill-app1-voc-group, lndfll-app1-metals-6020	03
-001	MW-99 (B)	Water	GRAB	4/17/24	9:34	7	lndfill-app1-voc-group, lndfll-app1-metals-6020	04
-001	MW-49	Water	GRAB	4/17/24	9:10	11	alk-caco3-2320, lndfill-app1-voc-group, lndfll-app1-metals-6020, methane-astm-d1946, ph-9040	05
-001	MW-54	Water	GRAB	4/17/24	8:46	11	alk-caco3-2320, lndfill-app1-voc-group, lndfll-app1-metals-6020, methane-astm-d1946, ph-9040	06

Relinquished By: Todd Whipple Date/Time: 4/18/24

Received By: Date/Time:

Relinquished By: Date/Time:

Received for Lab By: Maher 4/18/24 Date/Time: 9:39

Remarks:

Original - Lab Copy Yellow - Sampler Copy

Keystone LABORATORIES A Microbac Company

600 East 17th Street So
Newton, IA 50208
641-792-8451

1HD1532
HLW Engineering
PM: Heather Murphy

SITE INFORMATION

Sampler: TODD WHIPPLE

Project: Marshall Sanitary Landfill-B1 6003

REPORT TO

Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50248

INVOICE TO

Don Ballalatak
Marshall County Landfill
2313 Marshalltown Blvd
Marshalltown, IA 50158

SPECIAL INSTRUCTIONS

None

Turn Around Time

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

LAB USE ONLY

Work Order: 1HD1532

Temperature: 0.8

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-81	Water	GRAB	4/16/24	11:20	11	alk-caco3-2320, lndfill-app1-voc-group, lndfill-app1-metals-6020, methane-astm-d1946, ph-9040	07
-001	MW-87	Water	GRAB	4/16/24	11:02	7	lndfill-app1-voc-group, lndfll-app1-metals-6020	08
-001	MW-89	Water	GRAB	4/16/24	10:44	7	lndfill-app1-voc-group, lndfll-app1-metals-6020	~~09~~ 17
-001	MW-91	Water	GRAB	4/16/24	10:05	7	lndfill-app1-voc-group, lndfll-app1-metals-6020	~~10~~ 09
-001	MW-93	Water	GRAB	4/16/24	11:43	7	lndfill-app1-voc-group, lndfll-app1-metals-6020	~~11~~ 10
-001	MW-94	Water	GRAB	4/17/24	8:29	11	alk-caco3-2320, lndfill-app1-voc-group, lndfll-app1-metals-6020, methane-astm-d1946, ph-9040	~~12~~ 11

Relinquished By: Todd Whipple Date/Time: 4/18/24

Received By: Date/Time:

Relinquished By: Date/Time:

Received for Lab By: Maher Date/Time: 4/18/24 9:39

Remarks:

Original - Lab Copy Yellow - Sampler Copy

Keystone LABORATORIES A Microbac Company

600 East 17th Street Sout
Newton, IA 50208
641-792-8451

1HD1532
HLW Engineering
PM: Heather Murphy

Printed: 3/20/2024 8:31:53A
www.keystonelabs.com

SITE INFORMATION

Sampler: TODD WHIPPLE

Project: Marshall Sanitary Landfill-B1 6003

REPORT TO

Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50248

INVOICE TO

Don Ballalatak
Marshall County Landfill
2313 Marshalltown Blvd
Marshalltown, IA 50158

SPECIAL INSTRUCTIONS

None

Turn Around Time
☐ Standard ☐ RUSH, need by __/__/__

LAB USE ONLY

Work Order 1HD1532
Temperature 0.8
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-95	Water	GRAB	4/17/24	7:35	7	lndfill-app1-voc-group	lndfll-app1-metals-6020	~~13~~ 12
-001	MW-96R	Water	GRAB	4/16/24	7:55	7	lndfill-app1-voc-group	lndfll-app1-metals-6020	~~14~~ 13
-001	MW-97	Water	GRAB	4/17/24	8:09	7	lndfill-app1-voc-group	lndfll-app1-metals-6020	~~15~~ 14
-001	SRAMP B Tile	Water	GRAB	4/16/24	8:30	7	lndfill-app1-voc-group	lndfll-app1-metals-6020	~~16~~ 15
-001	PECS B DRY	Water	GRAB	4/16/24	—	~~0~~	lndfill-app1-voc-group		~~17~~ ~~16~~
-001	Duplicate	Water	GRAB	4/16/24	✓	1	~~lndfill-app1-voc-group~~	lndfll-app1-metals-6020	16 ~~18~~ ~~17~~

Relinquished By: Todd Whipple Date/Time: 4/18/24

Received By ___ Date/Time ___

Relinquished By ___ Date/Time ___

Received for Lab By: Maher Date/Time: 4/18/24 9:39

Remarks:

Original - Lab Copy Yellow - Sampler Copy

May 02, 2024

Illinois	100226
Illinois	1004652024-2
Kansas	E-10374
Louisiana	05002
Louisiana	05003
Oklahoma	9978

Heather Murphy
Keystone Laboratories
600 East 17 th Street South
Newton, IA 50208
TEL: (641) 792-8451
FAX:

RE: 1HD1532

WorkOrder: 24042287

Dear Heather Murphy:

TEKLAB, INC received 4 samples on 4/29/2024 9:07:00 AM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Elizabeth A. Hurley
Director of Customer Service
(618)344-1004 ex 33
ehurley@teklabinc.com

1 H D 1 5 3 2
HLW Engineering
PM: Heather Murphy

Report Contents

Client: Keystone Laboratories **Work Order:** 24042287

Client Project: 1HD1532 **Report Date:** 02-May-24

This reporting package includes the following:

Definitions

http://www.teklabinc.com/

Client: Keystone Laboratories **Work Order:** 24042287

Client Project: 1HD1532 **Report Date:** 02-May-24

Abbr	Definition
*	Analytes on report marked with an asterisk are not NELAP accredited
CCV	Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.
CRQL	A Client Requested Quantitation Limit is a reporting limit that varies according to customer request. The CRQL may not be less than the MDL.
DF	Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilution factors.
DNI	Did not ignite
DUP	Laboratory duplicate is a replicate aliquot prepared under the same laboratory conditions and independently analyzed to obtain a measure of precision.
ICV	Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.
IDPH	IL Dept. of Public Health
LCS	Laboratory control sample is a sample matrix, free from the analytes of interest,spiked with verified known amounts of analytes and analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.
LCSD	Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
MBLK	Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.
MDL	"The method detection limit is defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results."
MS	Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).
MSD	Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
MW	Molecular weight
NC	Data is not acceptable for compliance purposes
ND	Not Detected at the Reporting Limit
NELAP	NELAP Accredited
PQL	Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions.
RL	The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.
RPD	Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).
SPK	The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.
Surr	Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.
TIC	Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"
TNTC	Too numerous to count (> 200 CFU)

Definitions

Client: Keystone Laboratories

Client Project: 1HD1532

Work Order: 24042287

Report Date: 02-May-24

Qualifiers

- # - Unknown hydrocarbon
- C - RL shown is a Client Requested Quantitation Limit
- H - Holding times exceeded
- J - Analyte detected below quantitation limits
- ND - Not Detected at the Reporting Limit
- S - Spike Recovery outside recovery limits
- X - Value exceeds Maximum Contaminant Level
- B - Analyte detected in associated Method Blank
- E - Value above quantitation range
- I - Associated internal standard was outside method criteria
- M - Manual Integration used to determine area response
- R - RPD outside accepted recovery limits
- T - TIC(Tentatively identified compound)

Case Narrative

http://www.teklabinc.com/

Client: Keystone Laboratories | **Work Order:** 24042287
Client Project: 1HD1532 | **Report Date:** 02-May-24

Cooler Receipt Temp: 18.3 °C

Locations

Collinsville

Address	5445 Horseshoe Lake Road Collinsville, IL 62234-7425
Phone	(618) 344-1004
Fax	(618) 344-1005
Email	jhriley@teklabinc.com

Collinsville Air

Address	5445 Horseshoe Lake Road Collinsville, IL 62234-7425
Phone	(618) 344-1004
Fax	(618) 344-1005
Email	EHurley@teklabinc.com

Springfield

Address	3920 Pintail Dr Springfield, IL 62711-9415
Phone	(217) 698-1004
Fax	(217) 698-1005
Email	KKlostermann@teklabinc.com

Chicago

Address	1319 Butterfield Rd. Downers Grove, IL 60515
Phone	(630) 324-6855
Fax	
Email	arenner@teklabinc.com

Kansas City

Address	8421 Nieman Road Lenexa, KS 66214
Phone	(913) 541-1998
Fax	(913) 541-1998
Email	jhriley@teklabinc.com

Accreditations

Client: Keystone Laboratories | **Work Order:** 24042287

Client Project: 1HD1532 | **Report Date:** 02-May-24

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2025	Collinsville
Illinois	IEPA	1004652024-2	NELAP	4/30/2025	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2025	Collinsville
Louisiana	LDEQ	05002	NELAP	6/30/2024	Collinsville
Louisiana	LDEQ	05003	NELAP	6/30/2024	Collinsville
Oklahoma	ODEQ	9978	NELAP	8/31/2024	Collinsville
Arkansas	ADEQ	88-0966		3/14/2025	Collinsville
Illinois	IDPH	17584		5/31/2025	Collinsville
Iowa	IDNR	430		6/1/2024	Collinsville
Kentucky	UST	0073		1/31/2025	Collinsville
Missouri	MDNR	00930		10/31/2026	Collinsville
Missouri	MDNR	930		1/31/2025	Collinsville

Laboratory Results

http://www.teklabinc.com/

Client: Keystone Laboratories
Client Project: 1HD1532
Lab ID: 24042287-001
Matrix: AQUEOUS

Work Order: 24042287
Report Date: 02-May-24
Client Sample ID: 1HD1532-05
Collection Date: 04/17/2024 9:10

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
PERMANENT GASES (RSKSOP-175)								
Methane	*	4.0		**22.3**	µg/L	1	04/29/2024 12:54	R346446

Laboratory Results

http://www.teklabinc.com/

Client: Keystone Laboratories
Work Order: 24042287
Client Project: 1HD1532
Report Date: 02-May-24
Lab ID: 24042287-002
Client Sample ID: 1HD1532-06
Matrix: AQUEOUS
Collection Date: 04/17/2024 8:46

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
PERMANENT GASES (RSKSOP-175)								
Methane	*	4.0		**9.1**	µg/L	1	04/29/2024 13:04	R346446

Laboratory Results

http://www.teklabinc.com/

Client:	Keystone Laboratories	**Work Order:**	24042287
Client Project:	1HD1532	**Report Date:**	02-May-24
Lab ID:	24042287-003	**Client Sample ID:**	1HD1532-07
Matrix:	AQUEOUS	**Collection Date:**	04/16/2024 11:20

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
PERMANENT GASES (RSKSOP-175)								
Methane	*	40.0		**96.2**	µg/L	10	04/29/2024 13:59	R346446

Laboratory Results

http://www.teklabinc.com/

Client: Keystone Laboratories
Work Order: 24042287
Client Project: 1HD1532
Report Date: 02-May-24
Lab ID: 24042287-004
Client Sample ID: 1HD1532-11
Matrix: AQUEOUS
Collection Date: 04/17/2024 8:29

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
PERMANENT GASES (RSKSOP-175)								
Methane	*	400		**2370**	µg/L	100	04/29/2024 14:10	R346446

Receiving Check List

http://www.teklabinc.com/

Client: Keystone Laboratories

Client Project: 1HD1532

Work Order: 24042287

Report Date: 02-May-24

Carrier: Spee Dee

Received By: LEH

Completed by:
On:
29-Apr-24
Paul Schultz

Reviewed by:
On:
29-Apr-24
Ellie Hopkins

Pages to follow: Chain of custody [1] Extra pages included [0]

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	Temp °C 18.3
Type of thermal preservation?	None ☐	Ice ☑	Blue Ice ☐	Dry Ice ☐
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Reported field parameters measured:	Field ☐	Lab ☐	NA ☑	
Container/Temp Blank temperature in compliance?	Yes ☐	No ☑		

When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.

Water – at least one vial per sample has zero headspace?	Yes ☑	No ☐	No VOA vials ☐	
Water - TOX containers have zero headspace?	Yes ☐	No ☐	No TOX containers ☑	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	NA ☐	
NPDES/CWA TCN interferences checked/treated in the field?	Yes ☐	No ☐	NA ☑	

Any No responses must be detailed below or on the COC.

The samples were out of temperature compliance upon receipt. - ehopkins - 4/29/2024 10:42:47 AM

Microbac Laboratories, Inc., Newton

MICROBAC®

24042287

SUBCONTRACTED CHAIN OF CUSTODY

1HD1532

SENDING LABORATORY:	RECEIVING LABORATORY:
Microbac Laboratories, Inc., Newton	Teklab, Inc.
600 East 17th Street South Newton, IA 50208	5445 Horseshoe Lake Road Collinsville, IL 62234
Phone: 641-792-8451	Phone: (618) 344-1004
Lab Manager: Heather Murphy	
Email: heather.murphy@microbac.com	Temp 18.3 LTG5 ØHS On ice LH 4/29/24

Project Info:

Project Type: Landfills | Report TAT: **10**

Project Location: IA | Due: **05/02/24 17:00**

24042287-001

Sample ID: 1HD1532-05 | **Sampled: 04/17/24 09:10** | Sampler: Whipple, Todd

Matrix: Water | Description: MW-49

SampleType: GRAB

Analysis	Method	Analysis Due	Expires
methane-astm-d1946	ASTM D1946	05/02/24 17:00	05/01/24 09:10

-002

Sample ID: 1HD1532-06 | **Sampled: 04/17/24 08:46** | Sampler: Whipple, Todd

Matrix: Water | Description: MW-54

SampleType: GRAB

Analysis	Method	Analysis Due	Expires
methane-astm-d1946	ASTM D1946	05/02/24 17:00	05/01/24 08:46

-003

Sample ID: 1HD1532-07 | **Sampled: 04/16/24 11:20** | Sampler: Whipple, Todd

Matrix: Water | Description: MW-81

SampleType: GRAB

Analysis	Method	Analysis Due	Expires
methane-astm-d1946	ASTM D1946	05/02/24 17:00	04/30/24 11:20

-004

Sample ID: 1HD1532-11 | **Sampled: 04/17/24 08:29** | Sampler: Whipple, Todd

Matrix: Water | Description: MW-94

SampleType: GRAB

Analysis	Method	Analysis Due	Expires
methane-astm-d1946	ASTM D1946	05/02/24 17:00	05/01/24 08:29

Released By	Date	Received By	Date
[signature]	4/24/24	[signature] SD	4/29/24 9:07

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HD1511

Project Description

6003

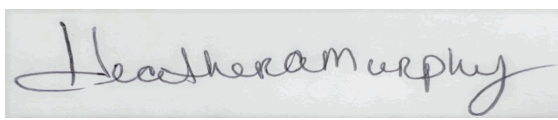
For:

Todd Whipple

HLW Engineering

PO Box 314

Story City, IA 50248



Heather Murphy

Customer Relationship Specialist

Friday, May 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.

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CERTIFICATE OF ANALYSIS

1HD1511

HLW Engineering

Todd Whipple
PO Box 314
Story City, IA 50248

Project Name: 6003

Project / PO Number: N/A
Received: 04/18/2024
Reported: 05/31/2024

Sample Summary Report

Sample Name	Laboratory ID	Client Matrix	Sample Type	Sample Begin	Sample Taken	Lab Received
LW-75	1HD1511-01	Aqueous	GRAB		04/16/24 15:22	04/18/24 09:39

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CERTIFICATE OF ANALYSIS

1HD1511

Analytical Testing Parameters

Client Sample ID:	LW-75		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HD1511-01	**Collection Date:**	04/16/2024 15:22

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		04/19/24 0000	04/19/24 1519	LJS
Vinyl Chloride	**3.4**	1.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
Bromomethane	<1.0	1.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
Chloroethane	**3.9**	1.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
Trichlorofluoromethane	<1.0	1.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
Acetone	**28.8**	10.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
Methyl Iodide	<1.0	1.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
Carbon Disulfide	<1.0	1.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
Methylene Chloride	**75.3**	5.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
Acrylonitrile	<5.0	5.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
1,1-Dichloroethane	**7.6**	1.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
Vinyl Acetate	<5.0	5.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
cis-1,2-Dichloroethylene	**6.8**	1.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
2-Butanone (MEK)	<10.0	10.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
Bromochloromethane	<1.0	1.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
Chloroform	<1.0	1.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
Carbon Tetrachloride	<1.0	1.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
Benzene	**8.9**	1.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
1,2-Dichloroethane	**1.9**	1.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
Trichloroethylene	**1.7**	1.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
1,2-Dichloropropane	<1.0	1.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
Dibromomethane	<1.0	1.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
Bromodichloromethane	<1.0	1.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
4-Methyl-2-pentanone (MIBK)	**6.1**	5.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
Toluene	**108**	1.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
Tetrachloroethylene	<1.0	1.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
Dibromochloromethane	<1.0	1.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
1,2-Dibromoethane	<1.0	1.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
Chlorobenzene	<1.0	1.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
Ethylbenzene	Over Cal		ug/L	1		04/19/24 0000	04/19/24 1519	LJS
Ethylbenzene	**297**	5.0	ug/L	5		04/25/24 0000	04/25/24 1731	LJS
Xylenes, total	**231**	2.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS

Client Sample ID:	LW-75		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HD1511-01	**Collection Date:**	04/16/2024 15:22

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Styrene	**2.5**	1.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
Bromoform	<1.0	1.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
1,4-Dichlorobenzene	**163**	1.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		04/19/24 0000	04/19/24 1519	LJS
Surrogate: Dibromofluoromethane	94.5	Limit: 80-126	% Rec	1		04/19/24 0000	04/19/24 1519	LJS
Surrogate: Dibromofluoromethane	94.5	Limit: 75-136	% Rec	1		04/19/24 0000	04/19/24 1519	LJS
Surrogate: Dibromofluoromethane	91.3	Limit: 75-136	% Rec	5		04/25/24 0000	04/25/24 1731	LJS
Surrogate: 1,2-Dichloroethane-d4	97.7	Limit: 61-142	% Rec	1		04/19/24 0000	04/19/24 1519	LJS
Surrogate: 1,2-Dichloroethane-d4	97.7	Limit: 63-138	% Rec	1		04/19/24 0000	04/19/24 1519	LJS
Surrogate: 1,2-Dichloroethane-d4	95.7	Limit: 61-142	% Rec	5		04/25/24 0000	04/25/24 1731	LJS
Surrogate: Toluene-d8	98.4	Limit: 87-116	% Rec	1		04/19/24 0000	04/19/24 1519	LJS
Surrogate: Toluene-d8	98.4	Limit: 82-121	% Rec	1		04/19/24 0000	04/19/24 1519	LJS
Surrogate: Toluene-d8	97.8	Limit: 82-121	% Rec	5		04/25/24 0000	04/25/24 1731	LJS
Surrogate: 4-Bromofluorobenzene	99.9	Limit: 80-116	% Rec	1		04/19/24 0000	04/19/24 1519	LJS
Surrogate: 4-Bromofluorobenzene	99.9	Limit: 85-111	% Rec	1		04/19/24 0000	04/19/24 1519	LJS
Surrogate: 4-Bromofluorobenzene	99.5	Limit: 80-116	% Rec	5		04/25/24 0000	04/25/24 1731	LJS

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
2320B								
Alkalinity, as CaCO3	**1530**	50	mg/L	1		04/19/24 1101	04/19/24 1402	BSS
EPA 410.4								
COD, total	**1170**	216	mg/L	4		04/25/24 1633	04/26/24 1310	CHP
EPA 9040								
pH	**7.1**	0.5	pH	1	**I-03**		04/19/24 1612	BSS
SM 5210 B								
BOD (5 day)	**123**	6	mg/L	3	**I-05**	04/19/24 0841	04/19/24 1125	MND
TIMBERLINE								
Nitrogen, Ammonia	**109**	1.00	mg/L	10		04/29/24 0719	04/29/24 1203	LJS
USGS I-1750-85								
Total Dissolved Solids (TDS)	**3680**	5	mg/L	1		04/22/24 1436	04/23/24 0740	MEAH
USGS I-3765-85								
Total Suspended Solids (TSS)	**14**	1	mg/L	1		04/22/24 0941	04/22/24 1410	MEAH

Determination of Inorganic Anions	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 9056								
Chloride	**1090**	50.0	mg/L	50		05/02/24 0000	05/02/24 1958	MID
Sulfate	**92.0**	10.0	mg/L	10		05/01/24 0000	05/01/24 1331	MID

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HD1511

Client Sample ID:	LW-75		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HD1511-01	**Collection Date:**	04/16/2024 15:22

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Arsenic, total	**0.0214**	0.0040	mg/L	4		04/24/24 0716	04/25/24 2243	JAR
Cobalt, total	**0.0221**	0.0004	mg/L	4		04/24/24 0716	04/25/24 2243	JAR

Batch Log Summary

Method	Batch	Laboratory ID	Client / Source ID
SM 5210 B	1HD1215	1HD1215-BLK1	
		1HD1215-SRM1	
		1HD1511-01	LW-75
		1HD1215-DUP1	1HD1444-01

Method	Batch	Laboratory ID	Client / Source ID
2320B	1HD1237	1HD1237-BLK1	
		1HD1237-BS1	
		1HD1511-01	LW-75
		1HD1237-MS1	1HD1512-01
		1HD1237-MSD1	1HD1512-01

Method	Batch	Laboratory ID	Client / Source ID
EPA 9040	1HD1258	1HD1258-DUP1	1HD1434-01
		1HD1258-SRM2	
		1HD1258-SRM1	
		1HD1511-01	LW-75

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260B	1HD1274	1HD1274-BS1	
		1HD1274-BSD1	
		1HD1274-BLK1	
		1HD1511-01	LW-75
		1HD1274-MS1	1HD1510-05
		1HD1274-MSD1	1HD1510-05

Method	Batch	Laboratory ID	Client / Source ID
USGS I-3765-85	1HD1292	1HD1292-DUP1	1HD1347-01
		1HD1511-01	LW-75
		1HD1292-BS1	
		1HD1292-BLK1	

Method	Batch	Laboratory ID	Client / Source ID
USGS I-1750-85	1HD1318	1HD1511-01	LW-75
		1HD1318-BLK1	
		1HD1318-DUP1	1HD1574-01
		1HD1318-BS1	

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260B	1HD1408	1HD1408-BS1	
		1HD1408-BSD1	

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260B	1HD1408	1HD1408-BLK1	
		1HD1408-MS1	1HD1532-04
		1HD1408-MSD1	1HD1532-04

Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	1HD1412	1HD1412-BLK1	
		1HD1412-BS1	
		1HD1511-01	LW-75
		1HD1412-MS1	1HD1511-01
		1HD1412-MSD1	1HD1511-01
		1HD1412-PS1	1HD1511-01

Method	Batch	Laboratory ID	Client / Source ID
EPA 410.4	1HD1566	1HD1566-BLK1	
		1HD1566-MSD1	1HD1361-01
		1HD1566-MS1	1HD1361-01
		1HD1511-01	LW-75
		1HD1566-BS1	

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260B	1HD1572	1HD1572-BS1	
		1HD1572-BSD1	
		1HD1572-BLK1	
		1HD1511-01RE2	LW-75
		1HD1572-MS1	1HD1698-01
		1HD1572-MSD1	1HD1698-01

Method	Batch	Laboratory ID	Client / Source ID
TIMBERLINE	1HD1631	1HD1631-BLK1	
		1HD1631-BS1	
		1HD1631-MS1	2HD0576-02
		1HD1631-MSD1	2HD0576-02
		1HD1511-01	LW-75

Method	Batch	Laboratory ID	Client / Source ID
EPA 9056	1HE0146	1HE0146-BLK1	
		1HE0146-MRL1	
		1HE0146-BS1	
		1HE0146-BSD1	
		1HD1511-01	LW-75
		1HE0146-MS1	1HD1656-01
		1HE0146-MSD1	1HD1656-01

Method	Batch	Laboratory ID	Client / Source ID
EPA 9056	1HE0195	1HE0195-BLK1	

EPA 9056	1HE0195	1HE0195-MRL1	
		1HE0195-BS1	
		1HE0195-BSD1	
		1HE0195-MS1	1HD1652-01
		1HE0195-MSD1	1HD1652-01
		1HE0195-BLK2	
		1HD1511-01	LW-75

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 1HD1274 - EPA 5030B - EPA 8260B										
Blank (1HD1274-BLK1)			Prepared: 04/19/24 00:00 Analyzed: 04/19/24 11:36							
Chloromethane	<1.0	1.0	ug/L							
Vinyl Chloride	<1.0	1.0	ug/L							
Bromomethane	<1.0	1.0	ug/L							
Chloroethane	<1.0	1.0	ug/L							
Trichlorofluoromethane	<1.0	1.0	ug/L							
1,1-Dichloroethylene	<1.0	1.0	ug/L							
Acetone	<10.0	10.0	ug/L							
Methyl Iodide	<1.0	1.0	ug/L							
Carbon Disulfide	<1.0	1.0	ug/L							
Methylene Chloride	<5.0	5.0	ug/L							
Acrylonitrile	<5.0	5.0	ug/L							
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L							
1,1-Dichloroethane	<1.0	1.0	ug/L							
Vinyl Acetate	<5.0	5.0	ug/L							
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L							
2-Butanone (MEK)	<10.0	10.0	ug/L							
Bromochloromethane	<1.0	1.0	ug/L							
Chloroform	<1.0	1.0	ug/L							
1,1,1-Trichloroethane	<1.0	1.0	ug/L							
Carbon Tetrachloride	<1.0	1.0	ug/L							
Benzene	<1.0	1.0	ug/L							
1,2-Dichloroethane	<1.0	1.0	ug/L							
Trichloroethylene	<1.0	1.0	ug/L							
1,2-Dichloropropane	<1.0	1.0	ug/L							
Dibromomethane	<1.0	1.0	ug/L							
Bromodichloromethane	<1.0	1.0	ug/L							
cis-1,3-Dichloropropene	<1.0	1.0	ug/L							
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L							
Toluene	<1.0	1.0	ug/L							
trans-1,3-Dichloropropene	<1.0	1.0	ug/L							
1,1,2-Trichloroethane	<1.0	1.0	ug/L							
Tetrachloroethylene	<1.0	1.0	ug/L							
2-Hexanone (MBK)	<5.0	5.0	ug/L							

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1274 - EPA 5030B - EPA 8260B										
Blank (1HD1274-BLK1)			Prepared: 04/19/24 00:00 Analyzed: 04/19/24 11:36							
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	*47.8*		ug/L	*50.2*		*95.2*	*80-126*			
Surrogate: Dibromofluoromethane	*47.8*		ug/L	*50.2*		*95.2*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*48.7*		ug/L	*50.1*		*97.3*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*48.7*		ug/L	*50.1*		*97.3*	*61-142*			
Surrogate: Toluene-d8	*48.9*		ug/L	*50.4*		*97.0*	*87-116*			
Surrogate: Toluene-d8	*48.9*		ug/L	*50.4*		*97.0*	*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 (1HD1274-BS1)			Prepared: 04/19/24 00:00 Analyzed: 04/19/24 10:28							
Chloromethane	31.07	1.0	ug/L	30.6		101	63-155			
Vinyl Chloride	31.29	1.0	ug/L	30.2		104	70-154			
Bromomethane	26.63	1.0	ug/L	28.8		92.5	52-176			
Chloroethane	35.46	1.0	ug/L	31.6		112	72-148			
Trichlorofluoromethane	31.82	1.0	ug/L	32.6		97.6	70-152			
1,1-Dichloroethylene	50.43	1.0	ug/L	50.0		101	70-148			
Acetone	90.44	10.0	ug/L	102		88.7	43-172			
Methyl Iodide	101.6	1.0	ug/L	99.7		102	69-170			
Carbon Disulfide	94.70	1.0	ug/L	101		93.8	72-162			
Methylene Chloride	51.19	5.0	ug/L	50.0		102	68-142			
Acrylonitrile	100.4	5.0	ug/L	100		100	67-144			
trans-1,2-Dichloroethylene	51.58	1.0	ug/L	50.0		103	66-148			
1,1-Dichloroethane	50.63	1.0	ug/L	50.0		101	66-143			
Vinyl Acetate	111.4	5.0	ug/L	102		109	43-153			
cis-1,2-Dichloroethylene	49.59	1.0	ug/L	50.0		99.2	71-149			
2-Butanone (MEK)	111.8	10.0	ug/L	103		108	52-159			
Bromochloromethane	51.97	1.0	ug/L	50.0		104	69-143			
Chloroform	49.99	1.0	ug/L	50.0		100	69-144			
1,1,1-Trichloroethane	47.72	1.0	ug/L	50.0		95.4	62-129			
Carbon Tetrachloride	50.93	1.0	ug/L	50.0		102	63-141			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1274 - EPA 5030B - EPA 8260B										
LCS (1HD1274-BS1)				Prepared: 04/19/24 00:00 Analyzed: 04/19/24 10:28						
Benzene	51.82	1.0	ug/L	50.0		104	71-134			
1,2-Dichloroethane	51.40	1.0	ug/L	50.0		103	72-132			
Trichloroethylene	51.45	1.0	ug/L	50.0		103	71-135			
1,2-Dichloropropane	52.48	1.0	ug/L	50.0		105	69-136			
Dibromomethane	54.18	1.0	ug/L	50.0		108	73-147			
Bromodichloromethane	52.29	1.0	ug/L	50.0		105	68-129			
cis-1,3-Dichloropropene	52.86	1.0	ug/L	50.0		106	65-134			
4-Methyl-2-pentanone (MIBK)	113.6	5.0	ug/L	101		112	58-147			
Toluene	50.08	1.0	ug/L	50.0		100	72-133			
trans-1,3-Dichloropropene	55.12	1.0	ug/L	50.0		110	67-130			
1,1,2-Trichloroethane	53.60	1.0	ug/L	50.0		107	69-135			
Tetrachloroethylene	51.61	1.0	ug/L	50.0		103	69-130			
2-Hexanone (MBK)	120.8	5.0	ug/L	103		117	55-144			
Dibromochloromethane	55.86	1.0	ug/L	50.0		112	73-127			
1,2-Dibromoethane	54.36	1.0	ug/L	50.0		109	67-132			
Chlorobenzene	52.34	1.0	ug/L	50.0		105	72-123			
1,1,1,2-Tetrachloroethane	54.67	1.0	ug/L	50.0		109	73-127			
Ethylbenzene	53.92	1.0	ug/L	50.0		108	71-127			
Xylenes, total	164.1	2.0	ug/L	150		109	74-127			
Styrene	56.40	1.0	ug/L	50.0		113	66-126			
Bromoform	54.07	1.0	ug/L	50.0		108	68-130			
1,2,3-Trichloropropane	54.40	1.0	ug/L	50.0		109	63-136			
trans-1,4-Dichloro-2-butene	103.3	5.0	ug/L	104		99.4	54-134			
1,1,2,2-Tetrachloroethane	54.53	1.0	ug/L	50.0		109	61-131			
1,4-Dichlorobenzene	52.01	1.0	ug/L	50.0		104	70-129			
1,2-Dichlorobenzene	54.06	1.0	ug/L	50.0		108	69-126			
1,2-Dibromo-3-chloropropane	55.64	5.0	ug/L	50.0		111	50-143			
Surrogate: Dibromofluoromethane	*47.8*		ug/L	*50.2*		*95.3*	*80-126*			
Surrogate: Dibromofluoromethane	*47.8*		ug/L	*50.2*		*95.3*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*48.1*		ug/L	*50.1*		*96.0*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*48.1*		ug/L	*50.1*		*96.0*	*61-142*			
Surrogate: Toluene-d8	*49.5*		ug/L	*50.4*		*98.3*	*87-116*			
Surrogate: Toluene-d8	*49.5*		ug/L	*50.4*		*98.3*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*50.3*		ug/L	*50.1*		*100*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*50.3*		ug/L	*50.1*		*100*	*80-116*			
LCS Dup (1HD1274-BSD1)				Prepared: 04/19/24 00:00 Analyzed: 04/19/24 10:51						
Chloromethane	24.98	1.0	ug/L	30.6		81.5	63-155	21.7	24	
Vinyl Chloride	21.82	1.0	ug/L	30.2		72.2	70-154	35.7	25	QR-02
Bromomethane	23.19	1.0	ug/L	28.8		80.5	52-176	13.8	27	
Chloroethane	28.16	1.0	ug/L	31.6		89.0	72-148	22.9	25	
Trichlorofluoromethane	25.31	1.0	ug/L	32.6		77.6	70-152	22.8	26	
1,1-Dichloroethylene	39.10	1.0	ug/L	50.0		78.2	70-148	25.3	24	QR-02
Acetone	74.10	10.0	ug/L	102		72.6	43-172	19.9	30	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1274 - EPA 5030B - EPA 8260B										
LCS Dup (1HD1274-BSD1)				Prepared: 04/19/24 00:00 Analyzed: 04/19/24 10:51						
Methyl Iodide	83.32	1.0	ug/L	99.7		83.6	69-170	19.8	30	
Carbon Disulfide	73.63	1.0	ug/L	101		72.9	72-162	25.0	24	QR-02
Methylene Chloride	41.44	5.0	ug/L	50.0		82.9	68-142	21.1	21	QR-02
Acrylonitrile	80.73	5.0	ug/L	100		80.4	67-144	21.7	24	
trans-1,2-Dichloroethylene	41.12	1.0	ug/L	50.0		82.2	66-148	22.6	27	
1,1-Dichloroethane	40.69	1.0	ug/L	50.0		81.4	66-143	21.8	24	
Vinyl Acetate	89.66	5.0	ug/L	102		88.0	43-153	21.6	30	
cis-1,2-Dichloroethylene	47.62	1.0	ug/L	50.0		95.2	71-149	4.05	26	
2-Butanone (MEK)	94.14	10.0	ug/L	103		91.1	52-159	17.1	27	
Bromochloromethane	42.26	1.0	ug/L	50.0		84.5	69-143	20.6	23	
Chloroform	40.04	1.0	ug/L	50.0		80.1	69-144	22.1	23	
1,1,1-Trichloroethane	37.82	1.0	ug/L	50.0		75.6	62-129	23.1	24	
Carbon Tetrachloride	40.10	1.0	ug/L	50.0		80.2	63-141	23.8	25	
Benzene	42.04	1.0	ug/L	50.0		84.1	71-134	20.8	24	
1,2-Dichloroethane	41.67	1.0	ug/L	50.0		83.3	72-132	20.9	24	
Trichloroethylene	40.94	1.0	ug/L	50.0		81.9	71-135	22.8	24	
1,2-Dichloropropane	42.59	1.0	ug/L	50.0		85.2	69-136	20.8	24	
Dibromomethane	43.52	1.0	ug/L	50.0		87.0	73-147	21.8	25	
Bromodichloromethane	42.01	1.0	ug/L	50.0		84.0	68-129	21.8	22	
cis-1,3-Dichloropropene	42.63	1.0	ug/L	50.0		85.3	65-134	21.4	23	
4-Methyl-2-pentanone (MIBK)	89.41	5.0	ug/L	101		88.2	58-147	23.9	27	
Toluene	40.46	1.0	ug/L	50.0		80.9	72-133	21.3	24	
trans-1,3-Dichloropropene	44.01	1.0	ug/L	50.0		88.0	67-130	22.4	24	
1,1,2-Trichloroethane	43.23	1.0	ug/L	50.0		86.5	69-135	21.4	23	
Tetrachloroethylene	40.64	1.0	ug/L	50.0		81.3	69-130	23.8	25	
2-Hexanone (MBK)	94.60	5.0	ug/L	103		91.6	55-144	24.4	25	
Dibromochloromethane	44.23	1.0	ug/L	50.0		88.5	73-127	23.2	22	QR-02
1,2-Dibromoethane	43.44	1.0	ug/L	50.0		86.9	67-132	22.3	24	
Chlorobenzene	42.53	1.0	ug/L	50.0		85.1	72-123	20.7	23	
1,1,1,2-Tetrachloroethane	44.19	1.0	ug/L	50.0		88.4	73-127	21.2	24	
Ethylbenzene	43.38	1.0	ug/L	50.0		86.8	71-127	21.7	26	
Xylenes, total	132.4	2.0	ug/L	150		88.2	74-127	21.4	25	
Styrene	45.36	1.0	ug/L	50.0		90.7	66-126	21.7	23	
Bromoform	42.85	1.0	ug/L	50.0		85.7	68-130	23.2	23	QR-02
1,2,3-Trichloropropane	43.46	1.0	ug/L	50.0		86.9	63-136	22.4	24	
trans-1,4-Dichloro-2-butene	82.12	5.0	ug/L	104		79.0	54-134	22.9	27	
1,1,2,2-Tetrachloroethane	43.64	1.0	ug/L	50.0		87.3	61-131	22.2	29	
1,4-Dichlorobenzene	42.13	1.0	ug/L	50.0		84.3	70-129	21.0	24	
1,2-Dichlorobenzene	44.04	1.0	ug/L	50.0		88.1	69-126	20.4	26	
1,2-Dibromo-3-chloropropane	43.57	5.0	ug/L	50.0		87.1	50-143	24.3	30	
Surrogate: Dibromofluoromethane	*47.6*		ug/L	*50.2*		*94.9*	*80-126*			
Surrogate: Dibromofluoromethane	*47.6*		ug/L	*50.2*		*94.9*	*75-136*			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1274 - EPA 5030B - EPA 8260B										
LCS Dup (1HD1274-BSD1)				Prepared: 04/19/24 00:00 Analyzed: 04/19/24 10:51						
Surrogate: 1,2-Dichloroethane-d4	*47.7*		ug/L	*50.1*		*95.2*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*47.7*		ug/L	*50.1*		*95.2*	*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*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*50.4*		ug/L	*50.1*		*101*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*50.4*		ug/L	*50.1*		*101*	*80-116*			
Matrix Spike (1HD1274-MS1)	**Source: 1HD1510-05**			Prepared: 04/19/24 00:00 Analyzed: 04/19/24 15:41						
Chloromethane	295.1	10.0	ug/L	306	ND	96.3	61-152			
Vinyl Chloride	304.1	10.0	ug/L	302	ND	101	66-149			
Bromomethane	204.5	10.0	ug/L	288	ND	71.0	43-171			
Chloroethane	344.0	10.0	ug/L	316	ND	109	69-148			
Trichlorofluoromethane	320.3	10.0	ug/L	326	ND	98.2	62-163			
1,1-Dichloroethylene	484.8	10.0	ug/L	500	ND	97.0	70-148			
Acetone	904.5	100	ug/L	1020	ND	88.7	45-173			
Methyl Iodide	1053	10.0	ug/L	997	ND	106	62-167			
Carbon Disulfide	901.5	10.0	ug/L	1010	ND	89.3	71-163			
Methylene Chloride	477.5	50.0	ug/L	500	ND	95.5	69-140			
Acrylonitrile	949.5	50.0	ug/L	1000	ND	94.6	58-151			
trans-1,2-Dichloroethylene	493.3	10.0	ug/L	500	ND	98.7	69-144			
1,1-Dichloroethane	483.2	10.0	ug/L	500	ND	96.6	70-138			
Vinyl Acetate	1122	50.0	ug/L	1020	ND	110	58-142			
cis-1,2-Dichloroethylene	566.5	10.0	ug/L	500	ND	113	68-151			
2-Butanone (MEK)	1067	100	ug/L	1030	ND	103	50-160			
Bromochloromethane	491.2	10.0	ug/L	500	ND	98.2	65-143			
Chloroform	469.6	10.0	ug/L	500	ND	93.9	71-143			
1,1,1-Trichloroethane	463.2	10.0	ug/L	500	ND	92.6	63-133			
Carbon Tetrachloride	489.3	10.0	ug/L	500	ND	97.9	63-142			
Benzene	486.6	10.0	ug/L	500	ND	97.3	69-133			
1,2-Dichloroethane	480.6	10.0	ug/L	500	ND	96.1	63-138			
Trichloroethylene	482.7	10.0	ug/L	500	ND	96.5	71-133			
1,2-Dichloropropane	490.5	10.0	ug/L	500	ND	98.1	69-132			
Dibromomethane	497.9	10.0	ug/L	500	ND	99.6	70-147			
Bromodichloromethane	479.8	10.0	ug/L	500	ND	96.0	67-130			
cis-1,3-Dichloropropene	483.9	10.0	ug/L	500	ND	96.8	61-126			
4-Methyl-2-pentanone (MIBK)	1054	50.0	ug/L	1010	ND	104	55-147			
Toluene	470.2	10.0	ug/L	500	ND	94.0	71-133			
trans-1,3-Dichloropropene	498.0	10.0	ug/L	500	ND	99.6	63-124			
1,1,2-Trichloroethane	490.2	10.0	ug/L	500	ND	98.0	69-133			
Tetrachloroethylene	484.7	10.0	ug/L	500	ND	96.9	70-124			
2-Hexanone (MBK)	1104	50.0	ug/L	1030	ND	107	53-141			
Dibromochloromethane	495.7	10.0	ug/L	500	ND	99.1	74-122			
1,2-Dibromoethane	496.8	10.0	ug/L	500	ND	99.4	66-127			
Chlorobenzene	482.9	10.0	ug/L	500	ND	96.6	76-116			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1274 - EPA 5030B - EPA 8260B										
Matrix Spike (1HD1274-MS1)	**Source: 1HD1510-05**	Prepared: 04/19/24 00:00 Analyzed: 04/19/24 15:41								
1,1,1,2-Tetrachloroethane	491.8	10.0	ug/L	500	ND	98.4	77-121			
Ethylbenzene	503.2	10.0	ug/L	500	ND	101	73-124			
Xylenes, total	1526	20.0	ug/L	1500	ND	102	75-123			
Styrene	517.0	10.0	ug/L	500	ND	103	70-120			
Bromoform	472.8	10.0	ug/L	500	ND	94.6	70-124			
1,2,3-Trichloropropane	490.6	10.0	ug/L	500	ND	98.1	62-135			
trans-1,4-Dichloro-2-butene	925.9	50.0	ug/L	1040	ND	89.1	50-120			
1,1,2,2-Tetrachloroethane	496.8	10.0	ug/L	500	ND	99.4	63-126			
1,4-Dichlorobenzene	484.9	10.0	ug/L	500	ND	97.0	72-119			
1,2-Dichlorobenzene	498.4	10.0	ug/L	500	ND	99.7	71-117			
1,2-Dibromo-3-chloropropane	494.5	50.0	ug/L	500	ND	98.9	49-134			
Surrogate: Dibromofluoromethane	*485*		ug/L	*502*		*96.6*	*80-126*			
Surrogate: Dibromofluoromethane	*485*		ug/L	*502*		*96.6*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*491*		ug/L	*501*		*98.1*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*491*		ug/L	*501*		*98.1*	*61-142*			
Surrogate: Toluene-d8	*497*		ug/L	*504*		*98.6*	*87-116*			
Surrogate: Toluene-d8	*497*		ug/L	*504*		*98.6*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*502*		ug/L	*501*		*100*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*502*		ug/L	*501*		*100*	*80-116*			
Matrix Spike Dup (1HD1274-MSD1)	**Source: 1HD1510-05**	Prepared: 04/19/24 00:00 Analyzed: 04/19/24 16:04								
Chloromethane	283.4	10.0	ug/L	306	ND	92.5	61-152	4.04	26	
Vinyl Chloride	289.7	10.0	ug/L	302	ND	95.8	66-149	4.85	23	
Bromomethane	206.0	10.0	ug/L	288	ND	71.5	43-171	0.731	29	
Chloroethane	350.6	10.0	ug/L	316	ND	111	69-148	1.90	25	
Trichlorofluoromethane	292.7	10.0	ug/L	326	ND	89.8	62-163	9.00	25	
1,1-Dichloroethylene	466.9	10.0	ug/L	500	ND	93.4	70-148	3.76	22	
Acetone	664.2	100	ug/L	1020	ND	65.1	45-173	30.6	30	QR-02
Methyl Iodide	1034	10.0	ug/L	997	ND	104	62-167	1.79	24	
Carbon Disulfide	874.0	10.0	ug/L	1010	ND	86.5	71-163	3.10	22	
Methylene Chloride	459.7	50.0	ug/L	500	ND	91.9	69-140	3.80	19	
Acrylonitrile	820.0	50.0	ug/L	1000	ND	81.7	58-151	14.6	15	
trans-1,2-Dichloroethylene	472.9	10.0	ug/L	500	ND	94.6	69-144	4.22	22	
1,1-Dichloroethane	462.0	10.0	ug/L	500	ND	92.4	70-138	4.49	20	
Vinyl Acetate	985.5	50.0	ug/L	1020	ND	96.7	58-142	13.0	24	
cis-1,2-Dichloroethylene	451.2	10.0	ug/L	500	ND	90.2	68-151	22.7	22	QR-02
2-Butanone (MEK)	718.4	100	ug/L	1030	ND	69.5	50-160	39.0	23	QR-02
Bromochloromethane	474.8	10.0	ug/L	500	ND	95.0	65-143	3.40	22	
Chloroform	452.7	10.0	ug/L	500	ND	90.5	71-143	3.66	21	
1,1,1-Trichloroethane	440.9	10.0	ug/L	500	ND	88.2	63-133	4.93	23	
Carbon Tetrachloride	470.7	10.0	ug/L	500	ND	94.1	63-142	3.87	22	
Benzene	466.4	10.0	ug/L	500	ND	93.3	69-133	4.24	18	
1,2-Dichloroethane	451.7	10.0	ug/L	500	ND	90.3	63-138	6.20	20	
Trichloroethylene	461.7	10.0	ug/L	500	ND	92.3	71-133	4.45	23	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1274 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1HD1274-MSD1)	**Source: 1HD1510-05**		Prepared: 04/19/24 00:00 Analyzed: 04/19/24 16:04							
1,2-Dichloropropane	472.4	10.0	ug/L	500	ND	94.5	69-132	3.76	20	
Dibromomethane	482.9	10.0	ug/L	500	ND	96.6	70-147	3.06	22	
Bromodichloromethane	463.7	10.0	ug/L	500	ND	92.7	67-130	3.41	21	
cis-1,3-Dichloropropene	469.0	10.0	ug/L	500	ND	93.8	61-126	3.13	21	
4-Methyl-2-pentanone (MIBK)	982.4	50.0	ug/L	1010	ND	96.9	55-147	7.01	23	
Toluene	449.5	10.0	ug/L	500	ND	89.9	71-133	4.50	19	
trans-1,3-Dichloropropene	482.4	10.0	ug/L	500	ND	96.5	63-124	3.18	21	
1,1,2-Trichloroethane	473.4	10.0	ug/L	500	ND	94.7	69-133	3.49	19	
Tetrachloroethylene	469.6	10.0	ug/L	500	ND	93.9	70-124	3.16	24	
2-Hexanone (MBK)	1048	50.0	ug/L	1030	ND	102	53-141	5.15	24	
Dibromochloromethane	486.3	10.0	ug/L	500	ND	97.3	74-122	1.91	21	
1,2-Dibromoethane	486.8	10.0	ug/L	500	ND	97.4	66-127	2.03	23	
Chlorobenzene	468.1	10.0	ug/L	500	ND	93.6	76-116	3.11	21	
1,1,1,2-Tetrachloroethane	485.3	10.0	ug/L	500	ND	97.1	77-121	1.33	25	
Ethylbenzene	486.2	10.0	ug/L	500	ND	97.2	73-124	3.44	20	
Xylenes, total	1478	20.0	ug/L	1500	ND	98.6	75-123	3.16	20	
Styrene	504.8	10.0	ug/L	500	ND	101	70-120	2.39	23	
Bromoform	470.1	10.0	ug/L	500	ND	94.0	70-124	0.573	22	
1,2,3-Trichloropropane	484.1	10.0	ug/L	500	ND	96.8	62-135	1.33	28	
trans-1,4-Dichloro-2-butene	906.4	50.0	ug/L	1040	ND	87.2	50-120	2.13	26	
1,1,2,2-Tetrachloroethane	488.9	10.0	ug/L	500	ND	97.8	63-126	1.60	24	
1,4-Dichlorobenzene	464.3	10.0	ug/L	500	ND	92.9	72-119	4.34	24	
1,2-Dichlorobenzene	482.0	10.0	ug/L	500	ND	96.4	71-117	3.35	24	
1,2-Dibromo-3-chloropropane	481.2	50.0	ug/L	500	ND	96.2	49-134	2.73	28	
Surrogate: Dibromofluoromethane	*485*		ug/L	*502*		*96.7*	*80-126*			
Surrogate: Dibromofluoromethane	*485*		ug/L	*502*		*96.7*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*481*		ug/L	*501*		*96.1*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*481*		ug/L	*501*		*96.1*	*61-142*			
Surrogate: Toluene-d8	*496*		ug/L	*504*		*98.4*	*87-116*			
Surrogate: Toluene-d8	*496*		ug/L	*504*		*98.4*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*501*		ug/L	*501*		*99.8*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*501*		ug/L	*501*		*99.8*	*80-116*			
Batch 1HD1408 - EPA 5030B - EPA 8260B										
Blank (1HD1408-BLK1)			Prepared: 04/23/24 00:00 Analyzed: 04/23/24 10:46							
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							

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1408 - EPA 5030B - EPA 8260B										
Blank (1HD1408-BLK1)			Prepared: 04/23/24 00:00 Analyzed: 04/23/24 10:46							
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	*50.8*		ug/L	*50.2*		*101*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*51.8*		ug/L	*50.1*		*103*	*61-142*			
Surrogate: Toluene-d8	*49.7*		ug/L	*50.4*		*98.7*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*48.6*		ug/L	*50.1*		*96.9*	*80-116*			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1408 - EPA 5030B - EPA 8260B										
LCS (1HD1408-BS1)				Prepared: 04/23/24 00:00 Analyzed: 04/23/24 09:38						
Chloromethane	35.96	1.0	ug/L	30.6		117	63-155			
Vinyl Chloride	35.51	1.0	ug/L	30.2		117	70-154			
Bromomethane	30.25	1.0	ug/L	28.8		105	52-176			
Chloroethane	38.95	1.0	ug/L	31.6		123	72-148			
Trichlorofluoromethane	35.99	1.0	ug/L	32.6		110	70-152			
1,1-Dichloroethylene	54.20	1.0	ug/L	50.0		108	70-148			
Acetone	83.64	10.0	ug/L	101		82.6	43-172			
Methyl Iodide	100.8	1.0	ug/L	102		98.9	69-170			
Carbon Disulfide	121.4	1.0	ug/L	103		118	72-162			
Methylene Chloride	51.84	5.0	ug/L	50.0		104	68-142			
trans-1,2-Dichloroethylene	53.70	1.0	ug/L	50.0		107	66-148			
1,1-Dichloroethane	51.84	1.0	ug/L	50.0		104	66-143			
Vinyl Acetate	97.50	5.0	ug/L	100		97.5	43-153			
cis-1,2-Dichloroethylene	50.21	1.0	ug/L	50.0		100	71-149			
2-Butanone (MEK)	91.25	10.0	ug/L	102		89.6	52-159			
Bromochloromethane	52.63	1.0	ug/L	50.0		105	69-143			
Chloroform	50.51	1.0	ug/L	50.0		101	69-144			
1,1,1-Trichloroethane	49.46	1.0	ug/L	50.0		98.9	62-129			
Carbon Tetrachloride	52.74	1.0	ug/L	50.0		105	63-141			
Benzene	50.94	1.0	ug/L	50.0		102	71-134			
1,2-Dichloroethane	48.82	1.0	ug/L	50.0		97.6	72-132			
Trichloroethylene	50.80	1.0	ug/L	50.0		102	71-135			
1,2-Dichloropropane	50.57	1.0	ug/L	50.0		101	69-136			
Dibromomethane	51.42	1.0	ug/L	50.0		103	73-147			
Bromodichloromethane	49.96	1.0	ug/L	50.0		99.9	68-129			
cis-1,3-Dichloropropene	49.40	1.0	ug/L	50.0		98.8	65-134			
4-Methyl-2-pentanone (MIBK)	101.2	5.0	ug/L	100		101	58-147			
Toluene	48.89	1.0	ug/L	50.0		97.8	72-133			
trans-1,3-Dichloropropene	50.85	1.0	ug/L	50.0		102	67-130			
1,1,2-Trichloroethane	50.24	1.0	ug/L	50.0		100	69-135			
Tetrachloroethylene	50.30	1.0	ug/L	50.0		101	69-130			
2-Hexanone (MBK)	104.0	5.0	ug/L	99.3		105	55-144			
Dibromochloromethane	51.03	1.0	ug/L	50.0		102	73-127			
1,2-Dibromoethane	50.10	1.0	ug/L	50.0		100	67-132			
Chlorobenzene	50.14	1.0	ug/L	50.0		100	72-123			
1,1,1,2-Tetrachloroethane	51.71	1.0	ug/L	50.0		103	73-127			
Ethylbenzene	51.98	1.0	ug/L	50.0		104	71-127			
Xylenes, total	157.3	2.0	ug/L	150		105	74-127			
Styrene	53.55	1.0	ug/L	50.0		107	66-126			
Bromoform	48.10	1.0	ug/L	50.0		96.2	68-130			
1,2,3-Trichloropropane	49.51	1.0	ug/L	50.0		99.0	63-136			
trans-1,4-Dichloro-2-butene	91.95	5.0	ug/L	103		89.4	54-134			
1,1,2,2-Tetrachloroethane	48.77	1.0	ug/L	50.0		97.5	61-131			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1408 - EPA 5030B - EPA 8260B										
LCS (1HD1408-BS1)			Prepared: 04/23/24 00:00 Analyzed: 04/23/24 09:38							
1,4-Dichlorobenzene	49.35	1.0	ug/L	50.0		98.7	70-129			
1,2-Dichlorobenzene	50.94	1.0	ug/L	50.0		102	69-126			
1,2-Dibromo-3-chloropropane	46.92	5.0	ug/L	50.0		93.8	50-143			
Surrogate: Dibromofluoromethane	*50.9*		ug/L	*50.2*		*102*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*50.6*		ug/L	*50.1*		*101*	*61-142*			
Surrogate: Toluene-d8	*50.3*		ug/L	*50.4*		*99.8*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*50.4*		ug/L	*50.1*		*101*	*80-116*			
LCS Dup (1HD1408-BSD1)			Prepared: 04/23/24 00:00 Analyzed: 04/23/24 10:01							
Chloromethane	34.15	1.0	ug/L	30.6		111	63-155	5.16	24	
Vinyl Chloride	33.22	1.0	ug/L	30.2		110	70-154	6.66	25	
Bromomethane	30.50	1.0	ug/L	28.8		106	52-176	0.823	27	
Chloroethane	37.41	1.0	ug/L	31.6		118	72-148	4.03	25	
Trichlorofluoromethane	33.93	1.0	ug/L	32.6		104	70-152	5.89	26	
1,1-Dichloroethylene	51.03	1.0	ug/L	50.0		102	70-148	6.02	24	
Acetone	73.24	10.0	ug/L	101		72.4	43-172	13.3	30	
Methyl Iodide	98.09	1.0	ug/L	102		96.3	69-170	2.68	30	
Carbon Disulfide	114.3	1.0	ug/L	103		111	72-162	5.97	24	
Methylene Chloride	50.42	5.0	ug/L	50.0		101	68-142	2.78	21	
trans-1,2-Dichloroethylene	50.79	1.0	ug/L	50.0		102	66-148	5.57	27	
1,1-Dichloroethane	48.98	1.0	ug/L	50.0		98.0	66-143	5.67	24	
Vinyl Acetate	94.18	5.0	ug/L	100		94.2	43-153	3.46	30	
cis-1,2-Dichloroethylene	47.83	1.0	ug/L	50.0		95.7	71-149	4.86	26	
2-Butanone (MEK)	79.76	10.0	ug/L	102		78.3	52-159	13.4	27	
Bromochloromethane	51.02	1.0	ug/L	50.0		102	69-143	3.11	23	
Chloroform	48.30	1.0	ug/L	50.0		96.6	69-144	4.47	23	
1,1,1-Trichloroethane	46.64	1.0	ug/L	50.0		93.3	62-129	5.87	24	
Carbon Tetrachloride	49.78	1.0	ug/L	50.0		99.6	63-141	5.77	25	
Benzene	48.87	1.0	ug/L	50.0		97.7	71-134	4.15	24	
1,2-Dichloroethane	47.62	1.0	ug/L	50.0		95.2	72-132	2.49	24	
Trichloroethylene	49.00	1.0	ug/L	50.0		98.0	71-135	3.61	24	
1,2-Dichloropropane	49.30	1.0	ug/L	50.0		98.6	69-136	2.54	24	
Dibromomethane	50.60	1.0	ug/L	50.0		101	73-147	1.61	25	
Bromodichloromethane	48.54	1.0	ug/L	50.0		97.1	68-129	2.88	22	
cis-1,3-Dichloropropene	48.22	1.0	ug/L	50.0		96.4	65-134	2.42	23	
4-Methyl-2-pentanone (MIBK)	98.38	5.0	ug/L	100		98.3	58-147	2.88	27	
Toluene	47.13	1.0	ug/L	50.0		94.3	72-133	3.67	24	
trans-1,3-Dichloropropene	49.94	1.0	ug/L	50.0		99.9	67-130	1.81	24	
1,1,2-Trichloroethane	49.57	1.0	ug/L	50.0		99.1	69-135	1.34	23	
Tetrachloroethylene	48.32	1.0	ug/L	50.0		96.6	69-130	4.02	25	
2-Hexanone (MBK)	100.7	5.0	ug/L	99.3		101	55-144	3.17	25	
Dibromochloromethane	50.39	1.0	ug/L	50.0		101	73-127	1.26	22	
1,2-Dibromoethane	49.13	1.0	ug/L	50.0		98.3	67-132	1.96	24	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1408 - EPA 5030B - EPA 8260B										
LCS Dup (1HD1408-BSD1)			Prepared: 04/23/24 00:00 Analyzed: 04/23/24 10:01							
Chlorobenzene	48.76	1.0	ug/L	50.0		97.5	72-123	2.79	23	
1,1,1,2-Tetrachloroethane	49.84	1.0	ug/L	50.0		99.7	73-127	3.68	24	
Ethylbenzene	49.99	1.0	ug/L	50.0		100	71-127	3.90	26	
Xylenes, total	151.5	2.0	ug/L	150		101	74-127	3.78	25	
Styrene	51.92	1.0	ug/L	50.0		104	66-126	3.09	23	
Bromoform	47.28	1.0	ug/L	50.0		94.6	68-130	1.72	23	
1,2,3-Trichloropropane	48.94	1.0	ug/L	50.0		97.9	63-136	1.16	24	
trans-1,4-Dichloro-2-butene	90.17	5.0	ug/L	103		87.7	54-134	1.95	27	
1,1,2,2-Tetrachloroethane	48.79	1.0	ug/L	50.0		97.6	61-131	0.0410	29	
1,4-Dichlorobenzene	47.97	1.0	ug/L	50.0		95.9	70-129	2.84	24	
1,2-Dichlorobenzene	50.06	1.0	ug/L	50.0		100	69-126	1.74	26	
1,2-Dibromo-3-chloropropane	47.42	5.0	ug/L	50.0		94.8	50-143	1.06	30	
Surrogate: Dibromofluoromethane	*50.9*		ug/L	*50.2*		*102*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*49.9*		ug/L	*50.1*		*99.6*	*61-142*			
Surrogate: Toluene-d8	*50.3*		ug/L	*50.4*		*99.8*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*50.3*		ug/L	*50.1*		*100*	*80-116*			
Matrix Spike (1HD1408-MS1)	**Source: 1HD1532-04**		Prepared: 04/23/24 00:00 Analyzed: 04/23/24 19:51							
Chloromethane	321.3	10.0	ug/L	306	ND	105	61-152			
Vinyl Chloride	319.2	10.0	ug/L	302	ND	106	66-149			
Bromomethane	222.6	10.0	ug/L	288	ND	77.3	43-171			
Chloroethane	351.5	10.0	ug/L	316	ND	111	69-148			
Trichlorofluoromethane	326.4	10.0	ug/L	326	ND	100	62-163			
1,1-Dichloroethylene	470.3	10.0	ug/L	500	ND	94.1	70-148			
Acetone	873.1	100	ug/L	1010	ND	86.3	45-173			
Methyl Iodide	983.3	10.0	ug/L	1020	ND	96.5	62-167			
Carbon Disulfide	1080	10.0	ug/L	1030	ND	105	71-163			
Methylene Chloride	464.0	50.0	ug/L	500	ND	92.8	69-140			
trans-1,2-Dichloroethylene	473.0	10.0	ug/L	500	ND	94.6	69-144			
1,1-Dichloroethane	465.8	10.0	ug/L	500	ND	93.2	70-138			
Vinyl Acetate	903.2	50.0	ug/L	1000	ND	90.3	58-142			
cis-1,2-Dichloroethylene	541.4	10.0	ug/L	500	ND	108	68-151			
2-Butanone (MEK)	982.2	100	ug/L	1020	ND	96.5	50-160			
Bromochloromethane	480.7	10.0	ug/L	500	ND	96.1	65-143			
Chloroform	452.5	10.0	ug/L	500	ND	90.5	71-143			
1,1,1-Trichloroethane	439.5	10.0	ug/L	500	ND	87.9	63-133			
Carbon Tetrachloride	431.3	10.0	ug/L	500	ND	86.3	63-142			
Benzene	485.0	10.0	ug/L	500	ND	97.0	69-133			
1,2-Dichloroethane	475.0	10.0	ug/L	500	ND	95.0	63-138			
Trichloroethylene	480.4	10.0	ug/L	500	ND	96.1	71-133			
1,2-Dichloropropane	487.6	10.0	ug/L	500	ND	97.5	69-132			
Dibromomethane	503.7	10.0	ug/L	500	ND	101	70-147			
Bromodichloromethane	469.7	10.0	ug/L	500	ND	93.9	67-130			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1408 - EPA 5030B - EPA 8260B										
Matrix Spike (1HD1408-MS1)	**Source: 1HD1532-04**	Prepared: 04/23/24 00:00 Analyzed: 04/23/24 19:51								
cis-1,3-Dichloropropene	458.1	10.0	ug/L	500	ND	91.6	61-126			
4-Methyl-2-pentanone (MIBK)	1065	50.0	ug/L	1000	ND	106	55-147			
Toluene	468.3	10.0	ug/L	500	ND	93.7	71-133			
trans-1,3-Dichloropropene	480.0	10.0	ug/L	500	ND	96.0	63-124			
1,1,2-Trichloroethane	494.9	10.0	ug/L	500	ND	99.0	69-133			
Tetrachloroethylene	482.8	10.0	ug/L	500	ND	96.6	70-124			
2-Hexanone (MBK)	1110	50.0	ug/L	993	ND	112	53-141			
Dibromochloromethane	488.7	10.0	ug/L	500	ND	97.7	74-122			
1,2-Dibromoethane	506.1	10.0	ug/L	500	ND	101	66-127			
Chlorobenzene	487.5	10.0	ug/L	500	ND	97.5	76-116			
1,1,1,2-Tetrachloroethane	492.3	10.0	ug/L	500	ND	98.5	77-121			
Ethylbenzene	501.3	10.0	ug/L	500	ND	100	73-124			
Xylenes, total	1511	20.0	ug/L	1500	ND	101	75-123			
Styrene	521.7	10.0	ug/L	500	ND	104	70-120			
Bromoform	468.8	10.0	ug/L	500	ND	93.8	70-124			
1,2,3-Trichloropropane	503.8	10.0	ug/L	500	ND	101	62-135			
trans-1,4-Dichloro-2-butene	896.7	50.0	ug/L	1030	ND	87.2	50-120			
1,1,2,2-Tetrachloroethane	499.7	10.0	ug/L	500	ND	99.9	63-126			
1,4-Dichlorobenzene	481.2	10.0	ug/L	500	ND	96.2	72-119			
1,2-Dichlorobenzene	500.8	10.0	ug/L	500	ND	100	71-117			
1,2-Dibromo-3-chloropropane	494.5	50.0	ug/L	500	ND	98.9	49-134			
Surrogate: Dibromofluoromethane	*472*		ug/L	*502*		*94.1*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*471*		ug/L	*501*		*94.0*	*61-142*			
Surrogate: Toluene-d8	*499*		ug/L	*504*		*99.0*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*499*		ug/L	*501*		*99.5*	*80-116*			
Matrix Spike Dup (1HD1408-MSD1)	**Source: 1HD1532-04**	Prepared: 04/23/24 00:00 Analyzed: 04/23/24 20:14								
Chloromethane	302.2	10.0	ug/L	306	ND	98.6	61-152	6.13	26	
Vinyl Chloride	300.5	10.0	ug/L	302	ND	99.4	66-149	6.04	23	
Bromomethane	229.6	10.0	ug/L	288	ND	79.7	43-171	3.10	29	
Chloroethane	336.9	10.0	ug/L	316	ND	106	69-148	4.24	25	
Trichlorofluoromethane	314.4	10.0	ug/L	326	ND	96.4	62-163	3.75	25	
1,1-Dichloroethylene	448.3	10.0	ug/L	500	ND	89.7	70-148	4.79	22	
Acetone	851.0	100	ug/L	1010	ND	84.1	45-173	2.56	30	
Methyl Iodide	1030	10.0	ug/L	1020	ND	101	62-167	4.65	24	
Carbon Disulfide	1014	10.0	ug/L	1030	ND	98.7	71-163	6.31	22	
Methylene Chloride	447.2	50.0	ug/L	500	ND	89.4	69-140	3.69	19	
trans-1,2-Dichloroethylene	450.8	10.0	ug/L	500	ND	90.2	69-144	4.81	22	
1,1-Dichloroethane	444.2	10.0	ug/L	500	ND	88.8	70-138	4.75	20	
Vinyl Acetate	988.4	50.0	ug/L	1000	ND	98.8	58-142	9.01	24	
cis-1,2-Dichloroethylene	520.3	10.0	ug/L	500	ND	104	68-151	3.97	22	
2-Butanone (MEK)	963.8	100	ug/L	1020	ND	94.7	50-160	1.89	23	
Bromochloromethane	456.4	10.0	ug/L	500	ND	91.3	65-143	5.19	22	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1408 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1HD1408-MSD1)	**Source: 1HD1532-04**		Prepared: 04/23/24 00:00 Analyzed: 04/23/24 20:14							
Chloroform	435.1	10.0	ug/L	500	ND	87.0	71-143	3.92	21	
1,1,1-Trichloroethane	423.1	10.0	ug/L	500	ND	84.6	63-133	3.80	23	
Carbon Tetrachloride	436.9	10.0	ug/L	500	ND	87.4	63-142	1.29	22	
Benzene	469.9	10.0	ug/L	500	ND	94.0	69-133	3.16	18	
1,2-Dichloroethane	459.9	10.0	ug/L	500	ND	92.0	63-138	3.23	20	
Trichloroethylene	462.8	10.0	ug/L	500	ND	92.6	71-133	3.73	23	
1,2-Dichloropropane	469.6	10.0	ug/L	500	ND	93.9	69-132	3.76	20	
Dibromomethane	488.3	10.0	ug/L	500	ND	97.7	70-147	3.10	22	
Bromodichloromethane	458.7	10.0	ug/L	500	ND	91.7	67-130	2.37	21	
cis-1,3-Dichloropropene	443.2	10.0	ug/L	500	ND	88.6	61-126	3.31	21	
4-Methyl-2-pentanone (MIBK)	1047	50.0	ug/L	1000	ND	105	55-147	1.70	23	
Toluene	454.6	10.0	ug/L	500	ND	90.9	71-133	2.97	19	
trans-1,3-Dichloropropene	463.1	10.0	ug/L	500	ND	92.6	63-124	3.58	21	
1,1,2-Trichloroethane	483.8	10.0	ug/L	500	ND	96.8	69-133	2.27	19	
Tetrachloroethylene	475.0	10.0	ug/L	500	ND	95.0	70-124	1.63	24	
2-Hexanone (MBK)	1090	50.0	ug/L	993	ND	110	53-141	1.75	24	
Dibromochloromethane	483.7	10.0	ug/L	500	ND	96.7	74-122	1.03	21	
1,2-Dibromoethane	493.1	10.0	ug/L	500	ND	98.6	66-127	2.60	23	
Chlorobenzene	472.5	10.0	ug/L	500	ND	94.5	76-116	3.12	21	
1,1,1,2-Tetrachloroethane	482.4	10.0	ug/L	500	ND	96.5	77-121	2.03	25	
Ethylbenzene	489.5	10.0	ug/L	500	ND	97.9	73-124	2.38	20	
Xylenes, total	1481	20.0	ug/L	1500	ND	98.7	75-123	1.99	20	
Styrene	507.0	10.0	ug/L	500	ND	101	70-120	2.86	23	
Bromoform	468.7	10.0	ug/L	500	ND	93.7	70-124	0.0213	22	
1,2,3-Trichloropropane	501.0	10.0	ug/L	500	ND	100	62-135	0.557	28	
trans-1,4-Dichloro-2-butene	889.4	50.0	ug/L	1030	ND	86.5	50-120	0.817	26	
1,1,2,2-Tetrachloroethane	491.2	10.0	ug/L	500	ND	98.2	63-126	1.72	24	
1,4-Dichlorobenzene	465.2	10.0	ug/L	500	ND	93.0	72-119	3.38	24	
1,2-Dichlorobenzene	484.4	10.0	ug/L	500	ND	96.9	71-117	3.33	24	
1,2-Dibromo-3-chloropropane	483.8	50.0	ug/L	500	ND	96.8	49-134	2.19	28	
Surrogate: Dibromofluoromethane	*469*		ug/L	*502*		*93.5*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*464*		ug/L	*501*		*92.7*	*61-142*			
Surrogate: Toluene-d8	*497*		ug/L	*504*		*98.7*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*499*		ug/L	*501*		*99.5*	*80-116*			
Batch 1HD1572 - EPA 5030B - EPA 8260B										
Blank (1HD1572-BLK1)			Prepared: 04/25/24 00:00 Analyzed: 04/25/24 10:53							
Chloromethane	<1.0	1.0	ug/L							
Vinyl Chloride	<1.0	1.0	ug/L							
Bromomethane	<1.0	1.0	ug/L							
Chloroethane	<1.0	1.0	ug/L							
Trichlorofluoromethane	<1.0	1.0	ug/L							

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1572 - EPA 5030B - EPA 8260B										
Blank (1HD1572-BLK1)			Prepared: 04/25/24 00:00 Analyzed: 04/25/24 10:53							
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							
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	*45.9*		ug/L	*50.2*		*91.4*	*75-136*			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1572 - EPA 5030B - EPA 8260B										
Blank (1HD1572-BLK1)				Prepared: 04/25/24 00:00 Analyzed: 04/25/24 10:53						
Surrogate: 1,2-Dichloroethane-d4	*47.5*		ug/L	*50.1*		*94.9*	*61-142*			
Surrogate: Toluene-d8	*49.0*		ug/L	*50.4*		*97.2*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*48.4*		ug/L	*50.1*		*96.6*	*80-116*			
LCS (1HD1572-BS1)				Prepared: 04/25/24 00:00 Analyzed: 04/25/24 09:45						
Chloromethane	31.87	1.0	ug/L	30.6		104	63-155			
Vinyl Chloride	31.27	1.0	ug/L	30.2		103	70-154			
Bromomethane	27.29	1.0	ug/L	28.8		94.8	52-176			
Chloroethane	34.72	1.0	ug/L	31.6		110	72-148			
Trichlorofluoromethane	31.60	1.0	ug/L	32.6		96.9	70-152			
1,1-Dichloroethylene	46.16	1.0	ug/L	50.0		92.3	70-148			
Acetone	77.88	10.0	ug/L	101		77.0	43-172			
Methyl Iodide	90.24	1.0	ug/L	102		88.6	69-170			
Carbon Disulfide	103.5	1.0	ug/L	103		101	72-162			
Methylene Chloride	45.98	5.0	ug/L	50.0		92.0	68-142			
trans-1,2-Dichloroethylene	47.10	1.0	ug/L	50.0		94.2	66-148			
1,1-Dichloroethane	46.09	1.0	ug/L	50.0		92.2	66-143			
Vinyl Acetate	103.5	5.0	ug/L	100		103	43-153			
cis-1,2-Dichloroethylene	44.41	1.0	ug/L	50.0		88.8	71-149			
2-Butanone (MEK)	98.28	10.0	ug/L	102		96.5	52-159			
Bromochloromethane	46.58	1.0	ug/L	50.0		93.2	69-143			
Chloroform	44.67	1.0	ug/L	50.0		89.3	69-144			
1,1,1-Trichloroethane	43.41	1.0	ug/L	50.0		86.8	62-129			
Carbon Tetrachloride	46.00	1.0	ug/L	50.0		92.0	63-141			
Benzene	48.21	1.0	ug/L	50.0		96.4	71-134			
1,2-Dichloroethane	46.27	1.0	ug/L	50.0		92.5	72-132			
Trichloroethylene	47.24	1.0	ug/L	50.0		94.5	71-135			
1,2-Dichloropropane	48.29	1.0	ug/L	50.0		96.6	69-136			
Dibromomethane	48.39	1.0	ug/L	50.0		96.8	73-147			
Bromodichloromethane	46.91	1.0	ug/L	50.0		93.8	68-129			
cis-1,3-Dichloropropene	46.00	1.0	ug/L	50.0		92.0	65-134			
4-Methyl-2-pentanone (MIBK)	99.66	5.0	ug/L	100		99.6	58-147			
Toluene	46.08	1.0	ug/L	50.0		92.2	72-133			
trans-1,3-Dichloropropene	48.01	1.0	ug/L	50.0		96.0	67-130			
1,1,2-Trichloroethane	48.29	1.0	ug/L	50.0		96.6	69-135			
Tetrachloroethylene	47.47	1.0	ug/L	50.0		94.9	69-130			
2-Hexanone (MBK)	104.2	5.0	ug/L	99.3		105	55-144			
Dibromochloromethane	49.44	1.0	ug/L	50.0		98.9	73-127			
1,2-Dibromoethane	48.54	1.0	ug/L	50.0		97.1	67-132			
Chlorobenzene	48.15	1.0	ug/L	50.0		96.3	72-123			
1,1,1,2-Tetrachloroethane	49.04	1.0	ug/L	50.0		98.1	73-127			
Ethylbenzene	49.63	1.0	ug/L	50.0		99.3	71-127			
Xylenes, total	150.2	2.0	ug/L	150		100	74-127			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1572 - EPA 5030B - EPA 8260B										
LCS (1HD1572-BS1)			Prepared: 04/25/24 00:00 Analyzed: 04/25/24 09:45							
Styrene	51.38	1.0	ug/L	50.0		103	66-126			
Bromoform	46.93	1.0	ug/L	50.0		93.9	68-130			
1,2,3-Trichloropropane	48.22	1.0	ug/L	50.0		96.4	63-136			
trans-1,4-Dichloro-2-butene	88.46	5.0	ug/L	103		86.1	54-134			
1,1,2,2-Tetrachloroethane	49.14	1.0	ug/L	50.0		98.3	61-131			
1,4-Dichlorobenzene	47.71	1.0	ug/L	50.0		95.4	70-129			
1,2-Dichlorobenzene	49.58	1.0	ug/L	50.0		99.2	69-126			
1,2-Dibromo-3-chloropropane	47.66	5.0	ug/L	50.0		95.3	50-143			
Surrogate: Dibromofluoromethane	*46.3*		ug/L	*50.2*		*92.2*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*46.8*		ug/L	*50.1*		*93.5*	*61-142*			
Surrogate: Toluene-d8	*49.6*		ug/L	*50.4*		*98.3*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*50.0*		ug/L	*50.1*		*99.8*	*80-116*			
LCS Dup (1HD1572-BSD1)			Prepared: 04/25/24 00:00 Analyzed: 04/25/24 10:07							
Chloromethane	30.48	1.0	ug/L	30.6		99.5	63-155	4.46	24	
Vinyl Chloride	29.91	1.0	ug/L	30.2		99.0	70-154	4.45	25	
Bromomethane	26.94	1.0	ug/L	28.8		93.5	52-176	1.29	27	
Chloroethane	33.02	1.0	ug/L	31.6		104	72-148	5.02	25	
Trichlorofluoromethane	30.17	1.0	ug/L	32.6		92.5	70-152	4.63	26	
1,1-Dichloroethylene	44.10	1.0	ug/L	50.0		88.2	70-148	4.56	24	
Acetone	79.15	10.0	ug/L	101		78.2	43-172	1.62	30	
Methyl Iodide	85.49	1.0	ug/L	102		83.9	69-170	5.41	30	
Carbon Disulfide	98.52	1.0	ug/L	103		95.9	72-162	4.91	24	
Methylene Chloride	44.51	5.0	ug/L	50.0		89.0	68-142	3.25	21	
trans-1,2-Dichloroethylene	44.92	1.0	ug/L	50.0		89.8	66-148	4.74	27	
1,1-Dichloroethane	44.42	1.0	ug/L	50.0		88.8	66-143	3.69	24	
Vinyl Acetate	97.13	5.0	ug/L	100		97.1	43-153	6.31	30	
cis-1,2-Dichloroethylene	52.28	1.0	ug/L	50.0		105	71-149	16.3	26	
2-Butanone (MEK)	92.77	10.0	ug/L	102		91.1	52-159	5.77	27	
Bromochloromethane	44.92	1.0	ug/L	50.0		89.8	69-143	3.63	23	
Chloroform	43.06	1.0	ug/L	50.0		86.1	69-144	3.67	23	
1,1,1-Trichloroethane	41.29	1.0	ug/L	50.0		82.6	62-129	5.01	24	
Carbon Tetrachloride	43.89	1.0	ug/L	50.0		87.8	63-141	4.69	25	
Benzene	46.39	1.0	ug/L	50.0		92.8	71-134	3.85	24	
1,2-Dichloroethane	45.26	1.0	ug/L	50.0		90.5	72-132	2.21	24	
Trichloroethylene	45.57	1.0	ug/L	50.0		91.1	71-135	3.60	24	
1,2-Dichloropropane	46.95	1.0	ug/L	50.0		93.9	69-136	2.81	24	
Dibromomethane	47.71	1.0	ug/L	50.0		95.4	73-147	1.42	25	
Bromodichloromethane	45.70	1.0	ug/L	50.0		91.4	68-129	2.61	22	
cis-1,3-Dichloropropene	45.21	1.0	ug/L	50.0		90.4	65-134	1.73	23	
4-Methyl-2-pentanone (MIBK)	100.4	5.0	ug/L	100		100	58-147	0.750	27	
Toluene	44.67	1.0	ug/L	50.0		89.3	72-133	3.11	24	
trans-1,3-Dichloropropene	47.20	1.0	ug/L	50.0		94.4	67-130	1.70	24	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1572 - EPA 5030B - EPA 8260B										
LCS Dup (1HD1572-BSD1)				Prepared: 04/25/24 00:00 Analyzed: 04/25/24 10:07						
1,1,2-Trichloroethane	47.28	1.0	ug/L	50.0		94.6	69-135	2.11	23	
Tetrachloroethylene	45.29	1.0	ug/L	50.0		90.6	69-130	4.70	25	
2-Hexanone (MBK)	104.5	5.0	ug/L	99.3		105	55-144	0.230	25	
Dibromochloromethane	48.16	1.0	ug/L	50.0		96.3	73-127	2.62	22	
1,2-Dibromoethane	47.80	1.0	ug/L	50.0		95.6	67-132	1.54	24	
Chlorobenzene	46.58	1.0	ug/L	50.0		93.2	72-123	3.31	23	
1,1,1,2-Tetrachloroethane	47.89	1.0	ug/L	50.0		95.8	73-127	2.37	24	
Ethylbenzene	47.82	1.0	ug/L	50.0		95.6	71-127	3.71	26	
Xylenes, total	145.6	2.0	ug/L	150		97.0	74-127	3.12	25	
Styrene	49.77	1.0	ug/L	50.0		99.5	66-126	3.18	23	
Bromoform	46.69	1.0	ug/L	50.0		93.4	68-130	0.513	23	
1,2,3-Trichloropropane	47.89	1.0	ug/L	50.0		95.8	63-136	0.687	24	
trans-1,4-Dichloro-2-butene	88.16	5.0	ug/L	103		85.8	54-134	0.340	27	
1,1,2,2-Tetrachloroethane	48.31	1.0	ug/L	50.0		96.6	61-131	1.70	29	
1,4-Dichlorobenzene	46.06	1.0	ug/L	50.0		92.1	70-129	3.52	24	
1,2-Dichlorobenzene	47.96	1.0	ug/L	50.0		95.9	69-126	3.32	26	
1,2-Dibromo-3-chloropropane	48.25	5.0	ug/L	50.0		96.5	50-143	1.23	30	
Surrogate: Dibromofluoromethane	*46.2*		ug/L	*50.2*		*92.2*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*46.2*		ug/L	*50.1*		*92.2*	*61-142*			
Surrogate: Toluene-d8	*49.4*		ug/L	*50.4*		*98.0*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*50.3*		ug/L	*50.1*		*100*	*80-116*			
Matrix Spike (1HD1572-MS1)	**Source: 1HD1698-01**			Prepared: 04/25/24 00:00 Analyzed: 04/25/24 19:02						
Chloromethane	276.8	10.0	ug/L	300	ND	92.2	61-152			
Vinyl Chloride	304.3	10.0	ug/L	300	ND	101	66-149			
Bromomethane	210.2	10.0	ug/L	301	ND	69.8	43-171			
Chloroethane	308.6	10.0	ug/L	300	ND	103	69-148			
Trichlorofluoromethane	291.8	10.0	ug/L	300	ND	97.3	62-163			
1,1-Dichloroethylene	472.9	10.0	ug/L	501	ND	94.3	70-148			
Acetone	813.9	100	ug/L	1000	ND	81.3	45-173			
Methyl Iodide	737.0	10.0	ug/L	1000	ND	73.6	62-167			
Carbon Disulfide	937.9	10.0	ug/L	1000	ND	93.7	71-163			
Methylene Chloride	465.7	50.0	ug/L	502	ND	92.8	69-140			
trans-1,2-Dichloroethylene	476.3	10.0	ug/L	503	ND	94.7	69-144			
1,1-Dichloroethane	469.8	10.0	ug/L	503	ND	93.5	70-138			
Vinyl Acetate	846.4	50.0	ug/L	1620	ND	52.4	58-142			QM-05
cis-1,2-Dichloroethylene	546.4	10.0	ug/L	505	ND	108	68-151			
2-Butanone (MEK)	943.1	100	ug/L	1000	ND	94.2	50-160			
Bromochloromethane	469.3	10.0	ug/L	504	ND	93.0	65-143			
Chloroform	455.5	10.0	ug/L	502	ND	90.8	71-143			
1,1,1-Trichloroethane	460.7	10.0	ug/L	503	ND	91.6	63-133			
Carbon Tetrachloride	470.6	10.0	ug/L	502	ND	93.7	63-142			
Benzene	487.8	10.0	ug/L	504	ND	96.7	69-133			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1572 - EPA 5030B - EPA 8260B										
Matrix Spike (1HD1572-MS1)	**Source: 1HD1698-01**	Prepared: 04/25/24 00:00 Analyzed: 04/25/24 19:02								
1,2-Dichloroethane	462.2	10.0	ug/L	502	ND	92.1	63-138			
Trichloroethylene	486.2	10.0	ug/L	503	ND	96.6	71-133			
1,2-Dichloropropane	486.5	10.0	ug/L	502	ND	96.9	69-132			
Dibromomethane	484.7	10.0	ug/L	505	ND	96.0	70-147			
Bromodichloromethane	477.9	10.0	ug/L	503	ND	95.1	67-130			
cis-1,3-Dichloropropene	476.4	10.0	ug/L	502	ND	94.9	61-126			
4-Methyl-2-pentanone (MIBK)	1057	50.0	ug/L	1000	ND	105	55-147			
Toluene	479.4	10.0	ug/L	505	ND	95.0	71-133			
trans-1,3-Dichloropropene	477.7	10.0	ug/L	503	ND	95.0	63-124			
1,1,2-Trichloroethane	489.0	10.0	ug/L	502	ND	97.4	69-133			
Tetrachloroethylene	485.1	10.0	ug/L	502	ND	96.6	70-124			
2-Hexanone (MBK)	1090	50.0	ug/L	1000	ND	109	53-141			
Dibromochloromethane	486.1	10.0	ug/L	503	ND	96.6	74-122			
1,2-Dibromoethane	495.9	10.0	ug/L	504	ND	98.3	66-127			
Chlorobenzene	491.8	10.0	ug/L	502	ND	97.9	76-116			
1,1,1,2-Tetrachloroethane	485.6	10.0	ug/L	504	ND	96.3	77-121			
Ethylbenzene	507.9	10.0	ug/L	505	ND	101	73-124			
Xylenes, total	1537	20.0	ug/L	1510	ND	102	75-123			
Styrene	517.3	10.0	ug/L	504	ND	103	70-120			
Bromoform	470.4	10.0	ug/L	502	ND	93.7	70-124			
1,2,3-Trichloropropane	496.6	10.0	ug/L	504	ND	98.5	62-135			
trans-1,4-Dichloro-2-butene	1006	50.0	ug/L	1000	ND	100	50-120			
1,1,2,2-Tetrachloroethane	498.5	10.0	ug/L	502	ND	99.3	63-126			
1,4-Dichlorobenzene	483.9	10.0	ug/L	502	ND	96.4	72-119			
1,2-Dichlorobenzene	481.6	10.0	ug/L	502	ND	96.0	71-117			
1,2-Dibromo-3-chloropropane	485.6	50.0	ug/L	505	ND	96.2	49-134			
Surrogate: Dibromofluoromethane	*467*		ug/L	*502*		*93.2*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*474*		ug/L	*501*		*94.7*	*61-142*			
Surrogate: Toluene-d8	*499*		ug/L	*504*		*99.0*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*500*		ug/L	*501*		*99.6*	*80-116*			
Matrix Spike Dup (1HD1572-MSD1)	**Source: 1HD1698-01**	Prepared: 04/25/24 00:00 Analyzed: 04/25/24 19:25								
Chloromethane	264.9	10.0	ug/L	300	ND	88.2	61-152	4.39	26	
Vinyl Chloride	291.2	10.0	ug/L	300	ND	97.0	66-149	4.40	23	
Bromomethane	227.3	10.0	ug/L	301	ND	75.5	43-171	7.82	29	
Chloroethane	296.6	10.0	ug/L	300	ND	98.8	69-148	3.97	25	
Trichlorofluoromethane	287.3	10.0	ug/L	300	ND	95.8	62-163	1.55	25	
1,1-Dichloroethylene	456.6	10.0	ug/L	501	ND	91.1	70-148	3.51	22	
Acetone	783.7	100	ug/L	1000	ND	78.3	45-173	3.78	30	
Methyl Iodide	801.1	10.0	ug/L	1000	ND	80.0	62-167	8.33	24	
Carbon Disulfide	902.2	10.0	ug/L	1000	ND	90.1	71-163	3.88	22	
Methylene Chloride	450.2	50.0	ug/L	502	ND	89.7	69-140	3.38	19	
trans-1,2-Dichloroethylene	454.5	10.0	ug/L	503	ND	90.4	69-144	4.68	22	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1572 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1HD1572-MSD1)	**Source: 1HD1698-01**	Prepared: 04/25/24 00:00 Analyzed: 04/25/24 19:25								
1,1-Dichloroethane	450.4	10.0	ug/L	503	ND	89.6	70-138	4.22	20	
Vinyl Acetate	899.2	50.0	ug/L	1620	ND	55.7	58-142	6.05	24	QM-05
cis-1,2-Dichloroethylene	527.8	10.0	ug/L	505	ND	105	68-151	3.46	22	
2-Butanone (MEK)	969.7	100	ug/L	1000	ND	96.8	50-160	2.78	23	
Bromochloromethane	457.9	10.0	ug/L	504	ND	90.8	65-143	2.46	22	
Chloroform	436.1	10.0	ug/L	502	ND	86.9	71-143	4.35	21	
1,1,1-Trichloroethane	444.5	10.0	ug/L	503	ND	88.3	63-133	3.58	23	
Carbon Tetrachloride	452.8	10.0	ug/L	502	ND	90.2	63-142	3.86	22	
Benzene	466.8	10.0	ug/L	504	ND	92.5	69-133	4.40	18	
1,2-Dichloroethane	450.5	10.0	ug/L	502	ND	89.8	63-138	2.56	20	
Trichloroethylene	464.9	10.0	ug/L	503	ND	92.3	71-133	4.48	23	
1,2-Dichloropropane	471.3	10.0	ug/L	502	ND	93.8	69-132	3.17	20	
Dibromomethane	472.6	10.0	ug/L	505	ND	93.6	70-147	2.53	22	
Bromodichloromethane	464.0	10.0	ug/L	503	ND	92.3	67-130	2.95	21	
cis-1,3-Dichloropropene	463.0	10.0	ug/L	502	ND	92.2	61-126	2.85	21	
4-Methyl-2-pentanone (MIBK)	1024	50.0	ug/L	1000	ND	102	55-147	3.14	23	
Toluene	456.5	10.0	ug/L	505	ND	90.4	71-133	4.89	19	
trans-1,3-Dichloropropene	470.2	10.0	ug/L	503	ND	93.5	63-124	1.58	21	
1,1,2-Trichloroethane	474.2	10.0	ug/L	502	ND	94.4	69-133	3.07	19	
Tetrachloroethylene	463.0	10.0	ug/L	502	ND	92.2	70-124	4.66	24	
2-Hexanone (MBK)	1065	50.0	ug/L	1000	ND	106	53-141	2.32	24	
Dibromochloromethane	477.4	10.0	ug/L	503	ND	94.8	74-122	1.81	21	
1,2-Dibromoethane	484.9	10.0	ug/L	504	ND	96.1	66-127	2.24	23	
Chlorobenzene	469.2	10.0	ug/L	502	ND	93.4	76-116	4.70	21	
1,1,1,2-Tetrachloroethane	469.9	10.0	ug/L	504	ND	93.2	77-121	3.29	25	
Ethylbenzene	484.5	10.0	ug/L	505	ND	96.0	73-124	4.72	20	
Xylenes, total	1462	20.0	ug/L	1510	ND	96.6	75-123	4.97	20	
Styrene	496.6	10.0	ug/L	504	ND	98.5	70-120	4.08	23	
Bromoform	466.8	10.0	ug/L	502	ND	92.9	70-124	0.768	22	
1,2,3-Trichloropropane	479.7	10.0	ug/L	504	ND	95.1	62-135	3.46	28	
trans-1,4-Dichloro-2-butene	990.8	50.0	ug/L	1000	ND	98.8	50-120	1.48	26	
1,1,2,2-Tetrachloroethane	484.6	10.0	ug/L	502	ND	96.5	63-126	2.83	24	
1,4-Dichlorobenzene	463.5	10.0	ug/L	502	ND	92.4	72-119	4.31	24	
1,2-Dichlorobenzene	466.7	10.0	ug/L	502	ND	93.0	71-117	3.14	24	
1,2-Dibromo-3-chloropropane	484.3	50.0	ug/L	505	ND	95.9	49-134	0.268	28	
Surrogate: Dibromofluoromethane	*471*		ug/L	*502*		*93.8*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*473*		ug/L	*501*		*94.4*	*61-142*			
Surrogate: Toluene-d8	*498*		ug/L	*504*		*98.8*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*500*		ug/L	*501*		*99.8*	*80-116*			

Determination of Conventional Chemistry Parameters	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1215 - General Prep Micro - SM 5210 B										
Blank (1HD1215-BLK1)			Prepared: 04/19/24 08:41 Analyzed: 04/19/24 10:25							
BOD (5 day)	<2	2	mg/L							B-06
Duplicate (1HD1215-DUP1)	**Source: 1HD1444-01**		Prepared: 04/19/24 08:41 Analyzed: 04/19/24 11:27							
BOD (5 day)	63.5	24	mg/L		55.6			13.4	29	
Reference (1HD1215-SRM1)			Prepared: 04/19/24 08:41 Analyzed: 04/19/24 10:31							
BOD (5 day)	194	100	mg/L	198		97.8	84.6-115.4			
Batch 1HD1237 - Wet Chem Preparation - 2320B										
Blank (1HD1237-BLK1)			Prepared: 04/19/24 11:01 Analyzed: 04/19/24 14:02							
Alkalinity, as CaCO3	<10	10	mg/L							
LCS (1HD1237-BS1)			Prepared: 04/19/24 11:01 Analyzed: 04/19/24 14:02							
Alkalinity, as CaCO3	223	10	mg/L	235		94.9	88-114			
Matrix Spike (1HD1237-MS1)	**Source: 1HD1512-01**		Prepared: 04/19/24 11:01 Analyzed: 04/19/24 14:02							
Alkalinity, as CaCO3	400	10	mg/L	235	189	89.5	74-122			
Matrix Spike Dup (1HD1237-MSD1)	**Source: 1HD1512-01**		Prepared: 04/19/24 11:01 Analyzed: 04/19/24 14:02							
Alkalinity, as CaCO3	398	10	mg/L	235	189	88.7	74-122	0.476	10	
Batch 1HD1258 - Wet Chem Preparation - EPA 9040										
Duplicate (1HD1258-DUP1)	**Source: 1HD1434-01**		Prepared & Analyzed: 04/19/24 16:12							
pH	7.47	0.5	pH		7.46			0.107	10	
Reference (1HD1258-SRM1)			Prepared & Analyzed: 04/19/24 16:12							
pH	7.01	0.5	pH	7.00		100	90-110			
Reference (1HD1258-SRM2)			Prepared & Analyzed: 04/19/24 16:12							
pH	7.02	0.5	pH	7.00		100	90-110			
Batch 1HD1292 - Wet Chem Preparation - USGS I-3765-85										
Blank (1HD1292-BLK1)			Prepared: 04/22/24 09:41 Analyzed: 04/22/24 14:10							
Total Suspended Solids (TSS)	<1	1	mg/L							
LCS (1HD1292-BS1)			Prepared: 04/22/24 09:41 Analyzed: 04/22/24 14:10							
Total Suspended Solids (TSS)	14.1	1	mg/L	15.0		94.0	74-114			
Duplicate (1HD1292-DUP1)	**Source: 1HD1347-01**		Prepared: 04/22/24 09:41 Analyzed: 04/22/24 14:10							
Total Suspended Solids (TSS)	55.6	1	mg/L		59.2			6.27	30	
Batch 1HD1318 - Wet Chem Preparation - USGS I-1750-85										
Blank (1HD1318-BLK1)			Prepared: 04/22/24 14:36 Analyzed: 04/23/24 07:40							
Total Dissolved Solids (TDS)	<5	5	mg/L							
LCS (1HD1318-BS1)			Prepared: 04/22/24 14:36 Analyzed: 04/23/24 07:40							
Total Dissolved Solids (TDS)	99	5	mg/L	100		99.3	71-114			

Determination of Conventional Chemistry Parameters	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1318 - Wet Chem Preparation - USGS I-1750-85										
Duplicate (1HD1318-DUP1)		**Source: 1HD1574-01**	Prepared: 04/22/24 14:36 Analyzed: 04/23/24 07:40							
Total Dissolved Solids (TDS)	1130	5	mg/L		1130			0.235	30	
Batch 1HD1566 - Wet Chem Preparation - EPA 410.4										
Blank (1HD1566-BLK1)			Prepared: 04/25/24 16:33 Analyzed: 04/26/24 13:10							
COD, total	<54	54	mg/L							
LCS (1HD1566-BS1)			Prepared: 04/25/24 16:33 Analyzed: 04/26/24 13:10							
COD, total	162	54	mg/L	150		108	90-110			
Matrix Spike (1HD1566-MS1)		**Source: 1HD1361-01**	Prepared: 04/25/24 16:33 Analyzed: 04/26/24 13:10							
COD, total	404	108	mg/L	300	ND	135	90-110			QM-13
Matrix Spike Dup (1HD1566-MSD1)		**Source: 1HD1361-01**	Prepared: 04/25/24 16:33 Analyzed: 04/26/24 13:10							
COD, total	1420	108	mg/L	300	ND	474	90-110	111	10	QM-13
Batch 1HD1631 - General Prep HPLC/IC - TIMBERLINE										
Blank (1HD1631-BLK1)			Prepared: 04/29/24 07:19 Analyzed: 04/29/24 11:54							
Nitrogen, Ammonia	<0.10	0.10	mg/L							
LCS (1HD1631-BS1)			Prepared: 04/29/24 07:19 Analyzed: 04/29/24 11:56							
Nitrogen, Ammonia	5.31	0.10	mg/L	5.00		106	90-114			
Matrix Spike (1HD1631-MS1)		**Source: 2HD0576-02**	Prepared: 04/29/24 07:19 Analyzed: 04/29/24 11:57							
Nitrogen, Ammonia	5.60	0.10	mg/L	5.00	ND	112	84-115			
Matrix Spike Dup (1HD1631-MSD1)		**Source: 2HD0576-02**	Prepared: 04/29/24 07:19 Analyzed: 04/29/24 11:59							
Nitrogen, Ammonia	5.70	0.10	mg/L	5.00	ND	114	84-115	1.66	20	

Determination of Inorganic Anions	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HE0146 - General Prep HPLC/IC - EPA 9056										
Blank (1HE0146-BLK1)			Prepared: 05/01/24 00:00 Analyzed: 05/01/24 11:39							
Sulfate	<1.0	1.0	mg/L							
LCS (1HE0146-BS1)			Prepared: 05/01/24 00:00 Analyzed: 05/01/24 12:24							
Sulfate	33.16	1.0	mg/L	33.9		97.7	80-120			
LCS Dup (1HE0146-BSD1)			Prepared: 05/01/24 00:00 Analyzed: 05/01/24 12:46							
Sulfate	33.09	1.0	mg/L	33.9		97.5	80-120	0.229	10	
Matrix Spike (1HE0146-MS1)		**Source: 1HD1656-01**	Prepared: 05/01/24 00:00 Analyzed: 05/01/24 20:37							
Sulfate	413.7	10.0	mg/L	339	77.90	99.0	87-113			
Matrix Spike Dup (1HE0146-MSD1)		**Source: 1HD1656-01**	Prepared: 05/01/24 00:00 Analyzed: 05/01/24 20:59							
Sulfate	413.2	10.0	mg/L	339	77.90	98.8	87-113	0.133	10	
Batch 1HE0195 - General Prep HPLC/IC - EPA 9056										

Determination of Inorganic Anions	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HE0195 - General Prep HPLC/IC - EPA 9056										
Blank (1HE0195-BLK1)			Prepared: 05/02/24 00:00 Analyzed: 05/02/24 10:15							
Chloride	<1.0	1.0	mg/L							
Blank (1HE0195-BLK2)			Prepared: 05/02/24 00:00 Analyzed: 05/02/24 16:59							
Chloride	<1.0	1.0	mg/L							
LCS (1HE0195-BS1)			Prepared: 05/02/24 00:00 Analyzed: 05/02/24 11:00							
Chloride	15.33	1.0	mg/L	15.4		99.2	80-120			
LCS Dup (1HE0195-BSD1)			Prepared: 05/02/24 00:00 Analyzed: 05/02/24 11:23							
Chloride	15.09	1.0	mg/L	15.4		97.6	80-120	1.61	10	
Matrix Spike (1HE0195-MS1)	**Source: 1HD1652-01**		Prepared: 05/02/24 00:00 Analyzed: 05/02/24 13:15							
Chloride	291.2	10.0	mg/L	154	142.9	96.0	81-116			
Matrix Spike Dup (1HE0195-MSD1)	**Source: 1HD1652-01**		Prepared: 05/02/24 00:00 Analyzed: 05/02/24 13:37							
Chloride	291.5	10.0	mg/L	154	142.9	96.2	81-116	0.0858	10	

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HD1412 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1HD1412-BLK1)			Prepared: 04/24/24 07:16 Analyzed: 04/25/24 22:31							
Arsenic, total	<0.0040	0.0040	mg/L							
Cobalt, total	<0.0004	0.0004	mg/L							
LCS (1HD1412-BS1)			Prepared: 04/24/24 07:16 Analyzed: 04/25/24 22:37							
Arsenic, total	0.100	0.0040	mg/L	0.100		100	80-120			
Cobalt, total	0.104	0.0004	mg/L	0.100		104	80-120			
Matrix Spike (1HD1412-MS1)	**Source: 1HD1511-01**		Prepared: 04/24/24 07:16 Analyzed: 04/25/24 22:49							
Arsenic, total	0.121	0.0040	mg/L	0.100	0.0214	99.7	75-125			
Cobalt, total	0.130	0.0004	mg/L	0.100	0.0221	108	75-125			
Matrix Spike Dup (1HD1412-MSD1)	**Source: 1HD1511-01**		Prepared: 04/24/24 07:16 Analyzed: 04/25/24 22:56							
Arsenic, total	0.120	0.0040	mg/L	0.100	0.0214	98.3	75-125	1.16	20	
Cobalt, total	0.129	0.0004	mg/L	0.100	0.0221	107	75-125	0.903	20	
Post Spike (1HD1412-PS1)	**Source: 1HD1511-01**		Prepared: 04/24/24 07:16 Analyzed: 04/25/24 23:02							
Arsenic, total	0.101		mg/L	0.0800	0.0214	99.7	80-120			
Cobalt, total	0.109		mg/L	0.0800	0.0221	108	80-120			

Definitions

B-06:	Unseeded Blank equals .41mg/L
I-03:	Analyte required to be analyzed within 15 minutes of sampling. Analysis performed upon receipt of sample at laboratory.
I-05:	Sample received at laboratory past hold time for this analyte.
QM-05:	The spike recovery and/or RPD was outside acceptance limits for the MS and/or MSD due to matrix interference. The LCS and/or LCSD were within acceptance limits showing that the laboratory is in control and the data is acceptable.
QM-13:	The spike recovery was outside acceptance limits for the MS and/or MSD. Batch accepted based on acceptable initial and continuing calibration results.
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.
RL:	Reporting Limit
RPD:	Relative Percent Difference

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 0.8ºC

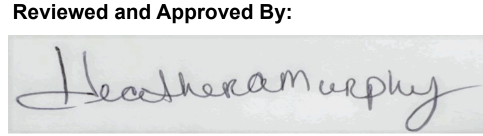
Cooler Inspection Checklist

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

Report Comments

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

Reviewed and Approved By:



Heather Murphy
Customer Relationship Specialist
heather.murphy@microbac.com
05/31/24 11:21

Keystone LABORATORIES
A Microbac Company

600 East 17th Street South
Newton, IA 50208
641-792-8451

1 H D 1 5 1 1
HLW Engineering
PM: Heather Murphy

www.keystonelab...

SITE INFORMATION

Sampler: TODD WHIPPLE

Project: Marshall Sanitary Landfill-B1
6003

REPORT TO

Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50248

Don Ballalatak
Marshall County Landfill
2313 Marshalltown Blvd
Marshalltown, IA 50158

SPECIAL INSTRUCTIONS

None

Turn Around Time
☐ Standard ☐ RUSH, need by __/__/__

LAB USE ONLY

Work Order: 1HD1511
Temperature: 0.8
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	LW-75 *	Water	GRAB	4/16/24	15:22 *	15	alk-caco3-2320, as-t-6020, bod-5210, cl-9056-w, cod-t-410.4, co-t-6020, lndfill-app1-voc-group, methane-astm-d1946, nh3-timberline, ph-9040, so4-9056-w, tds-i-1750-85, tss-i-3765-85	01

Relinquished By: Todd Whipple Date/Time: 4/18/24

Relinquished By: Date/Time:

Received By: Date/Time:

Received for Lab By: Maher Date/Time: 4/18/24 9:39

Remarks: * please run all analyses if hold time has passed.

Original - Lab Copy Yellow - Sampler Copy

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HG1939

Project Description

6003

For:

Todd Whipple

HLW Engineering

PO Box 314

Story City, IA 50248

Heather Murphy

Customer Relationship Specialist

Friday, August 2, 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

1HG1939

HLW Engineering

Todd Whipple
PO Box 314
Story City, IA 50248

Project Name: 6003

Project / PO Number: N/A
Received: 07/24/2024
Reported: 08/02/2024

Sample Summary Report

Sample Name	Laboratory ID	Client Matrix	Sample Type	Sample Begin	Sample Taken	Lab Received
MW97	1HG1939-01	Aqueous	GRAB		07/18/24 14:50	07/24/24 10:04

MICROBAC®

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HG1939

Analytical Testing Parameters

Client Sample ID:	MW97		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HG1939-01	**Collection Date:**	07/18/2024 14:50

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Copper, total	<0.0040	0.0040	mg/L	4		07/31/24 1544	08/01/24 2138	RVV

Batch Log Summary

Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	1HG1686	1HG1686-BLK1	
		1HG1686-BS1	
		1HG1939-01	MW97
		1HG1686-MS1	1HG2076-02
		1HG1686-MSD1	1HG2076-02
		1HG1686-PS1	1HG2076-02

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

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HG1686 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1HG1686-BLK1)			Prepared: 07/31/24 15:44 Analyzed: 08/01/24 21:26							
Copper, total	<0.0040	0.0040	mg/L							
LCS (1HG1686-BS1)			Prepared: 07/31/24 15:44 Analyzed: 08/01/24 21:32							
Copper, total	0.108	0.0040	mg/L	0.100		108	80-120			
Matrix Spike (1HG1686-MS1)	**Source: 1HG2076-02**		Prepared: 07/31/24 15:44 Analyzed: 08/01/24 22:03							
Copper, total	0.141	0.0040	mg/L	0.100	0.0456	95.9	75-125			
Matrix Spike Dup (1HG1686-MSD1)	**Source: 1HG2076-02**		Prepared: 07/31/24 15:44 Analyzed: 08/01/24 22:09							
Copper, total	0.143	0.0040	mg/L	0.100	0.0456	97.6	75-125	1.19	20	
Post Spike (1HG1686-PS1)	**Source: 1HG2076-02**		Prepared: 07/31/24 15:44 Analyzed: 08/01/24 22:15							
Copper, total	0.120		mg/L	0.0800	0.0447	94.8	80-120			

Definitions

RL: Reporting Limit
RPD: Relative Percent Difference

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 0.0°C

Cooler Inspection Checklist

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

Report Comments

Reviewed and Approved By:

Heather Murphy
Customer Relationship Specialist
heather.murphy@microbac.com
08/02/24 16:39

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>.***

CHAIN OF CUSTODY RECORD

Keystone LABORATORIES, INC.

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

☐ 30… W… Ph… Fa…

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

1HG1939
HLW Engineering
PM: Heather Murphy

PAGE 1 OF 1

PRINT OR TYPE INFORMATION BELOW	REPORT TO:	BILL TO:
SAMPLER: Todd Whipple	NAME: Todd Whipple	NAME: Don Ballalatak, Mgr
SITE NAME: Marshall Co SLF	COMPANY NAME: HLW Engineering	COMPANY NAME: Marshall Co SLF
ADDRESS:	ADDRESS: P.O Box 314	ADDRESS: P.O Box 217
CITY/ST/ZIP:	CITY/ST/ZIP: Story City, IA 50248	CITY/ST/ZIP: Marshalltown, IA 50158
PHONE:	PHONE: 515 733-4144	PHONE:
	FAX: 4146	Keystone Quote No: (If Applicable)

ANALYSES REQUIRED

LAB USE ONLY
LABORATORY WORK ORDER NO. 1HG1939
SAMPLE TEMPERATURE UPON RECEIPT: 0.0 °C

CLIENT SAMPLE NUMBER	DATE	TIME	SAMPLE LOCATION	NO. OF CONTAINERS	MATRIX	GRAB/COMPOSITE	Copper Total (App I)							SAMPLE CONDITION/COMMENTS	LABORATORY SAMPLE NUMBER
MW97	7-18-24	14:50	MW97	1	W	G	X							on ice	01

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Date / Time	Turn-Around:
[signature]	Date 7/24/24 Time		Date Time	☐ Standard ☐ Rush ____ Contact Lab Prior to Submission
Relinquished by: (Signature)	Date Time	Received for Lab by: (Signature) [signature]	Date 7-24-24 Time 10:04	Remarks:

Original - Lab Copy • Yellow - Sampler Copy

FORM: CCR 7-97

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ1337

Project Description

6003

For:

Todd Whipple

HLW Engineering

204 West Broad St

Story City, IA 50248

Heather Murphy

Customer Relationship Specialist

Friday, November 1, 2024

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

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

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ1337

HLW Engineering

Todd Whipple
204 West Broad St
Story City, IA 50248

Project Name: 6003

Project / PO Number: N/A
Received: 10/16/2024
Reported: 11/01/2024

Sample Summary Report

Sample Name	Laboratory ID	Client Matrix	Sample Type	Sample Begin	Sample Taken	Lab Received
MW-85 (B)	1HJ1337-01	Aqueous	GRAB		10/15/24 11:33	10/16/24 10:26
MW-98 (B)	1HJ1337-02	Aqueous	GRAB		10/15/24 14:53	10/16/24 10:26
MW-99 (B)	1HJ1337-03	Aqueous	GRAB		10/15/24 10:10	10/16/24 10:26
MW-49	1HJ1337-04	Aqueous	GRAB		10/15/24 12:38	10/16/24 10:26
MW-54	1HJ1337-05	Aqueous	GRAB		10/15/24 12:20	10/16/24 10:26
MW-81	1HJ1337-06	Aqueous	GRAB		10/15/24 15:48	10/16/24 10:26
MW-87	1HJ1337-07	Aqueous	GRAB		10/15/24 15:36	10/16/24 10:26
MW-89	1HJ1337-08	Aqueous	GRAB		10/15/24 15:20	10/16/24 10:26
MW-91	1HJ1337-09	Aqueous	GRAB		10/15/24 15:09	10/16/24 10:26
MW-93	1HJ1337-10	Aqueous	GRAB		10/15/24 09:53	10/16/24 10:26
MW-94	1HJ1337-11	Aqueous	GRAB		10/15/24 12:03	10/16/24 10:26
MW-95	1HJ1337-12	Aqueous	GRAB		10/15/24 11:07	10/16/24 10:26
MW-96R	1HJ1337-13	Aqueous	GRAB		10/15/24 13:59	10/16/24 10:26
MW-97	1HJ1337-14	Aqueous	GRAB		10/15/24 11:49	10/16/24 10:26
Duplicate	1HJ1337-15	Aqueous	GRAB		10/15/24 00:00	10/16/24 10:26
LW-75	1HJ1337-16	Aqueous	GRAB		10/15/24 13:07	10/16/24 10:26

Analytical Testing Parameters

Client Sample ID:	MW-85 (B)		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ1337-01	**Collection Date:**	10/15/2024 11:33

Analyses Performed by: Microbac Laboratories, Inc., Newton

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 2059	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
Chloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
Acetone	<10.0	10.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1	**Q3**	10/17/24 0000	10/17/24 2059	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/22/24 0000	10/22/24 1355	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
Chloroform	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
Benzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
Toluene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF

Client Sample ID:	MW-85 (B)		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ1337-01	**Collection Date:**	10/15/2024 11:33

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Styrene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
Bromoform	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2059	BDF
Surrogate: Dibromofluoromethane	97.1	Limit: 75-136	% Rec	1		10/17/24 0000	10/17/24 2059	BDF
Surrogate: Dibromofluoromethane	98.3	Limit: 57-134	% Rec	1		10/22/24 0000	10/22/24 1355	CSM
Surrogate: 1,2-Dichloroethane-d4	103	Limit: 53-140	% Rec	1		10/22/24 0000	10/22/24 1355	CSM
Surrogate: 1,2-Dichloroethane-d4	98.4	Limit: 61-142	% Rec	1		10/17/24 0000	10/17/24 2059	BDF
Surrogate: Toluene-d8	93.0	Limit: 86-114	% Rec	1		10/22/24 0000	10/22/24 1355	CSM
Surrogate: Toluene-d8	97.1	Limit: 82-121	% Rec	1		10/17/24 0000	10/17/24 2059	BDF
Surrogate: 4-Bromofluorobenzene	99.4	Limit: 78-121	% Rec	1		10/22/24 0000	10/22/24 1355	CSM
Surrogate: 4-Bromofluorobenzene	95.9	Limit: 80-116	% Rec	1		10/17/24 0000	10/17/24 2059	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		10/17/24 1551	10/18/24 2318	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/18/24 2318	RVV
Barium, total	**0.136**	0.0040	mg/L	4		10/17/24 1551	10/18/24 2318	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/18/24 2318	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/17/24 1551	10/18/24 2318	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/17/24 1551	10/18/24 2318	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		10/17/24 1551	10/18/24 2318	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/18/24 2318	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/18/24 2318	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/18/24 2318	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/18/24 2318	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/18/24 2318	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/17/24 1551	10/18/24 2318	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/17/24 1551	10/18/24 2318	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/17/24 1551	10/18/24 2318	RVV

Client Sample ID:	MW-98 (B)		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ1337-02	**Collection Date:**	10/15/2024 14:53

Analyses Performed by: Microbac Laboratories, Inc., Newton

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 2122	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
Chloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
Acetone	<10.0	10.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1	**Q3**	10/17/24 0000	10/17/24 2122	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/22/24 0000	10/22/24 1418	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
Chloroform	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
Benzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
Toluene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
Styrene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
Bromoform	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF

Client Sample ID:	MW-98 (B)		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ1337-02	**Collection Date:**	10/15/2024 14:53

Determination of Volatile Organic Compounds	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2122	BDF
Surrogate: Dibromofluoromethane	98.4	Limit: 57-134	% Rec	1		10/22/24 0000	10/22/24 1418	CSM
Surrogate: Dibromofluoromethane	96.9	Limit: 75-136	% Rec	1		10/17/24 0000	10/17/24 2122	BDF
Surrogate: 1,2-Dichloroethane-d4	104	Limit: 53-140	% Rec	1		10/22/24 0000	10/22/24 1418	CSM
Surrogate: 1,2-Dichloroethane-d4	98.3	Limit: 61-142	% Rec	1		10/17/24 0000	10/17/24 2122	BDF
Surrogate: Toluene-d8	93.1	Limit: 86-114	% Rec	1		10/22/24 0000	10/22/24 1418	CSM
Surrogate: Toluene-d8	97.1	Limit: 82-121	% Rec	1		10/17/24 0000	10/17/24 2122	BDF
Surrogate: 4-Bromofluorobenzene	96.0	Limit: 80-116	% Rec	1		10/17/24 0000	10/17/24 2122	BDF
Surrogate: 4-Bromofluorobenzene	99.4	Limit: 78-121	% Rec	1		10/22/24 0000	10/22/24 1418	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		10/17/24 1551	10/18/24 2355	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/18/24 2355	RVV
Barium, total	**0.137**	0.0040	mg/L	4		10/17/24 1551	10/18/24 2355	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/18/24 2355	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/17/24 1551	10/18/24 2355	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/17/24 1551	10/18/24 2355	RVV
Cobalt, total	**0.0019**	0.0004	mg/L	4		10/17/24 1551	10/18/24 2355	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/18/24 2355	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/18/24 2355	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/18/24 2355	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/18/24 2355	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/18/24 2355	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/17/24 1551	10/18/24 2355	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/17/24 1551	10/18/24 2355	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/17/24 1551	10/18/24 2355	RVV

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1HJ1337

Client Sample ID:	MW-99 (B)		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ1337-03	**Collection Date:**	10/15/2024 10:10

Analyses Performed by: Microbac Laboratories, Inc., Newton

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 2145	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
Chloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
Acetone	<10.0	10.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1	**Q3**	10/17/24 0000	10/17/24 2145	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/22/24 0000	10/22/24 1441	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
Chloroform	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
Benzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
Toluene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
Styrene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
Bromoform	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF

Client Sample ID:	MW-99 (B)		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ1337-03	**Collection Date:**	10/15/2024 10:10

Determination of Volatile Organic Compounds	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2145	BDF
Surrogate: Dibromofluoromethane	96.8	Limit: 75-136	% Rec	1		10/17/24 0000	10/17/24 2145	BDF
Surrogate: Dibromofluoromethane	98.4	Limit: 57-134	% Rec	1		10/22/24 0000	10/22/24 1441	CSM
Surrogate: 1,2-Dichloroethane-d4	98.8	Limit: 61-142	% Rec	1		10/17/24 0000	10/17/24 2145	BDF
Surrogate: 1,2-Dichloroethane-d4	104	Limit: 53-140	% Rec	1		10/22/24 0000	10/22/24 1441	CSM
Surrogate: Toluene-d8	97.2	Limit: 82-121	% Rec	1		10/17/24 0000	10/17/24 2145	BDF
Surrogate: Toluene-d8	94.5	Limit: 86-114	% Rec	1		10/22/24 0000	10/22/24 1441	CSM
Surrogate: 4-Bromofluorobenzene	96.1	Limit: 80-116	% Rec	1		10/17/24 0000	10/17/24 2145	BDF
Surrogate: 4-Bromofluorobenzene	98.4	Limit: 78-121	% Rec	1		10/22/24 0000	10/22/24 1441	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		10/17/24 1551	10/19/24 0001	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0001	RVV
Barium, total	**0.0888**	0.0040	mg/L	4		10/17/24 1551	10/19/24 0001	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0001	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/17/24 1551	10/19/24 0001	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/17/24 1551	10/19/24 0001	RVV
Cobalt, total	**0.0009**	0.0004	mg/L	4		10/17/24 1551	10/19/24 0001	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0001	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0001	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0001	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0001	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0001	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/17/24 1551	10/19/24 0001	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/17/24 1551	10/19/24 0001	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/17/24 1551	10/19/24 0001	RVV

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CERTIFICATE OF ANALYSIS

1HJ1337

Client Sample ID:	MW-49		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ1337-04	**Collection Date:**	10/15/2024 12:38

Analyses Performed by: Microbac Laboratories Inc., - Marietta, OH

Volatile Organic Compounds by GCMS	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA RSK-175								
Methane	**4770**	100	ug/L	20	**D3**	10/23/24 1040	10/23/24 1548	KJB
Ethene	<5.00	5.00	ug/L	1		10/22/24 1401	10/22/24 1553	KJB
Ethane	<5.00	5.00	ug/L	1		10/22/24 1401	10/22/24 1553	KJB

Analyses Performed by: Microbac Laboratories, Inc., Newton

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 2208	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
Chloroethane	**5.5**	1.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
Acetone	<10.0	10.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1	**Q3**	10/17/24 0000	10/17/24 2208	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/22/24 0000	10/22/24 1503	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
1,1-Dichloroethane	**1.2**	1.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
Chloroform	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
Benzene	**3.7**	1.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
Toluene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF

Client Sample ID:	MW-49		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ1337-04	**Collection Date:**	10/15/2024 12:38

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
Chlorobenzene	**1.1**	1.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
Styrene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
Bromoform	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
1,4-Dichlorobenzene	**7.9**	1.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2208	BDF
Surrogate: Dibromofluoromethane	97.5	Limit: 57-134	% Rec	1		10/22/24 0000	10/22/24 1503	CSM
Surrogate: Dibromofluoromethane	96.5	Limit: 75-136	% Rec	1		10/17/24 0000	10/17/24 2208	BDF
Surrogate: 1,2-Dichloroethane-d4	98.7	Limit: 61-142	% Rec	1		10/17/24 0000	10/17/24 2208	BDF
Surrogate: 1,2-Dichloroethane-d4	104	Limit: 53-140	% Rec	1		10/22/24 0000	10/22/24 1503	CSM
Surrogate: Toluene-d8	97.3	Limit: 82-121	% Rec	1		10/17/24 0000	10/17/24 2208	BDF
Surrogate: Toluene-d8	95.2	Limit: 86-114	% Rec	1		10/22/24 0000	10/22/24 1503	CSM
Surrogate: 4-Bromofluorobenzene	97.2	Limit: 80-116	% Rec	1		10/17/24 0000	10/17/24 2208	BDF
Surrogate: 4-Bromofluorobenzene	99.4	Limit: 78-121	% Rec	1		10/22/24 0000	10/22/24 1503	CSM

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
2320B								
Alkalinity, as CaCO3	**1170**	50	mg/L	1		10/18/24 1042	10/18/24 1458	BSS
EPA 9040								
pH	**6.3**	0.5	pH	1	**H4**		10/21/24 0916	BSS

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		10/17/24 1551	10/19/24 0007	RVV
Arsenic, total	**0.520**	0.0040	mg/L	4		10/17/24 1551	10/19/24 0007	RVV
Barium, total	**0.213**	0.0040	mg/L	4		10/17/24 1551	10/19/24 0007	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0007	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/17/24 1551	10/19/24 0007	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/17/24 1551	10/19/24 0007	RVV
Cobalt, total	**0.0669**	0.0004	mg/L	4		10/17/24 1551	10/19/24 0007	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0007	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0007	RVV
Nickel, total	**0.0339**	0.0040	mg/L	4		10/17/24 1551	10/19/24 0007	RVV

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CERTIFICATE OF ANALYSIS

1HJ1337

Client Sample ID:	MW-49		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ1337-04	**Collection Date:**	10/15/2024 12:38

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Selenium, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0007	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0007	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/17/24 1551	10/19/24 0007	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/17/24 1551	10/19/24 0007	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/17/24 1551	10/19/24 0007	RVV

Client Sample ID:	MW-54		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ1337-05	**Collection Date:**	10/15/2024 12:20

Analyses Performed by: Microbac Laboratories Inc., - Marietta, OH

Volatile Organic Compounds by GCMS	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA RSK-175								
Methane	**78.0**	5.00	ug/L	1		10/23/24 1040	10/23/24 1441	KJB
Ethene	<5.00	5.00	ug/L	1		10/22/24 1401	10/22/24 1607	KJB
Ethane	<5.00	5.00	ug/L	1		10/22/24 1401	10/22/24 1607	KJB

Analyses Performed by: Microbac Laboratories, Inc., Newton

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 2231	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
Chloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
Acetone	<10.0	10.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1	**Q3**	10/17/24 0000	10/17/24 2231	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/22/24 0000	10/22/24 1526	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
Chloroform	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
Benzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
Toluene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF

Client Sample ID:	MW-54		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ1337-05	**Collection Date:**	10/15/2024 12:20

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
Styrene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
Bromoform	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
1,4-Dichlorobenzene	**2.9**	1.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2231	BDF
Surrogate: Dibromofluoromethane	97.9	Limit: 57-134	% Rec	1		10/22/24 0000	10/22/24 1526	CSM
Surrogate: Dibromofluoromethane	96.9	Limit: 75-136	% Rec	1		10/17/24 0000	10/17/24 2231	BDF
Surrogate: 1,2-Dichloroethane-d4	97.8	Limit: 61-142	% Rec	1		10/17/24 0000	10/17/24 2231	BDF
Surrogate: 1,2-Dichloroethane-d4	104	Limit: 53-140	% Rec	1		10/22/24 0000	10/22/24 1526	CSM
Surrogate: Toluene-d8	94.5	Limit: 86-114	% Rec	1		10/22/24 0000	10/22/24 1526	CSM
Surrogate: Toluene-d8	97.0	Limit: 82-121	% Rec	1		10/17/24 0000	10/17/24 2231	BDF
Surrogate: 4-Bromofluorobenzene	97.0	Limit: 80-116	% Rec	1		10/17/24 0000	10/17/24 2231	BDF
Surrogate: 4-Bromofluorobenzene	99.3	Limit: 78-121	% Rec	1		10/22/24 0000	10/22/24 1526	CSM

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
2320B								
Alkalinity, as CaCO3	**612**	50	mg/L	1		10/18/24 1042	10/18/24 1458	BSS
EPA 9040								
pH	**6.4**	0.5	pH	1	**H4**		10/21/24 0916	BSS

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		10/17/24 1551	10/19/24 0013	RVV
Arsenic, total	**0.0054**	0.0040	mg/L	4		10/17/24 1551	10/19/24 0013	RVV
Barium, total	**0.481**	0.0040	mg/L	4		10/17/24 1551	10/19/24 0013	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0013	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/17/24 1551	10/19/24 0013	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/17/24 1551	10/19/24 0013	RVV
Cobalt, total	**0.0099**	0.0004	mg/L	4		10/17/24 1551	10/19/24 0013	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0013	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0013	RVV
Nickel, total	**0.0226**	0.0040	mg/L	4		10/17/24 1551	10/19/24 0013	RVV

Client Sample ID:	MW-54		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ1337-05	**Collection Date:**	10/15/2024 12:20

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Selenium, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0013	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0013	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/17/24 1551	10/19/24 0013	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/17/24 1551	10/19/24 0013	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/17/24 1551	10/19/24 0013	RVV

Client Sample ID:	MW-81		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ1337-06	**Collection Date:**	10/15/2024 15:48

Analyses Performed by: Microbac Laboratories Inc., - Marietta, OH

Volatile Organic Compounds by GCMS	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA RSK-175								
Methane	**560**	5.00	ug/L	1		10/22/24 1401	10/22/24 1620	KJB
Ethene	<5.00	5.00	ug/L	1		10/22/24 1401	10/22/24 1620	KJB
Ethane	<5.00	5.00	ug/L	1		10/22/24 1401	10/22/24 1620	KJB

Analyses Performed by: Microbac Laboratories, Inc., Newton

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 2254	BDF
Vinyl Chloride	**6.5**	1.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
Chloroethane	**6.0**	1.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
Acetone	<10.0	10.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1	**Q3**	10/17/24 0000	10/17/24 2254	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/22/24 0000	10/22/24 1548	CSM
trans-1,2-Dichloroethylene	**2.4**	1.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
1,1-Dichloroethane	**24.8**	1.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
cis-1,2-Dichloroethylene	**127**	1.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
Chloroform	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
Benzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
1,2-Dichloroethane	**11.2**	1.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
Trichloroethylene	**2.2**	1.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
1,2-Dichloropropane	**6.9**	1.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
Toluene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF

Client Sample ID:	MW-81		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ1337-06	**Collection Date:**	10/15/2024 15:48

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
Chlorobenzene	**1.8**	1.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
Styrene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
Bromoform	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
1,4-Dichlorobenzene	**5.6**	1.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2254	BDF
Surrogate: Dibromofluoromethane	97.2	Limit: 57-134	% Rec	1		10/22/24 0000	10/22/24 1548	CSM
Surrogate: Dibromofluoromethane	96.5	Limit: 75-136	% Rec	1		10/17/24 0000	10/17/24 2254	BDF
Surrogate: 1,2-Dichloroethane-d4	103	Limit: 53-140	% Rec	1		10/22/24 0000	10/22/24 1548	CSM
Surrogate: 1,2-Dichloroethane-d4	97.8	Limit: 61-142	% Rec	1		10/17/24 0000	10/17/24 2254	BDF
Surrogate: Toluene-d8	98.0	Limit: 82-121	% Rec	1		10/17/24 0000	10/17/24 2254	BDF
Surrogate: Toluene-d8	95.5	Limit: 86-114	% Rec	1		10/22/24 0000	10/22/24 1548	CSM
Surrogate: 4-Bromofluorobenzene	98.2	Limit: 78-121	% Rec	1		10/22/24 0000	10/22/24 1548	CSM
Surrogate: 4-Bromofluorobenzene	95.9	Limit: 80-116	% Rec	1		10/17/24 0000	10/17/24 2254	BDF

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
2320B								
Alkalinity, as CaCO3	**907**	50	mg/L	1		10/18/24 1042	10/18/24 1458	BSS
EPA 9040								
pH	**6.3**	0.5	pH	1	**H4**		10/21/24 0916	BSS

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		10/17/24 1551	10/19/24 0020	RVV
Arsenic, total	**0.0060**	0.0040	mg/L	4		10/17/24 1551	10/19/24 0020	RVV
Barium, total	**1.58**	0.0040	mg/L	4		10/17/24 1551	10/19/24 0020	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0020	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/17/24 1551	10/19/24 0020	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/17/24 1551	10/19/24 0020	RVV
Cobalt, total	**0.0082**	0.0004	mg/L	4		10/17/24 1551	10/19/24 0020	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0020	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0020	RVV
Nickel, total	**0.0094**	0.0040	mg/L	4		10/17/24 1551	10/19/24 0020	RVV

Client Sample ID:	MW-81		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ1337-06	**Collection Date:**	10/15/2024 15:48

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Selenium, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0020	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0020	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/17/24 1551	10/19/24 0020	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/17/24 1551	10/19/24 0020	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/17/24 1551	10/19/24 0020	RVV

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CERTIFICATE OF ANALYSIS

1HJ1337

Client Sample ID:	MW-87		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ1337-07	**Collection Date:**	10/15/2024 15:36

Analyses Performed by: Microbac Laboratories, Inc., Newton

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 2316	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
Chloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
Acetone	<10.0	10.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1	**Q3**	10/17/24 0000	10/17/24 2316	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/22/24 0000	10/22/24 1611	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
Chloroform	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
Benzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
Toluene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
Styrene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
Bromoform	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF

Client Sample ID:	MW-87			
Sample Matrix:	Aqueous		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ1337-07		**Collection Date:**	10/15/2024 15:36

Determination of Volatile Organic Compounds	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2316	BDF
Surrogate: Dibromofluoromethane	97.9	Limit: 57-134	% Rec	1		10/22/24 0000	10/22/24 1611	CSM
Surrogate: Dibromofluoromethane	97.4	Limit: 75-136	% Rec	1		10/17/24 0000	10/17/24 2316	BDF
Surrogate: 1,2-Dichloroethane-d4	103	Limit: 53-140	% Rec	1		10/22/24 0000	10/22/24 1611	CSM
Surrogate: 1,2-Dichloroethane-d4	99.1	Limit: 61-142	% Rec	1		10/17/24 0000	10/17/24 2316	BDF
Surrogate: Toluene-d8	94.0	Limit: 86-114	% Rec	1		10/22/24 0000	10/22/24 1611	CSM
Surrogate: Toluene-d8	96.8	Limit: 82-121	% Rec	1		10/17/24 0000	10/17/24 2316	BDF
Surrogate: 4-Bromofluorobenzene	99.2	Limit: 78-121	% Rec	1		10/22/24 0000	10/22/24 1611	CSM
Surrogate: 4-Bromofluorobenzene	96.2	Limit: 80-116	% Rec	1		10/17/24 0000	10/17/24 2316	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		10/17/24 1551	10/19/24 0026	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0026	RVV
Barium, total	**0.100**	0.0040	mg/L	4		10/17/24 1551	10/19/24 0026	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0026	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/17/24 1551	10/19/24 0026	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/17/24 1551	10/19/24 0026	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		10/17/24 1551	10/19/24 0026	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0026	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0026	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0026	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0026	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0026	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/17/24 1551	10/19/24 0026	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/17/24 1551	10/19/24 0026	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/17/24 1551	10/19/24 0026	RVV

Client Sample ID:	MW-89		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ1337-08	**Collection Date:**	10/15/2024 15:20

Analyses Performed by: Microbac Laboratories, Inc., Newton

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 2339	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
Chloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
Acetone	<10.0	10.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1	**Q3**	10/17/24 0000	10/17/24 2339	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/22/24 0000	10/22/24 1634	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
Chloroform	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
Benzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
Toluene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
Styrene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
Bromoform	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF

Client Sample ID:	MW-89		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ1337-08	**Collection Date:**	10/15/2024 15:20

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/17/24 0000	10/17/24 2339	BDF
Surrogate: Dibromofluoromethane	96.6	Limit: 75-136	% Rec	1		10/17/24 0000	10/17/24 2339	BDF
Surrogate: Dibromofluoromethane	98.4	Limit: 57-134	% Rec	1		10/22/24 0000	10/22/24 1634	CSM
Surrogate: 1,2-Dichloroethane-d4	99.0	Limit: 61-142	% Rec	1		10/17/24 0000	10/17/24 2339	BDF
Surrogate: 1,2-Dichloroethane-d4	104	Limit: 53-140	% Rec	1		10/22/24 0000	10/22/24 1634	CSM
Surrogate: Toluene-d8	97.2	Limit: 82-121	% Rec	1		10/17/24 0000	10/17/24 2339	BDF
Surrogate: Toluene-d8	94.6	Limit: 86-114	% Rec	1		10/22/24 0000	10/22/24 1634	CSM
Surrogate: 4-Bromofluorobenzene	95.9	Limit: 80-116	% Rec	1		10/17/24 0000	10/17/24 2339	BDF
Surrogate: 4-Bromofluorobenzene	99.4	Limit: 78-121	% Rec	1		10/22/24 0000	10/22/24 1634	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		10/17/24 1551	10/19/24 0032	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0032	RVV
Barium, total	**0.215**	0.0040	mg/L	4		10/17/24 1551	10/19/24 0032	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0032	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/17/24 1551	10/19/24 0032	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/17/24 1551	10/19/24 0032	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		10/17/24 1551	10/19/24 0032	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0032	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0032	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0032	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0032	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0032	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/17/24 1551	10/19/24 0032	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/17/24 1551	10/19/24 0032	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/17/24 1551	10/19/24 0032	RVV

Client Sample ID:	MW-91		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ1337-09	**Collection Date:**	10/15/2024 15:09

Analyses Performed by: Microbac Laboratories, Inc., Newton

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	10/18/24 0002	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
Chloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
Acetone	<10.0	10.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1	**Q3**	10/17/24 0000	10/18/24 0002	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/22/24 0000	10/22/24 1656	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
Chloroform	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
Benzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
Toluene	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
Styrene	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
Bromoform	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF

Client Sample ID:	MW-91			
Sample Matrix:	Aqueous		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ1337-09		**Collection Date:**	10/15/2024 15:09

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/17/24 0000	10/18/24 0002	BDF
Surrogate: Dibromofluoromethane	97.5	Limit: 57-134	% Rec	1		10/22/24 0000	10/22/24 1656	CSM
Surrogate: Dibromofluoromethane	97.8	Limit: 75-136	% Rec	1		10/17/24 0000	10/18/24 0002	BDF
Surrogate: 1,2-Dichloroethane-d4	98.7	Limit: 61-142	% Rec	1		10/17/24 0000	10/18/24 0002	BDF
Surrogate: 1,2-Dichloroethane-d4	103	Limit: 53-140	% Rec	1		10/22/24 0000	10/22/24 1656	CSM
Surrogate: Toluene-d8	94.5	Limit: 86-114	% Rec	1		10/22/24 0000	10/22/24 1656	CSM
Surrogate: Toluene-d8	98.0	Limit: 82-121	% Rec	1		10/17/24 0000	10/18/24 0002	BDF
Surrogate: 4-Bromofluorobenzene	95.7	Limit: 80-116	% Rec	1		10/17/24 0000	10/18/24 0002	BDF
Surrogate: 4-Bromofluorobenzene	97.9	Limit: 78-121	% Rec	1		10/22/24 0000	10/22/24 1656	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		10/17/24 1551	10/19/24 0038	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0038	RVV
Barium, total	**0.242**	0.0040	mg/L	4		10/17/24 1551	10/19/24 0038	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0038	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/17/24 1551	10/19/24 0038	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/17/24 1551	10/19/24 0038	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		10/17/24 1551	10/19/24 0038	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0038	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0038	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0038	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0038	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0038	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/17/24 1551	10/19/24 0038	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/17/24 1551	10/19/24 0038	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/17/24 1551	10/19/24 0038	RVV

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CERTIFICATE OF ANALYSIS

1HJ1337

Client Sample ID:	MW-93		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ1337-10	**Collection Date:**	10/15/2024 9:53

Analyses Performed by: Microbac Laboratories, Inc., Newton

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	10/18/24 0024	BDF
Vinyl Chloride	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
Bromomethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
Chloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
Acetone	<10.0	10.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
Methyl Iodide	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
Carbon Disulfide	<1.0	1.0	ug/L	1	**Q3**	10/17/24 0000	10/18/24 0024	BDF
Methylene Chloride	<5.0	5.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
Acrylonitrile	<5.0	5.0	ug/L	1		10/22/24 0000	10/22/24 1719	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
Vinyl Acetate	<5.0	5.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
Bromochloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
Chloroform	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
Benzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
Trichloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
Dibromomethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
Bromodichloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
Toluene	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
Dibromochloromethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
Chlorobenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
Ethylbenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
Xylenes, total	<2.0	2.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
Styrene	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
Bromoform	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF

CERTIFICATE OF ANALYSIS

1HJ1337

Client Sample ID:	MW-93		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ1337-10	**Collection Date:**	10/15/2024 9:53

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/17/24 0000	10/18/24 0024	BDF
Surrogate: Dibromofluoromethane	96.5	Limit: 57-134	% Rec	1		10/22/24 0000	10/22/24 1719	CSM
Surrogate: Dibromofluoromethane	96.7	Limit: 75-136	% Rec	1		10/17/24 0000	10/18/24 0024	BDF
Surrogate: 1,2-Dichloroethane-d4	103	Limit: 53-140	% Rec	1		10/22/24 0000	10/22/24 1719	CSM
Surrogate: 1,2-Dichloroethane-d4	98.4	Limit: 61-142	% Rec	1		10/17/24 0000	10/18/24 0024	BDF
Surrogate: Toluene-d8	95.0	Limit: 86-114	% Rec	1		10/22/24 0000	10/22/24 1719	CSM
Surrogate: Toluene-d8	97.5	Limit: 82-121	% Rec	1		10/17/24 0000	10/18/24 0024	BDF
Surrogate: 4-Bromofluorobenzene	99.6	Limit: 78-121	% Rec	1		10/22/24 0000	10/22/24 1719	CSM
Surrogate: 4-Bromofluorobenzene	97.2	Limit: 80-116	% Rec	1		10/17/24 0000	10/18/24 0024	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		10/17/24 1551	10/19/24 0056	RVV
Arsenic, total	**0.0152**	0.0040	mg/L	4		10/17/24 1551	10/19/24 0056	RVV
Barium, total	**0.242**	0.0040	mg/L	4		10/17/24 1551	10/19/24 0056	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0056	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/17/24 1551	10/19/24 0056	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/17/24 1551	10/19/24 0056	RVV
Cobalt, total	**0.0099**	0.0004	mg/L	4		10/17/24 1551	10/19/24 0056	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0056	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0056	RVV
Nickel, total	**0.0271**	0.0040	mg/L	4		10/17/24 1551	10/19/24 0056	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0056	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0056	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/17/24 1551	10/19/24 0056	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/17/24 1551	10/19/24 0056	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/17/24 1551	10/19/24 0056	RVV

Client Sample ID:	MW-94		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ1337-11	**Collection Date:**	10/15/2024 12:03

Analyses Performed by: Microbac Laboratories Inc., - Marietta, OH

Volatile Organic Compounds by GCMS	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA RSK-175								
Methane	**1380**	25.0	ug/L	5	**D3**	10/23/24 1040	10/23/24 1535	KJB
Ethene	<5.00	5.00	ug/L	1		10/22/24 1401	10/22/24 1651	KJB
Ethane	<5.00	5.00	ug/L	1		10/22/24 1401	10/22/24 1651	KJB

Analyses Performed by: Microbac Laboratories, Inc., Newton

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		10/21/24 0000	10/21/24 1621	CSM
Vinyl Chloride	**2.0**	1.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
Bromomethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
Chloroethane	**3.0**	1.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
Acetone	<10.0	10.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
1,1-Dichloroethane	**1.0**	1.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
cis-1,2-Dichloroethylene	**6.0**	1.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
Chloroform	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
Benzene	**1.8**	1.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
1,2-Dichloropropane	**1.0**	1.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
Dibromomethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
Toluene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM

Client Sample ID:	MW-94			
Sample Matrix:	Aqueous		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ1337-11		**Collection Date:**	10/15/2024 12:03

Determination of Volatile Organic Compounds	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
Xylenes, total	<2.0	2.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
Styrene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
Bromoform	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/21/24 0000	10/21/24 1621	CSM
Surrogate: Dibromofluoromethane	96.0	Limit: 75-136	% Rec	1		10/21/24 0000	10/21/24 1621	CSM
Surrogate: Dibromofluoromethane	96.0	Limit: 57-134	% Rec	1		10/21/24 0000	10/21/24 1621	CSM
Surrogate: 1,2-Dichloroethane-d4	100	Limit: 53-140	% Rec	1		10/21/24 0000	10/21/24 1621	CSM
Surrogate: 1,2-Dichloroethane-d4	100	Limit: 61-142	% Rec	1		10/21/24 0000	10/21/24 1621	CSM
Surrogate: Toluene-d8	95.2	Limit: 82-121	% Rec	1		10/21/24 0000	10/21/24 1621	CSM
Surrogate: Toluene-d8	95.2	Limit: 86-114	% Rec	1		10/21/24 0000	10/21/24 1621	CSM
Surrogate: 4-Bromofluorobenzene	99.0	Limit: 80-116	% Rec	1		10/21/24 0000	10/21/24 1621	CSM
Surrogate: 4-Bromofluorobenzene	99.0	Limit: 78-121	% Rec	1		10/21/24 0000	10/21/24 1621	CSM

Determination of Conventional Chemistry Parameters	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
2320B								
Alkalinity, as CaCO3	**752**	50	mg/L	1		10/18/24 1042	10/18/24 1458	BSS
EPA 9040								
pH	**6.4**	0.5	pH	1	**H4**		10/21/24 0916	BSS

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		10/17/24 1551	10/19/24 0102	RVV
Arsenic, total	**0.0758**	0.0040	mg/L	4		10/17/24 1551	10/19/24 0102	RVV
Barium, total	**0.305**	0.0040	mg/L	4		10/17/24 1551	10/19/24 0102	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0102	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/17/24 1551	10/19/24 0102	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/17/24 1551	10/19/24 0102	RVV
Cobalt, total	**0.0088**	0.0004	mg/L	4		10/17/24 1551	10/19/24 0102	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0102	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0102	RVV
Nickel, total	**0.0074**	0.0040	mg/L	4		10/17/24 1551	10/19/24 0102	RVV

Client Sample ID:	MW-94		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ1337-11	**Collection Date:**	10/15/2024 12:03

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Selenium, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0102	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0102	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/17/24 1551	10/19/24 0102	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/17/24 1551	10/19/24 0102	RVV
Zinc, total	**0.0203**	0.0200	mg/L	4		10/17/24 1551	10/19/24 0102	RVV

Client Sample ID:	MW-95		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ1337-12	**Collection Date:**	10/15/2024 11:07

Analyses Performed by: Microbac Laboratories, Inc., Newton

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		10/21/24 0000	10/21/24 1644	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
Bromomethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
Chloroethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
Acetone	<10.0	10.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
Chloroform	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
Benzene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
Dibromomethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
Toluene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
Xylenes, total	<2.0	2.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
Styrene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
Bromoform	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM

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CERTIFICATE OF ANALYSIS

1HJ1337

Client Sample ID:	MW-95		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ1337-12	**Collection Date:**	10/15/2024 11:07

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/21/24 0000	10/21/24 1644	CSM
Surrogate: Dibromofluoromethane	97.2	Limit: 57-134	% Rec	1		10/21/24 0000	10/21/24 1644	CSM
Surrogate: Dibromofluoromethane	97.2	Limit: 75-136	% Rec	1		10/21/24 0000	10/21/24 1644	CSM
Surrogate: 1,2-Dichloroethane-d4	102	Limit: 53-140	% Rec	1		10/21/24 0000	10/21/24 1644	CSM
Surrogate: 1,2-Dichloroethane-d4	102	Limit: 61-142	% Rec	1		10/21/24 0000	10/21/24 1644	CSM
Surrogate: Toluene-d8	93.8	Limit: 86-114	% Rec	1		10/21/24 0000	10/21/24 1644	CSM
Surrogate: Toluene-d8	93.8	Limit: 82-121	% Rec	1		10/21/24 0000	10/21/24 1644	CSM
Surrogate: 4-Bromofluorobenzene	97.1	Limit: 78-121	% Rec	1		10/21/24 0000	10/21/24 1644	CSM
Surrogate: 4-Bromofluorobenzene	97.1	Limit: 80-116	% Rec	1		10/21/24 0000	10/21/24 1644	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		10/17/24 1551	10/19/24 0109	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0109	RVV
Barium, total	**0.0323**	0.0040	mg/L	4		10/17/24 1551	10/19/24 0109	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0109	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/17/24 1551	10/19/24 0109	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/17/24 1551	10/19/24 0109	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		10/17/24 1551	10/19/24 0109	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0109	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0109	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0109	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0109	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0109	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/17/24 1551	10/19/24 0109	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/17/24 1551	10/19/24 0109	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/17/24 1551	10/19/24 0109	RVV

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CERTIFICATE OF ANALYSIS

1HJ1337

Client Sample ID:	MW-96R		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ1337-13	**Collection Date:**	10/15/2024 13:59

Analyses Performed by: Microbac Laboratories, Inc., Newton

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		10/21/24 0000	10/21/24 1706	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
Bromomethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
Chloroethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
Acetone	<10.0	10.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
Chloroform	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
Benzene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
Dibromomethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
Toluene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
Xylenes, total	<2.0	2.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
Styrene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
Bromoform	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM

Client Sample ID:	MW-96R		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ1337-13	**Collection Date:**	10/15/2024 13:59

Determination of Volatile Organic Compounds	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/21/24 0000	10/21/24 1706	CSM
Surrogate: Dibromofluoromethane	97.0	Limit: 75-136	% Rec	1		10/21/24 0000	10/21/24 1706	CSM
Surrogate: Dibromofluoromethane	97.0	Limit: 57-134	% Rec	1		10/21/24 0000	10/21/24 1706	CSM
Surrogate: 1,2-Dichloroethane-d4	102	Limit: 61-142	% Rec	1		10/21/24 0000	10/21/24 1706	CSM
Surrogate: 1,2-Dichloroethane-d4	102	Limit: 53-140	% Rec	1		10/21/24 0000	10/21/24 1706	CSM
Surrogate: Toluene-d8	94.1	Limit: 82-121	% Rec	1		10/21/24 0000	10/21/24 1706	CSM
Surrogate: Toluene-d8	94.1	Limit: 86-114	% Rec	1		10/21/24 0000	10/21/24 1706	CSM
Surrogate: 4-Bromofluorobenzene	98.3	Limit: 80-116	% Rec	1		10/21/24 0000	10/21/24 1706	CSM
Surrogate: 4-Bromofluorobenzene	98.3	Limit: 78-121	% Rec	1		10/21/24 0000	10/21/24 1706	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		10/17/24 1551	10/19/24 0115	RVV
Arsenic, total	**0.0066**	0.0040	mg/L	4		10/17/24 1551	10/19/24 0115	RVV
Barium, total	**0.338**	0.0040	mg/L	4		10/17/24 1551	10/19/24 0115	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0115	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/17/24 1551	10/19/24 0115	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/17/24 1551	10/19/24 0115	RVV
Cobalt, total	**0.0105**	0.0004	mg/L	4		10/17/24 1551	10/19/24 0115	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0115	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0115	RVV
Nickel, total	**0.0046**	0.0040	mg/L	4		10/17/24 1551	10/19/24 0115	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0115	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0115	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/17/24 1551	10/19/24 0115	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/17/24 1551	10/19/24 0115	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/17/24 1551	10/19/24 0115	RVV

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CERTIFICATE OF ANALYSIS

1HJ1337

Client Sample ID:	MW-97		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ1337-14	**Collection Date:**	10/15/2024 11:49

Analyses Performed by: Microbac Laboratories, Inc., Newton

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		10/21/24 0000	10/21/24 1729	CSM
Vinyl Chloride	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
Bromomethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
Chloroethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
Acetone	<10.0	10.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
Methyl Iodide	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
Carbon Disulfide	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
Methylene Chloride	<5.0	5.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
Acrylonitrile	<5.0	5.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
Vinyl Acetate	<5.0	5.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
Bromochloromethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
Chloroform	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
Benzene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
Trichloroethylene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
Dibromomethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
Bromodichloromethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
Toluene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
Dibromochloromethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
Chlorobenzene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
Ethylbenzene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
Xylenes, total	<2.0	2.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
Styrene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
Bromoform	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM

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CERTIFICATE OF ANALYSIS

1HJ1337

Client Sample ID:	MW-97		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ1337-14	**Collection Date:**	10/15/2024 11:49

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/21/24 0000	10/21/24 1729	CSM
Surrogate: Dibromofluoromethane	99.4	Limit: 75-136	% Rec	1		10/21/24 0000	10/21/24 1729	CSM
Surrogate: Dibromofluoromethane	99.4	Limit: 57-134	% Rec	1		10/21/24 0000	10/21/24 1729	CSM
Surrogate: 1,2-Dichloroethane-d4	104	Limit: 61-142	% Rec	1		10/21/24 0000	10/21/24 1729	CSM
Surrogate: 1,2-Dichloroethane-d4	104	Limit: 53-140	% Rec	1		10/21/24 0000	10/21/24 1729	CSM
Surrogate: Toluene-d8	95.1	Limit: 82-121	% Rec	1		10/21/24 0000	10/21/24 1729	CSM
Surrogate: Toluene-d8	95.1	Limit: 86-114	% Rec	1		10/21/24 0000	10/21/24 1729	CSM
Surrogate: 4-Bromofluorobenzene	98.8	Limit: 80-116	% Rec	1		10/21/24 0000	10/21/24 1729	CSM
Surrogate: 4-Bromofluorobenzene	98.8	Limit: 78-121	% Rec	1		10/21/24 0000	10/21/24 1729	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		10/17/24 1551	10/19/24 0121	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0121	RVV
Barium, total	**0.274**	0.0040	mg/L	4		10/17/24 1551	10/19/24 0121	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0121	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/17/24 1551	10/19/24 0121	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/17/24 1551	10/19/24 0121	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		10/17/24 1551	10/19/24 0121	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0121	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0121	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0121	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0121	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0121	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/17/24 1551	10/19/24 0121	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/17/24 1551	10/19/24 0121	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/17/24 1551	10/19/24 0121	RVV

CERTIFICATE OF ANALYSIS

1HJ1337

Client Sample ID:	Duplicate		
Sample Matrix:	Aqueous	**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ1337-15	**Collection Date:**	10/15/2024

Analyses Performed by: Microbac Laboratories, Inc., Newton

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		10/17/24 1551	10/19/24 0127	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0127	RVV
Barium, total	**0.0272**	0.0040	mg/L	4		10/17/24 1551	10/19/24 0127	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0127	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/17/24 1551	10/19/24 0127	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/17/24 1551	10/19/24 0127	RVV
Cobalt, total	<0.0004	0.0004	mg/L	4		10/17/24 1551	10/19/24 0127	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0127	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0127	RVV
Nickel, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0127	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0127	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/17/24 1551	10/19/24 0127	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/17/24 1551	10/19/24 0127	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/17/24 1551	10/19/24 0127	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/17/24 1551	10/19/24 0127	RVV

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CERTIFICATE OF ANALYSIS

1HJ1337

Client Sample ID:	LW-75			
Sample Matrix:	Aqueous		**Collected By:**	Whipple, Todd
Lab Sample ID:	1HJ1337-16		**Collection Date:**	10/15/2024 13:07

Analyses Performed by: Microbac Laboratories Inc., - Marietta, OH

Volatile Organic Compounds by GCMS	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA RSK-175								
Methane	**5530**	100	ug/L	20	**D3**	10/23/24 1040	10/23/24 1601	KJB
Ethene	<5.00	5.00	ug/L	1		10/22/24 1401	10/22/24 1705	KJB
Ethane	<5.00	5.00	ug/L	1		10/22/24 1401	10/22/24 1705	KJB

Analyses Performed by: Microbac Laboratories, Inc., Newton

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
2320B								
Alkalinity, as CaCO3	**1730**	50	mg/L	1		10/18/24 1042	10/18/24 1458	BSS
EPA 410.4								
COD, total	**1050**	108	mg/L	2	**A15**	10/24/24 0748	10/24/24 1105	CES
EPA 9040								
pH	**6.6**	0.5	pH	1	**H4**		10/21/24 0916	BSS
SM 5210 B								
BOD (5 day)	**82**	24	mg/L	12		10/16/24 1719	10/16/24 1920	MND
TIMBERLINE								
Nitrogen, Ammonia	**109**	1.00	mg/L	10		10/21/24 1446	10/22/24 1436	RAF
USGS I-1750-85								
Total Dissolved Solids (TDS)	**3780**	5	mg/L	1		10/17/24 0845	10/17/24 1230	RDH
USGS I-3765-85								
Total Suspended Solids (TSS)	**7**	1	mg/L	1		10/17/24 0837	10/21/24 0950	MEAH

Determination of Inorganic Anions	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 9056								
Chloride	**1220**	50.0	mg/L	50			10/25/24 1601	MID
Sulfate	**138**	50.0	mg/L	50			10/25/24 1601	MID

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Arsenic, total	**0.0176**	0.0040	mg/L	4		10/17/24 1551	10/19/24 0133	RVV
Cobalt, total	**0.0188**	0.0004	mg/L	4		10/17/24 1551	10/19/24 0133	RVV

Batch Log Summary

Method	Batch	Laboratory ID	Client / Source ID
SM 5210 B	1HJ1006	1HJ1006-BLK1	
		1HJ1006-SRM1	
		1HJ1337-16	LW-75
		1HJ1006-DUP2	1HJ1321-01

Method	Batch	Laboratory ID	Client / Source ID
USGS I-3765-85	1HJ1020	1HJ1337-16	LW-75
		1HJ1020-BS1	
		1HJ1020-DUP1	1HJ1331-01
		1HJ1020-BLK1	

Method	Batch	Laboratory ID	Client / Source ID
USGS I-1750-85	1HJ1022	1HJ1022-BLK1	
		1HJ1022-DUP1	1HJ1211-01
		1HJ1022-BS1	
		1HJ1337-16	LW-75

Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	1HJ1084	1HJ1084-BLK1	
		1HJ1084-BS1	
		1HJ1337-01	MW-85 (B)
		1HJ1084-MS1	1HJ1337-01
		1HJ1084-MSD1	1HJ1337-01
		1HJ1084-PS1	1HJ1337-01
		1HJ1337-02	MW-98 (B)
		1HJ1337-03	MW-99 (B)
		1HJ1337-04	MW-49
		1HJ1337-05	MW-54
		1HJ1337-06	MW-81
		1HJ1337-07	MW-87
		1HJ1337-08	MW-89
		1HJ1337-09	MW-91
		1HJ1337-10	MW-93
		1HJ1337-11	MW-94
		1HJ1337-12	MW-95
		1HJ1337-13	MW-96R
		1HJ1337-14	MW-97
		1HJ1337-15	Duplicate
		1HJ1337-16	LW-75

Method	Batch	Laboratory ID	Client / Source ID

2320B	1HJ1125	1HJ1337-06	MW-81
		1HJ1337-11	MW-94
		1HJ1125-BLK1	
		1HJ1337-05	MW-54
		1HJ1337-04	MW-49
		1HJ1125-MSD1	1HJ1319-04
		1HJ1125-MS1	1HJ1319-04
		1HJ1337-16	LW-75
		1HJ1125-BS1	

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260B	1HJ1173	1HJ1173-BS1	
		1HJ1173-BSD1	
		1HJ1173-BLK1	
		1HJ1337-01	MW-85 (B)
		1HJ1337-02	MW-98 (B)
		1HJ1337-03	MW-99 (B)
		1HJ1337-04	MW-49
		1HJ1337-05	MW-54
		1HJ1337-06	MW-81
		1HJ1337-07	MW-87
		1HJ1337-08	MW-89
		1HJ1337-09	MW-91
		1HJ1337-10	MW-93
		1HJ1173-MS1	1HJ1076-02
		1HJ1173-MSD1	1HJ1076-02

Method	Batch	Laboratory ID	Client / Source ID
EPA 9040	1HJ1184	1HJ1184-SRM2	
		1HJ1184-SRM1	
		1HJ1337-11	MW-94
		1HJ1337-06	MW-81
		1HJ1337-05	MW-54
		1HJ1337-04	MW-49
		1HJ1337-16	LW-75
		1HJ1184-DUP1	1HJ1337-04

Method	Batch	Laboratory ID	Client / Source ID
TIMBERLINE	1HJ1226	1HJ1226-BLK1	
		1HJ1226-BS1	
		1HJ1226-MS1	1HJ1325-02
		1HJ1226-MSD1	1HJ1325-02
		1HJ1337-16	LW-75

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260B	1HJ1301	1HJ1301-BS1	
		1HJ1301-BSD1	
		1HJ1301-BLK1	
		1HJ1337-11	MW-94
		1HJ1337-11	MW-94
		1HJ1337-12	MW-95
		1HJ1337-12	MW-95
		1HJ1337-13	MW-96R
		1HJ1337-13	MW-96R
		1HJ1337-14	MW-97
		1HJ1337-14	MW-97
		1HJ1301-BS2	
		1HJ1301-BSD2	
		1HJ1301-BLK2	
		1HJ1301-MS1	1HJ1342-01
		1HJ1301-MSD1	1HJ1342-01
		1HJ1301-MS2	1HJ1340-05
		1HJ1301-MSD2	1HJ1340-05

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260B	1HJ1355	1HJ1355-BS1	
		1HJ1355-BSD1	
		1HJ1355-BLK1	
		1HJ1337-01	MW-85 (B)
		1HJ1337-02	MW-98 (B)
		1HJ1337-03	MW-99 (B)
		1HJ1337-04	MW-49
		1HJ1337-05	MW-54
		1HJ1337-06	MW-81
		1HJ1337-07	MW-87
		1HJ1337-08	MW-89
		1HJ1337-09	MW-91
		1HJ1337-10	MW-93
		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 410.4	1HJ1457	1HJ1337-16	LW-75
		1HJ1457-MS1	1HJ1376-04
		1HJ1457-MSD1	1HJ1376-04
		1HJ1457-BS1	
		1HJ1457-BLK1	

Method	Batch	Laboratory ID	Client / Source ID
EPA 9056	1HJ1779	1HJ1779-BLK1	
		1HJ1779-BS1	
		1HJ1779-BSD1	
		1HJ1779-MS1	1HJ1352-01
		1HJ1779-MSD1	1HJ1352-01
		1HJ1337-16	LW-75

Method	Batch	Laboratory ID	Client / Source ID
EPA RSK-175	B4J1197	B4J1197-BLK1	
		B4J1197-BS1	
		B4J1197-BSD1	
		1HJ1337-04	MW-49
		1HJ1337-05	MW-54
		1HJ1337-06	MW-81
		1HJ1337-11	MW-94
		1HJ1337-16	LW-75

Method	Batch	Laboratory ID	Client / Source ID
EPA RSK-175	B4J1225	B4J1225-BLK1	
		B4J1225-BS1	
		B4J1225-BSD1	
		1HJ1337-05RE1	MW-54
		1HJ1337-11RE1	MW-94
		1HJ1337-04RE1	MW-49
		1HJ1337-16RE1	LW-75

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 1HJ1173 - EPA 5030B - EPA 8260B										
Blank (1HJ1173-BLK1)	Prepared: 10/17/24 00:00 Analyzed: 10/17/24 12:48									
Chloromethane	<1.0	1.0	ug/L							
Vinyl Chloride	<1.0	1.0	ug/L							
Bromomethane	<1.0	1.0	ug/L							
Chloroethane	<1.0	1.0	ug/L							
Trichlorofluoromethane	<1.0	1.0	ug/L							

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1173 - EPA 5030B - EPA 8260B										
Blank (1HJ1173-BLK1)			Prepared: 10/17/24 00:00 Analyzed: 10/17/24 12:48							
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							
1,4-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L							
Surrogate: Dibromofluoromethane	*48.1*		ug/L	*50.2*		*95.8*	*75-136*			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1173 - EPA 5030B - EPA 8260B										
Blank (1HJ1173-BLK1)			Prepared: 10/17/24 00:00 Analyzed: 10/17/24 12:48							
Surrogate: 1,2-Dichloroethane-d4	*49.2*		ug/L	*50.4*		*97.6*	*61-142*			
Surrogate: Toluene-d8	*48.9*		ug/L	*50.5*		*96.9*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*48.5*		ug/L	*50.2*		*96.7*	*80-116*			
LCS (1HJ1173-BS1)			Prepared: 10/17/24 00:00 Analyzed: 10/17/24 11:40							
Chloromethane	22.05	1.0	ug/L	30.0		73.5	63-155			
Vinyl Chloride	22.82	1.0	ug/L	30.0		76.1	70-154			
Bromomethane	22.95	1.0	ug/L	30.0		76.5	52-176			
Chloroethane	26.55	1.0	ug/L	30.0		88.5	72-148			
Trichlorofluoromethane	25.67	1.0	ug/L	30.0		85.6	70-152			
1,1-Dichloroethylene	44.68	1.0	ug/L	50.0		89.4	70-148			
Acetone	99.17	10.0	ug/L	101		98.0	43-172			
Methyl Iodide	97.97	1.0	ug/L	102		96.2	69-170			
Carbon Disulfide	68.29	1.0	ug/L	103		66.5	72-162			S
Methylene Chloride	46.61	5.0	ug/L	50.0		93.2	68-142			
trans-1,2-Dichloroethylene	44.81	1.0	ug/L	50.0		89.6	66-148			
1,1-Dichloroethane	44.82	1.0	ug/L	50.0		89.6	66-143			
Vinyl Acetate	97.23	5.0	ug/L	100		97.2	43-153			
cis-1,2-Dichloroethylene	43.79	1.0	ug/L	50.0		87.6	71-149			
2-Butanone (MEK)	88.92	10.0	ug/L	102		87.3	52-159			
Bromochloromethane	42.95	1.0	ug/L	50.0		85.9	69-143			
Chloroform	42.09	1.0	ug/L	50.0		84.2	69-144			
1,1,1-Trichloroethane	45.27	1.0	ug/L	50.0		90.5	62-129			
Carbon Tetrachloride	48.70	1.0	ug/L	50.0		97.4	63-141			
Benzene	44.38	1.0	ug/L	50.0		88.8	71-134			
1,2-Dichloroethane	44.14	1.0	ug/L	50.0		88.3	72-132			
Trichloroethylene	45.42	1.0	ug/L	50.0		90.8	71-135			
1,2-Dichloropropane	45.72	1.0	ug/L	50.0		91.4	69-136			
Dibromomethane	48.01	1.0	ug/L	50.0		96.0	73-147			
Bromodichloromethane	47.33	1.0	ug/L	50.0		94.7	68-129			
cis-1,3-Dichloropropene	44.19	1.0	ug/L	50.0		88.4	65-134			
4-Methyl-2-pentanone (MIBK)	99.24	5.0	ug/L	100		99.1	58-147			
Toluene	43.92	1.0	ug/L	50.0		87.8	72-133			
trans-1,3-Dichloropropene	45.70	1.0	ug/L	50.0		91.4	67-130			
1,1,2-Trichloroethane	46.39	1.0	ug/L	50.0		92.8	69-135			
Tetrachloroethylene	46.73	1.0	ug/L	50.0		93.5	69-130			
2-Hexanone (MBK)	101.3	5.0	ug/L	99.3		102	55-144			
Dibromochloromethane	47.83	1.0	ug/L	50.0		95.7	73-127			
1,2-Dibromoethane	46.60	1.0	ug/L	50.0		93.2	67-132			
Chlorobenzene	44.61	1.0	ug/L	50.0		89.2	72-123			
1,1,1,2-Tetrachloroethane	47.25	1.0	ug/L	50.0		94.5	73-127			
Ethylbenzene	46.50	1.0	ug/L	50.0		93.0	71-127			
Xylenes, total	141.1	2.0	ug/L	150		94.1	74-127			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1173 - EPA 5030B - EPA 8260B										
LCS (1HJ1173-BS1)				Prepared: 10/17/24 00:00 Analyzed: 10/17/24 11:40						
Styrene	48.95	1.0	ug/L	50.0		97.9	66-126			
Bromoform	48.29	1.0	ug/L	50.0		96.6	68-130			
1,2,3-Trichloropropane	48.97	1.0	ug/L	50.0		97.9	63-136			
trans-1,4-Dichloro-2-butene	88.67	5.0	ug/L	103		86.3	54-134			
1,1,2,2-Tetrachloroethane	47.83	1.0	ug/L	50.0		95.7	61-131			
1,4-Dichlorobenzene	44.21	1.0	ug/L	50.0		88.4	70-129			
1,2-Dichlorobenzene	46.15	1.0	ug/L	50.0		92.3	69-126			
1,2-Dibromo-3-chloropropane	49.94	5.0	ug/L	50.0		99.9	50-143			
Surrogate: Dibromofluoromethane	*47.7*		ug/L	*50.2*		*95.1*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*47.6*		ug/L	*50.4*		*94.4*	*61-142*			
Surrogate: Toluene-d8	*50.0*		ug/L	*50.5*		*99.0*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*50.6*		ug/L	*50.2*		*101*	*80-116*			
LCS Dup (1HJ1173-BSD1)				Prepared: 10/17/24 00:00 Analyzed: 10/17/24 12:03						
Chloromethane	21.14	1.0	ug/L	30.0		70.5	63-155	4.21	24	
Vinyl Chloride	22.06	1.0	ug/L	30.0		73.5	70-154	3.39	25	
Bromomethane	22.43	1.0	ug/L	30.0		74.8	52-176	2.29	27	
Chloroethane	25.81	1.0	ug/L	30.0		86.0	72-148	2.83	25	
Trichlorofluoromethane	24.45	1.0	ug/L	30.0		81.5	70-152	4.87	26	
1,1-Dichloroethylene	43.34	1.0	ug/L	50.0		86.7	70-148	3.04	24	
Acetone	94.71	10.0	ug/L	101		93.6	43-172	4.60	30	
Methyl Iodide	94.99	1.0	ug/L	102		93.2	69-170	3.09	30	
Carbon Disulfide	65.46	1.0	ug/L	103		63.7	72-162	4.23	24	S
Methylene Chloride	46.51	5.0	ug/L	50.0		93.0	68-142	0.215	21	
trans-1,2-Dichloroethylene	43.30	1.0	ug/L	50.0		86.6	66-148	3.43	27	
1,1-Dichloroethane	43.64	1.0	ug/L	50.0		87.3	66-143	2.67	24	
Vinyl Acetate	96.62	5.0	ug/L	100		96.6	43-153	0.629	30	
cis-1,2-Dichloroethylene	43.29	1.0	ug/L	50.0		86.6	71-149	1.15	26	
2-Butanone (MEK)	92.96	10.0	ug/L	102		91.3	52-159	4.44	27	
Bromochloromethane	42.53	1.0	ug/L	50.0		85.1	69-143	0.983	23	
Chloroform	41.17	1.0	ug/L	50.0		82.3	69-144	2.21	23	
1,1,1-Trichloroethane	43.58	1.0	ug/L	50.0		87.2	62-129	3.80	24	
Carbon Tetrachloride	47.31	1.0	ug/L	50.0		94.6	63-141	2.90	25	
Benzene	43.22	1.0	ug/L	50.0		86.4	71-134	2.65	24	
1,2-Dichloroethane	44.04	1.0	ug/L	50.0		88.1	72-132	0.227	24	
Trichloroethylene	43.86	1.0	ug/L	50.0		87.7	71-135	3.49	24	
1,2-Dichloropropane	44.76	1.0	ug/L	50.0		89.5	69-136	2.12	24	
Dibromomethane	47.38	1.0	ug/L	50.0		94.8	73-147	1.32	25	
Bromodichloromethane	46.68	1.0	ug/L	50.0		93.4	68-129	1.38	22	
cis-1,3-Dichloropropene	43.68	1.0	ug/L	50.0		87.4	65-134	1.16	23	
4-Methyl-2-pentanone (MIBK)	99.52	5.0	ug/L	100		99.4	58-147	0.282	27	
Toluene	42.62	1.0	ug/L	50.0		85.2	72-133	3.00	24	
trans-1,3-Dichloropropene	45.40	1.0	ug/L	50.0		90.8	67-130	0.659	24	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1173 - EPA 5030B - EPA 8260B										
LCS Dup (1HJ1173-BSD1)			Prepared: 10/17/24 00:00 Analyzed: 10/17/24 12:03							
1,1,2-Trichloroethane	46.49	1.0	ug/L	50.0		93.0	69-135	0.215	23	
Tetrachloroethylene	45.40	1.0	ug/L	50.0		90.8	69-130	2.89	25	
2-Hexanone (MBK)	102.1	5.0	ug/L	99.3		103	55-144	0.777	25	
Dibromochloromethane	47.86	1.0	ug/L	50.0		95.7	73-127	0.0627	22	
1,2-Dibromoethane	46.42	1.0	ug/L	50.0		92.8	67-132	0.387	24	
Chlorobenzene	43.99	1.0	ug/L	50.0		88.0	72-123	1.40	23	
1,1,1,2-Tetrachloroethane	46.73	1.0	ug/L	50.0		93.5	73-127	1.11	24	
Ethylbenzene	45.22	1.0	ug/L	50.0		90.4	71-127	2.79	26	
Xylenes, total	137.9	2.0	ug/L	150		91.9	74-127	2.28	25	
Styrene	48.08	1.0	ug/L	50.0		96.2	66-126	1.79	23	
Bromoform	48.21	1.0	ug/L	50.0		96.4	68-130	0.166	23	
1,2,3-Trichloropropane	48.37	1.0	ug/L	50.0		96.7	63-136	1.23	24	
trans-1,4-Dichloro-2-butene	88.14	5.0	ug/L	103		85.7	54-134	0.600	27	
1,1,2,2-Tetrachloroethane	47.36	1.0	ug/L	50.0		94.7	61-131	0.988	29	
1,4-Dichlorobenzene	43.54	1.0	ug/L	50.0		87.1	70-129	1.53	24	
1,2-Dichlorobenzene	45.78	1.0	ug/L	50.0		91.6	69-126	0.805	26	
1,2-Dibromo-3-chloropropane	49.82	5.0	ug/L	50.0		99.6	50-143	0.241	30	
Surrogate: Dibromofluoromethane	*47.7*		ug/L	*50.2*		*94.9*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*47.7*		ug/L	*50.4*		*94.7*	*61-142*			
Surrogate: Toluene-d8	*49.7*		ug/L	*50.5*		*98.5*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*50.2*		ug/L	*50.2*		*100*	*80-116*			
Matrix Spike (1HJ1173-MS1)	**Source: 1HJ1076-02**		Prepared: 10/17/24 00:00 Analyzed: 10/18/24 00:47							
Chloromethane	214.8	10.0	ug/L	300	ND	71.6	61-152			
Vinyl Chloride	225.4	10.0	ug/L	300	ND	75.1	66-149			
Bromomethane	211.0	10.0	ug/L	300	ND	70.3	43-171			
Chloroethane	266.5	10.0	ug/L	300	ND	88.8	69-148			
Trichlorofluoromethane	251.4	10.0	ug/L	300	ND	83.8	62-163			
1,1-Dichloroethylene	448.8	10.0	ug/L	500	ND	89.8	70-148			
Acetone	928.5	100	ug/L	1010	ND	91.7	45-173			
Methyl Iodide	929.4	10.0	ug/L	1020	ND	91.2	62-167			
Carbon Disulfide	690.5	10.0	ug/L	1030	ND	67.2	71-163			S
Methylene Chloride	504.5	50.0	ug/L	500	ND	101	69-140			
trans-1,2-Dichloroethylene	450.0	10.0	ug/L	500	ND	90.0	69-144			
1,1-Dichloroethane	444.9	10.0	ug/L	500	ND	89.0	70-138			
Vinyl Acetate	969.3	50.0	ug/L	1000	ND	96.9	58-142			
cis-1,2-Dichloroethylene	434.2	10.0	ug/L	500	ND	86.8	68-151			
2-Butanone (MEK)	862.1	100	ug/L	1020	ND	84.7	50-160			
Bromochloromethane	428.4	10.0	ug/L	500	ND	85.7	65-143			
Chloroform	427.1	10.0	ug/L	500	ND	85.4	71-143			
1,1,1-Trichloroethane	454.7	10.0	ug/L	500	ND	90.9	63-133			
Carbon Tetrachloride	430.2	10.0	ug/L	500	ND	86.0	63-142			
Benzene	439.6	10.0	ug/L	500	ND	87.9	69-133			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1173 - EPA 5030B - EPA 8260B										
Matrix Spike (1HJ1173-MS1)	**Source: 1HJ1076-02**	Prepared: 10/17/24 00:00 Analyzed: 10/18/24 00:47								
1,2-Dichloroethane	441.0	10.0	ug/L	500	ND	88.2	63-138			
Trichloroethylene	450.1	10.0	ug/L	500	ND	90.0	71-133			
1,2-Dichloropropane	453.2	10.0	ug/L	500	ND	90.6	69-132			
Dibromomethane	476.6	10.0	ug/L	500	ND	95.3	70-147			
Bromodichloromethane	456.5	10.0	ug/L	500	ND	91.3	67-130			
cis-1,3-Dichloropropene	408.8	10.0	ug/L	500	ND	81.8	61-126			
4-Methyl-2-pentanone (MIBK)	967.8	50.0	ug/L	1000	ND	96.7	55-147			
Toluene	434.6	10.0	ug/L	500	ND	86.9	71-133			
trans-1,3-Dichloropropene	432.0	10.0	ug/L	500	ND	86.4	63-124			
1,1,2-Trichloroethane	454.0	10.0	ug/L	500	ND	90.8	69-133			
Tetrachloroethylene	461.5	10.0	ug/L	500	ND	92.3	70-124			
2-Hexanone (MBK)	988.9	50.0	ug/L	993	ND	99.6	53-141			
Dibromochloromethane	464.9	10.0	ug/L	500	ND	93.0	74-122			
1,2-Dibromoethane	458.5	10.0	ug/L	500	ND	91.7	66-127			
Chlorobenzene	443.1	10.0	ug/L	500	ND	88.6	76-116			
1,1,1,2-Tetrachloroethane	464.2	10.0	ug/L	500	ND	92.8	77-121			
Ethylbenzene	460.8	10.0	ug/L	500	ND	92.2	73-124			
Xylenes, total	1393	20.0	ug/L	1500	ND	92.9	75-123			
Styrene	481.2	10.0	ug/L	500	ND	96.2	70-120			
Bromoform	462.5	10.0	ug/L	500	ND	92.5	70-124			
1,2,3-Trichloropropane	483.3	10.0	ug/L	500	ND	96.7	62-135			
trans-1,4-Dichloro-2-butene	811.4	50.0	ug/L	1030	ND	78.9	50-120			
1,1,2,2-Tetrachloroethane	458.5	10.0	ug/L	500	ND	91.7	63-126			
1,4-Dichlorobenzene	429.8	10.0	ug/L	500	ND	86.0	72-119			
1,2-Dichlorobenzene	454.2	10.0	ug/L	500	ND	90.8	71-117			
1,2-Dibromo-3-chloropropane	496.9	50.0	ug/L	500	ND	99.4	49-134			
Surrogate: Dibromofluoromethane	*480*		ug/L	*502*		*95.5*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*487*		ug/L	*504*		*96.7*	*61-142*			
Surrogate: Toluene-d8	*500*		ug/L	*505*		*99.1*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*504*		ug/L	*502*		*100*	*80-116*			
Matrix Spike Dup (1HJ1173-MSD1)	**Source: 1HJ1076-02**	Prepared: 10/17/24 00:00 Analyzed: 10/18/24 01:10								
Chloromethane	206.8	10.0	ug/L	300	ND	68.9	61-152	3.80	26	
Vinyl Chloride	216.9	10.0	ug/L	300	ND	72.3	66-149	3.84	23	
Bromomethane	213.1	10.0	ug/L	300	ND	71.0	43-171	0.990	29	
Chloroethane	256.4	10.0	ug/L	300	ND	85.5	69-148	3.86	25	
Trichlorofluoromethane	238.6	10.0	ug/L	300	ND	79.5	62-163	5.22	25	
1,1-Dichloroethylene	428.7	10.0	ug/L	500	ND	85.7	70-148	4.58	22	
Acetone	908.7	100	ug/L	1010	ND	89.8	45-173	2.16	30	
Methyl Iodide	915.7	10.0	ug/L	1020	ND	89.9	62-167	1.49	24	
Carbon Disulfide	654.1	10.0	ug/L	1030	ND	63.7	71-163	5.41	22	S
Methylene Chloride	493.3	50.0	ug/L	500	ND	98.7	69-140	2.24	19	
trans-1,2-Dichloroethylene	428.8	10.0	ug/L	500	ND	85.8	69-144	4.82	22	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1173 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1HJ1173-MSD1)	**Source: 1HJ1076-02**	Prepared: 10/17/24 00:00 Analyzed: 10/18/24 01:10								
1,1-Dichloroethane	430.5	10.0	ug/L	500	ND	86.1	70-138	3.29	20	
Vinyl Acetate	968.3	50.0	ug/L	1000	ND	96.8	58-142	0.103	24	
cis-1,2-Dichloroethylene	419.9	10.0	ug/L	500	ND	84.0	68-151	3.35	22	
2-Butanone (MEK)	846.5	100	ug/L	1020	ND	83.2	50-160	1.83	23	
Bromochloromethane	417.2	10.0	ug/L	500	ND	83.4	65-143	2.65	22	
Chloroform	415.0	10.0	ug/L	500	ND	83.0	71-143	2.87	21	
1,1,1-Trichloroethane	434.7	10.0	ug/L	500	ND	86.9	63-133	4.50	23	
Carbon Tetrachloride	427.3	10.0	ug/L	500	ND	85.5	63-142	0.676	22	
Benzene	424.9	10.0	ug/L	500	ND	85.0	69-133	3.40	18	
1,2-Dichloroethane	430.5	10.0	ug/L	500	ND	86.1	63-138	2.41	20	
Trichloroethylene	431.7	10.0	ug/L	500	ND	86.3	71-133	4.17	23	
1,2-Dichloropropane	441.2	10.0	ug/L	500	ND	88.2	69-132	2.68	20	
Dibromomethane	465.9	10.0	ug/L	500	ND	93.2	70-147	2.27	22	
Bromodichloromethane	450.6	10.0	ug/L	500	ND	90.1	67-130	1.30	21	
cis-1,3-Dichloropropene	406.1	10.0	ug/L	500	ND	81.2	61-126	0.663	21	
4-Methyl-2-pentanone (MIBK)	963.8	50.0	ug/L	1000	ND	96.3	55-147	0.414	23	
Toluene	420.6	10.0	ug/L	500	ND	84.1	71-133	3.27	19	
trans-1,3-Dichloropropene	428.2	10.0	ug/L	500	ND	85.6	63-124	0.884	21	
1,1,2-Trichloroethane	458.4	10.0	ug/L	500	ND	91.7	69-133	0.964	19	
Tetrachloroethylene	447.5	10.0	ug/L	500	ND	89.5	70-124	3.08	24	
2-Hexanone (MBK)	990.3	50.0	ug/L	993	ND	99.7	53-141	0.141	24	
Dibromochloromethane	469.3	10.0	ug/L	500	ND	93.9	74-122	0.942	21	
1,2-Dibromoethane	458.2	10.0	ug/L	500	ND	91.6	66-127	0.0654	23	
Chlorobenzene	432.3	10.0	ug/L	500	ND	86.5	76-116	2.47	21	
1,1,1,2-Tetrachloroethane	455.8	10.0	ug/L	500	ND	91.2	77-121	1.83	25	
Ethylbenzene	445.6	10.0	ug/L	500	ND	89.1	73-124	3.35	20	
Xylenes, total	1355	20.0	ug/L	1500	ND	90.3	75-123	2.75	20	
Styrene	469.9	10.0	ug/L	500	ND	94.0	70-120	2.38	23	
Bromoform	474.2	10.0	ug/L	500	ND	94.8	70-124	2.50	22	
1,2,3-Trichloropropane	478.5	10.0	ug/L	500	ND	95.7	62-135	0.998	28	
trans-1,4-Dichloro-2-butene	813.0	50.0	ug/L	1030	ND	79.1	50-120	0.197	26	
1,1,2,2-Tetrachloroethane	460.1	10.0	ug/L	500	ND	92.0	63-126	0.348	24	
1,4-Dichlorobenzene	425.2	10.0	ug/L	500	ND	85.0	72-119	1.08	24	
1,2-Dichlorobenzene	446.3	10.0	ug/L	500	ND	89.3	71-117	1.75	24	
1,2-Dibromo-3-chloropropane	484.7	50.0	ug/L	500	ND	96.9	49-134	2.49	28	
Surrogate: Dibromofluoromethane	*482*		ug/L	*502*		*96.0*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*481*		ug/L	*504*		*95.5*	*61-142*			
Surrogate: Toluene-d8	*498*		ug/L	*505*		*98.6*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*499*		ug/L	*502*		*99.5*	*80-116*			
Batch 1HJ1301 - EPA 5030B - EPA 8260B										
Blank (1HJ1301-BLK1)		Prepared: 10/21/24 00:00 Analyzed: 10/21/24 11:09								

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1301 - EPA 5030B - EPA 8260B										
Blank (1HJ1301-BLK1)				Prepared: 10/21/24 00:00 Analyzed: 10/21/24 11:09						
Chloromethane	<1.0	1.0	ug/L							
Vinyl Chloride	<1.0	1.0	ug/L							
Bromomethane	<1.0	1.0	ug/L							
Chloroethane	<1.0	1.0	ug/L							
Trichlorofluoromethane	<1.0	1.0	ug/L							
1,1-Dichloroethylene	<1.0	1.0	ug/L							
Acetone	<10.0	10.0	ug/L							
Methyl Iodide	<1.0	1.0	ug/L							
Carbon Disulfide	<1.0	1.0	ug/L							
Methylene Chloride	<5.0	5.0	ug/L							
Acrylonitrile	<5.0	5.0	ug/L							
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L							
1,1-Dichloroethane	<1.0	1.0	ug/L							
Vinyl Acetate	<5.0	5.0	ug/L							
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L							
2-Butanone (MEK)	<10.0	10.0	ug/L							
Bromochloromethane	<1.0	1.0	ug/L							
Chloroform	<1.0	1.0	ug/L							
1,1,1-Trichloroethane	<1.0	1.0	ug/L							
Carbon Tetrachloride	<1.0	1.0	ug/L							
Benzene	<1.0	1.0	ug/L							
1,2-Dichloroethane	<1.0	1.0	ug/L							
Trichloroethylene	<1.0	1.0	ug/L							
1,2-Dichloropropane	<1.0	1.0	ug/L							
Dibromomethane	<1.0	1.0	ug/L							
Bromodichloromethane	<1.0	1.0	ug/L							
cis-1,3-Dichloropropene	<1.0	1.0	ug/L							
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L							
Toluene	<1.0	1.0	ug/L							
trans-1,3-Dichloropropene	<1.0	1.0	ug/L							
1,1,2-Trichloroethane	<1.0	1.0	ug/L							
Tetrachloroethylene	<1.0	1.0	ug/L							
2-Hexanone (MBK)	<5.0	5.0	ug/L							
Dibromochloromethane	<1.0	1.0	ug/L							
1,2-Dibromoethane	<1.0	1.0	ug/L							
Chlorobenzene	<1.0	1.0	ug/L							
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L							
Ethylbenzene	<1.0	1.0	ug/L							
Xylenes, total	<2.0	2.0	ug/L							
Styrene	<1.0	1.0	ug/L							
Bromoform	<1.0	1.0	ug/L							
1,2,3-Trichloropropane	<1.0	1.0	ug/L							
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L							

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1301 - EPA 5030B - EPA 8260B										
Blank (1HJ1301-BLK1)			Prepared: 10/21/24 00:00 Analyzed: 10/21/24 11:09							
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	*47.6*		ug/L	*50.2*		*94.7*	*57-134*			
Surrogate: Dibromofluoromethane	*47.6*		ug/L	*50.2*		*94.7*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*50.0*		ug/L	*50.4*		*99.3*	*53-140*			
Surrogate: 1,2-Dichloroethane-d4	*50.0*		ug/L	*50.4*		*99.3*	*61-142*			
Surrogate: Toluene-d8	*47.2*		ug/L	*50.5*		*93.5*	*86-114*			
Surrogate: Toluene-d8	*47.2*		ug/L	*50.5*		*93.5*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*49.4*		ug/L	*50.2*		*98.4*	*78-121*			
Surrogate: 4-Bromofluorobenzene	*49.4*		ug/L	*50.2*		*98.4*	*80-116*			
Blank (1HJ1301-BLK2)			Prepared: 10/21/24 00:00 Analyzed: 10/22/24 01:23							
Chloromethane	<1.0	1.0	ug/L							
Vinyl Chloride	<1.0	1.0	ug/L							
Bromomethane	<1.0	1.0	ug/L							
Chloroethane	<1.0	1.0	ug/L							
Trichlorofluoromethane	<1.0	1.0	ug/L							
1,1-Dichloroethylene	<1.0	1.0	ug/L							
Acetone	<10.0	10.0	ug/L							
Methyl Iodide	<1.0	1.0	ug/L							
Carbon Disulfide	<1.0	1.0	ug/L							
Methylene Chloride	<5.0	5.0	ug/L							
Acrylonitrile	<5.0	5.0	ug/L							
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L							
1,1-Dichloroethane	<1.0	1.0	ug/L							
Vinyl Acetate	<5.0	5.0	ug/L							
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L							
2-Butanone (MEK)	<10.0	10.0	ug/L							
Bromochloromethane	<1.0	1.0	ug/L							
Chloroform	<1.0	1.0	ug/L							
1,1,1-Trichloroethane	<1.0	1.0	ug/L							
Carbon Tetrachloride	<1.0	1.0	ug/L							
Benzene	<1.0	1.0	ug/L							
1,2-Dichloroethane	<1.0	1.0	ug/L							
Trichloroethylene	<1.0	1.0	ug/L							
1,2-Dichloropropane	<1.0	1.0	ug/L							
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							

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1301 - EPA 5030B - EPA 8260B										
Blank (1HJ1301-BLK2)			Prepared: 10/21/24 00:00 Analyzed: 10/22/24 01:23							
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	*52.2*		ug/L	*50.2*		*104*	*57-134*			
Surrogate: Dibromofluoromethane	*52.2*		ug/L	*50.2*		*104*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*54.8*		ug/L	*50.4*		*109*	*53-140*			
Surrogate: 1,2-Dichloroethane-d4	*54.8*		ug/L	*50.4*		*109*	*61-142*			
Surrogate: Toluene-d8	*47.9*		ug/L	*50.5*		*94.9*	*86-114*			
Surrogate: Toluene-d8	*47.9*		ug/L	*50.5*		*94.9*	*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 (1HJ1301-BS1)			Prepared: 10/21/24 00:00 Analyzed: 10/21/24 10:02							
Chloromethane	30.14	1.0	ug/L	30.0		100	63-155			
Vinyl Chloride	28.96	1.0	ug/L	30.0		96.5	70-154			
Bromomethane	33.12	1.0	ug/L	30.0		110	52-176			
Chloroethane	24.87	1.0	ug/L	30.0		82.9	72-148			
Trichlorofluoromethane	24.34	1.0	ug/L	30.0		81.1	70-152			
1,1-Dichloroethylene	44.45	1.0	ug/L	50.0		88.9	70-148			
Acetone	99.33	10.0	ug/L	101		98.2	43-172			
Methyl Iodide	96.99	1.0	ug/L	102		95.2	69-170			
Carbon Disulfide	67.06	1.0	ug/L	103		65.3	72-162			Q3
Methylene Chloride	43.27	5.0	ug/L	50.0		86.5	68-142			
Acrylonitrile	77.56	5.0	ug/L	100		77.3	56-135			
trans-1,2-Dichloroethylene	45.12	1.0	ug/L	50.0		90.2	66-148			
1,1-Dichloroethane	44.18	1.0	ug/L	50.0		88.4	66-143			
Vinyl Acetate	91.56	5.0	ug/L	100		91.6	43-153			
cis-1,2-Dichloroethylene	44.44	1.0	ug/L	50.0		88.9	71-149			
2-Butanone (MEK)	92.08	10.0	ug/L	102		90.5	52-159			
Bromochloromethane	43.62	1.0	ug/L	50.0		87.2	69-143			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1301 - EPA 5030B - EPA 8260B										
LCS (1HJ1301-BS1)				Prepared: 10/21/24 00:00 Analyzed: 10/21/24 10:02						
Chloroform	44.14	1.0	ug/L	50.0		88.3	69-144			
1,1,1-Trichloroethane	44.67	1.0	ug/L	50.0		89.3	62-129			
Carbon Tetrachloride	45.86	1.0	ug/L	50.0		91.7	63-141			
Benzene	48.01	1.0	ug/L	50.0		96.0	71-134			
1,2-Dichloroethane	52.15	1.0	ug/L	50.0		104	72-132			
Trichloroethylene	47.37	1.0	ug/L	50.0		94.7	71-135			
1,2-Dichloropropane	45.95	1.0	ug/L	50.0		91.9	69-136			
Dibromomethane	48.86	1.0	ug/L	50.0		97.7	73-147			
Bromodichloromethane	47.09	1.0	ug/L	50.0		94.2	68-129			
cis-1,3-Dichloropropene	45.20	1.0	ug/L	50.0		90.4	65-134			
4-Methyl-2-pentanone (MIBK)	102.1	5.0	ug/L	100		102	58-147			
Toluene	46.37	1.0	ug/L	50.0		92.7	72-133			
trans-1,3-Dichloropropene	46.70	1.0	ug/L	50.0		93.4	67-130			
1,1,2-Trichloroethane	46.58	1.0	ug/L	50.0		93.2	69-135			
Tetrachloroethylene	50.31	1.0	ug/L	50.0		101	69-130			
2-Hexanone (MBK)	101.6	5.0	ug/L	99.3		102	55-144			
Dibromochloromethane	48.07	1.0	ug/L	50.0		96.1	73-127			
1,2-Dibromoethane	48.68	1.0	ug/L	50.0		97.4	67-132			
Chlorobenzene	47.64	1.0	ug/L	50.0		95.3	72-123			
1,1,1,2-Tetrachloroethane	50.14	1.0	ug/L	50.0		100	73-127			
Ethylbenzene	50.00	1.0	ug/L	50.0		100	71-127			
Xylenes, total	144.8	2.0	ug/L	150		96.6	74-127			
Styrene	49.55	1.0	ug/L	50.0		99.1	66-126			
Bromoform	48.34	1.0	ug/L	50.0		96.7	68-130			
1,2,3-Trichloropropane	49.06	1.0	ug/L	50.0		98.1	63-136			
trans-1,4-Dichloro-2-butene	90.82	5.0	ug/L	103		88.3	54-134			
1,1,2,2-Tetrachloroethane	48.58	1.0	ug/L	50.0		97.2	61-131			
1,4-Dichlorobenzene	46.59	1.0	ug/L	50.0		93.2	70-129			
1,2-Dichlorobenzene	47.28	1.0	ug/L	50.0		94.6	69-126			
1,2-Dibromo-3-chloropropane	42.84	5.0	ug/L	50.0		85.7	50-143			
Surrogate: Dibromofluoromethane	*46.3*		ug/L	*50.2*		*92.2*	*57-134*			
Surrogate: Dibromofluoromethane	*46.3*		ug/L	*50.2*		*92.2*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*47.2*		ug/L	*50.4*		*93.8*	*53-140*			
Surrogate: 1,2-Dichloroethane-d4	*47.2*		ug/L	*50.4*		*93.8*	*61-142*			
Surrogate: Toluene-d8	*49.2*		ug/L	*50.5*		*97.4*	*86-114*			
Surrogate: Toluene-d8	*49.2*		ug/L	*50.5*		*97.4*	*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*			
LCS (1HJ1301-BS2)				Prepared: 10/21/24 00:00 Analyzed: 10/22/24 00:15						
Chloromethane	35.79	1.0	ug/L	30.0		119	63-155			
Vinyl Chloride	33.44	1.0	ug/L	30.0		111	70-154			
Bromomethane	38.13	1.0	ug/L	30.0		127	52-176			
Chloroethane	28.96	1.0	ug/L	30.0		96.5	72-148			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1301 - EPA 5030B - EPA 8260B										
LCS (1HJ1301-BS2)				Prepared: 10/21/24 00:00 Analyzed: 10/22/24 00:15						
Trichlorofluoromethane	26.87	1.0	ug/L	30.0		89.6	70-152			
1,1-Dichloroethylene	50.89	1.0	ug/L	50.0		102	70-148			
Acetone	117.9	10.0	ug/L	101		116	43-172			
Methyl Iodide	110.5	1.0	ug/L	102		108	69-170			
Carbon Disulfide	76.48	1.0	ug/L	103		74.5	72-162			
Methylene Chloride	51.38	5.0	ug/L	50.0		103	68-142			
Acrylonitrile	90.93	5.0	ug/L	100		90.6	56-135			
trans-1,2-Dichloroethylene	53.17	1.0	ug/L	50.0		106	66-148			
1,1-Dichloroethane	52.88	1.0	ug/L	50.0		106	66-143			
Vinyl Acetate	102.8	5.0	ug/L	100		103	43-153			
cis-1,2-Dichloroethylene	51.62	1.0	ug/L	50.0		103	71-149			
2-Butanone (MEK)	110.8	10.0	ug/L	102		109	52-159			
Bromochloromethane	52.57	1.0	ug/L	50.0		105	69-143			
Chloroform	52.26	1.0	ug/L	50.0		105	69-144			
1,1,1-Trichloroethane	51.69	1.0	ug/L	50.0		103	62-129			
Carbon Tetrachloride	52.38	1.0	ug/L	50.0		105	63-141			
Benzene	53.07	1.0	ug/L	50.0		106	71-134			
1,2-Dichloroethane	56.57	1.0	ug/L	50.0		113	72-132			
Trichloroethylene	50.92	1.0	ug/L	50.0		102	71-135			
1,2-Dichloropropane	51.66	1.0	ug/L	50.0		103	69-136			
Dibromomethane	53.48	1.0	ug/L	50.0		107	73-147			
Bromodichloromethane	52.33	1.0	ug/L	50.0		105	68-129			
cis-1,3-Dichloropropene	48.84	1.0	ug/L	50.0		97.7	65-134			
4-Methyl-2-pentanone (MIBK)	113.2	5.0	ug/L	100		113	58-147			
Toluene	51.24	1.0	ug/L	50.0		102	72-133			
trans-1,3-Dichloropropene	49.52	1.0	ug/L	50.0		99.0	67-130			
1,1,2-Trichloroethane	51.38	1.0	ug/L	50.0		103	69-135			
Tetrachloroethylene	51.58	1.0	ug/L	50.0		103	69-130			
2-Hexanone (MBK)	108.5	5.0	ug/L	99.3		109	55-144			
Dibromochloromethane	51.28	1.0	ug/L	50.0		103	73-127			
1,2-Dibromoethane	51.91	1.0	ug/L	50.0		104	67-132			
Chlorobenzene	50.99	1.0	ug/L	50.0		102	72-123			
1,1,1,2-Tetrachloroethane	53.59	1.0	ug/L	50.0		107	73-127			
Ethylbenzene	53.82	1.0	ug/L	50.0		108	71-127			
Xylenes, total	156.5	2.0	ug/L	150		104	74-127			
Styrene	53.57	1.0	ug/L	50.0		107	66-126			
Bromoform	50.30	1.0	ug/L	50.0		101	68-130			
1,2,3-Trichloropropane	52.59	1.0	ug/L	50.0		105	63-136			
trans-1,4-Dichloro-2-butene	95.70	5.0	ug/L	103		93.1	54-134			
1,1,2,2-Tetrachloroethane	51.76	1.0	ug/L	50.0		104	61-131			
1,4-Dichlorobenzene	49.42	1.0	ug/L	50.0		98.8	70-129			
1,2-Dichlorobenzene	50.44	1.0	ug/L	50.0		101	69-126			
1,2-Dibromo-3-chloropropane	45.00	5.0	ug/L	50.0		90.0	50-143			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1301 - EPA 5030B - EPA 8260B										
LCS (1HJ1301-BS2)				Prepared: 10/21/24 00:00 Analyzed: 10/22/24 00:15						
Surrogate: Dibromofluoromethane	*51.3*		ug/L	*50.2*		*102*	*57-134*			
Surrogate: Dibromofluoromethane	*51.3*		ug/L	*50.2*		*102*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*52.6*		ug/L	*50.4*		*104*	*53-140*			
Surrogate: 1,2-Dichloroethane-d4	*52.6*		ug/L	*50.4*		*104*	*61-142*			
Surrogate: Toluene-d8	*50.5*		ug/L	*50.5*		*100*	*86-114*			
Surrogate: Toluene-d8	*50.5*		ug/L	*50.5*		*100*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*49.9*		ug/L	*50.2*		*99.4*	*78-121*			
Surrogate: 4-Bromofluorobenzene	*49.9*		ug/L	*50.2*		*99.4*	*80-116*			
LCS Dup (1HJ1301-BSD1)				Prepared: 10/21/24 00:00 Analyzed: 10/21/24 10:24						
Chloromethane	28.77	1.0	ug/L	30.0		95.9	63-155	4.65	24	
Vinyl Chloride	27.81	1.0	ug/L	30.0		92.7	70-154	4.05	25	
Bromomethane	32.00	1.0	ug/L	30.0		107	52-176	3.44	27	
Chloroethane	23.72	1.0	ug/L	30.0		79.1	72-148	4.73	25	
Trichlorofluoromethane	23.08	1.0	ug/L	30.0		76.9	70-152	5.31	26	
1,1-Dichloroethylene	42.78	1.0	ug/L	50.0		85.6	70-148	3.83	24	
Acetone	96.37	10.0	ug/L	101		95.2	43-172	3.03	30	
Methyl Iodide	94.39	1.0	ug/L	102		92.7	69-170	2.72	30	
Carbon Disulfide	64.32	1.0	ug/L	103		62.6	72-162	4.17	24	Q3
Methylene Chloride	42.95	5.0	ug/L	50.0		85.9	68-142	0.742	21	
Acrylonitrile	76.96	5.0	ug/L	100		76.7	56-135	0.777	16	
trans-1,2-Dichloroethylene	43.93	1.0	ug/L	50.0		87.9	66-148	2.67	27	
1,1-Dichloroethane	43.12	1.0	ug/L	50.0		86.2	66-143	2.43	24	
Vinyl Acetate	91.64	5.0	ug/L	100		91.6	43-153	0.0873	30	
cis-1,2-Dichloroethylene	44.31	1.0	ug/L	50.0		88.6	71-149	0.293	26	
2-Butanone (MEK)	93.49	10.0	ug/L	102		91.8	52-159	1.52	27	
Bromochloromethane	43.36	1.0	ug/L	50.0		86.7	69-143	0.598	23	
Chloroform	43.75	1.0	ug/L	50.0		87.5	69-144	0.887	23	
1,1,1-Trichloroethane	44.07	1.0	ug/L	50.0		88.1	62-129	1.35	24	
Carbon Tetrachloride	45.28	1.0	ug/L	50.0		90.6	63-141	1.27	25	
Benzene	47.83	1.0	ug/L	50.0		95.7	71-134	0.376	24	
1,2-Dichloroethane	53.08	1.0	ug/L	50.0		106	72-132	1.77	24	
Trichloroethylene	46.95	1.0	ug/L	50.0		93.9	71-135	0.891	24	
1,2-Dichloropropane	46.23	1.0	ug/L	50.0		92.5	69-136	0.608	24	
Dibromomethane	49.75	1.0	ug/L	50.0		99.5	73-147	1.81	25	
Bromodichloromethane	48.03	1.0	ug/L	50.0		96.1	68-129	1.98	22	
cis-1,3-Dichloropropene	45.81	1.0	ug/L	50.0		91.6	65-134	1.34	23	
4-Methyl-2-pentanone (MIBK)	103.6	5.0	ug/L	100		104	58-147	1.44	27	
Toluene	46.51	1.0	ug/L	50.0		93.0	72-133	0.301	24	
trans-1,3-Dichloropropene	47.51	1.0	ug/L	50.0		95.0	67-130	1.72	24	
1,1,2-Trichloroethane	47.32	1.0	ug/L	50.0		94.6	69-135	1.58	23	
Tetrachloroethylene	50.18	1.0	ug/L	50.0		100	69-130	0.259	25	
2-Hexanone (MBK)	102.9	5.0	ug/L	99.3		104	55-144	1.24	25	
Dibromochloromethane	49.60	1.0	ug/L	50.0		99.2	73-127	3.13	22	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1301 - EPA 5030B - EPA 8260B										
LCS Dup (1HJ1301-BSD1)				Prepared: 10/21/24 00:00 Analyzed: 10/21/24 10:24						
1,2-Dibromoethane	50.07	1.0	ug/L	50.0		100	67-132	2.82	24	
Chlorobenzene	48.07	1.0	ug/L	50.0		96.1	72-123	0.899	23	
1,1,1,2-Tetrachloroethane	51.22	1.0	ug/L	50.0		102	73-127	2.13	24	
Ethylbenzene	50.70	1.0	ug/L	50.0		101	71-127	1.39	26	
Xylenes, total	147.0	2.0	ug/L	150		98.0	74-127	1.45	25	
Styrene	50.75	1.0	ug/L	50.0		102	66-126	2.39	23	
Bromoform	50.28	1.0	ug/L	50.0		101	68-130	3.93	23	
1,2,3-Trichloropropane	49.77	1.0	ug/L	50.0		99.5	63-136	1.44	24	
trans-1,4-Dichloro-2-butene	92.71	5.0	ug/L	103		90.2	54-134	2.06	27	
1,1,2,2-Tetrachloroethane	49.96	1.0	ug/L	50.0		99.9	61-131	2.80	29	
1,4-Dichlorobenzene	47.87	1.0	ug/L	50.0		95.7	70-129	2.71	24	
1,2-Dichlorobenzene	48.91	1.0	ug/L	50.0		97.8	69-126	3.39	26	
1,2-Dibromo-3-chloropropane	44.18	5.0	ug/L	50.0		88.4	50-143	3.08	30	
Surrogate: Dibromofluoromethane	*45.8*		ug/L	*50.2*		*91.2*	*57-134*			
Surrogate: Dibromofluoromethane	*45.8*		ug/L	*50.2*		*91.2*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*47.2*		ug/L	*50.4*		*93.8*	*53-140*			
Surrogate: 1,2-Dichloroethane-d4	*47.2*		ug/L	*50.4*		*93.8*	*61-142*			
Surrogate: Toluene-d8	*49.4*		ug/L	*50.5*		*97.9*	*86-114*			
Surrogate: Toluene-d8	*49.4*		ug/L	*50.5*		*97.9*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*50.0*		ug/L	*50.2*		*99.6*	*78-121*			
Surrogate: 4-Bromofluorobenzene	*50.0*		ug/L	*50.2*		*99.6*	*80-116*			
LCS Dup (1HJ1301-BSD2)				Prepared: 10/21/24 00:00 Analyzed: 10/22/24 00:38						
Chloromethane	34.06	1.0	ug/L	30.0		114	63-155	4.95	24	
Vinyl Chloride	32.00	1.0	ug/L	30.0		107	70-154	4.40	25	
Bromomethane	36.39	1.0	ug/L	30.0		121	52-176	4.67	27	
Chloroethane	27.79	1.0	ug/L	30.0		92.6	72-148	4.12	25	
Trichlorofluoromethane	26.03	1.0	ug/L	30.0		86.8	70-152	3.18	26	
1,1-Dichloroethylene	49.28	1.0	ug/L	50.0		98.6	70-148	3.21	24	
Acetone	119.2	10.0	ug/L	101		118	43-172	1.10	30	
Methyl Iodide	107.9	1.0	ug/L	102		106	69-170	2.35	30	
Carbon Disulfide	73.31	1.0	ug/L	103		71.4	72-162	4.23	24	Q3
Methylene Chloride	49.96	5.0	ug/L	50.0		99.9	68-142	2.80	21	
Acrylonitrile	90.42	5.0	ug/L	100		90.1	56-135	0.562	16	
trans-1,2-Dichloroethylene	51.34	1.0	ug/L	50.0		103	66-148	3.50	27	
1,1-Dichloroethane	51.18	1.0	ug/L	50.0		102	66-143	3.27	24	
Vinyl Acetate	102.6	5.0	ug/L	100		103	43-153	0.175	30	
cis-1,2-Dichloroethylene	50.04	1.0	ug/L	50.0		100	71-149	3.11	26	
2-Butanone (MEK)	111.1	10.0	ug/L	102		109	52-159	0.325	27	
Bromochloromethane	52.20	1.0	ug/L	50.0		104	69-143	0.706	23	
Chloroform	51.33	1.0	ug/L	50.0		103	69-144	1.80	23	
1,1,1-Trichloroethane	50.04	1.0	ug/L	50.0		100	62-129	3.24	24	
Carbon Tetrachloride	50.53	1.0	ug/L	50.0		101	63-141	3.60	25	
Benzene	52.09	1.0	ug/L	50.0		104	71-134	1.86	24	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1301 - EPA 5030B - EPA 8260B										
LCS Dup (1HJ1301-BSD2)			Prepared: 10/21/24 00:00 Analyzed: 10/22/24 00:38							
1,2-Dichloroethane	56.17	1.0	ug/L	50.0		112	72-132	0.710	24	
Trichloroethylene	50.28	1.0	ug/L	50.0		101	71-135	1.26	24	
1,2-Dichloropropane	51.01	1.0	ug/L	50.0		102	69-136	1.27	24	
Dibromomethane	52.98	1.0	ug/L	50.0		106	73-147	0.939	25	
Bromodichloromethane	51.57	1.0	ug/L	50.0		103	68-129	1.46	22	
cis-1,3-Dichloropropene	48.44	1.0	ug/L	50.0		96.9	65-134	0.822	23	
4-Methyl-2-pentanone (MIBK)	114.8	5.0	ug/L	100		115	58-147	1.37	27	
Toluene	50.29	1.0	ug/L	50.0		101	72-133	1.87	24	
trans-1,3-Dichloropropene	49.53	1.0	ug/L	50.0		99.1	67-130	0.0202	24	
1,1,2-Trichloroethane	51.06	1.0	ug/L	50.0		102	69-135	0.625	23	
Tetrachloroethylene	49.89	1.0	ug/L	50.0		99.8	69-130	3.33	25	
2-Hexanone (MBK)	110.0	5.0	ug/L	99.3		111	55-144	1.37	25	
Dibromochloromethane	50.52	1.0	ug/L	50.0		101	73-127	1.49	22	
1,2-Dibromoethane	51.35	1.0	ug/L	50.0		103	67-132	1.08	24	
Chlorobenzene	49.99	1.0	ug/L	50.0		100	72-123	1.98	23	
1,1,1,2-Tetrachloroethane	52.40	1.0	ug/L	50.0		105	73-127	2.25	24	
Ethylbenzene	52.53	1.0	ug/L	50.0		105	71-127	2.43	26	
Xylenes, total	153.2	2.0	ug/L	150		102	74-127	2.13	25	
Styrene	52.68	1.0	ug/L	50.0		105	66-126	1.68	23	
Bromoform	50.29	1.0	ug/L	50.0		101	68-130	0.0199	23	
1,2,3-Trichloropropane	51.72	1.0	ug/L	50.0		103	63-136	1.67	24	
trans-1,4-Dichloro-2-butene	94.84	5.0	ug/L	103		92.3	54-134	0.903	27	
1,1,2,2-Tetrachloroethane	51.28	1.0	ug/L	50.0		103	61-131	0.932	29	
1,4-Dichlorobenzene	48.86	1.0	ug/L	50.0		97.7	70-129	1.14	24	
1,2-Dichlorobenzene	49.66	1.0	ug/L	50.0		99.3	69-126	1.56	26	
1,2-Dibromo-3-chloropropane	45.25	5.0	ug/L	50.0		90.5	50-143	0.554	30	
Surrogate: Dibromofluoromethane	*50.6*		ug/L	*50.2*		*101*	*57-134*			
Surrogate: Dibromofluoromethane	*50.6*		ug/L	*50.2*		*101*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*52.5*		ug/L	*50.4*		*104*	*53-140*			
Surrogate: 1,2-Dichloroethane-d4	*52.5*		ug/L	*50.4*		*104*	*61-142*			
Surrogate: Toluene-d8	*51.0*		ug/L	*50.5*		*101*	*86-114*			
Surrogate: Toluene-d8	*51.0*		ug/L	*50.5*		*101*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*49.6*		ug/L	*50.2*		*98.8*	*78-121*			
Surrogate: 4-Bromofluorobenzene	*49.6*		ug/L	*50.2*		*98.8*	*80-116*			
Matrix Spike (1HJ1301-MS1)	**Source: 1HJ1342-01**		Prepared: 10/21/24 00:00 Analyzed: 10/22/24 04:24							
Chloromethane	357.8	10.0	ug/L	300	ND	119	61-152			
Vinyl Chloride	334.2	10.0	ug/L	300	ND	111	66-149			
Bromomethane	359.2	10.0	ug/L	300	ND	120	43-171			
Chloroethane	288.5	10.0	ug/L	300	ND	96.2	69-148			
Trichlorofluoromethane	274.5	10.0	ug/L	300	ND	91.5	62-163			
1,1-Dichloroethylene	511.5	10.0	ug/L	500	ND	102	70-148			
Acetone	1189	100	ug/L	1010	ND	118	45-173			
Methyl Iodide	1049	10.0	ug/L	1020	ND	103	62-167			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1301 - EPA 5030B - EPA 8260B										
Matrix Spike (1HJ1301-MS1)	**Source: 1HJ1342-01**	Prepared: 10/21/24 00:00 Analyzed: 10/22/24 04:24								
Carbon Disulfide	765.6	10.0	ug/L	1030	ND	74.5	71-163			
Methylene Chloride	513.6	50.0	ug/L	500	ND	103	69-140			
Acrylonitrile	903.2	50.0	ug/L	1000	ND	90.0	38-147			
trans-1,2-Dichloroethylene	528.2	10.0	ug/L	500	ND	106	69-144			
1,1-Dichloroethane	526.6	10.0	ug/L	500	ND	105	70-138			
Vinyl Acetate	1006	50.0	ug/L	1000	ND	101	58-142			
cis-1,2-Dichloroethylene	505.4	10.0	ug/L	500	ND	101	68-151			
2-Butanone (MEK)	1048	100	ug/L	1020	ND	103	50-160			
Bromochloromethane	526.0	10.0	ug/L	500	ND	105	65-143			
Chloroform	516.2	10.0	ug/L	500	ND	103	71-143			
1,1,1-Trichloroethane	511.6	10.0	ug/L	500	ND	102	63-133			
Carbon Tetrachloride	520.3	10.0	ug/L	500	ND	104	63-142			
Benzene	530.0	10.0	ug/L	500	ND	106	69-133			
1,2-Dichloroethane	566.1	10.0	ug/L	500	ND	113	63-138			
Trichloroethylene	507.9	10.0	ug/L	500	ND	102	71-133			
1,2-Dichloropropane	509.9	10.0	ug/L	500	ND	102	69-132			
Dibromomethane	530.2	10.0	ug/L	500	ND	106	70-147			
Bromodichloromethane	513.7	10.0	ug/L	500	ND	103	67-130			
cis-1,3-Dichloropropene	469.8	10.0	ug/L	500	ND	94.0	61-126			
4-Methyl-2-pentanone (MIBK)	1094	50.0	ug/L	1000	ND	109	55-147			
Toluene	506.5	10.0	ug/L	500	ND	101	71-133			
trans-1,3-Dichloropropene	481.3	10.0	ug/L	500	ND	96.3	63-124			
1,1,2-Trichloroethane	509.0	10.0	ug/L	500	ND	102	69-133			
Tetrachloroethylene	511.4	10.0	ug/L	500	ND	102	70-124			
2-Hexanone (MBK)	1044	50.0	ug/L	993	ND	105	53-141			
Dibromochloromethane	505.4	10.0	ug/L	500	ND	101	74-122			
1,2-Dibromoethane	510.0	10.0	ug/L	500	ND	102	66-127			
Chlorobenzene	504.8	10.0	ug/L	500	ND	101	76-116			
1,1,1,2-Tetrachloroethane	523.4	10.0	ug/L	500	ND	105	77-121			
Ethylbenzene	533.7	10.0	ug/L	500	ND	107	73-124			
Xylenes, total	1545	20.0	ug/L	1500	ND	103	75-123			
Styrene	527.4	10.0	ug/L	500	ND	105	70-120			
Bromoform	492.6	10.0	ug/L	500	ND	98.5	70-124			
1,2,3-Trichloropropane	506.6	10.0	ug/L	500	ND	101	62-135			
trans-1,4-Dichloro-2-butene	898.2	50.0	ug/L	1030	ND	87.4	50-120			
1,1,2,2-Tetrachloroethane	506.0	10.0	ug/L	500	ND	101	63-126			
1,4-Dichlorobenzene	486.9	10.0	ug/L	500	ND	97.4	72-119			
1,2-Dichlorobenzene	504.8	10.0	ug/L	500	ND	101	71-117			
1,2-Dibromo-3-chloropropane	439.0	50.0	ug/L	500	ND	87.8	49-134			
Surrogate: Dibromofluoromethane	*514*		ug/L	*502*		*102*	*57-134*			
Surrogate: Dibromofluoromethane	*514*		ug/L	*502*		*102*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*529*		ug/L	*504*		*105*	*53-140*			
Surrogate: 1,2-Dichloroethane-d4	*529*		ug/L	*504*		*105*	*61-142*			

Determination of Volatile Organic Compounds	**Result**	**RL**	**Units**	**Spike Level**	**Source Result**	**%REC**	**%REC Limits**	**RPD**	**RPD Limit**	**Notes**
Batch 1HJ1301 - EPA 5030B - EPA 8260B										
Matrix Spike (1HJ1301-MS1)	**Source: 1HJ1342-01**		Prepared: 10/21/24 00:00 Analyzed: 10/22/24 04:24							
Surrogate: Toluene-d8	*509*		ug/L	*505*		*101*	*86-114*			
Surrogate: Toluene-d8	*509*		ug/L	*505*		*101*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*497*		ug/L	*502*		*99.0*	*78-121*			
Surrogate: 4-Bromofluorobenzene	*497*		ug/L	*502*		*99.0*	*80-116*			
Matrix Spike (1HJ1301-MS2)	**Source: 1HJ1340-05**		Prepared: 10/21/24 00:00 Analyzed: 10/22/24 05:09							
Chloromethane	347.5	10.0	ug/L	300	ND	116	61-152			
Vinyl Chloride	335.4	10.0	ug/L	300	ND	112	66-149			
Bromomethane	366.9	10.0	ug/L	300	ND	122	43-171			
Chloroethane	286.2	10.0	ug/L	300	ND	95.4	69-148			
Trichlorofluoromethane	275.3	10.0	ug/L	300	ND	91.8	62-163			
1,1-Dichloroethylene	516.7	10.0	ug/L	500	ND	103	70-148			
Acetone	1222	100	ug/L	1010	ND	121	45-173			
Methyl Iodide	1093	10.0	ug/L	1020	ND	107	62-167			
Carbon Disulfide	775.1	10.0	ug/L	1030	ND	75.5	71-163			
Methylene Chloride	518.8	50.0	ug/L	500	ND	104	69-140			
Acrylonitrile	931.7	50.0	ug/L	1000	ND	92.8	38-147			
trans-1,2-Dichloroethylene	537.6	10.0	ug/L	500	ND	108	69-144			
1,1-Dichloroethane	535.3	10.0	ug/L	500	ND	107	70-138			
Vinyl Acetate	1044	50.0	ug/L	1000	ND	104	58-142			
cis-1,2-Dichloroethylene	516.5	10.0	ug/L	500	ND	103	68-151			
2-Butanone (MEK)	1102	100	ug/L	1020	ND	108	50-160			
Bromochloromethane	533.9	10.0	ug/L	500	ND	107	65-143			
Chloroform	527.5	10.0	ug/L	500	ND	106	71-143			
1,1,1-Trichloroethane	524.3	10.0	ug/L	500	ND	105	63-133			
Carbon Tetrachloride	536.0	10.0	ug/L	500	ND	107	63-142			
Benzene	535.6	10.0	ug/L	500	ND	107	69-133			
1,2-Dichloroethane	577.4	10.0	ug/L	500	ND	115	63-138			
Trichloroethylene	515.3	10.0	ug/L	500	ND	103	71-133			
1,2-Dichloropropane	520.9	10.0	ug/L	500	ND	104	69-132			
Dibromomethane	538.8	10.0	ug/L	500	ND	108	70-147			
Bromodichloromethane	524.5	10.0	ug/L	500	ND	105	67-130			
cis-1,3-Dichloropropene	483.7	10.0	ug/L	500	ND	96.7	61-126			
4-Methyl-2-pentanone (MIBK)	1146	50.0	ug/L	1000	ND	115	55-147			
Toluene	518.7	10.0	ug/L	500	ND	104	71-133			
trans-1,3-Dichloropropene	496.1	10.0	ug/L	500	ND	99.2	63-124			
1,1,2-Trichloroethane	519.0	10.0	ug/L	500	ND	104	69-133			
Tetrachloroethylene	525.7	10.0	ug/L	500	ND	105	70-124			
2-Hexanone (MBK)	1112	50.0	ug/L	993	ND	112	53-141			
Dibromochloromethane	522.0	10.0	ug/L	500	ND	104	74-122			
1,2-Dibromoethane	528.2	10.0	ug/L	500	ND	106	66-127			
Chlorobenzene	516.0	10.0	ug/L	500	ND	103	76-116			
1,1,1,2-Tetrachloroethane	538.7	10.0	ug/L	500	ND	108	77-121			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1301 - EPA 5030B - EPA 8260B										
Matrix Spike (1HJ1301-MS2)		**Source: 1HJ1340-05**	Prepared: 10/21/24 00:00 Analyzed: 10/22/24 05:09							
Ethylbenzene	549.3	10.0	ug/L	500	ND	110	73-124			
Xylenes, total	1596	20.0	ug/L	1500	ND	106	75-123			
Styrene	545.0	10.0	ug/L	500	ND	109	70-120			
Bromoform	508.8	10.0	ug/L	500	ND	102	70-124			
1,2,3-Trichloropropane	534.2	10.0	ug/L	500	ND	107	62-135			
trans-1,4-Dichloro-2-butene	953.8	50.0	ug/L	1030	ND	92.8	50-120			
1,1,2,2-Tetrachloroethane	529.2	10.0	ug/L	500	ND	106	63-126			
1,4-Dichlorobenzene	504.5	10.0	ug/L	500	ND	101	72-119			
1,2-Dichlorobenzene	518.5	10.0	ug/L	500	ND	104	71-117			
1,2-Dibromo-3-chloropropane	464.1	50.0	ug/L	500	ND	92.8	49-134			
Surrogate: Dibromofluoromethane	*508*		ug/L	*502*		*101*	*57-134*			
Surrogate: Dibromofluoromethane	*508*		ug/L	*502*		*101*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*527*		ug/L	*504*		*105*	*53-140*			
Surrogate: 1,2-Dichloroethane-d4	*527*		ug/L	*504*		*105*	*61-142*			
Surrogate: Toluene-d8	*507*		ug/L	*505*		*101*	*86-114*			
Surrogate: Toluene-d8	*507*		ug/L	*505*		*101*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*498*		ug/L	*502*		*99.4*	*78-121*			
Surrogate: 4-Bromofluorobenzene	*498*		ug/L	*502*		*99.4*	*80-116*			
Matrix Spike Dup (1HJ1301-MSD1)		**Source: 1HJ1342-01**	Prepared: 10/21/24 00:00 Analyzed: 10/22/24 04:47							
Chloromethane	338.4	10.0	ug/L	300	ND	113	61-152	5.57	26	
Vinyl Chloride	322.6	10.0	ug/L	300	ND	108	66-149	3.53	23	
Bromomethane	355.2	10.0	ug/L	300	ND	118	43-171	1.12	29	
Chloroethane	275.2	10.0	ug/L	300	ND	91.7	69-148	4.72	25	
Trichlorofluoromethane	265.5	10.0	ug/L	300	ND	88.5	62-163	3.33	25	
1,1-Dichloroethylene	492.8	10.0	ug/L	500	ND	98.6	70-148	3.72	22	
Acetone	1172	100	ug/L	1010	ND	116	45-173	1.50	30	
Methyl Iodide	1055	10.0	ug/L	1020	ND	104	62-167	0.618	24	
Carbon Disulfide	744.0	10.0	ug/L	1030	ND	72.4	71-163	2.86	22	
Methylene Chloride	501.1	50.0	ug/L	500	ND	100	69-140	2.46	19	
Acrylonitrile	894.9	50.0	ug/L	1000	ND	89.1	38-147	0.923	30	
trans-1,2-Dichloroethylene	516.5	10.0	ug/L	500	ND	103	69-144	2.24	22	
1,1-Dichloroethane	509.5	10.0	ug/L	500	ND	102	70-138	3.30	20	
Vinyl Acetate	1004	50.0	ug/L	1000	ND	100	58-142	0.189	24	
cis-1,2-Dichloroethylene	502.3	10.0	ug/L	500	ND	100	68-151	0.615	22	
2-Butanone (MEK)	1066	100	ug/L	1020	ND	105	50-160	1.74	23	
Bromochloromethane	527.1	10.0	ug/L	500	ND	105	65-143	0.209	22	
Chloroform	509.8	10.0	ug/L	500	ND	102	71-143	1.25	21	
1,1,1-Trichloroethane	505.3	10.0	ug/L	500	ND	101	63-133	1.24	23	
Carbon Tetrachloride	512.1	10.0	ug/L	500	ND	102	63-142	1.59	22	
Benzene	511.3	10.0	ug/L	500	ND	102	69-133	3.59	18	
1,2-Dichloroethane	559.4	10.0	ug/L	500	ND	112	63-138	1.19	20	
Trichloroethylene	494.4	10.0	ug/L	500	ND	98.9	71-133	2.69	23	
1,2-Dichloropropane	505.6	10.0	ug/L	500	ND	101	69-132	0.847	20	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1301 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1HJ1301-MSD1)	**Source: 1HJ1342-01**	Prepared: 10/21/24 00:00 Analyzed: 10/22/24 04:47								
Dibromomethane	527.3	10.0	ug/L	500	ND	105	70-147	0.548	22	
Bromodichloromethane	509.6	10.0	ug/L	500	ND	102	67-130	0.801	21	
cis-1,3-Dichloropropene	470.1	10.0	ug/L	500	ND	94.0	61-126	0.0638	21	
4-Methyl-2-pentanone (MIBK)	1099	50.0	ug/L	1000	ND	110	55-147	0.447	23	
Toluene	493.5	10.0	ug/L	500	ND	98.7	71-133	2.60	19	
trans-1,3-Dichloropropene	482.6	10.0	ug/L	500	ND	96.5	63-124	0.270	21	
1,1,2-Trichloroethane	502.7	10.0	ug/L	500	ND	101	69-133	1.25	19	
Tetrachloroethylene	506.9	10.0	ug/L	500	ND	101	70-124	0.884	24	
2-Hexanone (MBK)	1045	50.0	ug/L	993	ND	105	53-141	0.0766	24	
Dibromochloromethane	506.2	10.0	ug/L	500	ND	101	74-122	0.158	21	
1,2-Dibromoethane	513.8	10.0	ug/L	500	ND	103	66-127	0.742	23	
Chlorobenzene	497.7	10.0	ug/L	500	ND	99.5	76-116	1.42	21	
1,1,1,2-Tetrachloroethane	522.6	10.0	ug/L	500	ND	105	77-121	0.153	25	
Ethylbenzene	525.0	10.0	ug/L	500	ND	105	73-124	1.64	20	
Xylenes, total	1527	20.0	ug/L	1500	ND	102	75-123	1.16	20	
Styrene	524.3	10.0	ug/L	500	ND	105	70-120	0.590	23	
Bromoform	498.5	10.0	ug/L	500	ND	99.7	70-124	1.19	22	
1,2,3-Trichloropropane	517.3	10.0	ug/L	500	ND	103	62-135	2.09	28	
trans-1,4-Dichloro-2-butene	912.3	50.0	ug/L	1030	ND	88.7	50-120	1.56	26	
1,1,2,2-Tetrachloroethane	512.7	10.0	ug/L	500	ND	103	63-126	1.32	24	
1,4-Dichlorobenzene	484.4	10.0	ug/L	500	ND	96.9	72-119	0.515	24	
1,2-Dichlorobenzene	499.1	10.0	ug/L	500	ND	99.8	71-117	1.14	24	
1,2-Dibromo-3-chloropropane	434.2	50.0	ug/L	500	ND	86.8	49-134	1.10	28	
Surrogate: Dibromofluoromethane	*512*		ug/L	*502*		*102*	*57-134*			
Surrogate: Dibromofluoromethane	*512*		ug/L	*502*		*102*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*531*		ug/L	*504*		*105*	*53-140*			
Surrogate: 1,2-Dichloroethane-d4	*531*		ug/L	*504*		*105*	*61-142*			
Surrogate: Toluene-d8	*501*		ug/L	*505*		*99.4*	*86-114*			
Surrogate: Toluene-d8	*501*		ug/L	*505*		*99.4*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*500*		ug/L	*502*		*99.7*	*78-121*			
Surrogate: 4-Bromofluorobenzene	*500*		ug/L	*502*		*99.7*	*80-116*			
Matrix Spike Dup (1HJ1301-MSD2)	**Source: 1HJ1340-05**	Prepared: 10/21/24 00:00 Analyzed: 10/22/24 05:32								
Chloromethane	337.5	10.0	ug/L	300	ND	112	61-152	2.92	26	
Vinyl Chloride	315.4	10.0	ug/L	300	ND	105	66-149	6.15	23	
Bromomethane	355.1	10.0	ug/L	300	ND	118	43-171	3.27	29	
Chloroethane	281.7	10.0	ug/L	300	ND	93.9	69-148	1.58	25	
Trichlorofluoromethane	262.5	10.0	ug/L	300	ND	87.5	62-163	4.76	25	
1,1-Dichloroethylene	494.6	10.0	ug/L	500	ND	98.9	70-148	4.37	22	
Acetone	1220	100	ug/L	1010	ND	121	45-173	0.139	30	
Methyl Iodide	1068	10.0	ug/L	1020	ND	105	62-167	2.38	24	
Carbon Disulfide	745.3	10.0	ug/L	1030	ND	72.6	71-163	3.92	22	
Methylene Chloride	510.6	50.0	ug/L	500	ND	102	69-140	1.59	19	
Acrylonitrile	918.8	50.0	ug/L	1000	ND	91.5	38-147	1.39	30	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1301 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1HJ1301-MSD2)	**Source: 1HJ1340-05**	Prepared: 10/21/24 00:00 Analyzed: 10/22/24 05:32								
trans-1,2-Dichloroethylene	518.9	10.0	ug/L	500	ND	104	69-144	3.54	22	
1,1-Dichloroethane	513.8	10.0	ug/L	500	ND	103	70-138	4.10	20	
Vinyl Acetate	1030	50.0	ug/L	1000	ND	103	58-142	1.37	24	
cis-1,2-Dichloroethylene	499.5	10.0	ug/L	500	ND	99.9	68-151	3.35	22	
2-Butanone (MEK)	1127	100	ug/L	1020	ND	111	50-160	2.23	23	
Bromochloromethane	529.1	10.0	ug/L	500	ND	106	65-143	0.903	22	
Chloroform	510.3	10.0	ug/L	500	ND	102	71-143	3.31	21	
1,1,1-Trichloroethane	505.3	10.0	ug/L	500	ND	101	63-133	3.69	23	
Carbon Tetrachloride	513.8	10.0	ug/L	500	ND	103	63-142	4.23	22	
Benzene	518.7	10.0	ug/L	500	ND	104	69-133	3.21	18	
1,2-Dichloroethane	570.9	10.0	ug/L	500	ND	114	63-138	1.13	20	
Trichloroethylene	499.2	10.0	ug/L	500	ND	99.8	71-133	3.17	23	
1,2-Dichloropropane	510.8	10.0	ug/L	500	ND	102	69-132	1.96	20	
Dibromomethane	540.7	10.0	ug/L	500	ND	108	70-147	0.352	22	
Bromodichloromethane	514.7	10.0	ug/L	500	ND	103	67-130	1.89	21	
cis-1,3-Dichloropropene	483.2	10.0	ug/L	500	ND	96.6	61-126	0.103	21	
4-Methyl-2-pentanone (MIBK)	1149	50.0	ug/L	1000	ND	115	55-147	0.218	23	
Toluene	499.6	10.0	ug/L	500	ND	99.9	71-133	3.75	19	
trans-1,3-Dichloropropene	495.5	10.0	ug/L	500	ND	99.1	63-124	0.121	21	
1,1,2-Trichloroethane	515.6	10.0	ug/L	500	ND	103	69-133	0.657	19	
Tetrachloroethylene	501.0	10.0	ug/L	500	ND	100	70-124	4.81	24	
2-Hexanone (MBK)	1110	50.0	ug/L	993	ND	112	53-141	0.198	24	
Dibromochloromethane	513.4	10.0	ug/L	500	ND	103	74-122	1.66	21	
1,2-Dibromoethane	532.2	10.0	ug/L	500	ND	106	66-127	0.754	23	
Chlorobenzene	501.1	10.0	ug/L	500	ND	100	76-116	2.93	21	
1,1,1,2-Tetrachloroethane	522.9	10.0	ug/L	500	ND	105	77-121	2.98	25	
Ethylbenzene	524.9	10.0	ug/L	500	ND	105	73-124	4.54	20	
Xylenes, total	1539	20.0	ug/L	1500	ND	103	75-123	3.66	20	
Styrene	531.3	10.0	ug/L	500	ND	106	70-120	2.55	23	
Bromoform	517.2	10.0	ug/L	500	ND	103	70-124	1.64	22	
1,2,3-Trichloropropane	534.6	10.0	ug/L	500	ND	107	62-135	0.0748	28	
trans-1,4-Dichloro-2-butene	943.8	50.0	ug/L	1030	ND	91.8	50-120	1.05	26	
1,1,2,2-Tetrachloroethane	513.1	10.0	ug/L	500	ND	103	63-126	3.09	24	
1,4-Dichlorobenzene	487.6	10.0	ug/L	500	ND	97.5	72-119	3.41	24	
1,2-Dichlorobenzene	503.1	10.0	ug/L	500	ND	101	71-117	3.01	24	
1,2-Dibromo-3-chloropropane	455.6	50.0	ug/L	500	ND	91.1	49-134	1.85	28	
Surrogate: Dibromofluoromethane	*511*		ug/L	*502*		*102*	*57-134*			
Surrogate: Dibromofluoromethane	*511*		ug/L	*502*		*102*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*531*		ug/L	*504*		*105*	*53-140*			
Surrogate: 1,2-Dichloroethane-d4	*531*		ug/L	*504*		*105*	*61-142*			
Surrogate: Toluene-d8	*507*		ug/L	*505*		*100*	*86-114*			
Surrogate: Toluene-d8	*507*		ug/L	*505*		*100*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*498*		ug/L	*502*		*99.3*	*78-121*			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1301 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1HJ1301-MSD2)	**Source: 1HJ1340-05**		Prepared: 10/21/24 00:00 Analyzed: 10/22/24 05:32							
Surrogate: 4-Bromofluorobenzene	*498*		ug/L	*502*		*99.3*	*80-116*			
Batch 1HJ1355 - EPA 5030B - EPA 8260B										
Blank (1HJ1355-BLK1)			Prepared: 10/22/24 00:00 Analyzed: 10/22/24 11:05							
Acrylonitrile	<5.0	5.0	ug/L							
Surrogate: Dibromofluoromethane	*49.7*		ug/L	*50.2*		*99.0*	*57-134*			
Surrogate: 1,2-Dichloroethane-d4	*53.4*		ug/L	*50.4*		*106*	*53-140*			
Surrogate: Toluene-d8	*47.5*		ug/L	*50.5*		*94.2*	*86-114*			
Surrogate: 4-Bromofluorobenzene	*49.8*		ug/L	*50.2*		*99.2*	*78-121*			
Blank (1HJ1355-BLK2)			Prepared: 10/22/24 00:00 Analyzed: 10/23/24 00:08							
Acrylonitrile	<5.0	5.0	ug/L							
Surrogate: Dibromofluoromethane	*47.7*		ug/L	*50.2*		*95.0*	*57-134*			
Surrogate: 1,2-Dichloroethane-d4	*51.7*		ug/L	*50.4*		*103*	*53-140*			
Surrogate: Toluene-d8	*47.4*		ug/L	*50.5*		*93.8*	*86-114*			
Surrogate: 4-Bromofluorobenzene	*49.6*		ug/L	*50.2*		*98.8*	*78-121*			
LCS (1HJ1355-BS1)			Prepared: 10/22/24 00:00 Analyzed: 10/22/24 09:57							
Acrylonitrile	90.68	5.0	ug/L	50.2		181	56-135			Q2
Surrogate: Dibromofluoromethane	*49.9*		ug/L	*50.2*		*99.4*	*57-134*			
Surrogate: 1,2-Dichloroethane-d4	*52.1*		ug/L	*50.4*		*103*	*53-140*			
Surrogate: Toluene-d8	*49.8*		ug/L	*50.5*		*98.8*	*86-114*			
Surrogate: 4-Bromofluorobenzene	*49.4*		ug/L	*50.2*		*98.4*	*78-121*			
LCS (1HJ1355-BS2)			Prepared: 10/22/24 00:00 Analyzed: 10/22/24 23:01							
Acrylonitrile	85.78	5.0	ug/L	50.2		171	56-135			Q2
Surrogate: Dibromofluoromethane	*47.2*		ug/L	*50.2*		*94.0*	*57-134*			
Surrogate: 1,2-Dichloroethane-d4	*49.5*		ug/L	*50.4*		*98.3*	*53-140*			
Surrogate: Toluene-d8	*49.8*		ug/L	*50.5*		*98.7*	*86-114*			
Surrogate: 4-Bromofluorobenzene	*50.1*		ug/L	*50.2*		*99.9*	*78-121*			
LCS Dup (1HJ1355-BSD1)			Prepared: 10/22/24 00:00 Analyzed: 10/22/24 10:20							
Acrylonitrile	88.06	5.0	ug/L	50.2		175	56-135	2.93	16	Q2
Surrogate: Dibromofluoromethane	*50.2*		ug/L	*50.2*		*100*	*57-134*			
Surrogate: 1,2-Dichloroethane-d4	*52.2*		ug/L	*50.4*		*104*	*53-140*			
Surrogate: Toluene-d8	*50.0*		ug/L	*50.5*		*99.0*	*86-114*			
Surrogate: 4-Bromofluorobenzene	*49.9*		ug/L	*50.2*		*99.4*	*78-121*			
LCS Dup (1HJ1355-BSD2)			Prepared: 10/22/24 00:00 Analyzed: 10/22/24 23:23							
Acrylonitrile	85.67	5.0	ug/L	50.2		171	56-135	0.128	16	Q2
Surrogate: Dibromofluoromethane	*47.1*		ug/L	*50.2*		*93.7*	*57-134*			
Surrogate: 1,2-Dichloroethane-d4	*49.9*		ug/L	*50.4*		*99.0*	*53-140*			
Surrogate: Toluene-d8	*50.3*		ug/L	*50.5*		*99.6*	*86-114*			

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							
Surrogate: 4-Bromofluorobenzene	*50.0*		ug/L	*50.2*		*99.7*	*78-121*			
Matrix Spike (1HJ1355-MS1)		**Source: 1HJ1617-04**	Prepared: 10/22/24 00:00 Analyzed: 10/22/24 21:30							
Acrylonitrile	851.1	50.0	ug/L	502	ND	170	38-147			M1
Surrogate: Dibromofluoromethane	*469*		ug/L	*502*		*93.3*	*57-134*			
Surrogate: 1,2-Dichloroethane-d4	*492*		ug/L	*504*		*97.7*	*53-140*			
Surrogate: Toluene-d8	*498*		ug/L	*505*		*98.7*	*86-114*			
Surrogate: 4-Bromofluorobenzene	*500*		ug/L	*502*		*99.7*	*78-121*			
Matrix Spike (1HJ1355-MS2)		**Source: 1HJ1633-01**	Prepared: 10/22/24 00:00 Analyzed: 10/23/24 08:04							
Acrylonitrile	917.8	50.0	ug/L	502	ND	183	38-147			M1
Surrogate: Dibromofluoromethane	*468*		ug/L	*502*		*93.3*	*57-134*			
Surrogate: 1,2-Dichloroethane-d4	*499*		ug/L	*504*		*99.1*	*53-140*			
Surrogate: Toluene-d8	*502*		ug/L	*505*		*99.4*	*86-114*			
Surrogate: 4-Bromofluorobenzene	*500*		ug/L	*502*		*99.6*	*78-121*			
Matrix Spike Dup (1HJ1355-MSD1)		**Source: 1HJ1617-04**	Prepared: 10/22/24 00:00 Analyzed: 10/22/24 21:53							
Acrylonitrile	857.2	50.0	ug/L	502	ND	171	38-147	0.714	30	M1
Surrogate: Dibromofluoromethane	*472*		ug/L	*502*		*94.0*	*57-134*			
Surrogate: 1,2-Dichloroethane-d4	*500*		ug/L	*504*		*99.4*	*53-140*			
Surrogate: Toluene-d8	*501*		ug/L	*505*		*99.3*	*86-114*			
Surrogate: 4-Bromofluorobenzene	*496*		ug/L	*502*		*98.9*	*78-121*			
Matrix Spike Dup (1HJ1355-MSD2)		**Source: 1HJ1633-01**	Prepared: 10/22/24 00:00 Analyzed: 10/23/24 08:26							
Acrylonitrile	880.4	50.0	ug/L	502	ND	175	38-147	4.16	30	M1
Surrogate: Dibromofluoromethane	*467*		ug/L	*502*		*93.1*	*57-134*			
Surrogate: 1,2-Dichloroethane-d4	*500*		ug/L	*504*		*99.2*	*53-140*			
Surrogate: Toluene-d8	*498*		ug/L	*505*		*98.7*	*86-114*			
Surrogate: 4-Bromofluorobenzene	*504*		ug/L	*502*		*100*	*78-121*			

Determination of Conventional Chemistry Parameters	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1006 - General Prep Micro - SM 5210 B										
Blank (1HJ1006-BLK1)			Prepared: 10/16/24 17:19 Analyzed: 10/16/24 18:42							
BOD (5 day)	<2	2	mg/L							
Duplicate (1HJ1006-DUP2)		**Source: 1HJ1321-01**	Prepared: 10/16/24 17:19 Analyzed: 10/16/24 19:47							
BOD (5 day)	243	24	mg/L		242			0.412	30	
Reference (1HJ1006-SRM1)			Prepared: 10/16/24 17:19 Analyzed: 10/16/24 18:57							
BOD (5 day)	203	100	mg/L	198		102	84.6-115.4			

Batch 1HJ1020 - Wet Chem Preparation - USGS I-3765-85

Determination of Conventional Chemistry Parameters	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (1HJ1020-BLK1)			Prepared: 10/17/24 08:37 Analyzed: 10/21/24 09:50							
Total Suspended Solids (TSS)	<1	1	mg/L							
LCS (1HJ1020-BS1)			Prepared: 10/17/24 08:37 Analyzed: 10/21/24 09:50							
Total Suspended Solids (TSS)	15.9	1	mg/L	15.0		106	71-110			
Duplicate (1HJ1020-DUP1)	**Source: 1HJ1331-01**		Prepared: 10/17/24 08:37 Analyzed: 10/21/24 09:50							
Total Suspended Solids (TSS)	70.0	1	mg/L		74.0			5.56	30	

Batch 1HJ1022 - Wet Chem Preparation - USGS I-1750-85

Determination of Conventional Chemistry Parameters	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (1HJ1022-BLK1)			Prepared: 10/17/24 08:45 Analyzed: 10/17/24 12:30							
Total Dissolved Solids (TDS)	<5	5	mg/L							
LCS (1HJ1022-BS1)			Prepared: 10/17/24 08:45 Analyzed: 10/17/24 12:30							
Total Dissolved Solids (TDS)	96	5	mg/L	100		96.5	79-114			
Duplicate (1HJ1022-DUP1)	**Source: 1HJ1211-01**		Prepared: 10/17/24 08:45 Analyzed: 10/17/24 12:30							
Total Dissolved Solids (TDS)	1700	5	mg/L		1730			1.56	24	

Batch 1HJ1125 - Wet Chem Preparation - 2320B

Determination of Conventional Chemistry Parameters	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (1HJ1125-BLK1)			Prepared: 10/18/24 10:42 Analyzed: 10/18/24 14:58							
Alkalinity, as CaCO3	<10	10	mg/L							
LCS (1HJ1125-BS1)			Prepared: 10/18/24 10:42 Analyzed: 10/18/24 14:58							
Alkalinity, as CaCO3	50.4	10	mg/L	50.0		101	82-112			
Matrix Spike (1HJ1125-MS1)	**Source: 1HJ1319-04**		Prepared: 10/18/24 10:42 Analyzed: 10/18/24 14:58							
Alkalinity, as CaCO3	200	10	mg/L	50.0	163	73.2	70-113			
Matrix Spike Dup (1HJ1125-MSD1)	**Source: 1HJ1319-04**		Prepared: 10/18/24 10:42 Analyzed: 10/18/24 14:58							
Alkalinity, as CaCO3	201	10	mg/L	50.0	163	75.6	70-113	0.600	10	

Batch 1HJ1184 - Wet Chem Preparation - EPA 9040

Determination of Conventional Chemistry Parameters	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Duplicate (1HJ1184-DUP1)	**Source: 1HJ1337-04**		Prepared & Analyzed: 10/21/24 09:16							
pH	6.29	0.5	pH		6.29			0.0318	10	
Reference (1HJ1184-SRM1)			Prepared & Analyzed: 10/21/24 09:16							
pH	6.96	0.5	pH	7.00		99.4	98.6-101.4			
Reference (1HJ1184-SRM2)			Prepared & Analyzed: 10/21/24 09:16							
pH	7.00	0.5	pH	7.00		99.9	98.6-101.4			

Batch 1HJ1226 - General Prep HPLC/IC - TIMBERLINE

Determination of Conventional Chemistry Parameters	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Blank (1HJ1226-BLK1)			Prepared: 10/21/24 14:46 Analyzed: 10/22/24 14:09							
Nitrogen, Ammonia	<0.10	0.10	mg/L							
LCS (1HJ1226-BS1)			Prepared: 10/21/24 14:46 Analyzed: 10/22/24 14:11							
Nitrogen, Ammonia	5.11	0.10	mg/L	5.06		101	90-114			
Matrix Spike (1HJ1226-MS1)	**Source: 1HJ1325-02**		Prepared: 10/21/24 14:46 Analyzed: 10/22/24 14:12							

Determination of Conventional Chemistry Parameters	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1226 - General Prep HPLC/IC - TIMBERLINE										
Matrix Spike (1HJ1226-MS1)		**Source: 1HJ1325-02**	Prepared: 10/21/24 14:46 Analyzed: 10/22/24 14:12							
Nitrogen, Ammonia	4.24	0.10	mg/L	5.06	0.181	80.3	84-115			M2
Matrix Spike Dup (1HJ1226-MSD1)		**Source: 1HJ1325-02**	Prepared: 10/21/24 14:46 Analyzed: 10/22/24 14:14							**R1**
Nitrogen, Ammonia	5.92	0.10	mg/L	5.06	0.181	113	84-115	33.0	20	
Batch 1HJ1457 - Wet Chem Preparation - EPA 410.4										
Blank (1HJ1457-BLK1)			Prepared: 10/24/24 07:48 Analyzed: 10/24/24 11:05							
COD, total	<54	54	mg/L							
LCS (1HJ1457-BS1)			Prepared: 10/24/24 07:48 Analyzed: 10/24/24 11:05							
COD, total	1050	108	mg/L	1000		105	90-110			
Matrix Spike (1HJ1457-MS1)		**Source: 1HJ1376-04**	Prepared: 10/24/24 07:48 Analyzed: 10/24/24 11:05							
COD, total	1070	108	mg/L	1000	ND	107	90-110			
Matrix Spike Dup (1HJ1457-MSD1)		**Source: 1HJ1376-04**	Prepared: 10/24/24 07:48 Analyzed: 10/24/24 11:05							
COD, total	1100	108	mg/L	1000	ND	110	90-110	2.10	10	

Determination of Inorganic Anions	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1779 - General Prep HPLC/IC - EPA 9056										
Blank (1HJ1779-BLK1)			Prepared & Analyzed: 10/25/24 10:07							
Chloride	<1.0	1.0	mg/L							
Sulfate	<1.0	1.0	mg/L							
LCS (1HJ1779-BS1)			Prepared & Analyzed: 10/25/24 10:44							
Chloride	15.53	1.0	mg/L	15.3		102	80-120			
Sulfate	34.71	1.0	mg/L	34.2		102	80-120			
LCS Dup (1HJ1779-BSD1)			Prepared & Analyzed: 10/25/24 11:02							
Chloride	15.54	1.0	mg/L	15.3		102	80-120	0.0386	10	
Sulfate	34.70	1.0	mg/L	34.2		102	80-120	0.0461	10	
Matrix Spike (1HJ1779-MS1)		**Source: 1HJ1352-01**	Prepared & Analyzed: 10/25/24 13:18							
Chloride	425.9	10.0	mg/L	153	280.6	95.0	81-116			
Sulfate	831.5	10.0	mg/L	342	498.3	97.6	87-113			
Matrix Spike Dup (1HJ1779-MSD1)		**Source: 1HJ1352-01**	Prepared & Analyzed: 10/25/24 13:36							
Chloride	424.1	10.0	mg/L	153	280.6	93.9	81-116	0.416	10	
Sulfate	842.6	10.0	mg/L	342	498.3	101	87-113	1.32	10	

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1084 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1HJ1084-BLK1)			Prepared: 10/17/24 15:51 Analyzed: 10/18/24 22:54							

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1084 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1HJ1084-BLK1)			Prepared: 10/17/24 15:51 Analyzed: 10/18/24 22:54							
Antimony, total	<0.0020	0.0020	mg/L							
Arsenic, total	<0.0040	0.0040	mg/L							
Barium, total	<0.0040	0.0040	mg/L							
Beryllium, total	<0.0040	0.0040	mg/L							
Cadmium, total	<0.0008	0.0008	mg/L							
Chromium, total	<0.0080	0.0080	mg/L							
Cobalt, total	<0.0004	0.0004	mg/L							
Copper, total	<0.0040	0.0040	mg/L							
Lead, total	<0.0040	0.0040	mg/L							
Nickel, total	<0.0040	0.0040	mg/L							
Selenium, total	<0.0040	0.0040	mg/L							
Silver, total	<0.0040	0.0040	mg/L							
Thallium, total	<0.0020	0.0020	mg/L							
Vanadium, total	<0.0200	0.0200	mg/L							
Zinc, total	<0.0200	0.0200	mg/L							
LCS (1HJ1084-BS1)			Prepared: 10/17/24 15:51 Analyzed: 10/18/24 23:00							
Antimony, total	0.0946	0.0020	mg/L	0.100		94.6	80-120			
Arsenic, total	0.0953	0.0040	mg/L	0.100		95.3	80-120			
Barium, total	0.104	0.0040	mg/L	0.100		104	80-120			
Beryllium, total	0.0974	0.0040	mg/L	0.100		97.4	80-120			
Cadmium, total	0.0916	0.0008	mg/L	0.100		91.6	80-120			
Chromium, total	0.0919	0.0080	mg/L	0.100		91.9	80-120			
Cobalt, total	0.0958	0.0004	mg/L	0.100		95.8	80-120			
Copper, total	0.0929	0.0040	mg/L	0.100		92.9	80-120			
Lead, total	0.0986	0.0040	mg/L	0.100		98.6	80-120			
Nickel, total	0.0929	0.0040	mg/L	0.100		92.9	80-120			
Selenium, total	0.0934	0.0040	mg/L	0.100		93.4	80-120			
Silver, total	0.0964	0.0040	mg/L	0.100		96.4	80-120			
Thallium, total	0.0913	0.0020	mg/L	0.100		91.3	80-120			
Vanadium, total	0.0951	0.0200	mg/L	0.100		95.1	80-120			
Zinc, total	0.0910	0.0200	mg/L	0.100		91.0	80-120			
Matrix Spike (1HJ1084-MS1)	**Source: 1HJ1337-01**		Prepared: 10/17/24 15:51 Analyzed: 10/18/24 23:24							
Antimony, total	0.0958	0.0020	mg/L	0.100	ND	95.8	75-125			
Arsenic, total	0.0953	0.0040	mg/L	0.100	0.0013	94.0	75-125			
Barium, total	0.242	0.0040	mg/L	0.100	0.136	106	75-125			
Beryllium, total	0.0965	0.0040	mg/L	0.100	ND	96.5	75-125			
Cadmium, total	0.0940	0.0008	mg/L	0.100	ND	94.0	75-125			
Chromium, total	0.0924	0.0080	mg/L	0.100	0.0007	91.7	75-125			
Cobalt, total	0.0939	0.0004	mg/L	0.100	ND	93.9	75-125			
Copper, total	0.0891	0.0040	mg/L	0.100	ND	89.1	75-125			
Lead, total	0.0964	0.0040	mg/L	0.100	ND	96.4	75-125			
Nickel, total	0.0935	0.0040	mg/L	0.100	0.0016	91.9	75-125			
Selenium, total	0.0967	0.0040	mg/L	0.100	ND	96.7	75-125			

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1HJ1084 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Matrix Spike (1HJ1084-MS1)	**Source: 1HJ1337-01**	Prepared: 10/17/24 15:51 Analyzed: 10/18/24 23:24								
Silver, total	0.0955	0.0040	mg/L	0.100	ND	95.5	75-125			
Thallium, total	0.0919	0.0020	mg/L	0.100	ND	91.9	75-125			
Vanadium, total	0.0977	0.0200	mg/L	0.100	ND	97.7	75-125			
Zinc, total	0.0911	0.0200	mg/L	0.100	ND	91.1	75-125			
Matrix Spike Dup (1HJ1084-MSD1)	**Source: 1HJ1337-01**	Prepared: 10/17/24 15:51 Analyzed: 10/18/24 23:43								
Antimony, total	0.0945	0.0020	mg/L	0.100	ND	94.5	75-125	1.31	20	
Arsenic, total	0.0917	0.0040	mg/L	0.100	0.0013	90.3	75-125	3.89	20	
Barium, total	0.244	0.0040	mg/L	0.100	0.136	108	75-125	0.720	20	
Beryllium, total	0.0936	0.0040	mg/L	0.100	ND	93.6	75-125	3.06	20	
Cadmium, total	0.0903	0.0008	mg/L	0.100	ND	90.3	75-125	4.08	20	
Chromium, total	0.0905	0.0080	mg/L	0.100	0.0007	89.8	75-125	2.04	20	
Cobalt, total	0.0908	0.0004	mg/L	0.100	ND	90.8	75-125	3.37	20	
Copper, total	0.0850	0.0040	mg/L	0.100	ND	85.0	75-125	4.78	20	
Lead, total	0.0939	0.0040	mg/L	0.100	ND	93.9	75-125	2.62	20	
Nickel, total	0.0905	0.0040	mg/L	0.100	0.0016	88.9	75-125	3.24	20	
Selenium, total	0.0947	0.0040	mg/L	0.100	ND	94.7	75-125	2.06	20	
Silver, total	0.0935	0.0040	mg/L	0.100	ND	93.5	75-125	2.17	20	
Thallium, total	0.0904	0.0020	mg/L	0.100	ND	90.4	75-125	1.69	20	
Vanadium, total	0.0949	0.0200	mg/L	0.100	ND	94.9	75-125	2.93	20	
Zinc, total	0.0901	0.0200	mg/L	0.100	ND	90.1	75-125	1.12	20	
Post Spike (1HJ1084-PS1)	**Source: 1HJ1337-01**	Prepared: 10/17/24 15:51 Analyzed: 10/18/24 23:49								
Antimony, total	0.0767		mg/L	0.0800	0.0003	95.4	80-120			
Arsenic, total	0.0745		mg/L	0.0800	0.0013	91.5	80-120			
Barium, total	0.217		mg/L	0.0800	0.133	105	80-120			
Beryllium, total	0.0775		mg/L	0.0800	0.000005	96.8	80-120			
Cadmium, total	0.0749		mg/L	0.0800	-0.00001	93.6	80-120			
Chromium, total	0.0740		mg/L	0.0800	0.0007	91.6	80-120			
Cobalt, total	0.0738		mg/L	0.0800	0.0001	92.1	80-120			
Copper, total	0.0713		mg/L	0.0800	0.0006	88.3	80-120			
Lead, total	0.0768		mg/L	0.0800	0.00002	96.0	80-120			
Nickel, total	0.0730		mg/L	0.0800	0.0015	89.4	80-120			
Selenium, total	0.0712		mg/L	0.0800	0.0004	88.5	80-120			
Silver, total	0.0776		mg/L	0.0800	0.0001	96.9	80-120			
Thallium, total	0.0741		mg/L	0.0800	0.0001	92.5	80-120			
Vanadium, total	0.0781		mg/L	0.0800	0.0031	93.7	80-120			
Zinc, total	0.0727		mg/L	0.0800	0.0031	87.0	80-120			

Batch Quality Control Summary: Microbac Laboratories Inc., - Marietta, OH

Volatile Organic Compounds by GCMS	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Volatile Organic Compounds by GCMS	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B4J1197 - 5021 - EPA RSK-175										
Blank (B4J1197-BLK1)				Prepared: 10/22/24 14:01 Analyzed: 10/22/24 14:37						
Methane	<5.00	5.00	ug/L							
Ethene	<5.00	5.00	ug/L							
Ethane	<5.00	5.00	ug/L							
Propane	<5.00	5.00	ug/L							
LCS (B4J1197-BS1)				Prepared: 10/22/24 14:01 Analyzed: 10/22/24 14:50						
Methane	107	5.00	ug/L	114.1884		93.8	85-115			
Ethene	181	5.00	ug/L	199.6873		90.7	85-115			
Ethane	192	5.00	ug/L	213.9965		89.6	85-115			
Propane	271	5.00	ug/L	313.9185		86.3	85-115			
LCS Dup (B4J1197-BSD1)				Prepared: 10/22/24 14:01 Analyzed: 10/22/24 15:03						
Methane	110	5.00	ug/L	114.1884		96.3	85-115	2.65	40	
Ethene	184	5.00	ug/L	199.6873		92.3	85-115	1.74	40	
Ethane	195	5.00	ug/L	213.9965		91.0	85-115	1.51	40	
Propane	275	5.00	ug/L	313.9185		87.6	85-115	1.50	40	
Batch B4J1225 - 5021 - EPA RSK-175										
Blank (B4J1225-BLK1)				Prepared: 10/23/24 10:40 Analyzed: 10/23/24 13:12						
Methane	<5.00	5.00	ug/L							
Ethene	<5.00	5.00	ug/L							
Ethane	<5.00	5.00	ug/L							
Propane	<5.00	5.00	ug/L							
LCS (B4J1225-BS1)				Prepared: 10/23/24 10:40 Analyzed: 10/23/24 13:26						
Methane	111	5.00	ug/L	114.1884		97.6	85-115			
Ethene	204	5.00	ug/L	199.6873		102	85-115			
Ethane	216	5.00	ug/L	213.9965		101	85-115			
Propane	319	5.00	ug/L	313.9185		102	85-115			
LCS Dup (B4J1225-BSD1)				Prepared: 10/23/24 10:40 Analyzed: 10/23/24 13:40						
Methane	126	5.00	ug/L	114.1884		110	85-115	11.9	40	
Ethene	230	5.00	ug/L	199.6873		115	85-115	12.0	40	
Ethane	246	5.00	ug/L	213.9965		115	85-115	12.6	40	
Propane	368	5.00	ug/L	313.9185		117	85-115	14.3	40	Q

Definitions

A15:	Proper preservation cannot be achieved due to the sample matrix.
D3:	Dilution was performed due to high target analyte concentration.
H4:	The test was performed outside of the EPA recommended holding time of 15 minutes.
M1:	Matrix spike recovery is above acceptance limits.
M2:	Matrix spike recovery is below acceptance limits.
MDL:	Minimum Detection Limit
Q:	One or more quality control criteria failed.
Q2:	LCS recovery is above acceptance limits.
Q3:	LCS 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:	4.9°C

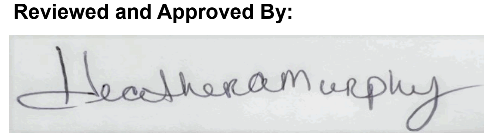
Cooler Inspection Checklist

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
11/01/24 08:14

CHAIN OF CUSTODY

MICROBAC®

600 East 17th Street South
Newton, IA 50208
641-792-8451

1HJ1337
HLW Engineering
PM: Heather Murphy

Page 1 of
...ed: 9/30/2024 2:59:01P
...w.keystonelabs.com

SITE INFORMATION

Sampler: TODD WHIPPLE

Project: Marshall Sanitary Landfill-B1

6003

REPORT TO

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

INVOICE TO

Don Ballalatak
Marshall County Landfill
2313 Marshalltown Blvd
Marshalltown, IA 50158

SPECIAL INSTRUCTIONS

None

Turn Around Time

☐ Standard ☐ RUSH, need by __/__/__

LAB USE ONLY

Work Order: 1HJ1337

Temperature: 4.9

Turn-Cooler: No

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

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses	Lab Sample Number
-001	MW-66 (B) DRY	Aqueous	GRAB	10/15/24	—	0	lndfill-app1-voc-group, lndfll-app1-metals-6020	—
-001	MW-85 (B)	Aqueous	GRAB	10/15/24	11:33	7	lndfill-app1-voc-group, lndfll-app1-metals-6020	01
-001	MW-98 (B)	Aqueous	GRAB	10/15/24	14:53	7	lndfill-app1-voc-group, lndfll-app1-metals-6020	02
-001	MW-99 (B)	Aqueous	GRAB	10/15/24	10:10	7	lndfill-app1-voc-group, lndfll-app1-metals-6020	03
-001	MW-49	Aqueous	GRAB	10/15/24	12:38	11	alk-caco3-2320, lndfill-app1-voc-group, lndfll-app1-metals-6020, permgas-rsk-175, ph-9040	04
-001	MW-54	Aqueous	GRAB	10/15/24	12:20	11	alk-caco3-2320, lndfill-app1-voc-group, lndfll-app1-metals-6020, permgas-rsk-175, ph-9040	05

Relinquished By: [signature] Date/Time: 10/16/24

Relinquished By: Date/Time:

Received By: Date/Time:

Received for Lab By: [signature] Date/Time: 10/16/2024 10:26 AM

Remarks:

Original - Lab Copy Yellow - Sampler Copy

CHAIN OF CUS[TODY]

MICROBAC®
600 East 17th Street Sou[th]
Newton, IA 50208
641-792-8451

1HJ1337
HLW Engineering
PM: Heather Murphy

SITE INFORMATION

Sampler:

Project: Marshall Sanitary Landfill-B1
6003

REPORT TO

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

INVOICE TO

Don Ballalatak
Marshall County Landfill
2313 Marshalltown Blvd
Marshalltown, IA 50158

SPECIAL INSTRUCTIONS

None

Turn Around Time
☐ Standard ☐ RUSH, need by __/__/__

LAB USE ONLY

Work Order
Temperature 4.9
Turn-Cooler: No

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

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses	Lab Sample Number
-001	MW-81	Aqueous	GRAB	10/15/24	15:48	11	alk-caco3-2320, lndfll-app1-voc-group, lndfll-app1-metals-6020, permgas-rsk-175, ph-9040	06
-001	MW-87	Aqueous	GRAB	10/15/24	15:36	7	lndfll-app1-voc-group, lndfll-app1-metals-6020	07
-001	MW-89	Aqueous	GRAB	10/15/24	15:20	7	lndfll-app1-voc-group, lndfll-app1-metals-6020	08
-001	MW-91	Aqueous	GRAB	10/15/24	15:09	7	lndfll-app1-voc-group, lndfll-app1-metals-6020	09
-001	MW-93	Aqueous	GRAB	10/15/24	9:53	7	lndfll-app1-voc-group, lndfll-app1-metals-6020	10
-001	MW-94	Aqueous	GRAB	10/15/24	12:03	11	alk-caco3-2320, lndfll-app1-voc-group, lndfll-app1-metals-6020, permgas-rsk-175, ph-9040	11

Relinquished By: Todd Whipple Date/Time: 10/16/24
Relinquished By: Date/Time:
Received By: Date/Time:
Received for Lab By: [signature] Date/Time: 10/16/2024 10:26 AM

Remarks:

Original - Lab Copy Yellow - Sampler Copy

CHAIN OF CUSTODY RECORD

MICROBAC®

600 East 17th Street
Newton, IA 50208
641-792-8451

1HJ1337
HLW Engineering
PM: Heather Murphy

Printed: 9/30/2024 2:59:01P

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SITE INFORMATION

Sampler:

Project: Marshall Sanitary Landfill-B1
6003

REPORT TO

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

INVOICE TO

Don Ballalatak
Marshall County Landfill
2313 Marshalltown Blvd
Marshalltown, IA 50158

SPECIAL INSTRUCTIONS

None

Turn Around Time
☐ Standard ☐ RUSH, need by __/__/__

LAB USE ONLY

Work Order
Temperature 4.9
Turn-Cooler: No

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

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses		Lab Sample Number
-001	MW-95	Aqueous	GRAB	10/15/24	11:07	7	lndfill-app1-voc-group	lndfll-app1-metals-6020	12
-001	MW-96R	Aqueous	GRAB	10/15/24	13:59	7	lndfill-app1-voc-group	lndfll-app1-metals-6020	13
-001	MW-97	Aqueous	GRAB	10/15/24	11:49	7	lndfill-app1-voc-group	lndfll-app1-metals-6020	14
-001	SRAMP B Tile Dry	Aqueous	GRAB	10/15/24	—	0	lndfill-app1-voc-group	lndfll-app1-metals-6020	—
-001	PECS B Dry	Aqueous	GRAB	10/15/24	—	0	lndfill-app1-voc-group		—
-001	Duplicate	Aqueous	GRAB	10/15/24	✓	1	~~lndfill-app1-voc-group~~	lndfll-app1-metals-6020	15

Relinquished By: Todd Whipple Date/Time: 10/16/24

Received By: Date/Time:

Relinquished By: Date/Time:

Received for Lab By: [signature] Date/Time: 10/16/2024 10:26 AM

Remarks:

Original - Lab Copy Yellow - Sampler Copy

CHAIN OF C

1 H J 1 3 3 7
HLW Engineering
PM: Heather Murphy

MICROBAC®
600 East 17th Street S
Newton, IA 50208
641-792-8451

Printed: 9/30/2024 2:59:01P

www.keystonelabs.com

SITE INFORMATION

Sampler:

Project: Marshall Sanitary Landfill-B1

6003

REPORT TO

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

INVOICE TO

Don Ballalatak
Marshall County Landfill
2313 Marshalltown Blvd
Marshalltown, IA 50158

SPECIAL INSTRUCTIONS

None

Turn Around Time

☐ Standard ☐ RUSH, need by __/__/__

LAB USE ONLY

Work Order

Temperature 4.9

Turn-Cooler: No

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

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses		Lab Sample Number
-001	LW-75	Aqueous	GRAB	10/15/24	13:07	8	alk-caco3-2320 bod-5210 cod-t-410.4 nh3-timberline ph-9040 tds-i-1750-85	as-t-6020 cl-9056-w co-t-6020 permgas-rsk-175 so4-9056-w tss-i-3765-85	16

Relinquished By [signature] Date/Time 10/16/24

Relinquished By Date/Time

Received By Date/Time

Received for Lab By [signature] Date/Time 10/16/2024 10:26 AM

Remarks:

Original - Lab Copy Yellow - Sampler Copy

Appendix D

Field Turbidity Summary

Marshall County Sanitary Landfill

Field Turbidity Over Time

No-Purge Sampling

	10/16/14	1/14/15	4/3/15	7/6/15	10/1/15	4/14/16	10/13/16	4/10/17	7/11/17	10/9/17	1/9/18	4/17/18
Well	**NTU**	**NTU**	**NTU**	**NTU**	**NTU**	**NTU**	**NTU**	**NTU**	**NTU**	**NTU**	**NTU**	**NTU**
49	0.62		0.62		0.18	1.68	1.03	2.32		0.39	13.70	11.77
54	1.73		1.72		1.76	2.30	4.38	6.96		0.24		36.03
66	0.34	1.93	0.74	0.16	0.13	0.96	0.46	3.28				
81	3.79		5.74		0.35	5.04	0.38	12.67		1.90		1.23
85	1.44	15.50	11.12	7.89	12.72	4.86	0.67	8.96		0.63		0.63
87	0.11		0.93		0.11	0.60	0.18	0.43		0.28		0.39
89	0.79		1.62		1.02	1.21	0.36	0.59		0.16		0.69
91	1.93		0.28		0.38	0.71	0.37	0.96	1.75	0.54	3.54	0.60
93	1.14		4.69		17.38	91.67	7.28	16.02		0.79		0.97
94	1.79		34.27		1.66	26.86	1.74	5.29		6.52		3.60
95	0.99		0.19		2.34	9.23	0.26	13.66		1.85		1.02
96R												
97	8.91		1.62		1.15	1.29	0.41	3.89		3.64		0.66
98							2.53	96.54		1.95		94.24
99							1.62	3.10		42.22		12.68
Max	**14.42**	**15.50**	**34.27**	**7.89**	**17.38**	**91.67**	**7.28**	**96.54**	**1.75**	**42.22**	**13.70**	**94.24**
Min	**0.11**	**1.93**	**0.19**	**0.16**	**0.11**	**0.60**	**0.18**	**0.43**	**1.75**	**0.16**	**3.54**	**0.39**
Median	**1.44**	**8.72**	**1.62**	**4.03**	**1.02**	**1.68**	**0.67**	**3.89**	**1.75**	**1.32**	**8.62**	**1.00**
Average	**2.92**	**8.72**	**4.95**	**4.03**	**3.05**	**11.32**	**1.55**	**11.70**	**1.75**	**4.90**	**8.62**	**11.79**

Marshall

Field Turbic

No-Purg

Well	7/2/18 NTU	10/22/18 NTU	4/22/19 NTU	10/23/19 NTU	4/10/20 NTU	10/19/20 NTU	1/7/21 NTU	4/5/21 NTU	7/2/21 NTU	10/8/21 NTU	4/6/22 NTU	10/25/22 NTU
49		21.71	2.42	1.33	3.03	12.50		2.11		1.32	2.73	1.22
54		1.81	2.84	27.00	67.72	8.40		11.60		7.42	13.66	2.27
66												
81		5.52	1.68	0.69	1.85	1.05		7.06		1.06	9.07	1.54
85		0.82	1.07	1.95	1.29	5.18		2.47		1.41	2.78	2.22
87		0.49	0.85	0.87	0.82	1.77		2.28		1.44	1.13	1.05
89		0.92	0.71	1.53	0.90	0.80		3.46		1.40	1.49	1.21
91	2.95	0.70	1.02	0.94	0.83	2.54	1.73	2.11		3.35	6.64	1.37
93		1.24	72.30	4.73	3.08	1.20		2.25	2.95	5.85	1.35	59.40
94		0.88	17.74	1.47	52.74	11.90		36.96		1.48	8.26	1.97
95		0.72	0.72	0.62	1.13	4.40		4.89		2.10	1.76	3.20
96R								153.60	7.92	8.12	59.05	20.70
97		2.99	2.15	1.01	1.19	0.92		1.89		9.53	1.09	1.72
98		3.84	26.54	12.50	16.20	1.97		9.80		11.07	5.72	12.70
99		1.62	1.55	20.00	1.12	1.97		2.44		3.73	1.48	1.70
Max	**2.95**	**21.71**	**72.30**	**27.00**	**67.72**	**12.50**	**1.73**	**153.60**	**7.92**	**11.07**	**59.05**	**59.40**
Min	**2.95**	**0.49**	**0.71**	**0.62**	**0.82**	**0.80**	**1.73**	**1.89**	**2.95**	**1.06**	**1.09**	**1.05**
Median	**2.95**	**1.08**	**1.62**	**1.44**	**1.57**	**1.97**	**1.73**	**2.97**	**5.44**	**2.73**	**2.76**	**1.85**
Average	**2.95**	**3.13**	**9.46**	**5.43**	**11.22**	**4.20**	**1.73**	**17.35**	**5.44**	**4.23**	**8.30**	**8.02**

Marshall

Field Turbic

No-Purg

Well	4/10/23 NTU	7/7/23 NTU	7/20/23 NTU	10/13/23 NTU	4/16/24 NTU	7/18/24 NTU	10/15/24 NTU	Max	Min	Ave	Std Dev
49	2.07			1.54	14.83		8.80	**21.71**	**0.18**	**4.91**	**6.06**
54	6.93			43.51	19.53		5.99	**67.72**	**0.24**	**13.04**	**17.24**
66								**3.28**	**0.13**	**1.00**	**1.09**
81	6.07			3.19	1.56		2.50	**12.67**	**0.35**	**3.52**	**3.22**
85	0.80			3.97	6.76		2.99	**15.50**	**0.63**	**4.27**	**4.28**
87	1.01			3.22	1.82		2.53	**3.22**	**0.11**	**1.06**	**0.84**
89	1.12			2.98	2.11		2.66	**3.46**	**0.16**	**1.32**	**0.85**
91	1.16			3.15	1.69		3.20	**6.64**	**0.28**	**1.78**	**1.44**
93	1.35			2.31	5.75		3.49	**91.67**	**0.79**	**13.96**	**25.49**
94	5.76			2.91	6.96		4.00	**52.74**	**0.88**	**11.18**	**14.41**
95	1.70			2.81	2.27		4.31	**13.66**	**0.19**	**2.87**	**3.23**
96R	2.44	3.77	19.40	13.98	14.22		14.54	**153.60**	**2.44**	**28.89**	**44.12**
97	4.38			1.32	2.20	1.95	1.95	**9.53**	**0.41**	**2.54**	**2.40**
98	53.92			29.91	393.50		6.06	**393.50**	**1.95**	**45.82**	**0.00**
99	0.98			2.59	1.60		3.34	**42.22**	**0.98**	**6.10**	**0.00**
Max	**53.92**	**3.77**	**19.40**	**43.51**	**393.50**	**1.95**	**14.54**				
Min	**0.80**	**3.77**	**19.40**	**1.32**	**1.56**	**1.95**	**1.95**				
Median	**1.89**	**3.77**	**19.40**	**3.07**	**4.01**	**1.95**	**3.42**				
Average	**6.41**	**3.77**	**19.40**	**8.05**	**33.91**	**1.95**	**4.74**				

Appendix E

Running Summary of Prediction Limit Exceedances

Inorganic – Compound concentrations that exceed the Prediction Limits

Spring 2013*	**Fall 2013***
MW-49 – arsenic, barium, cobalt	MW-49 – arsenic, barium, cobalt
MW-54 – barium	MW-54 – barium
MW-81 – barium	MW-81 – barium
MW-94 – barium	MW-94 – cobalt
MW-96 – barium	MW-96 – barium

Spring 2014*	**Fall 2014***
MW-49 – barium, cobalt	MW-49 – arsenic, cobalt
MW-54 – cadmium	MW-54 – none
MW-81 – barium	MW-81 – barium
	MW-94 – cobalt

Spring 2015*	**Fall 2015***
MW-49 – arsenic, cobalt	MW-49 – arsenic, cobalt, nickel
MW-54 – none	MW-54 - cobalt, nickel
MW-81 – barium	MW-81 – barium, cobalt, nickel
MW-93 – none	MW-93 - arsenic, cobalt, nickel
MW-94 – cobalt	MW-94 – arsenic, cobalt, nickel
MW-96 – barium	MW-96 – cobalt, nickel

Spring 2016*	**Fall 2016***
MW-49 – arsenic, cobalt, nickel	MW-49 – arsenic, cobalt, nickel
MW-54 – cobalt, nickel	MW-54 - cobalt, nickel
MW-81 – barium, cobalt, nickel	MW-81 – barium, cobalt, nickel
MW-93 – arsenic, cobalt, nickel	MW-93 - cobalt, nickel
MW-94 – arsenic, cobalt, nickel	MW-94 – arsenic, cobalt, nickel
MW-96 – cobalt, nickel	MW-96 – nickel
MW-97 – cobalt, nickel	

Spring 2017*	**Fall 2017***
MW-49 – arsenic, cobalt, nickel	MW-49 – cobalt
MW-54 – cobalt, nickel	MW-54 - cobalt, nickel
MW-81 – barium, cobalt, nickel	MW-81 – barium, cobalt, nickel
MW-93 – cobalt, nickel	MW-93 - nickel
MW-94 – cobalt, nickel	MW-94 – cobalt, nickel
MW-96 – nickel	MW-96 – nickel

**does not yet include sufficient data from background wells MW-98 and MW-99 in the calculation of Site Prediction Limits for inorganic compounds.*

Spring 2018	**Fall 2018**
MW-49 – arsenic, cobalt, nickel	MW-49 – arsenic, cobalt, nickel
MW-54 – cobalt, nickel	MW-54 - cobalt, nickel
MW-81 – barium, cobalt, nickel	MW-81 – barium, nickel
MW-93 – nickel	MW-93 - nickel
MW-94 – arsenic, cobalt, nickel	MW-94 – cobalt, copper, nickel
MW-96 – nickel	MW-96 – nickel

Spring 2019	**Fall 2019**
MW-49 – arsenic, cobalt, nickel	MW-49 – arsenic, cobalt, nickel
MW-54 – cobalt, nickel	MW-54 - cobalt, nickel
MW-81 – barium, cobalt	MW-81 – barium, cobalt
MW-93 – arsenic, cobalt, nickel	MW-93 - cobalt, nickel
MW-94 – cobalt, nickel	MW-94 – cobalt, nickel
MW-96 – nickel	MW-96 – nickel

Spring 2020	**Fall 2020**
MW-49 – arsenic, cobalt, nickel	MW-49 – arsenic, cobalt, nickel
MW-54 – arsenic, cobalt, copper, nickel, zinc	MW-54 - cobalt, nickel
MW-81 – barium, cobalt	MW-81 – barium, cobalt, nickel
MW-93 – cobalt, nickel	MW-93 - nickel
MW-94 – arsenic, cobalt, nickel	MW-94 – arsenic, cobalt, nickel
MW-96 – nickel	MW-96 – plugged

Spring 2021 (interwell)	**Fall 2021 (interwell)**
MW-49 – arsenic, barium, cobalt, nickel	MW-49 – arsenic, barium, cobalt, nickel
MW-54 –cobalt, nickel	MW-54 - arsenic, cobalt, nickel
MW-81 – barium, cobalt, nickel	MW-81 – barium, cobalt, nickel
MW-91 – selenium	
MW-93 – arsenic, cobalt, copper*, nickel	MW-93 - arsenic, cobalt, nickel
MW-94 – arsenic, cobalt, nickel	MW-94 – arsenic, cobalt, nickel
MW-96R – arsenic, barium, cobalt	MW-96R – arsenic, barium, cobalt

Spring 2022 (interwell)	**Fall 2022 (interwell)**
MW-49 – arsenic, cobalt, nickel	MW-49 – arsenic, cobalt, nickel
MW-54 –cobalt, nickel	MW-54 - cobalt, nickel
MW-81 – arsenic, barium, cobalt, nickel	MW-81 – barium, cobalt, nickel
MW-91 – none	MW-91 – none
MW-93 – arsenic, cobalt, nickel	MW-93 - arsenic, cobalt, nickel
MW-94 – arsenic, cobalt, nickel	MW-94 – arsenic, cobalt
MW-96R – arsenic, cobalt, selenium	MW-96R – arsenic, barium, cobalt

Spring 2022 (intrawell)	**Fall 2022 (intrawell)**
MW-93 – none	MW-93 – none

**starting in 2023 the supplemental wells were no longer evaluated for exceedances of the Prediction Limits*

Spring 2023 (interwell)	**Fall 2023 (interwell)**
MW-93 – arsenic, cobalt, nickel	MW-93 - arsenic, cobalt, nickel
MW-96R –arsenic, cobalt, selenium	MW-96R – arsenic, barium, cobalt

Spring 2023 (intrawell)	**Fall 2023 (intrawell)**
MW-93 – none	MW-93 – none
MW-96R –none	MW-96R –none

Spring 2024 (interwell)	Fall 2024 (interwell)
MW-93 – arsenic, cobalt, nickel	MW-93 - arsenic, cobalt, nickel
MW-96R – selenium	MW-96R –cobalt
Spring 2024 (intrawell)	**Fall 2024 (intrawell)**
MW-93 – none	MW-93 – none
MW-96R –none	MW-96R –none

Organic - Statistically Significant Increases (SSI)

Spring 2013		Fall 2013	
MW-49 –	1,1-dichloroethane 1,4-dichlorobenzene benzene chloroethane cis-1,2-dichloroethylene vinyl chloride	**MW-49 –**	1,1-dichloroethane 1,4-dichlorobenzene chloroethane cis-1,2-dichloroethylene vinyl chloride
MW-54 –	1,1-dichloroethane chloroethane cis-1,2-dichloroethylene	**MW-54 –**	1,1-dichloroethane 1,4-dichlorobenzene benzene chloroethane cis-1,2-dichloroethylene
MW-81 –	1,1-dichloroethane 1,2-dichloroethane 1,2-dichloropropane 1,4-dichlorobenzene benzene chloroethane cis-1,2-dichloroethylene tetrachloroethene trans-1,2-dichloroethylene trichloroethene vinyl chloride	**MW-81 –**	1,1-dichloroethane 1,2-dichloroethane 1,2-dichloropropane 1,4-dichlorobenzene benzene chloroethane cis-1,2-dichloroethylene tetrachloroethene trans-1,2-dichloroethylene trichloroethene vinyl chloride
MW-94 –	1,1-dichloroethane 1,2-dichloropropane benzene chloroethane cis-1,2-dichloroethylene trans-1,2-dichloroethylene trichloroethylene vinyl chloride.	**MW-94 –**	1,1-dichloroethane 1,2-dichloropropane benzene chloroethane cis-1,2-dichloroethylene trans-1,2-dichloroethylene trichloroethylene vinyl chloride

Spring 2014		Fall 2014	
MW-49 –	1,1-dichloroethane 1,4-dichlorobenzene chloroethane cis-1,2-dichloroethylene vinyl chloride	**MW-49 –**	1,4-dichlorobenzene benzene chloroethane cis-1,2-dichloroethylene vinyl chloride
MW-54 –	1,1-dichloroethane 1,4-dichlorobenzene chloroethane cis-1,2-dichloroethylene	**MW-54 –**	1,1-dichloroethane 1,4-dichlorobenzene benzene chloroethane cis-1,2-dichloroethylene vinyl chloride
MW-81 –	1,1-dichloroethane 1,2-dichloroethane 1,2-dichloropropane 1,4-dichlorobenzene chloroethane cis-1,2-dichloroethylene trans-1,2-dichloroethylene	**MW-81 –**	1,1-dichloroethane 1,2-dichloroethane 1,2-dichloropropane 1,4-dichlorobenzene chloroethane cis-1,2-dichloroethylene trans-1,2-dichloroethylene

	trichloroethene vinyl chloride		trichloroethene vinyl chloride
MW-87 -	bis(2-ethylhexyl)phthalate	**MW-87 -**	none
MW-89 -	bis(2-ethylhexyl)phthalate	**MW-89 -**	none
MW-91 -	1,1-dichloroethane	**MW-91 -**	1,1-dichloroethane
MW-94 –	1,1-dichloroethane benzene chloroethane cis-1,2-dichloroethylene trans-1,2-dichloroethylene trichloroethylene vinyl chloride	**MW-94 –**	1,1-dichloroethane 1,2-dichloropropane benzene chloroethane cis-1,2-dichloroethylene trans-1,2-dichloroethylene trichloroethylene vinyl chloride

Spring 2015		**Fall 2015**	
MW-49 –	1,1-dichloroethane 1,4-dichlorobenzene benzene bis(2 ethylhexyl) phthalate chloroethane cis-1,2-dichloroethylene vinyl chloride	**MW-49** –	1,1-dichloroethane 1,4-dichlorobenzene benzene chloroethane cis-1,2-dichloroethylene vinyl chloride
MW-54 –	1,1-dichloroethane 1,4-dichlorobenzene chloroethane cis-1,2-dichloroethylene	**MW-54** –	1,1-dichloroethane 1,4-dichlorobenzene chloroethane cis-1,2-dichloroethylene vinyl chloride
MW-81 –	1,1-dichloroethane 1,2-dichloroethane 1,2-dichloropropane 1,4-dichlorobenzene bis(2 ethylhexyl) phthalate chloroethane cis-1,2-dichloroethylene trans-1,2-dichloroethylene trichloroethene vinyl chloride	**MW-81** –	1,1-dichloroethane 1,2-dichloroethane 1,2-dichloropropane 1,4-dichlorobenzene chloroethane cis-1,2-dichloroethylene trans-1,2-dichloroethylene trichloroethene vinyl chloride
MW-91 -	1,1-dichloroethane cis-1,2-dichloroethylene	**MW-91 -**	1,1-dichloroethane
MW-94 –	1,1-dichloroethane benzene chloroethane cis-1,2-dichloroethylene trans-1,2-dichloroethylene trichloroethylene vinyl chloride	**MW-94 –**	1,1-dichloroethane 1,2-dichloroethane 1,2-dichloropropane benzene chloroethane cis-1,2-dichloroethylene vinyl chloride

Spring 2016		Fall 2016	
MW-49 –	1,1-dichloroethane	**MW-49 –**	1,1-dichloroethane
	1,4-dichlorobenzene		1,4-dichlorobenzene
	benzene		benzene
	chloroethane		chloroethane
	cis-1,2-dichloroethylene		cis-1,2-dichloroethylene
	vinyl chloride		vinyl chloride
MW-54 –	1,1-dichloroethane	**MW-54 –**	1,1-dichloroethane
	1,4-dichlorobenzene		1,4-dichlorobenzene
	chloroethane		benzene
	cis-1,2-dichloroethylene		chloroethane
			cis-1,2-dichloroethylene
			vinyl chloride
MW-81 –	1,1-dichloroethane	**MW-81 –**	1,1-dichloroethane
	1,2-dichloroethane		1,2-dichloroethane
	1,2-dichloropropane		1,2-dichloropropane
	1,4-dichlorobenzene		1,4-dichlorobenzene
	chloroethane		benzene
	cis-1,2-dichloroethylene		chlorobenzene
	trans-1,2-dichloroethylene		chloroethane
	trichloroethene		cis-1,2-dichloroethylene
	vinyl chloride		trans-1,2-dichloroethylene
			trichloroethene
			vinyl chloride
MW-89 -	bis(2 ethylhexyl) phthalate		
MW-94 –	1,1-dichloroethane	**MW-94 –**	1,1-dichloroethane
	benzene		1,2-dichloroethane
	chloroethane		1,2-dichloropropane
	cis-1,2-dichloroethylene		benzene
	vinyl chloride		chloroethane
			cis-1,2-dichloroethylene
			trans-1,2-dichloroethylene
			vinyl chloride

Spring 2017		Fall 2017	
MW-49 –	1,1-dichloroethane	**MW-49 –**	1,1-dichloroethane
	1,4-dichlorobenzene		1,4-dichlorobenzene
	benzene		benzene
	chloroethane		chloroethane
	cis-1,2-dichloroethylene		cis-1,2-dichloroethylene
	vinyl chloride		vinyl chloride
MW-54 –	1,1-dichloroethane	**MW-54 –**	1,1-dichloroethane
	1,4-dichlorobenzene		1,4-dichlorobenzene
	chloroethane		benzene
	cis-1,2-dichloroethylene		chloroethane
	vinyl chloride		cis-1,2-dichloroethylene
			vinyl chloride
MW-81 –	1,1-dichloroethane	**MW-81 –**	1,1-dichloroethane
	1,2-dichloroethane		1,2-dichloroethane
	1,2-dichloropropane		1,2-dichloropropane
	1,4-dichlorobenzene		1,4-dichlorobenzene

	benzene chlorobenzene chloroethane cis-1,2-dichloroethylene trans-1,2-dichloroethylene trichloroethene vinyl chloride		benzene chlorobenzene chloroethane cis-1,2-dichloroethylene trans-1,2-dichloroethylene trichloroethene vinyl chloride
MW-91 –	none	**MW-91** –	1,1-dichloroethane
MW-94 –	1,1-dichloroethane 1,2-dichloroethane 1,2-dichloropropane Benzene chloroethane	**MW-94** –	1,1-dichloroethane 1,2-dichloroethane 1,2-dichloropropane benzene chloroethane

Spring 2018		**Fall 2018**	
MW-49 –	1,1-dichloroethane 1,4-dichlorobenzene benzene chloroethane cis-1,2-dichloroethylene vinyl chloride	**MW-49** –	1,1-dichloroethane 1,4-dichlorobenzene acetone benzene chloroethane cis-1,2-dichloroethylene vinyl chloride
MW-54 –	1,1-dichloroethane 1,4-dichlorobenzene chloroethane cis-1,2-dichloroethylene	**MW-54** –	1,1-dichloroethane chloroethane
MW-81 –	1,1-dichloroethane 1,2-dichloroethane 1,2-dichloropropane 1,4-dichlorobenzene benzene chlorobenzene chloroethane cis-1,2-dichloroethylene trans-1,2-dichloroethylene trichloroethene vinyl chloride	**MW-81** –	1,1-dichloroethane 1,2-dichloroethane 1,2-dichloropropane acetone chloroethane cis-1,2-dichloroethylene vinyl chloride
MW-94 –	1,1-dichloroethane 1,2-dichloroethane 1,2-dichloropropane benzene chloroethane cis-1,2-dichloroethene vinyl chloride	**MW-94** –	1,1-dichloroethane 1,2-dichloropropane benzene chloroethane cis-1,2-dichloroethylene vinyl chloride

Spring 2019		Fall 2019	
MW-49 –	1,1-dichloroethane 1,4-dichlorobenzene benzene chlorobenzene chloroethane cis-1,2-dichloroethylene vinyl chloride	**MW-49** –	1,1-dichloroethane 1,4-dichlorobenzene benzene chloroethane vinyl chloride
MW-54 –	1,1-dichloroethane 1,4-dichlorobenzene chloroethane toluene	**MW-54** –	1,1-dichloroethane 1,4-dichlorobenzene chloroethane
MW-81 –	1,1-dichloroethane 1,2-dichlorobenzene 1,2-dichloroethane 1,2-dichloropropane 1,4-dichlorobenzene benzene chlorobenzene chloroethane cis-1,2-dichloroethylene trans-1,2-dichloroethylene vinyl chloride	**MW-81** –	1,1-dichloroethane 1,2-dichlorobenzene 1,2-dichloropropane 1,4-dichlorobenzene benzene chlorobenzene chloroethane cis-1,2-dichloroethylene trans-1,2-dichloroethylene vinyl chloride
MW-91 –	1,1-dichloroethane	**MW-91** –	none
MW-94 –	1,1-dichloroethane 1,2-dichloropropane benzene chloroethane cis-1,2-dichloroethene vinyl chloride	**MW-94** –	1,1-dichloroethane 1,2-dichloropropane benzene chloroethane cis-1,2-dichloroethylene

Spring 2020		Fall 2020	
MW-49 –	1,1-dichloroethane benzene chlorobenzene chloroethane cis-1,2-dichloroethylene vinyl chloride	**MW-49** –	1,1-dichloroethane 1,4-dichlorobenzene benzene chlorobenzene chloroethane cis-1,2-dichloroethylene vinyl chloride
MW-54 –	chloroethane	**MW-54** –	1,1-dichloroethane 1,4-dichlorobenzene chloroethane

MW-81 –	1,1-dichloroethane 1,2-dichlorobenzene 1,2-dichloroethane 1,2-dichloropropane benzene chloroethane cis-1,2-dichloroethylene trans-1,2-dichloroethylene vinyl chloride	**MW-81** –	1,1-dichloroethane 1,2-dichlorobenzene 1,2-dichloroethane 1,2-dichloropropane 1,4-dichlorobenzene benzene chlorobenzene chloroethane cis-1,2-dichloroethylene trans-1,2-dichloroethylene trichloroethene vinyl chloride
MW-91 –	none	**MW-91** –	1,1-dichloroethane
MW-94 –	1,1-dichloroethane 1,2-dichloropropane benzene chloroethane cis-1,2-dichloroethene trans-1,2-dichloroethylene vinyl chloride	**MW-94** –	1,1-dichloroethane 1,2-dichloropropane benzene chloroethane cis-1,2-dichloroethylene trans-1,2-dichloroethylene vinyl chloride
LW-75 –	none	**LW-75** –	1,4-dichlorobenzene acetone benzene chloroethane ethylbenzene xylenes

Spring 2021		Fall 2021	
MW-49 –	1,1-dichloroethane 1,4-dichlorobenzene benzene chloroethane	**MW-49** –	1,1-dichloroethane 1,4-dichlorobenzene benzene chloroethane cis-1,2-dichloroethylene
MW-54 –	1,4-dichlorobenzene	**MW-54** –	1,1-dichloroethane 1,4-dichlorobenzene
MW-81 –	1,1-dichloroethane 1,2-dichloroethane 1,2-dichloropropane 1,4-dichlorobenzene benzene chlorobenzene chloroethane cis-1,2-dichloroethylene trans-1,2-dichloroethylene trichloroethene vinyl chloride	**MW-81** –	1,1-dichloroethane 1,2-dichloroethane 1,2-dichloropropane 1,4-dichlorobenzene chlorobenzene chloroethane cis-1,2-dichloroethylene trans-1,2-dichloroethylene trichloroethene vinyl chloride
MW-94 –	1,1-dichloroethane 1,2-dichloropropane benzene chloroethane cis-1,2-dichloroethene	**MW-94** –	1,1-dichloroethane 1,2-dichloropropane benzene chloroethane cis-1,2-dichloroethylene
MW-96R –	none	**MW-96R** –	bis(2-ethylhexyl)phthalate
LW-75 –	1,4-dichlorobenzene acetone benzene chloroethane cis-1,2-dichloroethylene ethylbenzene xylenes		

Spring 2022		Fall 2022	
MW-49 –	1,1-dichloroethane 1,4-dichlorobenzene acetone benzene chloroethane	**MW-49** –	1,1-dichloroethane 1,4-dichlorobenzene acetone benzene chlorobenzene chloroethane cis-1,2-dichloroethylene
MW-54 –	1,4-dichlorobenzene	**MW-54** –	1,1-dichloroethane 1,4-dichlorobenzene chloroethane
MW-81 –	1,1-dichloroethane 1,2-dichloroethane 1,2-dichloropropane 1,4-dichlorobenzene chlorobenzene chloroethane cis-1,2-dichloroethylene trichloroethene vinyl chloride	**MW-81** –	1,1-dichloroethane 1,2-dichloroethane 1,2-dichloropropane 1,4-dichlorobenzene chlorobenzene chloroethane cis-1,2-dichloroethylene trans-1,2-dichloroethylene trichloroethene vinyl chloride
MW-91 –	carbon disulfide	**MW-91** –	none
MW-94 –	1,1-dichloroethane 1,2-dichloropropane benzene chloroethane cis-1,2-dichloroethene	**MW-94** –	1,1-dichloroethane 1,2-dichloropropane benzene chloroethane cis-1,2-dichloroethylene trans-1,2-dichloroethylene vinyl chloride

**starting in 2023 the supplemental wells were no longer evaluated for exceedances of the Prediction Limits*

Appendix F

Summary of On-Going Assessment Monitoring

(green highlights on the following tables represent the full Appendix II sample collection events)

bis (2-ethylhexyl)phthalate (ug/L)

Date							
	Detection	Detection	Assessment	Detection	Detection	Detection	Detection
	AZPOC	AZPOC	AZPOC	POC	POC	POC	AZPOC
	MW87	MW89	MW91	MW93	MW95	MW96R	MW97
3/28/08	<8	<8	<8	NT	NT	DNE	NT
6/25/08	<8	<8	<8	NT	NT	DNE	NT
8/25/08	<8	<8	<8	NT	NT	DNE	NT
10/3/08	<8	<8	<8	NT	NT	DNE	NT
12/8/08	**28.0**	**60.0**	**9.0**	NT	NT	DNE	NT
4/1/09	<10	<10	<10	NT	NT	DNE	NT
10/21/09	<10	<10	<10	NT	NT	DNE	NT
4/20/10	<10	<10	<10	NT	NT	DNE	NT
10/8/10	<10	<10	**15.0**	NT	NT	DNE	NT
4/4/11	<10	<14	<10	NT	NT	DNE	NT
10/6/11	<10	<10	<10	NT	NT	DNE	NT
4/10/12	<10	<10	<10	NT	NT	DNE	NT
10/8/12	<10	<10	<10	<12	NT	DNE	NT
4/4/13	<10	<10	<10	<8	NT	DNE	NT
10/16/13	<8	**9.0**	**142.0**	NT	NT	DNE	NT
4/9/14	**13.0**	**18.0**	<10	NT	NT	DNE	NT
10/16/14	<10	<10	<10	NT	NT	DNE	NT
4/3/2015	<10	NT	<10	NT	NT	DNE	NT
10/1/2015	<10	<10	<10	NT	NT	DNE	NT
4/14/2016	<10	**19.0**	<10	NT	NT	DNE	NT
10/13/2016	<10	<10	<10	NT	NT	DNE	NT
4/10/2017	<10	<10	<10	NT	NT	DNE	NT
10/9/2017	NT	NT	NT	NT	NT	DNE	NT
4/17/2018	NT	NT	NT	NT	NT	DNE	NT
10/22/2018	NT	NT	<6	<6	NT	DNE	NT
4/22/2019	NT	NT	NT	NT	NT	DNE	NT
10/23/2019	NT	NT	NT	NT	NT	DNE	NT
4/10/2020	NT	NT	NT	NT	NT	DNE	NT
10/19/2020	NT	NT	NT	NT	NT	DNE	NT
4/5/2021	NT	NT	NT	NT	NT	NT	NT
10/8/2021	NT	NT	NT	NT	NT	NT	NT
4/6/2022	NT	NT	NT	NT	NT	**6.0**	NT
10/25/2022	NT	NT	NT	NT	NT	NT	NT
4/10/2023	NT	NT	NT	NT	NT	<6	NT
10/13/2023	NT	NT	<6	<6	NT	NT	NT
4/17/2024	NT	NT	NT	NT	NT	NT	NT
10/15/2024	NT	NT	NT	NT	NT	NT	NT

bis (2-ethylhexyl)phthalate (ug/L)

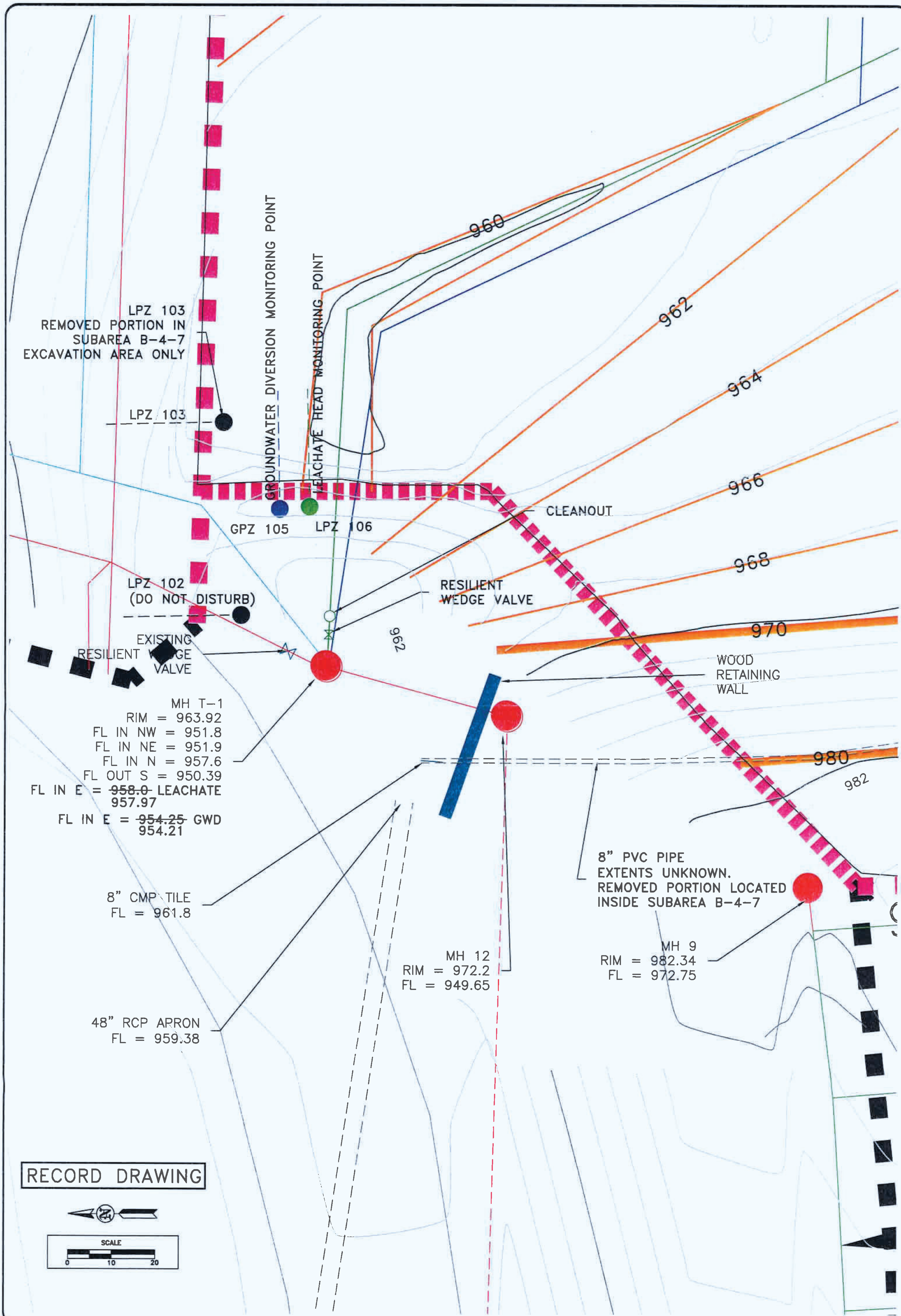
Date	Supplemental Monitoring Wells			
	MW49	MW54	MW81	MW94
3/28/08	<8	<8	<8	NT
6/25/08	<8	<8	<8	NT
8/25/08	<8	<8	<8	NT
10/3/08	<8	<8	<11	NT
12/8/08	**13.0**	**16.0**	<8	NT
4/1/09	<10	<10	<10	NT
10/21/09	NT	NT	NT	NT
4/20/10	NT	NT	<10	NT
10/8/10	NT	NT	NT	NT
4/4/11	NT	NT	NT	<8
10/6/11	NT	NT	NT	<8
4/10/12	NT	NT	NT	NT
10/8/12	<10	<10	<10	**8.0**
4/4/13	<10	<10	<10	<10
10/16/13	<8	<11	<8	<10
4/9/14	<10	<10	<10	<10
10/16/14	<10	<17	<10	<10
4/3/2015	**65.0**	<10	**36.0**	<10
10/1/2015	<10	<10	<10	<10
4/14/2016	<10	<10	<10	<10
10/13/2016	<10	<10	<10	<10
4/10/2017	<10	<10	<10	<10
10/9/2017	NT	NT	NT	<6
4/17/2018	NT	NT	NT	NT
10/22/2018	<6	<6	<6	NT
4/22/2019	NT	NT	NT	NT
10/23/2019	NT	NT	NT	NT
4/10/2020	NT	NT	NT	NT
10/19/2020	NT	NT	NT	NT
4/5/2021	NT	NT	NT	NT
7/2/2021	NT	NT	NT	NT
10/8/2021	NT	NT	NT	NT
4/6/2022	NT	NT	NT	NT
10/25/2022	NT	NT	NT	NT
4/10/2023	NT	NT	NT	NT
10/13/2023	NT	NT	NT	NT
4/17/2024	NT	NT	NT	NT
10/15/2024	NT	NT	NT	NT

DNE = Did Not Exist

Appendix G

Leachate Collection System Performance Evaluation Report

Appendix G.1 – Map of Monitoring Points Area B4 & Maps Illustrating all Leachate Lines and Groundwater Diversion Lines



HLW

HLW Engineering Group

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FAX: (515) 733-4146

SITE PLAN – MH T-1 AREA
SUBAREA B-4-7 EXPANSION
MARSHALL COUNTY SANITARY LANDFILL
MARSHALL COUNTY, IOWA

FIGURE:	7	
REVISION	NO.	DATE
DRAWN JGH	PROJECT NO. 6003-16A	DATE 8/7/17

Legend

- Existing 2' Contours
- Existing 10' Contours
- Boundary of Landfill Waste (Existing)
- Existing Groundwater Diversion Pipe
- Existing Leachate Pipe
- Property Line
- Storm Water Pipe
- Fence
- Leachate Manhole
- Gravel Surface

NOTES:
1. GROUND CONTOURS FROM AERIAL DRONE SURVEY DATED SEPTEMBER 25, 2017.
2. FORCE MAIN ONLY APPROXIMATELY LOCATED. FOR PRECISE LOCATIONS SEE RECORD PLANS DATED 1991, "LEACHATE CONTROL SYSTEM – PHASE B.

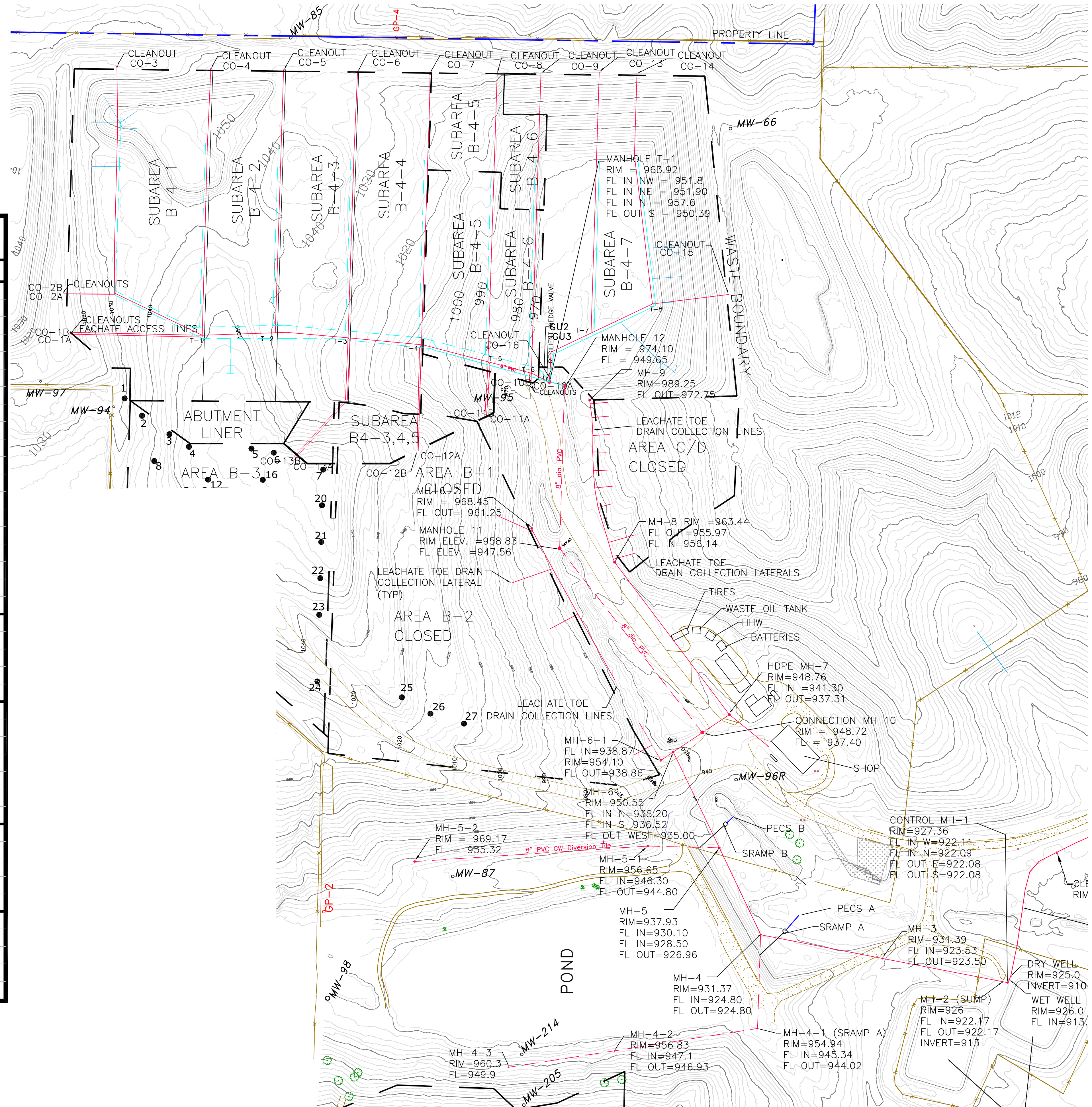
SCALE 0 150 300

PIPE LENGTHS

CLEANOUT NO.	PIPE LENGTH, FT
CO-1A	
	1092
CO-4	
CO-1B	
	1177
CO-13A	
CO-2A	
	778
CO-3	
CO-2B	
	413
T-1	
CO-5	
	509
T-2	
CO-6	
	1143
CO-13B	
CO-7	
	1059
CO-12A	
CO-8	
	961
CO-11B	
CO-9	
	868
CO-10A	
CO-10B	
	126
MH-12	
CO-11A	
	559
T-3	
CO-12B	
	611
T-6	
CO-13	
	731
T-7	
CO-14	
	643
T-8	
CO-15	
	601
CO-16	

PIPE LENGTHS

MANHOLE NO.	PIPE LENGTH, FT
CONTROL MH-1	
	15
MH-2	
	335
MH-3	
	340
MH-4	
	264
MH-5	
	292
MH-6	
	96
MH-10	
	89
MH-7	
	524
MH-8	
	452
MH-9	
MH-10	
	639
MH-11	
	445
MH-12	
MH-4	
	257
MH-4-1	
	397
MH-4-2	
	295
MH-4-3	
MH-5	
	197
MH-5-1	
	640
MH-5-2	
MH-6	
	41
MH-6-1	
	727
MH-6-2	



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SITE PLAN

LEACHATE COLLECTION SYSTEM & MONITORING WELLS – EAST HALF

MARSHALL COUNTY SLF, MARSHALLTOWN, IOWA

FIGURE:	3A	
REVISION	NO.	DATE
DRAWN JGH	PROJECT NO. 6003-17A	DATE 3/23/21

Appendix G.2 – Map of Leachate Well Locations & Comprehensive Leachate Head Elevation Data - Areas B-1/B-2/B-3/B-4/C/D

FIGURE: 1

REVISION	NO.	DATE
DRAWN DRA	PROJECT NO. 6003-11A	DATE 10-17-21

SITE PLAN WITH SUBSURFACE GAS PROBE LOCATIONS

MARSHALL COUNTY SANITARY LANDFILL
MARSHALLTOWN, IOWA

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HLW Engineering Group

	MARSHALL COUNTY SANITARY LANDFILL					
		64-SDP-2-75P		**Leachate Elevations**		
	MONTHLY WATER ELEVATIONS					
	LHMW 73	**LHMW 74**	**LHMW 75**	**LHPZ 76**	**LHPZ 77**	**LHMW 78**	**LHMW 79**
TOP PVC. ELEV, FT	993.77	1021.72	1049.75	1047.47	1046.54	991.66	1010.27
DATE							
10/21/92			1049.75	1047.47	1046.54		
11/30/92		987.81	1014.20	1016.07	1016.18		
12/28/92	963.43	986.75	1014.13	1015.45	1015.86		
1/11/93	963.43	986.95	1014.10	1015.42	1015.99		
2/15/93	963.43	987.13	1014.25	1015.57	1015.70		
3/17/93	963.43	986.74	1013.78	1047.47	1015.53	972.36	990.58
4/16/93	963.57	989.87	1014.80	1016.22	1017.54	972.66	990.77
5/14/93	963.61	987.04	1014.99	1016.88	1018.44	972.78	990.93
6/17/93	963.64	987.81	1014.90	1017.16	1018.11	973.19	990.90
7/6/93	963.57	988.07	1015.10	1017.50	1020.54	975.71	991.17
8/31/93	963.61	988.38	1015.34	1018.95	1020.54	973.27	992.37
9/21/93	963.62	988.33	1015.75	1019.16	1020.35	976.35	992.36
10/11/93	963.47	988.22	1015.85	1018.97	1019.74	973.31	991.57
11/10/93	963.64	988.32	1016.04	1018.45	1018.76	973.31	991.81
12/10/93	963.65	988.57	1016.80	1018.33	1018.28	973.06	991.81
1/28/94	963.76	988.76	1017.30	1018.09	1017.84	973.57	992.49
2/11/94	963.66	988.09	1017.53	1018.38	1018.16	973.17	992.24
3/15/94	963.67	988.50	1017.23	1017.96	1018.84	973.17	991.57
4/6/94	963.77	988.12	1017.25	1017.67	1019.94	972.96	991.57
5/31/94	963.67	988.18	1016.75	1017.18	1017.02	973.17	992.32
6/14/94	963.65	989.06	1017.12	1017.58	1017.44	973.27	992.01
7/12/94	963.69	988.75	1016.65	1017.06	1017.14	974.75	993.87
8/26/94	963.68	989.77	1016.54	1016.84	1016.65	973.41	991.91
9/20/94	963.68	985.11	1016.61	1016.79	1016.58	973.63	991.95
10/18/94	963.77	984.32	1016.25	1016.27	1016.34	973.06	991.67
11/25/94	963.63	985.61	1016.54	1016.39	1016.04	973.58	1000.27
12/20/94	963.71	984.56	1016.64	1016.65	1016.31	973.77	992.03
1/30/95	963.72	978.58	1016.75	1016.70	1016.35	976.18	996.46
2/28/95	963.70	981.27	1016.46	1017.30	1015.84	973.71	992.16
3/28/95	963.64	982.77	1016.75	1016.62	1016.09	977.36	994.17
04/19/95	963.77	984.52	1016.55	1016.27	1016.14	973.66	991.97
5/30/95	963.66	1006.32	1017.65	1016.87	1017.14	975.96	994.17
6/30/95	963.66	1010.22	1019.65	1018.27	1018.54	974.76	993.77
7/6/95	963.67	988.32	1017.45	1017.47	1017.74	973.46	992.27
8/28/95	963.67	987.62	1017.55	1017.17	1016.74	973.76	993.67
9/19/95	963.52	987.36	1017.27	1016.20	1016.12	973.39	992.38
10/12/95	963.67	986.82	1016.55	1016.37	1016.44	973.46	992.92
11/15/95	963.76	986.75	1017.05	1016.57	1015.94	973.76	993.47
12/21/95	963.76	986.72	1016.16	1016.27	1015.58	975.65	992.16
1/11/96	963.71	986.62	1016.05	1015.77	1015.64	973.56	992.77
3/11/96	963.71	985.93	1015.36	Iced	1015.35	973.56	992.32
4/11/96	963.71	986.62	1015.55	1015.67	1015.64	973.66	992.97
5/14/96	963.77	986.22	1016.25	1015.03	1015.19	973.56	993.77
6/20/96	963.77	986.17	1015.31	1016.22	1015.08	974.21	994.32
7/12/96	963.71	985.82	1015.25	1015.07	1015.66	973.56	992.77
8/26/96	963.77	986.27	1016.25	1016.87	1015.84	974.93	993.72
9/25/96	963.75	986.20	1016.24	1015.86	1015.84	973.51	994.67
10/03/1996	963.71	985.93	1015.15	1015.37	1015.94	973.66	994.37
11/13/1996	963.77	986.92	1014.85	1015.37	1015.14	974.76	994.67
12/11/1996	963.75	986.35	1015.18	1016.25	1015.39	975.51	994.62

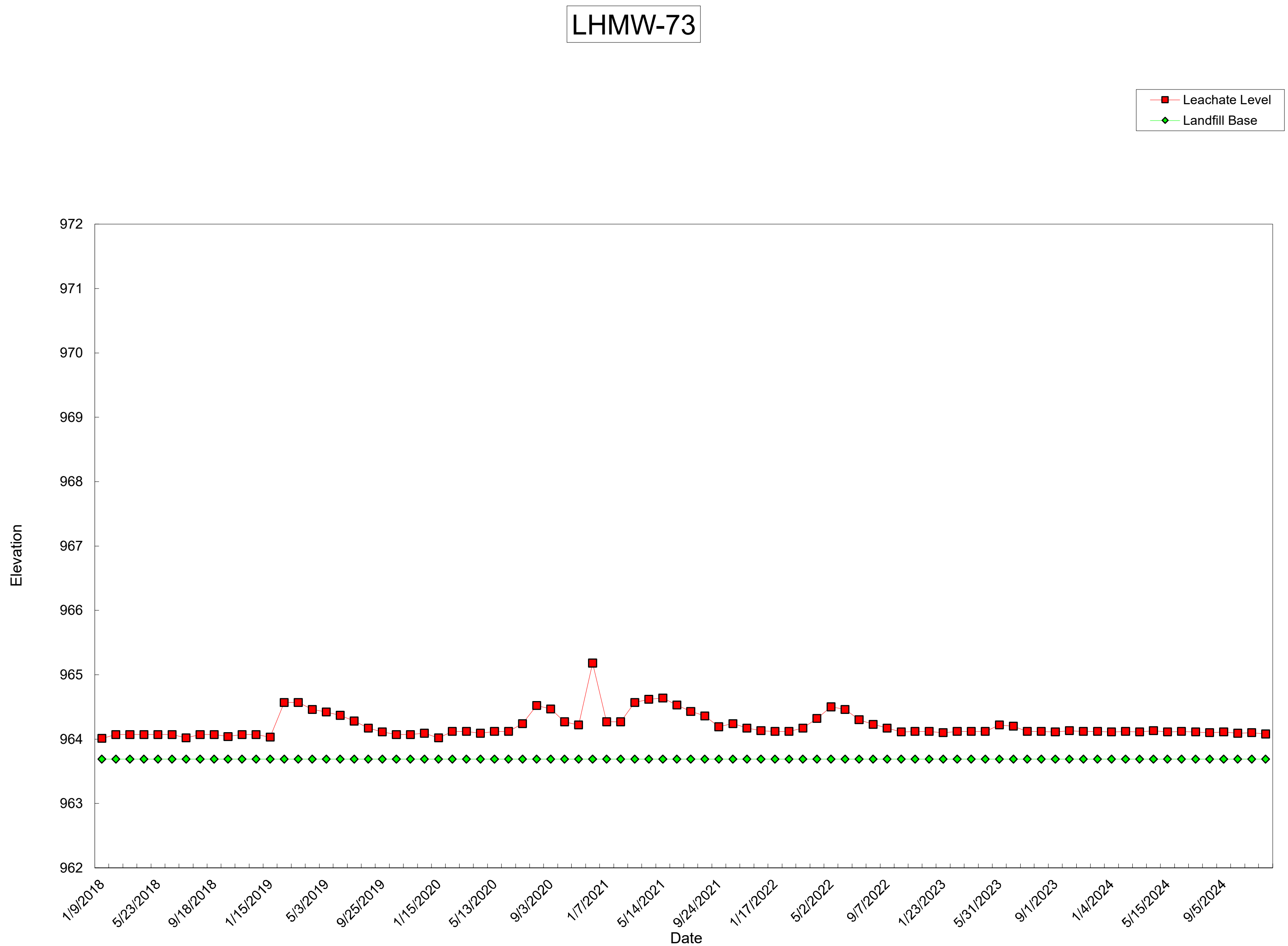
	MARSHALL COUNTY SANITARY LANDFILL					
		64-SDP-2-75P		**Leachate Elevations**		
	MONTHLY WATER ELEVATIONS					
	LHMW 73	**LHMW 74**	**LHMW 75**	**LHPZ 76**	**LHPZ 77**	**LHMW 78**	**LHMW 79**
TOP PVC. ELEV, FT	993.77	1021.72	1049.75	1047.47	1046.54	991.66	1010.27
DATE							
01/13/1997	963.69	976.85	1013.95	1014.27	1014.54	973.56	994.37
02/26/1997	964.57	986.72	1014.73	1015.42	1013.40	974.46	994.67
03/31/1997	964.67	985.29	1014.41	1014.61	1015.04	975.66	994.87
04/08/1997	964.57	984.72	1014.45	1014.47	1015.04	973.66	994.27
05/21/1997	964.77	999.72	1014.75	1014.69	1015.04	975.91	994.67
06/27/1997	964.57	993.82	1014.75	1014.66	1015.34	974.26	994.57
07/16/1997	964.37	986.22	1014.65	1014.87	1015.84	973.86	994.87
08/27/1997	964.27	986.82	1014.80	1015.96	1015.94	974.95	995.06
09/30/1997	964.42	987.37	1016.33	1015.27	1015.59	973.82	995.72
10/13/1997	964.27	976.85	1014.65	1015.07	1015.54	973.76	995.37
11/26/1997	964.21	987.04	1014.73	1014.65	1015.15	973.90	995.08
12/15/1997	964.27	985.92	1014.80	1015.12	1015.08	974.35	995.26
01/26/1998	963.87	976.85	1014.75	1014.47	1014.79	973.86	994.67
02/28/1998	964.37	987.32	1015.03	1015.12	1015.32	973.88	995.46
03/03/1998			1049.75	1047.47	1046.54		
04/20/1998	964.07	976.85	1014.55	1015.17	1017.54	973.86	995.27
05/26/1998	964.00	982.77	1016.45	1015.62	1017.13	976.92	996.19
06/22/1998	963.99	985.72	1015.95	1015.90	1017.95	973.86	995.98
07/09/1998	963.97	976.85	1014.95	1016.27	1018.14	973.86	996.77
08/31/1998	963.99	985.13	1015.06	1015.97	1016.79	975.89	997.36
09/30/1998			1014.89	1015.77	1016.45		
10/13/1998	963.97	985.42	1015.15	1015.67	1016.44	973.86	996.77
11/24/1998	964.08	985.72	1015.54	1015.52	1016.54	977.16	997.26
12/30/1998	964.02	984.95	1014.87	1015.50	1016.08	974.86	996.53
01/26/1999	963.97		1014.55	1015.07	1015.84	973.76	996.27
02/28/1999	964.24	986.35	1014.87	1015.03	1015.25	973.94	995.49
04/20/1999			1014.85	1015.27	1016.34	974.06	996.47
07/13/1999		984.92	1015.25	1015.97	1017.84	974.16	997.07
10/09/1999		985.12	1015.55	1015.67	1016.54	974.26	996.77
01/06/2000							
04/13/2000							
06/26/2000		984.52	1014.39	1014.17	1015.14		
07/05/2000							
09/09/2000							
10/04/2000	964.93	983.81	1014.57	1014.55	1015.45	974.21	997.07
01/17/2001							
02/07/2001							
04/25/2001	966.07	987.02	1014.35	1015.47	1018.04	973.16	997.27
07/20/2001	965.47	Removed	1015.15	1016.17	1017.94	974.36	997.27
10/05/2001	965.07	Removed	1014.95	1015.47	1014.54	974.46	997.27
01/03/2002	964.97	Removed	1014.35	1014.87	1015.64	974.26	997.27
04/29/2002	965.95	Removed	1014.61	1014.73	1015.70	974.46	996.61
07/03/2002	965.47	Removed	1014.45	1014.67	1015.64	974.46	
10/14/2002	965.31	Removed	1014.21	1014.39	1015.30	974.56	996.90
01/27/2003		Removed	1015.75	1014.67	1046.54	973.66	995.77
04/21/2003	965.83	Removed	1013.85	1013.65	1013.68	974.18	996.41
07/10/2003		Removed					
10/01/2003	965.19	Removed	1014.30	1014.35	1015.94	974.30	996.87
04/22/2004	965.57	Removed	1014.45	1015.27	1017.54	974.06	996.97
10/05/2004	964.77	Removed	1013.75	1014.67	1016.14	973.66	996.27

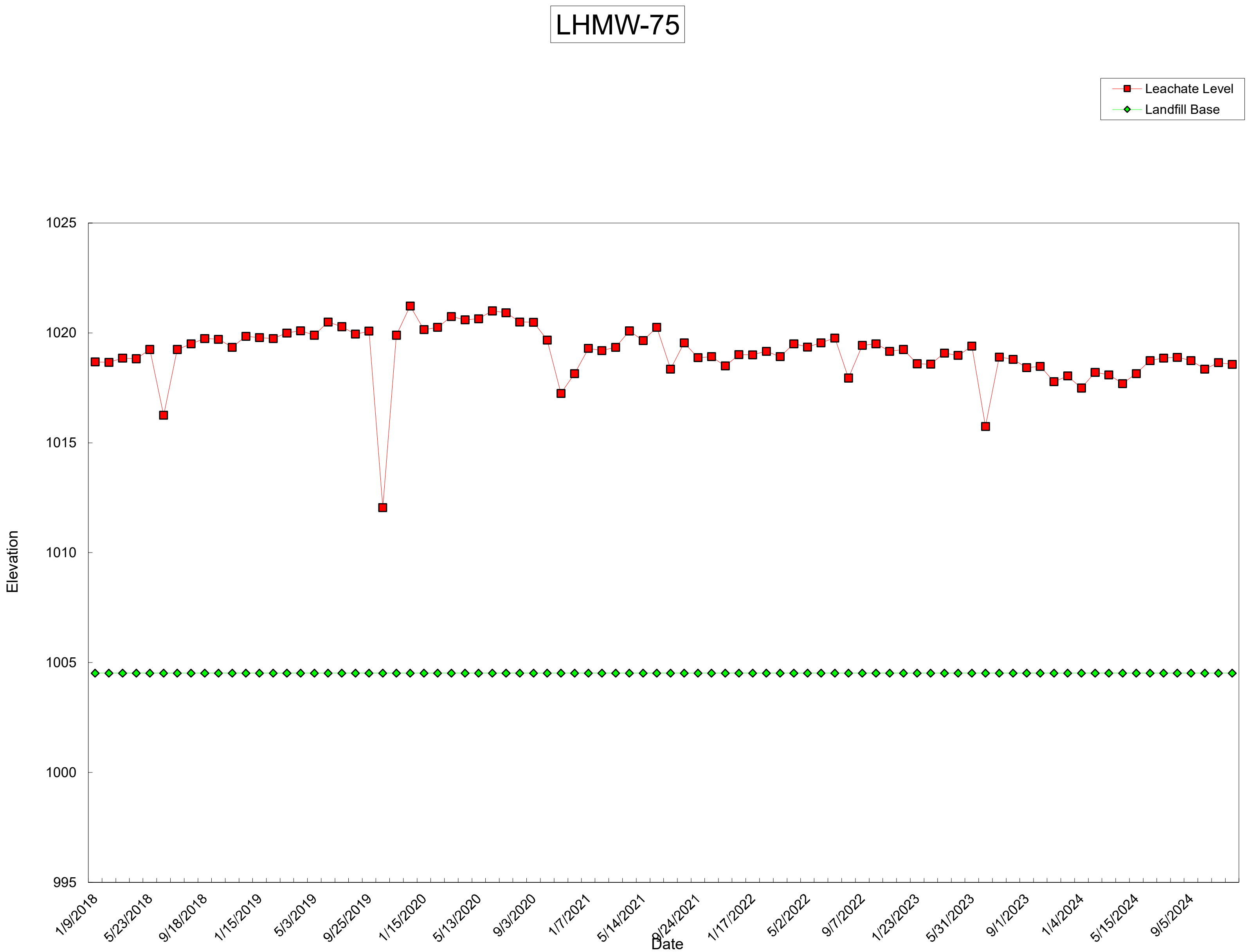
	MARSHALL COUNTY SANITARY LANDFILL					
	64-SDP-2-75P			**Leachate Elevations**		
	MONTHLY WATER ELEVATIONS					
	LHMW 73	**LHMW 74**	**LHMW 75**	**LHPZ 76**	**LHPZ 77**	**LHMW 78**	**LHMW 79**
TOP PVC. ELEV, FT	993.77	1021.72	1049.75	1047.47	1046.54	991.66	1010.27
DATE							
04/01/2005	964.47	Removed	1014.45	1014.27	1016.40	974.16	995.67
07/12/2005	964.67	Removed	1014.45	1014.67	1016.64	974.36	996.17
10/04/2005	964.46	Removed	1014.73	1014.34	1015.48	974.58	996.02
01/09/2006	964.29	Removed	1014.28	1013.73	1013.96	974.07	995.35
02/01/2006		Removed					
04/05/2006	964.16	Removed	1014.27	1014.05	1015.44	974.48	995.08
07/13/2006	964.08	Removed	1014.54	1014.37	1016.21	974.55	995.60
10/05/2006	964.07	Removed	1014.27	1014.22	1016.01	974.54	995.13
01/02/2007	964.06	Removed	1014.44		1015.14		
04/10/2007	964.99	Removed	1014.77	1014.59	1017.22	974.29	994.87
07/30/2007	964.67	Removed	1015.09	1015.46	1017.76	974.59	995.90
10/10/2007	964.53	Removed	1015.01	1015.21	1017.01	974.71	995.53
01/16/2008	964.33	Removed	1014.88	1014.65	1016.03	974.58	995.47
04/01/2008	965.89	Removed	1014.61	1014.70	1017.01	974.52	994.84
06/20/2008		Removed					
08/05/2008		Removed					
10/02/2008	965.27	Removed	1017.05	1015.77	1017.29	974.66	996.37
12/10/2008	964.87	Removed	1016.05		1016.24	974.66	996.27
04/01/2009	965.77	Removed	1017.25	1015.37	1016.54	974.86	996.57
10/21/2009	965.17	Removed	1016.55	1015.47	1017.04	974.56	996.37
01/29/2010			1016.54	1016.02	1018.17	974.56	996.32
04/20/2010	966.17	Removed	1017.55	1017.17	1020.24	974.76	997.07
07/20/2010	965.57	Removed	1017.35	1016.77	1019.29	974.61	997.67
10/08/2010	963.77	Removed	1017.25	1016.17	1017.14	973.96	997.17
01/14/2011	964.87	Removed	1016.50	1015.57	1016.94	974.41	992.57
04/04/2011	965.67	Removed	1017.75	1016.17	1017.44	974.66	996.77
10/05/2011	964.97	Removed	1016.85	1015.97	1017.04	974.76	996.77
01/17/2012	964.67	Removed	1016.65	1015.37	1016.20	974.76	993.52
02/21/2012	964.66	Removed	1017.06	1015.60	1016.68	974.80	996.37
03/29/2012	964.54	Removed	1016.90	1015.70	1016.76	975.01	996.07
04/09/2012	964.47	Removed	1017.45	1015.47	1016.74	975.01	996.17
05/15/2012	964.55	Removed	1017.06	1015.82	1017.35	975.56	996.40
06/08/2012	964.37	Removed	1016.85	1015.67	1017.34	977.26	996.37
07/17/2012	964.30	Removed	1016.85	1015.70	1017.24	975.05	996.80
08/27/2012	964.37	Removed	1016.45	1015.47	1017.34	977.36	996.17
09/25/2012	964.27	Removed	1016.55	1015.47	1016.59	977.26	995.87
10/08/2012	964.07	Removed	1016.75	1015.17	1016.44	974.76	995.87
11/16/2012	964.11	Removed	1015.90	Removed	Removed	976.56	995.13
12/28/2012	964.97	Removed	1016.14	Removed	Removed	977.17	995.10
01/16/2013	964.07	Removed	1016.05	Removed	Removed	975.06	995.37
02/25/2013	964.05	Removed	1016.35	Removed	Removed	974.76	994.89
03/29/2013	964.08	Removed	1016.27	Removed	Removed	974.94	995.29
04/03/2013	964.07	Removed	1016.35	Removed	Removed	974.66	995.12
05/29/2013	964.05	Removed	1017.84	Removed	Removed	975.55	995.98
06/28/2013	964.07	Removed	1018.22	Removed	Removed	975.14	996.63
07/12/2013	964.02	Removed	1017.95	Removed	Removed	974.96	996.67
08/28/2013	964.11	Removed	1018.06	Removed	Removed	975.66	996.15
09/16/2013	964.07	Removed	1017.55	Removed	Removed	974.66	996.27
10/15/2013	964.02	Removed	1017.90	Removed	Removed	975.01	996.27
11/21/2013	964.03	Removed	1017.55	Removed	Removed	974.80	995.16
12/28/2013	964.06	Removed	1017.57	Removed	Removed	974.84	995.72

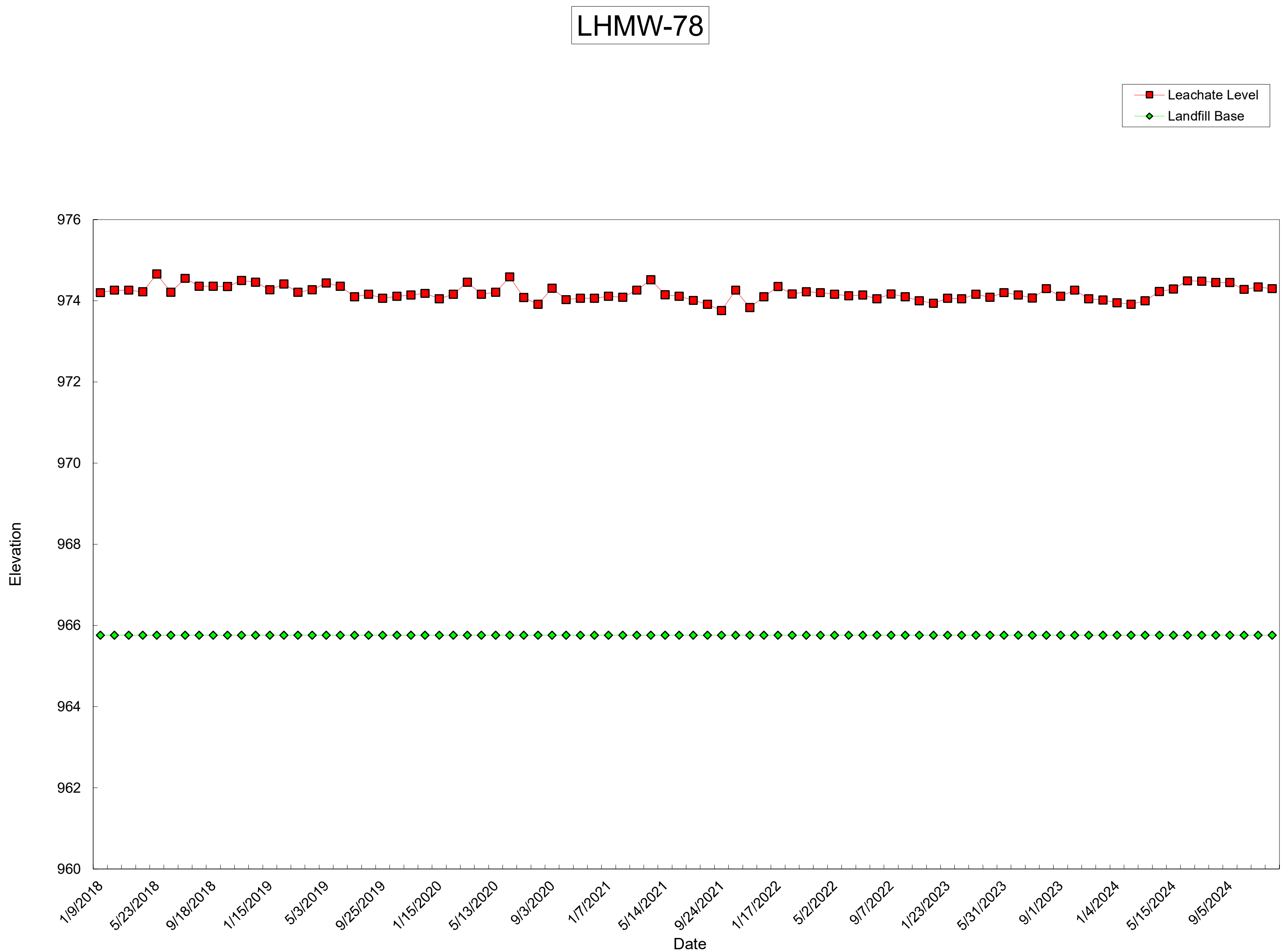
	MARSHALL COUNTY SANITARY LANDFILL						
		64-SDP-2-75P			**Leachate Elevations**		
	MONTHLY WATER ELEVATIONS						
	LHMW 73	**LHMW 74**	**LHMW 75**	**LHPZ 76**	**LHPZ 77**	**LHMW 78**	**LHMW 79**
TOP PVC. ELEV, FT	993.77	1021.72	1049.75	1047.47	1046.54	991.66	1010.27
DATE							
01/13/2014	964.02	Removed	1017.95	Removed	Removed	974.86	995.57
02/28/2014	964.07	Removed	1017.23	Removed	Removed	974.79	994.72
03/29/2014	964.03	Removed	1017.18	Removed	Removed	974.43	994.79
04/10/2014	964.06	Removed	1017.50	Removed	Removed	974.60	995.03
05/28/2014	964.12	Removed	1017.90	Removed	Removed	974.96	995.59
06/24/2014	964.10	Removed	1017.96	Removed	Removed	974.98	995.70
07/09/2014	964.07	Removed	1017.95	Removed	Removed	975.06	995.87
08/25/2014	964.06	Removed	1018.11	Removed	Removed	975.26	996.06
09/26/2014	964.07	Removed	1017.97	Removed	Removed	975.05	996.62
10/17/2014	964.02	Removed	1018.55	Removed	Removed	974.51	996.42
11/25/2014	964.07	Removed	1018.35	Removed	Removed	974.66	995.77
12/29/2014	964.07	Removed	1017.84	Removed	Removed	974.82	995.92
01/14/2015	964.07	Removed	1017.95	Removed	Removed	974.76	996.12
02/24/2015	964.11	Removed	1018.18	Removed	Removed	974.84	996.07
03/23/2015	964.19	Removed	1018.08	Removed	Removed	975.19	995.72
04/03/2015	964.22	Removed	1018.15	Removed	Removed	974.36	995.17
05/13/2015	964.13	Removed	1018.10	Removed	Removed	974.71	995.83
06/29/2015	964.10	Removed	1018.45	Removed	Removed	976.07	997.47
07/06/2015	964.09	Removed	1018.52	Removed	Removed	974.71	997.45
08/17/2015	964.07	Removed	1018.47	Removed	Removed	974.71	997.47
09/20/2015	964.08	Removed	1018.64	Removed	Removed	974.66	996.99
10/01/2015	964.07	Removed	1018.35	Removed	Removed	974.41	996.12
11/23/2015	964.07	Removed	1018.44	Removed	Removed	974.42	996.40
12/30/2015	963.97	Removed	1018.36	Removed	Removed	974.84	996.56
01/06/2016	964.27	Removed	1018.15	Removed	Removed	974.86	996.27
02/11/2016	964.07	Removed	1018.75	Removed	Removed	974.36	995.17
03/30/2016	964.06	Removed	1019.07	Removed	Removed	974.51	996.62
04/14/2016	964.04	Removed	1019.05	Removed	Removed	974.64	996.32
05/23/2016	964.06	Removed	1019.04	Removed	Removed	974.58	997.16
06/30/2016	964.07	Removed	1018.90	Removed	Removed	974.29	997.05
07/08/2016	964.02	Removed	1019.00	Removed	Removed	974.16	997.03
08/22/2016	964.06	Removed	1018.49	Removed	Removed	974.07	997.09
9/19/2016	964.07	Removed	1018.72	Removed	Removed	974.15	997.27
10/13/2016	964.02	Removed	1018.68	Removed	Removed	974.06	997.35
11/30/2016	964.06	Removed	1019.15	Removed	Removed	974.32	996.89
12/16/2016	964.07	Removed	1018.54	Removed	Removed	974.26	996.59
1/26/2017	964.02	Removed	1018.60	Removed	Removed	974.46	995.82
2/16/2017	964.07	Removed	1018.30	Removed	Removed	974.70	995.77
3/21/2017	964.06	Removed	1018.25	Removed	Removed	974.66	995.37
4/10/2017	964.07	Removed	1019.18	Removed	Removed	974.51	996.33
5/31/2017	964.08	Removed	1019.59	Removed	Removed	974.56	996.23
6/13/2017	964.07	Removed	1019.79	Removed	Removed	974.36	997.46
7/11/2017	964.02	Removed	1019.70	Removed	Removed	974.86	997.45
8/23/2017	963.77	Removed	1020.04	Removed	Removed	974.16	996.57
9/29/2017	964.07	Removed	1018.85	Removed	Removed	974.16	996.33
10/9/2017	963.97	Removed	1018.97	Removed	Removed	974.23	996.31
11/30/2017	964.07	Removed	1018.75	Removed	Removed	974.31	995.72
12/18/2017	964.07	Removed	1018.95	Removed	Removed	974.16	994.57

	MARSHALL COUNTY SANITARY LANDFILL					
		64-SDP-2-75P		**Leachate Elevations**		
	MONTHLY WATER ELEVATIONS					
	LHMW 73	**LHMW 74**	**LHMW 75**	**LHPZ 76**	**LHPZ 77**	**LHMW 78**	**LHMW 79**
TOP PVC. ELEV, FT	993.77	1021.72	1049.75	1047.47	1046.54	991.66	1010.27
DATE							
1/9/2018	964.01	Removed	1018.68	Removed	Removed	974.20	993.69
2/23/2018	964.07	Removed	1018.67	Removed	Removed	974.26	995.37
3/9/2018	964.07	Removed	1018.85	Removed	Removed	974.26	992.52
4/2/2018	964.07	Removed	1018.83	Removed	Removed	974.22	993.00
5/23/2018	964.07	Removed	1019.25	Removed	Removed	974.66	996.32
6/18/2018	964.07	Removed	1016.25	Removed	Removed	974.21	993.77
7/2/2018	964.02	Removed	1019.25	Removed	Removed	974.55	995.30
8/14/2018	964.07	Removed	1019.50	Removed	Removed	974.36	996.67
9/18/2018	964.07	Removed	1019.75	Removed	Removed	974.36	995.37
10/22/2018	964.04	Removed	1019.71	Removed	Removed	974.35	995.56
11/13/2018	964.07	Removed	1019.35	Removed	Removed	974.50	995.77
12/11/2018	964.07	Removed	1019.85	Removed	Removed	974.46	995.62
1/15/2019	964.03	Removed	1019.79	Removed	Removed	974.27	995.36
2/28/2019	964.57	Removed	1019.75	Removed	Removed	974.41	995.72
3/28/2019	964.57	Removed	1020.00	Removed	Removed	974.21	995.32
4/22/2019	964.46	Removed	1020.10	Removed	Removed	974.27	995.20
5/3/2019	964.42	Removed	1019.90	Removed	Removed	974.44	995.72
6/19/2019	964.37	Removed	1020.50	Removed	Removed	974.36	997.72
7/8/2019	964.28	Removed	1020.29	Removed	Removed	974.10	997.92
8/23/2019	964.17	Removed	1019.95	Removed	Removed	974.16	997.37
9/25/2019	964.11	Removed	1020.08	Removed	Removed	974.06	997.09
10/23/2019	964.07	Removed	1012.05	Removed	Removed	974.11	996.84
11/14/2019	964.07	Removed	1019.90	Removed	Removed	974.14	996.47
12/12/2019	964.09	Removed	1021.23	Removed	Removed	974.18	997.50
1/15/2020	964.02	Removed	1020.15	Removed	Removed	974.05	997.28
2/5/2020	964.12	Removed	1020.25	Removed	Removed	974.16	996.82
3/3/2020	964.12	Removed	1020.75	Removed	Removed	974.46	997.17
4/10/2020	964.09	Removed	1020.60	Removed	Removed	974.16	997.87
5/13/2020	964.12	Removed	1020.65	Removed	Removed	974.21	998.47
6/3/2020	964.12	Removed	1021.00	Removed	Removed	974.59	998.33
7/8/2020	964.24	Removed	1020.92	Removed	Removed	974.08	998.46
8/4/2020	964.52	Removed	1020.50	Removed	Removed	973.91	998.12
9/3/2020	964.47	Removed	1020.49	Removed	Removed	974.31	997.96
10/23/2020	964.27	Removed	1019.68	Removed	Removed	974.03	996.87
11/30/2020	964.22	Removed	1017.25	Removed	Removed	974.06	996.27
12/18/2020	965.18	Removed	1018.15	Removed	Removed	974.06	996.16
1/7/2021	964.27	Removed	1019.30	Removed	Removed	974.11	995.70
2/19/2021	964.27	Removed	1019.20	Removed	Removed	974.09	995.52
3/9/2021	964.57	Removed	1019.35	Removed	Removed	974.26	995.56
4/5/2021	964.62	Removed	1020.09	Removed	Removed	974.52	995.79
5/14/2021	964.64	Removed	1019.65	Removed	Removed	974.15	995.98
6/9/2021	964.53	Removed	1020.25	Removed	Removed	974.11	996.17
7/1/2021	964.43	Removed	1018.35	Removed	Removed	974.01	996.17
8/5/2021	964.36	Removed	1019.55	Removed	Removed	973.91	996.27
9/24/2021	964.19	Removed	1018.88	Removed	Removed	973.76	995.76
10/8/2021	964.24	Removed	1018.92	Removed	Removed	974.26	995.74
11/2/2021	964.17	Removed	1018.50	Removed	Removed	973.83	995.46
12/3/2021	964.13	Removed	1019.01	Removed	Removed	974.10	995.91

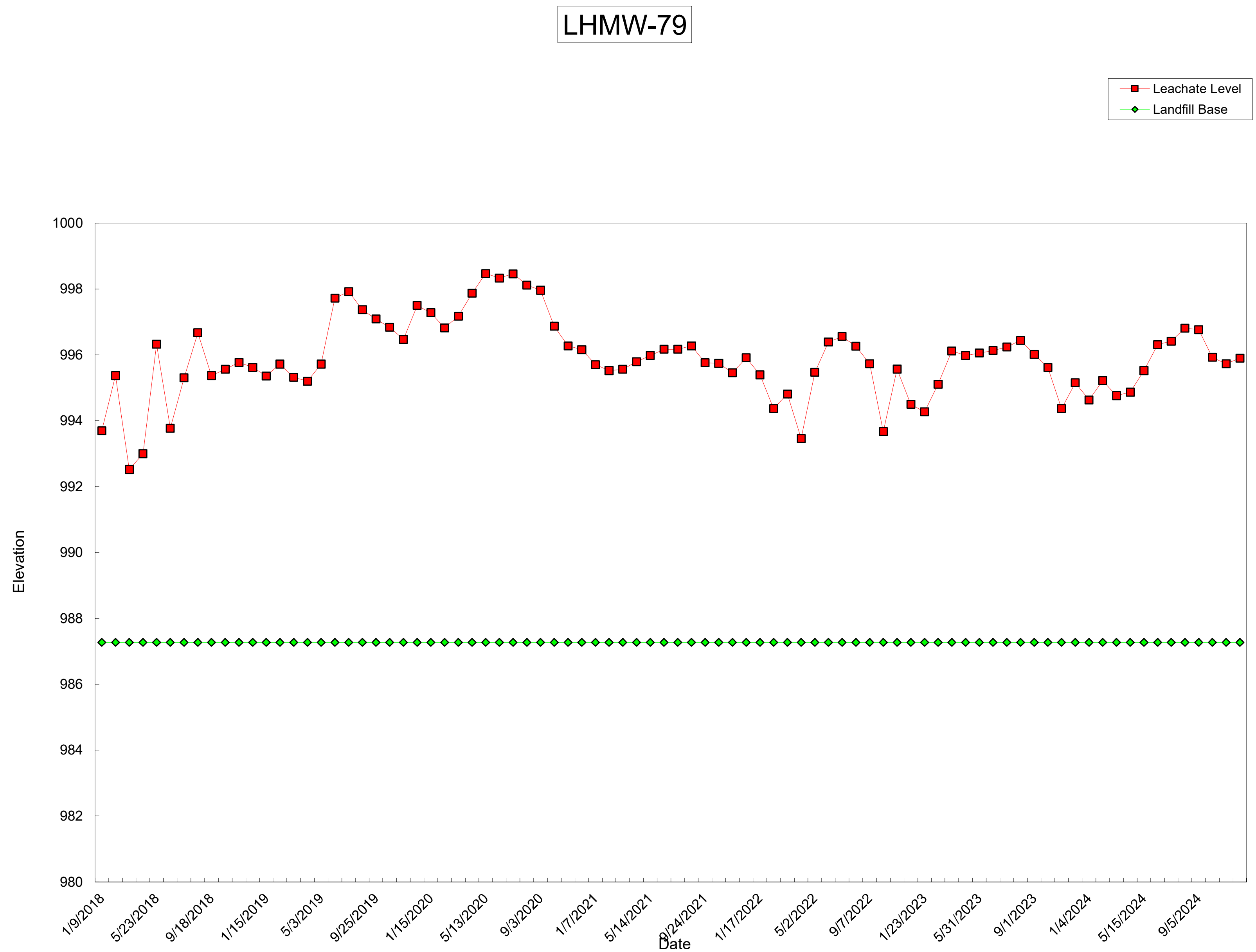
	MARSHALL COUNTY SANITARY LANDFILL						
		64-SDP-2-75P		**Leachate Elevations**			
	MONTHLY WATER ELEVATIONS						
	LHMW 73	**LHMW 74**	**LHMW 75**	**LHPZ 76**	**LHPZ 77**	**LHMW 78**	**LHMW 79**
TOP PVC. ELEV, FT	993.77	1021.72	1049.75	1047.47	1046.54	991.66	1010.27
DATE							
1/17/2022	964.12	Removed	1019.00	Removed	Removed	974.35	995.39
2/1/2022	964.12	Removed	1019.16	Removed	Removed	974.17	994.37
3/2/2022	964.17	Removed	1018.92	Removed	Removed	974.22	994.81
4/6/2022	964.32	Removed	1019.51	Removed	Removed	974.20	993.46
5/2/2022	964.50	Removed	1019.36	Removed	Removed	974.16	995.47
6/1/2022	964.46	Removed	1019.55	Removed	Removed	974.12	996.39
7/8/2022	964.30	Removed	1019.77	Removed	Removed	974.14	996.56
8/11/2022	964.23	Removed	1017.95	Removed	Removed	974.05	996.26
9/7/2022	964.17	Removed	1019.43	Removed	Removed	974.17	995.73
10/25/2022	964.11	Removed	1019.51	Removed	Removed	974.10	993.67
11/1/2022	964.12	Removed	1019.16	Removed	Removed	974.00	995.57
12/8/2022	964.12	Removed	1019.25	Removed	Removed	973.94	994.50
1/23/2023	964.10	Removed	1018.60	Removed	Removed	974.06	994.27
2/2/2023	964.12	Removed	1018.58	Removed	Removed	974.05	995.11
3/23/2023	964.12	Removed	1019.09	Removed	Removed	974.16	996.12
4/11/2023	964.12	Removed	1018.98	Removed	Removed	974.09	995.98
5/31/2023	964.22	Removed	1019.40	Removed	Removed	974.20	996.06
6/12/2023	964.20	Removed	1015.75	Removed	Removed	974.14	996.13
7/7/2023	964.12	Removed	1018.90	Removed	Removed	974.07	996.24
8/2/2023	964.12	Removed	1018.80	Removed	Removed	974.30	996.44
9/1/2023	964.11	Removed	1018.42	Removed	Removed	974.11	996.01
10/13/2023	964.13	Removed	1018.48	Removed	Removed	974.26	995.62
11/2/2023	964.12	Removed	1017.78	Removed	Removed	974.05	994.37
12/4/2023	964.12	Removed	1018.04	Removed	Removed	974.02	995.15
1/4/2024	964.11	Removed	1017.49	Removed	Removed	973.95	994.63
2/8/2024	964.12	Removed	1018.21	Removed	Removed	973.91	995.22
3/12/2024	964.11	Removed	1018.09	Removed	Removed	974.00	994.76
4/17/2024	964.13	Removed	1017.70	Removed	Removed	974.23	994.87
5/15/2024	964.11	Removed	1018.15	Removed	Removed	974.29	995.52
6/25/2024	964.12	Removed	1018.74	Removed	Removed	974.49	996.31
7/23/2024	964.11	Removed	1018.86	Removed	Removed	974.48	996.42
8/8/2024	964.10	Removed	1018.89	Removed	Removed	974.45	996.81
9/5/2024	964.11	Removed	1018.74	Removed	Removed	974.45	996.76
10/15/2024	964.09	Removed	1018.35	Removed	Removed	974.28	995.93
11/18/2024	964.10	Removed	1018.65	Removed	Removed	974.34	995.73
12/9/2024	964.08	Removed	1018.57	Removed	Removed	974.30	995.90


LHMW-73
Leachate Level
Landfill Base
Elevation
972
971
970
969
968
967
966
965
964
963
962
1/9/2018
5/23/2018
9/18/2018
1/15/2019
5/3/2019
9/25/2019
1/15/2020
5/13/2020
9/3/2020
1/7/2021
5/14/2021
9/24/2021
1/17/2022
5/2/2022
9/7/2022
1/23/2023
5/31/2023
9/1/2023
1/4/2024
5/15/2024
9/5/2024
Date


LHMW-75
Leachate Level
Landfill Base
Elevation
Date
1025
1020
1015
1010
1005
1000
995
1/9/2018
5/23/2018
9/18/2018
1/15/2019
5/3/2019
9/25/2019
1/15/2020
5/13/2020
9/3/2020
1/7/2021
5/14/2021
9/24/2021
1/17/2022
5/2/2022
9/7/2022
1/23/2023
5/31/2023
9/1/2023
1/4/2024
5/15/2024
9/5/2024



LHMW-78
Leachate Level
Landfill Base
976
974
972
970
968
966
964
962
960
Elevation
1/9/2018
5/23/2018
9/18/2018
1/15/2019
5/3/2019
9/25/2019
1/15/2020
5/13/2020
9/3/2020
1/7/2021
5/14/2021
9/24/2021
1/17/2022
5/2/2022
9/7/2022
1/23/2023
5/31/2023
9/1/2023
1/4/2024
5/15/2024
9/5/2024
Date



LHMW-79
Leachate Level
Landfill Base
Elevation
1000
998
996
994
992
990
988
986
984
982
980
Date
1/9/2018
5/23/2018
9/18/2018
1/15/2019
5/3/2019
9/25/2019
1/15/2020
5/13/2020
9/3/2020
1/7/2021
5/14/2021
9/24/2021
1/17/2022
5/2/2022
9/7/2022
1/23/2023
5/31/2023
9/1/2023
1/4/2024
5/15/2024
9/5/2024

Appendix G.3 – Treatment Agreement with Marshalltown

The City of Marshalltown, Iowa
Joel T.S. Greer, Mayor
Jessica Kinser, City Administrator
Bob Ranson, Superintendent WPC
1001 Woodland Street
Marshalltown, IA 50158-1810
Tel - (641) 754-5709
Fax - (641) 754-5741
Email - branson@marshalltown-ia.gov

WATER POLLUTION CONTROL

Date: September 1, 2022

To: Wastewater Discharge Permit Holders

From: Bob Ranson, Superintendent

Re: New Wastewater Discharge Permits

Enclosed is your wastewater discharge permit, renewed for three (3) years, effective January 1, 2023. Please maintain a copy of this permit in your pretreatment facility. Additionally, I will be sending signed electronic copies of your wastewater discharge permit.

Please let me know if you have any questions.

Sincerely,

Bob Ranson

CITY OF MARSHALLTOWN
Water Pollution Control Plant

SIGNIFICANT INDUSTRIAL USER
WASTEWATER DISCHARGE PERMIT

Permit No. MCL0123

In accordance with all terms and conditions of the Marshalltown Industrial Pretreatment Ordinance, and also with any applicable provisions of Federal or State law or regulation:

Permission is Hereby Granted to:

Marshall County Landfill
PO Box 217
2313 Marshalltown Blvd.
Marshalltown, Iowa 50158

Classified for the contribution of Landfill Leachate to the City of Marshalltown sanitary sewer lines and the Marshalltown Wastewater Treatment Plant.

This permit is granted in accordance with the application filed on **July 11, 2022**, in the office of the **Superintendent of the Marshalltown POTW**, and in conformity with plans, specifications, and other data submitted to the Superintendent in support of the above application, all of which are filed with and considered as part of this permit, together with the following conditions and requirements.

Effective: January 1, 2023
To expire: December 31, 2025

Bob Ranson, Superintendent
Water Pollution Control Plant

PERMIT LIMITATIONS

Compatible Waste in Contribution (Organics)	Not to Exceed	Maximum for 24-hour Period	Sample Type
Flow	65 gal./minute	93,600 gal.	
BOD_5	200 mg/L *		
Total Suspended Solids, lbs.	200 mg/L *		
TKN	75mg/L *		
Oil & Grease, mg/L			
See Note #1			

*Surcharge rates apply above these values (these are not permit limits)

Range of pH level in contribution 5.5 - 11.0. Peak hourly flow contribution of ________

Hours of operation during the peak day of operation ________ Days of operation/wk _______

Incompatible Wastes in Contribution (metals)	Monthly Average	Maximum for any 24 hour period	Sample Type
See Note #1			

Test Methods
All samples analyzed according to 40 CFR Part 136 and/or OA-1 and OA-2.

ADDENDUM #1

General Operating Conditions

24 hours/day with a flow rate not to exceed 65 gallons/minute.

Landfill agrees to maintain the sewer line from the leachate lagoon to the City sanitary sewer on Lincoln Way, west of Highland Acres Road. MH # E09-011.

Landfill agrees to promptly pay all sewage treatment costs as outlined by the City's User Charge Ordinance.

Note #1: No limit will be applied to metal and/or organics at this time. If tests indicate the presence of metals or organics, discharge limits will be developed.

Monitoring Requirements

During each discharge event from the leachate lagoon system, a composite sample will be collected consisting of six (6) equal grabs evenly spaced over a six hour period. The collection point will be from the force main discharge to the sanitary sewer. The sample will be analyzed for the compatible wastes listed on page two of the permit, and the heavy metals, Cadmium (Cd), Chrome (Cr), Copper (Cu), Lead (Pb), Nickel (Ni), and Zinc (Zn). The sample shall be delivered to the WPCP for analysis in accordance with City procedures. At the time of one of the grab sample collections, Landfill staff will measure and record pH using a WPCP pH meter.

This sample will be used to calculate the monthly surcharge rate. The Landfill can bring in other samples to be tested to change the monthly average.

A complete Priority Pollutant Scan shall be run every five (5) years on a representative sample of the lagoon leachate content.

If a new landfill site is opened and the leach field is connected to the existing lagoon, a Priority Pollutant scan should be run within 30 days of connection. If there is no flow to the lagoon from the new site, then wait until a representative sample can be taken.

Industry is required to resample and resubmit results within 30 days following a violation and is responsible for self-monitoring in case the City is unable to conduct sampling analysis.

Reporting Requirements

1) A monthly flow report containing daily flow totals shall be an original document signed by the appropriate industry representative and mailed or hand delivered, within the first five (5) working days of the following month.

2) A copy of all leachate analysis required or provided to the Iowa Department of Natural Resources (IDNR) shall be submitted to the City within 15 days of submittal to the IDNR.

Note: Daily flow readings will be taken from an approved flow meter.

Flow report shall be sent to:

Bob Ranson
Superintendent
Marshalltown WPCP
1001 Woodland Street
Marshalltown, Iowa 50158-1810
Phone (641) 754-5709
Fax (641) 754-5741

STANDARD PERMIT CONDITIONS

Marshalltown City Code available at: https://marshalltown-ia.gov/ (Chapter 28 Water and Sewers).

1) Inspection of premises
City personnel shall have the right to enter a permitted industry's property for inspection and/or sampling. (Ordinance Section 28.92)

2) Maintenance of records
You are required to maintain records of your operation in accordance with Ordinance Section 28-94 for three (3) years.

3) Penalty provisions
Failure to comply with any permit conditions can result in enforcement action as stated in Ordinance Section 28-97.

4) Revocation of permit
The City may revoke a permit if any of the provisions of (Ordinance Section 28-97 (b)) are not met.

5) Permit transfer
Wastewater discharge permits are issued to a specific user for a specific operation. A wastewater discharge permit shall not be reassigned or transferred or sold to a new owner, new user, different premises, or a new or changed operation without the approval of the City. Any succeeding owner or user shall also comply with the terms and conditions of the existing permit. (Ordinance Section 28-88(f))

6) Notification of slug load/accidental discharge
Permit holders are required to notify the POTW immediately of any slug load/accidental discharge to the sanitary sewer system. (Ordinance Section 28-89 (f)(g))

7) Accidental discharge/slug control plans
The City may require any industrial user to develop and implement an accidental discharge/slug control plan. (Ordinance Section 28-85)

8) Civil/Criminal penalties
Industrial users are subject to civil/criminal penalties if they violate any permit/ordinance conditions.

9) Permit renewal
An application for permit renewal shall be submitted to the Water Pollution Control Plant 90 days prior to the expiration date of the current permit. (Ordinance section 28-88(e))

10) Notification of changes in wastewater discharge
The Permittee shall promptly notify the City of any new introduction of wastewater constituents or any substantial change in the volume or character of the wastewater constituents being introduced into the wastewater treatment system. (Ordinance section 28-88(g))

11) Application of other authority
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 or your discharge.

12) Periodic report on continued compliance 40 CFR, Section 403.12(e)
Categorical and noncategorical industrial users are required to report on their regulated waste discharges to the control authority at least semiannually. The regulations (section 403.12(e)(1)) state that the reports are to contain information indicating the nature and concentration of pollutants in the effluent that are limited by such categorical pretreatment standards. For some categorical TTO standards, the categorical regulation provides for the use of a certification as a substitute for sampling and analysis results. In addition, this report shall include a record of measured or estimated average daily flows for the reporting period. If the city performs all of the monitoring and sampling requirements of the industrial user's permit, every six months the City will send all permitted industrial users a standard six-month compliance form for the industrial user to certify compliance.

13) Additional monitoring
Any Significant Industrial User (SIU) that conducts self-monitoring in lieu of the City conducting all of the monitoring must submit all monitoring data to the City. If a SIU conducts sampling more frequently than the minimum required by their permit, all of the sampling data must be submitted to the City.

14) Testing responsibility
If the City of Marshalltown Water Pollution Control Plant Laboratory provides testing services for an industry and is unable to conduct testing for permit compliance, the industry is still responsible for testing and data submittal.

Appendix G.4- Leachate Volumes Discharged to the POTW

Annual Leachate Discharge to POTW
Marshall County Sanitary Landfill

2024

Month	**Gallons Discharged**
January	
February	
March	
April	1,257,168
May	
June	
July	1,043,452
August	756,444
September	
October	
November	
December	
	3,057,064

Appendix G.5 – Leachate Analyses by POTW

City of Marshalltown, Iowa
Water Pollution Control Plant
4/1/2024 - 4/30/2024

Marshall County Landfill
Marshalltown, Iowa

Facility Number: 6469001
IA Lab Cert. # 141

Marshall County Landfill Daily 4/1/2024 - 4/30/2024	Flow GPD	BOD 5 MG/L	BOD 5 LB	TSS (mg/L)	TSS LB	Ammonia MG/L	Ammonia LB	TKN MG/L	TKN LB
4/1/2024	34,128	29.00	8.254	54	15.37			64.5	18.358
4/2/2024	68,256	29.00	16.508	54	30.74			64.5	36.717
4/3/2024	68,256	29.00	16.508	54	30.74			64.5	36.717
4/4/2024	68,256	29.00	16.508	54	30.74			64.5	36.717
4/5/2024	68,256	29.00	16.508	54	30.74			64.5	36.717
4/6/2024	68,256	29.00	16.508	54	30.74			64.5	36.717
4/7/2024	68,256	29.00	16.508	54	30.74			64.5	36.717
4/8/2024	68,256	29.00	16.508	54	30.74			64.5	36.717
4/9/2024	68,256	29.00	16.508	54	30.74			64.5	36.717
4/10/2024	68,256	29.00	16.508	54	30.74			64.5	36.717
4/11/2024	68,256	29.00	16.508	54	30.74			64.5	36.717
4/12/2024	68,256	29.00	16.508	54	30.74			64.5	36.717
4/13/2024	68,256	29.00	16.508	54	30.74			64.5	36.717
4/14/2024	68,256	29.00	16.508	54	30.74			64.5	36.717
4/15/2024	68,256	29.00	16.508	54	30.74			64.5	36.717
4/16/2024	68,256	29.00	16.508	54	30.74			64.5	36.717
4/17/2024	68,256	29.00	16.508	54	30.74			64.5	36.717
4/18/2024	34,128	29.00	8.254	54	15.37			64.5	18.358
4/19/2024	34,128	29.00	8.254	54	15.37			64.5	18.358
4/20/2024	34,128	29.00	8.254	54	15.37			64.5	18.358
4/21/2024	28,560	29.00	6.908	54	12.86			64.5	15.363
4/22/2024									
4/23/2024									
4/24/2024									
4/25/2024									
4/26/2024									
4/27/2024									
4/28/2024									
4/29/2024									
4/30/2024									
Sum	1,257,168	609.00	304.059	1,134	566.18			1,354.5	676.268
Avg	59,865	29.00	14.479	54	26.96			64.5	32.203
Max	68,256	29.00	16.508	54	30.74			64.5	36.717
Min	28,560	29.00	6.908	54	12.86			64.5	15.363

Bob Ranson, Superintendent

MARSHALL COUNTY LANDFILL
MONTHLY MONITORING REPORT
MONTH: April
YEAR: 2024

DATE	FLOW MGD	BOD mg/L	BOD LBS	pH	TSS mg/L	TSS LBS	TKN mg/L	TKN LBS
1	0.0341	29	8.25	8.50	54	15	64.5	18
2	0.0683	29	16.51	8.50	54	31	64.5	37
3	0.0683	29	16.51	8.50	54	31	64.5	37
4	0.0683	29	16.51	8.50	54	31	64.5	37
5	0.0683	29	16.51	8.50	54	31	64.5	37
6	0.0683	29	16.51	8.50	54	31	64.5	37
7	0.0683	29	16.51	8.50	54	31	64.5	37
8	0.0683	29	16.51	8.50	54	31	64.5	37
9	0.0683	29	16.51	8.50	54	31	64.5	37
10	0.0683	29	16.51	8.50	54	31	64.5	37
11	0.0683	29	16.51	8.50	54	31	64.5	37
12	0.0683	29	16.51	8.50	54	31	64.5	37
13	0.0683	29	16.51	8.50	54	31	64.5	37
14	0.0683	29	16.51	8.50	54	31	64.5	37
15	0.0683	29	16.51	8.50	54	31	64.5	37
16	0.0683	29	16.51	8.50	54	31	64.5	37
17	0.0683	29	16.51	8.50	54	31	64.5	37
18	0.0341	29	8.25	8.50	54	15	64.5	18
19	0.0341	29	8.25	8.50	54	15	64.5	18
20	0.0341	29	8.25	8.50	54	15	64.5	18
21	0.0286	29	6.91	8.50	54	13	64.5	15
22			0.00			0		0
23			0.00			0		0
24			0.00			0		0
25			0.00			0		0
26			0.00			0		0
27			0.00			0		0
28			0.00			0		0
29			0.00			0		0
30			0.00			0		0
TOTAL	1.2572		304			566		676
AVE	0.0599	29	14	8.50	54	27		32
MAX	0.0683	29	17	8.50	54	31	64.5	37
MIN	0.0286	29	0	8.50	54	0	64.5	0

Sample was brought in on 4-10-24

MARSHALL COUNTY LANDFILL
MONTHLY MONITORING REPORT
MONTH: April
YEAR: 2024

DATE	FLOW MGD	BOD mg/L	BOD-200 mg/L	BOD LBS	TSS mg/L	TSS-200 mg/L	TSS LBS	TKN mg/L	TKN-75 mg/L	TKN LBS
1	0.0341	29	0	0	54	0	0	64.5	0	0
2	0.0683	29	0	0	54	0	0	64.5	0	0
3	0.0683	29	0	0	54	0	0	64.5	0	0
4	0.0683	29	0	0	54	0	0	64.5	0	0
5	0.0683	29	0	0	54	0	0	64.5	0	0
6	0.0683	29	0	0	54	0	0	64.5	0	0
7	0.0683	29	0	0	54	0	0	64.5	0	0
8	0.0683	29	0	0	54	0	0	64.5	0	0
9	0.0683	29	0	0	54	0	0	64.5	0	0
10	0.0683	29	0	0	54	0	0	64.5	0	0
11	0.0683	29	0	0	54	0	0	64.5	0	0
12	0.0683	29	0	0	54	0	0	64.5	0	0
13	0.0683	29	0	0	54	0	0	64.5	0	0
14	0.0683	29	0	0	54	0	0	64.5	0	0
15	0.0683	29	0	0	54	0	0	64.5	0	0
16	0.0683	29	0	0	54	0	0	64.5	0	0
17	0.0683	29	0	0	54	0	0	64.5	0	0
18	0.0341	29	0	0	54	0	0	64.5	0	0
19	0.0341	29	0	0	54	0	0	64.5	0	0
20	0.0341	29	0	0	54	0	0	64.5	0	0
21	0.0286	29	0	0	54	0	0	64.5	0	0
22	0.0000	0	0	0	0	0	0	0.0	0	0
23	0.0000	0	0	0	0	0	0	0.0	0	0
24	0.0000	0	0	0	0	0	0	0.0	0	0
25	0.0000	0	0	0	0	0	0	0.0	0	0
26	0.0000	0	0	0	0	0	0	0.0	0	0
27	0.0000	0	0	0	0	0	0	0.0	0	0
28	0.0000	0	0	0	0	0	0	0.0	0	0
29	0.0000	0	0	0	0	0	0	0.0	0	0
30	0.0000	0	0	0	0	0	0	0.0	0	0
TOTAL	1.2572			0			0			0

0	#CBOD*0.618=	0.00
0	#SS*0.371=	0.00
0	#TKN*0.402=	0.00
	TOTAL	$ 0.00

LANDFILL METALS 2024

MARSHALL COUNTY LANDFILL 2024 **MARSHALL COUNTY LANDFILL 2024**

DATE	FLOW MGD	pH	Cd mg/L	Cd LBS	Cr mg/L	Cr LBS	Cu mg/L	Cu LBS	Pb mg/L	PB LBS
04/10/24	0.0683	8.50	<0.00025	0.00	<0.00025	0.0000	<0.002	0.0000	0.00076	0.0004
				0.00		0.0000		0.0000		0.0000
				0.00		0.0000		0.0000		0.0000
				0.00		0.0000		0.0000		0.0000
				0.00		0.0000		0.0000		0.0000
				0.00		0.0000		0.0000		0.0000
				0.00		0.0000		0.0000		0.0000
				0.00		0.0000		0.0000		0.0000
				0.00		0.0000		0.0000		0.0000
				0.00		0.0000		0.0000		0.0000
				0.00		0.0000		0.0000		0.0000
AVE	0.0683	8.50	#DIV/0!	0	#DIV/0!	0.0000	#DIV/0!	0.0000	0.0008	0.0001
MAX	0.0683	8.50	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
MIN	0.0683	8.50	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00

DATE	FLOW MGD	Ni mg/L	Ni lbs	Zn mg/L	Zn lbs
04/10/24	0.0683	0.023663	0.01	0.021	0.0118
01/00/00	0.0186		0.00		0.0000
01/00/00	0.0000		0.00		0.0000
01/00/00	0.0000		0.00		0.0000
01/00/00	0.0000		0.00		0.0000
01/00/00	0.0000		0.00		0.0000
01/00/00	0.0000		0.00		0.0000
01/00/00	0.0000		0.00		0.0000
01/00/00	0.0000		0.00		0.0000
01/00/00	0.0000		0.00		0.0000
01/00/00	0.0000		0.00		0.0000
AVE	#REF!	#REF!	0.002	0.021	0.0013
MAX	#REF!	#REF!	0.01	0.021	0.012
MIN	#REF!	#REF!	0.00	0.021	0.000

City of Marshalltown, Iowa
Water Pollution Control Plant
8/1/2024 - 8/31/2024

Marshall County Landfill
Marshalltown, Iowa

Facility Number: 6469001
IA Lab Cert. # 141

Marshall County Landfill Daily 8/1/2024 - 8/31/2024	Flow GPD	BOD 5 MG/L	BOD 5 LB	TSS (mg/L)	TSS LB	Ammonia MG/L	Ammonia LB	TKN MG/L	TKN LB
8/1/2024	22,480	41.00	7.687	7	1.27			77.0	14.436
8/2/2024	53,952	41.00	18.448	7	3.05			77.0	34.647
8/3/2024	53,952	41.00	18.448	7	3.05			77.0	34.647
8/4/2024	53,952	41.00	18.448	7	3.05			77.0	34.647
8/5/2024	53,952	41.00	18.448	7	3.05			77.0	34.647
8/6/2024	53,952	41.00	18.448	7	3.05			77.0	34.647
8/7/2024	53,952	41.00	18.448	7	3.05			77.0	34.647
8/8/2024	53,952	41.00	18.448	7	3.05			77.0	34.647
8/9/2024	53,952	41.00	18.448	7	3.05			77.0	34.647
8/10/2024	53,952	41.00	18.448	7	3.05			77.0	34.647
8/11/2024	53,952	41.00	18.448	7	3.05			77.0	34.647
8/12/2024	53,952	41.00	18.448	7	3.05			77.0	34.647
8/13/2024	53,952	41.00	18.448	7	3.05			77.0	34.647
8/14/2024	53,952	41.00	18.448	7	3.05			77.0	34.647
8/15/2024	22,480	41.00	7.687	7	1.27			77.0	14.436
8/16/2024	53,952	41.00	18.448	7	3.05			77.0	34.647
8/17/2024	53,952	41.00	18.448	7	3.05			77.0	34.647
8/18/2024	26,976	41.00	9.224	7	1.53			77.0	17.323
8/19/2024	53,952	41.00	18.448	7	3.05			77.0	34.647
8/20/2024	53,952	41.00	18.448	7	3.05			77.0	34.647
8/21/2024	22,480	41.00	7.687	7	1.27			77.0	14.436
8/22/2024	22,480	41.00	7.687	7	1.27			77.0	14.436
8/23/2024	9,368	41.00	3.203	7	0.53			77.0	6.016
8/24/2024									
8/25/2024									
8/26/2024									
8/27/2024									
8/28/2024									
8/29/2024									
8/30/2024									
8/31/2024									
Sum	1,043,448	943.00	356.797	156	59.00			1,771.0	670.081
Avg	45,367	41.00	15.513	7	2.57			77.0	29.134
Max	53,952	41.00	18.448	7	3.05			77.0	34.647
Min	9,368	41.00	3.203	7	0.53			77.0	6.016

Bob Ranson, Superintendent

MARSHALL COUNTY LANDFILL
MONTHLY MONITORING REPORT
MONTH: August
YEAR: 2024

DATE	FLOW MGD	BOD mg/L	BOD LBS	pH	TSS mg/L	TSS LBS	TKN mg/L	TKN LBS
1	0.0225	41	7.69	6.78	25	5	77.0	14
2	0.0540	41	18.45	6.78	25	11	77.0	35
3	0.0540	41	18.45	6.78	25	11	77.0	35
4	0.0540	41	18.45	6.78	25	11	77.0	35
5	0.0540	41	18.45	6.78	25	11	77.0	35
6	0.0540	41	18.45	6.78	25	11	77.0	35
7	0.0540	41	18.45	6.78	25	11	77.0	35
8	0.0540	41	18.45	6.78	25	11	77.0	35
9	0.0540	41	18.45	6.78	25	11	77.0	35
10	0.0540	41	18.45	6.78	25	11	77.0	35
11	0.0540	41	18.45	6.78	25	11	77.0	35
12	0.0540	41	18.45	6.78	25	11	77.0	35
13	0.0540	41	18.45	6.78	25	11	77.0	35
14	0.0540	41	18.45	6.78	25	11	77.0	35
15	0.0225	41	7.69	6.78	25	5	77.0	14
16	0.0540	41	18.45	6.78	25	11	77.0	35
17	0.0540	41	18.45	6.78	25	11	77.0	35
18	0.0270	41	9.22	6.78	25	6	77.0	17
19	0.0540	41	18.45	6.78	25	11	77.0	35
20	0.0540	41	18.45	6.78	25	11	77.0	35
21	0.0225	41	7.69	6.78	25	5	77.0	14
22	0.0225	41	7.69	6.78	25	5	77.0	14
23	0.0094	41	3.20	6.78	25	2	77.0	6
24			0.00			0		0
25			0.00			0		0
26			0.00			0		0
27			0.00			0		0
28			0.00			0		0
29			0.00			0		0
30			0.00			0		0
31			0.00			0		0
TOTAL	1.0434		357			218		670
AVE	0.0454	41	16	6.78	25	10		29
MAX	0.0540	41	18	6.78	25	11	77.0	35
MIN	0.0094	41	0	6.78	25	0	77.0	0

Sample was brought in on 8-1-24

MARSHALL COUNTY LANDFILL
MONTHLY MONITORING REPORT
MONTH: August
YEAR: 2024

DATE	FLOW MGD	BOD mg/L	BOD-200 mg/L	BOD LBS	TSS mg/L	TSS-200 mg/L	TSS LBS	TKN mg/L	TKN-75 mg/L	TKN LBS
1	0.0225	41	0	0	25	0	0	77.0	2	0
2	0.0540	41	0	0	25	0	0	77.0	2	1
3	0.0540	41	0	0	25	0	0	77.0	2	1
4	0.0540	41	0	0	25	0	0	77.0	2	1
5	0.0540	41	0	0	25	0	0	77.0	2	1
6	0.0540	41	0	0	25	0	0	77.0	2	1
7	0.0540	41	0	0	25	0	0	77.0	2	1
8	0.0540	41	0	0	25	0	0	77.0	2	1
9	0.0540	41	0	0	25	0	0	77.0	2	1
10	0.0540	41	0	0	25	0	0	77.0	2	1
11	0.0540	41	0	0	25	0	0	77.0	2	1
12	0.0540	41	0	0	25	0	0	77.0	2	1
13	0.0540	41	0	0	25	0	0	77.0	2	1
14	0.0540	41	0	0	25	0	0	77.0	2	1
15	0.0225	41	0	0	25	0	0	77.0	2	0
16	0.0540	41	0	0	25	0	0	77.0	2	1
17	0.0540	41	0	0	25	0	0	77.0	2	1
18	0.0270	41	0	0	25	0	0	77.0	2	0
19	0.0540	41	0	0	25	0	0	77.0	2	1
20	0.0540	41	0	0	25	0	0	77.0	2	1
21	0.0225	41	0	0	25	0	0	77.0	2	0
22	0.0225	41	0	0	25	0	0	77.0	2	0
23	0.0094	41	0	0	25	0	0	77.0	2	0
24	0.0000	0	0	0	0	0	0	0.0	0	0
25	0.0000	0	0	0	0	0	0	0.0	0	0
26	0.0000	0	0	0	0	0	0	0.0	0	0
27	0.0000	0	0	0	0	0	0	0.0	0	0
28	0.0000	0	0	0	0	0	0	0.0	0	0
29	0.0000	0	0	0	0	0	0	0.0	0	0
30	0.0000	0	0	0	0	0	0	0.0	0	0
31	0.0000	0	0	0	0	0	0	0.0	0	0
TOTAL	1.0434			0			0			17.405

0	#CBOD*0.618=		0.00
0	#SS*0.371=		0.00
17.4047	#TKN*0.402=		7.00
	TOTAL	$	7.00

MARSHALL COUNTY LANDFILL 2024

MARSHALL COUNTY LANDFILL 2024

DATE	FLOW MGD	pH	Cd mg/L	Cd LBS	Cr mg/L	Cr LBS	Cu mg/L	Cu LBS	Pb mg/L	PB LBS
04/10/24	0.0683	8.50	<0.00025	0.00	<0.00025	0.0000	<0.002	0.0000	0.00076	0.0004
08/01/24	0.0225	6.78	<0.00025	0.00	0.005	0.0010	0.014	0.0026	<0.00075	0.0000
				0.00		0.0000		0.0000		0.0000
				0.00		0.0000		0.0000		0.0000
				0.00		0.0000		0.0000		0.0000
				0.00		0.0000		0.0000		0.0000
				0.00		0.0000		0.0000		0.0000
				0.00		0.0000		0.0000		0.0000
				0.00		0.0000		0.0000		0.0000
				0.00		0.0000		0.0000		0.0000
				0.00		0.0000		0.0000		0.0000
AVE	0.0454	7.64	#DIV/0!	0	0.005	0.0001	0.0138	0.0003	0.0008	0.0001
MAX	0.0683	8.50	0.000	0.000	0.000	0.00	0.01	0.00	0.00	0.00
MIN	0.0683	6.78	0.000	0.000	0.000	0.00	0.01	0.00	0.00	0.00

DATE	FLOW MGD	Ni mg/L	Ni lbs	Zn mg/L	Zn lbs
04/10/24	0.0683	0.023663	0.01	0.021	0.0118
08/01/24	0.0225	0.018759	0.00	0.023	0.0043
01/00/00	0.0000		0.00		0.0000
01/00/00	0.0000		0.00		0.0000
01/00/00	0.0000		0.00		0.0000
01/00/00	0.0000		0.00		0.0000
01/00/00	0.0000		0.00		0.0000
01/00/00	0.0000		0.00		0.0000
01/00/00	0.0000		0.00		0.0000
01/00/00	0.0000		0.00		0.0000
01/00/00	0.0000		0.00		0.0000
AVE	#REF!	#REF!	0.002	0.022	0.0018
MAX	#REF!	#REF!	0.01	0.023	0.012
MIN	#REF!	#REF!	0.00	0.021	0.000

City of Marshalltown, Iowa
Water Pollution Control Plant
9/1/2024 - 9/30/2024

Marshall County Landfill
Marshalltown, Iowa

Facility Number: 6469001
IA Lab Cert. # 141

Marshall County Landfill Daily 9/1/2024 - 9/30/2024	Flow GPD	BOD 5 MG/L	BOD 5 LB	TSS (mg/L)	TSS LB	Ammonia MG/L	Ammonia LB	TKN MG/L	TKN LB
9/1/2024	19,590	31.00	5.065	77	12.58			44.7	7.303
9/2/2024	47,016	31.00	12.156	77	30.19			44.7	17.527
9/3/2024	47,016	31.00	12.156	77	30.19			44.7	17.527
9/4/2024	47,016	31.00	12.156	77	30.19			44.7	17.527
9/5/2024	47,016	31.00	12.156	77	30.19			44.7	17.527
9/6/2024	47,016	31.00	12.156	77	30.19			44.7	17.527
9/7/2024	47,016	31.00	12.156	77	30.19			44.7	17.527
9/8/2024	47,016	31.00	12.156	77	30.19			44.7	17.527
9/9/2024	47,016	31.00	12.156	77	30.19			44.7	17.527
9/10/2024	47,016	31.00	12.156	77	30.19			44.7	17.527
9/11/2024	47,016	31.00	12.156	77	30.19			44.7	17.527
9/12/2024	47,016	31.00	12.156	77	30.19			44.7	17.527
9/13/2024	47,016	31.00	12.156	77	30.19			44.7	17.527
9/14/2024	47,016	31.00	12.156	77	30.19			44.7	17.527
9/15/2024	47,016	31.00	12.156	77	30.19			44.7	17.527
9/16/2024	47,016	31.00	12.156	77	30.19			44.7	17.527
9/17/2024	31,614	31.00	8.173	77	20.30			44.7	11.786
9/18/2024									
9/19/2024									
9/20/2024									
9/21/2024									
9/22/2024									
9/23/2024									
9/24/2024									
9/25/2024									
9/26/2024									
9/27/2024									
9/28/2024									
9/29/2024									
9/30/2024									
Sum	756,444	527.00	195.571	1,309	485.77			759.9	282.001
Avg	44,497	31.00	11.504	77	28.57			44.7	16.588
Max	47,016	31.00	12.156	77	30.19			44.7	17.527
Min	19,590	31.00	5.065	77	12.58			44.7	7.303

Bob Ranson, Superintendent

MARSHALL COUNTY LANDFILL 2024

MARSHALL COUNTY LANDFILL 2024

DATE	FLOW MGD	pH	Cd mg/L	Cd LBS	Cr mg/L	Cr LBS	Cu mg/L	Cu LBS	Pb mg/L	PB LBS
)4/10/24	0.0683	8.50	<0.00025	0.00	<0.00025	0.0000	<0.002	0.0000	0.00076	0.0004
)8/01/24	0.0225	6.78	<0.00025	0.00	0.005	0.0010	0.014	0.0026	<0.00075	0.0000
)9/05/24	0.0470	8.15	<0.00025	0.00	0.004	0.0015	<0.002	0.0000	<0.00075	0.0000
				0.00		0.0000		0.0000		0.0000
				0.00		0.0000		0.0000		0.0000
				0.00		0.0000		0.0000		0.0000
				0.00		0.0000		0.0000		0.0000
				0.00		0.0000		0.0000		0.0000
				0.00		0.0000		0.0000		0.0000
				0.00		0.0000		0.0000		0.0000
				0.00		0.0000		0.0000		0.0000
AVE	0.0459	7.81	#DIV/0!	0	0.004	0.0003	0.0138	0.0003	0.0008	0.0001
MAX	0.0683	8.50	0.000	0.000	0.000	0.00	0.01	0.00	0.00	0.00
MIN	0.0683	6.78	0.000	0.000	0.000	0.00	0.01	0.00	0.00	0.00

DATE	FLOW MGD	Ni mg/L	Ni lbs	Zn mg/L	Zn lbs
4/10/24	0.0683	0.023663	0.01	0.021	0.0118
8/01/24	0.0225	0.018759	0.00	0.023	0.0043
9/05/24	0.0470	0.019355	0.01	0.012	0.0048
1/00/00	0.0000		0.00		0.0000
1/00/00	0.0000		0.00		0.0000
1/00/00	0.0000		0.00		0.0000
1/00/00	0.0000		0.00		0.0000
1/00/00	0.0000		0.00		0.0000
1/00/00	0.0000		0.00		0.0000
1/00/00	0.0000		0.00		0.0000
1/00/00	0.0000		0.00		0.0000
AVE	#REF!	#REF!	0.004	0.019	0.0023
MAX	#REF!	#REF!	0.01	0.023	0.012
MIN	#REF!	#REF!	0.00	0.012	0.000

MARSHALL COUNTY LANDFILL
MONTHLY MONITORING REPORT
MONTH: September
YEAR: 2024

DATE	FLOW MGD	BOD mg/L	BOD LBS	pH	TSS mg/L	TSS LBS	TKN mg/L	TKN LBS
1	0.0196	31	5.06	8.15	77	13	44.7	7
2	0.0470	31	12.16	8.15	77	30	44.7	18
3	0.0470	31	12.16	8.15	77	30	44.7	18
4	0.0470	31	12.16	8.15	77	30	44.7	18
5	0.0470	31	12.16	8.15	77	30	44.7	18
6	0.0470	31	12.16	8.15	77	30	44.7	18
7	0.0470	31	12.16	8.15	77	30	44.7	18
8	0.0470	31	12.16	8.15	77	30	44.7	18
9	0.0470	31	12.16	8.15	77	30	44.7	18
10	0.0470	31	12.16	8.15	77	30	44.7	18
11	0.0470	31	12.16	8.15	77	30	44.7	18
12	0.0470	31	12.16	8.15	77	30	44.7	18
13	0.0470	31	12.16	8.15	77	30	44.7	18
14	0.0470	31	12.16	8.15	77	30	44.7	18
15	0.0470	31	12.16	8.15	77	30	44.7	18
16	0.0470	31	12.16	8.15	77	30	44.7	18
17	0.0316	31	8.17	8.15	77	20	44.7	12
18			0.00			0		0
19			0.00			0		0
20			0.00			0		0
21			0.00			0		0
22			0.00			0		0
23			0.00			0		0
24			0.00			0		0
25			0.00			0		0
26			0.00			0		0
27			0.00			0		0
28			0.00			0		0
29			0.00			0		0
30			0.00			0		0
TOTAL	0.7564		196			486		282
AVE	0.0445	31	12	8.15	77	29		17
MAX	0.0470	31	12	8.15	77	30	44.7	18
MIN	0.0196	31	0	8.15	77	0	44.7	0

Annual Inspection sample was collected 9-5-24

MARSHALL COUNTY LANDFILL
MONTHLY MONITORING REPORT
MONTH: September
YEAR: 2024

DATE	FLOW MGD	BOD mg/L	BOD-200 mg/L	BOD LBS	TSS mg/L	TSS-200 mg/L	TSS LBS	TKN mg/L	TKN-75 mg/L	TKN LBS
1	0.0196	31	0	0	77	0	0	44.7	0	0
2	0.0470	31	0	0	77	0	0	44.7	0	0
3	0.0470	31	0	0	77	0	0	44.7	0	0
4	0.0470	31	0	0	77	0	0	44.7	0	0
5	0.0470	31	0	0	77	0	0	44.7	0	0
6	0.0470	31	0	0	77	0	0	44.7	0	0
7	0.0470	31	0	0	77	0	0	44.7	0	0
8	0.0470	31	0	0	77	0	0	44.7	0	0
9	0.0470	31	0	0	77	0	0	44.7	0	0
10	0.0470	31	0	0	77	0	0	44.7	0	0
11	0.0470	31	0	0	77	0	0	44.7	0	0
12	0.0470	31	0	0	77	0	0	44.7	0	0
13	0.0470	31	0	0	77	0	0	44.7	0	0
14	0.0470	31	0	0	77	0	0	44.7	0	0
15	0.0470	31	0	0	77	0	0	44.7	0	0
16	0.0470	31	0	0	77	0	0	44.7	0	0
17	0.0316	31	0	0	77	0	0	44.7	0	0
18	0.0000	0	0	0	0	0	0	0.0	0	0
19	0.0000	0	0	0	0	0	0	0.0	0	0
20	0.0000	0	0	0	0	0	0	0.0	0	0
21	0.0000	0	0	0	0	0	0	0.0	0	0
22	0.0000	0	0	0	0	0	0	0.0	0	0
23	0.0000	0	0	0	0	0	0	0.0	0	0
24	0.0000	0	0	0	0	0	0	0.0	0	0
25	0.0000	0	0	0	0	0	0	0.0	0	0
26	0.0000	0	0	0	0	0	0	0.0	0	0
27	0.0000	0	0	0	0	0	0	0.0	0	0
28	0.0000	0	0	0	0	0	0	0.0	0	0
29	0.0000	0	0	0	0	0	0	0.0	0	0
30	0.0000	0	0	0	0	0	0	0.0	0	0
TOTAL	0.7564			0			0			0

0	#CBOD*0.618=			0.00
0	#SS*0.371=			0.00
0	#TKN*0.402=			0.00
		TOTAL	$	0

Appendix G.6 – Priority Pollutant Scan

THE UNIVERSITY OF IOWA | STATE HYGIENIC LABORATORY

ANALYTICAL REPORT

1-800-421-IOWA (4692)

Collection Location	Collector and Phone	Client Reference	Accession #
leachole lagoon	draper damien 641/754-5709	marshall co landfill	2269894
MARSHALLTOWN,	Collected 2023-04-20	Received 2023-04-20 13:16	Project

Report To

DAMIEN DRAPER
MARSHALLTOWN WPCP

1001 WOODLAND ST
MARSHALLTOWN, IA 50158-1810

Sample Description	non drinking water
Sample Type	Non-Drinking Water
Sample Source	
Sample Note(s)	1

ADDITIONAL SAMPLE INFORMATION

Purchase Order: 04202023DD01

RESULTS OF ANALYSIS - FINAL REPORT

TEST	RESULT (ug/L)	QUANT LIMIT	ANALYSIS NOTE(S)
GCMS Volatiles, EPA 624		*CORRECTED REPORT 1*	*2*
Chloromethane	<5	5	
Bromomethane	<5	5	
Vinyl chloride	<5	5	
Chloroethane	<5	5	
Methylene chloride	<5	5	
1,1-Dichloroethene	<5	5	
1,1-Dichloroethane	<5	5	
Total 1,2-Dichloroethenes	<5	5	
Chloroform	<5	5	
1,2-Dichloroethane	<5	5	
1,1,1-Trichloroethane	<5	5	
Carbon tetrachloride	<5	5	
Bromodichloromethane	<5	5	
1,2-Dichloropropane	<5	5	
cis-1,3-Dichloropropene	<5	5	
Trichloroethene	<5	5	
Dibromochloromethane	<5	5	
1,1,2-Trichloroethane	<5	5	
Benzene	<5	5	
trans-1,3-Dichloropropene	<5	5	
Bromoform	<5	5	
Tetrachloroethene	<5	5	
1,1,2,2-Tetrachloroethane	<5	5	
Toluene	<5	5	
Chlorobenzene	<5	5	
Ethylbenzene	<5	5	
GCMS Volatiles, EPA 624 AAC			
Acrolein	<20.	20.	
Acrylonitrile	<20.	20.	
2-Chloroethylvinyl ether	<20.	20.	
GCMS Semivolatiles, EPA 625			
Phenol	<5	5	
bis(2-Chloroethyl)ether	<5	5	
2-Chlorophenol	<5	5	

Collection Location	Collector	Client Reference	Accession #
leachole lagoon	draper damien	marshall co landfill	2269894

TEST	RESULT (ug/L)	QUANT LIMIT	ANALYSIS NOTE(S)
1,3-Dichlorobenzene	<5	5	
1,4-Dichlorobenzene	<5	5	
1,2-Dichlorobenzene	<5	5	
2-Methylphenol	<5	5	
2,2'-oxybis(1-Chloropropane)	<5	5	
4-Methylphenol	<5	5	
N-Nitroso-di-n-propylamine	<5	5	
Hexachloroethane	<5	5	
Nitrobenzene	<5	5	
Isophorone	<5	5	
2-Nitrophenol	<5	5	
2,4-Dimethylphenol	<5	5	
bis(2-Chloroethoxy) methane	<5	5	
2,4-Dichlorophenol	<5	5	
1,2,4-Trichlorobenzene	<5	5	
Naphthalene	<5	5	
4-Chloroaniline	<5	5	
Hexachlorobutadiene	<5	5	
4-Chloro-3-methylphenol	<5	5	
2-Methylnaphthalene	<5	5	
Hexachlorocyclopentadiene	<5	5	
2,4,6-Trichlorophenol	<5	5	
2,4,5-Trichlorophenol	<5	5	
2-Chloronaphthalene	<5	5	
2-Nitroaniline	<5	5	
Dimethyl phthalate	<5	5	
Acenaphthylene	<5	5	
2,6-Dinitrotoluene	<5	5	
3-Nitroaniline	<5	5	
Acenaphthene	<5	5	
2,4-Dinitrophenol	<5	5	
4-Nitrophenol	<5	5	
Dibenzofuran	<5	5	
2,4-Dinitrotoluene	<5	5	
Diethyl phthalate	<5	5	
Fluorene	<5	5	
4-Chlorophenyl phenyl ether	<5	5	
4-Nitroaniline	<5	5	
4,6-Dinitro-2-methylphenol	<5	5	
N-Nitrosodiphenylamine	<5	5	
4-Bromophenyl phenyl ether	<5	5	
Hexachlorobenzene	<5	5	
Pentachlorophenol	<5	5	
Phenanthrene	<5	5	
Carbazole	<5	5	
Anthracene	<5	5	
Di-n-butyl phthalate	<5	5	
Fluoranthene	<5	5	
Pyrene	<5	5	
Butyl benzyl phthalate	<5	5	
Benzo(a)anthracene	<5	5	
3,3'-Dichlorobenzidine	<5	5	
Chrysene	<5	5	
bis(2-Ethylhexyl)phthalate	<5	5	

Collection Location	Collector	Client Reference	Accession #
leachole lagoon	draper damien	marshall co landfill	2269894

TEST	RESULT (ug/L)	QUANT LIMIT	ANALYSIS NOTE(S)
Di-n-octyl phthalate	<5	5	
Benzo(b)fluoranthene	<5	5	
Benzo(k)fluoranthene	<5	5	
Benzo(a)pyrene	<5	5	
Indeno(1,2,3-cd)pyrene	<5	5	
Dibenzo(a,h)anthracene	<5	5	
Benzo(g,h,i)perylene	<5	5	
N-Nitrosodimethylamine	<5	5	
Benzidine	<5	5	
1,2-Diphenylhydrazine	<5	5	
Chlorinated Hydrocarbon Insecticides, EPA 608			
Aldrin	<0.05	0.05	
alpha-BHC	<0.05	0.05	
beta-BHC	<0.05	0.05	
delta-BHC	<0.05	0.05	
Lindane	<0.05	0.05	
4,4'-DDD	<0.05	0.05	
4,4'-DDE	<0.05	0.05	
4,4'-DDT	<0.05	0.05	
Dieldrin	<0.05	0.05	
Endosulfan I	<0.10	0.10	
Endosulfan II	<0.05	0.05	
Endosulfan sulfate	<0.05	0.05	
Endrin	<0.05	0.05	
Endrin aldehyde	<0.05	0.05	
Endrin ketone	<0.05	0.05	
Heptachlor	<0.05	0.05	
Heptachlor epoxide	<0.05	0.05	
Methoxychlor	<0.05	0.05	
Chlordane	<0.05	0.05	
Toxaphene	<0.5	0.5	
Aroclor 1016	<0.5	0.5	
Aroclor 1221	<0.5	0.5	
Aroclor 1232	<0.5	0.5	
Aroclor 1242	<0.5	0.5	
Aroclor 1248	<0.5	0.5	
Aroclor 1254	<0.5	0.5	
Aroclor 1260	<0.5	0.5	

SAMPLE AND ANALYSIS NOTES

1. Upon arrival, sample met container and preservation requirements for the analysis requested. Please review carefully your sample results for additional analyte comments or method exceptions.
2. The analysis note was removed by TGC on 2023-04-26.

ANALYSIS INFORMATION

TEST	ANALYZED	SITE	RELEASED	ANALYSIS PREP
1. GCMS Volatiles, EPA 624	2023-04-24 15:37 LJL	3200	2023-04-26 11:45 TGC	
2. GCMS Volatiles, EPA 624 AAC	2023-04-24 16:16 LJL	3200	2023-04-26 11:45 TGC	
3. GCMS Semivolatiles, EPA 625	2023-04-24 12:32 VER	3200	2023-04-26 11:03 TGC	Test 4
4. Prep by Separatory Funnel, EPA 625	2023-04-21 08:00 MZ	3200	2023-04-24 07:50 MES	

Collection Location	Collector	Client Reference	Accession #
leachole lagoon	draper damien	marshall co landfill	2269894

TEST	ANALYZED	SITE	RELEASED	ANALYSIS PREP
5. Chlorinated Hydrocarbon Insecticides, EPA 608	2023-04-26 04:46 VER	3200	2023-04-27 14:26 TGC	Test 6
6. Prep by Separatory Funnel, EPA 608	2023-04-24 08:00 MES	3200	2023-04-28 07:11 LWL	

DESCRIPTION OF UNITS

ug/L = Micrograms per Liter

SITE(S) PERFORMING TESTING

3200 STATE HYGIENIC LABORATORY CORALVILLE, UNIVERSITY OF IOWA RESEARCH PK, 2490 CROSSPARK RD, CORALVILLE, IA 52241; Phone 319/335-4500; Fax 319/335-4555; Michael D. Schueller, M.S., Associate Director; Wade K. Aldous, Ph.D. (D)ABMM, Associate Director; IOWA ENVIRONMENTAL LAB ID #027

The result(s) of this report relate only to the items analyzed. Where the laboratory has not been responsible for the sampling stage the results apply only to the sample as received. This report shall not be reproduced except in full without the written approval of the laboratory. If you have any questions, please call Client Services at 800/421-IOWA (4692) or 319/335-4500.

Collection Location	Collector and Phone	Client Reference	Accession #
leachate lagoon	draper damien 641/754-5709	marshall co landfill	2269903
MARSHALLTOWN,	**Collected** 2023-04-20	**Received** 2023-04-20 13:16	**Project**

Report To

DAMIEN DRAPER
MARSHALLTOWN WPCP

1001 WOODLAND ST
MARSHALLTOWN, IA 50158-1810

Sample Description	waste water
Sample Type	Non-Drinking Water
Sample Source	
Sample Note(s)	1

ADDITIONAL SAMPLE INFORMATION

Purchase Order: 04202023DD01

RESULTS OF ANALYSIS - FINAL REPORT

TEST	RESULT (mg/L)	QUANT LIMIT	ANALYSIS NOTE(S)
Ammonia as N, LAC 10-107-06-1J			
Ammonia nitrogen as N	64	0.1	

TEST	RESULT (mg/L)	QUANT LIMIT	MCL	ANALYSIS NOTE(S)
Anions, EPA 300.0				4
Nitrate nitrogen as N	0.99	0.05	10	

TEST	RESULT (mg/L)	QUANT LIMIT	ANALYSIS NOTE(S)
Chloride, EPA 300.0			
Chloride	180	0.2	
Sulfate, EPA 300.0			
Sulfate	60	0.2	
Total Phenol, EPA 420.1			
Phenol	<0.035	0.035	
Total Phosphorus as P, LAC 10-115-01-2B			
Total Phosphorus as P	0.51	0.5	
Total Kjeldahl Nitrogen as N, LAC 10-107-06-2M			
Total Kjeldahl Nitrogen as N	74	0.2	
Total Organic Carbon, SM 5310 B			
Total Organic Carbon	44	0.5	
BOD, 5 Day, SM 5210 B			
BOD, 5 Day	26	2	
BOD, Carbonaceous 5 Day, SM 5210 B			
CBOD, 5 Day	25	2	
Chemical Oxygen Demand, SM 5220 D			
Chemical Oxygen Demand	150	10	
Cyanide, SM 4500-CN E			2
Cyanide	<0.005	0.005	
Total Hardness as CaCO3, SM 2340 C			
Total Hardness	710	1.0	

Collection Location	Collector	Client Reference	Accession #
leachate lagoon	draper damien	marshall co landfill	2269903

TEST	RESULT (pH)		ANALYSIS NOTE(S)
Laboratory pH, SM 4500 H+B			*3, 5*
Laboratory pH	**7.3**		

TEST	RESULT (mg/L)	QUANT LIMIT	ANALYSIS NOTE(S)
Total Dissolved Solids, SM 2540 C			
Total Dissolved Solids	**1200**	**1**	
Total Suspended Solids, USGS I-3765-85			
Total Suspended Solids	**38**	**1**	
Total Volatile Solids, EPA 160.4			
Total Volatile Solids	**280**	**1**	
Boron, EPA 200.7			
Boron	**2.3**	**0.05**	
Mercury, EPA 245.2			
Mercury	**<0.00020**	**0.0002**	
Metals, EPA 200.8			
Antimony	**<0.005**	**0.005**	
Arsenic	**<0.01**	**0.01**	
Barium	**0.38**	**0.05**	
Beryllium	**<0.02**	**0.02**	
Cadmium	**<0.02**	**0.02**	
Chromium	**<0.02**	**0.02**	
Copper	**<0.01**	**0.01**	
Lead	**<0.01**	**0.01**	
Manganese	**0.76**	**0.02**	
Nickel	**<0.05**	**0.05**	
Selenium	**<0.01**	**0.01**	
Silver	**<0.01**	**0.01**	
Strontium	**<0.02**	**0.02**	
Thallium	**<0.001**	**0.001**	
Zinc	**<0.02**	**0.02**	

SAMPLE AND ANALYSIS NOTES

1. Upon arrival, sample met container and preservation requirements for the analysis requested. Please review carefully your sample results for additional analyte comments or method exceptions.
2. 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.
3. Waste pH measured in water at 22.8℃
4. The MCL (maximum contaminant level) is only applicable to compliance monitoring samples under the Safe Drinking Water Act (SDWA).
5. EPA holding time requires pH analysis be completed within 15 minutes of collection to be valid for regulatory reporting. Results reported as Laboratory pH do not meet this requirement and must be qualified if reported for regulatory purposes.

ANALYSIS INFORMATION

TEST	ANALYZED	SITE	RELEASED	ANALYSIS PREP
1. Ammonia as N, LAC 10-107-06-1J	2023-05-03 09:00 KAR	3201	2023-05-03 12:45 JAE	
2. Anions, EPA 300.0	2023-04-20 23:54 MGB	3201	2023-04-21 09:50 JAE	
3. Chloride, EPA 300.0	2023-04-21 23:09 MGB	3201	2023-04-24 10:08 JAE	
4. Sulfate, EPA 300.0	2023-04-21 23:09 MGB	3201	2023-04-24 10:08 JAE	

Collection Location	Collector	Client Reference	Accession #
leachate lagoon	draper damien	marshall co landfill	2269903

TEST	ANALYZED	SITE	RELEASED	ANALYSIS PREP
5. Total Phenol, EPA 420.1	2023-04-27 08:41 BRW	228	2023-04-27 15:55 MLS	
6. Total Phosphorus as P, LAC 10-115-01-2B	2023-04-28 09:46 KAR, MLS	3201	2023-05-01 14:24 MGB	
7. Total Kjeldahl Nitrogen as N, LAC 10-107-06-2M	2023-04-28 09:46 KAR, MLS	3201	2023-05-01 14:24 MGB	
8. Total Organic Carbon, SM 5310 B	2023-04-26 09:43 AJB	3201	2023-04-28 08:29 JAE	
9. BOD, 5 Day, SM 5210 B	2023-04-20 13:25 AMG	3201	2023-04-25 15:03 JAE	
10. BOD, Carbonaceous 5 Day, SM 5210 B	2023-04-20 13:25 AMG	3201	2023-04-25 15:03 JAE	
11. Chemical Oxygen Demand, SM 5220 D	2023-04-25 09:15 MLS	3201	2023-04-25 13:25 JAE	
12. Cyanide, SM 4500-CN E	2023-04-25 08:09 BRW	228	2023-04-27 15:55 MLS	
13. Total Hardness as CaCO3, SM 2340 C	2023-04-26 10:00 MLS	3201	2023-04-26 11:06 AMG	
14. Laboratory pH, SM 4500 H+B	2023-04-20 14:35 AMG	3201	2023-04-21 08:36 JAE	
15. Total Dissolved Solids, SM 2540 C	2023-04-25 10:00 WMH	3201	2023-04-27 12:22 JAE	
16. Total Suspended Solids, USGS I-3765-85	2023-04-25 10:00 WMH	3201	2023-04-27 12:22 JAE	
17. Total Volatile Solids, EPA 160.4	2023-04-25 10:00 WMH	3201	2023-04-27 12:22 JAE	
18. Boron, EPA 200.7	2023-05-24 13:00 MRC	3201	2023-05-26 10:48 BRW	
19. Mercury, EPA 245.2	2023-04-28 11:49 SGB	3201	2023-04-28 14:14 MRC	
20. Metals, EPA 200.8	2023-05-03 09:50 SGB	3201	2023-05-04 13:51 MRC	

DESCRIPTION OF UNITS

mg/L = Milligrams per Liter
pH = pH Units

SITE(S) PERFORMING TESTING

3201 STATE HYGIENIC LABORATORY ANKENY, IOWA LABORATORIES COMPLEX, 2220 S ANKENY BLVD, ANKENY, IA 50023; Phone 515/725-1600; Fax 515/725-1642; Michael D. Schueller, M.S., Associate Director; Wade K. Aldous, Ph.D. (D)ABMM, Associate Director; IOWA ENVIRONMENTAL LAB ID #397

228 KEYSTONE LABS INC, 600 E 17TH ST S STE B, NEWTON, IA 50208;

The result(s) of this report relate only to the items analyzed. Where the laboratory has not been responsible for the sampling stage the results apply only to the sample as received. This report shall not be reproduced except in full without the written approval of the laboratory. If you have any questions, please call Client Services at 800/421-IOWA (4692) or 319/335-4500.

Appendix G.7 – Daily/Weekly Leachate Recirculation Logs

Leachate Recirculation
Marshall County Sanitary Landfill
2024

APRIL			JUNE			SEPTEMBER			OCTOBER		
Date	Loads	Gallons	Date	Loads	Gallons	Date	Loads	Gallons	Date	Loads	Gallons
4/12/2024	2	10,000	6/3/2024	8	40,000	9/25/2024	11	55,000	10/15/2024	21	105,000
4/13/2024	4	20,000	6/4/2024	18	90,000	9/26/2024	15	75,000	10/16/2024	8	40,000
			6/11/2024	19	95,000	9/30/2024	14	70,000	10/19/2024	2	10,000
			6/18/2024	21	105,000				10/23/2024	7	35,000
									10/24/2024	3	15,000
									10/25/2024	3	15,000
	6			66			40			44	
		30,000			**330,000**			**200,000**			**220,000**

156 Loads
780,000 Gallons

Marshall County Sanitary Landfill – Daily/Weekly Leachate Recirculation Log

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Date						4/12/24	4/13/24
Liquid Level (not to exceed 12-inches)							
LPZ-101						Dry	Dry
LPZ-106						Dry	Dry
Recirculation Quantity							
Number of Tanks Recirculated						2	4
Total Gallons Recirculated						10,000	20,000

NOTES:

1) **LPZ-101 and LPZ-106 measurement required at least once per week when leachate is being recirculated.**
2) **If liquid level in LPZ-101 or LPZ-106 exceeds 12" leachate recirculation shall stop and not resume until the liquid level in LPZ-101 and LPZ-106 is less than 12".**

Marshall County Sanitary Landfill – Daily/Weekly Leachate Recirculation Log

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Date		6/3/24	6/4/24				
Liquid Level (not to exceed 12-inches)							
LPZ-101		Dry	Dry				
LPZ-106		Dry	Dry				
Recirculation Quantity							
Number of Tanks Recirculated		8	18				
Total Gallons Recirculated		40,000	90,000				

<u>NOTES:</u>

1) **LPZ-101 and LPZ-106 measurement required at least once per week when leachate is being recirculated.**
2) **If liquid level in LPZ-101 or LPZ-106 exceeds 12” leachate recirculation shall stop and not resume until the liquid level in LPZ-101 and LPZ-106 is less than 12”.**

Marshall County Sanitary Landfill – Daily/Weekly Leachate Recirculation Log

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Date			6/11/24				
Liquid Level (not to exceed 12-inches)							
LPZ-101			Dry				
LPZ-106			Dry				
Recirculation Quantity							
Number of Tanks Recirculated			19				
Total Gallons Recirculated			95,000				

<u>NOTES:</u>

1) **LPZ-101 and LPZ-106 measurement required at least once per week when leachate is being recirculated.**
2) **If liquid level in LPZ-101 or LPZ-106 exceeds 12" leachate recirculation shall stop and not resume until the liquid level in LPZ-101 and LPZ-106 is less than 12".**

Marshall County Sanitary Landfill – Daily/Weekly Leachate Recirculation Log

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Date			6/18/24				
Liquid Level (not to exceed 12-inches)							
LPZ-101			Dry				
LPZ-106			Dry				
Recirculation Quantity							
Number of Tanks Recirculated			21				
Total Gallons Recirculated			105,000				

NOTES:

1) **LPZ-101 and LPZ-106 measurement required at least once per week when leachate is being recirculated.**
2) **If liquid level in LPZ-101 or LPZ-106 exceeds 12" leachate recirculation shall stop and not resume until the liquid level in LPZ-101 and LPZ-106 is less than 12".**

Marshall County Sanitary Landfill – Daily/Weekly Leachate Recirculation Log

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Date				9/25/24	9/26/24		
Liquid Level (not to exceed 12-inches)							
LPZ-101				Dry	Dry		
LPZ-106				Dry	Dry		
Recirculation Quantity							
Number of Tanks Recirculated				11	15		
Total Gallons Recirculated				55,000	75,000		

NOTES:

1) **LPZ-101 and LPZ-106 measurement required at least once per week when leachate is being recirculated.**
2) **If liquid level in LPZ-101 or LPZ-106 exceeds 12" leachate recirculation shall stop and not resume until the liquid level in LPZ-101 and LPZ-106 is less than 12".**

Marshall County Sanitary Landfill – Daily/Weekly Leachate Recirculation Log

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Date		9/30/24					
Liquid Level (not to exceed 12-inches)							
LPZ-101		Dry					
LPZ-106		Dry					
Recirculation Quantity							
Number of Tanks Recirculated		14					
Total Gallons Recirculated		70,000					

NOTES:
1) **LPZ-101 and LPZ-106 measurement required at least once per week when leachate is being recirculated.**
2) **If liquid level in LPZ-101 or LPZ-106 exceeds 12" leachate recirculation shall stop and not resume until the liquid level in LPZ-101 and LPZ-106 is less than 12".**

Marshall County Sanitary Landfill – Daily/Weekly Leachate Recirculation Log

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Date			10/15/24	10/16/24			10/19/24
Liquid Level (not to exceed 12-inches)							
LPZ-101			Dry	Dry			Dry
LPZ-106			Dry	Dry			Dry
Recirculation Quantity							
Number of Tanks Recirculated			21	8			2
Total Gallons Recirculated			105,000	40,000			10,000

NOTES:

1) **LPZ-101 and LPZ-106 measurement required at least once per week when leachate is being recirculated.**
2) **If liquid level in LPZ-101 or LPZ-106 exceeds 12" leachate recirculation shall stop and not resume until the liquid level in LPZ-101 and LPZ-106 is less than 12".**

Marshall County Sanitary Landfill – Daily/Weekly Leachate Recirculation Log

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Date				10/23/24	10/24/24	10/25/24	
Liquid Level (not to exceed 12-inches)							
LPZ-101				Dry	Dry	Dry	
LPZ-106				Dry	Dry	Dry	
Recirculation Quantity							
Number of Tanks Recirculated				7	3	3	
Total Gallons Recirculated				35,000	15,000	15,000	

NOTES:

1) **LPZ-101 and LPZ-106 measurement required at least once per week when leachate is being recirculated.**
2) **If liquid level in LPZ-101 or LPZ-106 exceeds 12" leachate recirculation shall stop and not resume until the liquid level in LPZ-101 and LPZ-106 is less than 12".**