2023 ANNUAL WATER QUALITY REPORT

FOR THE
SCISWA LANDFILL
63-SDP-02-77P
TRACY, IOWA

by:
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Engineering Management

6009-22A.320

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Certification

Prepared by: ___________________________________ Date: 1-23-2024

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Section 1.0 Background Information

1.1 Report Format

Table 1 through Table 14 are attached to this report and satisfy the IDNR requirement to provide the tables to meet the IDNR format requirements included in Special Provision 4.i. of the Permit Revision #8, dated July 12, 2022 (Doc #103579).

1.2 Report Priority - Low

Sampling in accordance with Table 1 and Table 2 is recommended. It is recommended that detection and assessment monitoring continue in accordance with the HMSP as approved in Special Provision 4 of the Permit, dated July 12, 2022 (Doc #103579). An Alternate Source Demonstration (ASD) related to metals was completed in 2014 (Doc #79861). The ASD indicates that acid mine drainage (AMD) is the contributing factor associated with the inorganic groundwater impacts historically identified in most monitoring well locations, making spatial variability impractical to sufficiently quantify. AMD is characterized by low pH levels combined with elevated metals and elevated sulfate concentrations in groundwater. With IDNR approval, intrawell statistical evaluations (along with interwell statistical methods) are employed. It is recognized that the intrawell control limits and the interwell prediction limits are at times elevated above the groundwater protection standards (GWPS) published in Iowa Administrative Code (IAC) 567, Chapter 137. In these instances, Site-Specific GWPS are developed and are equal to the elevated control/prediction limit value.

Based on the ASD, continued acid mine drainage constituent monitoring is required and Assessment of Corrective Measures activities are not required at wells impacted by AMD. Statistically Significant Increases (SSI) and Significantly Significant Levels (SSL) for inorganic constituents would only be realized in monitoring points where AMD effects are minor (below SSI/SSL levels) <u>and</u> where both SSI/SSL are identified by <u>both</u> intrawell and interwell statistical methods at a monitoring point. The AMD impacts are addressed in Special Provision 4.n. of the Permit Revision #8, dated July 12, 2022 (Doc #103579).

There are no SSI or SSL identified for inorganic compounds at any monitoring point in 2023. There are Volatile Organic Compound (VOC) SSI identified at MW-344 and MW-382R in 2023. No VOC SSL are identified in 2023.

IDNR has also approved the use of field measured turbidity in lieu of Total Suspended Solids (TSS) testing (Doc #103471).

1.3 Period of Report Coverage

Water quality data evaluation is based on a running compilation of data beginning in March, 2008. Statistical evaluations herein are based on the most recent water quality data collected March 6, 2023 and September 29, 2023.

1.4 Current Site Map

Figure 1 and Figure 2 are attached illustrating the current site and property boundaries. The figures include all monitoring well locations, leachate piezometer locations, the groundwater monitoring point location, and subsurface gas probe locations in relation to waste boundaries.

1.5 Site Status and Applicable Rules

Site Location

The SCISWA Sanitary Landfill is located in parts of Sections 20, 21, 28, and 29, T75N, R18W, Marion County, Iowa. The facility is situated on Highway T17 near Tracy and Pershing, Iowa. The facility operates under the Iowa Department of Natural Resources (IDNR) Permit Number 63-SDP-02-77P.

Landfill Layout

The site is situated within a former coal strip mine. Completed landfill areas include the Original Landfill (Areas A1 and A2 (and associated vertical expansions)) Cells N-1, N-2, and N-3 (alternate lined (4 ft clay)), and Cells 4A-4F (prescriptive liner). Cells N-1, N-2, and N-3 and Cells 4A-4F are actively receiving waste from the planning area.

Applicable Rules

Iowa Administrative Code (IAC) 567-113 is applicable to the site due to the contiguous nature of the various landfill areas.

1.6 Summary of Hydrologic Monitoring System Plan (HMSP)

The HMSP sampling performed on March 6, 2023 and September 29, 2023 conforms to Permit Provisions.

Water monitoring points and the gas monitoring network are illustrated on Figure 1 and Figure 2. A Water Contour Map is included as Figure 3. The current HMSP is summarized in Table 1. The HMSP Implementation Schedule for 2024 is itemized in Table 2. A listing of all monitoring points that currently exist on site is included in Appendix A.

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

The current year water elevation data is included on Table 4. Historic water elevation data is included in Table 4A (Supplement) – Comprehensive Historical Data. The Water Contour Map (Figure 3) dated September, 2023 is included with this report. The Water Contour Map illustrates the water surfaces in the unconsolidated formation. Review of the 2023 data does not indicate excessive variability compared to historic water elevation data.

Well Depth & Sedimentation

Well depth measurements were made on September 29, 2023. Review of the well depth data included on Table 4 indicate that well sedimentation is estimated to be less than one (1) foot at all site monitoring wells.

Well Recharge Rates & Chemistry

The originally measured horizontal hydraulic conductivity testing results for each site monitoring well is included on Table 4. Horizontal hydraulic conductivities ranged between 10^{-3} cm/sec and 10^{-7} cm/sec.

Field recovery data recorded for 2021 (on Table 4) indicates that the monitoring wells demonstrate minimal drawdown during low-stress purging. It was noted that baseline hydraulic conductivity data was not recorded for MW-384, MW-385 MW-601, MW-602, or MW-603. On September 1, 2022 the field data was collected and the hydraulic conductivity is now included on Table 4.

Similarly, it is now recognized that baseline hydraulic conductivity data was not recorded for MW-380, MW-381 MW-382R, MW-390. The full bail and recovery testing will be completed in March, 2024 and the baseline hydraulic conductivity will be calculated.

The 2021 and 2022 (partial evaluation) 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". Well recovery information will be collected at all site monitoring wells in March 2024 to establish a common date for the biennial requirement required by rule (113.10(2)"f"(4)).

Based on the apparent static condition of the water table across the site, the conclusions of the well recharge evaluation, and the existing water elevation database, it appears that the semi-annual water elevation data is sufficient to adequately monitor the hydrologic condition of the site. Therefore, it appears that the integrity of monitoring wells is intact, that the wells are appropriately located to detect impact from the fill, and that no changes in monitoring system are recommended.

MW-344 Well Depth (September 1, 2022)
The IDNR Comment Letter dated July 12, 2022 (Doc #103578) indicated that a discrepancy in the well depth at MW-344 was noted. A response (Doc #103587) was submitted to IDNR on July 13, 2022 and was approved on July 13, 2022 (Doc #103598).

The measured well depth at MW-344 on September 1, 2022 is recorded at 30.50 feet. This confirms that the MW-344 well depths reported semi-annually in 2021 and again on April 14, 2022 were erroneous. Table 4 has been corrected to reflect the well depth recorded on September 1, 2022.

MW-309
Excavation will be completed at MW-309 in the future Northwest Expansion Area Cell NW1. The full length of MW-309 will be excavated and removed in 2024 during construction of Cell NW1.

Impending HMSP Changes
Construction of the Cell NW1/NW2 expansion is scheduled to occur in 2024. The development will modify the HMSP by eliminating some wells, relocating GU-A, and adding temporary monitoring points. The HMSP modifications associated with the upcoming construction will be fully described in the Permit Renewal Application that will be submitted in early 2024.

Section 2.0 Reporting Period Monitoring Activities

A summary of the planned 2024 sample collection events at each well is included on Table 2. A comprehensive summary of all sampling episodes to date are included in the Table 2 Supplement. Field sampling data related to the March 6, 2023 and September 29, 2023 events are included on the field forms (IDNR Form 542-1322) in Appendix B.

A comprehensive summary of Analytical Data for the episodes between September 2012 and September 29, 2023, is included on Table 9.

Per the Permit Revision #8 dated July 12, 2022 (Doc #103579) the HMSP includes the following:

<u>Background Wells</u>
MW-307
MW-312
MW-390

<u>Downgradient Wells/Points</u>
MW-300 (Detection Monitoring Program)
MW-303 (Detection Monitoring Program)
MW-304 (Detection Monitoring Program)
MW-310 (plugged 12/19/2019)
MW-313 (Detection Monitoring Program)
MW-335 (Detection Monitoring Program)
MW-344 (***Assessment*** Monitoring Program)
MW-380 (Detection Monitoring Program)
MW-381 (Detection Monitoring Program)
MW-382R (***Assessment*** Monitoring Program)
MW-384 (Detection Monitoring Program)
MW-385 (Detection Monitoring Program)
GU-4A (Detection Monitoring Program)

<u>Alternate Source Demonstration (ASD) Acid Mine Drainage Parameters</u>
MW-300
MW-303
MW-304
MW-313
MW-335
MW-344
MW-380
MW-381
MW-382R
MW-384
MW-385
GU-4A
Surface Water SW-1

<u>Baseline Water Quality Monitoring Prior to Landfill Expansion (Not yet evaluated)</u>
MW-601
MW-602
MW-603

2.1 Current Detection Monitoring Activities/Sampling Requirements

At the downgradient monitoring wells listed above, detection monitoring includes Appendix I analyses on a semi-annual frequency. In addition, the Acid Mine Drainage (AMD) parameters (alkalinity, aluminum, iron, pH, and sulfate) are tested at all wells, GU-4A, and surface water SW-1. AMD sample collection occurs on a semi-annual frequency to confirm the on-going conditions at the site related to elevated metals based on the acid mine drainage.

2.2 Current Assessment Monitoring Activities

At the downgradient monitoring wells MW-344 and MW-382R, assessment monitoring includes Appendix II compounds on a five (5) year frequency (once two (2) annual Appendix II episodes are completed) and Appendix I compound testing on a semi-annual frequency.

2.3 Current Corrective Action Monitoring Activities

There are currently no corrective actions required at this facility and there is no associated Corrective Action Monitoring required. AMD impacts are documented across the site and have not decreased to date. SSI and SSL for metals at site monitoring points are not recorded, rather the elevated metals are recognized as due to an alternate source. The management of AMD impacts are addressed in Special Provision 4.n. of the Permit Revision #8, dated July 12, 2022 (Doc #103579).

Section 3.0 Data Evaluation and Summary

Statistical Evaluations included herein are prepared by Otter Creek Environmental Services for the monitoring episodes completed March 6, 2023 and September 29, 2023. The Groundwater Statistics Report for the South Central Iowa Solid Waste Agency (SCISWA) Landfill, First Semi-Annual Monitoring Event in 2023, dated April, 2023 is included in Appendix C.1. The Groundwater Statistics Report for the South Central Iowa Solid Waste Agency (SCISWA) Landfill, Second Semi-Annual Monitoring Event in 2023, dated December, 2023 is included in Appendix C.2.

Intrawell statistical evaluations are employed at this site in accordance with the IDNR preferred method as described in the June 5, 2014 IDNR Letter (Doc # 80411) and are relied upon based on the documented spatial variability that results from on-going Acid Mine Drainage impacts. Note that interwell statistics are also completed in the statistical evaluation report as a means to further evaluate groundwater quality.

Based on the approved ASD, continued AMD constituent monitoring is required and Assessment of Corrective Measures activities are not required at wells impacted by AMD.

Statistically Significant Increases (SSI) and Significantly Significant Levels (SSL) for inorganic constituents would only be realized in monitoring points where AMD effects are minor (below SSI/SSL levels) and where both SSI/SSL are identified by both intrawell and interwell statistical methods at a monitoring point. The AMD impacts are addressed in Special Provision 4.n. of the Permit Revision #8, dated July 12, 2022 (Doc #103579).

The Analytical Reports for the laboratory testing of the March 6, 2023 and September 29, 2023 sampling episodes are included in Appendix D.

QUALITY ASSURANCE/QUALITY CONTROL

A blind duplicate sample was collected at MW-601 during the March 6, 2023 sampling episode. A blind duplicate sample was collected at MW-390 during the September 29, 2023 sampling episode.

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

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

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

The results of the blind duplicate and the monitoring well results in 2023 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 # 80700). A TSS and Field Turbidity Evaluation Report was prepared and submitted on June 17, 2022 (Doc# 103453) and was approved by IDNR on June 22, 2022 (Doc #103471).

"No-Purge" sample methods were employed at this site beginning September 1, 2022. The background data for sample collection episodes that occurred prior to September 1, 2022 have been evaluated statistically for outliers and is validated. Outliers that failed the Dixon Test are summarized in the Dixon Test Outlier Table, Attachment C, Table 6, included in the December , 2023 Statistical Evaluation Report (Appendix C.2). The Control Limits established in the December , 2023 Statistical Evaluation Report (Appendix C.2) are based on the validated background with outliers removed. The calculated Intrawell Control Limits are itemized in Table 5.

SITE SPECIFIC GWPS

Table 5 includes the calculated Intrawell Control Limits and the Interwell Prediction Limits. Comparison of the Control Limits and the Prediction Limits to the published IAC 567, Chapter 137 Statewide Standard indicates that inorganic Control Limits and/or Prediction Limits are frequently in excess of the published standards. The interpretation is made that the elevated metals concentrations in background reflect the character of the disturbed soils that result from historic mining and the subsequent AMD. The instances where the Control Limits and/or Prediction Limits exceeds the published IAC 567, Chapter 137 Statewide Standard are highlighted in yellow in Table 5.

The Site-Specific GWPS should not be set lower than the Control Limit and/or the Prediction Limit calculated from the site background data. For this report, the Site-Specific GWPS for the HMSP Systems are summarized in the far right-hand column of Table 5. For all other compounds the published IAC 567, Chapter 137 Statewide Standard are utilized as the GWPS.

EVALUATION OF ACID MINE DRAINAGE IMPACTS

Acid Mine Drainage is evaluated using the water quality parameters alkalinity (as calcium carbonate), aluminum, iron, sulfate, and pH at site monitoring wells and GU-4A, and at SW-1. The 2023 Acid Mine Drainage constituents are summarized in Table 5A. Table 5A illustrates that all wells are impacted by AMD which is the source of all elevated metals. It follows that AMD impacts are not minor and that inorganic SSI are attributed to AMD effects, rather than to landfill impact.

Time Series Plots are also included in Appendix G. Review of the Time Series Plots of the AMD constituents indicates the following trends:

Sulfate demonstrates decreasing trends at GU-4A, MW-307, MW-380, MW-381, MW-384, and MW-385.

Iron demonstrates a decreasing trend at MW-307 and an increasing trend at MW-380.

pH indicates an increasing trend at MW-380 and MW-381.

Further review of the pH data included on the Time Series Plots indicates that the pH values at most monitoring points are consistently below 7 (acidic) except at SW-1. The observed pH values are typically observed to be lowest at MW-380, but an increasing trend has been recorded recently at MW-380.

Conditions confirm that acid mine drainage impacts are endemic to the site and the approved alternate source demonstrated for the inorganic compound concentrations continues to be appropriately applied at this site.

Time Series Plots for the Appendix I metal compounds are also included in Appendix G for MW-601, MW-602, and MW-603 since these wells are not yet evaluated by intrawell statistical methods.

STATISTICALLY SIGNIFICANT INCREASE (SSI) EVALUATION

Inorganic Compounds - The detected concentrations of each compound are compared to the Intrawell Control Limit and the Interwell Prediction Limit for each respective compound. In the detection monitoring wells, a detected concentration for a compound that is in excess of the calculated Control Limit and/or Prediction Limit are:

Well	Season	AMD Impacted?	Statistical Method	Compounds	SSI
MW-300	Spring	Yes	Interwell	Co, Ni	No
MW-303	Spring	Yes	Interwell	Ba	No
MW-304	Spring	Yes	Interwell	Ba	No
MW-335	Spring	Yes	*Intrawell*	As, Cu	No
MW-344	Spring	Yes	Interwell	Co, Ni	No
MW-380	Spring	Yes	Interwell	Be, Cd, Co, Ni, Se	No

Well	Season	AMD Impacted?	Statistical Method	Compounds	SSI
MW-300	Fall	Yes	Interwell	Co, Ni	No
MW-300	Fall	Yes	*Intrawell*	Co, Ni, Se	No
MW-304	Fall	Yes	Interwell	Ba	No
MW-307	Fall	Yes	*Intrawell*	Sb, As, Cu	No
MW-312	Fall	Yes	*Intrawell*	Ba	No
MW-344	Fall	Yes	Interwell	Co	No
MW-380	Fall	Yes	Interwell	Be, Cd, Co, Ni, Se	No

The September 29, 2023 results for MW-300 recorded an exceedance of Cobalt and Nickel by both intrawell and interwell statistical methods. However, as recorded on Table 5A, MW-300 demonstrates ongoing significant impact by AMD and the exceedances are not attributable to landfill impact. No other monitoring point had a compound recorded in excess of both the Intrawell Control Limit and the Interwell Prediction Limit. Further all site monitoring points exhibit AMD impacts. Therefore, there are no SSI recorded for the site in 2023. *The prevalence of the AMD impacts across the site and recognition of the AMD as the alternate source demonstration (in accordance with IAC567-113.10(5)"c"(3)), the Control Limit and/or Prediction Limit exceedances summarized above are not classified as SSI and Assessment Monitoring is not required. All site monitoring points remain in the Detection Monitoring System related to inorganics when the alternate source of elevated metals (due to acid mine drainage) is documented at the site.*

<u>Volatile Organic Compounds (VOC)</u> – VOC compounds are evaluated by the "double quantification rule" described as a preliminary detection followed by a verification detection. At the SCISWA facility there were no VOC reported in the Detection Monitoring System wells in 2023.

VOC have been historically detected in the Assessment Monitoring System wells MW-344 and MW-382R. In 2023, benzene and cis-1,2-dichloroethylene was detected in MW-344, while 1,1-dichloroethane and bis(2ethylhexyl)phthalate were detected in MW-382R. The detections are verified exceedances according to double quantification. Table 6 summarizes the *current year* VOC exceedances for the site.

Table 7 includes brown highlighted values that signify detected VOC concentrations in excess of the quantification limits (SSI) over time in the site monitoring wells.

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

ASSESSMENT MONITORING SUMMARY

Assessment monitoring is required to be repeated annually per IAC 567-113.10(6)b. However, a five (5) year full Appendix II sampling frequency is approved (Special Provision 4.f. of the Revised Permit, dated July 12, 2022 (Doc #103579)) for all site Point of Compliance Monitoring Wells where at least two (2) full Appendix II samples have been collected.

Full rounds of Appendix II assessment monitoring have been completed at MW-344 (5 episodes) and at MW-382R (5 episodes). The next round of full Appendix II sampling at MW-344 and MW-382R is scheduled to occur in September, 2028. The full Appendix II sampling episodes are listed in Table 2. Results of bis(2-ethylhexyl)phthalate, dichlorofluoromethane, and tin testing are itemized in Appendix H. Results recorded during the full Appendix II sample collection events at MW-344 and MW-382R are highlighted in green in Appendix H.

Bis(2-ethylhexyl)phthalate testing will be performed again in March 2024 at MW-382R

There are no SSI or SSL identified for inorganic compounds at any monitoring point in 2023. There are Volatile Organic Compound (VOC) SSI identified at MW-344 and MW-382R in 2023. No VOC SSL are identified in 2023.

STATISTICALLY SIGNIFICANT LEVEL (SSL) EVALUATION

Validation of the significant AMD impacts at monitoring points precludes inorganic SSI and SSL from being detected at the site. However, those compounds with detections that exceed the VOC quantification limits (see summary in Table 1) are utilized to calculate the Confidence Interval (the 95% lower confidence limits (LCL) and the 95% upper control limits (UCL)) in accordance with the 2009 <u>Unified Guidance for Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities</u> by US

EPA. The 95% LCL values for VOC are compared to applicable GWPS. Any 95% LCL value for VOC that exceeds an applicable GWPS is recorded as an SSL. All wells with a recorded SSL require the plume of impact to be defined in the horizontal and vertical directions and require completion of an Assessment of Corrective Measures (ACM).

The SSL Evaluation is based on data for each VOC impacted monitoring well (MW-344 and MW-382R). The Confidence Intervals (95% LCL and 95% UCL) are calculated during each statistical evaluation based on the most recent four (4) data points.

The 95% LCL evaluation for VOC at MW-344 and MW-382R is presented in Table 7. Review of the data in Table 7 indicate that the 95% LCL values for VOC at assessment monitoring wells MW-344 and MW-382R are below the applicable Statewide Standards published in IAC 567, Chapter 137 (the GWPS) and no SSL are identified.

Standard IDNR Tables 8, 10, and 11 are not required for this report based on the absence of SSL.

ASSESSMENT OF CORRECTIVE MEASURES

Assessment of Corrective Measures is not warranted at this site.

Section 4.0 Leachate Collection System Performance Evaluation

Between January 1, 2023, and December 31, 2023, staff reported that approximately 425,000 gallons of leachate were recirculated to Cells 4A, 4B, 4C, 4D, 4E, and 4F in accordance with Special Provision X.5 of the SDP Permit. Dates and reported volumes of leachate recirculation are included in Appendix I.1. LHPZ-4A measures leachate head on the Subtitle D composite lined areas Cells 4A, 4B, 4C, 4D, 4E, and 4F. Based on the leachate head data included in Table 12, leachate levels in LHPZ-4A did not exceed 12" during 2023 so leachate recirculation does not appear to have an effect on leachate levels recorded on the Subtitle D composite liner. No changes are recommended.

The facility also utilizes the Des Moines Metropolitan Wastewater Reclamation Authority (WRA) as a backup leachate treatment and disposal option in the event that leachate recirculation and evaporation from the leachate storage lagoon are not adequate to keep up with leachate generation volumes. Note that no leachate was disposed of at the WRA in 2023.

RCRA Subtitle D Cells N-1, N-2, N-3, 4A, 4B, 4C, 4D, 4E, and 4F

Cells N-1, N-2, and N-3 were constructed with Subtitle D compliant alternative liner systems in 2001, 2002, and 2004, respectively. Leachate collected in these cells drains by gravity into a 10,000-gallon capacity dual walled underground leachate storage tank. A pump has been installed in the tank to pump accumulated leachate to the leachate storage lagoon via a dual walled forcemain as needed.

Cells 4A, 4B, 4C, 4D, 4E, and 4F were constructed with Subtitle D compliant composite liner systems. Cell 4A was constructed in 2009. A portion of the liner system in Cell 4A was constructed over previously placed waste in Subtitle D compliant lined Cell N-3. Cells 4B, 4C, and 4D were constructed in 2012. The liner system in Cells 4B, 4C, and 4D was constructed entirely over previously placed waste either in Subtitle D compliant lined Cells N-1, N-2, and N-3 or in unlined (and previously closed) Cell A-2. Cell 4F was constructed in 2015. The liner system in Cell 4F was constructed entirely over previously placed waste in unlined (and previously closed) Cell A-2. Leachate collected in Cells 4A, 4B, 4C, 4D, and 4F is directed into a leachate collection sump located north of Cell 4A and is pumped from the sump to the leachate storage lagoon via a dual walled forcemain as needed. Cell 4E was constructed in 2019. The liner system in Cell 4E was constructed entirely over previously placed waste either in Subtitle D compliant lined Cells N-1 and N-2 or in unlined (and previously closed) Cells A-1 and A-2. Leachate collected in Cell 4E is directed by gravity into the 10,000-gallon capacity dual walled underground leachate storage tank. Maps illustrating all leachate collection lines and all groundwater diversion lines (all connected to the LCP) are included in Appendix I.2.

Two (2) leachate head monitoring points were installed during the Cell 4A Expansion project in 2009. LHPZ-N3 was installed in Cell N3 to monitor the leachate head on the Subtitle D compliant alternative lined areas. LHPZ-4A was installed in Cell 4A to monitor the leachate head on the Subtitle D composite lined areas. The locations of the leachate head monitoring points are included on Figure 1 in Appendix I.2. The leachate head monitoring point measurements are included in Table 12. The data indicates that liquid levels in each monitoring point are below the 12-inch maximum limit.

Closed Landfill LCP

The closed unlined disposal areas, Cells A1 and A2, do not have a leachate collection system as per Special Provision X.7 of the SDP Permit. Leachate head monitoring piezometers (LW-471R, LW-477, LW-478R, and LW-479) have been installed in these areas and are measured on a monthly basis (see Table 12).

Leachate Storage System

There are currently two components to the leachate storage system, a leachate storage lagoon with a Subtitle D composite liner and a capacity of approximately 2,500,000 gallons and a 10,000-gallon capacity double walled underground leachate storage tank. Note that leachate collected in the tank is pumped to the lagoon when tank levels warrant. Current plans call for the leachate storage tank to be removed/abandoned during the Cell NW1/NW2 expansion project in 2024.

Leachate Line Cleaning

The leachate gravity collection and conveyance lines in the Subtitle D lined areas are illustrated in the Figure in Appendix I.2. The leachate lines were cleaned during October, 2022. As per IDNR regulations, the lines should be cleaned every 3 years at a minimum (next cleaning tentatively scheduled for 2025).

Section 5.0 Gas Monitoring

Explosive gas monitoring per 113.9(2) and the approved GMSP was conducted quarterly during the last reporting period (2023). Recorded gas concentrations are below actionable levels.

Explosive gas concentrations are recorded as percent lower explosive limit (% LEL) and were undetected or below action levels at all points during the monitoring episodes. A Summary table of gas monitoring is as Table 13.

Section 6.0 Recommendations

Sampling in accordance with Table 2 is recommended. It is recommended that detection and assessment monitoring continue in accordance with the approved HMSP, with recognition that the HMSP will change in 2024 following construction of the Cell NW1/NW2 expansion.

Based on the Alternate Source Demonstration (Acid Mine Drainage) we recommend that the inorganic compounds continue to be evaluated by intrawell and interwell statistical methods and that the alternate source demonstration of AMD continue to be monitored. Further we recommend all site monitoring wells continue to be included in the Detection Monitoring System, except MW-344 and MW-382R that have documented VOC SSI.

We recommend that MW-344 and MW-382R remain in the Assessment Monitoring System due to the continued exceedance of the double quantification rule for VOC.

Figures

0 100 300 800
DRONE CONTOURS: JUNE 29, 2022

FIGURE: 1

REVISION	NO.	DATE
DRAWN DRA	PROJECT NO. 6009	DATE 12-21-23

SITE PLAN
ENTIRE SITE

SOUTH CENTRAL IOWA SOLID WASTE AGENCY SLF
TRACY, IOWA

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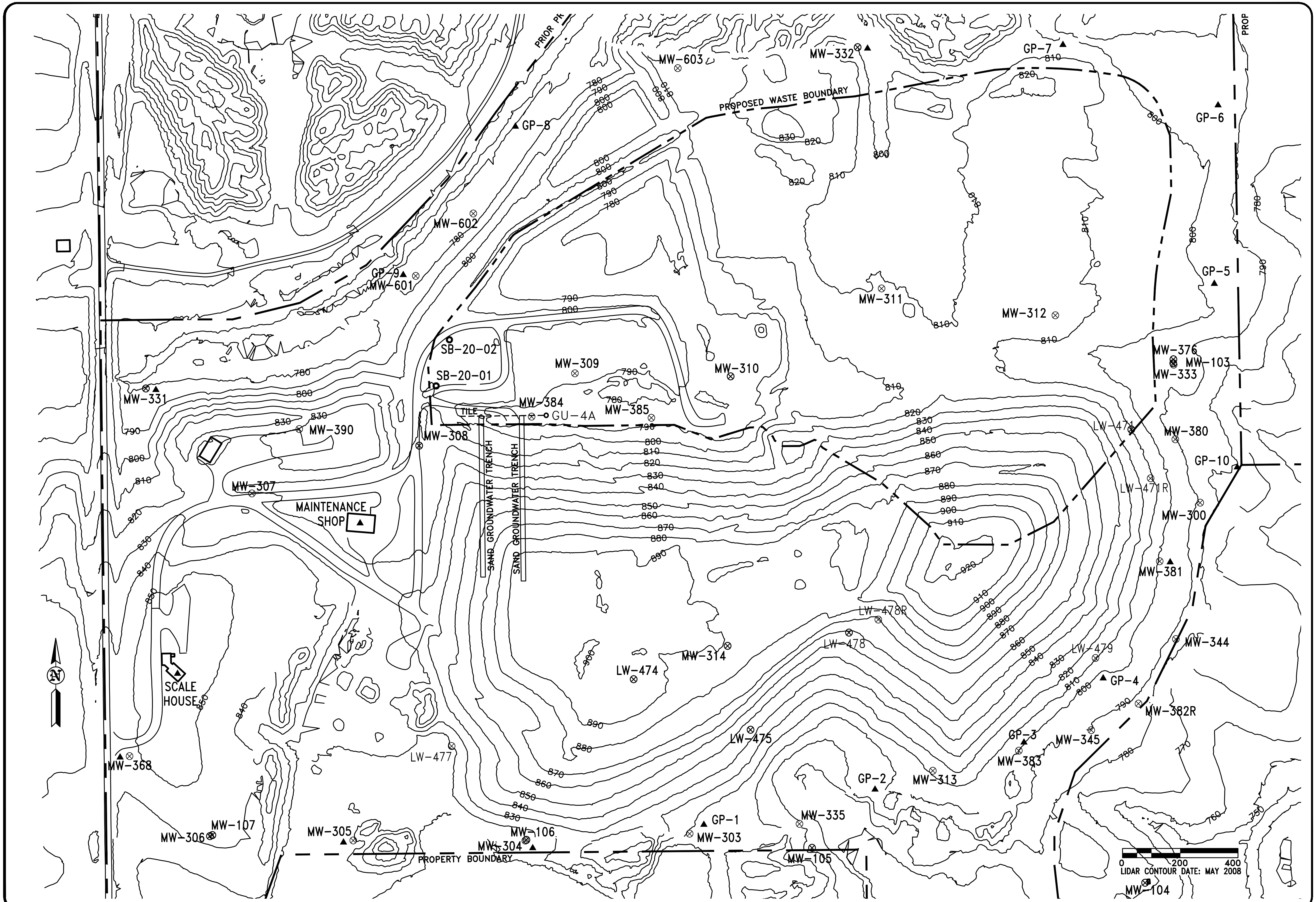
204 West Broad Street, P.O. Box 314
Story City, Iowa 50248
Phone: (515) 733-4144
FAX: (515) 733-4146

HLW
HLW Engineering Group



SITE PLAN WITH GAS PROBES AREA OF INTEREST

SOUTH CENTRAL IOWA SOLID WASTE AGENCY SLF
TRACY, IOWA

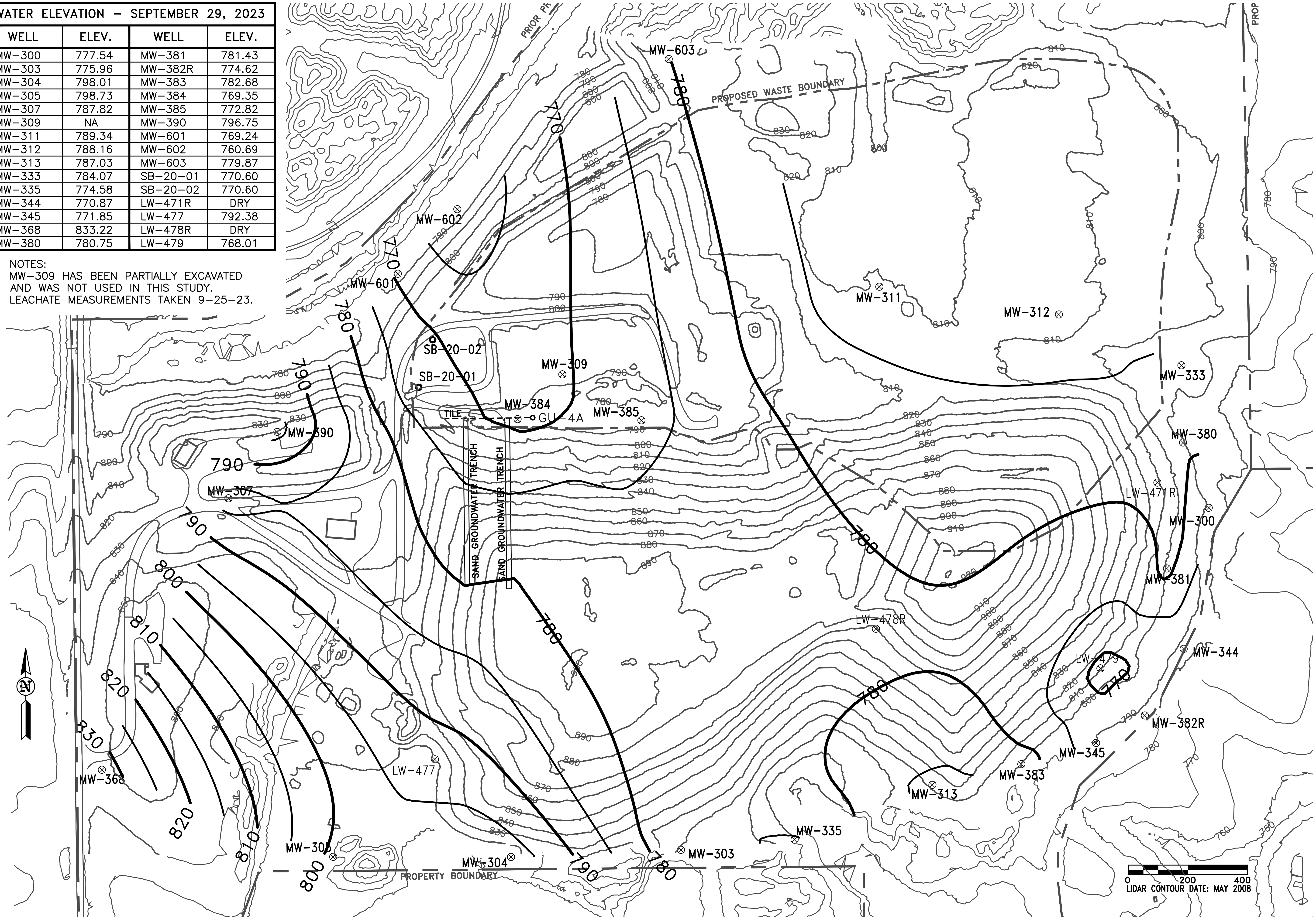
HLW Engineering Group
204 West Broad Street, P.O. Box 314
Story City, Iowa 50248
Phone: (515) 733-4144
FAX: (515) 733-4146

HLW Engineering Group

FIGURE:	2
REVISION	NO.	DATE
DRAWN DRA	PROJECT NO. 6009	DATE 12-21-23

WATER ELEVATION – SEPTEMBER 29, 2023			
WELL	ELEV.	WELL	ELEV.
MW–300	777.54	MW–381	781.43
MW–303	775.96	MW–382R	774.62
MW–304	798.01	MW–383	782.68
MW–305	798.73	MW–384	769.35
MW–307	787.82	MW–385	772.82
MW–309	NA	MW–390	796.75
MW–311	789.34	MW–601	769.24
MW–312	788.16	MW–602	760.69
MW–313	787.03	MW–603	779.87
MW–333	784.07	SB–20–01	770.60
MW–335	774.58	SB–20–02	770.60
MW–344	770.87	LW–471R	DRY
MW–345	771.85	LW–477	792.38
MW–368	833.22	LW–478R	DRY
MW–380	780.75	LW–479	768.01

NOTES:
MW–309 HAS BEEN PARTIALLY EXCAVATED AND WAS NOT USED IN THIS STUDY.
LEACHATE MEASUREMENTS TAKEN 9–25–23.



GROUNDWATER CONTOURS

SOUTH CENTRAL IOWA SOLID WASTE AGENCY SLF
TRACY, IOWA

FIGURE: 3

REVISION	NO.	DATE
DRAWN DRA	PROJECT NO. 6009	DATE 12–21–23

HLW Engineering Group
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Tables
(in IDNR Format)

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Table 1 – Monitoring Program Summary

Table 1
Monitoring Program Summary
Annual Water Quality Report
SCISWA Landfill
63-SDP-02-77P

Monitoring Well	Formation - Soil Type	Current Monitoring Program	Change for next sampling event	Constituents w/ SSI	Constituents w/ SSL	Total # of Samples in Each Monitoring Program		
						Detection	Assessment	Corrective Action
HMSP Monitoring Points								
GU-4A	Underdrain System	Detection	NC	None	None	24	0	0
MW-300	Silty Clay with Shale	Detection	NC	None	None	35	0	0
MW-303	Fill - Clayey Shale/Coal	Detection	NC	None	None	35	0	0
MW-304	Fill - Disturbed Clay & Shale	Detection	NC	None	None	18	0	0
MW-307	Fill - Disturbed Clay & Shale	Background	NC	None	None	32	0	0
MW-312	Fill - Disturbed Clay/Shale/Coal	Background	NC	None	None	23	0	0
MW-313	Fill - Disturbed Clay/Shale/Coal	Detection	NC	None	None	35	0	0
MW-335	Fill - Disturbed Clay/Shale/Coal	Detection	NC	None	None	35	0	0
MW-344	Fill - Disturbed Clay/Shale/Coal	Assessment	NC	benzene, cis-1,2-DCE	None	0	35	0
MW-380	Fill - Disturbed Clay & Shale	Detection	NC	None	None	35	0	0
MW-381	Fill - Disturbed Clay & Shale	Detection	NC	None	None	35	0	0
MW-382R	Fill - Disturbed Clay & Shale	Assessment	NC	1,1-DCA, bis(2-ethylhexyl)phthalate	None	0	29	0
MW-384	Fill - Disturbed Clay & Shale	Detection	NC	None	None	31	0	0
MW-385	Fill - Disturbed Clay & Shale	Detection	NC	None	None	31	0	0
MW-390	Silty Clay with Shale	Background	NC	None	None	29	0	0
MW-601[1]	Sandy Lean Clay with Shale	Preliminary	NC	None	None	8	0	0
MW-602[1]	Lean Clay with Shale	Preliminary	NC	None	None	8	0	0
MW-603[1]	Sandy Lean Clay with Shale	Preliminary	NC	None	None	8	0	0
Other monitoring points								
SW-1[2]	N/A	Surface Water	NC	N/A	N/A	N/A	N/A	N/A

[1]Monitoring wells MW-601, MW-602, and MW-603 were installed for background information for future expansion. They are not included in the Hydrologic Monitoring System Plan (HMSP) network.

[2]Surface water sample SW-1 is monitored for Acid Mine Drainage (AMD) constituents.

Table 2 – Monitoring Program Implementation Schedule

Table 2
Monitoring Implementation Schedule
Annual Water Quality Report
SCISWA Landfill
63-SDP-02-77P

Monitoring Well	Recent Sampling Events		Upcoming Sampling		Full Appendix II Sample Dates	
	March 2023	September 2023	March 2024	September 2024	Previously Collected	Next Event
GU-4A	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD		
MW-300	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD		
MW-303	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD		
MW-304	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD		
MW-307	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD		
MW-310	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD		
MW-312	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD		
MW-313	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD		
MW-335	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD		
MW-344*	Appendix I, AMD	**Appendix II, AMD**	Appendix I, AMD	Appendix I, AMD	3/16/2012, 9/20/2012, 9/25/2013, 10/02/2018, 9/29/2023	Fall 2028
MW-380	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD		
MW-381	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD		
MW-382R**	Appendix I, AMD	**Appendix II, AMD**	Appendix I (1), AMD	Appendix I (1), AMD	3/16/2012, 9/20/2012, 9/25/2013, 10/02/2018, 9/29/2023	Fall 2028
MW-384	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD		
MW-385	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD		
MW-390	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD		
Surface Water Monitoring						
SW-1	AMD	AMD	AMD	AMD		

AMD = Acid Mine Drainage parameters (alkalinity (as CaCO3), aluminum, iron, pH, and sulfate.
Appendix (1) = add bis(2-ethylhexyl)phthalate

Table 2 Supplement

Summary of All Well Testing to Date

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

WELL	Mar-2008	Apr-2008	Jul-2008	Aug-2008	Sep-2008
GUA-4					
MW-300	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW-303	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW-304					
MW-307(b)					
MW-312(b)					
MW-313	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW-335	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW-344	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW-380	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW-381	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW-382R					
MW-384					
MW-385					
MW-390(b)					
SW-1					

WELL	Nov-2008	Mar-2009	May-2009	Jul-2009	Sep-2009
GUA-4					Appendix I
MW-300		Appendix I			Appendix I
MW-303		Appendix I			Appendix I
MW-304					
MW-307(b)	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW-312(b)					
MW-313		Appendix I			Appendix I
MW-335		Appendix I			Appendix I
MW-344		Appendix I			Appendix I
MW-380		Appendix I			Appendix I
MW-381		Appendix I			Appendix I
MW-382R					
MW-384					Appendix I
MW-385					Appendix I
MW-390(b)					
SW-1					

WELL	Dec-2009	Mar-2010	Jul-2010	Sep-2010	Jan-2011
GUA-4	Appendix I	Appendix I	Appendix I	Appendix I	
MW-300		Appendix I		Appendix I	
MW-303		Appendix I		Appendix I	
MW-304					
MW-307(b)		**Appendix II**	**Appendix II**	**Appendix II**	
MW-312(b)					
MW-313		Appendix I		Appendix I	
MW-335		Appendix I		Appendix I	
MW-344		Appendix I		Appendix I	
MW-380		Appendix I		Appendix I	
MW-381		Appendix I		Appendix I	
MW-382R					
MW-384	Appendix I	Appendix I	Appendix I	Appendix I	
MW-385	Appendix I	Appendix I	Appendix I	Appendix I	
MW-390(b)				Appendix I	Appendix I
SW-1					

WELL	Mar-2011	Jun-2011	Aug-2011	Sep-2011	Dec-2011
GUA-4	Appendix I			Appendix I	
MW-300	Appendix I			Appendix I	
MW-303	Appendix I			Appendix I	
MW-304					
MW-307(b)	Appendix I			Appendix I	
MW-312(b)					
MW-313	Appendix I			Appendix I	
MW-335	Appendix I			Appendix I	
MW-344	Appendix I			Appendix I	
MW-380	Appendix I			Appendix I	
MW-381	Appendix I			Appendix I	
MW-382R	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW-384	Appendix I			Appendix I	
MW-385	Appendix I			Appendix I	
MW-390(b)	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
SW-1					

WELL	**Mar-2012**	**Sep-2012**	**Mar-2013**	**Sep-2013**	**Apr-2014**
GUA-4	Appendix I		Appendix I		Appendix I
MW-300	Appendix I	**Appendix II**	Appendix I	**Appendix II**	Appendix I
MW-303	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW-304					
MW-307(b)	**Appendix II**	**Appendix II**	Appendix I	**Appendix II**	Appendix I
MW-312(b)					
MW-313	Appendix I	**Appendix II**	Appendix I	**Appendix II**	Appendix I
MW-335	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW-344	**Appendix II**	**Appendix II**	Appendix I	**Appendix II**	Appendix I
MW-380	Appendix I	**Appendix II**	Appendix I	**Appendix II**	Appendix I
MW-381	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW-382R	**Appendix II**	**Appendix II**	Appendix I	**Appendix II**	Appendix I
MW-384	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW-385	Appendix I	Appendix I	Appendix I	Appendix I	Appendix I
MW-390(b)	**Appendix II**	**Appendix II**	Appendix I	**Appendix II**	Appendix I
SW-1					

WELL	**Sep-2014**	**Mar-2015**	**Sep-2015**	**Mar-2016**	**Oct-2016**
GUA-4	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD
MW-300	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD
MW-303	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD
MW-304				Appendix I, AMD	Appendix I, AMD
MW-307(b)	Appendix I, AMD		Appendix I, AMD	Appendix I, AMD	Appendix I, AMD
MW-312(b)			Appendix I, AMD	Appendix I, AMD	Appendix I, AMD
MW-313	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD
MW-335	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD
MW-344	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD
MW-380	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD
MW-381	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD
MW-382R	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD
MW-384	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD
MW-385	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD
MW-390(b)			Appendix I, AMD	Appendix I, AMD	Appendix I, AMD
SW-1	AMD	AMD	AMD	AMD	AMD

WELL	Jan-2017	Mar-2017	Jum-2017	Sep-2017	Mar-2018
GUA-4		Appendix I, AMD		Appendix I, AMD	Appendix I, AMD
MW-300		Appendix I, AMD		Appendix I, AMD	Appendix I, AMD
MW-303		Appendix I, AMD		Appendix I, AMD	Appendix I, AMD
MW-304	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD
MW-307(b)		Appendix I, AMD		Appendix I, AMD	Appendix I, AMD
MW-312(b)		Appendix I, AMD		Appendix I, AMD	Appendix I, AMD
MW-313		Appendix I, AMD		Appendix I, AMD	Appendix I, AMD
MW-335		Appendix I, AMD		Appendix I, AMD	Appendix I, AMD
MW-344		Appendix I, AMD		Appendix I, AMD	Appendix I, AMD
MW-380		Appendix I, AMD		Appendix I, AMD	Appendix I, AMD
MW-381		Appendix I, AMD		Appendix I, AMD	Appendix I, AMD
MW-382R		Appendix I, AMD		Appendix I, AMD	Appendix I, AMD
MW-384		Appendix I, AMD		Appendix I, AMD	Appendix I, AMD
MW-385		Appendix I, AMD		Appendix I, AMD	Appendix I, AMD
MW-390(b)		Appendix I, AMD		Appendix I, AMD	Appendix I, AMD
SW-1		AMD		AMD	AMD

WELL	Oct-2018	Mar-2019	Sep-2019	Mar-2020	Sep-2020
GUA-4	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD
MW-300	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD
MW-303	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD
MW-304	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD
MW-307(b)	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	App I, AMD, S^{2-}	App I, AMD, S^{2-}
MW-312(b)	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	App I, AMD, S^{2-}	App I, AMD, S^{2-}
MW-313	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD
MW-335	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	**Appendix II**, AMD	Appendix I, AMD
MW-344	**Appendix II**, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD
MW-380	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD
MW-381	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD
MW-382R	**Appendix II**, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD
MW-384	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD
MW-385	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD
MW-390(b)	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	App I, AMD, S^{2-}	App I, AMD, S^{2-}
SW-1	AMD	AMD	AMD	AMD	AMD

WELL	Apr-2021	Oct-2021	Apr-2022	9/1/2022	11/15/2022
GUA-4			Appendix I, AMD	Appendix I, AMD	
MW-300	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Co, Ni, Se
MW-303	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	
MW-304	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	
MW-307(b)	App I, AMD, S^{2-}	App I, AMD, S^{2-}	App I, AMD, S^{2-}	App I, AMD, S^{2-}	
MW-312(b)	App I, AMD, S^{2-}	App I, AMD, S^{2-}	App I, AMD, S^{2-}	App I, AMD, S^{2-}	
MW-313	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	
MW-335	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	
MW-344	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	
MW-380	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	
MW-381	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	
MW-382R	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	
MW-384	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	
MW-385	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	Appendix I, AMD	
MW-390(b)	App I, AMD, S^{2-}	App I, AMD, S^{2-}	App I, AMD, S^{2-}	App I, AMD, S^{2-}	
SW-1	AMD	AMD	AMD	AMD	
Duplicate				At MW-601	

WELL	3/6/2023	9/29/2023			
GUA-4	Appendix I, AMD	Appendix I, AMD			
MW-300	Appendix I, AMD	Appendix I, AMD			
MW-303	Appendix I, AMD	Appendix I, AMD			
MW-304	Appendix I, AMD	Appendix I, AMD			
MW-307(b)	Appendix I, AMD	Appendix I, AMD			
MW-312(b)	Appendix I, AMD	Appendix I, AMD			
MW-313	Appendix I, AMD	Appendix I, AMD			
MW-335	Appendix I, AMD	Appendix I, AMD			
MW-344	Appendix I, AMD	**Appendix II**, AMD			
MW-380	Appendix I, AMD	Appendix I, AMD			
MW-381	Appendix I, AMD	Appendix I, AMD			
MW-382R	Appendix I, AMD	**Appendix II**, AMD			
MW-384	Appendix I, AMD	Appendix I, AMD			
MW-385	Appendix I, AMD	Appendix I, AMD			
MW-390(b)	Appendix I, AMD	Appendix I, AMD			
SW-1	AMD	AMD			
Duplicate	At MW-601	At MW-390			

(b) = Background
App I = Appendix I
AMD = Acid mine drainage parameters alkalinity, aluminum, iron, pH, and sulfate
S^{2-} = Sulfide

Table 3 – Monitoring Well Maintenance Performance Reevaluation Schedule

Table 3
Monitoring Well Maintenance and Performance Reevaluation Schedule
Annual Water Quality Report
SCISWA Landfill
Permit No. 63-SDP-02-77P

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

Compliance with:	**Monitoring Calendar Years**								
	2024	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**	**2031**	**2032**
567 IAC 113.10(2)"f"(1): high and low water levels (semiannually)	Scheduled		Scheduled		Scheduled		Scheduled		Scheduled
567 IAC 113.10(2)"f"(2): changes in the hydrologic setting and flow paths	Scheduled		Scheduled		Scheduled		Scheduled		Scheduled
567 IAC 113.10(2)"f"(3): well depths	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled
567 IAC 113.10(2)"f"(4): well recharge rates and chemistry	Scheduled		Scheduled		Scheduled		Scheduled		Scheduled
567 IAC 113.6(2)"i": Waste separation from ground water	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled	Scheduled

Table 4 – Monitoring Well Maintenance Performance Reevaluation Summary

Table 4
Monitoring Well Maintenance and Performance Summary
Annual Water Quality Report
SCISWA Landfill
Permit No. 63-SDP-02-77P

Well	Top of Casing (ft. AMSL)	Top of Screen (ft. AMSL)	Screen Length (ft.)	Total Depth (ft.)		Date of Measurements		Maximum Depth	Hydraulic Cond.	Most Recent Recharge Rate[2]	
						3/6/2023	9/29/2023	Discrepancy (ft.)	(cm/sec)/date	2023	Change
MW-300	793.22	783.24	10.00	19.98	Groundwater Level (ft.)	12.23	15.68	0	0.0000033 1997	Minimal Drawdown	None percieved
					Groundwater Elevation (Ft MSL)	780.99	777.54				
					Measured Well Depth (ft.)	19.98	19.98				
					Submerged screen	N	N				
MW-303	810.22	762.60	10.00	57.62	Groundwater Level (ft.)	32.45	34.26	0	0.0001 1997	pending 3/2024 Field Work	None percieved
					Groundwater Elevation (Ft MSL)	777.77	775.96				
					Measured Well Depth (ft.)	57.62	57.62				
					Submerged screen	Y	Y				
MW-304	818.51	786.25	10.00	42.26	Groundwater Level (ft.)	18.36	20.50	0	0.0000028 1997	pending 3/2024 Field Work	None percieved
					Groundwater Elevation (Ft MSL)	800.15	798.01				
					Measured Well Depth (ft.)	42.26	42.26				
					Submerged screen	Y	Y				
MW-307	822.23	794.71	10.00	37.52	Groundwater Level (ft.)	33.6	34.41	0	0.0001 1995	pending 3/2024 Field Work	None percieved
					Groundwater Elevation (Ft MSL)	788.63	787.82				
					Measured Well Depth (ft.)	37.52	37.52				
					Submerged screen	N	N				
MW-312	828.05	798.02	10.00	40.03	Groundwater Level (ft.)	27.45	28.33	0	0.0001 1995	pending 3/2024 Field Work	None percieved
					Groundwater Elevation (Ft MSL)	800.6	799.72				
					Measured Well Depth (ft.)	40.03	40.03				
					Submerged screen	Y	Y				
MW-313	813.06	773.85	10.00	49.21	Groundwater Level (ft.)	5.96	26.03	0.09	0.000000594 1997	pending 3/2024 Field Work	None percieved
					Groundwater Elevation (Ft MSL)	807.1	787.03				
					Measured Well Depth (ft.)	49.12	49.12				
					Submerged screen	Y	Y				
MW-335	791.74	759.65	10.00	42.09	Groundwater Level (ft.)	16.10	17.16	0	0.0001 1992	pending 3/2024 Field Work	None percieved
					Groundwater Elevation (Ft MSL)	775.64	774.58				
					Measured Well Depth (ft.)	42.09	42.09				
					Submerged screen	Y	Y				
MW-344	786.50	766.29	10.00	30.21	Groundwater Level (ft.)	8.35	15.63	-0.29	0.0002 1992	Minimal Drawdown	None percieved
					Groundwater Elevation (Ft MSL)	778.15	770.87				
					Measured Well Depth (ft.)	30.5	30.5				
					Submerged screen	Y	Y				
MW-380	789.92	782.30	10.00	17.62	Groundwater Level (ft.)	7.75	9.17	0	Pending	pending 3/2024 Field Work	None percieved
					Groundwater Elevation (Ft MSL)	782.17	780.75				
					Measured Well Depth (ft.)	17.62	17.62				
					Submerged screen	N	N				
MW-381	801.43	787.31	10.00	24.12	Groundwater Level (ft.)	7.73	20.00	0	Pending	pending 3/2024 Field Work	None percieved
					Groundwater Elevation (Ft MSL)	793.7	781.43				
					Measured Well Depth (ft.)	24.12	24.12				
					Submerged screen	Y	N				

Table 4
Monitoring Well Maintenance and Performance Summary
Annual Water Quality Report
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Well	Top of Casing (ft. AMSL)	Top of Screen (ft. AMSL)	Screen Length (ft.)	Total Depth (ft.)		Date of Measurements 3/6/2023	Date of Measurements 9/29/2023	Maximum Depth Discrepancy (ft.)	Hydraulic Cond. (cm/sec)/date	Most Recent Recharge Rate[2] 2023	Most Recent Recharge Rate[2] Change
MW-382R	789.90	767.08	10.00	32.82	Groundwater Level (ft.)	12.88	15.3	0	Pending	Minimal Drawdown	None percieved
					Groundwater Elevation (Ft MSL)	777.02	774.6				
					Measured Well Depth (ft.)	32.82	32.82				
					Submerged screen	Y	Y				
MW-384	787.00	774.68	10.00	22.32	Groundwater Level (ft.)	16.61	17.65	0	0.00084 2022	pending 3/2024 Field Work	None percieved
					Groundwater Elevation (Ft MSL)	770.39	769.35				
					Measured Well Depth (ft.)	22.32	22.32				
					Submerged screen	N	N				
MW-385	786.34	779.36	10.00	16.98	Groundwater Level (ft.)	12.11	13.52	0	0.00292 2022	pending 3/2024 Field Work	None percieved
					Groundwater Elevation (Ft MSL)	774.23	772.82				
					Measured Well Depth (ft.)	16.98	16.98				
					Submerged screen	N	N				
MW-390	834.97	793.32	10.00	51.65	Groundwater Level (ft.)	36.96	38.22	0.00	Pending	pending 3/2024 Field Work	None percieved
					Groundwater Elevation (Ft MSL)	798.01	796.75				
					Measured Well Depth (ft.)	51.65	51.65				
					Submerged screen	Y	Y				

Groundwater Separation Transducer

Transducer		Date of Measurements 3/23/2023	Date of Measurements 9/25/2023
4A-GW (Cell 4A)	Bottom of Waste (in. above transducer)	69.00	69.00
	Transducer in horizontal Screen (datum)	0.00	0.00
	Water above transducer (inches)	0.00	0.00
	Separation Distance (inches)	69.00	69.00
	Separation Distance (ft.)	5.75	5.75

Table 4A – Historic Water Elevation Data

					WO		WO		WO			WO			WO	WO				WO												
	Monitoring Well	MW-300	MW-303	MW-304	MW-305	MW-307	MW-309	MW-310	MW-311	MW-312	MW-313	MW-333	MW-335	MW-344	MW-345	MW-368	MW-380	MW-381	MW-382R	MW-383	MW-384	MW-385	MW-390	MW-601	MW-602	MW-603	SB20-01	SB20-02	LW-471R	LW-477	LW-478R	LW-479
	Original TOC Elevation	793.22	810.22	818.51	821.49	822.23	820.51	806.58	826.69	828.05	813.06	794.26	791.74	786.50	790.11	850.70	789.92	801.43	789.92	802.15	787.00	786.34	834.97	782.44	780.46	818.55	813.35	807.85				
	Current TOC Elevation	793.22	810.22	818.51	821.49	822.23	820.51	806.58	816.59	816.49	813.06	794.26	791.74	786.50	790.11	850.70	789.92	801.43	789.92	802.15	787.00	786.34	834.97	782.44	780.46	818.55	813.35	807.85		821.38		793.41
	Screen Top	784.72	767.22	785.51	784.61	800.23	779.01	780.58	791.25	790.75	776.86	779.40	767.10	768.40	772.10	843.60	786.98	779.46	768.50	778.62	776.66	780.93	799.67	773.37	763.91	776.49	790.08	776.21				
	Screen Bottom	772.64	751.32	775.51	774.61	784.23	763.01	767.00	776.25	775.75	758.86	767.01	749.79	755.40	759.10	829.60	772.12	777.18	756.50	767.15	764.55	768.93	782.67	763.37	753.91	766.49	780.08	766.21	20.1	40.5	86.9	36.9
	NORTHING	1180.53	53.79	36.48	43.76	1249.62	1652.60	1636.33	1934.55	1834.98	262.51	1659.44	83.45	708.65	396.80	344.32					1504.39	1495.89		465204.52	465420.74	465924.38	464823.9	464983.5				
	EASTING	3802.11	2020.61	1450.86	854.88	517.70	1641.25	2180.25	2706.89	3307.75	2865.58	3715.91	2401.57	3712.67	3415.97	83.04					1489.38	1904.40		1790786.9	1790986.2	1791695.0	1790858	1790904				
	Static Water Level	12.58	33.97	NM	NM	33.53	NM	24.60	38.12	39.44	24.28	10.04	17.48	9.94	16.80	NM	5.40	19.97	12.85	17.52	16.49	11.20	36.03									
2012 - Mar	Total Depth	20.10	57.55	NM	NM	37.60	NM	38.50	NM	NM	49.30	27.20	41.95	30.25	30.30	NM	17.70	24.25	32.90	35.00	22.45	17.05	52.10									
	Static Water Elevation	780.64	776.25	NM	NM	788.70	NM	781.98	778.47	777.05	788.78	784.22	774.26	776.56	773.31	NM	784.52	781.46	777.07	784.63	770.51	775.14	798.94									
	Static Water Level	14.41	34.77	NM	NM	33.96	50.13	26.97	38.52	39.95	27.22	11.60	17.78	15.49	18.30	NM	6.36	22.33	15.36	19.40	16.60	12.08	36.57									
2012 - Sep	Total Depth	20.05	57.60	NM	NM	37.60	53.80	38.50	48.70	50.70	49.50	27.25	41.95	30.25	30.25	NM	17.80	24.25	32.75	33.55	22.40	17.10	52.05									
	Static Water Elevation	778.81	775.45	NM	NM	788.27	770.38	779.61	778.07	776.54	785.84	782.66	773.96	771.01	771.81	NM	783.56	779.10	774.56	782.75	770.40	774.26	798.40									
	Static Water Level	12.83	33.36	NM	NM	33.98	50.27	26.37	38.22	39.54	27.64	11.15	17.06	10.31	18.28	NM	6.02	18.39	13.81	19.13	16.79	12.41	37.00									
2013 - Mar	Total Depth	20.05	57.60	NM	NM	37.60	53.80	38.50	48.70	50.70	49.50	27.25	41.95	30.25	30.25	NM	17.80	24.25	32.75	33.55	22.40	17.10	52.05									
	Static Water Elevation	780.39	776.86	NM	NM	788.25	770.24	780.21	778.37	776.95	785.42	783.11	774.68	776.19	771.83	NM	783.90	783.04	776.11	783.02	770.21	773.93	797.97									
	Static Water Level	12.10	NM	NM	NM	NM	50.12	NM	36.40	37.69	24.50	9.06	NM	8.89	15.24	12.46	8.62	NM	11.24	NM	NM	NM	34.32									
2013 - Jun	Total Depth	20.05	NM	NM	NM	NM	53.80	NM	48.70	50.70	49.50	27.25	NM	30.25	30.25	21.10	17.80	NM	32.75	NM	NM	NM	52.05									
	Static Water Elevation	781.12	NM	NM	NM	NM	770.39	NM	780.19	778.80	788.56	785.20	NM	777.61	774.87	838.24	781.30	NM	778.68	NM	NM	NM	800.65									
	Static Water Level	14.32	35.15	NM	NM	33.67	50.42	26.28	37.48	27.17	27.48	10.98	18.11	14.50	17.51	16.92	5.87	21.36	14.12	18.23	17.19	12.72	35.38									
2013 - Sep	Total Depth	19.90	57.70	NM	NM	37.55	54.20	38.40	48.65	38.55	48.25	27.10	41.95	30.50	29.90	21.10	17.60	24.05	32.75	35.00	22.30	16.90	52.00									
	Static Water Elevation	778.90	775.07	NM	NM	788.56	770.09	780.30	779.11	789.32	785.58	783.28	773.63	772.00	772.60	833.78	784.05	780.07	775.80	783.92	769.81	773.62	799.59									
	Static Water Level	12.94	34.43	NM	NM	34.37	47.04	25.19	27.46	28.67	31.28	13.13	17.39	11.27	20.20	NM	9.87	8.09	17.00	20.90	16.49	12.19	37.58									
2014 - Apr	Total Depth	19.90	57.70	NM	NM	37.55	54.20	38.60	38.60	40.10	49.30	27.10	41.95	30.50	29.90	NM	17.60	24.05	32.75	35.00	22.30	16.90	52.00									
	Static Water Elevation	780.28	775.79	NM	NM	787.86	773.47	781.39	789.13	787.82	781.78	781.13	774.35	775.23	769.91	#VALUE!	780.05	793.34	772.92	781.25	770.51	774.15	797.39									
	Static Water Level	12.10	32.85	NM	NM	31.49	45.35	25.08	26.39	27.37	26.34	9.33	16.95	9.62	15.51	12.11	8.75	16.62	11.10	16.31	11.85	9.95	34.78									
2014 - Sep	Total Depth	19.90	57.70	NM	NM	37.55	54.20	38.60	38.60	40.10	49.35	27.10	41.95	30.50	29.90	21.10	17.60	24.05	32.75	35.00	22.30	16.90	52.00									
	Static Water Elevation	781.12	777.37	NM	NM	790.74	775.16	781.50	790.20	789.12	786.72	784.93	774.79	776.88	774.60	838.59	781.17	784.81	778.82	785.84	775.15	776.39	800.19									
	Static Water Level	13.75	33.82	NM	NM	33.62	48.21	25.15	26.88	27.84	10.15	10.57	17.21	9.96	16.15	13.10	9.20	11.75	12.30	17.39	18.41	11.55	36.73									
2015 - Mar	Total Depth	19.90	57.70	NM	NM	37.55	54.20	38.60	38.60	40.10	49.35	27.10	41.95	30.50	29.90	21.10	17.60	24.05	32.75	35.00	22.30	16.90	52.00									
	Static Water Elevation	779.47	776.40	NM	NM	788.61	772.30	781.43	789.71	788.65	802.91	783.69	774.53	776.54	773.96	837.60	780.72	789.68	777.62	784.76	768.59	774.79	798.24									
	Static Water Level	11.88	33.03	NM	NM	30.89	46.65	26.57	25.65	26.64	24.00	7.89	16.96	10.44	14.58	12.01	6.83	18.14	11.11	16.42	15.41	10.05	33.80									
2015 - Sep	Total Depth	19.90	57.70	NM	NM	37.55	54.20	38.60	38.60	40.10	49.35	27.10	41.95	30.50	29.90	21.10	17.60	24.05	32.75	35.00	22.30	16.90	52.00	Monitoring Wells Installed December 18 and December 19, 2019.								
	Static Water Elevation	781.34	777.19	NM	NM	791.34	773.86	780.01	790.94	789.85	789.06	786.37	774.78	776.06	775.53	838.69	783.09	783.29	778.81	785.73	771.59	776.29	801.17									
	Static Water Level	11.89	32.40	10.97	24.86	32.55	45.66	25.35	25.53	26.55	4.85	8.20	16.58	8.89	14.24	10.48	6.62	11.83	10.85	15.05	15.14	9.73	34.61									
2016 - Mar	Total Depth	19.90	57.70	42.75	NM	37.55	NM	38.60	NM	40.10	49.35	NM	41.95	30.50	NM	NM	17.60	24.05	32.75	NM	22.30	16.90	52.00				Installed 10-7-2020					
	Static Water Elevation	781.33	777.82	807.54	796.63	789.68	774.85	781.23	791.06	789.94	808.21	786.06	775.16	777.61	775.87	840.22	783.30	789.60	779.07	787.10	771.86	776.61	800.36									
	Static Water Level	13.89	34.09	17.82	26.62	33.75	46.96	26.12	27.08	28.15	26.62	9.43	17.41	14.46	17.46	14.91	8.15	19.81	14.21	19.21	18.46	10.31	36.38									
2016 - Oct	Total Depth	19.98	57.62	42.26	NM	37.52	NM	38.51	NM	40.03	49.21	NM	42.09	30.21	NM	NM	17.62	24.12	32.82	NM	22.32	16.98	51.65									
	Static Water Elevation	779.33	776.13	800.69	794.87	788.48	773.55	780.46	789.51	788.34	786.44	784.83	774.33	772.04	772.65	835.79	781.77	781.62	775.71	782.94	768.54	776.03	798.59									
	Static Water Level	13.66	34.39	18.89	26.96	34.16	46.86	25.88	27.89	28.88	27.90	10.99	17.51	13.22	18.75	13.93	9.43	10.51	15.26	19.99	17.69	10.31	37.75									
2017 - Mar	Total Depth	20.05	57.76	42.41	NM	37.55	NM	38.63	NM	40.06	49.35	NM	42.08	30.19	NM	NM	17.78	24.10	32.87	NM	22.31	17.01	51.65									
	Static Water Elevation	779.56	775.83	799.62	794.53	788.07	773.65	780.70	788.70	787.61	785.16	783.27	774.23	773.28	771.36	836.77	780.49	790.92	774.66	782.16	769.31	776.03	797.22									
	Static Water Level	14.48	34.45	19.51	26.92	34.21	45.98	25.78	27.45	28.41	27.59	10.32	17.58	15.65	18.21	17.25	8.77	20.94	15.26	19.39	17.75	10.28	36.73									
2017 - Sept	Total Depth	20.04	57.73	42.41	NM	37.52	NM	38.60	NM	40.04	49.35	NM	42.05	30.15	NM	NM	17.76	24.10	32.80	NM	22.31	17.00	51.59									
	Static Water Elevation	778.74	775.77	799.00	794.57	788.02	774.53	780.80	789.14	788.08	785.47	783.94	774.16	770.85	771.90	833.45	781.15	780.49	774.66	782.76	769.25	776.06	798.24									
	Static Water Level	13.45	34.20	21.15	27.05	34.34	48.26	24.46	27.75	28.95	28.40	11.28	17.33	13.05	19.32	14.35	9.70	6.95	15.50	20.65	18.20	10.60	37.34									
2018 - Mar	Total Depth	20.05	57.76	42.41	NM	37.55	NM	38.63	NM	40.06	49.35	NM	42.08	30.19	NM	NM	17.78	24.10	32.87	NM	22.31	17.01	51.65									
	Static Water Elevation	779.77	776.02	797.36	794.44	787.89	772.25	782.12	788.84	787.54	784.66	782.98	774.41	773.45	770.79	836.35	780.22	794.48	774.42	781.50	768.80	775.74	797.63									
	Static Water Level	13.05	33.43	20.60	26.39	33.35	59.60	27.21	26.95	27.94	27.05	9.15	16.92	11.95	16.98	14.71	8.08	18.95	13.30	18.12	18.60	13.25	35.65									
2018 - Oct	Total Depth	20.05	57.76	42.41	26.92	37.55	NM	38.63	27.45	40.06	49.35	10.32	42.08	30.19	18.21	17.25	17.78	24.10	32.87	19.39	22.31	17.01	51.65									
	Static Water Elevation	780.17	776.79	797.91	795.10	788.88	760.91	779.37	789.64	788.55	786.01	785.11	774.82	774.55	773.13	835.99	781.84	782.48	776.62	784.03	768.40	773.09	799.32									
	Static Water Level	12.15	30.95	12.95	27.98	31.95	46.43	26.20	24.85	25.90	4.60	8.50	15.90	8.22	13.80	10.98	6.95	8.42	10.30	13.70	12.90	11.74	34.02									
2019 - Mar	Total Depth	20.05	57.76	42.41	NM	37.55	NM	38.60	27.45	40.06	49.35	10.32	42.08	30.19	18.21	17.25	17.76	24.10	32.87	19.39	22.31	17.01	51.65									
	Static Water Elevation	781.07	779.27	805.56	793.51	790.28	774.08	780.38	791.74	790.59	808.46	785.76	775.84	778.28	776.31	839.72	782.97	793.01	779.62	788.45	774.10	774.60	800.95									
	Static Water Level	13.18	33.50	16.40	23.37	33.20	47.79	26.75	25.58	26.61	6.62	8.05	16.82	11.37	15.31	12.28	6.85	15.00	12.28	17.07	16.62	12.05	34.80									
2019 - Sep	Total Depth	20.05	57.76	42.41	NM	37.55	NM	38.60	27.45	40.06	49.35	10.32	42.08	30.19	18.21	17.25	17.76	24.10	32.87	19.39	22.31	17.01	51.65									
	Static Water Elevation	780.04	776.72	802.11	798.12	789.03	772.72	779.83	791.01	789.88	806.44	786.21	774.92	775.13	774.80	838.42	783.07	786.43	777.64	785.08	770.38	774.29	800.17									
	Static Water Level	13.05	32.69	12.42	22.34	32.71	51.31		25.72	26.70	4.65	8.20	16.40	9.38	14.35	10.55	7.18	4.00	11.42	15.71	12.25	14.05	35.40	11.84	17.19	46.4						
2020 - Mar	Total Depth	20.05	57.76	42.41	26.92	37.55	54.20		27.08	40.04	49.35	10.32	42.05	30.15	18.21	17.25	17.76	24.10	32.80	19.39	22.31	17.00	51.59	19.65	27.22	51.88						
	Static Water Elevation	780.17	777.53	806.09	799.15	789.52	769.20		790.87	789.79	808.41	786.06	775.34	777.12	775.76	840.15	782.74	797.43	778.50	786.44	774.75	772.29	799.57	770.60	763.27	772.15						
	Static Water Level	14.23	33.22	16.43	22.11	33.53	51.37		25.54	26.49	8.40	8.65	11.94	13.22	16.25	14.30	7.46	14.94	13.45	18.29	18.20	13.57	35.59	11.7	17.63	46.53						
2020 - Sep	Total Depth	20.28	58.37	42.68	46.51	37.94	54.64		38.84	40.30	49.62	27.37	16.78	30.23	30.32	21.50	18.04	24.33	33.13	35.38	22.79	NM	54.52	19.66	27.21	52.33						
	Static Water Elevation	778.99	777.00	802.08	799.38	788.70	769.14		791.05	790.00	804.66	785.61	779.80	773.28	773.86	836.40	782.46	786.49	776.47	783.86	768.80	772.77	799.38	770.74	762.83	772.02						
	Static Water Level	12.64	31.91	13.96	21.61	32.39	50.90		25.14	26.18	4.68	8.01	9.33	8.65	15.06	11.96	6.77	8.04	11.36	15.50	17.92	13.09	35.76	9.07	15.47	45.83						
2021 - Apr	Total Depth	20.23	57.95	42.70	46.42	37.79	54.29	Abandoned December 19, 2019.	38.69	40.31	49.60	27.40	16.80	36.45	30.34	21.96	18.00	24.33	33.12	35.38	22.80	17.21	52.23	19.69	27.22	51.90						
	Static Water Elevation	780.58	778.31	804.55	799.88	789.84	769.61		791.45	790.31	808.38	786.25	782.41	777.85	775.05	838.74	783.15	793.39	778.56	786.65	769.08	773.25	799.21	773.37	764.99	772.72						
	Static Water Level	13.60	33.51	18.96	22.79	30.97	52.27		26.31	27.38	24.99	11.84	16.68	12.92	17.09	12.96	8.03	9.37	14.53	19.11	15.12	13.34	36.75	16.30	17.92	36.64						
2021 - Oct	Total Depth	20.25	57.97	42.73	46.46	37.84	54.33		38.71	40.35	49.92	27.43	42.15	36.48	30.38	21.62	18.03	24.35	33.16	35.41	22.86	17.29	52.48	19.75	27.31	52.31						
	Static Water Elevation	779.62	776.71	799.55	798.70	791.26	768.24		790.28	789.11	788.07	782.42	775.06	773.58	773.02	837.74	781.89	792.06	775.39	783.04	771.88	773.00	798.22	766.14	762.54	781.91						
	Static Water Level	12.59	32.17	14.61	22.27	33.03	51.64		25.94	28.31	7.64	10.09	6.06	8.31	NM	12.24	7.81	7.12	12.11	17.26	14.58	12.73	36.81	11.36	17.44	38.54						
2022 - Apr	Total Depth	20.20	57.98	42.75	46.47	37.85	54.34		38.73	40.37	49.93	27.49	42.16	36.49	NM	21.63	18.04	24.30	33.17	35.42	22.87	17.30	52.44	19.76	27.51	52.72						
	Static Water Elevation	780.63	778.05	803.90	799.22	789.20	768.87		790.65	788.18	805.42	784.17	785.68	778.19	#VALUE!	838.46	782.11	794.31	777.81	784.89	772.42	773.61	798.16	771.08	763.02	780.01						
	Static Water Level	14.90	33.76	18.18	22.29	33.86	Fully Excavated		26.73	27.78	24.58	9.31	16.90	14.35	17.19	16.20	8.27	19.08	14.09	18.61	17.55	13.72	37.50	12.36	19.09	38.21	41.94	36.85	Dry	28.5	Dry	25.8
2022 - Sep	Total Depth	19.98	57.62	42.26	46.47	37.52	Fully Excavated		38.73	40.03	49.12	27.49	42.09	30.50	30.38	21.63	17.62	24.12	32.82	35.42	22.32	16.98	51.65	19.75	27.31	52.31	33.27	41.64	0	40.5	0	36.9
	Static Water Elevation	778.32	776.46	800.33	799.20	788.37	Fully Excavated		789.86	788.71	788.48	784.95	774.84	772.15	772.92	834.50	781.65	782.35	775.83	783.54	769.45	772.62	797.47	770.08	761.37	780.34	771.41	771.00	Dry	792.88	Dry	767.61
	Static Water Level	12.23	32.45	18.36	22.15	33.60	Fully Excavated		26.47	27.45	5.96	8.66	16.10	8.35	17.37	12.12	7.75	7.73	12.88	17.21	16.61	12.11	36.96	11.22	17.16	37.62	40.53	34.51	Dry	28.7	Dry	25.1
2023 - Mar	Total Depth	20.20	57.98	42.75	46.47	37.85	Fully Excavated		38.73	40.03	49.12	27.49	42.09	30.50	30.38	21.63	17.62	24.12	32.82	35.42	22.32	16.98	51.65	19.75	27.31	52.31	33.27	41.64	0	40.5	0	36.9
	Static Water Elevation	780.99	777.77	800.15	799.34	788.63	Fully Excavated		790.12	789.04	807.10	785.60	775.64	778.15	772.74	838.58	782.17	793.70	777.04	784.94	770.39	774.23	798.01	771.22	763.30	780.93	772.82	773.34	Dry	792.68	Dry	768.31
	Static Water Level	15.68	34.26	20.50	22.76	34.41	Fully Excavated		27.25	28.33	26.03	10.19	17.16	15.63	18.26	17.48	9.17	20.00	15.30	19.47	17.65	13.52	38.22	13.20	19.77	38.68	42.75	37.25	Dry	29	Dry	25.4
2023 - Sep	Total Depth	19.98	57.62	42.26	46.47	37.52	Fully Excavated		38.73	40.03	49.12	27.49	42.09	30.50	30.38	21.63	17.62	24.12	32.82	35.42	22.32	16.98	51.65	19.75	27.31	52.31	33.27	41.64	0	40.5	0	36.9
	Static Water Elevation	777.54	775.96	798.01	798.73	787.82	Fully Excavated		789.34	788.16	787.03	784.07	774.58	770.87	771.85	833.22	780.75	781.43	774.62	782.68	769.35	772.82	796.75	769.24	760.69	779.87	770.60	770.60	Dry	792.38	Dry	768.01

Notes:
Total Depth is the depth to from top of casing to bottom of well, measured during the sampling event.
The well depths recorded at MW-344 in 2021 and in April 2022 were erroneous. Well depth was confirmed on September 1, 2022 in satisfaction of IDNR requirements (Doc #103587 and Doc #103598)
NM = Not Measured During Sampling Event

Table 5 – Background and GWPS Summary

Table 5
Background Data Summary Tables - Control Limits
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SCISWA Landfill
Permit No. 63-SDP-02-77P

(Control/Prediction Limits that exceed the Statewide Standard are highlighted yellow)
(Site Specific GWPS that vary from the Statewide Standard are in red text)

Monitoring Point	Compound	Units	IAC 567-137 Statewide Standards	Intrawell Statistical Control Limit	Interwell Statistical Prediction Limit	Site-Specific GWPS Utilized
GU-4A	Antimony, total	ug/L	6	0.74	4.40	6
GU-4A	Arsenic, total	ug/L	10	5.30	22.50	22.5
GU-4A	Barium, total	ug/L	2000	19.06	49.90	2000
GU-4A	Beryllium, total	ug/L	4	2.05	1.00	4
GU-4A	Cadmium, totall	ug/L	5	0.40	1.19	5
GU-4A	Chromium, total	ug/L	100	2.92	5.51	100
GU-4A	Cobalt, total	ug/L	2.1	138.11	139.70	139.70
GU-4A	Copper, total	ug/L	1300	2.19	7.99	1300
GU-4A	Lead, total	ug/L	15	0.32	4.78	15
GU-4A	Nickel, total	ug/L	100	231.54	147.41	231.54
GU-4A	Selenium, total	ug/L	50	3.34	6.40	50
GU-4A	Silver, total	ug/L	100	0.37	0.56	100
GU-4A	Thallium, total	ug/L	2	0.26	1.17	2
GU-4A	Vanadium, total	ug/L	35	2.15	8.91	35
GU-4A	Zinc, total	ug/L	2000	262.67	13436.69	13436.69
MW-300	Antimony, total	ug/L	6	1.00	4.40	6
MW-300	Arsenic, total	ug/L	10	4.77	22.50	22.5
MW-300	Barium, total	ug/L	2000	23.94	49.90	2000
MW-300	Beryllium, total	ug/L	4	0.53	1.00	4
MW-300	Cadmium, totall	ug/L	5	10.61	1.19	10.61
MW-300	Chromium, total	ug/L	100	3.69	5.51	100
MW-300	Cobalt, total	ug/L	2.1	653.25	139.70	635.25
MW-300	Copper, total	ug/L	1300	32.00	7.99	1300
MW-300	Lead, total	ug/L	15	2.45	4.78	15
MW-300	Nickel, total	ug/L	100	535.68	147.41	535.68
MW-300	Selenium, total	ug/L	50	3.34	6.40	50
MW-300	Silver, total	ug/L	100	0.56	0.56	100
MW-300	Thallium, total	ug/L	2	0.51	1.17	2
MW-300	Vanadium, total	ug/L	35	2.15	8.91	35
MW-300	Zinc, total	ug/L	2000	1649.11	13436.69	13436.6853
MW-303	Antimony, total	ug/L	6	0.53	4.40	6
MW-303	Arsenic, total	ug/L	10	3.56	22.50	22.5
MW-303	Barium, total	ug/L	2000	179.90	49.90	2000
MW-303	Beryllium, total	ug/L	4	0.27	1.00	4
MW-303	Cadmium, totall	ug/L	5	0.10	1.19	5
MW-303	Chromium, total	ug/L	100	4.76	5.51	100
MW-303	Cobalt, total	ug/L	2.1	37.33	139.70	139.701
MW-303	Copper, total	ug/L	1300	2.00	7.99	1300
MW-303	Lead, total	ug/L	15	3.86	4.78	15
MW-303	Nickel, total	ug/L	100	104.03	147.41	147.4121
MW-303	Selenium, total	ug/L	50	1.00	6.40	50
MW-303	Silver, total	ug/L	100	0.37	0.56	100
MW-303	Thallium, total	ug/L	2	0.90	1.17	2
MW-303	Vanadium, total	ug/L	35	8.73	8.91	35
MW-303	Zinc, total	ug/L	2000	271.62	13436.69	13436.69

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SCISWA Landfill
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MW-304	Antimony, total	ug/L	6	0.82	4.40	6
MW-304	Arsenic, total	ug/L	10	14.68	22.50	22.50
MW-304	Barium, total	ug/L	2000	171.80	49.90	2000
MW-304	Beryllium, total	ug/L	4	0.22	1.00	4
MW-304	Cadmium, totall	ug/L	5	0.37	1.19	5
MW-304	Chromium, total	ug/L	100	1.28	5.51	100
MW-304	Cobalt, total	ug/L	2.1	26.80	139.70	139.701
MW-304	Copper, total	ug/L	1300	2.87	7.99	1300
MW-304	Lead, total	ug/L	15	0.74	4.78	15
MW-304	Nickel, total	ug/L	100	19.25	147.41	147.4121
MW-304	Selenium, total	ug/L	50	1.24	6.40	50
MW-304	Silver, total	ug/L	100	0.18	0.56	100
MW-304	Thallium, total	ug/L	2	0.26	1.17	2
MW-304	Vanadium, total	ug/L	35	0.84	8.91	35
MW-304	Zinc, total	ug/L	2000	18.91	13436.69	13436.69
MW-307	Antimony, total	ug/L	6	1.00	4.40	6
MW-307	Arsenic, total	ug/L	10	10.80	22.50	22.50
MW-307	Barium, total	ug/L	2000	22.48	49.90	2000
MW-307	Beryllium, total	ug/L	4	2.26	1.00	4
MW-307	Cadmium, totall	ug/L	5	1.57	1.19	5
MW-307	Chromium, total	ug/L	100	1.60	5.51	100
MW-307	Cobalt, total	ug/L	2.1	121.65	139.70	139.701
MW-307	Copper, total	ug/L	1300	2.19	7.99	1300
MW-307	Lead, total	ug/L	15	0.77	4.78	15
MW-307	Nickel, total	ug/L	100	208.84	147.41	208.84
MW-307	Selenium, total	ug/L	50	10.65	6.40	50
MW-307	Silver, total	ug/L	100	0.42	0.56	100
MW-307	Thallium, total	ug/L	2	0.27	1.17	2
MW-307	Vanadium, total	ug/L	35	1.10	8.91	35
MW-307	Zinc, total	ug/L	2000	1065.97	13436.69	13436.69
MW-312	Antimony, total	ug/L	6	1.00	4.40	6
MW-312	Arsenic, total	ug/L	10	3.49	22.50	22.50
MW-312	Barium, total	ug/L	2000	33.65	49.90	2000
MW-312	Beryllium, total	ug/L	4	1.19	1.00	4
MW-312	Cadmium, totall	ug/L	5	0.25	1.19	5
MW-312	Chromium, total	ug/L	100	3.90	5.51	100
MW-312	Cobalt, total	ug/L	2.1	82.41	139.70	139.701
MW-312	Copper, total	ug/L	1300	2.19	7.99	1300
MW-312	Lead, total	ug/L	15	1.67	4.78	15
MW-312	Nickel, total	ug/L	100	227.83	147.41	227.83
MW-312	Selenium, total	ug/L	50	1.00	6.40	50
MW-312	Silver, total	ug/L	100	0.42	0.56	100
MW-312	Thallium, total	ug/L	2	0.27	1.17	2
MW-312	Vanadium, total	ug/L	35	1.10	8.91	35
MW-312	Zinc, total	ug/L	2000	307.97	13436.69	13436.69
MW-313	Antimony, total	ug/L	6	1.00	4.40	6
MW-313	Arsenic, total	ug/L	10	38.65	22.50	38.65
MW-313	Barium, total	ug/L	2000	94.69	49.90	2000
MW-313	Beryllium, total	ug/L	4	0.27	1.00	4
MW-313	Cadmium, totall	ug/L	5	0.39	1.19	5
MW-313	Chromium, total	ug/L	100	2.98	5.51	100
MW-313	Cobalt, total	ug/L	2.1	105.21	139.70	139.701
MW-313	Copper, total	ug/L	1300	2.99	7.99	1300
MW-313	Lead, total	ug/L	15	1.71	4.78	15
MW-313	Nickel, total	ug/L	100	151.76	147.41	151.76
MW-313	Selenium, total	ug/L	50	1.00	6.40	50
MW-313	Silver, total	ug/L	100	0.37	0.56	100
MW-313	Thallium, total	ug/L	2	0.26	1.17	2
MW-313	Vanadium, total	ug/L	35	131.26	8.91	131.26
MW-313	Zinc, total	ug/L	2000	161.45	13436.69	13436.69

Table 5
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MW-335	Antimony, total	ug/L	6	0.74	4.40	6
MW-335	Arsenic, total	ug/L	10	11.69	22.50	22.50
MW-335	Barium, total	ug/L	2000	33.34	49.90	2000
MW-335	Beryllium, total	ug/L	4	1.02	1.00	4
MW-335	Cadmium, totall	ug/L	5	1.24	1.19	5
MW-335	Chromium, total	ug/L	100	2.93	5.51	100
MW-335	Cobalt, total	ug/L	2.1	198.93	139.70	198.93
MW-335	Copper, total	ug/L	1300	2.00	7.99	1300
MW-335	Lead, total	ug/L	15	1.82	4.78	15
MW-335	Nickel, total	ug/L	100	520.13	147.41	520.13
MW-335	Selenium, total	ug/L	50	1.00	6.40	50
MW-335	Silver, total	ug/L	100	0.37	0.56	100
MW-335	Thallium, total	ug/L	2	0.27	1.17	2
MW-335	Vanadium, total	ug/L	35	1.10	8.91	35
MW-335	Zinc, total	ug/L	2000	375.56	13436.69	13436.69
MW-344	Antimony, total	ug/L	6	5.02	4.40	6
MW-344	Arsenic, total	ug/L	10	4.80	22.50	22.50
MW-344	Barium, total	ug/L	2000	34.26	49.90	2000
MW-344	Beryllium, total	ug/L	4	0.04	1.00	4
MW-344	Cadmium, totall	ug/L	5	1.31	1.19	5
MW-344	Chromium, total	ug/L	100	5.52	5.51	100
MW-344	Cobalt, total	ug/L	2.1	558.63	139.70	558.63
MW-344	Copper, total	ug/L	1300	2.00	7.99	1300
MW-344	Lead, total	ug/L	15	0.73	4.78	15
MW-344	Nickel, total	ug/L	100	496.86	147.41	496.86
MW-344	Selenium, total	ug/L	50	1.06	6.40	50
MW-344	Silver, total	ug/L	100	0.37	0.56	100
MW-344	Thallium, total	ug/L	2	0.26	1.17	2
MW-344	Vanadium, total	ug/L	35	1.10	8.91	35
MW-344	Zinc, total	ug/L	2000	288.40	13436.69	13436.69
MW-380	Antimony, total	ug/L	6	1.10	4.40	6
MW-380	Arsenic, total	ug/L	10	14.66	22.50	22.50
MW-380	Barium, total	ug/L	2000	17.51	49.90	2000
MW-380	Beryllium, total	ug/L	4	26.02	1.00	26.018
MW-380	Cadmium, totall	ug/L	5	33.24	1.19	33.2446
MW-380	Chromium, total	ug/L	100	61.90	5.51	100
MW-380	Cobalt, total	ug/L	2.1	2927.73	139.70	2927.73
MW-380	Copper, total	ug/L	1300	60.98	7.99	1300
MW-380	Lead, total	ug/L	15	11.41	4.78	15
MW-380	Nickel, total	ug/L	100	4173.93	147.41	4173.93
MW-380	Selenium, total	ug/L	50	48.19	6.40	50
MW-380	Silver, total	ug/L	100	1.00	0.56	100
MW-380	Thallium, total	ug/L	2	2.79	1.17	2.79
MW-380	Vanadium, total	ug/L	35	27.41	8.91	35
MW-380	Zinc, total	ug/L	2000	12325.21	13436.69	13436.69
MW-381	Antimony, total	ug/L	6	0.74	4.40	6
MW-381	Arsenic, total	ug/L	10	7.14	22.50	22.5
MW-381	Barium, total	ug/L	2000	32.10	49.90	2000
MW-381	Beryllium, total	ug/L	4	0.27	1.00	4
MW-381	Cadmium, totall	ug/L	5	1.77	1.19	5
MW-381	Chromium, total	ug/L	100	3.90	5.51	100
MW-381	Cobalt, total	ug/L	2.1	65.49	139.70	139.701
MW-381	Copper, total	ug/L	1300	6.39	7.99	1300
MW-381	Lead, total	ug/L	15	1.62	4.78	15
MW-381	Nickel, total	ug/L	100	133.45	147.41	147.4121
MW-381	Selenium, total	ug/L	50	1.00	6.40	50
MW-381	Silver, total	ug/L	100	0.37	0.56	100
MW-381	Thallium, total	ug/L	2	0.26	1.17	2
MW-381	Vanadium, total	ug/L	35	2.98	8.91	35
MW-381	Zinc, total	ug/L	2000	269.67	13436.69	13436.6853

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MW-382R	Antimony, total	ug/L	6	0.74	4.40	6
MW-382R	Arsenic, total	ug/L	10	0.88	22.50	22.5
MW-382R	Barium, total	ug/L	2000	40.43	49.90	2000
MW-382R	Beryllium, total	ug/L	4	0.27	1.00	4
MW-382R	Cadmium, totall	ug/L	5	0.11	1.19	5
MW-382R	Chromium, total	ug/L	100	5.91	5.51	100
MW-382R	Cobalt, total	ug/L	2.1	16.55	139.70	139.701
MW-382R	Copper, total	ug/L	1300	2.00	7.99	1300
MW-382R	Lead, total	ug/L	15	0.59	4.78	15
MW-382R	Nickel, total	ug/L	100	10.33	147.41	147.4121
MW-382R	Selenium, total	ug/L	50	1.00	6.40	50
MW-382R	Silver, total	ug/L	100	0.42	0.56	100
MW-382R	Thallium, total	ug/L	2	0.26	1.17	2
MW-382R	Vanadium, total	ug/L	35	2.15	8.91	35
MW-382R	Zinc, total	ug/L	2000	175.00	13436.69	13436.6853
MW-384	Antimony, total	ug/L	6	0.58	4.40	6
MW-384	Arsenic, total	ug/L	10	5.90	22.50	22.5
MW-384	Barium, total	ug/L	2000	25.73	49.90	2000
MW-384	Beryllium, total	ug/L	4	2.85	1.00	4
MW-384	Cadmium, totall	ug/L	5	0.24	1.19	5
MW-384	Chromium, total	ug/L	100	10.00	5.51	100
MW-384	Cobalt, total	ug/L	2.1	139.10	139.70	139.701
MW-384	Copper, total	ug/L	1300	2.00	7.99	1300
MW-384	Lead, total	ug/L	15	1.24	4.78	15
MW-384	Nickel, total	ug/L	100	300.07	147.41	300.07
MW-384	Selenium, total	ug/L	50	1.06	6.40	50
MW-384	Silver, total	ug/L	100	0.37	0.56	100
MW-384	Thallium, total	ug/L	2	0.27	1.17	2
MW-384	Vanadium, total	ug/L	35	2.15	8.91	35
MW-384	Zinc, total	ug/L	2000	579.08	13436.69	13436.6853
MW-385	Antimony, total	ug/L	6	0.74	4.40	6
MW-385	Arsenic, total	ug/L	10	2.74	22.50	22.5
MW-385	Barium, total	ug/L	2000	23.74	49.90	2000
MW-385	Beryllium, total	ug/L	4	0.27	1.00	4
MW-385	Cadmium, totall	ug/L	5	1.46	1.19	5
MW-385	Chromium, total	ug/L	100	4.31	5.51	100
MW-385	Cobalt, total	ug/L	2.1	26.81	139.70	139.701
MW-385	Copper, total	ug/L	1300	2.00	7.99	1300
MW-385	Lead, total	ug/L	15	0.87	4.78	15
MW-385	Nickel, total	ug/L	100	79.88	147.41	147.4121
MW-385	Selenium, total	ug/L	50	1.00	6.40	50
MW-385	Silver, total	ug/L	100	0.37	0.56	100
MW-385	Thallium, total	ug/L	2	0.26	1.17	2
MW-385	Vanadium, total	ug/L	35	1.10	8.91	35
MW-385	Zinc, total	ug/L	2000	155.66	13436.69	13436.6853
MW-390	Antimony, total	ug/L	6	1.00	4.40	6
MW-390	Arsenic, total	ug/L	10	33.72	22.50	33.72
MW-390	Barium, total	ug/L	2000	70.39	49.90	2000
MW-390	Beryllium, total	ug/L	4	0.27	1.00	4
MW-390	Cadmium, totall	ug/L	5	1.75	1.19	5
MW-390	Chromium, total	ug/L	100	5.51	5.51	100
MW-390	Cobalt, total	ug/L	2.1	155.48	139.70	155.48
MW-390	Copper, total	ug/L	1300	2.19	7.99	1300
MW-390	Lead, total	ug/L	15	5.38	4.78	15
MW-390	Nickel, total	ug/L	100	85.05	147.41	147.4121
MW-390	Selenium, total	ug/L	50	1.00	6.40	50
MW-390	Silver, total	ug/L	100	0.42	0.56	100
MW-390	Thallium, total	ug/L	2	1.17	1.17	2
MW-390	Vanadium, total	ug/L	35	8.91	8.91	35
MW-390	Zinc, total	ug/L	2000	598.18	13436.69	13436.6853

Table 5A – Acid Mine Drainage Testing Parameters Summary

Table 5A
Alternate Source Evaluation Summary
Annual Water Quality Report
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Acid Mine Drainage Constituents - March, 2023

Monitoring Location	pH (S.U.)	Alkalinity ($CaCO_3$) (mg/L)	Aluminum (mg/L)	Iron (mg/L)	Sulfate (mg/L)	Turbidity (NTU)
MW-300	6.1	270	0.138	69.8	1,760	2.30
MW-303	6.5	530	0.142	1.86	100	21.66
MW-304	7.0	367	<0.050	6.29	80.9	23.60
MW-307	5.5	53	0.213	280	2,130	2.61
MW-312	6.2	328	0.092	5.27	373	43.81
MW-313	6.8	472	<0.050	4.63	1,800	16.43
MW-335	6.3	443	0.372	9.54	2,810	146.80
MW-344	6.0	197	0.077	11.6	2,150	147.20
MW-380	3.7	43	19.2	453	3,410	9.77
MW-381	6.8	170	0.102	0.126	711	24.84
MW-382R	7.1	376	0.241	0.685	1,060	47.34
MW-384	6.0	106	<0.050	5.52	2,430	65.14
MW-385	6.7	410	<0.050	22.6	1,960	36.07
MW-390	6.0	203	<0.050	144	1,910	10.35
GU-4A	6.0	179	<0.050	114	2,560	1.01
SW-1	7.1	85	0.057	0.208	652	2.61

Acid Mine Drainage Constituents - September 2023

Monitoring Location	pH (S.U.)	Alkalinity ($CaCO_3$) (mg/L)	Aluminum (mg/L)	Iron (mg/L)	Sulfate (mg/L)	Turbidity (NTU)
MW-300	5.8	172	0.663	116	3,280	5.47
MW-303	6.4	536	0.076	1.36	272	22.60
MW-304	6.8	343	<0.050	3.78	92.6	25.62
MW-307	5.6	84	0.695	266	1,980	5.20
MW-312	6.1	312	0.053	0.8	422	9.35
MW-313	6.9	478	0.115	39.4	387	9.94
MW-335	6.2	558	0.342	11	2,650	22.03
MW-344	5.8	219	0.11	8.33	2,160	10.14
MW-380	4.8	<10	14.5	435	3,450	10.74
MW-381	6.6	263	0.351	0.287	777	8.36
MW-382R	6.5	379	0.135	<0.100	1,090	9.64
MW-384	5.8	125	0.117	103	2,450	7.26
MW-385	6.6	515	0.27	67.6	2,140	40.06
MW-390	5.9	250	0.232	132	1,940	21.13
GU-4A	Dry	Dry	Dry	Dry	Dry	Dry
SW-1	Dry	Dry	Dry	Dry	Dry	Dry

Notes:

[shaded cell] = elevated above standards.

Discussion on acid mine drainage (AMD) is provided in the AWQR.

Table 6 – Summary of Detections

Table 6
Summary of Well/Detected Constituent Pairs that Exceed the Prediction Limit
Annual Water Quality Report
SCISWA Sanitary Landfill
Permit No. 63-SDP-02-77P

Well	Compound	Date	Result (ug/L)	Prediction Limit (ug/L)	Monitoring Program
MW-344	benzene	9/29/2023	1.100	1.0	Assessment Monitoring
MW-344	cis-1,2-DCE	9/29/2023	2.400	1.0	Assessment Monitoring
MW-382R	1,1-dichloroethane	3/6/2023	1.40	1.0	Assessment Monitoring
MW-382R	bis(2-ethylhexyl)phthalate	9/29/2023	16.00	6.0	Assessment Monitoring

Table 7 – Summary of Ongoing and Newly Identified SSI

Table 7	KEY:	SSI	SSL LCL>GWPS

Summary of Ongoing & Newly Identified SSI
Note: The absence of shading indicates that the condition does not exist.
Annual Water Quality Report
SCISWA Sanitary Landfill
Permit No. 63-SDP-02-77P

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-344	1,1-dichloroethane	3/27/2013	<1	1.00	---	140	N/A	N/A	3/27/2013
MW-344	1,1-dichloroethane	9/25/2013	<1	1.00	---	140	N/A	N/A	3/27/2013
MW-344	1,1-dichloroethane	4/15/2014	<1	1.00	---	140	N/A	N/A	3/27/2013
MW-344	1,1-dichloroethane	9/26/2014	<1	1.00	---	140	N/A	N/A	3/27/2013
MW-344	1,1-dichloroethane	3/12/2015	<1	1.00	---	140	N/A	N/A	3/27/2013
MW-344	1,1-dichloroethane	9/2/2015	<1	1.00	---	140	N/A	N/A	3/27/2013
MW-344	1,1-dichloroethane	3/23/2016	<1	1.00	---	140	N/A	N/A	3/27/2013
MW-344	1,1-dichloroethane	10/19/2016	<1	1.00	---	140	N/A	N/A	3/27/2013
MW-344	1,1-dichloroethane	3/7/2017	0.290	1.00	---	140	N/A	N/A	3/27/2013
MW-344	1,1-dichloroethane	9/26/2017	0.475	1.00	---	140	N/A	N/A	3/27/2013
MW-344	1,1-dichloroethane	3/14/2018	0.474	1.00	---	140	N/A	N/A	3/27/2013
MW-344	1,1-dichloroethane	10/2/2018	<1	1.00	---	140	N/A	N/A	3/27/2013
MW-344	1,1-dichloroethane	3/28/2019	<1	1.00	---	140	N/A	N/A	3/27/2013
MW-344	1,1-dichloroethane	9/24/2019	<1	1.00	---	140	N/A	N/A	3/27/2013
MW-344	1,1-dichloroethane	3/10/2020	<1	1.00	---	140	N/A	N/A	3/27/2013
MW-344	1,1-dichloroethane	9/15/2020	0.408	1.00	---	140	N/A	N/A	3/27/2013
MW-344	1,1-dichloroethane	4/15/2021	0.345	1.00	---	140	N/A	N/A	3/27/2013
MW-344	1,1-dichloroethane	10/27/2021	<1	1.00	---	140	N/A	N/A	3/27/2013
MW-344	1,1-dichloroethane	4/14/2022	<1	1.00	---	140	N/A	N/A	3/27/2013
MW-344	1,1-dichloroethane	9/1/2022	<1	1.00	0.031	140	N/A	N/A	3/27/2013
MW-344	1,1-dichloroethane	3/6/2023	<1	1.00	0.500	140	N/A	N/A	3/27/2013
MW-344	1,1-dichloroethane	9/29/2023	<1	1.00	0.500	140	N/A	N/A	3/27/2013
MW-344	Benzene	3/27/2013	<1	1.00	---	5	N/A	N/A	3/27/2013
MW-344	Benzene	9/25/2013	0.215	1.00	---	5	N/A	N/A	3/27/2013
MW-344	Benzene	4/15/2014	0.268	1.00	---	5	N/A	N/A	3/27/2013
MW-344	Benzene	9/26/2014	0.198	1.00	---	5	N/A	N/A	3/27/2013
MW-344	Benzene	3/12/2015	0.281	1.00	---	5	N/A	N/A	3/27/2013
MW-344	Benzene	9/2/2015	<1	1.00	---	5	N/A	N/A	3/27/2013
MW-344	Benzene	3/23/2016	<1	1.00	---	5	N/A	N/A	3/27/2013
MW-344	Benzene	10/19/2016	0.594	1.00	---	5	N/A	N/A	3/27/2013
MW-344	Benzene	3/7/2017	0.543	1.00	---	5	N/A	N/A	3/27/2013
MW-344	Benzene	9/26/2017	0.894	1.00	---	5	N/A	N/A	3/27/2013
MW-344	Benzene	3/14/2018	0.715	1.00	---	5	N/A	N/A	3/27/2013
MW-344	Benzene	10/2/2018	0.732	1.00	---	5	N/A	N/A	3/27/2013
MW-344	Benzene	3/28/2019	<1	1.00	---	5	N/A	N/A	3/27/2013
MW-344	Benzene	9/24/2019	0.541	1.00	---	5	N/A	N/A	3/27/2013
MW-344	Benzene	3/10/2020	<1	1.00	---	5	N/A	N/A	3/27/2013
MW-344	Benzene	9/15/2020	0.836	1.00	---	5	N/A	N/A	3/27/2013
MW-344	Benzene	4/15/2021	0.722	1.00	0.220	5	N/A	N/A	3/27/2013
MW-344	Benzene	10/27/2021	0.918	1.00	0.268	5	N/A	N/A	3/27/2013
MW-344	Benzene	4/14/2022	0.390	1.00	0.310	5	N/A	N/A	3/27/2013
MW-344	Benzene	9/1/2022	<1	1.00	0.211	5	N/A	N/A	3/27/2013
MW-344	Benzene	3/6/2023	<1	1.00	0.078	5	N/A	N/A	3/27/2013
MW-344	Benzene	9/29/2023	1.100	1.00	0.019	5	N/A	N/A	3/27/2013
MW-344	cis-1,2-DCE	3/27/2013	0.301	1.00	---	70	4/15/2014	N/A	3/27/2013
MW-344	cis-1,2-DCE	9/25/2013	0.976	1.00	---	70	4/15/2014	N/A	3/27/2013
MW-344	cis-1,2-DCE	4/15/2014	1.300	1.00	---	70	4/15/2014	N/A	3/27/2013
MW-344	cis-1,2-DCE	9/26/2014	0.819	1.00	---	70	4/15/2014	N/A	3/27/2013
MW-344	cis-1,2-DCE	3/12/2015	<1	1.00	---	70	4/15/2014	N/A	3/27/2013
MW-344	cis-1,2-DCE	9/2/2015	1.140	1.00	---	70	4/15/2014	N/A	3/27/2013
MW-344	cis-1,2-DCE	3/23/2016	1.120	1.00	---	70	4/15/2014	N/A	3/27/2013
MW-344	cis-1,2-DCE	10/19/2016	2.040	1.00	---	70	4/15/2014	N/A	3/27/2013
MW-344	cis-1,2-DCE	3/7/2017	1.820	1.00	---	70	4/15/2014	N/A	3/27/2013
MW-344	cis-1,2-DCE	9/26/2017	2.480	1.00	---	70	4/15/2014	N/A	3/27/2013
MW-344	cis-1,2-DCE	3/14/2018	2.240	1.00	---	70	4/15/2014	N/A	3/27/2013
MW-344	cis-1,2-DCE	10/2/2018	1.900	1.00	---	70	4/15/2014	N/A	3/27/2013
MW-344	cis-1,2-DCE	3/28/2019	1.180	1.00	---	70	4/15/2014	N/A	3/27/2013
MW-344	cis-1,2-DCE	9/24/2019	1.820	1.00	---	70	4/15/2014	N/A	3/27/2013
MW-344	cis-1,2-DCE	3/10/2020	1.360	1.00	---	70	4/15/2014	N/A	3/27/2013
MW-344	cis-1,2-DCE	9/15/2020	2.440	1.00	---	70	4/15/2014	N/A	3/27/2013
MW-344	cis-1,2-DCE	4/15/2021	2.020	1.00	1.077	70	4/15/2014	N/A	3/27/2013
MW-344	cis-1,2-DCE	10/27/2021	2.180	1.00	1.125	70	4/15/2014	N/A	3/27/2013
MW-344	cis-1,2-DCE	4/14/2022	1.270	1.00	1.134	70	4/15/2014	N/A	3/27/2013
MW-344	cis-1,2-DCE	9/1/2022	1.900	1.00	1.374	70	4/15/2014	N/A	3/27/2013
MW-344	cis-1,2-DCE	3/6/2023	<1	1.00	0.585	70	4/15/2014	N/A	3/27/2013
MW-344	cis-1,2-DCE	9/29/2023	2.400	1.00	0.552	70	4/15/2014	N/A	3/27/2013
MW-344	Vinyl Chloride	3/27/2013	1.320	1.00	---	2	3/27/2013	N/A	3/27/2013
MW-344	Vinyl Chloride	9/25/2013	0.858	1.00	---	2	3/27/2013	N/A	3/27/2013
MW-344	Vinyl Chloride	4/15/2014	0.884	1.00	---	2	3/27/2013	N/A	3/27/2013
MW-344	Vinyl Chloride	9/26/2014	0.484	1.00	---	2	3/27/2013	N/A	3/27/2013
MW-344	Vinyl Chloride	3/12/2015	0.428	1.00	---	2	3/27/2013	N/A	3/27/2013
MW-344	Vinyl Chloride	9/2/2015	<1	1.00	---	2	3/27/2013	N/A	3/27/2013
MW-344	Vinyl Chloride	3/23/2016	<1	1.00	---	2	3/27/2013	N/A	3/27/2013
MW-344	Vinyl Chloride	10/19/2016	0.587	1.00	---	2	3/27/2013	N/A	3/27/2013
MW-344	Vinyl Chloride	3/7/2017	1.050	1.00	---	2	3/27/2013	N/A	3/27/2013
MW-344	Vinyl Chloride	9/26/2017	0.705	1.00	---	2	3/27/2013	N/A	3/27/2013
MW-344	Vinyl Chloride	3/14/2018	0.569	1.00	---	2	3/27/2013	N/A	3/27/2013
MW-344	Vinyl Chloride	10/2/2018	<1	1.00	---	2	3/27/2013	N/A	3/27/2013
MW-344	Vinyl Chloride	3/28/2019	<1	1.00	---	2	3/27/2013	N/A	3/27/2013
MW-344	Vinyl Chloride	9/24/2019	0.513	1.00	---	2	3/27/2013	N/A	3/27/2013
MW-344	Vinyl Chloride	3/10/2020	<1	1.00	---	2	3/27/2013	N/A	3/27/2013
MW-344	Vinyl Chloride	9/15/2020	0.903	1.00	---	2	3/27/2013	N/A	3/27/2013
MW-344	Vinyl Chloride	4/15/2021	0.840	1.00	---	2	3/27/2013	N/A	3/27/2013
MW-344	Vinyl Chloride	10/27/2021	0.986	1.00	---	2	3/27/2013	N/A	3/27/2013
MW-344	Vinyl Chloride	4/14/2022	0.383	1.00	---	2	3/27/2013	N/A	3/27/2013
MW-344	Vinyl Chloride	9/1/2022	<1	1.00	0.231	2	3/27/2013	N/A	3/27/2013
MW-344	Vinyl Chloride	3/6/2023	<1	1.00	0.277	2	3/27/2013	N/A	3/27/2013
MW-344	Vinyl Chloride	9/29/2023	<1	1.00	0.402	2	3/27/2013	N/A	3/27/2013

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

Table 7
Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
SCISWA Sanitary Landfill
Permit No. 63-SDP-02-77P

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-382R	1,1-dichloroethane	3/27/2013	2.43	1.00	---	140	3/27/2013	N/A	3/27/2013
MW-382R	1,1-dichloroethane	9/25/2013	2.00	1.00	---	140	3/27/2013	N/A	3/27/2013
MW-382R	1,1-dichloroethane	4/15/2014	3.54	1.00	---	140	3/27/2013	N/A	3/27/2013
MW-382R	1,1-dichloroethane	9/26/2014	2.00	1.00	---	140	3/27/2013	N/A	3/27/2013
MW-382R	1,1-dichloroethane	3/12/2015	2.23	1.00	---	140	3/27/2013	N/A	3/27/2013
MW-382R	1,1-dichloroethane	9/2/2015	1.62	1.00	---	140	3/27/2013	N/A	3/27/2013
MW-382R	1,1-dichloroethane	3/23/2016	1.65	1.00	---	140	3/27/2013	N/A	3/27/2013
MW-382R	1,1-dichloroethane	10/19/2016	2.31	1.00	---	140	3/27/2013	N/A	3/27/2013
MW-382R	1,1-dichloroethane	3/7/2017	1.810	1.00	---	140	3/27/2013	N/A	3/27/2013
MW-382R	1,1-dichloroethane	9/26/2017	1.930	1.00	---	140	3/27/2013	N/A	3/27/2013
MW-382R	1,1-dichloroethane	3/14/2018	2.600	1.00	---	140	3/27/2013	N/A	3/27/2013
MW-382R	1,1-dichloroethane	10/2/2018	1.510	1.00	---	140	3/27/2013	N/A	3/27/2013
MW-382R	1,1-dichloroethane	3/28/2019	1.600	1.00	---	140	3/27/2013	N/A	3/27/2013
MW-382R	1,1-dichloroethane	9/24/2019	1.710	1.00	---	140	3/27/2013	N/A	3/27/2013
MW-382R	1,1-dichloroethane	3/10/2020	1.740	1.00	---	140	3/27/2013	N/A	3/27/2013
MW-382R	1,1-dichloroethane	9/15/2020	2.000	1.00	---	140	3/27/2013	N/A	3/27/2013
MW-382R	1,1-dichloroethane	4/15/2021	1.410	1.00	1.712	140	3/27/2013	N/A	3/27/2013
MW-382R	1,1-dichloroethane	10/27/2021	1.690	1.00	1.710	140	3/27/2013	N/A	3/27/2013
MW-382R	1,1-dichloroethane	4/14/2022	1.090	1.00	1.653	140	3/27/2013	N/A	3/27/2013
MW-382R	1,1-dichloroethane	9/1/2022	<1	1.00	0.571	140	3/27/2013	N/A	3/27/2013
MW-382R	1,1-dichloroethane	3/6/2023	1.400	1.00	0.571	140	3/27/2013	N/A	3/27/2013
MW-382R	1,1-dichloroethane	9/29/2023	<1	1.00	0.345	140	3/27/2013	N/A	3/27/2013
MW-382R	cis-1,2-DCE	3/27/2013	0.383	1.00	---	70	N/A	N/A	3/27/2013
MW-382R	cis-1,2-DCE	9/25/2013	0.320	1.00	---	70	N/A	N/A	3/27/2013
MW-382R	cis-1,2-DCE	4/15/2014	0.267	1.00	---	70	N/A	N/A	3/27/2013
MW-382R	cis-1,2-DCE	9/26/2014	0.270	1.00	---	70	N/A	N/A	3/27/2013
MW-382R	cis-1,2-DCE	3/12/2015	<1	1.00	---	70	N/A	N/A	3/27/2013
MW-382R	cis-1,2-DCE	9/2/2015	<1	1.00	---	70	N/A	N/A	3/27/2013
MW-382R	cis-1,2-DCE	3/23/2016	<1	1.00	---	70	N/A	N/A	3/27/2013
MW-382R	cis-1,2-DCE	10/19/2016	0.414	1.00	---	70	N/A	N/A	3/27/2013
MW-382R	cis-1,2-DCE	3/7/2017	0.385	1.00	---	70	N/A	N/A	3/27/2013
MW-382R	cis-1,2-DCE	9/26/2017	0.484	1.00	---	70	N/A	N/A	3/27/2013
MW-382R	cis-1,2-DCE	3/14/2018	0.449	1.00	---	70	N/A	N/A	3/27/2013
MW-382R	cis-1,2-DCE	10/2/2018	0.401	1.00	---	70	N/A	N/A	3/27/2013
MW-382R	cis-1,2-DCE	3/28/2019	0.439	1.00	---	70	N/A	N/A	3/27/2013
MW-382R	cis-1,2-DCE	9/24/2019	0.345	1.00	---	70	N/A	N/A	3/27/2013
MW-382R	cis-1,2-DCE	3/10/2020	<1	1.00	---	70	N/A	N/A	3/27/2013
MW-382R	cis-1,2-DCE	9/15/2020	0.487	1.00	---	70	N/A	N/A	3/27/2013
MW-382R	cis-1,2-DCE	4/15/2021	0.289	1.00	---	70	N/A	N/A	3/27/2013
MW-382R	cis-1,2-DCE	10/27/2021	0.406	1.00	---	70	N/A	N/A	3/27/2013
MW-382R	cis-1,2-DCE	4/14/2022	0.307	1.00	---	70	N/A	N/A	3/27/2013
MW-382R	cis-1,2-DCE	9/1/2022	<1	1.00	0.261	70	N/A	N/A	3/27/2013
MW-382R	cis-1,2-DCE	3/6/2023	<1	1.00	0.320	70	N/A	N/A	3/27/2013
MW-382R	cis-1,2-DCE	9/29/2023	<1	1.00	0.338	70	N/A	N/A	3/27/2013
MW-382R	Vinyl Chloride	3/27/2013	<1	1.00	---	2	N/A	N/A	3/27/2013
MW-382R	Vinyl Chloride	9/25/2013	0.345	1.00	---	2	N/A	N/A	3/27/2013
MW-382R	Vinyl Chloride	4/15/2014	<1	1.00	---	2	N/A	N/A	3/27/2013
MW-382R	Vinyl Chloride	9/26/2014	<1	1.00	---	2	N/A	N/A	3/27/2013
MW-382R	Vinyl Chloride	3/12/2015	<1	1.00	---	2	N/A	N/A	3/27/2013
MW-382R	Vinyl Chloride	9/2/2015	<1	1.00	---	2	N/A	N/A	3/27/2013
MW-382R	Vinyl Chloride	3/23/2016	<1	1.00	---	2	N/A	N/A	3/27/2013
MW-382R	Vinyl Chloride	10/19/2016	<1	1.00	---	2	N/A	N/A	3/27/2013
MW-382R	Vinyl Chloride	3/7/2017	<1	1.00	---	2	N/A	N/A	3/27/2013
MW-382R	Vinyl Chloride	9/26/2017	<1	1.00	---	2	N/A	N/A	3/27/2013
MW-382R	Vinyl Chloride	3/14/2018	0.295	1.00	---	2	N/A	N/A	3/27/2013
MW-382R	Vinyl Chloride	10/2/2018	<1	1.00	---	2	N/A	N/A	3/27/2013
MW-382R	Vinyl Chloride	3/28/2019	<1	1.00	---	2	N/A	N/A	3/27/2013
MW-382R	Vinyl Chloride	9/24/2019	<1	1.00	---	2	N/A	N/A	3/27/2013
MW-382R	Vinyl Chloride	3/10/2020	<1	1.00	---	2	N/A	N/A	3/27/2013
MW-382R	Vinyl Chloride	9/15/2020	<1	1.00	---	2	N/A	N/A	3/27/2013
MW-382R	Vinyl Chloride	4/15/2021	0.206	1.00	---	2	N/A	N/A	3/27/2013
MW-382R	Vinyl Chloride	10/27/2021	0.241	1.00	---	2	N/A	N/A	3/27/2013
MW-382R	Vinyl Chloride	4/14/2022	<1	1.00	---	2	N/A	N/A	3/27/2013
MW-382R	Vinyl Chloride	9/1/2022	<1	1.00	0.207	2	N/A	N/A	3/27/2013
MW-382R	Vinyl Chloride	3/6/2023	<1	1.00	0.251	2	N/A	N/A	3/27/2013
MW-382R	Vinyl Chloride	9/29/2023	<1	1.00	0.500	2	N/A	N/A	3/27/2013
MW-382R	bis(2-ethylhexyl)phthalate	3/27/2013	NT	6.00	---	6	9/29/2023	N/A	pending
MW-382R	bis(2-ethylhexyl)phthalate	9/25/2013	<6	6.00	---	6	9/29/2023	N/A	pending
MW-382R	bis(2-ethylhexyl)phthalate	4/15/2014	NT	6.00	---	6	9/29/2023	N/A	pending
MW-382R	bis(2-ethylhexyl)phthalate	9/26/2014	NT	6.00	---	6	9/29/2023	N/A	pending
MW-382R	bis(2-ethylhexyl)phthalate	3/12/2015	NT	6.00	---	6	9/29/2023	N/A	pending
MW-382R	bis(2-ethylhexyl)phthalate	9/2/2015	NT	6.00	---	6	9/29/2023	N/A	pending
MW-382R	bis(2-ethylhexyl)phthalate	3/23/2016	NT	6.00	---	6	9/29/2023	N/A	pending
MW-382R	bis(2-ethylhexyl)phthalate	10/19/2016	NT	6.00	---	6	9/29/2023	N/A	pending
MW-382R	bis(2-ethylhexyl)phthalate	3/7/2017	NT	6.00	---	6	9/29/2023	N/A	pending
MW-382R	bis(2-ethylhexyl)phthalate	9/26/2017	NT	6.00	---	6	9/29/2023	N/A	pending
MW-382R	bis(2-ethylhexyl)phthalate	3/14/2018	NT	6.00	---	6	9/29/2023	N/A	pending
MW-382R	bis(2-ethylhexyl)phthalate	10/2/2018	<6	6.00	---	6	9/29/2023	N/A	pending
MW-382R	bis(2-ethylhexyl)phthalate	3/28/2019	NT	6.00	---	6	9/29/2023	N/A	pending
MW-382R	bis(2-ethylhexyl)phthalate	9/24/2019	NT	6.00	---	6	9/29/2023	N/A	pending
MW-382R	bis(2-ethylhexyl)phthalate	3/10/2020	NT	6.00	---	6	9/29/2023	N/A	pending
MW-382R	bis(2-ethylhexyl)phthalate	9/15/2020	NT	6.00	---	6	9/29/2023	N/A	pending
MW-382R	bis(2-ethylhexyl)phthalate	4/15/2021	NT	6.00	---	6	9/29/2023	N/A	pending
MW-382R	bis(2-ethylhexyl)phthalate	10/27/2021	NT	6.00	---	6	9/29/2023	N/A	pending
MW-382R	bis(2-ethylhexyl)phthalate	4/14/2022	NT	6.00	---	6	9/29/2023	N/A	pending
MW-382R	bis(2-ethylhexyl)phthalate	9/1/2022	NT	6.00	---	6	9/29/2023	N/A	pending
MW-382R	bis(2-ethylhexyl)phthalate	3/6/2023	NT	6.00	---	6	9/29/2023	N/A	pending
MW-382R	bis(2-ethylhexyl)phthalate	9/29/2023	16.000	6.00	1.280	6	9/29/2023	N/A	pending

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

Table 8 - Summary of Ongoing and Newly Identified SSL

NOT USED

Table 8
Summary of Ongoing & Newly Identified SSL
Annual Water Quality Report
SCISWA Sanitary Landfill
Permit No. 63-SDP-02-77P

NOT REQUIRED

Table 9 – Analytical Data Summary

Table 9

Analytical Data Summary for GU-4A

Constituents	Units	3/28/2013	4/15/2014	9/25/2014	3/11/2015	9/1/2015	3/22/2016	10/20/2016	3/8/2017
1,1,1,2-Tetrachloroethane	ug/L	<1.00	<1.00	<.21	<1.00	<1.00	<1.00	<.21	<.21
1,1,1-Trichloroethane	ug/L	<1.00	<1.00	<.12	<1.00	<1.00	<1.00	<.12	<.12
1,1,2,2-Tetrachloroethane	ug/L	<1.00	<1.00	<.10	<1.00	<1.00	<1.00	<.10	<.10
1,1,2-Trichloroethane	ug/L	<1.00	<1.00	<.12	<1.00	<1.00	<1.00	<.12	<.12
1,1-Dichloroethane	ug/L	<1.00	<1.00	<.21	<1.00	<1.00	<1.00	<.21	<.21
1,1-Dichloroethene	ug/L	<2.00	<2.00	<.15	<2.00	<2.00	<2.00	<.15	<.15
1,2,3-Trichloropropane	ug/L	<1.00	<1.00	<.19	<1.00	<1.00	<1.00	<.19	<.19
1,2-Dibromo-3-chloropropane	ug/L	<10.00	<10.00	<.12	<10.00	<10.00	<10.00	<.50	<.50
1,2-Dibromoethane	ug/L	<10.00	<10.00	<.13	<10.00	<10.00	<10.00	<.13	<.13
1,2-Dichlorobenzene	ug/L	<1.00	<1.00	<.14	<1.00	<1.00	<1.00	<.14	<.14
1,2-Dichloroethane	ug/L	<1.00	<1.00	<.18	<1.00	<1.00	<1.00	<.18	<.18
1,2-Dichloropropane	ug/L	<1.00	<1.00	<.87	<1.00	<1.00	<1.00	<.87	<.87
1,4-Dichlorobenzene	ug/L	<1.00	<1.00	<.20	<1.00	<1.00	<1.00	<.20	<.20
2-Butanone	ug/L	<10.00	<10.00	<.47	<10.00	<10.00	<10.00	<1.04	<1.04
2-Hexanone	ug/L	<10.0	<10.0	<.2	<10.0	<10.0	<10.0	<.2	<.2
4-Methyl-2-pentanone	ug/L	<10.00	<10.00	<.22	<10.00	<10.00	<10.00	<.22	<.22
Acetone	ug/L	<10.00	<10.00	<1.79	<10.00	<10.00	<10.00	<1.79	<1.79
Acrylonitrile	ug/L	<10.00	<10.00	<.53	<10.00	<10.00	<10.00	<.53	<.53
Alkalinity as CaCO3	mg/L			227.0	130.0	150.0	197.0	155.0	175.0
Aluminum	ug/L			37.3	19.1	35.9	23.8	<20.8	<41.3
Ammonia as N	mg/L								
Antimony	ug/L	<6.000	<6.000	<.161	<1.000	<1.000	<.237	<.237	<.185
Arsenic	ug/L	<1.00	<1.00	1.41	1.33	<2.00	1.65	1.58	1.30
Barium	ug/L	8.70	<10.00	15.60	9.71	13.30	11.30	10.50	12.70
Benzene	ug/L	<.50	<.50	<.11	<.50	<.50	<.50	<.11	<.11
Beryllium	ug/L	<1.000	<1.000	.351	<1.000	<1.000	.336	.341	.165
Biochemical Oxygen Demand	mg/L								
Boron	ug/L								
Bromochloromethane	ug/L	<5.00	<5.00	<.12	<5.00	<5.00	<5.00	<.12	<.12
Bromodichloromethane	ug/L	<1.00	<1.00	<.12	<1.00	<1.00	<1.00	<.12	<.12
Bromoform	ug/L	<5.00	<5.00	<.14	<5.00	<5.00	<5.00	<.14	<.14
Bromomethane	ug/L	<4.000	<4.000	<.220	<4.000	<4.000	<4.000	.433	<.220
Cadmium	ug/L	<.5000	.2230	.2710	<.5000	<.5000	.0580	.0420	<.0441
Carbon Disulfide	ug/L	<1.00	<1.00	<.15	<1.00	<1.00	<1.00	<.15	<.15
Carbon Tetrachloride	ug/L	<2.00	<2.00	<.24	<2.00	<2.00	<2.00	<.24	<.24
Chloride	mg/L								
Chlorobenzene	ug/L	<1.00	<1.00	<.19	<1.00	<1.00	<1.00	<.19	<.19
Chlorodibromomethane	ug/L	<5.00	<5.00	<.20	<5.00	<5.00	<5.00	<.20	<.20
Chloroethane	ug/L	<4.00	<4.00	<.15	<4.00	<4.00	<4.00	<.15	<.15
Chloroform	ug/L	<1.00	<1.00	<.28	<1.00	<1.00	<1.00	<.28	<.28
Chloromethane	ug/L	<3.00	<3.00	<.31	<3.00	<3.00	<3.00	<.31	<.31
Chromium	ug/L	<20.000	<20.000	<1.240	<5.000	<5.000	<.355	.461	<.729
cis-1,2-Dichloroethene	ug/L	<1.00	<1.00	<.13	<1.00	<1.00	<1.00	<.13	<.13
cis-1,3-Dichloropropene	ug/L	<5.00	<5.00	<.15	<5.00	<5.00	<5.00	<.15	<.15
Cobalt	ug/L	28.1	21.7	111.0	41.7	65.6	65.5	49.6	68.4
Copper	ug/L	<20.000	<20.000	<.485	<2.000	<2.000	<1.220	<1.220	<2.190
Dibromomethane	ug/L	<1.00	<1.00	<.18	<1.00	<1.00	<1.00	<.18	<.18
Ethylbenzene	ug/L	<1.00	<1.00	<.21	<1.00	<1.00	<1.00	<.21	<.21
Fluoride	mg/L								
Iodomethane	ug/L	<10.0	<10.0	<.8	<10.0	<10.0	<10.0	<.8	<.8
Iron	ug/L			140000	82700	155000	88200	79900	59100
Lead	ug/L	<4.0000	<4.0000	<.0967	<.5000	<.5000	<.2110	<.2110	<.3240
Lithium	ug/L								
Manganese	ug/L								
Methylene Chloride	ug/L	<5.000	<5.000	.802	<5.000	<5.000	<5.000	.303	<.170
Molybdenum	ug/L								
Nickel	ug/L	67.4	64.9	173.0	91.7	144.0	109.0	88.7	95.5
Nitrate Nitrite as N	mg/L								
pH	SU			6.01	6.19	6.27	6.27	6.41	6.40
Selenium	ug/L	<5.000	<5.000	<3.340	<5.000	<5.000	<.630	<.630	<.928
Silica (SiO2), molybdate-reactive	mg/L								
Silver	ug/L	<20.000	<20.000	<.042	<1.000	<1.000	<.153	<.153	<.140
Styrene	ug/L	<1.00	<1.00	<.10	<1.00	<1.00	<1.00	<.10	<.10
Sulfate	mg/L			3070	3270	2690	2950	2860	2830
Tetrachloroethene	ug/L	<1.00	<1.00	<.18	<1.00	<1.00	<1.00	<.18	<.18
Thallium	ug/L	<2.0000	<2.0000	<.0325	<1.0000	<1.0000	<.0255	<.0255	<.0644
Toluene	ug/L								
Total Kjeldahl Nitrogen	mg/L								
Total Suspended Solids	mg/L			33.00	14.00	8.00	8.63	14.00	6.00
trans-1,2-Dichloroethene	ug/L	<1.00	<1.00	<.21	<1.00	<1.00	<1.00	<.21	<.21
trans-1,3-Dichloropropene	ug/L	<5.00	<5.00	<.22	<5.00	<5.00	<5.00	<.22	<.22
trans-1,4-Dichloro-2-butene	ug/L	<10.00	<10.00	<.13	<10.00	<10.00	<10.00	<.13	<.13
Trichloroethene	ug/L	<1.00	<1.00	<.19	<1.00	<1.00	<1.00	<.19	<.19
Trichlorofluoromethane	ug/L	<4.00	<4.00	<.17	<4.00	<4.00	<4.00	<.17	<.17
Vanadium	ug/L	<50.000	<50.000	<.449	<5.000	<5.000	<.255	<.255	<.840
Vinyl Acetate	ug/L	<2.00	<2.00	<.74	<10.00	<10.00	<10.00	<.74	<.74
Vinyl Chloride	ug/L	<1.000	<1.000	<.100	<1.000	<1.000	<1.000	<.100	<.100

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

Table 9

Analytical Data Summary for GU-4A

Constituents	9/27/2017	3/14/2018	10/1/2018	3/28/2019	9/23/2019	3/10/2020	9/15/2020	4/16/2021	4/13/2022
1,1,1,2-Tetrachloroethane	<.21	<.21	<.38	<.38	<.38	<.38	<.38		<.38
1,1,1-Trichloroethane	<.12	<.12	<.19	<.19	<.19	<.19	<.19		<.19
1,1,2,2-Tetrachloroethane	<.10	<.10	<.47	<.47	<.47	<.47	<.47		<.47
1,1,2-Trichloroethane	<.12	<.12	<.45	<.45	<.45	<.45	<.45		<.45
1,1-Dichloroethane	<.21	<.21	<.22	<.22	<.22	<.22	<.22		<.22
1,1-Dichloroethene	<.15	<.15	<.56	<.56	<.56	<.56	<.56		<.56
1,2,3-Trichloropropane	<.19	<.19	<.59	<.59	<.59	<.59	<.59		<.59
1,2-Dibromo-3-chloropropane	<.50	<.50	<1.20	<1.20	<1.20	<1.20	<1.20		<1.20
1,2-Dibromoethane	<.13	<.13	<.34	<.34	<.34	<.34	<.34		<.34
1,2-Dichlorobenzene	<.14	<.14	<.37	<.37	<.37	<.37	<.37		<.37
1,2-Dichloroethane	<.18	<.18	<.39	<.39	<.39	<.39	<.39		<.39
1,2-Dichloropropane	<.87	<.87	<.27	<.27	<.27	<.27	<.27		<.27
1,4-Dichlorobenzene	<.20	<.20	<.23	<.23	<.23	<.23	<.23		<.23
2-Butanone	<1.04	<1.04	<2.10	<2.10	<2.10	<2.10	<2.10		<2.10
2-Hexanone	<.2	<.2	<2.0	<2.0	<2.0	<2.0	<2.0		<2.0
4-Methyl-2-pentanone	<.22	<.22	<2.10	<2.10	<2.10	<2.10	<2.10		<2.10
Acetone	3.19	2.79	<3.10	<3.10	<3.10	<3.10	<3.10		<3.10
Acrylonitrile	<.53	<.53	<2.20	<2.20	<2.20	<2.20	<2.20		<2.20
Alkalinity as CaCO3	206.0	99.0	201.0	82.4	163.0	200.0	216.0		343.0
Aluminum	<41.3	<165.0	36.0	<108.0	<108.0	<30.0	34.5		<68.0
Ammonia as N								1.44	
Antimony	<.185	<.740	<1.320	<2.120	<2.120	<.580	<.510		<2.760
Arsenic	1.85	<2.02	2.87	<3.00	3.99	2.31	3.03		<3.00
Barium	12.00	10.40	10.30	9.76	14.80	9.50	10.40		10.30
Benzene	<.11	<.11	<.22	<.22	<.22	<.22	<.22		<.22
Beryllium	<.125	<.500	<.530	<1.080	<1.080	.504	.594		<1.080
Biochemical Oxygen Demand								16.1	
Boron								831	
Bromochloromethane	<.12	<.12	<.54	<.54	<.54	<.54	<.54		<.54
Bromodichloromethane	<.12	<.12	<.39	<.39	<.39	<.39	<.39		<.39
Bromoform	<.14	<.14	<.78	<.78	<.78	<.78	<.78		<.78
Bromomethane	<.220	<.220	<1.100	<1.100	<1.100	<1.100	<1.100		<1.100
Cadmium	<.0441	<.1760	.1900	<.3080	<.1560	.0570	<.0490		<.2200
Carbon Disulfide	<.15	<.15	<.45	<.45	<.45	<.45	<.45		<.45
Carbon Tetrachloride	<.24	<.24	<.65	<.65	<.65	<.65	<.65		<.65
Chloride								8.49	
Chlorobenzene	<.19	<.19	<.40	<.40	<.40	<.40	<.40		<.40
Chlorodibromomethane	<.20	<.20	<.75	<.75	<.75	<.75	<.75		<.75
Chloroethane	<.15	<.15	<.79	<.79	<.79	<.79	<.79		<.79
Chloroform	<.28	<.28	<1.30	<1.30	<1.30	<1.30	<1.30		<1.30
Chloromethane	<.31	<.31	<.61	<.61	<.61	<.61	<.61		<.61
Chromium	<.729	<2.920	1.170	<3.920	<3.920	<1.100	<1.100		<4.400
cis-1,2-Dichloroethene	<.13	<.13	<.21	<.21	<.21	<.21	<.21		<.21
cis-1,3-Dichloropropene	<.15	<.15	<.25	<.25	<.25	<.25	<.25		<.25
Cobalt	47.3	48.0	44.7	60.2	69.0	39.5	48.9		15.6
Copper	<2.190	<8.760	<.497	<8.000	<8.000	<3.200	<1.500		<7.200
Dibromomethane	<.18	<.18	<.33	<.33	<.33	<.33	<.33		<.33
Ethylbenzene	<.21	<.21	<.31	<.31	<.31	<.31	<.31		<.31
Fluoride								1.56	
Iodomethane	<.8	<.8	<7.0	<7.0	<7.0	<7.0	<7.0		<7.0
Iron	47800	65200	122000	158000	212000	152000	161000		65500
Lead	<.3240	<1.3000	<.1860	<1.0800	<1.0800	<.2700	<.1100		<.9600
Lithium								195	
Manganese								10700	
Methylene Chloride	.335	<.170	<1.700	<1.700	<1.700	<1.700	<1.700		<1.700
Molybdenum								<5.2	
Nickel	94.5	86.7	110.0	113.0	161.0	104.0	129.0		36.1
Nitrate Nitrite as N								<1.26	
pH	6.34	6.28	6.21	6.16	5.97	6.07	6.21		6.56
Selenium	<.928	<3.710	<.982	<4.000	<4.000	<1.000	<1.000		<3.840
Silica (SiO2), molybdate-reactive								12.6	
Silver	<.140	<.560	<.115	<1.480	<1.480	<.370	<.370		<1.960
Styrene	<.10	<.10	<.37	<.37	<.37	<.37	<.37		<.37
Sulfate	2930	2720	3000	2910	2700	2620	2790		2390
Tetrachloroethene	<.18	<.18	<.48	<.48	<.48	<.48	<.48		<.48
Thallium	<.0644	<.2580	<.5700	<1.0800	<1.0800	<.2600	<.2600		<1.0400
Toluene			<.43	<.43	<.43	<.43	<.43		<.43
Total Kjeldahl Nitrogen								1.65	
Total Suspended Solids	3.87	6.62	13.30	12.70	37.00	7.50	16.00		116.00
trans-1,2-Dichloroethene	<.21	<.21	<.27	<.27	<.27	<.27	<.27		<.27
trans-1,3-Dichloropropene	<.22	<.22	<.56	<.56	<.56	<.56	<.56		<.56
trans-1,4-Dichloro-2-butene	<.13	<.13	<1.10	<1.10	<1.10	<1.10	<1.10		<1.10
Trichloroethene	<.19	<.19	<.43	<.43	<.43	<.43	<.43		<.43
Trichlorofluoromethane	<.17	<.17	<.38	<.38	<.38	<.38	<.38		<.38
Vanadium	<.840	<3.360	<2.150	<3.280	<3.280	<.820	<.850		<4.400
Vinyl Acetate	<.74	<.74	<2.50	<2.50	<2.50	<2.50	<2.50		<2.50
Vinyl Chloride	<.100	.103	<.600	<.600	<.180	<.180	<.180		<.180

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

Table 9

Analytical Data Summary for GU-4A

Constituents	3/6/2023
1,1,1,2-Tetrachloroethane	<1.00
1,1,1-Trichloroethane	<1.00
1,1,2,2-Tetrachloroethane	<1.00
1,1,2-Trichloroethane	<1.00
1,1-Dichloroethane	<1.00
1,1-Dichloroethene	<1.00
1,2,3-Trichloropropane	<1.00
1,2-Dibromo-3-chloropropane	<5.00
1,2-Dibromoethane	<1.00
1,2-Dichlorobenzene	<1.00
1,2-Dichloroethane	<1.00
1,2-Dichloropropane	<1.00
1,4-Dichlorobenzene	<1.00
2-Butanone	<10.00
2-Hexanone	<5.0
4-Methyl-2-pentanone	<5.00
Acetone	<10.00
Acrylonitrile	<5.00
Alkalinity as CaCO3	179.0
Aluminum	<50.0
Ammonia as N	
Antimony	<2.000
Arsenic	<4.00
Barium	14.40
Benzene	<1.00
Beryllium	<4.000
Biochemical Oxygen Demand	
Boron	
Bromochloromethane	<1.00
Bromodichloromethane	<1.00
Bromoform	<1.00
Bromomethane	<1.000
Cadmium	<.8000
Carbon Disulfide	<1.00
Carbon Tetrachloride	<1.00
Chloride	
Chlorobenzene	<1.00
Chlorodibromomethane	<1.00
Chloroethane	<1.00
Chloroform	<1.00
Chloromethane	<1.00
Chromium	<8.000
cis-1,2-Dichloroethene	<1.00
cis-1,3-Dichloropropene	<1.00
Cobalt	38.2
Copper	<4.000
Dibromomethane	<1.00
Ethylbenzene	<1.00
Fluoride	
Iodomethane	<1.0
Iron	114000
Lead	<4.0000
Lithium	
Manganese	
Methylene Chloride	<5.000
Molybdenum	
Nickel	90.9
Nitrate Nitrite as N	
pH	6.00
Selenium	<4.000
Silica (SiO2), molybdate-reactive	
Silver	<4.000
Styrene	<1.00
Sulfate	2560
Tetrachloroethene	<1.00
Thallium	<2.0000
Toluene	<1.00
Total Kjeldahl Nitrogen	
Total Suspended Solids	
trans-1,2-Dichloroethene	<1.00
trans-1,3-Dichloropropene	<1.00
trans-1,4-Dichloro-2-butene	<5.00
Trichloroethene	<1.00
Trichlorofluoromethane	<1.00
Vanadium	<20.000
Vinyl Acetate	<5.00
Vinyl Chloride	<1.000

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

Table 9

Analytical Data Summary for GU-4A

Constituents	Units	3/28/2013	4/15/2014	9/25/2014	3/11/2015	9/1/2015	3/22/2016	10/20/2016	3/8/2017
Xylenes, Total	ug/L	<3.00	<3.00	<.13	<3.00	<3.00	<3.00	<.13	<.13
Zinc	ug/L	89.8	<60.0	158.0	84.1	152.0	83.5	71.7	52.8

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

Table 9

Analytical Data Summary for GU-4A

Constituents	9/27/2017	3/14/2018	10/1/2018	3/28/2019	9/23/2019	3/10/2020	9/15/2020	4/16/2021	4/13/2022
Xylenes, Total	<.13	<.13	<.40	<.40	<.40	<.40	<.40		<.40
Zinc	35.8	50.1	83.1	150.0	170.0	71.4	92.6		<40.0

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

Table 9

Analytical Data Summary for GU-4A

Constituents	3/6/2023
Xylenes, Total	<2.00
Zinc	81.2

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

Table 9

Analytical Data Summary for MW-300

Constituents	Units	9/18/2012	3/27/2013	9/25/2013	4/16/2014	9/26/2014	3/12/2015	9/2/2015	3/23/2016
1,1,1,2-Tetrachloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	<1.00
1,1,1-Trichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.12	<1.00	<1.00	<1.00
1,1,2,2-Tetrachloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.10	<1.00	<1.00	<1.00
1,1,2-Trichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.12	<1.00	<1.00	<1.00
1,1-Dichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	<1.00
1,1-Dichloroethene	ug/L	<2.00	<2.00	<2.00	<2.00	<.15	<2.00	<2.00	<2.00
1,1-Dichloropropene	ug/L	<1		<1					
1,2,3-Trichloropropane	ug/L	<1.00	<1.00	<1.00	<1.00	<.19	<1.00	<1.00	<1.00
1,2,4,5-Tetrachlorobenzene	ug/L	<10.0		<11.2					
1,2,4-Trichlorobenzene	ug/L	<5		<5					
1,2-Dibromo-3-chloropropane	ug/L	<10.00	<10.00	<10.00	<10.00	<.12	<10.00	<10.00	<10.00
1,2-Dibromoethane	ug/L	<10.00	<10.00	<10.00	<10.00	<.13	<10.00	<10.00	<10.00
1,2-Dichlorobenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.14	<1.00	<1.00	<1.00
1,2-Dichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.18	<1.00	<1.00	<1.00
1,2-Dichloropropane	ug/L	<1.00	<1.00	<1.00	<1.00	<.87	<1.00	<1.00	<1.00
1,3,5-Trinitrobenzene	ug/L	<10.0		<11.2					
1,3-Dichlorobenzene	ug/L	<1		<1					
1,3-Dichloropropane	ug/L	<1		<1					
1,3-Dinitrobenzene	ug/L	<10.0		<11.2					
1,4-Dichlorobenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.20	<1.00	<1.00	<1.00
1,4-Naphthoquinone	ug/L	<10.0		<11.2					
1-Naphthylamine	ug/L	<10.0		<11.2					
2,2`-oxybis[1-Chloropropane]	ug/L	<10.0		<11.2					
2,2-Dichloropropane	ug/L	<4		<4					
2,3,4,6-Tetrachlorophenol	ug/L	<10.0		<11.2					
2,4,5-T	ug/L	<1.00		<1.12					
2,4,5-TP [Silvex]	ug/L	<1.00		<1.12					
2,4,5-Trichlorophenol	ug/L	<10.0		<11.2					
2,4,6-Trichlorophenol	ug/L	<10.0		<11.2					
2,4-D	ug/L	<1.00		<1.12					
2,4-Dichlorophenol	ug/L	<10.0		<11.2					
2,4-Dimethylphenol	ug/L	<10.0		<11.2					
2,4-Dinitrophenol	ug/L	<20.0		<22.5					
2,4-Dinitrotoluene	ug/L	<10.0		<11.2					
2,6-Dichlorophenol	ug/L	<10.0		<11.2					
2,6-Dinitrotoluene	ug/L	<10.0		<11.2					
2-Acetylaminofluorene	ug/L	<10.0		<11.2					
2-Butanone	ug/L	<10.00	<10.00	<10.00	<10.00	<.47	<10.00	<10.00	<10.00
2-Chloronaphthalene	ug/L	<10.0		<11.2					
2-Chlorophenol	ug/L	<10.0		<11.2					
2-Hexanone	ug/L	<10.0	<10.0	<10.0	<10.0	<.2	<10.0	<10.0	<10.0
2-Methylnaphthalene	ug/L	<10.0		<11.2					
2-Methylphenol [o-Cresol]	ug/L	<10.0		<11.2					
2-Naphthylamine	ug/L	<10.0		<11.2					
2-Nitroaniline	ug/L	<10.0		<11.2					
2-Nitrophenol	ug/L	<10.0		<11.2					
3,3-Dichlorobenzidine	ug/L	<10.0		<56.2					
3,3-Dimethylbenzidine	ug/L	<10.0		<11.2					
3-Methylcholanthrene	ug/L	<10.0		<11.2					
3-Nitroaniline	ug/L	<10.0		<11.2					
4,4`-DDD	ug/L	<.0320		<.0356					
4,4`-DDE	ug/L	<.0320		<.0356					
4,4`-DDT	ug/L	<.0320		<.0356					
4,6-Dinitro-2-methylphenol	ug/L	<10.0		<11.2					
4-Aminobiphenyl	ug/L	<10.0		<11.2					
4-Bromophenyl phenyl ether	ug/L	<10.0		<11.2					
4-Chloro-3-methylphenol	ug/L	<10.0		<11.2					
4-Chloroaniline	ug/L	<10.0		<11.2					
4-Chlorophenyl phenyl ether	ug/L	<10.0		<11.2					
4-Methyl-2-pentanone	ug/L	<10.00	<10.00	<10.00	<10.00	<.22	<10.00	<10.00	<10.00
4-Nitroaniline	ug/L	<10.0		<11.2					
4-Nitrophenol	ug/L	<10.0		<11.2					
5-Nitro-o-toluidine	ug/L	<10.0		<11.2					
7,12-Dimethylbenz[a]anthracene	ug/L	<10.0		<11.2					
Acenaphthene	ug/L	<10.0		<11.2					
Acetone	ug/L	<10.00	<10.00	<10.00	47.80	<1.79	<10.00	<10.00	<10.00
Acetonitrile	ug/L	<10000		<10000					
Acetophenone	ug/L	<10.0		<11.2					
Acrolein	ug/L	<10		<10					
Acrylonitrile	ug/L	<10.00	<10.00	<10.00	<10.00	<.53	<10.00	<10.00	<10.00
Aldrin	ug/L	<.0320		<.0356					
Alkalinity as CaCO3	mg/L					284	265	258	370
Allyl Chloride	ug/L	<20		<2					
alpha-BHC	ug/L	<.0320		<.0356					
Aluminum	ug/L					39.1	37.3	70.1	33.5
Anthracene	ug/L	<10.0		<11.2					
Antimony	ug/L	<12.000	<6.000	<6.000	<6.000	<.161	<1.000	<1.000	<.237

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

Table 9

Analytical Data Summary for MW-300

Constituents	10/20/2016	3/7/2017	9/26/2017	3/14/2018	10/2/2018	3/28/2019	9/24/2019	3/10/2020	9/15/2020
1,1,1,2-Tetrachloroethane	<.21	<.21	<.21	<.21	<.38	<.38	<.38	<.38	<.38
1,1,1-Trichloroethane	<.12	<.12	<.12	<.12	<.19	<.19	<.19	<.19	<.19
1,1,2,2-Tetrachloroethane	<.10	<.10	<.10	<.10	<.47	<.47	<.47	<.47	<.47
1,1,2-Trichloroethane	<.12	<.12	<.12	<.12	<.45	<.45	<.45	<.45	<.45
1,1-Dichloroethane	<.21	<.21	<.21	<.21	<.22	<.22	<.22	<.22	<.22
1,1-Dichloroethene	<.15	<.15	<.15	<.15	<.56	<.56	<.56	<.56	<.56
1,1-Dichloropropene									
1,2,3-Trichloropropane	<.19	<.19	<.19	<.19	<.59	<.59	<.59	<.59	<.59
1,2,4,5-Tetrachlorobenzene									
1,2,4-Trichlorobenzene									
1,2-Dibromo-3-chloropropane	<.50	<.50	<.50	<.50	<1.20	<1.20	<1.20	<1.20	<1.20
1,2-Dibromoethane	<.13	<.13	<.13	<.13	<.34	<.34	<.34	<.34	<.34
1,2-Dichlorobenzene	<.14	<.14	<.14	<.14	<.37	<.37	<.37	<.37	<.37
1,2-Dichloroethane	<.18	<.18	<.18	<.18	<.39	<.39	<.39	<.39	<.39
1,2-Dichloropropane	<.87	<.87	<.87	<.87	<.27	<.27	<.27	<.27	<.27
1,3,5-Trinitrobenzene									
1,3-Dichlorobenzene									
1,3-Dichloropropane									
1,3-Dinitrobenzene									
1,4-Dichlorobenzene	<.20	<.20	<.20	<.20	<.23	<.23	<.23	<.23	<.23
1,4-Naphthoquinone									
1-Naphthylamine									
2,2`-oxybis[1-Chloropropane]									
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	<1.04	<1.04	<1.04	<1.04	<2.10	<2.10	<2.10	<2.10	<2.10
2-Chloronaphthalene									
2-Chlorophenol									
2-Hexanone	<.2	<.2	<.2	<.2	<2.0	<2.0	<2.0	<2.0	<2.0
2-Methylnaphthalene									
2-Methylphenol [o-Cresol]									
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	<.22	<.22	<.22	<.22	<2.10	<2.10	<2.10	<2.10	<2.10
4-Nitroaniline									
4-Nitrophenol									
5-Nitro-o-toluidine									
7,12-Dimethylbenz[a]anthracene									
Acenaphthene									
Acetone	<1.79	<1.79	4.29	48.60	<3.10	3.10	<3.10	<3.10	<3.10
Acetonitrile									
Acetophenone									
Acrolein									
Acrylonitrile	<.53	<.53	<.53	<.53	<2.20	<2.20	<2.20	<2.20	<2.20
Aldrin									
Alkalinity as CaCO3	242	288	283	292	258	134	252	333	329
Allyl Chloride									
alpha-BHC									
Aluminum	26.4	47.6	<413.0	<165.0	34.8	<108.0	<108.0	<30.0	16.5
Anthracene									
Antimony	<.237	<.185	<.925	<.740	<1.320	<2.120	<2.120	<.580	<.510

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

Table 9

Analytical Data Summary for MW-300

Constituents	4/15/2021	10/27/2021	4/13/2022	9/1/2022	3/6/2023	9/29/2023
1,1,1,2-Tetrachloroethane	<.38	<.38	<.38	<1.00	<1.00	<1.00
1,1,1-Trichloroethane	<.19	<.19	<.19	<1.00	<1.00	<1.00
1,1,2,2-Tetrachloroethane	<.47	<.47	<.47	<1.00	<1.00	<1.00
1,1,2-Trichloroethane	<.45	<.45	<.45	<1.00	<1.00	<1.00
1,1-Dichloroethane	<.22	<.22	<.22	<1.00	<1.00	<1.00
1,1-Dichloroethene	<.56	<.56	<.56	<1.00	<1.00	<1.00
1,1-Dichloropropene						
1,2,3-Trichloropropane	<.59	<.59	<.59	<1.00	<1.00	<1.00
1,2,4,5-Tetrachlorobenzene						
1,2,4-Trichlorobenzene						
1,2-Dibromo-3-chloropropane	<1.20	<1.20	<1.20	<5.00	<5.00	<5.00
1,2-Dibromoethane	<.34	<.34	<.34	<1.00	<1.00	<1.00
1,2-Dichlorobenzene	<.37	<.37	<.37	<1.00	<1.00	<1.00
1,2-Dichloroethane	<.39	<.39	<.39	<1.00	<1.00	<1.00
1,2-Dichloropropane	<.27	<.27	<.27	<1.00	<1.00	<1.00
1,3,5-Trinitrobenzene						
1,3-Dichlorobenzene						
1,3-Dichloropropane						
1,3-Dinitrobenzene						
1,4-Dichlorobenzene	<.23	<.23	<.23	<1.00	<1.00	<1.00
1,4-Naphthoquinone						
1-Naphthylamine						
2,2`-oxybis[1-Chloropropane]						
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	<2.10	<2.10	<2.10	<10.00	<10.00	<10.00
2-Chloronaphthalene						
2-Chlorophenol						
2-Hexanone	<2.0	<2.0	<2.0	<5.0	<5.0	<5.0
2-Methylnaphthalene						
2-Methylphenol [o-Cresol]						
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	<2.10	<2.10	<2.10	<5.00	<5.00	<5.00
4-Nitroaniline						
4-Nitrophenol						
5-Nitro-o-toluidine						
7,12-Dimethylbenz[a]anthracene						
Acenaphthene						
Acetone	5.12	5.67	<3.10	<10.00	<10.00	<10.00
Acetonitrile						
Acetophenone						
Acrolein						
Acrylonitrile	<2.20	<2.20	<2.20	<5.00	<5.00	<5.00
Aldrin						
Alkalinity as CaCO3	356	266	167	158	270	172
Allyl Chloride						
alpha-BHC						
Aluminum	63.8	<17.0	<68.0	1390.0	138.0	663.0
Anthracene						
Antimony	<1.100	<1.100	<2.760	<2.000	<2.000	<2.000

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

Table 9

Analytical Data Summary for MW-300

Constituents	Units	9/18/2012	3/27/2013	9/25/2013	4/16/2014	9/26/2014	3/12/2015	9/2/2015	3/23/2016
Arsenic	ug/L	<1.000	1.350	<2.000	<1.000	2.160	2.830	<2.000	2.230
Barium	ug/L	14.20	12.90	14.50	3.44	16.60	11.70	17.70	10.70
Benzene	ug/L	<.50	<.50	<.50	<.50	<.11	<.50	<.50	<.50
Benzo[a]anthracene	ug/L	<10.0		<11.2					
Benzo[a]pyrene	ug/L	<10.0		<11.2					
Benzo[b]fluoranthene	ug/L	<10.0		<11.2					
Benzo[ghi]perylene	ug/L	<10.0		<11.2					
Benzo[k]fluoranthene	ug/L	<10.0		<11.2					
Benzyl alcohol	ug/L	<10.0		<11.2					
Beryllium	ug/L	<1.000	<1.000	.230	<1.000	.138	<1.000	<1.000	<.221
beta-BHC	ug/L	<.0320		<.0356					
Bis(2-chloroethoxy)methane	ug/L	<10.0		<11.2					
Bis(2-chloroethyl)ether	ug/L	<10.0		<11.2					
Bis(2-ethylhexyl)phthalate	ug/L	<10.0		<11.2					
Bromochloromethane	ug/L	<5.00	<5.00	<5.00	<5.00	<.12	<5.00	<5.00	<5.00
Bromodichloromethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.12	<1.00	<1.00	<1.00
Bromoform	ug/L	<5.00	<5.00	<5.00	<5.00	<.14	<5.00	<5.00	<5.00
Bromomethane	ug/L	<20.00	<4.00	<4.00	<4.00	<.22	<4.00	<4.00	<4.00
Butylbenzylphthalate	ug/L	<10.0		<11.2					
Cadmium	ug/L	<.500	1.050	.240	8.080	.656	.259	<.500	.094
Carbon Disulfide	ug/L	<1.00	<1.00	<1.00	<1.00	<.15	<1.00	<1.00	<1.00
Carbon Tetrachloride	ug/L	<2.00	<2.00	<2.00	<2.00	<.24	<2.00	<2.00	<2.00
Chlordane	ug/L	<2.00		<2.22					
Chlorobenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.19	<1.00	<1.00	<1.00
Chlorobenzilate	ug/L	<10.0		<11.2					
Chlorodibromomethane	ug/L	<5.00	<5.00	<5.00	<5.00	<.20	<5.00	<5.00	<5.00
Chloroethane	ug/L	<4.00	<4.00	<4.00	<4.00	<.15	<4.00	<4.00	<4.00
Chloroform	ug/L	<1.00	<1.00	<1.00	<1.00	<.28	<1.00	<1.00	<1.00
Chloromethane	ug/L	<3.00	<3.00	<3.00	<3.00	<.31	<3.00	<3.00	<3.00
Chloroprene	ug/L	<1		<1					
Chromium	ug/L	<20.000	<20.000	3.690	<20.000	<1.240	<5.000	<5.000	<.355
Chrysene	ug/L	<10.0		<11.2					
cis-1,2-Dichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.13	<1.00	<1.00	<1.00
cis-1,3-Dichloropropene	ug/L	<5.00	<5.00	<5.00	<5.00	<.15	<5.00	<5.00	<5.00
Cobalt	ug/L	357.0	330.0	332.0	42.3	289.0	251.0	383.0	328.0
Copper	ug/L	<20.00	32.00	<20.00	<20.00	22.90	1.38	<2.00	<1.22
Cyanide	mg/L	<.01		<.01					
delta-BHC	ug/L	<.0320		<.0356					
Diallate	ug/L	<10.0		<11.2					
Dibenzo(a,h)anthracene	ug/L	<10.0		<11.2					
Dibenzofuran	ug/L	<10.0		<11.2					
Dibromomethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.18	<1.00	<1.00	<1.00
Dichlorodifluoromethane	ug/L	<3		<3					
Dieldrin	ug/L	<.0320		<.0356					
Diethyl phthalate	ug/L	<10.0		<11.2					
Dimethoate	ug/L	<10.0		<11.2					
Dimethyl phthalate	ug/L	<10.0		<11.2					
Di-n-butylphthalate	ug/L	<10.0		<11.2					
Di-n-octylphthalate	ug/L	<10.0		<22.5					
Dinoseb	ug/L	<10.0		<11.2					
Diphenylamine	ug/L	<10.0		<11.2					
Disulfoton	ug/L	<10.0		<11.2					
Endosulfan I	ug/L	<.0320		<.0356					
Endosulfan II	ug/L	<.0320		<.0356					
Endosulfan Sulfate	ug/L	<.0320		<.0356					
Endrin	ug/L	<.0320		<.0356					
Endrin Aldehyde	ug/L	<.0320		<.0356					
Ethyl Methacrylate	ug/L	<2		<2					
Ethyl Methanesulfonate	ug/L	<10.0		<11.2					
Ethylbenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	<1.00
Famphur	ug/L	<20.0		<22.5					
Fluoranthene	ug/L	<10.0		<11.2					
Fluorene	ug/L	<10.0		<11.2					
gamma-BHC (Lindane)	ug/L	<.0320		<.0356					
Heptachlor	ug/L	<.0320		<.0356					
Heptachlor Epoxide	ug/L	<.0320		<.0356					
Hexachlorobenzene	ug/L	<10.0		<11.2					
Hexachlorobutadiene	ug/L	<10.0		<11.2					
Hexachlorocyclopentadiene	ug/L	<10.0		<22.5					
Hexachloroethane	ug/L	<10.0		<11.2					
Hexachloropropene	ug/L	<10.0		<11.2					
Indeno[1,2,3-cd]pyrene	ug/L	<10.0		<11.2					
Iodomethane	ug/L	<10.0	<10.0	<10.0	<10.0	<.8	<10.0	<10.0	<10.0
Iron	ug/L					29200	40400	139000	129000
Isobutanol	ug/L	<10000		<10000					
Isodrin	ug/L	<10.0		<11.2					
Isophorone	ug/L	<10.0		<11.2					

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

Table 9

Analytical Data Summary for MW-300

Constituents	10/20/2016	3/7/2017	9/26/2017	3/14/2018	10/2/2018	3/28/2019	9/24/2019	3/10/2020	9/15/2020
Arsenic	2.480	1.800	1.920	<2.020	1.450	<3.000	<3.000	.942	2.580
Barium	13.60	12.30	13.90	11.60	14.00	11.30	12.10	9.65	13.30
Benzene	<.11	<.11	<.11	<.11	<.22	<.22	<.22	<.22	<.22
Benzo[a]anthracene									
Benzo[a]pyrene									
Benzo[b]fluoranthene									
Benzo[ghi]perylene									
Benzo[k]fluoranthene									
Benzyl alcohol									
Beryllium	<.221	.149	<1.250	<.500	<.530	<1.080	<1.080	<.270	<.270
beta-BHC									
Bis(2-chloroethoxy)methane									
Bis(2-chloroethyl)ether									
Bis(2-ethylhexyl)phthalate									
Bromochloromethane	<.12	<.12	<.12	<.12	<.54	<.54	<.54	<.54	<.54
Bromodichloromethane	<.12	<.12	<.12	<.12	<.39	<.39	<.39	<.39	<.39
Bromoform	<.14	<.14	<.14	<.14	<.78	<.78	<.78	<.78	<.78
Bromomethane	<.22	<.22	<.22	<.22	<1.10	<1.10	<1.10	<1.10	<1.10
Butylbenzylphthalate									
Cadmium	.231	.258	<.221	.360	.263	<.308	.156	.041	<.049
Carbon Disulfide	<.15	<.15	<.15	<.15	<.45	<.45	<.45	<.45	<.45
Carbon Tetrachloride	<.24	<.24	<.24	<.24	<.65	<.65	<.65	<.65	<.65
Chlordane									
Chlorobenzene	<.19	<.19	<.19	<.19	<.40	<.40	<.40	<.40	<.40
Chlorobenzilate									
Chlorodibromomethane	<.20	<.20	<.20	<.20	<.75	<.75	<.75	<.75	<.75
Chloroethane	<.15	<.15	<.15	<.15	<.79	<.79	<.79	<.79	<.79
Chloroform	<.28	<.28	<.28	<.28	<1.30	<1.30	<1.30	<1.30	<1.30
Chloromethane	<.31	<.31	<.31	<.31	<.61	<.61	<.61	<.61	<.61
Chloroprene									
Chromium	<.355	<.729	<7.290	<2.920	<1.140	<3.920	<3.920	<1.100	<1.100
Chrysene									
cis-1,2-Dichloroethene	<.13	<.13	<.13	<.13	<.21	<.21	<.21	<.21	<.21
cis-1,3-Dichloropropene	<.15	<.15	<.15	<.15	<.25	<.25	<.25	<.25	<.25
Cobalt	337.0	315.0	306.0	143.0	232.0	344.0	292.0	215.0	282.0
Copper	<1.22	<2.19	<11.00	<8.76	2.84	<8.00	<8.00	<3.20	<1.50
Cyanide									
delta-BHC									
Diallate									
Dibenzo(a,h)anthracene									
Dibenzofuran									
Dibromomethane	<.18	<.18	<.18	<.18	<.33	<.33	<.33	<.33	<.33
Dichlorodifluoromethane									
Dieldrin									
Diethyl phthalate									
Dimethoate									
Dimethyl phthalate									
Di-n-butylphthalate									
Di-n-octylphthalate									
Dinoseb									
Diphenylamine									
Disulfoton									
Endosulfan I									
Endosulfan II									
Endosulfan Sulfate									
Endrin									
Endrin Aldehyde									
Ethyl Methacrylate									
Ethyl Methanesulfonate									
Ethylbenzene	<.21	<.21	<.21	<.21	<.31	<.31	<.31	<.31	<.31
Famphur									
Fluoranthene									
Fluorene									
gamma-BHC (Lindane)									
Heptachlor									
Heptachlor Epoxide									
Hexachlorobenzene									
Hexachlorobutadiene									
Hexachlorocyclopentadiene									
Hexachloroethane									
Hexachloropropene									
Indeno[1,2,3-cd]pyrene									
Iodomethane	<.8	<.8	<.8	<.8	<7.0	<7.0	<7.0	<7.0	<7.0
Iron	125000	158000	147000	31300	133000	168000	174000	173000	174000
Isobutanol									
Isodrin									
Isophorone									

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

Table 9

Analytical Data Summary for MW-300

Constituents	4/15/2021	10/27/2021	4/13/2022	9/1/2022	3/6/2023	9/29/2023
Arsenic	1.860	3.110	<3.000	<4.000	<4.000	<4.000
Barium	12.10	13.40	10.70	12.60	13.40	11.30
Benzene	<.22	<.22	<.22	<1.00	<1.00	<1.00
Benzo[a]anthracene						
Benzo[a]pyrene						
Benzo[b]fluoranthene						
Benzo[ghi]perylene						
Benzo[k]fluoranthene						
Benzyl alcohol						
Beryllium	<.270	<.270	<1.080	<4.000	<4.000	<4.000
beta-BHC						
Bis(2-chloroethoxy)methane						
Bis(2-chloroethyl)ether						
Bis(2-ethylhexyl)phthalate						
Bromochloromethane	<.54	<.54	<.54	<1.00	<1.00	<1.00
Bromodichloromethane	<.39	<.39	<.39	<1.00	<1.00	<1.00
Bromoform	<.78	<.78	<.78	<1.00	<1.00	<1.00
Bromomethane	<1.10	<1.10	<1.10	<1.00	<1.00	<1.00
Butylbenzylphthalate						
Cadmium	.075	.077	<.220	.900	<.800	<.800
Carbon Disulfide	<.45	<.45	<.45	<1.00	<1.00	<1.00
Carbon Tetrachloride	<.65	<.65	<.65	<1.00	<1.00	<1.00
Chlordane						
Chlorobenzene	<.40	<.40	<.40	<1.00	<1.00	<1.00
Chlorobenzilate						
Chlorodibromomethane	<.75	<.75	<.75	<1.00	<1.00	<1.00
Chloroethane	<.79	<.79	<.79	<1.00	<1.00	<1.00
Chloroform	<1.30	<1.30	<1.30	<1.00	<1.00	<1.00
Chloromethane	<.61	<.61	<.61	<1.00	<1.00	<1.00
Chloroprene						
Chromium	<1.100	<1.100	<4.400	<8.000	<8.000	<8.000
Chrysene						
cis-1,2-Dichloroethene	<.21	<.21	<.21	<1.00	<1.00	<1.00
cis-1,3-Dichloropropene	<.25	<.25	<.25	<1.00	<1.00	<1.00
Cobalt	152.0	260.0	339.0	1370.0	294.0	881.0
Copper	<1.40	<1.40	<7.20	<4.00	<4.00	<4.00
Cyanide						
delta-BHC						
Diallate						
Dibenzo(a,h)anthracene						
Dibenzofuran						
Dibromomethane	<.33	<.33	<.33	<1.00	<1.00	<1.00
Dichlorodifluoromethane						
Dieldrin						
Diethyl phthalate						
Dimethoate						
Dimethyl phthalate						
Di-n-butylphthalate						
Di-n-octylphthalate						
Dinoseb						
Diphenylamine						
Disulfoton						
Endosulfan I						
Endosulfan II						
Endosulfan Sulfate						
Endrin						
Endrin Aldehyde						
Ethyl Methacrylate						
Ethyl Methanesulfonate						
Ethylbenzene	<.31	<.31	<.31	<1.00	<1.00	<1.00
Famphur						
Fluoranthene						
Fluorene						
gamma-BHC (Lindane)						
Heptachlor						
Heptachlor Epoxide						
Hexachlorobenzene						
Hexachlorobutadiene						
Hexachlorocyclopentadiene						
Hexachloroethane						
Hexachloropropene						
Indeno[1,2,3-cd]pyrene						
Iodomethane	<7.0	<7.0	<7.0	<1.0	<1.0	<1.0
Iron	127000	163000	177000	92700	69800	116000
Isobutanol						
Isodrin						
Isophorone						

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

Table 9

Analytical Data Summary for MW-300

Constituents	Units	9/18/2012	3/27/2013	9/25/2013	4/16/2014	9/26/2014	3/12/2015	9/2/2015	3/23/2016
Isosafrole	ug/L	<10.0		<11.2					
Kepone	ug/L	<10.0		<11.2					
Lead	ug/L	<4.000	<4.000	1.020	<4.000	1.380	.291	<.500	1.290
Mercury	ug/L	<.267		<.200					
Methacrylonitrile	ug/L	<1		<1					
Methapyrilene	ug/L	<10.0		<11.2					
Methoxychlor	ug/L	<.0320		<.0356					
Methyl Methacrylate	ug/L	<2		<2					
Methyl Methanesulfonate	ug/L	<10.0		<11.2					
Methyl Parathion	ug/L	<10.0		<11.2					
Methylene Chloride	ug/L	<5.000	<5.000	<5.000	<5.000	<.170	<5.000	<5.000	<5.000
Naphthalene	ug/L	<5		<5					
Nickel	ug/L	269.0	225.0	279.0	98.6	286.0	204.0	329.0	250.0
Nitrobenzene	ug/L	<10.0		<11.2					
N-Nitrosodiethylamine	ug/L	<10.0		<11.2					
N-Nitrosodimethylamine	ug/L	<10.0		<11.2					
N-Nitrosodi-n-butylamine	ug/L	<10.0		<11.2					
N-Nitrosodi-n-propylamine	ug/L	<10.0		<11.2					
N-Nitrosodiphenylamine	ug/L	<10.0		<11.2					
N-Nitrosomethylethylamine	ug/L	<10.0		<11.2					
N-Nitrosopiperidine	ug/L	<10.0		<11.2					
N-Nitrosopyrrolidine	ug/L	<10.0		<11.2					
o,o,o-Triethylphosphorothioate	ug/L	<10.0		<11.2					
o-Toluidine	ug/L	<10.0		<11.2					
p-[Dimethylamino]azobenzene	ug/L	<10.0		<11.2					
Parathion	ug/L	<10.0		<11.2					
PCB-1016	ug/L	<.800		<.816					
PCB-1221	ug/L	<.800		<.816					
PCB-1232	ug/L	<.800		<.816					
PCB-1242	ug/L	<.800		<.816					
PCB-1248	ug/L	<.800		<.816					
PCB-1254	ug/L	<.800		<.816					
PCB-1260	ug/L	<.800		<.816					
Pentachlorobenzene	ug/L	<10.0		<11.2					
Pentachloronitrobenzene	ug/L	<10.0		<11.2					
Pentachlorophenol	ug/L	<10.0		<11.2					
pH	SU					5.90	5.89	6.02	6.00
Phenacetin	ug/L	<10.0		<11.2					
Phenanthrene	ug/L	<10.0		<11.2					
Phenol	ug/L	<10.0		<11.2					
Phorate	ug/L	<10.0		<11.2					
p-Phenylenediamine	ug/L	<10.0		<11.2					
Pronamide	ug/L	<10.0		<11.2					
Propionitrile	ug/L	<10		<10					
Pyrene	ug/L	<10.0		<11.2					
Safrole	ug/L	<10.0		<11.2					
Selenium	ug/L	<5.000	<5.000	<5.000	<5.000	<3.340	<5.000	<5.000	<.630
Silver	ug/L	<20.000	<20.000	<20.000	<20.000	<.042	<1.000	<1.000	.163
Styrene	ug/L	<1.000	<1.000	<1.000	<1.000	<.100	<1.000	<1.000	<1.000
Sulfate	mg/L					2510	3090	2760	2820
Sulfide	mg/L	<1		<1					
Tetrachloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.18	<1.00	<1.00	<1.00
Thallium	ug/L	<2.000	<2.000	<2.000	<2.000	.355	.219	.251	.160
Thionazin	ug/L	<10.0		<11.2					
Tin	ug/L	160	<100	515	<100				
Toluene	ug/L								
Total Suspended Solids	mg/L					23.00	6.83	8.67	20.00
Toxaphene	ug/L	<2.00		<2.22					
trans-1,2-Dichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	<1.00
trans-1,3-Dichloropropene	ug/L	<5.00	<5.00	<5.00	<5.00	<.22	<5.00	<5.00	<5.00
trans-1,4-Dichloro-2-butene	ug/L	<10.00	<10.00	<10.00	<10.00	<.13	<10.00	<10.00	<10.00
Trichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.19	<1.00	<1.00	<1.00
Trichlorofluoromethane	ug/L	<4.00	<4.00	<4.00	<4.00	<.17	<4.00	<4.00	<4.00
Vanadium	ug/L	<50.000	<50.000	<50.000	<50.000	<.449	.462	<5.000	<.255
Vinyl Acetate	ug/L	<2.00	<2.00	<2.00	<2.00	<.74	<10.00	<10.00	<10.00
Vinyl Chloride	ug/L	<1.00	<1.00	<1.00	<1.00	<.10	<1.00	<1.00	<1.00
Xylenes, Total	ug/L	<3.00	<3.00	1.11	<3.00	<.13	<3.00	<3.00	<3.00
Zinc	ug/L	<20.0	838.0	248.0	522.0	669.0	712.0	171.0	187.0

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

Table 9

Analytical Data Summary for MW-300

Constituents	10/20/2016	3/7/2017	9/26/2017	3/14/2018	10/2/2018	3/28/2019	9/24/2019	3/10/2020	9/15/2020
Isosafrole									
Kepone									
Lead	.219	<.324	<1.620	<1.300	.717	<1.080	<.270	<.270	<.110
Mercury									
Methacrylonitrile									
Methapyrilene									
Methoxychlor									
Methyl Methacrylate									
Methyl Methanesulfonate									
Methyl Parathion									
Methylene Chloride	.264	.214	<.170	<.170	<1.700	<1.700	<1.700	<1.700	<1.700
Naphthalene									
Nickel	221.0	288.0	218.0	149.0	189.0	253.0	257.0	185.0	248.0
Nitrobenzene									
N-Nitrosodiethylamine									
N-Nitrosodimethylamine									
N-Nitrosodi-n-butylamine									
N-Nitrosodi-n-propylamine									
N-Nitrosodiphenylamine									
N-Nitrosomethylethylamine									
N-Nitrosopiperidine									
N-Nitrosopyrrolidine									
o,o,o-Triethylphosphorothioate									
o-Toluidine									
p-[Dimethylamino]azobenzene									
Parathion									
PCB-1016									
PCB-1221									
PCB-1232									
PCB-1242									
PCB-1248									
PCB-1254									
PCB-1260									
Pentachlorobenzene									
Pentachloronitrobenzene									
Pentachlorophenol									
pH	5.94	5.96	6.10	6.13	5.97	6.06	6.22	5.96	6.12
Phenacetin									
Phenanthrene									
Phenol									
Phorate									
p-Phenylenediamine									
Pronamide									
Propionitrile									
Pyrene									
Safrole									
Selenium	<.630	<.928	<.928	<3.710	1.010	<4.000	<4.000	<1.000	<1.000
Silver	<.153	.148	<.700	<.560	<.115	<1.480	<.370	<.370	<.370
Styrene	<.100	<.100	<.100	<.100	<.370	<.370	<.370	<.370	<.370
Sulfate	3190	2900	3070	2290	2590	2890	2880	2510	2930
Sulfide									
Tetrachloroethene	<.18	<.18	<.18	<.18	<.48	<.48	<.48	<.48	<.48
Thallium	.238	.208	.132	<.258	<.570	<1.080	<.270	<.260	<.260
Thionazin									
Tin									
Toluene					<.43	<.43	<.43	<.43	<.43
Total Suspended Solids	18.30	12.40	15.90	64.00	44.00	20.00	15.50	7.00	25.00
Toxaphene									
trans-1,2-Dichloroethene	<.21	<.21	<.21	<.21	<.27	<.27	<.27	<.27	<.27
trans-1,3-Dichloropropene	<.22	<.22	<.22	<.22	<.56	<.56	<.56	<.56	<.56
trans-1,4-Dichloro-2-butene	<.13	<.13	<.13	<.13	<1.10	<1.10	<1.10	<1.10	<1.10
Trichloroethene	<.19	<.19	<.19	<.19	<.43	<.43	<.43	<.43	<.43
Trichlorofluoromethane	<.17	<.17	<.17	<.17	<.38	<.38	<.38	<.38	<.38
Vanadium	<.255	<.840	<8.400	<3.360	<2.150	<3.280	<3.280	<.820	<.850
Vinyl Acetate	<.74	<.74	<.74	<.74	<2.50	<2.50	<2.50	<2.50	<2.50
Vinyl Chloride	<.10	<.10	<.10	<.10	<.60	<.60	<.18	<.18	<.18
Xylenes, Total	<.13	<.13	<.13	<.13	<.40	<.40	<.40	<.40	<.40
Zinc	308.0	257.0	77.8	209.0	33.6	176.0	63.7	17.7	31.0

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

Table 9

Analytical Data Summary for MW-300

Constituents	4/15/2021	10/27/2021	4/13/2022	9/1/2022	3/6/2023	9/29/2023
Isosafrole						
Kepone						
Lead	<.210	1.190	<.960	<4.000	<4.000	<4.000
Mercury						
Methacrylonitrile						
Methapyrilene						
Methoxychlor						
Methyl Methacrylate						
Methyl Methanesulfonate						
Methyl Parathion						
Methylene Chloride	<1.700	<1.700	<1.700	<5.000	<5.000	<5.000
Naphthalene						
Nickel	156.0	237.0	365.0	1720.0	343.0	955.0
Nitrobenzene						
N-Nitrosodiethylamine						
N-Nitrosodimethylamine						
N-Nitrosodi-n-butylamine						
N-Nitrosodi-n-propylamine						
N-Nitrosodiphenylamine						
N-Nitrosomethylethylamine						
N-Nitrosopiperidine						
N-Nitrosopyrrolidine						
o,o,o-Triethylphosphorothioate						
o-Toluidine						
p-[Dimethylamino]azobenzene						
Parathion						
PCB-1016						
PCB-1221						
PCB-1232						
PCB-1242						
PCB-1248						
PCB-1254						
PCB-1260						
Pentachlorobenzene						
Pentachloronitrobenzene						
Pentachlorophenol						
pH	6.12	5.99	6.58	5.60	6.10	5.80
Phenacetin						
Phenanthrene						
Phenol						
Phorate						
p-Phenylenediamine						
Pronamide						
Propionitrile						
Pyrene						
Safrole						
Selenium	<.960	<.960	<3.840	4.800	<4.000	4.500
Silver	<.420	<.420	<1.960	<4.000	<4.000	<4.000
Styrene	<.370	.383	<.370	<1.000	<1.000	<1.000
Sulfate	2330	2860	3070	3570	1760	3280
Sulfide						
Tetrachloroethene	<.48	<.48	<.48	<1.00	<1.00	<1.00
Thallium	<.260	<.260	<1.040	<2.000	<2.000	<2.000
Thionazin						
Tin						
Toluene	<.43	<.43	<.43	<1.00	<1.00	<1.00
Total Suspended Solids	23.40	38.50	250.00			
Toxaphene						
trans-1,2-Dichloroethene	<.27	<.27	<.27	<1.00	<1.00	<1.00
trans-1,3-Dichloropropene	<.56	<.56	<.56	<1.00	<1.00	<1.00
trans-1,4-Dichloro-2-butene	<1.10	<1.10	<1.10	<5.00	<5.00	<5.00
Trichloroethene	<.43	<.43	<.43	<1.00	<1.00	<1.00
Trichlorofluoromethane	<.38	<.38	<.38	<1.00	<1.00	<1.00
Vanadium	<1.100	<1.100	<4.400	<20.000	<20.000	<20.000
Vinyl Acetate	<2.50	<2.50	<2.50	<5.00	<5.00	<5.00
Vinyl Chloride	<.18	<.18	<.18	<1.00	<1.00	<1.00
Xylenes, Total	<.40	<.40	<.40	<2.00	<2.00	<2.00
Zinc	50.5	51.2	73.5	1230.0	122.0	925.0

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

Table 9

Analytical Data Summary for MW-303

Constituents	Units	9/19/2012	3/27/2013	9/26/2013	4/15/2014	9/25/2014	3/11/2015	9/2/2015	3/22/2016	10/21/2016
1,1,1,2-Tetrachloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	<1.00	<.21
1,1,1-Trichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.12	<1.00	<1.00	<1.00	<.12
1,1,2,2-Tetrachloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.10	<1.00	<1.00	<1.00	<.10
1,1,2-Trichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.12	<1.00	<1.00	<1.00	<.12
1,1-Dichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	<1.00	<.21
1,1-Dichloroethene	ug/L	<2.00	<2.00	<2.00	<2.00	<.15	<2.00	<2.00	<2.00	<.15
1,2,3-Trichloropropane	ug/L	<1.00	<1.00	<1.00	<1.00	<.19	<1.00	<1.00	<1.00	<.19
1,2-Dibromo-3-chloropropane	ug/L	<10.00	<10.00	<10.00	<10.00	<.12	<10.00	<10.00	<10.00	<.50
1,2-Dibromoethane	ug/L	<10.00	<10.00	<10.00	<10.00	<.13	<10.00	<10.00	<10.00	<.13
1,2-Dichlorobenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.14	<1.00	<1.00	<1.00	<.14
1,2-Dichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.18	<1.00	<1.00	<1.00	<.18
1,2-Dichloropropane	ug/L	<1.00	<1.00	<1.00	<1.00	<.87	<1.00	<1.00	<1.00	<.87
1,4-Dichlorobenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.20	<1.00	<1.00	<1.00	<.20
2-Butanone	ug/L	<10.00	<10.00	<10.00	<10.00	<.47	<10.00	<10.00	<10.00	<1.04
2-Hexanone	ug/L	<10.0	<10.0	<10.0	<10.0	<.2	<10.0	<10.0	<10.0	<.2
4-Methyl-2-pentanone	ug/L	<10.00	<10.00	<10.00	<10.00	<.22	<10.00	<10.00	<10.00	<.22
Acetone	ug/L	<10.00	<10.00	<10.00	<10.00	<1.79	<10.00	<10.00	<10.00	<1.79
Acrylonitrile	ug/L	<10.00	<10.00	<10.00	<10.00	<.53	<10.00	<10.00	<10.00	<.53
Alkalinity as CaCO3	mg/L					614	621	619	617	618
Aluminum	ug/L					12.0	<50.0	1380.0	<20.8	<20.8
Antimony	ug/L	<6.000	<6.000	<6.000		<.161	<1.000	<1.000	<.237	<.237
Arsenic	ug/L	<1.000	<1.000	2.030	<1.000	<.945	<2.000	<2.000	<.672	<.672
Barium	ug/L	31.9	26.8	39.1	26.1	106.0	72.5	36.6	66.8	69.2
Benzene	ug/L	<.50	<.50	<.50	<.50	<.11	<.50	<.50	<.50	<.11
Beryllium	ug/L	<1.000	<1.000	<1.000	<1.000	<.039	<1.000	<1.000	<.221	<.221
Bromochloromethane	ug/L	<5.00	<5.00	<5.00	<5.00	<.12	<5.00	<5.00	<5.00	<.12
Bromodichloromethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.12	<1.00	<1.00	<1.00	<.12
Bromoform	ug/L	<5.00	<5.00	<5.00	<5.00	<.14	<5.00	<5.00	<5.00	<.14
Bromomethane	ug/L	<20.00	<4.00	<4.00	<4.00	<.22	<4.00	<4.00	<4.00	<.22
Cadmium	ug/L	<.5000	<.5000	<.5000	.0936	<.1120	<.5000	<.5000	<.0351	<.0351
Carbon Disulfide	ug/L	<1.000	<1.000	<1.000	<1.000	<.150	<1.000	<1.000	<1.000	.231
Carbon Tetrachloride	ug/L	<2.00	<2.00	<2.00	<2.00	<.24	<2.00	<2.00	<2.00	<.24
Chlorobenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.19	<1.00	<1.00	<1.00	<.19
Chlorodibromomethane	ug/L	<5.00	<5.00	<5.00	<5.00	<.20	<5.00	<5.00	<5.00	<.20
Chloroethane	ug/L	<4.00	<4.00	<4.00	<4.00	<.15	<4.00	<4.00	<4.00	<.15
Chloroform	ug/L	<1.00	<1.00	<1.00	<1.00	<.28	<1.00	<1.00	<1.00	<.28
Chloromethane	ug/L	<3.00	<3.00	<3.00	<3.00	<.31	<3.00	<3.00	<3.00	<.31
Chromium	ug/L	<20.000	<20.000	4.760	<20.000	<1.240	<5.000	<5.000	<.355	<.355
cis-1,2-Dichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.13	<1.00	<1.00	<1.00	<.13
cis-1,3-Dichloropropene	ug/L	<5.00	<5.00	<5.00	<5.00	<.15	<5.00	<5.00	<5.00	<.15
Cobalt	ug/L	22.3	24.3	21.1	16.9	20.8	18.0	26.3	15.8	14.7
Copper	ug/L	<20.000	<20.000	<20.000	<20.000	<.485	<2.000		<1.220	<1.220
Dibromomethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.18	<1.00	<1.00	<1.00	<.18
Ethylbenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	<1.00	<.21
Iodomethane	ug/L	<10.0	<10.0	<10.0	<10.0	<.8	<10.0	<10.0	<10.0	<.8
Iron	ug/L					568	202	16800	271	179
Lead	ug/L	<4.000	<4.000	<4.000	<4.000	.097	.115	2.980	<.211	<.211
Methylene Chloride	ug/L	<5.000	<5.000	<5.000	<5.000	.573	<5.000	<5.000	<5.000	.308
Nickel	ug/L	51.2	51.8	56.2	44.5	38.5	31.3	52.8	30.2	28.9
pH	SU					6.45	6.41	6.57	6.53	6.50
Selenium	ug/L	<5.000	<5.000	<5.000	<5.000	<3.340	<5.000	<5.000	<.630	<.630
Silver	ug/L	<20.000	<20.000	<20.000	<20.000	<.042	<1.000	<1.000	.174	<.153
Styrene	ug/L	<1.00	<1.00	<1.00	<1.00	<.10	<1.00	<1.00	<1.00	<.10
Sulfate	mg/L					79.6	116.0	740.0	97.9	89.3
Tetrachloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.18	<1.00	<1.00	<1.00	<.18
Thallium	ug/L	<2.0000	<2.0000	<2.0000	<2.0000	.0340	.0460	<1.0000	.0500	<.0255
Toluene	ug/L									
Total Suspended Solids	mg/L					2.570	<5.000	900.000	3.670	1.250
trans-1,2-Dichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	<1.00	<.21
trans-1,3-Dichloropropene	ug/L	<5.00	<5.00	<5.00	<5.00	<.22	<5.00	<5.00	<5.00	<.22
trans-1,4-Dichloro-2-butene	ug/L	<10.00	<10.00	<10.00	<10.00	<.13	<10.00	<10.00	<10.00	<.13
Trichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.19	<1.00	<1.00	<1.00	<.19
Trichlorofluoromethane	ug/L	<4.00	<4.00	<4.00	<4.00	<.17	<4.00	<4.00	<4.00	<.17
Vanadium	ug/L	<50.000	<50.000	<50.000	<50.000	<.449	<5.000	8.730	<.255	<.255
Vinyl Acetate	ug/L	<2.00	<2.00	<2.00	<2.00	<.74	<10.00	<10.00	<10.00	<.74
Vinyl Chloride	ug/L	<1.00	<1.00	<1.00	<1.00	<.10	<1.00	<1.00	<1.00	<.10
Xylenes, Total	ug/L	<3.000	<3.000	.232	<3.000	<.130	<3.000	<3.000	<3.000	.390
Zinc	ug/L	<20.00	74.80	199.00	<60.00	18.40	<10.00	30.80	<5.21	<5.21

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

Table 9

Analytical Data Summary for MW-303

Constituents	3/8/2017	9/25/2017	3/13/2018	10/1/2018	3/27/2019	9/23/2019	3/10/2020	9/15/2020	4/14/2021
1,1,1,2-Tetrachloroethane	<.21	<.21	<.21	<.38	<.38	<.38	<.38	<.38	<.38
1,1,1-Trichloroethane	<.12	<.12	<.12	<.19	<.19	<.19	<.19	<.19	<.19
1,1,2,2-Tetrachloroethane	<.10	<.10	<.10	<.47	<.47	<.47	<.47	<.47	<.47
1,1,2-Trichloroethane	<.12	<.12	<.12	<.45	<.45	<.45	<.45	<.45	<.45
1,1-Dichloroethane	<.21	<.21	<.21	<.22	<.22	<.22	<.22	<.22	<.22
1,1-Dichloroethene	<.15	<.15	<.15	<.56	<.56	<.56	<.56	<.56	<.56
1,2,3-Trichloropropane	<.19	<.19	<.19	<.59	<.59	<.59	<.59	<.59	<.59
1,2-Dibromo-3-chloropropane	<.50	<.50	<.50	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20
1,2-Dibromoethane	<.13	<.13	<.13	<.34	<.34	<.34	<.34	<.34	<.34
1,2-Dichlorobenzene	<.14	<.14	<.14	<.37	<.37	<.37	<.37	<.37	<.37
1,2-Dichloroethane	<.18	<.18	<.18	<.39	<.39	<.39	<.39	<.39	<.39
1,2-Dichloropropane	<.87	<.87	<.87	<.27	<.27	<.27	<.27	<.27	<.27
1,4-Dichlorobenzene	<.20	<.20	<.20	<.23	<.23	<.23	<.23	<.23	<.23
2-Butanone	<1.04	<1.04	<1.04	<2.10	<2.10	<2.10	<2.10	<2.10	<2.10
2-Hexanone	<.2	<.2	<.2	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
4-Methyl-2-pentanone	<.22	<.22	<.22	<2.10	<2.10	<2.10	<2.10	<2.10	<2.10
Acetone	<1.79	2.21	<1.79	<3.10	<3.10	<3.10	<3.10	<3.10	<3.10
Acrylonitrile	<.53	<.53	<.53	<2.20	<2.20	<2.20	<2.20	<2.20	<2.20
Alkalinity as CaCO3	628	582	627	664	659	648	580	680	644
Aluminum	<41.3	<41.3	<41.3	33.0	<27.0	<27.0	<30.0	<12.0	215.0
Antimony	<.185	<.185	<.185	<1.320	<.530	<.530	<.580	<.510	<1.100
Arsenic	.508	<.505	<.505	.370	1.910	<.750	<.880	<.880	2.070
Barium	42.9	68.4	66.1	37.4	20.8	39.1	59.0	25.0	14.5
Benzene	<.11	<.11	<.11	<.22	<.22	<.22	<.22	<.22	<.22
Beryllium	<.125	<.125	<.125	<.530	<.270	<.270	<.270	<.270	<.270
Bromochloromethane	<.12	<.12	<.12	<.54	<.54	<.54	<.54	<.54	<.54
Bromodichloromethane	<.12	<.12	<.12	<.39	<.39	<.39	<.39	<.39	<.39
Bromoform	<.14	<.14	<.14	<.78	<.78	<.78	<.78	<.78	<.78
Bromomethane	<.22	<.22	<.22	<1.10	<1.10	<1.10	<1.10	<1.10	<1.10
Cadmium	<.0441	<.0441	<.0441	<.1670	<.0770	<.0390	<.0390	<.0490	.1000
Carbon Disulfide	<.150	<.150	<.150	<.450	<.450	<.450	<.450	<.450	<.450
Carbon Tetrachloride	<.24	<.24	<.24	<.65	<.65	<.65	<.65	<.65	<.65
Chlorobenzene	<.19	<.19	<.19	<.40	<.40	<.40	<.40	<.40	<.40
Chlorodibromomethane	<.20	<.20	<.20	<.75	<.75	<.75	<.75	<.75	<.75
Chloroethane	<.15	<.15	<.15	<.79	<.79	<.79	<.79	<.79	<.79
Chloroform	<.28	<.28	<.28	<1.30	<1.30	<1.30	<1.30	<1.30	<1.30
Chloromethane	<.31	<.31	<.31	<.61	<.61	<.61	<.61	<.61	<.61
Chromium	<.729	<.729	<.729	1.180	<.980	<.980		<1.100	<1.100
cis-1,2-Dichloroethene	<.13	<.13	<.13	<.21	<.21	<.21	<.21	<.21	<.21
cis-1,3-Dichloropropene	<.15	<.15	<.15	<.25	<.25	<.25	<.25	<.25	<.25
Cobalt	19.1	17.2	16.3	14.7	19.9	16.0	15.5	13.8	20.5
Copper	<2.190	<2.190	<2.190	.502	<2.000	<2.000	<3.200	<1.500	1.620
Dibromomethane	<.18	<.18	<.18	<.33	<.33	<.33	<.33	<.33	<.33
Ethylbenzene	<.21	<.21	<.21	<.31	<.31	<.31	<.31	<.31	<.31
Iodomethane	<.8	<.8	<.8	<7.0	<7.0	<7.0	<7.0	<7.0	<7.0
Iron	3120	176	426	523	4100	617	489	1390	9030
Lead	<.324	<.324	<.324	<.186	<.270	<.270	<.270	<.110	.439
Methylene Chloride	<.170	<.170	.226	<1.700	<1.700	<1.700	<1.700	<1.700	<1.700
Nickel	42.5	27.6	28.7	27.4	50.8	29.5	25.9	31.6	61.6
pH	6.56	7.23	6.56	6.54	6.50	6.52	6.43	6.77	6.48
Selenium	<.928	<.928	<.928	<.982	<1.000	<1.000	<1.000	<1.000	<.960
Silver	<.140	<.140	.170	<.115	<.370	<.370	<.370	<.370	<.420
Styrene	<.10	<.10	<.10	<.37	<.37	<.37	<.37	<.37	<.37
Sulfate	963.0	106.0	93.1	295.0	1860.0	306.0	116.0	415.0	2070.0
Tetrachloroethene	<.18	<.18	<.18	<.48	<.48	<.48	<.48	<.48	<.48
Thallium	<.0644	<.0644	<.0644	<.5700	<.2700	<.2700	<.2600	<.2600	.9040
Toluene				<.43	<.43	<.43	<.43	<.43	<.43
Total Suspended Solids	3.380	1.130	1.000	2.130	3.000	2.630	<.638	2.000	69.500
trans-1,2-Dichloroethene	<.21	<.21	<.21	<.27	<.27	<.27	<.27	<.27	<.27
trans-1,3-Dichloropropene	<.22	<.22	<.22	<.56	<.56	<.56	<.56	<.56	<.56
trans-1,4-Dichloro-2-butene	<.13	<.13	<.13	<1.10	<1.10	<1.10	<1.10	<1.10	<1.10
Trichloroethene	<.19	<.19	<.19	<.43	<.43	<.43	<.43	<.43	<.43
Trichlorofluoromethane	<.17	<.17	<.17	<.38	<.38	<.38	<.38	<.38	<.38
Vanadium	<.840	<.840	<.840	<2.150	<.820	<.820	<.820	<.850	1.360
Vinyl Acetate	<.74	<.74	<.74	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50
Vinyl Chloride	<.10	<.10	<.10	<.60	<.60	<.18	<.18	<.18	<.18
Xylenes, Total	.459	<.130	<.130	<.400	<.400	<.400	<.400	<.400	<.400
Zinc	<11.50	<11.50	<11.50	7.91	<10.00	<10.00	<10.00	<10.00	11.70

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

Table 9

Analytical Data Summary for MW-303

Constituents	10/27/2021	4/14/2022	9/1/2022	3/6/2023	9/29/2023
1,1,1,2-Tetrachloroethane	<.38	<.38	<1.00	<1.00	<1.00
1,1,1-Trichloroethane	<.19	<.19	<1.00	<1.00	<1.00
1,1,2,2-Tetrachloroethane	<.47	<.47	<1.00	<1.00	<1.00
1,1,2-Trichloroethane	<.45	<.45	<1.00	<1.00	<1.00
1,1-Dichloroethane	<.22	<.22	<1.00	<1.00	<1.00
1,1-Dichloroethene	<.56	<.56	<1.00	<1.00	<1.00
1,2,3-Trichloropropane	<.59	<.59	<1.00	<1.00	<1.00
1,2-Dibromo-3-chloropropane	<1.20	<1.20	<5.00	<5.00	<5.00
1,2-Dibromoethane	<.34	<.34	<1.00	<1.00	<1.00
1,2-Dichlorobenzene	<.37	<.37	<1.00	<1.00	<1.00
1,2-Dichloroethane	<.39	<.39	<1.00	<1.00	<1.00
1,2-Dichloropropane	<.27	<.27	<1.00	<1.00	<1.00
1,4-Dichlorobenzene	<.23	<.23	<1.00	<1.00	<1.00
2-Butanone	<2.10	<2.10	<10.00	<10.00	<10.00
2-Hexanone	<2.0	<2.0	<5.0	<5.0	<5.0
4-Methyl-2-pentanone	<2.10	<2.10	<5.00	<5.00	<5.00
Acetone	<3.10	<3.10	<10.00	<10.00	<10.00
Acrylonitrile	<2.20	<2.20	<5.00	<5.00	<5.00
Alkalinity as CaCO3	654	627	522	530	536
Aluminum	22.3	28.5	199.0	142.0	76.0
Antimony	<1.100	<.690	<2.000	<2.000	<2.000
Arsenic	<.750	<.750	<4.000	<4.000	<4.000
Barium	73.3	58.8	58.0	73.9	35.5
Benzene	<.22	<.22	<1.00	<1.00	<1.00
Beryllium	<.270	<.270	<4.000	<4.000	<4.000
Bromochloromethane	<.54	<.54	<1.00	<1.00	<1.00
Bromodichloromethane	<.39	<.39	<1.00	<1.00	<1.00
Bromoform	<.78	<.78	<1.00	<1.00	<1.00
Bromomethane	<1.10	<1.10	<1.00	<1.00	<1.00
Cadmium	<.0510	<.0550	<.8000	<.8000	<.8000
Carbon Disulfide	<.450	<.450	<1.000	<1.000	<1.000
Carbon Tetrachloride	<.65	<.65	<1.00	<1.00	<1.00
Chlorobenzene	<.40	<.40	<1.00	<1.00	<1.00
Chlorodibromomethane	<.75	<.75	<1.00	<1.00	<1.00
Chloroethane	<.79	<.79	<1.00	<1.00	<1.00
Chloroform	<1.30	<1.30	<1.00	<1.00	<1.00
Chloromethane	<.61	<.61	<1.00	<1.00	<1.00
Chromium	<1.100	<1.100	<8.000	<8.000	<8.000
cis-1,2-Dichloroethene	<.21	<.21	<1.00	<1.00	<1.00
cis-1,3-Dichloropropene	<.25	<.25	<1.00	<1.00	<1.00
Cobalt	16.9	14.7	9.9	27.9	17.5
Copper	<1.400	<1.800	<4.000	<4.000	<4.000
Dibromomethane	<.33	<.33	<1.00	<1.00	<1.00
Ethylbenzene	<.31	<.31	<1.00	<1.00	<1.00
Iodomethane	<7.0	<7.0	<1.0	<1.0	<1.0
Iron	580	776	733	1860	1360
Lead	.457	<.240	<4.000	<4.000	<4.000
Methylene Chloride	<1.700	<1.700	<5.000	<5.000	<5.000
Nickel	28.8	27.8	30.9	28.6	41.5
pH	6.49	6.66	6.40	6.50	6.40
Selenium	<.960	.966	<4.000	<4.000	<4.000
Silver	<.420	.580	<4.000	<4.000	<4.000
Styrene	<.37	<.37	<1.00	<1.00	<1.00
Sulfate	86.0	187.0	137.0	99.8	272.0
Tetrachloroethene	<.48	<.48	<1.00	<1.00	<1.00
Thallium	<.2600	<.2600	<2.0000	<2.0000	<2.0000
Toluene	<.43	<.43	<1.00	<1.00	<1.00
Total Suspended Solids	4.880	2.630			
trans-1,2-Dichloroethene	<.27	<.27	<1.00	<1.00	<1.00
trans-1,3-Dichloropropene	<.56	<.56	<1.00	<1.00	<1.00
trans-1,4-Dichloro-2-butene	<1.10	<1.10	<5.00	<5.00	<5.00
Trichloroethene	<.43	<.43	<1.00	<1.00	<1.00
Trichlorofluoromethane	<.38	<.38	<1.00	<1.00	<1.00
Vanadium	<1.100	<1.100	<20.000	<20.000	<20.000
Vinyl Acetate	<2.50	<2.50	<5.00	<5.00	<5.00
Vinyl Chloride	<.18	<.18	<1.00	<1.00	<1.00
Xylenes, Total	<.400	<.400	<2.000	<2.000	<2.000
Zinc	<10.00	<10.00	<20.00	<20.00	<20.00

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

Table 9

Analytical Data Summary for MW-304

Constituents	Units	3/22/2016	10/20/2016	1/18/2017	3/7/2017	6/28/2017	9/26/2017	3/14/2018	10/2/2018	3/28/2019
1,1,1,2-Tetrachloroethane	ug/L	<1.00	<.21	<.21	<.21	<.21	<.21	<.21	<.38	<.38
1,1,1-Trichloroethane	ug/L	<1.00	<.12	<.12	<.12	<.12	<.12	<.12	<.19	<.19
1,1,2,2-Tetrachloroethane	ug/L	<1.00	<.10	<.10	<.10	<.10	<.10	<.10	<.47	<.47
1,1,2-Trichloroethane	ug/L	<1.00	<.12	<.12	<.12	<.12	<.12	<.12	<.45	<.45
1,1-Dichloroethane	ug/L	<1.00	<.21	<.21	<.21	<.21	<.21	<.21	<.22	<.22
1,1-Dichloroethene	ug/L	<2.00	<.15	<.15	<.15	<.15	<.15	<.15	<.56	<.56
1,2,3-Trichloropropane	ug/L	<1.00	<.19	<.19	<.19	<.19	<.19	<.19	<.59	<.59
1,2-Dibromo-3-chloropropane	ug/L	<10.0	<.5	<.5	<.5	<.5	<.5	<.5	<1.2	<1.2
1,2-Dibromoethane	ug/L	<10.00	<.13	<.13	<.13	<.13	<.13	<.13	<.34	<.34
1,2-Dichlorobenzene	ug/L	<1.00	<.14	<.14	<.14	<.14	<.14	<.14	<.37	<.37
1,2-Dichloroethane	ug/L	<1.00	<.18	<.18	<.18	<.18	<.18	<.18	<.39	<.39
1,2-Dichloropropane	ug/L	<1.00	<.87	<.87	<.87	<.87	<.87	<.87	<.27	<.27
1,4-Dichlorobenzene	ug/L	<1.00	<.20	<.20	<.20	<.20	<.20	<.20	<.23	<.23
2-Butanone	ug/L	<10.00	<1.04	<1.04	<1.04	<1.04	<1.04	<1.04	<2.10	<2.10
2-Hexanone	ug/L	<10.0	<.2	<.2	<.2	<.2	<.2	<.2	<2.0	<2.0
4-Methyl-2-pentanone	ug/L	<10.00	<.22	<.22	<.22	<.22	<.22	<.22	<2.10	<2.10
Acetone	ug/L	<10.00	<1.79	<1.79	<1.79	3.74	2.99	<1.79	<3.10	<3.10
Acrylonitrile	ug/L	<10.00	<.53	<.53	<.53	<.53	<.53	<.53	<2.20	<2.20
Alkalinity as CaCO3	mg/L	464	448		422		422	361	397	412
Aluminum	ug/L	65.4	106.0		<41.3		<41.3	<41.3	<24.6	<27.0
Antimony	ug/L	<.237	<.237	<.237	.816	<.185	<.185	<.185	<1.320	<.530
Arsenic	ug/L	1.060	<.672	3.480	3.760	<.505	<.505	3.680	.509	<.750
Barium	ug/L	77.5	85.1	43.2	103.0	74.3	73.1	39.9	72.3	75.6
Benzene	ug/L	<.50	<.11	<.11	<.11	<.11	<.11	<.11	<.22	<.22
Beryllium	ug/L	<.221	<.221	<.221	<.125	<.125	<.125	<.125	<.530	<.270
Bromochloromethane	ug/L	<5.00	<.12	<.12	<.12	<.12	<.12	<.12	<.54	<.54
Bromodichloromethane	ug/L	<1.00	<.12	<.12	<.12	<.12	<.12	<.12	<.39	<.39
Bromoform	ug/L	<5.00	<.14	<.14	<.14	<.14	<.14	<.14	<.78	<.78
Bromomethane	ug/L	<4.000	<.220	<.220	<.220	<.220	.372	.448	<1.100	<1.100
Cadmium	ug/L	.3710	<.0351	<.0351	.0470	<.0441	<.0441	<.0441	<.1670	<.0770
Carbon Disulfide	ug/L	<1.00	<.15	<.15	<.15	<.15	<.15	<.15	<.45	<.45
Carbon Tetrachloride	ug/L	<2.00	<.24	<.24	<.24	<.24	<.24	<.24	<.65	<.65
Chlorobenzene	ug/L	<1.00	<.19	<.19	<.19	<.19	<.19	<.19	<.40	<.40
Chlorodibromomethane	ug/L	<5.00	<.20	<.20	<.20	<.20	<.20	<.20	<.75	<.75
Chloroethane	ug/L	<4.00	<.15	<.15	<.15	<.15	<.15	<.15	<.79	<.79
Chloroform	ug/L	<1.00	<.28	<.28	<.28	<.28	<.28	<.28	<1.30	<1.30
Chloromethane	ug/L	<3.00	<.31	<.31	<.31	<.31	<.31	<.31	<.61	<.61
Chromium	ug/L	<.355	.436	<.355	<.729	<.729	<.729	<.729	1.280	<.980
cis-1,2-Dichloroethene	ug/L	<1.00	<.13	<.13	<.13	<.13	<.13	<.13	<.21	<.21
cis-1,3-Dichloropropene	ug/L	<5.00	<.15	<.15	<.15	<.15	<.15	<.15	<.25	<.25
Cobalt	ug/L	8.49	6.44	6.64	8.48	4.59	6.39	7.20	7.33	4.75
Copper	ug/L	2.870	<1.220	<1.220	<2.190	<2.190	<2.190	<2.190	.864	<2.000
Dibromomethane	ug/L	<1.00	<.18	<.18	<.18	<.18	<.18	<.18	<.33	<.33
Ethylbenzene	ug/L	<1.00	<.21	<.21	<.21	<.21	<.21	<.21	<.31	<.31
Iodomethane	ug/L	<10.0	<.8	<.8	<.8	<.8	<.8	<.8	<7.0	<7.0
Iron	ug/L	2250	7870		12200		716	5170	2280	512
Lead	ug/L	.378	<.211	<.211	<.324	<.324	<.324	<.324	<.186	<.270
Methylene Chloride	ug/L	<5.000	<.170	.264	<.170	<.170	<.170	<.170	<1.700	<1.700
Nickel	ug/L	6.13	5.33	4.80	8.29	4.61	4.86	4.76	5.60	4.52
pH	SU	6.87	6.79		6.81		6.88	6.85	7.27	7.17
Selenium	ug/L	<.630	<.630	<.630	1.240	<.928	<.928	<.928	<.982	<1.000
Silver	ug/L	<.153	<.153	<.153	<.140	<.140	.180	<.140	<.115	<.370
Styrene	ug/L	<1.00	<.10	<.10	<.10	<.10	<.10	<.10	<.37	<.37
Sulfate	mg/L	68.0	116.0		86.9		98.2	170.0	85.6	86.0
Tetrachloroethene	ug/L	<1.00	<.18	<.18	<.18	<.18	<.18	<.18	<.48	<.48
Thallium	ug/L	<.0255	.0300	.0340	.1290	<.0644	<.0644	<.0644	<.5700	<.2700
Toluene	ug/L								<.43	<.43
Total Suspended Solids	mg/L	33.20	12.00	6.38	10.50	2.25	5.75	14.30	5.00	3.00
trans-1,2-Dichloroethene	ug/L	<1.00	<.21	<.21	<.21	<.21	<.21	<.21	<.27	<.27
trans-1,3-Dichloropropene	ug/L	<5.00	<.22	<.22	<.22	<.22	<.22	<.22	<.56	<.56
trans-1,4-Dichloro-2-butene	ug/L	<10.00	<.13	<.13	<.13	<.13	<.13	<.13	<1.10	<1.10
Trichloroethene	ug/L	<1.00	<.19	<.19	<.19	<.19	<.19	<.19	<.43	<.43
Trichlorofluoromethane	ug/L	<4.00	<.17	<.17	<.17	<.17	<.17	<.17	<.38	<.38
Vanadium	ug/L	<.255	<.255	<.255	<.840	<.840	<.840	<.840	<2.150	<.820
Vinyl Acetate	ug/L	<10.00	<.74	<.74	<.74	<.74	<.74	<.74	<2.50	<2.50
Vinyl Chloride	ug/L	<1.00	<.10	<.10	<.10	<.10	<.10	<.10	<.60	<.60
Xylenes, Total	ug/L	<3.00	<.13	<.13	<.13	<.13	<.13	<.13	<.40	<.40
Zinc	ug/L	6.66	<5.21	10.60	13.50	<11.50	<11.50	<11.50	7.48	<10.00

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

Table 9

Analytical Data Summary for MW-304

Constituents	9/24/2019	3/10/2020	9/15/2020	4/16/2021	10/27/2021	4/14/2022	9/1/2022	3/6/2023	9/29/2023
1,1,1,2-Tetrachloroethane	<.38	<.38	<.38	<.38	<.38	<.38	<1.00	<1.00	<1.00
1,1,1-Trichloroethane	<.19	<.19	<.19	<.19	<.19	<.19	<1.00	<1.00	<1.00
1,1,2,2-Tetrachloroethane	<.47	<.47	<.47	<.47	<.47	<.47	<1.00	<1.00	<1.00
1,1,2-Trichloroethane	<.45	<.45	<.45	<.45	<.45	<.45	<1.00	<1.00	<1.00
1,1-Dichloroethane	<.22	<.22	<.22	<.22	<.22	<.22	<1.00	<1.00	<1.00
1,1-Dichloroethene	<.56	<.56	<.56	<.56	<.56	<.56	<1.00	<1.00	<1.00
1,2,3-Trichloropropane	<.59	<.59	<.59	<.59	<.59	<.59	<1.00	<1.00	<1.00
1,2-Dibromo-3-chloropropane	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<5.0	<5.0	<5.0
1,2-Dibromoethane	<.34	<.34	<.34	<.34	<.34	<.34	<1.00	<1.00	<1.00
1,2-Dichlorobenzene	<.37	<.37	<.37	<.37	<.37	<.37	<1.00	<1.00	<1.00
1,2-Dichloroethane	<.39	<.39	<.39	<.39	<.39	<.39	<1.00	<1.00	<1.00
1,2-Dichloropropane	<.27	<.27	<.27	<.27	<.27	<.27	<1.00	<1.00	<1.00
1,4-Dichlorobenzene	<.23	<.23	<.23	<.23	<.23	<.23	<1.00	<1.00	<1.00
2-Butanone	<2.10	<2.10	<2.10	<2.10	<2.10	<2.10	<10.00	<10.00	<10.00
2-Hexanone	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<5.0	<5.0	<5.0
4-Methyl-2-pentanone	<2.10	<2.10	<2.10	<2.10	<2.10	<2.10	<5.00	<5.00	<5.00
Acetone	<3.10	<3.10	<3.10	<3.10	<3.10	<3.10	<10.00	<10.00	<10.00
Acrylonitrile	<2.20	<2.20	<2.20	<2.20	<2.20	<2.20	<5.00	<5.00	<5.00
Alkalinity as CaCO3	406	418	421	287	445	314	349	367	343
Aluminum	<27.0	<30.0	<12.0	<15.0	<17.0	<68.0	<100.0	<50.0	<50.0
Antimony	<.530	<.580	<.510	<1.100	<1.100	<2.760	<2.000	<2.000	<2.000
Arsenic	<.750	<.880	<.880	7.670	5.620	5.980	<4.000	<4.000	<4.000
Barium	68.9	71.1	68.1	42.4	36.8	40.8	60.2	66.5	61.0
Benzene	<.22	<.22	<.22	<.22	<.22	<.22	<1.00	<1.00	<1.00
Beryllium	<.270	<.270	<.270	<.270	<.270	<1.080	<4.000	<4.000	<4.000
Bromochloromethane	<.54	<.54	<.54	<.54	<.54	<.54	<1.00	<1.00	<1.00
Bromodichloromethane	<.39	<.39	<.39	<.39	<.39	<.39	<1.00	<1.00	<1.00
Bromoform	<.78	<.78	<.78	<.78	<.78	<.78	<1.00	<1.00	<1.00
Bromomethane	<1.100	<1.100	<1.100	<1.100	<1.100	<1.100	<1.000	<1.000	<1.000
Cadmium	<.0390	<.0390	<.0490	<.0510	<.0510	<.2200	<.8000	<.8000	<.8000
Carbon Disulfide	<.45	<.45	<.45	<.45	<.45	<.45	<1.00	<1.00	<1.00
Carbon Tetrachloride	<.65	<.65	<.65	<.65	<.65	<.65	<1.00	<1.00	<1.00
Chlorobenzene	<.40	<.40	<.40	<.40	<.40	<.40	<1.00	<1.00	<1.00
Chlorodibromomethane	<.75	<.75	<.75	<.75	<.75	<.75	<1.00	<1.00	<1.00
Chloroethane	<.79	<.79	<.79	<.79	<.79	<.79	<1.00	<1.00	<1.00
Chloroform	<1.30	<1.30	<1.30	<1.30	<1.30	<1.30	<1.00	<1.00	<1.00
Chloromethane	<.61	<.61	<.61	<.61	<.61	<.61	<1.00	<1.00	<1.00
Chromium	<.980	<1.100	<1.100	<1.100	<1.100	<4.400	<8.000	<8.000	<8.000
cis-1,2-Dichloroethene	<.21	<.21	<.21	<.21	<.21	<.21	<1.00	<1.00	<1.00
cis-1,3-Dichloropropene	<.25	<.25	<.25	<.25	<.25	<.25	<1.00	<1.00	<1.00
Cobalt	9.79	8.06	8.98	37.20	18.20	28.90	7.80	4.40	7.10
Copper	<2.000	<3.200	<1.500	<1.400	<1.400	<7.200	<4.000	<4.000	<4.000
Dibromomethane	<.33	<.33	<.33	<.33	<.33	<.33	<1.00	<1.00	<1.00
Ethylbenzene	<.31	<.31	<.31	<.31	<.31	<.31	<1.00	<1.00	<1.00
Iodomethane	<7.0	<7.0	<7.0	<7.0	<7.0	<7.0	<1.0	<1.0	<1.0
Iron	3890	334	7840	13100	8080	12300	1580	6290	3780
Lead	<.270	<.270	<.110	<.210	.737	<.960	<4.000	<4.000	<4.000
Methylene Chloride	<1.700	<1.700	<1.700	<1.700	<1.700	<1.700	<5.000	<5.000	<5.000
Nickel	6.82	4.71	6.13	27.10	13.20	21.40	6.80	4.10	5.50
pH	7.08	6.93	6.90	6.45	6.66	6.83	6.60	7.00	6.80
Selenium	<1.000	<1.000	<1.000	<.960	<.960	<3.840	<4.000	<4.000	<4.000
Silver	<.370	<.370	<.370	<.420	<.420	<1.960	<4.000	<4.000	<4.000
Styrene	<.37	<.37	<.37	<.37	<.37	<.37	<1.00	<1.00	<1.00
Sulfate	135.0	96.1	151.0	1080.0	599.0	1120.0	162.0	80.9	92.6
Tetrachloroethene	<.48	<.48	<.48	<.48	<.48	<.48	<1.00	<1.00	<1.00
Thallium	<.2700	<.2600	<.2600	<.2600	<.2600	<1.0400	<2.0000	<2.0000	<2.0000
Toluene	<.43	<.43	<.43	<.43	<.43	<.43	<1.00	<1.00	<1.00
Total Suspended Solids	6.25	1.00	11.10	21.40	9.50	10.30			
trans-1,2-Dichloroethene	<.27	<.27	<.27	<.27	<.27	<.27	<1.00	<1.00	<1.00
trans-1,3-Dichloropropene	<.56	<.56	<.56	<.56	<.56	<.56	<1.00	<1.00	<1.00
trans-1,4-Dichloro-2-butene	<1.10	<1.10	<1.10	<1.10	<1.10	<1.10	<5.00	<5.00	<5.00
Trichloroethene	<.43	<.43	<.43	<.43	<.43	<.43	<1.00	<1.00	<1.00
Trichlorofluoromethane	<.38	<.38	<.38	<.38	<.38	<.38	<1.00	<1.00	<1.00
Vanadium	<.820	<.820	<.850	<1.100	<1.100	<4.400	<20.000	<20.000	<20.000
Vinyl Acetate	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<5.00	<5.00	<5.00
Vinyl Chloride	<.18	<.18	<.18	<.18	<.18	<.18	<1.00	<1.00	<1.00
Xylenes, Total	<.40	<.40	<.40	<.40	<.40	<.40	<2.00	<2.00	<2.00
Zinc	<10.00	<10.00	<10.00	66.30	31.10	52.60	<20.00	<20.00	<20.00

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

Table 9

Analytical Data Summary for MW-307

Constituents	Units	9/18/2012	3/27/2013	9/26/2013	4/15/2014	9/1/2015	3/22/2016	10/21/2016	3/8/2017
1,1,1,2-Tetrachloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.21	<.21
1,1,1-Trichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.12	<.12
1,1,2,2-Tetrachloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.10	<.10
1,1,2-Trichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.12	<.12
1,1-Dichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.21	<.21
1,1-Dichloroethene	ug/L	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<.15	<.15
1,1-Dichloropropene	ug/L	<1		<1					
1,2,3-Trichloropropane	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.19	<.19
1,2,4,5-Tetrachlorobenzene	ug/L	<10.0		<10.2					
1,2,4-Trichlorobenzene	ug/L	<5		<5					
1,2-Dibromo-3-chloropropane	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<.5	<.5
1,2-Dibromoethane	ug/L	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<.13	<.13
1,2-Dichlorobenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.14	<.14
1,2-Dichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.18	<.18
1,2-Dichloropropane	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.87	<.87
1,3,5-Trinitrobenzene	ug/L	<10.0		<10.2					
1,3-Dichlorobenzene	ug/L	<1		<1					
1,3-Dichloropropane	ug/L	<1		<1					
1,3-Dinitrobenzene	ug/L	<10.0		<10.2					
1,4-Dichlorobenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.20	<.20
1,4-Naphthoquinone	ug/L	<10.0		<10.2					
1-Naphthylamine	ug/L	<10.0		<10.2					
2,2`-oxybis[1-Chloropropane]	ug/L	<10.0		<10.2					
2,2-Dichloropropane	ug/L	<4		<4					
2,3,4,6-Tetrachlorophenol	ug/L	<10.0		<10.2					
2,4,5-T	ug/L	<1.00		<1.16					
2,4,5-TP [Silvex]	ug/L	<1.00		<1.16					
2,4,5-Trichlorophenol	ug/L	<10.0		<10.2					
2,4,6-Trichlorophenol	ug/L	<10.0		<10.2					
2,4-D	ug/L	<1.00		<1.16					
2,4-Dichlorophenol	ug/L	<10.0		<10.2					
2,4-Dimethylphenol	ug/L	<10.0		<10.2					
2,4-Dinitrophenol	ug/L	<20.0		<20.4					
2,4-Dinitrotoluene	ug/L	<10.0		<10.2					
2,6-Dichlorophenol	ug/L	<10.0		<10.2					
2,6-Dinitrotoluene	ug/L	<10.0		<10.2					
2-Acetylaminofluorene	ug/L	<10.0		<10.2					
2-Butanone	ug/L	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<1.04	<1.04
2-Chloronaphthalene	ug/L	<10.0		<10.2					
2-Chlorophenol	ug/L	<10.0		<10.2					
2-Hexanone	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<.2	<.2
2-Methylnaphthalene	ug/L	<10.0		<10.2					
2-Methylphenol [o-Cresol]	ug/L	<10.0		<10.2					
2-Naphthylamine	ug/L	<10.0		<10.2					
2-Nitroaniline	ug/L	<10.0		<10.2					
2-Nitrophenol	ug/L	<10.0		<10.2					
3,3-Dichlorobenzidine	ug/L	<10		<51					
3,3-Dimethylbenzidine	ug/L	<10.0		<10.2					
3-Methylcholanthrene	ug/L	<10.0		<10.2					
3-Nitroaniline	ug/L	<10.0		<10.2					
4,4`-DDD	ug/L	<.0320		<.0327					
4,4`-DDE	ug/L	<.0320		<.0327					
4,4`-DDT	ug/L	<.0320		<.0327					
4,6-Dinitro-2-methylphenol	ug/L	<10.0		<10.2					
4-Aminobiphenyl	ug/L	<10.0		<10.2					
4-Bromophenyl phenyl ether	ug/L	<10.0		<10.2					
4-Chloro-3-methylphenol	ug/L	<10.0		<10.2					
4-Chloroaniline	ug/L	<10.0		<10.2					
4-Chlorophenyl phenyl ether	ug/L	<10.0		<10.2					
4-Methyl-2-pentanone	ug/L	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<.22	<.22
4-Nitroaniline	ug/L	<10.0		<10.2					
4-Nitrophenol	ug/L	<10.0		<10.2					
5-Nitro-o-toluidine	ug/L	<10.0		<10.2					
7,12-Dimethylbenz[a]anthracene	ug/L	<10.0		<10.2					
Acenaphthene	ug/L	<10.0		<10.2					
Acetone	ug/L	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<1.79	2.61
Acetonitrile	ug/L	<10000		739					
Acetophenone	ug/L	<10.0		<10.2					
Acrolein	ug/L	<10		<10					
Acrylonitrile	ug/L	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<.53	<.53
Aldrin	ug/L	<.0320		<.0327					
Alkalinity as CaCO3	mg/L					<5.0	44.4	67.0	97.9
Allyl Chloride	ug/L	<20		<2					
alpha-BHC	ug/L	<.0320		<.0327					
Aluminum	ug/L					252.0	229.0	180.0	264.0
Anthracene	ug/L	<10.0		<10.2					
Antimony	ug/L	<12.000	<6.000	<6.000	<6.000	<1.000	<.237	<.237	<.185

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

Table 9

Analytical Data Summary for MW-307

Constituents	9/25/2017	3/13/2018	10/1/2018	3/27/2019	9/23/2019	3/9/2020	9/17/2020	4/16/2021	10/28/2021
1,1,1,2-Tetrachloroethane	<.21	<.21	<.38	<.38	<.38	<.38	<.38	<.38	<.38
1,1,1-Trichloroethane	<.12	<.12	<.19	<.19	<.19	<.19	<.19	<.19	<.19
1,1,2,2-Tetrachloroethane	<.10	<.10	<.47	<.47	<.47	<.47	<.47	<.47	<.47
1,1,2-Trichloroethane	<.12	<.12	<.45	<.45	<.45	<.45	<.45	<.45	<.45
1,1-Dichloroethane	<.21	<.21	<.22	<.22	<.22	<.22	<.22	<.22	<.22
1,1-Dichloroethene	<.15	<.15	<.56	<.56	<.56	<.56	<.56	<.56	<.56
1,1-Dichloropropene									
1,2,3-Trichloropropane	<.19	<.19	<.59	<.59	<.59	<.59	<.59	<.59	<.59
1,2,4,5-Tetrachlorobenzene									
1,2,4-Trichlorobenzene									
1,2-Dibromo-3-chloropropane	<.5	<.5	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2
1,2-Dibromoethane	<.13	<.13	<.34	<.34	<.34	<.34	<.34	<.34	<.34
1,2-Dichlorobenzene	<.14	<.14	<.37	<.37	<.37	<.37	<.37	<.37	<.37
1,2-Dichloroethane	<.18	<.18	<.39	<.39	<.39	<.39	<.39	<.39	<.39
1,2-Dichloropropane	<.87	<.87	<.27	<.27	<.27	<.27	<.27	<.27	<.27
1,3,5-Trinitrobenzene									
1,3-Dichlorobenzene									
1,3-Dichloropropane									
1,3-Dinitrobenzene									
1,4-Dichlorobenzene	<.20	<.20	<.23	<.23	<.23	<.23	<.23	<.23	<.23
1,4-Naphthoquinone									
1-Naphthylamine									
2,2`-oxybis[1-Chloropropane]									
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	<1.04	<1.04	<2.10	<2.10	<2.10	<2.10	<2.10	<2.10	<2.10
2-Chloronaphthalene									
2-Chlorophenol									
2-Hexanone	<.2	<.2	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
2-Methylnaphthalene									
2-Methylphenol [o-Cresol]									
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	<.22	<.22	<2.10	<2.10	<2.10	<2.10	<2.10	<2.10	<2.10
4-Nitroaniline									
4-Nitrophenol									
5-Nitro-o-toluidine									
7,12-Dimethylbenz[a]anthracene									
Acenaphthene									
Acetone	2.41	<1.79	<3.10	<3.10	<3.10	<3.10	<3.10	<3.10	<3.10
Acetonitrile									
Acetophenone									
Acrolein									
Acrylonitrile	<.53	<.53	<2.20	<2.20	<2.20	<2.20	<2.20	<2.20	<2.20
Aldrin									
Alkalinity as CaCO3	82.4	37.8	82.4	56.7	89.1	95.0	130.0	79.2	200.0
Allyl Chloride									
alpha-BHC									
Aluminum	158.0	284.0	283.0	174.0	187.0	157.0	138.0	225.0	80.3
Anthracene									
Antimony	<.185	<.740	<1.320	<.530	<2.120	<.580	<.510	<1.100	<1.100

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

Table 9

Analytical Data Summary for MW-307

Constituents	4/13/2022	9/1/2022	3/6/2023	9/29/2023
1,1,1,2-Tetrachloroethane	<.38	<1.00	<1.00	<1.00
1,1,1-Trichloroethane	<.19	<1.00	<1.00	<1.00
1,1,2,2-Tetrachloroethane	<.47	<1.00	<1.00	<1.00
1,1,2-Trichloroethane	<.45	<1.00	<1.00	<1.00
1,1-Dichloroethane	<.22	<1.00	<1.00	<1.00
1,1-Dichloroethene	<.56	<1.00	<1.00	<1.00
1,1-Dichloropropene				
1,2,3-Trichloropropane	<.59	<1.00	<1.00	<1.00
1,2,4,5-Tetrachlorobenzene				
1,2,4-Trichlorobenzene				
1,2-Dibromo-3-chloropropane	<1.2	<5.0	<5.0	<5.0
1,2-Dibromoethane	<.34	<1.00	<1.00	<1.00
1,2-Dichlorobenzene	<.37	<1.00	<1.00	<1.00
1,2-Dichloroethane	<.39	<1.00	<1.00	<1.00
1,2-Dichloropropane	<.27	<1.00	<1.00	<1.00
1,3,5-Trinitrobenzene				
1,3-Dichlorobenzene				
1,3-Dichloropropane				
1,3-Dinitrobenzene				
1,4-Dichlorobenzene	<.23	<1.00	<1.00	<1.00
1,4-Naphthoquinone				
1-Naphthylamine				
2,2`-oxybis[1-Chloropropane]				
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	<2.10	<10.00	<10.00	<10.00
2-Chloronaphthalene				
2-Chlorophenol				
2-Hexanone	<2.0	<5.0	<5.0	<5.0
2-Methylnaphthalene				
2-Methylphenol [o-Cresol]				
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	<2.10	<5.00	<5.00	<5.00
4-Nitroaniline				
4-Nitrophenol				
5-Nitro-o-toluidine				
7,12-Dimethylbenz[a]anthracene				
Acenaphthene				
Acetone	<3.10	<10.00	<10.00	<10.00
Acetonitrile				
Acetophenone				
Acrolein				
Acrylonitrile	<2.20	<5.00	<5.00	<5.00
Aldrin				
Alkalinity as CaCO3	103.0	62.0	53.0	84.0
Allyl Chloride				
alpha-BHC				
Aluminum	198.0	237.0	213.0	695.0
Anthracene				
Antimony	<2.760	<2.000	<2.000	4.400

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

Table 9

Analytical Data Summary for MW-307

Constituents	Units	9/18/2012	3/27/2013	9/26/2013	4/15/2014	9/1/2015	3/22/2016	10/21/2016	3/8/2017
Arsenic	ug/L	2.01	<2.00	4.67	<1.00	3.70	4.35	3.96	<5.05
Barium	ug/L	<10.00	10.40	<30.00	<10.00	9.59	8.51	8.92	8.71
Benzene	ug/L	<.50	<.50	<.50	<.50	<.50	<.50	<.11	<.11
Benzo[a]anthracene	ug/L	<10.0		<10.2					
Benzo[a]pyrene	ug/L	<10.0		<10.2					
Benzo[b]fluoranthene	ug/L	<10.0		<10.2					
Benzo[ghi]perylene	ug/L	<10.0		<10.2					
Benzo[k]fluoranthene	ug/L	<10.0		<10.2					
Benzyl alcohol	ug/L	<10.0		<10.2					
Beryllium	ug/L	<1.000	.624	.580	.265	<1.000	.539	.477	.455
beta-BHC	ug/L	<.0320		<.0327					
Bis(2-chloroethoxy)methane	ug/L	<10.0		<10.2					
Bis(2-chloroethyl)ether	ug/L	<10.0		<10.2					
Bis(2-ethylhexyl)phthalate	ug/L	<10.0		<10.2					
Bromochloromethane	ug/L	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<.12	<.12
Bromodichloromethane	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.12	<.12
Bromoform	ug/L	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<.14	<.14
Bromomethane	ug/L	<20.00	<4.00	<4.00	<4.00	<4.00	<4.00	<.22	<.22
Butylbenzylphthalate	ug/L	<10.0		<10.2					
Cadmium	ug/L	<.500	<.500	<.500	.147	<.500	.162	.115	.106
Carbon Disulfide	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.15	<.15
Carbon Tetrachloride	ug/L	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<.24	<.24
Chlordane	ug/L	<2.00		<2.04					
Chlorobenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.19	<.19
Chlorobenzilate	ug/L	<10.0		<10.2					
Chlorodibromomethane	ug/L	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<.20	<.20
Chloroethane	ug/L	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<.15	<.15
Chloroform	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.28	<.28
Chloromethane	ug/L	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<.31	<.31
Chloroprene	ug/L	<1		<1					
Chromium	ug/L	<20.000	<20.000	<60.000	<20.000	<5.000	<.355	<.355	<7.290
Chrysene	ug/L	<10.0		<10.2					
cis-1,2-Dichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.13	<.13
cis-1,3-Dichloropropene	ug/L	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<.15	<.15
Cobalt	ug/L	60.1	83.8	44.3	59.8	41.9	50.9	59.1	68.4
Copper	ug/L	<20.00	<20.00	<60.00	<20.00	<2.00	<1.22	<1.22	<2.19
Cyanide	mg/L	<.01		<.01					
delta-BHC	ug/L	<.0320		<.0327					
Diallate	ug/L	<10.0		<10.2					
Dibenzo(a,h)anthracene	ug/L	<10.0		<10.2					
Dibenzofuran	ug/L	<10.0		<10.2					
Dibromomethane	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.18	<.18
Dichlorodifluoromethane	ug/L	<3.00	<3.00	<3.00	<3.00			<.20	<.20
Dieldrin	ug/L	<.0320		<.0327					
Diethyl phthalate	ug/L	<10.0		<10.2					
Dimethoate	ug/L	<10.0		<10.2					
Dimethyl phthalate	ug/L	<10.0		<10.2					
Di-n-butylphthalate	ug/L	<10.0		<10.2					
Di-n-octylphthalate	ug/L	<10.0		<20.4					
Dinoseb	ug/L	<10.0		<10.2					
Diphenylamine	ug/L	<10.0		<10.2					
Disulfoton	ug/L	<10.0		<10.2					
Endosulfan I	ug/L	<.0320		<.0327					
Endosulfan II	ug/L	<.0320		<.0327					
Endosulfan Sulfate	ug/L	<.0320		<.0327					
Endrin	ug/L	<.0320		<.0327					
Endrin Aldehyde	ug/L	<.0320		<.0327					
Ethyl Methacrylate	ug/L	<2		<2					
Ethyl Methanesulfonate	ug/L	<10.0		<10.2					
Ethylbenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.21	<.21
Famphur	ug/L	<20.0		<20.4					
Fluoranthene	ug/L	<10.0		<10.2					
Fluorene	ug/L	<10.0		<10.2					
gamma-BHC (Lindane)	ug/L	<.0320		<.0327					
Heptachlor	ug/L	<.0320		<.0327					
Heptachlor Epoxide	ug/L	<.0320		<.0327					
Hexachlorobenzene	ug/L	<10.0		<10.2					
Hexachlorobutadiene	ug/L	<10.0		<10.2					
Hexachlorocyclopentadiene	ug/L	<10.0		<20.4					
Hexachloroethane	ug/L	<10.0		<10.2					
Hexachloropropene	ug/L	<10.0		<10.2					
Indeno[1,2,3-cd]pyrene	ug/L	<10.0		<10.2					
Iodomethane	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<.8	<.8
Iron	ug/L					380000	354000	349000	343000
Isobutanol	ug/L	<10000		<10000					
Isodrin	ug/L	<10.0		<10.2					
Isophorone	ug/L	<10.0		<10.2					

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

Table 9

Analytical Data Summary for MW-307

Constituents	9/25/2017	3/13/2018	10/1/2018	3/27/2019	9/23/2019	3/9/2020	9/17/2020	4/16/2021	10/28/2021
Arsenic	3.89	3.72	4.41	3.69	3.91	3.97	3.92	4.34	<.75
Barium	8.57	9.27	7.24	7.86	7.97	8.26	7.67	9.91	17.60
Benzene	<.11	<.11	<.22	<.22	<.22	<.22	<.22	<.22	<.22
Benzo[a]anthracene									
Benzo[a]pyrene									
Benzo[b]fluoranthene									
Benzo[ghi]perylene									
Benzo[k]fluoranthene									
Benzyl alcohol									
Beryllium	.427	<.500	<.530	.375	<1.080	.330	<1.080	.577	<.270
beta-BHC									
Bis(2-chloroethoxy)methane									
Bis(2-chloroethyl)ether									
Bis(2-ethylhexyl)phthalate									
Bromochloromethane	<.12	<.12	<.54	<.54	<.54	<.54	<.54	<.54	<.54
Bromodichloromethane	<.12	<.12	<.39	<.39	<.39	<.39	<.39	<.39	<.39
Bromoform	<.14	<.14	<.78	<.78	<.78	<.78	<.78	<.78	<.78
Bromomethane	<.22	<.22	<1.10	<1.10	<1.10	<1.10	<1.10	<1.10	<1.10
Butylbenzylphthalate									
Cadmium	.075	<.176	.817	.091	<.156	.128	.086	.116	.084
Carbon Disulfide	<.15	<.15	<.45	<.45	<.45	<.45	<.45	<.45	<.45
Carbon Tetrachloride	<.24	<.24	<.65	<.65	<.65	<.65	<.65	<.65	<.65
Chlordane									
Chlorobenzene	<.19	<.19	<.40	<.40	<.40	<.40	<.40	<.40	<.40
Chlorobenzilate									
Chlorodibromomethane	<.20	<.20	<.75	<.75	<.75	<.75	<.75	<.75	<.75
Chloroethane	<.15	<.15	<.79	<.79	<.79	<.79	<.79	<.79	<.79
Chloroform	<.28	<.28	<1.30	<1.30	<1.30	<1.30	<1.30	<1.30	<1.30
Chloromethane	<.31	<.31	<.61	<.61	<.61	<.61	<.61	<.61	<.61
Chloroprene									
Chromium	<.729	<2.920	1.600	<.980	<3.920	<1.100	<1.100	<1.100	<1.100
Chrysene									
cis-1,2-Dichloroethene	<.13	<.13	<.21	<.21	<.21	<.21	<.21	<.21	<.21
cis-1,3-Dichloropropene	<.15	<.15	<.25	<.25	<.25	<.25	<.25	<.25	<.25
Cobalt	58.0	65.1	52.4	35.6	44.9	42.0	45.8	59.1	14.8
Copper	<2.19	<8.76	1.24	<2.00	<8.00	<3.20	<1.50	<1.40	1.54
Cyanide									
delta-BHC									
Diallate									
Dibenzo(a,h)anthracene									
Dibenzofuran									
Dibromomethane	<.18	<.18	<.33	<.33	<.33	<.33	<.33	<.33	<.33
Dichlorodifluoromethane	<.20	<.20	<.25		<.25				
Dieldrin									
Diethyl phthalate									
Dimethoate									
Dimethyl phthalate									
Di-n-butylphthalate									
Di-n-octylphthalate									
Dinoseb									
Diphenylamine									
Disulfoton									
Endosulfan I									
Endosulfan II									
Endosulfan Sulfate									
Endrin									
Endrin Aldehyde									
Ethyl Methacrylate									
Ethyl Methanesulfonate									
Ethylbenzene	<.21	<.21	<.31	<.31	<.31	<.31	<.31	<.31	<.31
Famphur									
Fluoranthene									
Fluorene									
gamma-BHC (Lindane)									
Heptachlor									
Heptachlor Epoxide									
Hexachlorobenzene									
Hexachlorobutadiene									
Hexachlorocyclopentadiene									
Hexachloroethane									
Hexachloropropene									
Indeno[1,2,3-cd]pyrene									
Iodomethane	<.8	<.8	<7.0	<7.0	<7.0	<7.0	<7.0	<7.0	<7.0
Iron	322000	310000	293000	250000	287000	313000	290000	350000	1490
Isobutanol									
Isodrin									
Isophorone									

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

Table 9

Analytical Data Summary for MW-307

Constituents	4/13/2022	9/1/2022	3/6/2023	9/29/2023
Arsenic	3.92	<4.00	4.30	31.90
Barium	8.82	8.30	8.90	21.80
Benzene	<.22	<1.00	<1.00	<1.00
Benzo[a]anthracene				
Benzo[a]pyrene				
Benzo[b]fluoranthene				
Benzo[ghi]perylene				
Benzo[k]fluoranthene				
Benzyl alcohol				
Beryllium	<1.080	<4.000	<4.000	<4.000
beta-BHC				
Bis(2-chloroethoxy)methane				
Bis(2-chloroethyl)ether				
Bis(2-ethylhexyl)phthalate				
Bromochloromethane	<.54	<1.00	<1.00	<1.00
Bromodichloromethane	<.39	<1.00	<1.00	<1.00
Bromoform	<.78	<1.00	<1.00	<1.00
Bromomethane	<1.10	<1.00	<1.00	<1.00
Butylbenzylphthalate				
Cadmium	<.220	<.800	<.800	<.800
Carbon Disulfide	<.45	<1.00	<1.00	<1.00
Carbon Tetrachloride	<.65	<1.00	<1.00	<1.00
Chlordane				
Chlorobenzene	<.40	<1.00	<1.00	<1.00
Chlorobenzilate				
Chlorodibromomethane	<.75	<1.00	<1.00	<1.00
Chloroethane	<.79	<1.00	<1.00	<1.00
Chloroform	<1.30	<1.00	<1.00	<1.00
Chloromethane	<.61	<1.00	<1.00	<1.00
Chloroprene				
Chromium	<4.400	<8.000	<8.000	<8.000
Chrysene				
cis-1,2-Dichloroethene	<.21	<1.00	<1.00	<1.00
cis-1,3-Dichloropropene	<.25	<1.00	<1.00	<1.00
Cobalt	53.5	39.9	48.5	36.6
Copper	<7.20	<4.00	<4.00	4.20
Cyanide				
delta-BHC				
Diallate				
Dibenzo(a,h)anthracene				
Dibenzofuran				
Dibromomethane	<.33	<1.00	<1.00	<1.00
Dichlorodifluoromethane				
Dieldrin				
Diethyl phthalate				
Dimethoate				
Dimethyl phthalate				
Di-n-butylphthalate				
Di-n-octylphthalate				
Dinoseb				
Diphenylamine				
Disulfoton				
Endosulfan I				
Endosulfan II				
Endosulfan Sulfate				
Endrin				
Endrin Aldehyde				
Ethyl Methacrylate				
Ethyl Methanesulfonate				
Ethylbenzene	<.31	<1.00	<1.00	<1.00
Famphur				
Fluoranthene				
Fluorene				
gamma-BHC (Lindane)				
Heptachlor				
Heptachlor Epoxide				
Hexachlorobenzene				
Hexachlorobutadiene				
Hexachlorocyclopentadiene				
Hexachloroethane				
Hexachloropropene				
Indeno[1,2,3-cd]pyrene				
Iodomethane	<7.0	<1.0	<1.0	<1.0
Iron	272000	268000	280000	266000
Isobutanol				
Isodrin				
Isophorone				

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

Table 9

Analytical Data Summary for MW-307

Constituents	Units	9/18/2012	3/27/2013	9/26/2013	4/15/2014	9/1/2015	3/22/2016	10/21/2016	3/8/2017
Isosafrole	ug/L	<10.0		<10.2					
Kepone	ug/L	<10.0		<10.2					
Lead	ug/L	<4.000	<4.000	<4.000	<4.000	<.500	<.211	<.211	<.324
Mercury	ug/L	<.267		<.200					
Methacrylonitrile	ug/L	<1		<1					
Methapyrilene	ug/L	<10.0		<10.2					
Methoxychlor	ug/L	<.0320		<.0327					
Methyl Methacrylate	ug/L	<2		<2					
Methyl Methanesulfonate	ug/L	<10.0		<10.2					
Methyl Parathion	ug/L	<10.0		<10.2					
Methylene Chloride	ug/L	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000	.231	<.170
Naphthalene	ug/L	<5		<5					
Nickel	ug/L	115.0	122.0	79.6	101.0	70.9	84.3	69.8	112.0
Nitrobenzene	ug/L	<10.0		<10.2					
N-Nitrosodiethylamine	ug/L	<10.0		<10.2					
N-Nitrosodimethylamine	ug/L	<10.0		<10.2					
N-Nitrosodi-n-butylamine	ug/L	<10.0		<10.2					
N-Nitrosodi-n-propylamine	ug/L	<10.0		<10.2					
N-Nitrosodiphenylamine	ug/L	<10.0		<10.2					
N-Nitrosomethylethylamine	ug/L	<10.0		<10.2					
N-Nitrosopiperidine	ug/L	<10.0		<10.2					
N-Nitrosopyrrolidine	ug/L	<10.0		<10.2					
o,o,o-Triethylphosphorothioate	ug/L	<10.0		<10.2					
o-Toluidine	ug/L	<10.0		<10.2					
p-[Dimethylamino]azobenzene	ug/L	<10.0		<10.2					
Parathion	ug/L	<10.0		<10.2					
PCB-1016	ug/L	<.800		<.816					
PCB-1221	ug/L	<.800		<.816					
PCB-1232	ug/L	<.800		<.816					
PCB-1242	ug/L	<.800		<.816					
PCB-1248	ug/L	<.800		<.816					
PCB-1254	ug/L	<.800		<.816					
PCB-1260	ug/L	<.800		<.816					
Pentachlorobenzene	ug/L	<10.0		<10.2					
Pentachloronitrobenzene	ug/L	<10.0		<10.2					
Pentachlorophenol	ug/L	<10.0		<10.2					
pH	SU					5.88	5.90	5.92	5.67
Phenacetin	ug/L	<10.0		<10.2					
Phenanthrene	ug/L	<10.0		<10.2					
Phenol	ug/L	<10.0		<10.2					
Phorate	ug/L	<10.0		<10.2					
p-Phenylenediamine	ug/L	<10.0		<10.2					
Pronamide	ug/L	<10.0		<10.2					
Propionitrile	ug/L	<10		<10					
Pyrene	ug/L	<10.0		<10.2					
Safrole	ug/L	<10.0		<10.2					
Selenium	ug/L	<5.000	<5.000	<5.000	<5.000	<5.000	.643	1.480	2.310
Silver	ug/L		<20.000		<20.000	<1.000	<.153	<.153	<1.400
Styrene	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.10	<.10
Sulfate	mg/L					475	3380	3260	2690
Sulfide	mg/L	<1.000	.696	1.400	5.280			<.180	3.340
Tetrachloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.18	<.18
Thallium	ug/L	<2.0000	<2.0000	<2.0000	<2.0000	<1.0000	.0460	.0440	<.0644
Thionazin	ug/L	<10.0		<10.2					
Tin	ug/L	<100.000	<100.000	913.000	<100.000			<.832	<1.620
Toluene	ug/L								
Total Suspended Solids	mg/L					34.70	19.50	14.00	3.75
Toxaphene	ug/L	<2.00		<2.04					
trans-1,2-Dichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.21	<.21
trans-1,3-Dichloropropene	ug/L	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<.22	<.22
trans-1,4-Dichloro-2-butene	ug/L	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<.13	<.13
Trichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.19	<.19
Trichlorofluoromethane	ug/L	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<.17	<.17
Vanadium	ug/L	<50.000		<150.000	<50.000	<5.000	<.255	<.255	<.840
Vinyl Acetate	ug/L	<2.00	<2.00	<2.00	<2.00	<10.00	<10.00	<.74	<.74
Vinyl Chloride	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.10	<.10
Xylenes, Total	ug/L	<3.000	<3.000	<3.000	<3.000	<3.000	<3.000	.324	.362
Zinc	ug/L	434.0	663.0	695.0	356.0	338.0	385.0	456.0	492.0

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

Table 9

Analytical Data Summary for MW-307

Constituents	9/25/2017	3/13/2018	10/1/2018	3/27/2019	9/23/2019	3/9/2020	9/17/2020	4/16/2021	10/28/2021
Isosafrole									
Kepone									
Lead	<.324	<1.300	<.186	<.270	<1.080	<.270	<.110	<.210	.770
Mercury									
Methacrylonitrile									
Methapyrilene									
Methoxychlor									
Methyl Methacrylate									
Methyl Methanesulfonate									
Methyl Parathion									
Methylene Chloride	<.170	<.170	<1.700	<1.700	<1.700	<1.700	<1.700	<1.700	<1.700
Naphthalene									
Nickel	62.0	98.9	92.9	79.1	75.9	71.1	76.9	104.0	31.5
Nitrobenzene									
N-Nitrosodiethylamine									
N-Nitrosodimethylamine									
N-Nitrosodi-n-butylamine									
N-Nitrosodi-n-propylamine									
N-Nitrosodiphenylamine									
N-Nitrosomethylethylamine									
N-Nitrosopiperidine									
N-Nitrosopyrrolidine									
o,o,o-Triethylphosphorothioate									
o-Toluidine									
p-[Dimethylamino]azobenzene									
Parathion									
PCB-1016									
PCB-1221									
PCB-1232									
PCB-1242									
PCB-1248									
PCB-1254									
PCB-1260									
Pentachlorobenzene									
Pentachloronitrobenzene									
Pentachlorophenol									
pH	5.82	5.73	5.73	5.75	5.63	5.77	5.84	5.85	6.82
Phenacetin									
Phenanthrene									
Phenol									
Phorate									
p-Phenylenediamine									
Pronamide									
Propionitrile									
Pyrene									
Safrole									
Selenium	1.060	<3.710	1.040	1.230	<4.000	1.240	<1.000	<.960	<.960
Silver	<.140	<.560	<.115	<.370	<1.480	<.370	<.370	<.420	<.420
Styrene	<.10	<.10	<.37	<.37	<.37	<.37	<.37	<.37	<.37
Sulfate	2380	2590	3200	2510	2140	2130	2140	2400	1010
Sulfide	6.740	6.990	7.200	2.360	1.450	3.680	11.400	<10.000	<.231
Tetrachloroethene	<.18	<.18	<.48	<.48	<.48	<.48	<.48	<.48	<.48
Thallium	<.0644	<.2580	<.5700	<.2700	<1.0800	<.2600	<.2600	<.2600	<.2600
Thionazin									
Tin	<1.620	<6.480	<1.300	<1.800	<1.800				
Toluene			<.43	<.43	<.43	<.43	<.43	<.43	<.43
Total Suspended Solids	7.00	15.80	10.80	6.63	33.50	5.63	12.80	11.80	6.60
Toxaphene									
trans-1,2-Dichloroethene	<.21	<.21	<.27	<.27	<.27	<.27	<.27	<.27	<.27
trans-1,3-Dichloropropene	<.22	<.22	<.56	<.56	<.56	<.56	<.56	<.56	<.56
trans-1,4-Dichloro-2-butene	<.13	<.13	<1.10	<1.10	<1.10	<1.10	<1.10	<1.10	<1.10
Trichloroethene	<.19	<.19	<.43	<.43	<.43	<.43	<.43	<.43	<.43
Trichlorofluoromethane	<.17	<.17	<.38	<.38	<.38	<.38	<.38	<.38	<.38
Vanadium	<.840	<3.360	<2.150	<.820	<3.280	<.820	<.850	<1.100	<1.100
Vinyl Acetate	<.74	<.74	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50
Vinyl Chloride	<.10	<.10	<.60	<.60	<.18	<.18	<.18	<.18	<.18
Xylenes, Total	<.130	<.130	<.400	.481	<.400	<.400	<.400	<.400	<.400
Zinc	283.0	447.0	424.0	346.0	322.0	308.0	349.0	443.0	10.6

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

Table 9

Analytical Data Summary for MW-307

Constituents	4/13/2022	9/1/2022	3/6/2023	9/29/2023
Isosafrole				
Kepone				
Lead	<.960	<4.000	<4.000	<4.000
Mercury				
Methacrylonitrile				
Methapyrilene				
Methoxychlor				
Methyl Methacrylate				
Methyl Methanesulfonate				
Methyl Parathion				
Methylene Chloride	<1.700	<5.000	<5.000	<5.000
Naphthalene				
Nickel	88.8	70.0	83.7	68.1
Nitrobenzene				
N-Nitrosodiethylamine				
N-Nitrosodimethylamine				
N-Nitrosodi-n-butylamine				
N-Nitrosodi-n-propylamine				
N-Nitrosodiphenylamine				
N-Nitrosomethylethylamine				
N-Nitrosopiperidine				
N-Nitrosopyrrolidine				
o,o,o-Triethylphosphorothioate				
o-Toluidine				
p-[Dimethylamino]azobenzene				
Parathion				
PCB-1016				
PCB-1221				
PCB-1232				
PCB-1242				
PCB-1248				
PCB-1254				
PCB-1260				
Pentachlorobenzene				
Pentachloronitrobenzene				
Pentachlorophenol				
pH	5.85	5.70	5.50	5.60
Phenacetin				
Phenanthrene				
Phenol				
Phorate				
p-Phenylenediamine				
Pronamide				
Propionitrile				
Pyrene				
Safrole				
Selenium	<3.840	<4.000	<4.000	6.400
Silver	<1.960	<4.000	<4.000	<4.000
Styrene	<.37	<1.00	<1.00	<1.00
Sulfate	2230	1990	2130	1980
Sulfide	<.231	<.300		
Tetrachloroethene	<.48	<1.00	<1.00	<1.00
Thallium	<1.0400	<2.0000	<2.0000	<2.0000
Thionazin				
Tin				
Toluene	<.43	<1.00	<1.00	<1.00
Total Suspended Solids	29.00			
Toxaphene				
trans-1,2-Dichloroethene	<.27	<1.00	<1.00	<1.00
trans-1,3-Dichloropropene	<.56	<1.00	<1.00	<1.00
trans-1,4-Dichloro-2-butene	<1.10	<5.00	<5.00	<5.00
Trichloroethene	<.43	<1.00	<1.00	<1.00
Trichlorofluoromethane	<.38	<1.00	<1.00	<1.00
Vanadium	<4.400	<20.000	<20.000	<20.000
Vinyl Acetate	<2.50	<5.00	<5.00	<5.00
Vinyl Chloride	<.18	<1.00	<1.00	<1.00
Xylenes, Total	<.400	<2.000	<2.000	<2.000
Zinc	374.0	271.0	324.0	383.0

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

Table 9

Analytical Data Summary for MW-309

Constituents	Units	9/1/2015
1,1,1,2-Tetrachloroethane	ug/L	<1
1,1,1-Trichloroethane	ug/L	<1
1,1,2,2-Tetrachloroethane	ug/L	<1
1,1,2-Trichloroethane	ug/L	<1
1,1-Dichloroethane	ug/L	<1
1,1-Dichloroethene	ug/L	<2
1,2,3-Trichloropropane	ug/L	<1
1,2-Dibromo-3-chloropropane	ug/L	<10
1,2-Dibromoethane	ug/L	<10
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	ug/L	<10
2-Hexanone	ug/L	<10
4-Methyl-2-pentanone	ug/L	<10
Acetone	ug/L	<10
Acrylonitrile	ug/L	<10
Alkalinity as CaCO3	mg/L	268
Aluminum	ug/L	229
Antimony	ug/L	<1
Arsenic	ug/L	<2
Barium	ug/L	17.2
Benzene	ug/L	<.5
Beryllium	ug/L	<1
Bromochloromethane	ug/L	<5
Bromodichloromethane	ug/L	<1
Bromoform	ug/L	<5
Bromomethane	ug/L	<4
Cadmium	ug/L	.519
Carbon Disulfide	ug/L	<1
Carbon Tetrachloride	ug/L	<2
Chlorobenzene	ug/L	<1
Chlorodibromomethane	ug/L	<5
Chloroethane	ug/L	<4
Chloroform	ug/L	<1
Chloromethane	ug/L	<3
Chromium	ug/L	<5
cis-1,2-Dichloroethene	ug/L	<1
cis-1,3-Dichloropropene	ug/L	<5
Cobalt	ug/L	3.61
Copper	ug/L	6.93
Dibromomethane	ug/L	<1
Ethylbenzene	ug/L	<1
Iodomethane	ug/L	<10
Iron	ug/L	1690
Lead	ug/L	1.43
Methylene Chloride	ug/L	<5
Nickel	ug/L	34
pH	SU	6.56
Selenium	ug/L	<5
Silver	ug/L	<1
Styrene	ug/L	<1
Sulfate	mg/L	3020
Tetrachloroethene	ug/L	<1
Thallium	ug/L	<1
Total Suspended Solids	mg/L	221
trans-1,2-Dichloroethene	ug/L	<1
trans-1,3-Dichloropropene	ug/L	<5
trans-1,4-Dichloro-2-butene	ug/L	<10
Trichloroethene	ug/L	<1
Trichlorofluoromethane	ug/L	<4
Vanadium	ug/L	<5
Vinyl Acetate	ug/L	<10
Vinyl Chloride	ug/L	<1
Xylenes, Total	ug/L	<3
Zinc	ug/L	162

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

Table 9

Analytical Data Summary for MW-310

Constituents	Units	9/20/2012	3/27/2013	9/26/2013	4/16/2014	9/25/2014	3/11/2015	9/1/2015	3/22/2016
1,1,1,2-Tetrachloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	<1.00
1,1,1-Trichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.12	<1.00	<1.00	<1.00
1,1,2,2-Tetrachloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.10	<1.00	<1.00	<1.00
1,1,2-Trichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.12	<1.00	<1.00	<1.00
1,1-Dichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	<1.00
1,1-Dichloroethene	ug/L	<2.00	<2.00	<2.00	<2.00	<.15	<2.00	<2.00	<2.00
1,1-Dichloropropene	ug/L	<1		<1					
1,2,3-Trichloropropane	ug/L	<1.00	<1.00	<1.00	<1.00	<.19	<1.00	<1.00	<1.00
1,2,4,5-Tetrachlorobenzene	ug/L	<10.0		<11.2					
1,2,4-Trichlorobenzene	ug/L	<5		<5					
1,2-Dibromo-3-chloropropane	ug/L	<10.00	<10.00	<10.00	<10.00	<.12	<10.00	<10.00	<10.00
1,2-Dibromoethane	ug/L	<10.00	<10.00	<10.00	<10.00	<.13	<10.00	<10.00	<10.00
1,2-Dichlorobenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.14	<1.00	<1.00	<1.00
1,2-Dichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.18	<1.00	<1.00	<1.00
1,2-Dichloropropane	ug/L	<1.00	<1.00	<1.00	<1.00	<.87	<1.00	<1.00	<1.00
1,3,5-Trinitrobenzene	ug/L	<10.0		<11.2					
1,3-Dichlorobenzene	ug/L	<1		<1					
1,3-Dichloropropane	ug/L	<1		<1					
1,3-Dinitrobenzene	ug/L	<10.0		<11.2					
1,4-Dichlorobenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.20	<1.00	<1.00	<1.00
1,4-Naphthoquinone	ug/L	<10.0		<11.2					
1-Naphthylamine	ug/L	<10.0		<11.2					
2,2`-oxybis[1-Chloropropane]	ug/L	<10.0		<11.2					
2,2-Dichloropropane	ug/L	<4		<4					
2,3,4,6-Tetrachlorophenol	ug/L	<10.0		<11.2					
2,4,5-T	ug/L	<1.00		<1.08					
2,4,5-TP [Silvex]	ug/L	<1.00		<1.08					
2,4,5-Trichlorophenol	ug/L	<10.0		<11.2					
2,4,6-Trichlorophenol	ug/L	<10.0		<11.2					
2,4-D	ug/L	<1.00		<1.08					
2,4-Dichlorophenol	ug/L	<10.0		<11.2					
2,4-Dimethylphenol	ug/L	<10.0		<11.2					
2,4-Dinitrophenol	ug/L	<20.0		<22.5					
2,4-Dinitrotoluene	ug/L	<10.0		<11.2					
2,6-Dichlorophenol	ug/L	<10.0		<11.2					
2,6-Dinitrotoluene	ug/L	<10.0		<11.2					
2-Acetylaminofluorene	ug/L	<10.0		<11.2					
2-Butanone	ug/L	<10.00	<10.00	<10.00	<10.00	<.47	<10.00	<10.00	<10.00
2-Chloronaphthalene	ug/L	<10.0		<11.2					
2-Chlorophenol	ug/L	<10.0		<11.2					
2-Hexanone	ug/L	<10.0	<10.0	<10.0	<10.0	<.2	<10.0	<10.0	<10.0
2-Methylnaphthalene	ug/L	<10.0		<11.2					
2-Methylphenol [o-Cresol]	ug/L	<10.0		<11.2					
2-Naphthylamine	ug/L	<10.0		<11.2					
2-Nitroaniline	ug/L	<10.0		<11.2					
2-Nitrophenol	ug/L	<10.0		<11.2					
3,3-Dichlorobenzidine	ug/L	<10.0		<56.2					
3,3-Dimethylbenzidine	ug/L	<10.0		<11.2					
3-Methylcholanthrene	ug/L	<10.0		<11.2					
3-Nitroaniline	ug/L	<10.0		<11.2					
4,4`-DDD	ug/L	<.0320		<.0356					
4,4`-DDE	ug/L	<.0320		<.0356					
4,4`-DDT	ug/L	<.0320		<.0356					
4,6-Dinitro-2-methylphenol	ug/L	<10.0		<11.2					
4-Aminobiphenyl	ug/L	<10.0		<11.2					
4-Bromophenyl phenyl ether	ug/L	<10.0		<11.2					
4-Chloro-3-methylphenol	ug/L	<10.0		<11.2					
4-Chloroaniline	ug/L	<10.0		<11.2					
4-Chlorophenyl phenyl ether	ug/L	<10.0		<11.2					
4-Methyl-2-pentanone	ug/L	<10.00	<10.00	<10.00	<10.00	<.22	<10.00	<10.00	<10.00
4-Nitroaniline	ug/L	<10.0		<11.2					
4-Nitrophenol	ug/L	<10.0		<11.2					
5-Nitro-o-toluidine	ug/L	<10.0		<11.2					
7,12-Dimethylbenz[a]anthracene	ug/L	<10.0		<11.2					
Acenaphthene	ug/L	<10.0		<11.2					
Acetone	ug/L	<10.00	<10.00	<10.00	<10.00	<1.79	<10.00	<10.00	<10.00
Acetonitrile	ug/L	<10000		841					
Acetophenone	ug/L	<10.0		<11.2					
Acrolein	ug/L	<10		<10					
Acrylonitrile	ug/L	<10.00	<10.00	<10.00	<10.00	<.53	<10.00	<10.00	<10.00
Aldrin	ug/L	<.0320		<.0356					
Alkalinity as CaCO3	mg/L					341	443	547	494
Allyl Chloride	ug/L	<20		<2					
alpha-BHC	ug/L	<.0320		<.0356					
Aluminum	ug/L					1200.0	157.0	196.0	187.0
Anthracene	ug/L	<10.0		<11.2					
Antimony	ug/L	<6.000	<6.000	<6.000	<6.000	<.161	<1.000	<1.000	<.237

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

Table 9

Analytical Data Summary for MW-310

Constituents	10/20/2016	3/8/2017	9/27/2017	3/14/2018	10/2/2018	3/28/2019	9/24/2019	11/7/2019
1,1,1,2-Tetrachloroethane	<.21	<.21	<.21	<.21	<.38	<.38	<.38	
1,1,1-Trichloroethane	<.12	<.12	<.12	<.12	<.19	<.19	<.19	
1,1,2,2-Tetrachloroethane	<.10	<.10	<.10	<.10	<.47	<.47	<.47	
1,1,2-Trichloroethane	<.12	<.12	<.12	<.12	<.45	<.45	<.45	
1,1-Dichloroethane	<.21	<.21	<.21	<.21	<.22	<.22	<.22	
1,1-Dichloroethene	<.15	<.15	<.15	<.15	<.56	<.56	<.56	
1,1-Dichloropropene								
1,2,3-Trichloropropane	<.19	<.19	<.19	<.19	<.59	<.59	<.59	
1,2,4,5-Tetrachlorobenzene								
1,2,4-Trichlorobenzene								
1,2-Dibromo-3-chloropropane	<.50	<.50	<.50	<.50	<1.20	<1.20	<1.20	
1,2-Dibromoethane	<.13	<.13	<.13	<.13	<.34	<.34	<.34	
1,2-Dichlorobenzene	<.14	<.14	<.14	<.14	<.37	<.37	<.37	
1,2-Dichloroethane	<.18	<.18	<.18	<.18	<.39	<.39	<.39	
1,2-Dichloropropane	<.87	<.87	<.87	<.87	<.27	<.27	<.27	
1,3,5-Trinitrobenzene								
1,3-Dichlorobenzene								
1,3-Dichloropropane								
1,3-Dinitrobenzene								
1,4-Dichlorobenzene	<.20	<.20	<.20	<.20	<.23	<.23	<.23	
1,4-Naphthoquinone								
1-Naphthylamine								
2,2`-oxybis[1-Chloropropane]								
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	<1.04	<1.04	<1.04	<1.04	<2.10	<2.10	<2.10	
2-Chloronaphthalene								
2-Chlorophenol								
2-Hexanone	<.2	<.2	<.2	<.2	<2.0	<2.0	<2.0	
2-Methylnaphthalene								
2-Methylphenol [o-Cresol]								
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	<.22	<.22	<.22	<.22	<2.10	<2.10	<2.10	
4-Nitroaniline								
4-Nitrophenol								
5-Nitro-o-toluidine								
7,12-Dimethylbenz[a]anthracene								
Acenaphthene								
Acetone	<1.79	2.61	3.78	1.96	<3.10	<3.10	<3.10	
Acetonitrile								
Acetophenone								
Acrolein								
Acrylonitrile	<.53	<.53	<.53	<.53	<2.20	<2.20	<2.20	
Aldrin								
Alkalinity as CaCO3	448	355	345	381	644	474	386	
Allyl Chloride								
alpha-BHC								
Aluminum	178.0	336.0	425.0	585.0	33.9	110.0	582.0	
Anthracene								
Antimony	<.237	<.185	<.185	<1.850	<1.320	<.530	<1.060	<.530

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

Table 9

Analytical Data Summary for MW-310

Constituents	Units	9/20/2012	3/27/2013	9/26/2013	4/16/2014	9/25/2014	3/11/2015	9/1/2015	3/22/2016
Arsenic	ug/L	<1.00	<1.00	1.49	<1.00	1.02	<6.00	<2.00	2.02
Barium	ug/L	14.10	14.80	8.27	8.45	21.80	17.80	16.80	14.30
Benzene	ug/L	<.50	<.50	<.50	<.50	<.11	<.50	<.50	<.50
Benzo[a]anthracene	ug/L	<10.0		<11.2					
Benzo[a]pyrene	ug/L	<10.0		<11.2					
Benzo[b]fluoranthene	ug/L	<10.0		<11.2					
Benzo[ghi]perylene	ug/L	<10.0		<11.2					
Benzo[k]fluoranthene	ug/L	<10.0		<11.2					
Benzyl alcohol	ug/L	<10.0		<11.2					
Beryllium	ug/L	1.400	.439	.570	.366	.618	<3.000	<1.000	.337
beta-BHC	ug/L	<.0320		<.0356					
Bis(2-chloroethoxy)methane	ug/L	<10.0		<11.2					
Bis(2-chloroethyl)ether	ug/L	<10.0		<11.2					
Bis(2-ethylhexyl)phthalate	ug/L	<10.0		<11.2					
Bromochloromethane	ug/L	<5.00	<5.00	<5.00	<5.00	<.12	<5.00	<5.00	<5.00
Bromodichloromethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.12	<1.00	<1.00	<1.00
Bromoform	ug/L	<5.00	<5.00	<5.00	<5.00	<.14	<5.00	<5.00	<5.00
Bromomethane	ug/L	<20.00	<4.00	<4.00	<4.00	<.22	<4.00	<4.00	<4.00
Butylbenzylphthalate	ug/L	<10.0		<11.2					
Cadmium	ug/L	5.150	.638	.540	2.650	8.160	1.630	2.570	1.010
Carbon Disulfide	ug/L	<1.00	<1.00	<1.00	<1.00	<.15	<1.00	<1.00	<1.00
Carbon Tetrachloride	ug/L	<2.00	<2.00	<2.00	<2.00	<.24	<2.00	<2.00	<2.00
Chlordane	ug/L	<2.00		<2.22					
Chlorobenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.19	<1.00	<1.00	<1.00
Chlorobenzilate	ug/L	<10.0		<11.2					
Chlorodibromomethane	ug/L	<5.00	<5.00	<5.00	<5.00	<.20	<5.00	<5.00	<5.00
Chloroethane	ug/L	<4.00	<4.00	<4.00	<4.00	<.15	<4.00	<4.00	<4.00
Chloroform	ug/L	<1.00	<1.00	<1.00	<1.00	<.28	<1.00	<1.00	<1.00
Chloromethane	ug/L	<3.00	<3.00	<3.00	<3.00	<.31	<3.00	<3.00	<3.00
Chloroprene	ug/L	<1		<1					
Chromium	ug/L	25.100	<20.000	2.250	<40.000	<1.240	<15.000	<5.000	<.355
Chrysene	ug/L	<10.0		<11.2					
cis-1,2-Dichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.13	<1.00	<1.00	<1.00
cis-1,3-Dichloropropene	ug/L	<5.00	<5.00	<5.00	<5.00	<.15	<5.00	<5.00	<5.00
Cobalt	ug/L	190.0	94.6	86.6	146.0	109.0	147.0	70.9	214.0
Copper	ug/L	<20.00	<20.00	<20.00	<40.00	5.06	<6.00	<2.00	<1.22
Cyanide	mg/L	<.01		<.01					
delta-BHC	ug/L	<.0320		<.0356					
Diallate	ug/L	<10.0		<11.2					
Dibenzo(a,h)anthracene	ug/L	<10.0		<11.2					
Dibenzofuran	ug/L	<10.0		<11.2					
Dibromomethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.18	<1.00	<1.00	<1.00
Dichlorodifluoromethane	ug/L	<3		<3					
Dieldrin	ug/L	<.0320		<.0356					
Diethyl phthalate	ug/L	<10.0		<11.2					
Dimethoate	ug/L	<10.0		<11.2					
Dimethyl phthalate	ug/L	<10.0		<11.2					
Di-n-butylphthalate	ug/L	<10.0		<11.2					
Di-n-octylphthalate	ug/L	<10.0		<22.5					
Dinoseb	ug/L	<10.0		<11.2					
Diphenylamine	ug/L	<10.0		<11.2					
Disulfoton	ug/L	<10.0		<11.2					
Endosulfan I	ug/L	<.0320		<.0356					
Endosulfan II	ug/L	<.0320		<.0356					
Endosulfan Sulfate	ug/L	<.0320		<.0356					
Endrin	ug/L	<.0320		<.0356					
Endrin Aldehyde	ug/L	<.0320		<.0356					
Ethyl Methacrylate	ug/L	<2		<2					
Ethyl Methanesulfonate	ug/L	<10.0		<11.2					
Ethylbenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	<1.00
Famphur	ug/L	<20.0		<22.5					
Fluoranthene	ug/L	<10.0		<11.2					
Fluorene	ug/L	<10.0		<11.2					
gamma-BHC (Lindane)	ug/L	<.0320		<.0356					
Heptachlor	ug/L	<.0320		<.0356					
Heptachlor Epoxide	ug/L	<.0320		<.0356					
Hexachlorobenzene	ug/L	<10.0		<11.2					
Hexachlorobutadiene	ug/L	<10.0		<11.2					
Hexachlorocyclopentadiene	ug/L	<10.0		<22.5					
Hexachloroethane	ug/L	<10.0		<11.2					
Hexachloropropene	ug/L	<10.0		<11.2					
Indeno[1,2,3-cd]pyrene	ug/L	<10.0		<11.2					
Iodomethane	ug/L	<10.0	<10.0	<10.0	<10.0	<.8	<10.0	<10.0	<10.0
Iron	ug/L					2720	15800	14400	19500
Isobutanol	ug/L	<10000		<10000					
Isodrin	ug/L	<10.0		<11.2					
Isophorone	ug/L	<10.0		<11.2					

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

Table 9

Analytical Data Summary for MW-310

Constituents	10/20/2016	3/8/2017	9/27/2017	3/14/2018	10/2/2018	3/28/2019	9/24/2019	11/7/2019
Arsenic	1.24	<2.53	<2.53	<5.05	2.93	1.68	<1.50	2.36
Barium	13.40	14.20	14.90	18.60	13.30	14.70	16.00	14.70
Benzene	<.11	<.11	<.11	<.11	<.22	<.22	<.22	
Benzo[a]anthracene								
Benzo[a]pyrene								
Benzo[b]fluoranthene								
Benzo[ghi]perylene								
Benzo[k]fluoranthene								
Benzyl alcohol								
Beryllium	.652	.710	.745	<1.250	<.530	.391	1.090	.586
beta-BHC								
Bis(2-chloroethoxy)methane								
Bis(2-chloroethyl)ether								
Bis(2-ethylhexyl)phthalate								
Bromochloromethane	<.12	<.12	<.12	<.12	<.54	<.54	<.54	
Bromodichloromethane	<.12	<.12	<.12	<.12	<.39	<.39	<.39	
Bromoform	<.14	<.14	<.14	<.14	<.78	<.78	<.78	
Bromomethane	<.22	<.22	<.22	<.22	<1.10	<1.10	<1.10	
Butylbenzylphthalate								
Cadmium	.478	.681	.748	.940	.282	.299	1.850	1.340
Carbon Disulfide	<.15	<.15	<.15	<.15	<.45	<.45	<.45	
Carbon Tetrachloride	<.24	<.24	<.24	<.24	<.65	<.65	<.65	
Chlordane								
Chlorobenzene	<.19	<.19	<.19	<.19	<.40	<.40	<.40	
Chlorobenzilate								
Chlorodibromomethane	<.20	<.20	<.20	<.20	<.75	<.75	<.75	
Chloroethane	<.15	<.15	<.15	<.15	<.79	<.79	<.79	
Chloroform	<.28	<.28	<.28	<.28	<1.30	<1.30	<1.30	
Chloromethane	<.31	<.31	<.31	<.31	<.61	<.61	<.61	
Chloroprene								
Chromium	<.355	<3.650	<.729	<7.290	<1.140	<.980	<1.960	<.980
Chrysene								
cis-1,2-Dichloroethene	<.13	<.13	<.13	<.13	<.21	<.21	<.21	
cis-1,3-Dichloropropene	<.15	<.15	<.15	<.15	<.25	<.25	<.25	
Cobalt	210.0	160.0	142.0	169.0	39.1	168.0	338.0	235.0
Copper	<1.22	<11.00	<2.19	<21.90	1.16	<2.00	<4.00	<2.00
Cyanide								
delta-BHC								
Diallate								
Dibenzo(a,h)anthracene								
Dibenzofuran								
Dibromomethane	<.18	<.18	<.18	<.18	<.33	<.33	<.33	
Dichlorodifluoromethane								
Dieldrin								
Diethyl phthalate								
Dimethoate								
Dimethyl phthalate								
Di-n-butylphthalate								
Di-n-octylphthalate								
Dinoseb								
Diphenylamine								
Disulfoton								
Endosulfan I								
Endosulfan II								
Endosulfan Sulfate								
Endrin								
Endrin Aldehyde								
Ethyl Methacrylate								
Ethyl Methanesulfonate								
Ethylbenzene	<.21	<.21	<.21	<.21	<.31	<.31	<.31	
Famphur								
Fluoranthene								
Fluorene								
gamma-BHC (Lindane)								
Heptachlor								
Heptachlor Epoxide								
Hexachlorobenzene								
Hexachlorobutadiene								
Hexachlorocyclopentadiene								
Hexachloroethane								
Hexachloropropene								
Indeno[1,2,3-cd]pyrene								
Iodomethane	<.8	<.8	<.8	<.8	<7.0	<7.0	<7.0	
Iron	22100	20100	20700	34500	13700	19800	24200	
Isobutanol								
Isodrin								
Isophorone								

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

Table 9

Analytical Data Summary for MW-310

Constituents	Units	9/20/2012	3/27/2013	9/26/2013	4/16/2014	9/25/2014	3/11/2015	9/1/2015	3/22/2016
Isosafrole	ug/L	<10.0		<11.2					
Kepone	ug/L	<10.0		<11.2					
Lead	ug/L	<4.000	<4.000	<4.000	<4.000	4.760	.117	<.500	<.211
Mercury	ug/L	<.267		<.200					
Methacrylonitrile	ug/L	<1		<1					
Methapyrilene	ug/L	<10.0		<11.2					
Methoxychlor	ug/L	<.0320		<.0356					
Methyl Methacrylate	ug/L	<2		<2					
Methyl Methanesulfonate	ug/L	<10.0		<11.2					
Methyl Parathion	ug/L	<10.0		<11.2					
Methylene Chloride	ug/L	<5.000	<5.000	<5.000	<5.000	.756	<5.000	<5.000	<5.000
Naphthalene	ug/L	<5		<5					
Nickel	ug/L	400.0	205.0	196.0	294.0	183.0	247.0	140.0	429.0
Nitrobenzene	ug/L	<10.0		<11.2					
N-Nitrosodiethylamine	ug/L	<10.0		<11.2					
N-Nitrosodimethylamine	ug/L	<10.0		<11.2					
N-Nitrosodi-n-butylamine	ug/L	<10.0		<11.2					
N-Nitrosodi-n-propylamine	ug/L	<10.0		<11.2					
N-Nitrosodiphenylamine	ug/L	<10.0		<11.2					
N-Nitrosomethylethylamine	ug/L	<10.0		<11.2					
N-Nitrosopiperidine	ug/L	<10.0		<11.2					
N-Nitrosopyrrolidine	ug/L	<10.0		<11.2					
o,o,o-Triethylphosphorothioate	ug/L	<10.0		<11.2					
o-Toluidine	ug/L	<10.0		<11.2					
p-[Dimethylamino]azobenzene	ug/L	<10.0		<11.2					
Parathion	ug/L	<10.0		<11.2					
PCB-1016	ug/L	<.800		<.879					
PCB-1221	ug/L	<.800		<.879					
PCB-1232	ug/L	<.800		<.879					
PCB-1242	ug/L	<.800		<.879					
PCB-1248	ug/L	<.800		<.879					
PCB-1254	ug/L	<.800		<.879					
PCB-1260	ug/L	<.800		<.879					
Pentachlorobenzene	ug/L	<10.0		<11.2					
Pentachloronitrobenzene	ug/L	<10.0		<11.2					
Pentachlorophenol	ug/L	<10.0		<11.2					
pH	SU					5.99	6.13	6.48	6.33
Phenacetin	ug/L	<10.0		<11.2					
Phenanthrene	ug/L	<10.0		<11.2					
Phenol	ug/L	<10.0		<11.2					
Phorate	ug/L	<10.0		<11.2					
p-Phenylenediamine	ug/L	<10.0		<11.2					
Pronamide	ug/L	<10.0		<11.2					
Propionitrile	ug/L	<10		<10					
Pyrene	ug/L	<10.0		<11.2					
Safrole	ug/L	<10.0		<11.2					
Selenium	ug/L	<5.000	<5.000	<5.000	<5.000	<3.340	<15.000	<5.000	.692
Silver	ug/L	<20.000	<20.000	<20.000	<40.000	<.042	<1.000	<1.000	<.153
Styrene	ug/L	<1.00	<1.00	<1.00	<1.00	<.10	<1.00	<1.00	<1.00
Sulfate	mg/L					2990	3410	2570	3570
Sulfide	mg/L	<1		<1					
Tetrachloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.18	<1.00	<1.00	<1.00
Thallium	ug/L	<2.0000	<2.0000	<2.0000	<2.0000	.0810	.0480	<1.0000	.0360
Thionazin	ug/L	<10.0		<11.2					
Tin	ug/L	432	<100	450	<200				
Toluene	ug/L								
Total Suspended Solids	mg/L					114.00	5.67	7.67	6.50
Toxaphene	ug/L	<2.00		<2.22					
trans-1,2-Dichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	<1.00
trans-1,3-Dichloropropene	ug/L	<5.00	<5.00	<5.00	<5.00	<.22	<5.00	<5.00	<5.00
trans-1,4-Dichloro-2-butene	ug/L	<10.00	<10.00	<10.00	<10.00	<.13	<10.00	<10.00	<10.00
Trichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.19	<1.00	<1.00	<1.00
Trichlorofluoromethane	ug/L	<4.00	<4.00	<4.00	<4.00	<.17	<4.00	<4.00	<4.00
Vanadium	ug/L	<50.000	<50.000	<50.000	<100.000	<.449	<5.000	<5.000	<.255
Vinyl Acetate	ug/L	<2.00	<2.00	<2.00	<2.00	<.74	<10.00	<10.00	<10.00
Vinyl Chloride	ug/L	<1.00	<1.00	<1.00	<1.00	<.10	<1.00	<1.00	<1.00
Xylenes, Total	ug/L	<3.000	<3.000	<3.000	<3.000	<.130	<3.000	<3.000	<3.000
Zinc	ug/L	384.0	211.0	344.0	142.0	168.0	194.0	94.8	231.0

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

Table 9

Analytical Data Summary for MW-310

Constituents	10/20/2016	3/8/2017	9/27/2017	3/14/2018	10/2/2018	3/28/2019	9/24/2019	11/7/2019
Isosafrole								
Kepone								
Lead	<.211	<.324	<.324	<3.240	<.186	<.270	<.270	<.270
Mercury								
Methacrylonitrile								
Methapyrilene								
Methoxychlor								
Methyl Methacrylate								
Methyl Methanesulfonate								
Methyl Parathion								
Methylene Chloride	.186	<.170	<.170	<.170	<1.700	<1.700	<1.700	
Naphthalene								
Nickel	254.0	228.0	226.0	224.0	75.3	300.0	722.0	349.0
Nitrobenzene								
N-Nitrosodiethylamine								
N-Nitrosodimethylamine								
N-Nitrosodi-n-butylamine								
N-Nitrosodi-n-propylamine								
N-Nitrosodiphenylamine								
N-Nitrosomethylethylamine								
N-Nitrosopiperidine								
N-Nitrosopyrrolidine								
o,o,o-Triethylphosphorothioate								
o-Toluidine								
p-[Dimethylamino]azobenzene								
Parathion								
PCB-1016								
PCB-1221								
PCB-1232								
PCB-1242								
PCB-1248								
PCB-1254								
PCB-1260								
Pentachlorobenzene								
Pentachloronitrobenzene								
Pentachlorophenol								
pH	6.22	6.20	6.04	6.22	6.65	6.58	6.19	
Phenacetin								
Phenanthrene								
Phenol								
Phorate								
p-Phenylenediamine								
Pronamide								
Propionitrile								
Pyrene								
Safrole								
Selenium	<.630	2.480	2.720	<9.280	<.982	<1.000	3.370	1.850
Silver	<.153	<.140	<.700	<1.400	<.115	<.370	<.370	<.370
Styrene	<.10	<.10	<.10	<.10	<.37	<.37	<.37	
Sulfate	3370	3120	2980	2980	2920	3480	3600	
Sulfide								
Tetrachloroethene	<.18	<.18	<.18	<.18	<.48	<.48	<.48	
Thallium	.0390	<.0644	<.0644	<.6440	<.5700	<.2700	<.2700	<.2700
Thionazin								
Tin								
Toluene					<.43	<.43	<.43	
Total Suspended Solids	8.20	3.25	2.38	6.25	11.80	7.00	5.25	3.87
Toxaphene								
trans-1,2-Dichloroethene	<.21	<.21	<.21	<.21	<.27	<.27	<.27	
trans-1,3-Dichloropropene	<.22	<.22	<.22	<.22	<.56	<.56	<.56	
trans-1,4-Dichloro-2-butene	<.13	<.13	<.13	<.13	<1.10	<1.10	<1.10	
Trichloroethene	<.19	<.19	<.19	<.19	<.43	<.43	<.43	
Trichlorofluoromethane	<.17	<.17	<.17	<.17	<.38	<.38	<.38	
Vanadium	<.255	<.840	<.840	<8.400	<2.150	<.820	<1.640	<.820
Vinyl Acetate	<.74	<.74	<.74	<.74	<2.50	<2.50	<2.50	
Vinyl Chloride	<.10	<.10	<.10	<.10	<.60	<.60	<.18	
Xylenes, Total	.351	1.090	.363	<.130	<.400	<.400	<.400	
Zinc	297.0	223.0	165.0	199.0	31.6	192.0	524.0	287.0

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

Table 9

Analytical Data Summary for MW-311

Constituents	Units	9/20/2012	12/12/2012	3/28/2013	6/20/2013	9/25/2013	4/16/2014	9/1/2015
1,1,1,2-Tetrachloroethane	ug/L							<1
1,1,1-Trichloroethane	ug/L							<1
1,1,2,2-Tetrachloroethane	ug/L							<1
1,1,2-Trichloroethane	ug/L							<1
1,1-Dichloroethane	ug/L							<1
1,1-Dichloroethene	ug/L							<2
1,2,3-Trichloropropane	ug/L							<1
1,2-Dibromo-3-chloropropane	ug/L							<10
1,2-Dibromoethane	ug/L							<10
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	ug/L							<10
2-Hexanone	ug/L							<10
4-Methyl-2-pentanone	ug/L							<10
Acetone	ug/L							<10
Acrylonitrile	ug/L							<10
Alkalinity as CaCO3	mg/L							<5
Aluminum	ug/L							90
Antimony	ug/L	<6	<6	<6	<6	<6	<6	<1
Arsenic	ug/L	9.27	33.20	<2.00	<5.00	6.59	3.71	3.01
Barium	ug/L	15.30	13.00	10.90	6.35	8.88	<20.00	14.90
Benzene	ug/L							<.5
Beryllium	ug/L	<1.00	<1.00	<1.00	<1.00	.27	<1.00	<1.00
Bromochloromethane	ug/L							<5
Bromodichloromethane	ug/L							<1
Bromoform	ug/L							<5
Bromomethane	ug/L							<4
Cadmium	ug/L	<.500	<.500	.233	.244	<.500	.127	<.500
Carbon Disulfide	ug/L							<1
Carbon Tetrachloride	ug/L							<2
Chlorobenzene	ug/L							<1
Chlorodibromomethane	ug/L							<5
Chloroethane	ug/L							<4
Chloroform	ug/L							<1
Chloromethane	ug/L							<3
Chromium	ug/L	<20.00	<20.00	<20.00	<20.00	2.87	<40.00	<5.00
cis-1,2-Dichloroethene	ug/L							<1
cis-1,3-Dichloropropene	ug/L							<5
Cobalt	ug/L	247	262	260	237	258	266	309
Copper	ug/L	<20	<20	<20	<20	<20	<40	<2
Dibromomethane	ug/L							<1
Ethylbenzene	ug/L							<1
Iodomethane	ug/L							<10
Iron	ug/L							179000
Lead	ug/L	<4.000	<4.000	<4.000	4.350	2.370	<4.000	.597
Mercury	ug/L	<.267	<.200	<.200	<.200	<.200	<.200	
Methylene Chloride	ug/L							<5
Nickel	ug/L	210	241	238	235	258	258	270
pH	SU							5.78
Selenium	ug/L	<5	<5	<5	<5	<5	<5	<5
Silver	ug/L	<20	<20	<20	<20	<20	<40	<1
Styrene	ug/L							<1
Sulfate	mg/L							3120
Sulfide	mg/L				<1	<1	<1	
Tetrachloroethene	ug/L							<1
Thallium	ug/L	<2	<2	<2	<2	<2	<2	<1
Tin	ug/L	292	<100	<100	<100	419	<200	
Total Suspended Solids	mg/L							7.67
trans-1,2-Dichloroethene	ug/L							<1
trans-1,3-Dichloropropene	ug/L							<5
trans-1,4-Dichloro-2-butene	ug/L							<10
Trichloroethene	ug/L							<1
Trichlorofluoromethane	ug/L							<4
Vanadium	ug/L	<50	<50	<50	<50	<50	<100	<5
Vinyl Acetate	ug/L							<10
Vinyl Chloride	ug/L							<1
Xylenes, Total	ug/L							<3
Zinc	ug/L	188	315	328	311	438	186	278

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

Table 9

Analytical Data Summary for MW-312

Constituents	Units	9/20/2012	12/12/2012	3/28/2013	6/19/2013	9/26/2013	4/16/2014	9/1/2015	3/22/2016
1,1,1,2-Tetrachloroethane	ug/L							<1.00	<1.00
1,1,1-Trichloroethane	ug/L							<1.00	<1.00
1,1,2,2-Tetrachloroethane	ug/L							<1.00	<1.00
1,1,2-Trichloroethane	ug/L							<1.00	<1.00
1,1-Dichloroethane	ug/L							<1.00	<1.00
1,1-Dichloroethene	ug/L							<2.00	<2.00
1,2,3-Trichloropropane	ug/L							<1.00	<1.00
1,2-Dibromo-3-chloropropane	ug/L							<10.0	<10.0
1,2-Dibromoethane	ug/L							<10.00	<10.00
1,2-Dichlorobenzene	ug/L							<1.00	<1.00
1,2-Dichloroethane	ug/L							<1.00	<1.00
1,2-Dichloropropane	ug/L							<1.00	<1.00
1,4-Dichlorobenzene	ug/L							<1.00	<1.00
2-Butanone	ug/L							<10.00	<10.00
2-Hexanone	ug/L							<10.0	<10.0
4-Methyl-2-pentanone	ug/L							<10.00	<10.00
Acetone	ug/L							<10.00	<10.00
Acrylonitrile	ug/L							<10.00	<10.00
Alkalinity as CaCO3	mg/L							310	538
Aluminum	ug/L							152.0	<20.8
Antimony	ug/L	<6.000	<6.000	<6.000	<6.000	<6.000	<6.000	<1.000	<.237
Arsenic	ug/L	<1.000	<2.000	<1.000	<3.000	2.320	<1.000	<2.000	<.672
Barium	ug/L	16.60	18.50	12.30	16.70	8.47	10.70	15.40	24.90
Benzene	ug/L							<.50	<.50
Beryllium	ug/L	<1.000	<1.000	<1.000	<1.000	.280	<1.000	<1.000	<.221
Bromochloromethane	ug/L							<5.00	<5.00
Bromodichloromethane	ug/L							<1.00	<1.00
Bromoform	ug/L							<5.00	<5.00
Bromomethane	ug/L							<4.000	<4.000
Cadmium	ug/L	<.5000	<.5000	<.5000	.2460	<.5000	<.5000	<.5000	.0670
Carbon Disulfide	ug/L							<1.00	<1.00
Carbon Tetrachloride	ug/L							<2.00	<2.00
Chlorobenzene	ug/L							<1.00	<1.00
Chlorodibromomethane	ug/L							<5.00	<5.00
Chloroethane	ug/L							<4.00	<4.00
Chloroform	ug/L							<1.00	<1.00
Chloromethane	ug/L							<3.00	<3.00
Chromium	ug/L	<20.000	<20.000	<20.000	<20.000	3.900	<20.000	<5.000	<.355
cis-1,2-Dichloroethene	ug/L							<1.00	<1.00
cis-1,3-Dichloropropene	ug/L							<5.00	<5.00
Cobalt	ug/L	36.2	34.3	54.5	43.7	44.9	20.8	32.4	37.1
Copper	ug/L	<20.00	<20.00	2.19	<20.00	<20.00	<20.00	<2.00	<1.22
Dibromomethane	ug/L							<1.00	<1.00
Dichlorodifluoromethane	ug/L								
Ethylbenzene	ug/L							<1.00	<1.00
Iodomethane	ug/L							<10.0	<10.0
Iron	ug/L							46400	3180
Lead	ug/L	<4.000	<4.000	<4.000	1.670	<4.000	<4.000	<.500	<.211
Mercury	ug/L	<.267	<.200	<.200	<.200	<.200	<.200		
Methylene Chloride	ug/L							<5.000	<5.000
Nickel	ug/L	89.5	82.0	121.0	119.0	117.0	101.0	108.0	45.0
pH	SU							6.39	6.36
Selenium	ug/L	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000	<.630
Silver	ug/L	<20.000	<20.000	<20.000	<20.000	<20.000	<20.000	<1.000	<.153
Styrene	ug/L							<1.00	<1.00
Sulfate	mg/L							2260	530
Sulfide	mg/L				<1.000	<1.000	<1.000		
Tetrachloroethene	ug/L							<1.00	<1.00
Thallium	ug/L	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<2.0000	<1.0000	.0650
Tin	ug/L	<100.000	<100.000	<100.000	<100.000	572.000	<100.000		
Toluene	ug/L								
Total Suspended Solids	mg/L							32.00	5.00
trans-1,2-Dichloroethene	ug/L							<1.00	<1.00
trans-1,3-Dichloropropene	ug/L							<5.00	<5.00
trans-1,4-Dichloro-2-butene	ug/L							<10.00	<10.00
Trichloroethene	ug/L							<1.00	<1.00
Trichlorofluoromethane	ug/L							<4.00	<4.00
Vanadium	ug/L	<50.000	<50.000	<50.000	<50.000	<50.000	<50.000	<5.000	<.255
Vinyl Acetate	ug/L							<10.00	<10.00
Vinyl Chloride	ug/L							<1.00	<1.00
Xylenes, Total	ug/L							<3.000	<3.000
Zinc	ug/L	<20.0	85.0	84.9	70.1	209.0	<60.0	<10.0	6.8

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

Table 9

Analytical Data Summary for MW-312

Constituents	10/21/2016	3/8/2017	9/25/2017	3/13/2018	10/1/2018	3/27/2019	9/23/2019	3/9/2020	9/15/2020
1,1,1,2-Tetrachloroethane	<.21	<.21	<.21	<.21	<.38	<.38	<.38	<.38	<.38
1,1,1-Trichloroethane	<.12	<.12	<.12	<.12	<.19	<.19	<.19	<.19	<.19
1,1,2,2-Tetrachloroethane	<.10	<.10	<.10	<.10	<.47	<.47	<.47	<.47	<.47
1,1,2-Trichloroethane	<.12	<.12	<.12	<.12	<.45	<.45	<.45	<.45	<.45
1,1-Dichloroethane	<.21	<.21	<.21	<.21	<.22	<.22	<.22	<.22	<.22
1,1-Dichloroethene	<.15	<.15	<.15	<.15	<.56	<.56	<.56	<.56	<.56
1,2,3-Trichloropropane	<.19	<.19	<.19	<.19	<.59	<.59	<.59	<.59	<.59
1,2-Dibromo-3-chloropropane	<.5	<.5	<.5	<.5	<1.2	<1.2	<1.2	<1.2	<1.2
1,2-Dibromoethane	<.13	<.13	<.13	<.13	<.34	<.34	<.34	<.34	<.34
1,2-Dichlorobenzene	<.14	<.14	<.14	<.14	<.37	<.37	<.37	<.37	<.37
1,2-Dichloroethane	<.18	<.18	<.18	<.18	<.39	<.39	<.39	<.39	<.39
1,2-Dichloropropane	<.87	<.87	<.87	<.87	<.27	<.27	<.27	<.27	<.27
1,4-Dichlorobenzene	<.20	<.20	<.20	<.20	<.23	<.23	<.23	<.23	<.23
2-Butanone	<1.04	<1.04	<1.04	<1.04	<2.10	<2.10	<2.10	<2.10	<2.10
2-Hexanone	<.2	<.2	<.2	<.2	<2.0	<2.0	<2.0	<2.0	<2.0
4-Methyl-2-pentanone	<.22	<.22	<.22	<.22	<2.10	<2.10	<2.10	<2.10	<2.10
Acetone	<1.79	2.39	<1.79	<1.79	<3.10	<3.10	<3.10	<3.10	<3.10
Acrylonitrile	<.53	<.53	<.53	<.53	<2.20	<2.20	<2.20	<2.20	<2.20
Alkalinity as CaCO3	371	376	366	362	371	350	297	342	367
Aluminum	85.9	64.1	47.6	<165.0	27.0	44.5	35.4	<30.0	92.6
Antimony	<.237	<.185	<.185	<.740	<1.320	<.530	<.530	<.580	<.510
Arsenic	1.430	1.020	1.230	<2.020	1.840	1.130	1.220	<.880	2.150
Barium	13.80	14.10	16.50	12.80	13.40	14.60	11.10	14.90	13.60
Benzene	<.11	<.11	<.11	<.11	<.22	<.22	<.22	<.22	<.22
Beryllium	<.221	.143	.198	<.500	<.530	<.270	.318	<.270	<.270
Bromochloromethane	<.12	<.12	<.12	<.12	<.54	<.54	<.54	<.54	<.54
Bromodichloromethane	<.12	<.12	<.12	<.12	<.39	<.39	<.39	<.39	<.39
Bromoform	<.14	<.14	<.14	<.14	<.78	<.78	<.78	<.78	<.78
Bromomethane	<.220	<.220	.233	<.220	<1.100	<1.100	<1.100	<1.100	<1.100
Cadmium	<.0351	<.0441	<.0441	<.1760	<.1670	<.0770	<.0390	.0680	<.0490
Carbon Disulfide	<.15	<.15	<.15	<.15	<.45	<.45	<.45	<.45	<.45
Carbon Tetrachloride	<.24	<.24	<.24	<.24	<.65	<.65	<.65	<.65	<.65
Chlorobenzene	<.19	<.19	<.19	<.19	<.40	<.40	<.40	<.40	<.40
Chlorodibromomethane	<.20	<.20	<.20	<.20	<.75	<.75	<.75	<.75	<.75
Chloroethane	<.15	<.15	<.15	<.15	<.79	<.79	<.79	<.79	<.79
Chloroform	<.28	<.28	<.28	<.28	<1.30	<1.30	<1.30	<1.30	<1.30
Chloromethane	<.31	<.31	<.31	<.31	<.61	<.61	<.61	<.61	<.61
Chromium	<.355	<.729	<.729	<2.920	1.260	<.980	<.980	<1.100	<1.100
cis-1,2-Dichloroethene	<.13	<.13	<.13	<.13	<.21	<.21	<.21	<.21	<.21
cis-1,3-Dichloropropene	<.15	<.15	<.15	<.15	<.25	<.25	<.25	<.25	<.25
Cobalt	36.4	35.0	30.3	24.1	29.8	32.7	34.9	34.7	41.4
Copper	<1.22	<2.19	<2.19	<8.76	1.18	<2.00	<2.00	<3.20	<1.50
Dibromomethane	<.18	<.18	<.18	<.18	<.33	<.33	<.33	<.33	<.33
Dichlorodifluoromethane	<.20	<.20	<.20	<.20	<.25		<.25		
Ethylbenzene	<.21	<.21	<.21	<.21	<.31	<.31	<.31	<.31	<.31
Iodomethane	<.8	<.8	<.8	<.8	<7.0	<7.0	<7.0	<7.0	<7.0
Iron	32000	40300	33000	39000	34400	38100	47400	24800	39300
Lead	<.211	<.324	<.324	<1.300	<.186	<.270	.274	<.270	.177
Mercury									
Methylene Chloride	.295	<.170	<.170	.334	<1.700	<1.700	<1.700	<1.700	<1.700
Nickel	94.4	100.0	80.1	88.8	91.6	101.0	120.0	85.8	119.0
pH	6.23	6.36	6.40	6.37	6.56	6.28	6.28	6.34	6.25
Selenium	<.630	<.928	<.928	<3.710	<.982	<1.000	<1.000	<1.000	<1.000
Silver	<.153	<.140	<.140	<.560	<.115	<.370	<.370	<.370	<.370
Styrene	<.10	<.10	<.10	<.10	<.37	<.37	<.37	<.37	<.37
Sulfate	2210	2450	2160	2350	2240	2080	2260	1650	2240
Sulfide	<.180	<.180	1.530	<.231	<.231	<.231	<.231	<.231	10.000
Tetrachloroethene	<.18	<.18	<.18	<.18	<.48	<.48	<.48	<.48	<.48
Thallium	<.0255	<.0644	<.0644	<.2580	<.5700	<.2700	<.2700	<.2600	<.2600
Tin	<.832	<1.620	<1.620	<6.480	<1.300	<1.800	<1.800		
Toluene					<.43	<.43	<.43	<.43	<.43
Total Suspended Solids	13.50	11.50	8.12	11.50	7.62	6.12	37.00	3.87	34.80
trans-1,2-Dichloroethene	<.21	<.21	<.21	<.21	<.27	<.27	<.27	<.27	<.27
trans-1,3-Dichloropropene	<.22	<.22	<.22	<.22	<.56	<.56	<.56	<.56	<.56
trans-1,4-Dichloro-2-butene	<.13	<.13	<.13	<.13	<1.10	<1.10	<1.10	<1.10	<1.10
Trichloroethene	<.19	<.19	<.19	<.19	<.43	<.43	<.43	<.43	<.43
Trichlorofluoromethane	<.17	<.17	<.17	<.17	<.38	<.38	<.38	<.38	<.38
Vanadium	<.255	<.840	<.840	<3.360	<2.150	<.820	<.820	<.820	<.850
Vinyl Acetate	<.74	<.74	<.74	<.74	<2.50	<2.50	<2.50	<2.50	<2.50
Vinyl Chloride	<.10	<.10	<.10	<.10	<.60	<.60	<.18	<.18	<.18
Xylenes, Total	<.130	.654	<.130	<.130	<.400	<.400	<.400	<.400	<.400
Zinc	12.3	17.6	<11.5	<46.0	10.0	<10.0	<10.0	<10.0	12.9

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

Table 9

Analytical Data Summary for MW-312

Constituents	4/15/2021	10/27/2021	4/14/2022	9/1/2022	3/6/2023	9/29/2023
1,1,1,2-Tetrachloroethane	<.38	<.38	<.38	<1.00	<1.00	<1.00
1,1,1-Trichloroethane	<.19	<.19	<.19	<1.00	<1.00	<1.00
1,1,2,2-Tetrachloroethane	<.47	<.47	<.47	<1.00	<1.00	<1.00
1,1,2-Trichloroethane	<.45	<.45	<.45	<1.00	<1.00	<1.00
1,1-Dichloroethane	<.22	<.22	<.22	<1.00	<1.00	<1.00
1,1-Dichloroethene	<.56	<.56	<.56	<1.00	<1.00	<1.00
1,2,3-Trichloropropane	<.59	<.59	<.59	<1.00	<1.00	<1.00
1,2-Dibromo-3-chloropropane	<1.2	<1.2	<1.2	<5.0	<5.0	<5.0
1,2-Dibromoethane	<.34	<.34	<.34	<1.00	<1.00	<1.00
1,2-Dichlorobenzene	<.37	<.37	<.37	<1.00	<1.00	<1.00
1,2-Dichloroethane	<.39	<.39	<.39	<1.00	<1.00	<1.00
1,2-Dichloropropane	<.27	<.27	<.27	<1.00	<1.00	<1.00
1,4-Dichlorobenzene	<.23	<.23	<.23	<1.00	<1.00	<1.00
2-Butanone	<2.10	<2.10	<2.10	<10.00	<10.00	<10.00
2-Hexanone	<2.0	<2.0	<2.0	<5.0	<5.0	<5.0
4-Methyl-2-pentanone	<2.10	<2.10	<2.10	<5.00	<5.00	<5.00
Acetone	<3.10	<3.10	<3.10	<10.00	<10.00	<10.00
Acrylonitrile	<2.20	<2.20	<2.20	<5.00	<5.00	<5.00
Alkalinity as CaCO3	327	481	353	325	328	312
Aluminum	28.4	27.1	286.0	193.0	92.0	53.0
Antimony	<1.100	<1.100	<2.760	<2.000	<2.000	<2.000
Arsenic	1.280	1.290	<3.000	<4.000	<4.000	<4.000
Barium	12.50	11.90	14.60	23.90	25.30	22.90
Benzene	<.22	<.22	<.22	<1.00	<1.00	<1.00
Beryllium	.312	.275	<1.080	<4.000	<4.000	<4.000
Bromochloromethane	<.54	<.54	<.54	<1.00	<1.00	<1.00
Bromodichloromethane	<.39	<.39	<.39	<1.00	<1.00	<1.00
Bromoform	<.78	<.78	<.78	<1.00	<1.00	<1.00
Bromomethane	<1.100	<1.100	<1.100	<1.000	<1.000	<1.000
Cadmium	<.0510	<.0510	<.2200	<.8000	<.8000	<.8000
Carbon Disulfide	<.45	<.45	<.45	<1.00	<1.00	<1.00
Carbon Tetrachloride	<.65	<.65	<.65	<1.00	<1.00	<1.00
Chlorobenzene	<.40	<.40	<.40	<1.00	<1.00	<1.00
Chlorodibromomethane	<.75	<.75	<.75	<1.00	<1.00	<1.00
Chloroethane	<.79	<.79	<.79	<1.00	<1.00	<1.00
Chloroform	<1.30	<1.30	<1.30	<1.00	<1.00	<1.00
Chloromethane	<.61	<.61	<.61	<1.00	<1.00	<1.00
Chromium	<1.100	<1.100	<4.400	<8.000	<8.000	<8.000
cis-1,2-Dichloroethene	<.21	<.21	<.21	<1.00	<1.00	<1.00
cis-1,3-Dichloropropene	<.25	<.25	<.25	<1.00	<1.00	<1.00
Cobalt	52.3	38.6	47.4	34.0	44.8	42.9
Copper	<1.40	<1.40	7.99	<4.00	<4.00	<4.00
Dibromomethane	<.33	<.33	<.33	<1.00	<1.00	<1.00
Dichlorodifluoromethane						
Ethylbenzene	<.31	<.31	<.31	<1.00	<1.00	<1.00
Iodomethane	<7.0	<7.0	<7.0	<1.0	<1.0	<1.0
Iron	50200	50300	46100	4070	5270	800
Lead	<.210	1.410	<.960	<4.000	<4.000	<4.000
Mercury						
Methylene Chloride	<1.700	<1.700	<1.700	<5.000	<5.000	<5.000
Nickel	150.0	128.0	141.0	64.5	64.8	72.1
pH	6.30	6.34	6.39	6.20	6.20	6.10
Selenium	<.960	<.960	<3.840	<4.000	<4.000	<4.000
Silver	<.420	<.420	<1.960	<4.000	<4.000	<4.000
Styrene	<.37	<.37	<.37	<1.00	<1.00	<1.00
Sulfate	2480	2320	2310	907	373	422
Sulfide	14.700	<.231	<.231	<.100		
Tetrachloroethene	<.48	<.48	<.48	<1.00	<1.00	<1.00
Thallium	<.2600	<.2600	<1.0400	<2.0000	<2.0000	<2.0000
Tin						
Toluene	<.43	<.43	<.43	<1.00	<1.00	<1.00
Total Suspended Solids	12.50	29.10	140.00			
trans-1,2-Dichloroethene	<.27	<.27	<.27	<1.00	<1.00	<1.00
trans-1,3-Dichloropropene	<.56	<.56	<.56	<1.00	<1.00	<1.00
trans-1,4-Dichloro-2-butene	<1.10	<1.10	<1.10	<5.00	<5.00	<5.00
Trichloroethene	<.43	<.43	<.43	<1.00	<1.00	<1.00
Trichlorofluoromethane	<.38	<.38	<.38	<1.00	<1.00	<1.00
Vanadium	<1.100	<1.100	<4.400	<20.000	<20.000	<20.000
Vinyl Acetate	<2.50	<2.50	<2.50	<5.00	<5.00	<5.00
Vinyl Chloride	<.18	<.18	<.18	<1.00	<1.00	<1.00
Xylenes, Total	<.400	1.050	<.400	<2.000	<2.000	<2.000
Zinc	<10.0	<10.0	<40.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-313

Constituents	Units	9/18/2012	3/28/2013	9/25/2013	4/16/2014	9/26/2014	3/11/2015	9/2/2015	3/22/2016
1,1,1,2-Tetrachloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	<1.00
1,1,1-Trichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.12	<1.00	<1.00	<1.00
1,1,2,2-Tetrachloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.10	<1.00	<1.00	<1.00
1,1,2-Trichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.12	<1.00	<1.00	<1.00
1,1-Dichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	<1.00
1,1-Dichloroethene	ug/L	<2.00	<2.00	<2.00	<2.00	<.15	<2.00	<2.00	<2.00
1,1-Dichloropropene	ug/L	<1		<1					
1,2,3-Trichloropropane	ug/L	<1.00	<1.00	<1.00	<1.00	<.19	<1.00	<1.00	<1.00
1,2,4,5-Tetrachlorobenzene	ug/L	<10.0		<10.3					
1,2,4-Trichlorobenzene	ug/L	<5		<5					
1,2-Dibromo-3-chloropropane	ug/L	<10.00	<10.00	<10.00	<10.00	<.12	<10.00	<10.00	<10.00
1,2-Dibromoethane	ug/L	<10.00	<10.00	<10.00	<10.00	<.13	<10.00	<10.00	<10.00
1,2-Dichlorobenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.14	<1.00	<1.00	<1.00
1,2-Dichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.18	<1.00	<1.00	<1.00
1,2-Dichloropropane	ug/L	<1.00	<1.00	<1.00	<1.00	<.87	<1.00	<1.00	<1.00
1,3,5-Trinitrobenzene	ug/L	<10.0		<10.3					
1,3-Dichlorobenzene	ug/L	<1		<1					
1,3-Dichloropropane	ug/L	<1		<1					
1,3-Dinitrobenzene	ug/L	<10.0		<10.3					
1,4-Dichlorobenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.20	<1.00	<1.00	<1.00
1,4-Naphthoquinone	ug/L	<10.0		<10.3					
1-Naphthylamine	ug/L	<10.0		<10.3					
2,2`-oxybis[1-Chloropropane]	ug/L	<10.0		<10.3					
2,2-Dichloropropane	ug/L	<4		<4					
2,3,4,6-Tetrachlorophenol	ug/L	<10.0		<10.3					
2,4,5-T	ug/L	<1.00		<1.09					
2,4,5-TP [Silvex]	ug/L	<1.00		<1.09					
2,4,5-Trichlorophenol	ug/L	<10.0		<10.3					
2,4,6-Trichlorophenol	ug/L	<10.0		<10.3					
2,4-D	ug/L	<1.00		<1.09					
2,4-Dichlorophenol	ug/L	<10.0		<10.3					
2,4-Dimethylphenol	ug/L	<10.0		<10.3					
2,4-Dinitrophenol	ug/L	<20.0		<20.6					
2,4-Dinitrotoluene	ug/L	<10.0		<10.3					
2,6-Dichlorophenol	ug/L	<10.0		<10.3					
2,6-Dinitrotoluene	ug/L	<10.0		<10.3					
2-Acetylaminofluorene	ug/L	<10.0		<10.3					
2-Butanone	ug/L	<10.00	<10.00	<10.00	<10.00	<.47	<10.00	<10.00	<10.00
2-Chloronaphthalene	ug/L	<10.0		<10.3					
2-Chlorophenol	ug/L	<10.0		<10.3					
2-Hexanone	ug/L	<10.0	<10.0	<10.0	<10.0	<.2	<10.0	<10.0	<10.0
2-Methylnaphthalene	ug/L	<10.0		<10.3					
2-Methylphenol [o-Cresol]	ug/L	<10.0		<10.3					
2-Naphthylamine	ug/L	<10.0		<10.3					
2-Nitroaniline	ug/L	<10.0		<10.3					
2-Nitrophenol	ug/L	<10.0		<10.3					
3,3-Dichlorobenzidine	ug/L	<10.0		<51.5					
3,3-Dimethylbenzidine	ug/L	<10.0		<10.3					
3-Methylcholanthrene	ug/L	<10.0		<10.3					
3-Nitroaniline	ug/L	<10.0		<10.3					
4,4`-DDD	ug/L	<.03200		.00214					
4,4`-DDE	ug/L	<.0320		.0032					
4,4`-DDT	ug/L	<.0320		<.0333					
4,6-Dinitro-2-methylphenol	ug/L	<10.0		<10.3					
4-Aminobiphenyl	ug/L	<10.0		<10.3					
4-Bromophenyl phenyl ether	ug/L	<10.0		<10.3					
4-Chloro-3-methylphenol	ug/L	<10.0		<10.3					
4-Chloroaniline	ug/L	<10.0		<10.3					
4-Chlorophenyl phenyl ether	ug/L	<10.0		<10.3					
4-Methyl-2-pentanone	ug/L	<10.00	<10.00	<10.00	<10.00	<.22	<10.00	<10.00	<10.00
4-Nitroaniline	ug/L	<10.0		<10.3					
4-Nitrophenol	ug/L	<10.0		<10.3					
5-Nitro-o-toluidine	ug/L	<10.0		<10.3					
7,12-Dimethylbenz[a]anthracene	ug/L	<10.0		<10.3					
Acenaphthene	ug/L	<10.0		<10.3					
Acetone	ug/L	<10.00	<10.00	<10.00	<10.00	1.88	<10.00	<10.00	<10.00
Acetonitrile	ug/L	<10000		<10000					
Acetophenone	ug/L	<10.0		<10.3					
Acrolein	ug/L	<10		<10					
Acrylonitrile	ug/L	<10.00	<10.00	<10.00	<10.00	<.53	<10.00	<10.00	<10.00
Aldrin	ug/L	<.0320		<.0333					
Alkalinity as CaCO3	mg/L					330	724	583	582
Allyl Chloride	ug/L	<20		<2					
alpha-BHC	ug/L	<.03200		.00451					
Aluminum	ug/L					172.0	<50.0	<50.0	50.3
Anthracene	ug/L	<10.0		<10.3					
Antimony	ug/L	<12.000	<6.000		<6.000	.223	<1.000	<1.000	.329

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

Table 9

Analytical Data Summary for MW-313

Constituents	10/21/2016	3/8/2017	9/25/2017	3/13/2018	10/1/2018	3/27/2019	9/23/2019	3/10/2020	9/16/2020
1,1,1,2-Tetrachloroethane	<.21	<.21	<.21	<.21	<.38	<.38	<.38	<.38	<.38
1,1,1-Trichloroethane	<.12	<.12	<.12	<.12	<.19	<.19	<.19	<.19	<.19
1,1,2,2-Tetrachloroethane	<.10	<.10	<.10	<.10	<.47	<.47	<.47	<.47	<.47
1,1,2-Trichloroethane	<.12	<.12	<.12	<.12	<.45	<.45	<.45	<.45	<.45
1,1-Dichloroethane	<.21	<.21	<.21	<.21	<.22	<.22	<.22	<.22	<.22
1,1-Dichloroethene	<.15	<.15	<.15	<.15	<.56	<.56	<.56	<.56	<.56
1,1-Dichloropropene									
1,2,3-Trichloropropane	<.19	<.19	<.19	<.19	<.59	<.59	<.59	<.59	<.59
1,2,4,5-Tetrachlorobenzene									
1,2,4-Trichlorobenzene									
1,2-Dibromo-3-chloropropane	<.50	<.50	<.50	<.50	<1.20	<1.20	<1.20	<1.20	<1.20
1,2-Dibromoethane	<.13	<.13	<.13	<.13	<.34	<.34	<.34	<.34	<.34
1,2-Dichlorobenzene	<.14	<.14	<.14	<.14	<.37	<.37	<.37	<.37	<.37
1,2-Dichloroethane	<.18	<.18	<.18	<.18	<.39	<.39	<.39	<.39	<.39
1,2-Dichloropropane	<.87	<.87	<.87	<.87	<.27	<.27	<.27	<.27	<.27
1,3,5-Trinitrobenzene									
1,3-Dichlorobenzene									
1,3-Dichloropropane									
1,3-Dinitrobenzene									
1,4-Dichlorobenzene	<.20	<.20	<.20	<.20	<.23	<.23	<.23	<.23	<.23
1,4-Naphthoquinone									
1-Naphthylamine									
2,2`-oxybis[1-Chloropropane]									
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	<1.04	<1.04	<1.04	<1.04	<2.10	<2.10	<2.10	<2.10	<2.10
2-Chloronaphthalene									
2-Chlorophenol									
2-Hexanone	<.2	<.2	<.2	<.2	<2.0	<2.0	<2.0	<2.0	<2.0
2-Methylnaphthalene									
2-Methylphenol [o-Cresol]									
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	<.22	<.22	<.22	<.22	<2.10	<2.10	<2.10	<2.10	<2.10
4-Nitroaniline									
4-Nitrophenol									
5-Nitro-o-toluidine									
7,12-Dimethylbenz[a]anthracene									
Acenaphthene									
Acetone	<1.79	1.87	2.76	<1.79	<3.10	3.82	<3.10	<3.10	<3.10
Acetonitrile									
Acetophenone									
Acrolein									
Acrylonitrile	<.53	<.53	<.53	<.53	<2.20	<2.20	<2.20	<2.20	<2.20
Aldrin									
Alkalinity as CaCO3	551	556	484	443	448	520	545	475	551
Allyl Chloride									
alpha-BHC									
Aluminum	<20.8	<41.3	<41.3	<41.3	65.7	<27.0	<27.0	<30.0	13.0
Anthracene									
Antimony	<.237	.189	<.185	.309	<1.320	<.530	<.530	<.580	<.510

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

Table 9

Analytical Data Summary for MW-313

Constituents	4/15/2021	10/26/2021	4/14/2022	9/1/2022	3/6/2023	9/29/2023
1,1,1,2-Tetrachloroethane	<.38	<.38	<.38	<1.00	<1.00	<1.00
1,1,1-Trichloroethane	<.19	<.19	<.19	<1.00	<1.00	<1.00
1,1,2,2-Tetrachloroethane	<.47	<.47	<.47	<1.00	<1.00	<1.00
1,1,2-Trichloroethane	<.45	<.45	<.45	<1.00	<1.00	<1.00
1,1-Dichloroethane	<.22	<.22	<.22	<1.00	<1.00	<1.00
1,1-Dichloroethene	<.56	<.56	<.56	<1.00	<1.00	<1.00
1,1-Dichloropropene						
1,2,3-Trichloropropane	<.59	<.59	<.59	<1.00	<1.00	<1.00
1,2,4,5-Tetrachlorobenzene						
1,2,4-Trichlorobenzene						
1,2-Dibromo-3-chloropropane	<1.20	<1.20	<1.20	<5.00	<5.00	<5.00
1,2-Dibromoethane	<.34	<.34	<.34	<1.00	<1.00	<1.00
1,2-Dichlorobenzene	<.37	<.37	<.37	<1.00	<1.00	<1.00
1,2-Dichloroethane	<.39	<.39	<.39	<1.00	<1.00	<1.00
1,2-Dichloropropane	<.27	<.27	<.27	<1.00	<1.00	<1.00
1,3,5-Trinitrobenzene						
1,3-Dichlorobenzene						
1,3-Dichloropropane						
1,3-Dinitrobenzene						
1,4-Dichlorobenzene	<.23	<.23	<.23	<1.00	<1.00	<1.00
1,4-Naphthoquinone						
1-Naphthylamine						
2,2`-oxybis[1-Chloropropane]						
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	<2.10	<2.10	<2.10	<10.00	<10.00	<10.00
2-Chloronaphthalene						
2-Chlorophenol						
2-Hexanone	<2.0	<2.0	<2.0	<5.0	<5.0	<5.0
2-Methylnaphthalene						
2-Methylphenol [o-Cresol]						
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	<2.10	<2.10	<2.10	<5.00	<5.00	<5.00
4-Nitroaniline						
4-Nitrophenol						
5-Nitro-o-toluidine						
7,12-Dimethylbenz[a]anthracene						
Acenaphthene						
Acetone	<3.10	<3.10	<3.10	<10.00	<10.00	<10.00
Acetonitrile						
Acetophenone						
Acrolein						
Acrylonitrile	<2.20	<2.20	<2.20	<5.00	<5.00	<5.00
Aldrin						
Alkalinity as CaCO3	465	587	539	484	472	478
Allyl Chloride						
alpha-BHC						
Aluminum	94.9	65.1	76.7	<100.0	<50.0	115.0
Anthracene						
Antimony	<1.100	<1.100	<2.760	<2.000	<2.000	<2.000

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

Table 9

Analytical Data Summary for MW-313

Constituents	Units	9/18/2012	3/28/2013	9/25/2013	4/16/2014	9/26/2014	3/11/2015	9/2/2015	3/22/2016
Arsenic	ug/L	4.57	3.60	<1.00	10.90	25.70	1.49	<2.00	13.50
Barium	ug/L	40.1	51.7	15.6	30.4	61.3	26.0	16.2	28.1
Benzene	ug/L	<.50	<.50	<.50	<.50	<.11	<.50	<.50	<.50
Benzo[a]anthracene	ug/L	<10.0		<10.3					
Benzo[a]pyrene	ug/L	<10.0		<10.3					
Benzo[b]fluoranthene	ug/L	<10.0		<10.3					
Benzo[ghi]perylene	ug/L	<10.0		<10.3					
Benzo[k]fluoranthene	ug/L	<10.0		<10.3					
Benzyl alcohol	ug/L	<10.0		<10.3					
Beryllium	ug/L	<1.000	<1.000	<1.000	<1.000	.199	<1.000	<1.000	<.221
beta-BHC	ug/L	<.03200		.00598					
Bis(2-chloroethoxy)methane	ug/L	<10.0		<10.3					
Bis(2-chloroethyl)ether	ug/L	<10.0		<10.3					
Bis(2-ethylhexyl)phthalate	ug/L	<10.0		<10.3					
Bromochloromethane	ug/L	<5.00	<5.00	<5.00	<5.00	<.12	<5.00	<5.00	<5.00
Bromodichloromethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.12	<1.00	<1.00	<1.00
Bromoform	ug/L	<5.00	<5.00	<5.00	<5.00	<.14	<5.00	<5.00	<5.00
Bromomethane	ug/L	<20.000	<4.000	<4.000	<4.000	<.220	<4.000	<4.000	<4.000
Butylbenzylphthalate	ug/L	<10.0		<10.3					
Cadmium	ug/L	<.5000	<.5000	<.5000	<.5000	.1320	<.5000	<.5000	.0860
Carbon Disulfide	ug/L	<1.00	<1.00	<1.00	<1.00	<.15	<1.00	<1.00	<1.00
Carbon Tetrachloride	ug/L	<2.00	<2.00	<2.00	<2.00	<.24	<2.00	<2.00	<2.00
Chlordane	ug/L	<2.00		<2.08					
Chlorobenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.19	<1.00	<1.00	<1.00
Chlorobenzilate	ug/L	<10.0		<10.3					
Chlorodibromomethane	ug/L	<5.00	<5.00	<5.00	<5.00	<.20	<5.00	<5.00	<5.00
Chloroethane	ug/L	<4.00	<4.00	<4.00	<4.00	<.15	<4.00	<4.00	<4.00
Chloroform	ug/L	<1.00	<1.00	<1.00	<1.00	<.28	<1.00	<1.00	<1.00
Chloromethane	ug/L	<3.000	<3.000	<3.000	<3.000	<.310	<3.000	<3.000	<3.000
Chloroprene	ug/L	<1		<1					
Chromium	ug/L	<20.000	<20.000	2.980	<20.000	<1.240	<5.000	<5.000	.655
Chrysene	ug/L	<10.0		<10.3					
cis-1,2-Dichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.13	<1.00	<1.00	<1.00
cis-1,3-Dichloropropene	ug/L	<5.00	<5.00	<5.00	<5.00	<.15	<5.00	<5.00	<5.00
Cobalt	ug/L	4.640	3.020	<7.000	<7.000	9.690	7.370	2.150	17.400
Copper	ug/L	<20.00	<20.00	<20.00	<20.00	2.99	<2.00	<2.00	1.68
Cyanide	mg/L	<.01		<.01					
delta-BHC	ug/L	<.03200		.00444					
Diallate	ug/L	<10.0		<10.3					
Dibenzo(a,h)anthracene	ug/L	<10.0		<10.3					
Dibenzofuran	ug/L	<10.0		<10.3					
Dibromomethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.18	<1.00	<1.00	<1.00
Dichlorodifluoromethane	ug/L	<3		<3					
Dieldrin	ug/L	<.0320		<.0333					
Diethyl phthalate	ug/L	<10.0		<10.3					
Dimethoate	ug/L	<10.0		<10.3					
Dimethyl phthalate	ug/L	<10.0		<10.3					
Di-n-butylphthalate	ug/L	<10.0		<10.3					
Di-n-octylphthalate	ug/L	<10.0		<20.6					
Dinoseb	ug/L	<10.0		<10.3					
Diphenylamine	ug/L	<10.0		<10.3					
Disulfoton	ug/L	<10.0		<10.3					
Endosulfan I	ug/L	<.0320		<.0333					
Endosulfan II	ug/L	<.0320		<.0333					
Endosulfan Sulfate	ug/L	<.0320		<.0333					
Endrin	ug/L	<.0320		<.0333					
Endrin Aldehyde	ug/L	<.0320		<.0333					
Ethyl Methacrylate	ug/L	<2		<2					
Ethyl Methanesulfonate	ug/L	<10.0		<10.3					
Ethylbenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	<1.00
Famphur	ug/L	<20.0		<20.6					
Fluoranthene	ug/L	<10.0		<10.3					
Fluorene	ug/L	<10.0		<10.3					
gamma-BHC (Lindane)	ug/L	<.0320		<.0333					
Heptachlor	ug/L	<.0320		<.0333					
Heptachlor Epoxide	ug/L	<.0320		<.0333					
Hexachlorobenzene	ug/L	<10.0		<10.3					
Hexachlorobutadiene	ug/L	<10.0		<10.3					
Hexachlorocyclopentadiene	ug/L	<10.0		<20.6					
Hexachloroethane	ug/L	<10.0		<10.3					
Hexachloropropene	ug/L	<10.0		<10.3					
Indeno[1,2,3-cd]pyrene	ug/L	<10.0		<10.3					
Iodomethane	ug/L	<10.00	<10.00	<10.00	<10.00	<.80	<10.00	<10.00	<10.00
Iron	ug/L					47600	1310	589	17900
Isobutanol	ug/L	<10000		<10000					
Isodrin	ug/L	<10.0		<10.3					
Isophorone	ug/L	<10.0		<10.3					

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

Table 9

Analytical Data Summary for MW-313

Constituents	10/21/2016	3/8/2017	9/25/2017	3/13/2018	10/1/2018	3/27/2019	9/23/2019	3/10/2020	9/16/2020
Arsenic	1.54	6.87	7.49	1.26	2.19	3.17	3.04	4.79	2.64
Barium	16.4	24.7	20.7	15.7	15.3	23.5	24.4	17.3	22.0
Benzene	<.11	<.11	<.11	<.11	<.22	<.22	<.22	<.22	<.22
Benzo[a]anthracene									
Benzo[a]pyrene									
Benzo[b]fluoranthene									
Benzo[ghi]perylene									
Benzo[k]fluoranthene									
Benzyl alcohol									
Beryllium	<.221	<.125	<.125	<.125	<.530	<.270	<.270	<.270	<.270
beta-BHC									
Bis(2-chloroethoxy)methane									
Bis(2-chloroethyl)ether									
Bis(2-ethylhexyl)phthalate									
Bromochloromethane	<.12	<.12	<.12	<.12	<.54	<.54	<.54	<.54	<.54
Bromodichloromethane	<.12	<.12	<.12	<.12	<.39	<.39	<.39	<.39	<.39
Bromoform	<.14	<.14	<.14	<.14	<.78	<.78	<.78	<.78	<.78
Bromomethane	2.660	<.220	.344	<.220	<1.100	<1.100	<1.100	<1.100	<1.100
Butylbenzylphthalate									
Cadmium	<.0351	.0510	.0560	<.0441	<.1670	.1190	.1640	.0500	<.0490
Carbon Disulfide	<.15	<.15	<.15	<.15	<.45	<.45	<.45	<.45	<.45
Carbon Tetrachloride	<.24	<.24	<.24	<.24	<.65	<.65	<.65	<.65	<.65
Chlordane									
Chlorobenzene	<.19	<.19	<.19	<.19	<.40	<.40	<.40	<.40	<.40
Chlorobenzilate									
Chlorodibromomethane	<.20	<.20	<.20	<.20	<.75	<.75	<.75	<.75	<.75
Chloroethane	<.15	<.15	<.15	<.15	<.79	<.79	<.79	<.79	<.79
Chloroform	<.28	<.28	<.28	<.28	<1.30	<1.30	<1.30	<1.30	<1.30
Chloromethane	.701	<.310	<.310	<.310	<.610	<.610	<.610	<.610	<.610
Chloroprene									
Chromium	<.355	<.729	<.729	<.729	1.380	<.980	<.980	<1.100	<1.100
Chrysene									
cis-1,2-Dichloroethene	<.13	<.13	<.13	<.13	<.21	<.21	<.21	<.21	<.21
cis-1,3-Dichloropropene	<.15	<.15	<.15	<.15	<.25	<.25	<.25	<.25	<.25
Cobalt	.968	.501	.175	.107	.403	32.700	39.600	40.300	43.600
Copper	<1.22	<2.19	<2.19	<2.19	1.53	<2.00	<2.00	<3.20	<1.50
Cyanide									
delta-BHC									
Diallate									
Dibenzo(a,h)anthracene									
Dibenzofuran									
Dibromomethane	<.18	<.18	<.18	<.18	<.33	<.33	<.33	<.33	<.33
Dichlorodifluoromethane									
Dieldrin									
Diethyl phthalate									
Dimethoate									
Dimethyl phthalate									
Di-n-butylphthalate									
Di-n-octylphthalate									
Dinoseb									
Diphenylamine									
Disulfoton									
Endosulfan I									
Endosulfan II									
Endosulfan Sulfate									
Endrin									
Endrin Aldehyde									
Ethyl Methacrylate									
Ethyl Methanesulfonate									
Ethylbenzene	<.21	<.21	<.21	<.21	<.31	<.31	<.31	<.31	<.31
Famphur									
Fluoranthene									
Fluorene									
gamma-BHC (Lindane)									
Heptachlor									
Heptachlor Epoxide									
Hexachlorobenzene									
Hexachlorobutadiene									
Hexachlorocyclopentadiene									
Hexachloroethane									
Hexachloropropene									
Indeno[1,2,3-cd]pyrene									
Iodomethane	1.41	<.80	<.80	<.80	<7.00	<7.00	<7.00	<7.00	<7.00
Iron	1310	9270	9510	979	1640	3380	3720	7970	3840
Isobutanol									
Isodrin									
Isophorone									

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

Table 9

Analytical Data Summary for MW-313

Constituents	4/15/2021	10/26/2021	4/14/2022	9/1/2022	3/6/2023	9/29/2023
Arsenic	8.83	3.08	9.44	6.00	4.90	12.20
Barium	21.3	22.5	27.7	15.3	22.6	26.8
Benzene	<.22	<.22	<.22	<1.00	<1.00	<1.00
Benzo[a]anthracene						
Benzo[a]pyrene						
Benzo[b]fluoranthene						
Benzo[ghi]perylene						
Benzo[k]fluoranthene						
Benzyl alcohol						
Beryllium	<.270	<.270	<1.080	<4.000	<4.000	<4.000
beta-BHC						
Bis(2-chloroethoxy)methane						
Bis(2-chloroethyl)ether						
Bis(2-ethylhexyl)phthalate						
Bromochloromethane	<.54	<.54	<.54	<1.00	<1.00	<1.00
Bromodichloromethane	<.39	<.39	<.39	<1.00	<1.00	<1.00
Bromoform	<.78	<.78	<.78	<1.00	<1.00	<1.00
Bromomethane	<1.100	1.280	<1.100	<1.000	<1.000	<1.000
Butylbenzylphthalate						
Cadmium	<.0510	<.0510	.4640	<.8000	<.8000	<.8000
Carbon Disulfide	<.45	<.45	<.45	<1.00	<1.00	<1.00
Carbon Tetrachloride	<.65	<.65	<.65	<1.00	<1.00	<1.00
Chlordane						
Chlorobenzene	<.40	<.40	<.40	<1.00	<1.00	<1.00
Chlorobenzilate						
Chlorodibromomethane	<.75	<.75	<.75	<1.00	<1.00	<1.00
Chloroethane	<.79	<.79	<.79	<1.00	<1.00	<1.00
Chloroform	<1.30	<1.30	<1.30	<1.00	<1.00	<1.00
Chloromethane	<.610	<.610	<.610	<1.000	<1.000	<1.000
Chloroprene						
Chromium	<1.100	<1.100	<4.400	<8.000	<8.000	<8.000
Chrysene						
cis-1,2-Dichloroethene	<.21	<.21	<.21	<1.00	<1.00	<1.00
cis-1,3-Dichloropropene	<.25	<.25	<.25	<1.00	<1.00	<1.00
Cobalt	42.900	2.990	13.900	2.800	1.400	.800
Copper	<1.40	<1.40	<7.20	<4.00	<4.00	<4.00
Cyanide						
delta-BHC						
Diallate						
Dibenzo(a,h)anthracene						
Dibenzofuran						
Dibromomethane	<.33	<.33	<.33	<1.00	<1.00	<1.00
Dichlorodifluoromethane						
Dieldrin						
Diethyl phthalate						
Dimethoate						
Dimethyl phthalate						
Di-n-butylphthalate						
Di-n-octylphthalate						
Dinoseb						
Diphenylamine						
Disulfoton						
Endosulfan I						
Endosulfan II						
Endosulfan Sulfate						
Endrin						
Endrin Aldehyde						
Ethyl Methacrylate						
Ethyl Methanesulfonate						
Ethylbenzene	<.31	<.31	<.31	<1.00	<1.00	<1.00
Famphur						
Fluoranthene						
Fluorene						
gamma-BHC (Lindane)						
Heptachlor						
Heptachlor Epoxide						
Hexachlorobenzene						
Hexachlorobutadiene						
Hexachlorocyclopentadiene						
Hexachloroethane						
Hexachloropropene						
Indeno[1,2,3-cd]pyrene						
Iodomethane	<7.00	<7.00	<7.00	<1.00	<1.00	<1.00
Iron	12400	6230	12800	7300	4630	39400
Isobutanol						
Isodrin						
Isophorone						

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

Table 9

Analytical Data Summary for MW-313

Constituents	Units	9/18/2012	3/28/2013	9/25/2013	4/16/2014	9/26/2014	3/11/2015	9/2/2015	3/22/2016
Isosafrole	ug/L	<10.0		<10.3					
Kepone	ug/L	<10.0		<10.3					
Lead	ug/L	<4.000	<4.000	<4.000	<4.000	1.120	<.500	<.500	.401
Mercury	ug/L	<.267		<.200					
Methacrylonitrile	ug/L	<1		<1					
Methapyrilene	ug/L	<10.0		<10.3					
Methoxychlor	ug/L	<.0320		<.0333					
Methyl Methacrylate	ug/L	<2		<2					
Methyl Methanesulfonate	ug/L	<10.0		<10.3					
Methyl Parathion	ug/L	<10.0		<10.3					
Methylene Chloride	ug/L	<5.000	<5.000	<5.000	<5.000	<.170	<5.000	<5.000	<5.000
Naphthalene	ug/L	<5		<5					
Nickel	ug/L	<50.000	<50.000	2.610	<50.000	6.150	35.900	8.920	33.000
Nitrobenzene	ug/L	<10.0		<10.3					
N-Nitrosodiethylamine	ug/L	<10.0		<10.3					
N-Nitrosodimethylamine	ug/L	<10.0		<10.3					
N-Nitrosodi-n-butylamine	ug/L	<10.0		<10.3					
N-Nitrosodi-n-propylamine	ug/L	<10.0		<10.3					
N-Nitrosodiphenylamine	ug/L	<10.0		<10.3					
N-Nitrosomethylethylamine	ug/L	<10.0		<10.3					
N-Nitrosopiperidine	ug/L	<10.0		<10.3					
N-Nitrosopyrrolidine	ug/L	<10.0		<10.3					
o,o,o-Triethylphosphorothioate	ug/L	<10.0		<10.3					
o-Toluidine	ug/L	<10.0		<10.3					
p-[Dimethylamino]azobenzene	ug/L	<10.0		<10.3					
Parathion	ug/L	<10.0		<10.3					
PCB-1016	ug/L	<.800		<.808					
PCB-1221	ug/L	<.800		<.808					
PCB-1232	ug/L	<.800		<.808					
PCB-1242	ug/L	<.800		<.808					
PCB-1248	ug/L	<.800		<.808					
PCB-1254	ug/L	<.800		<.808					
PCB-1260	ug/L	<.800		<.808					
Pentachlorobenzene	ug/L	<10.0		<10.3					
Pentachloronitrobenzene	ug/L	<10.0		<10.3					
Pentachlorophenol	ug/L	<10.0		<10.3					
pH	SU					6.82	6.62	7.46	6.69
Phenacetin	ug/L	<10.0		<10.3					
Phenanthrene	ug/L	<10.0		<10.3					
Phenol	ug/L	<10.0		<10.3					
Phorate	ug/L	<10.0		<10.3					
p-Phenylenediamine	ug/L	<10.0		<10.3					
Pronamide	ug/L	<10.0		<10.3					
Propionitrile	ug/L	<10		<10					
Pyrene	ug/L	<10.0		<10.3					
Safrole	ug/L	<10.0		<10.3					
Selenium	ug/L	<5.000	<5.000	<5.000	<5.000	<3.340	<5.000	<5.000	<.630
Silver	ug/L	<20.000	<20.000	<20.000	<20.000	<.042	<1.000	<1.000	<.153
Styrene	ug/L	<1.00	<1.00	<1.00	<1.00	<.10	<1.00	<1.00	<1.00
Sulfate	mg/L					405	2300	603	2300
Sulfide	mg/L	<1		<1					
Tetrachloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.18	<1.00	<1.00	<1.00
Thallium	ug/L	<2.0000	<2.0000	<2.0000	<2.0000	<.0325	<1.0000	<1.0000	<.0255
Thionazin	ug/L	<10.0		<10.3					
Tin	ug/L	<100		453	<100				
Toluene	ug/L								
Total Suspended Solids	mg/L					304.00	6.33	<5.00	43.70
Toxaphene	ug/L	<2.00		<2.08					
trans-1,2-Dichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	<1.00
trans-1,3-Dichloropropene	ug/L	<5.00	<5.00	<5.00	<5.00	<.22	<5.00	<5.00	<5.00
trans-1,4-Dichloro-2-butene	ug/L	<10.00	<10.00	<10.00	<10.00	<.13	<10.00	<10.00	<10.00
Trichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.19	<1.00	<1.00	<1.00
Trichlorofluoromethane	ug/L	<4.00	<4.00	<4.00	<4.00	<.17	<4.00	<4.00	<4.00
Vanadium	ug/L	<50.00	<50.00	<50.00	<50.00	2.89	3.07	<5.00	15.40
Vinyl Acetate	ug/L	<2.00	<2.00	<2.00	<2.00	<.74	<10.00	<10.00	<10.00
Vinyl Chloride	ug/L	<1.00	<1.00	<1.00	<1.00	<.10	<1.00	<1.00	<1.00
Xylenes, Total	ug/L	<3.000	<3.000	.321	<3.000	<.130	<3.000	<3.000	<3.000
Zinc	ug/L	<20.00	61.30	114.00	<40.00	32.20	13.50	<10.00	11.40

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

Table 9

Analytical Data Summary for MW-313

Constituents	10/21/2016	3/8/2017	9/25/2017	3/13/2018	10/1/2018	3/27/2019	9/23/2019	3/10/2020	9/16/2020
Isosafrole									
Kepone									
Lead	1.030	<.324	<.324	<.324	<.186	<.270	<.270	<.270	<.110
Mercury									
Methacrylonitrile									
Methapyrilene									
Methoxychlor									
Methyl Methacrylate									
Methyl Methanesulfonate									
Methyl Parathion									
Methylene Chloride	.277	<.170	<.170	.207	<1.700	<1.700	<1.700	<1.700	<1.700
Naphthalene									
Nickel	3.000	2.540	<.929	3.290	4.060	44.900	49.800	51.400	53.100
Nitrobenzene									
N-Nitrosodiethylamine									
N-Nitrosodimethylamine									
N-Nitrosodi-n-butylamine									
N-Nitrosodi-n-propylamine									
N-Nitrosodiphenylamine									
N-Nitrosomethylethylamine									
N-Nitrosopiperidine									
N-Nitrosopyrrolidine									
o,o,o-Triethylphosphorothioate									
o-Toluidine									
p-[Dimethylamino]azobenzene									
Parathion									
PCB-1016									
PCB-1221									
PCB-1232									
PCB-1242									
PCB-1248									
PCB-1254									
PCB-1260									
Pentachlorobenzene									
Pentachloronitrobenzene									
Pentachlorophenol									
pH	7.16	6.91	7.02	6.87	6.89	6.67	6.65	6.54	6.48
Phenacetin									
Phenanthrene									
Phenol									
Phorate									
p-Phenylenediamine									
Pronamide									
Propionitrile									
Pyrene									
Safrole									
Selenium	<.630	<.928	<.928	<.928	<.982	<1.000	<1.000	<1.000	<1.000
Silver	<.153	<.140	<.140	<.140	<.115	<.370	<.370	<.370	<.370
Styrene	<.10	<.10	<.10	<.10	<.37	<.37	<.37	<.37	<.37
Sulfate	709	665	717	693	730	2230	2180	2290	2420
Sulfide									
Tetrachloroethene	<.18	<.18	<.18	<.18	<.48	<.48	<.48	<.48	<.48
Thallium	<.0255	<.0644	<.0644	<.0644	<.5700	<.2700	<.2700	<.2600	<.2600
Thionazin									
Tin									
Toluene					<.43	<.43	<.43	<.43	<.43
Total Suspended Solids	3.38	18.60	14.50	5.00	22.00	12.70	11.80	13.30	10.00
Toxaphene									
trans-1,2-Dichloroethene	<.21	<.21	<.21	<.21	<.27	<.27	<.27	<.27	<.27
trans-1,3-Dichloropropene	<.22	<.22	<.22	<.22	<.56	<.56	<.56	<.56	<.56
trans-1,4-Dichloro-2-butene	<.13	<.13	<.13	<.13	<1.10	<1.10	<1.10	<1.10	<1.10
Trichloroethene	<.19	<.19	<.19	<.19	<.43	<.43	<.43	<.43	<.43
Trichlorofluoromethane	<.17	<.17	<.17	<.17	<.38	<.38	<.38	<.38	<.38
Vanadium	2.29	6.76	5.34	1.79	3.51	2.71	3.87	2.90	1.27
Vinyl Acetate	<.74	<.74	<.74	<.74	<2.50	<2.50	<2.50	<2.50	<2.50
Vinyl Chloride	<.10	<.10	<.10	<.10	<.60	<.60	<.18	<.18	<.18
Xylenes, Total	1.890	.786	<.130	<.130	<.400	<.400	<.400	<.400	<.400
Zinc	6.37	<11.50	<11.50	<11.50	10.30	13.10	18.60	15.10	15.80

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

Table 9

Analytical Data Summary for MW-313

Constituents	4/15/2021	10/26/2021	4/14/2022	9/1/2022	3/6/2023	9/29/2023
Isosafrole						
Kepone						
Lead	.335	.356	<.960	<4.000	<4.000	<4.000
Mercury						
Methacrylonitrile						
Methapyrilene						
Methoxychlor						
Methyl Methacrylate						
Methyl Methanesulfonate						
Methyl Parathion						
Methylene Chloride	<1.700	<1.700	<1.700	<5.000	<5.000	<5.000
Naphthalene						
Nickel	51.100	5.050	38.800	7.200	19.800	4.000
Nitrobenzene						
N-Nitrosodiethylamine						
N-Nitrosodimethylamine						
N-Nitrosodi-n-butylamine						
N-Nitrosodi-n-propylamine						
N-Nitrosodiphenylamine						
N-Nitrosomethylethylamine						
N-Nitrosopiperidine						
N-Nitrosopyrrolidine						
o,o,o-Triethylphosphorothioate						
o-Toluidine						
p-[Dimethylamino]azobenzene						
Parathion						
PCB-1016						
PCB-1221						
PCB-1232						
PCB-1242						
PCB-1248						
PCB-1254						
PCB-1260						
Pentachlorobenzene						
Pentachloronitrobenzene						
Pentachlorophenol						
pH	6.57	6.93	6.59	6.70	6.80	6.90
Phenacetin						
Phenanthrene						
Phenol						
Phorate						
p-Phenylenediamine						
Pronamide						
Propionitrile						
Pyrene						
Safrole						
Selenium	<.960	<.960	4.890	<4.000	<4.000	<4.000
Silver	<.420	<.420	2.380	<4.000	<4.000	<4.000
Styrene	<.37	<.37	<.37	<1.00	<1.00	<1.00
Sulfate	2480	509	2090	510	1800	387
Sulfide						
Tetrachloroethene	<.48	<.48	<.48	<1.00	<1.00	<1.00
Thallium	<.2600	<.2600	<1.0400	<2.0000	<2.0000	<2.0000
Thionazin						
Tin						
Toluene	<.43	<.43	<.43	<1.00	<1.00	<1.00
Total Suspended Solids	34.40	29.00	2.63			
Toxaphene						
trans-1,2-Dichloroethene	<.27	<.27	<.27	<1.00	<1.00	<1.00
trans-1,3-Dichloropropene	<.56	<.56	<.56	<1.00	<1.00	<1.00
trans-1,4-Dichloro-2-butene	<1.10	<1.10	<1.10	<5.00	<5.00	<5.00
Trichloroethene	<.43	<.43	<.43	<1.00	<1.00	<1.00
Trichlorofluoromethane	<.38	<.38	<.38	<1.00	<1.00	<1.00
Vanadium	4.75	3.31	10.50	<20.00	<20.00	<20.00
Vinyl Acetate	<2.50	<2.50	<2.50	<5.00	<5.00	<5.00
Vinyl Chloride	<.18	<.18	<.18	<1.00	<1.00	<1.00
Xylenes, Total	<.400	<.400	<.400	<2.000	<2.000	<2.000
Zinc	15.90	<10.00	<40.00	<20.00	<20.00	<20.00

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

Table 9

Analytical Data Summary for MW-333

Constituents	Units	9/19/2012	3/27/2013	9/26/2013	4/16/2014	9/26/2014	3/11/2015	9/2/2015	11/10/2015
1,1,1,2-Tetrachloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	
1,1,1-Trichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.12	<1.00	<1.00	
1,1,2,2-Tetrachloroethane	ug/L	<1.0	<1.0	<1.0	<1.0	<.1	<1.0	<1.0	
1,1,2-Trichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.12	<1.00	<1.00	
1,1-Dichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	
1,1-Dichloroethene	ug/L	<2.00	<2.00	<2.00	<2.00	<.15	<2.00	<2.00	
1,1-Dichloropropene	ug/L	<1		<1					
1,2,3-Trichloropropane	ug/L	<1.00	<1.00	<1.00	<1.00	<.19	<1.00	<1.00	
1,2,4,5-Tetrachlorobenzene	ug/L	<10.0		<11.2					
1,2,4-Trichlorobenzene	ug/L	<5		<5					
1,2-Dibromo-3-chloropropane	ug/L	<10.00	<10.00	<10.00	<10.00	<.12	<10.00	<10.00	
1,2-Dibromoethane	ug/L	<10.00	<10.00	<10.00	<10.00	<.13	<10.00	<10.00	
1,2-Dichlorobenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.14	<1.00	<1.00	
1,2-Dichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.18	<1.00	<1.00	
1,2-Dichloropropane	ug/L	<1.00	<1.00	<1.00	<1.00	<.87	<1.00	<1.00	
1,3,5-Trinitrobenzene	ug/L	<10.0		<11.2					
1,3-Dichlorobenzene	ug/L	<1		<1					
1,3-Dichloropropane	ug/L	<1		<1					
1,3-Dinitrobenzene	ug/L	<10.0		<11.2					
1,4-Dichlorobenzene	ug/L	<1.0	<1.0	<1.0	<1.0	<.2	<1.0	<1.0	
1,4-Naphthoquinone	ug/L	<10.0		<11.2					
1-Naphthylamine	ug/L	<10.0		<11.2					
2,2`-oxybis[1-Chloropropane]	ug/L	<10.0		<11.2					
2,2-Dichloropropane	ug/L	<4		<4					
2,3,4,6-Tetrachlorophenol	ug/L	<10.0		<11.2					
2,4,5-T	ug/L	<1.00		<1.01					
2,4,5-TP [Silvex]	ug/L	<1.00		<1.01					
2,4,5-Trichlorophenol	ug/L	<10.0		<11.2					
2,4,6-Trichlorophenol	ug/L	<10.0		<11.2					
2,4-D	ug/L	<1.00		<1.01					
2,4-Dichlorophenol	ug/L	<10.0		<11.2					
2,4-Dimethylphenol	ug/L	<10.0		<11.2					
2,4-Dinitrophenol	ug/L	<20.0		<22.5					
2,4-Dinitrotoluene	ug/L	<10.0		<11.2					
2,6-Dichlorophenol	ug/L	<10.0		<11.2					
2,6-Dinitrotoluene	ug/L	<10.0		<11.2					
2-Acetylaminofluorene	ug/L	<10.0		<11.2					
2-Butanone	ug/L	<10.00	<10.00	<10.00	<10.00	<.47	<10.00	<10.00	
2-Chloronaphthalene	ug/L	<10.0		<11.2					
2-Chlorophenol	ug/L	<10.0		<11.2					
2-Hexanone	ug/L	<10.0	<10.0	<10.0	<10.0	<.2	<10.0	<10.0	
2-Methylnaphthalene	ug/L	<10.0		<11.2					
2-Methylphenol [o-Cresol]	ug/L	<10.0		<11.2					
2-Naphthylamine	ug/L	<10.0		<11.2					
2-Nitroaniline	ug/L	<10.0		<11.2					
2-Nitrophenol	ug/L	<10.0		<11.2					
3,3-Dichlorobenzidine	ug/L	<10.0		<56.2					
3,3-Dimethylbenzidine	ug/L	<10.0		<11.2					
3-Methylcholanthrene	ug/L	<10.0		<11.2					
3-Nitroaniline	ug/L	<10.0		<11.2					
4,4`-DDD	ug/L	<.0320		<.0356					
4,4`-DDE	ug/L	<.0320		<.0356					
4,4`-DDT	ug/L	<.0320		<.0356					
4,6-Dinitro-2-methylphenol	ug/L	<10.0		<11.2					
4-Aminobiphenyl	ug/L	<10.0		<11.2					
4-Bromophenyl phenyl ether	ug/L	<10.0		<11.2					
4-Chloro-3-methylphenol	ug/L	<10.0		<11.2					
4-Chloroaniline	ug/L	<10.0		<11.2					
4-Chlorophenyl phenyl ether	ug/L	<10.0		<11.2					
4-Methyl-2-pentanone	ug/L	<10.00	<10.00	<10.00	<10.00	<.22	<10.00	<10.00	
4-Nitroaniline	ug/L	<10.0		<11.2					
4-Nitrophenol	ug/L	<10.0		<11.2					
5-Nitro-o-toluidine	ug/L	<10.0		<11.2					
7,12-Dimethylbenz[a]anthracene	ug/L	<10.0		<11.2					
Acenaphthene	ug/L	<10.0		<11.2					
Acetone	ug/L	<10.00	<10.00	<10.00	<10.00	<1.79	<10.00	<10.00	
Acetonitrile	ug/L	<10000		964					
Acetophenone	ug/L	<10.0		<11.2					
Acrolein	ug/L	<10		<10					
Acrylonitrile	ug/L	<10.00	<10.00	<10.00	<10.00	<.53	<10.00	<10.00	
Aldrin	ug/L	<.0320		<.0356					
Alkalinity as CaCO3	mg/L					655	497	475	
Allyl Chloride	ug/L	<20		<2					
alpha-BHC	ug/L	<.0320		<.0356					
Aluminum	ug/L					11.6	16.8	55.0	
Anthracene	ug/L	<10.0		<11.2					
Antimony	ug/L	<12.000	<6.000	<6.000	<6.000	<.161	.206	<1.000	

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

Table 9

Analytical Data Summary for MW-333

Constituents	Units	9/19/2012	3/27/2013	9/26/2013	4/16/2014	9/26/2014	3/11/2015	9/2/2015	11/10/2015
Arsenic	ug/L	6.64	3.68	8.18	5.68	12.90	7.68	<2.00	
Barium	ug/L	222.0	158.0	107.0	149.0	240.0	132.0	12.6	
Benzene	ug/L	<.50	<.50	<.50	<.50	<.11	<.50	<.50	
Benzo[a]anthracene	ug/L	<10.0		<11.2					
Benzo[a]pyrene	ug/L	<10.0		<11.2					
Benzo[b]fluoranthene	ug/L	<10.0		<11.2					
Benzo[ghi]perylene	ug/L	<10.0		<11.2					
Benzo[k]fluoranthene	ug/L	<10.0		<11.2					
Benzyl alcohol	ug/L	<10.0		<11.2					
Beryllium	ug/L	<1.000	<1.000	<1.000	<1.000	<.039	<1.000	<1.000	
beta-BHC	ug/L	<.0320		<.0356					
Bis(2-chloroethoxy)methane	ug/L	<10.0		<11.2					
Bis(2-chloroethyl)ether	ug/L	<10.0		<11.2					
Bis(2-ethylhexyl)phthalate	ug/L	<10.0		<11.2					
Bromochloromethane	ug/L	<5.00	<5.00	<5.00	<5.00	<.12	<5.00	<5.00	
Bromodichloromethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.12	<1.00	<1.00	
Bromoform	ug/L	<5.00	<5.00	<5.00	<5.00	<.14	<5.00	<5.00	
Bromomethane	ug/L	<20.00	<4.00	<4.00	<4.00	<.22	<4.00	<4.00	
Butylbenzylphthalate	ug/L	<10.0		<11.2					
Cadmium	ug/L	<.500	<.500	<.500	<.500	<.112	<.500	1.440	<.112
Carbon Disulfide	ug/L	<1.00	<1.00	<1.00	<1.00	<.15	<1.00	<1.00	
Carbon Tetrachloride	ug/L	<2.00	<2.00	<2.00	<2.00	<.24	<2.00	<2.00	
Chlordane	ug/L	<2.00		<2.22					
Chlorobenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.19	<1.00	<1.00	
Chlorobenzilate	ug/L	<10.0		<11.2					
Chlorodibromomethane	ug/L	<5.0	<5.0	<5.0	<5.0	<.2	<5.0	<5.0	
Chloroethane	ug/L	<4.00	<4.00	<4.00	<4.00	<.15	<4.00	<4.00	
Chloroform	ug/L	<1.00	<1.00	<1.00	<1.00	<.28	<1.00	<1.00	
Chloromethane	ug/L	<3.00	<3.00	<3.00	<3.00	<.31	<3.00	<3.00	
Chloroprene	ug/L	<1		<1					
Chromium	ug/L	<20.00	<20.00	4.33	<20.00	<1.24	<5.00	<5.00	
Chrysene	ug/L	<10.0		<11.2					
cis-1,2-Dichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.13	<1.00	<1.00	
cis-1,3-Dichloropropene	ug/L	<5.00	<5.00	<5.00	<5.00	<.15	<5.00	<5.00	
Cobalt	ug/L	15.7	20.6	15.7	14.5	18.9	16.0	<.5	
Copper	ug/L	<20.000	<20.000	<20.000	<20.000	<.485	1.430	3.770	
Cyanide	mg/L	<.01		<.01					
delta-BHC	ug/L	<.0320		<.0356					
Diallate	ug/L	<10.0		<11.2					
Dibenzo(a,h)anthracene	ug/L	<10.0		<11.2					
Dibenzofuran	ug/L	<10.0		<11.2					
Dibromomethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.18	<1.00	<1.00	
Dichlorodifluoromethane	ug/L	<3		<3					
Dieldrin	ug/L	<.0320		<.0356					
Diethyl phthalate	ug/L	<10.0		<11.2					
Dimethoate	ug/L	<10.0		<11.2					
Dimethyl phthalate	ug/L	<10.0		<11.2					
Di-n-butylphthalate	ug/L	<10.0		<11.2					
Di-n-octylphthalate	ug/L	<10.0		<22.5					
Dinoseb	ug/L	<10.0		<11.2					
Diphenylamine	ug/L	<10.0		<11.2					
Disulfoton	ug/L	<10.0		<11.2					
Endosulfan I	ug/L	<.0320		<.0356					
Endosulfan II	ug/L	<.0320		<.0356					
Endosulfan Sulfate	ug/L	<.0320		<.0356					
Endrin	ug/L	<.0320		<.0356					
Endrin Aldehyde	ug/L	<.0320		<.0356					
Ethyl Methacrylate	ug/L	<2		<2					
Ethyl Methanesulfonate	ug/L	<10.0		<11.2					
Ethylbenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	
Famphur	ug/L	<20.0		<22.5					
Fluoranthene	ug/L	<10.0		<11.2					
Fluorene	ug/L	<10.0		<11.2					
gamma-BHC (Lindane)	ug/L	<.0320		<.0356					
Heptachlor	ug/L	<.0320		<.0356					
Heptachlor Epoxide	ug/L	<.0320		<.0356					
Hexachlorobenzene	ug/L	<10.0		<11.2					
Hexachlorobutadiene	ug/L	<10.0		<11.2					
Hexachlorocyclopentadiene	ug/L	<10.0		<22.5					
Hexachloroethane	ug/L	<10.0		<11.2					
Hexachloropropene	ug/L	<10.0		<11.2					
Indeno[1,2,3-cd]pyrene	ug/L	<10.0		<11.2					
Iodomethane	ug/L	<10.0	<10.0	<10.0	<10.0	<.8	<10.0	<10.0	
Iron	ug/L					39600	29500	148	
Isobutanol	ug/L	<10000		<10000					
Isodrin	ug/L	<10.0		<11.2					
Isophorone	ug/L	<10.0		<11.2					

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

Table 9

Analytical Data Summary for MW-333

Constituents	Units	9/19/2012	3/27/2013	9/26/2013	4/16/2014	9/26/2014	3/11/2015	9/2/2015	11/10/2015
Isosafrole	ug/L	<10.0		<11.2					
Kepone	ug/L	<10.0		<11.2					
Lead	ug/L	<4.0000	<4.0000	<4.0000	<4.0000	<.0967	.1650	<.5000	
Mercury	ug/L	<.267		<.200					
Methacrylonitrile	ug/L	<1		<1					
Methapyrilene	ug/L	<10.0		<11.2					
Methoxychlor	ug/L	<.0320		<.0356					
Methyl Methacrylate	ug/L	<2		<2					
Methyl Methanesulfonate	ug/L	<10.0		<11.2					
Methyl Parathion	ug/L	<10.0		<11.2					
Methylene Chloride	ug/L	<5.00	<5.00	<5.00	<5.00	<.17	<5.00	<5.00	
Naphthalene	ug/L	<5		<5					
Nickel	ug/L	<50.000000	6.350000	14.400000	<50.000000	11.100000	9.549999	56.599998	
Nitrobenzene	ug/L	<10.0		<11.2					
N-Nitrosodiethylamine	ug/L	<10.0		<11.2					
N-Nitrosodimethylamine	ug/L	<10.0		<11.2					
N-Nitrosodi-n-butylamine	ug/L	<10.0		<11.2					
N-Nitrosodi-n-propylamine	ug/L	<10.0		<11.2					
N-Nitrosodiphenylamine	ug/L	<10.0		<11.2					
N-Nitrosomethylethylamine	ug/L	<10.0		<11.2					
N-Nitrosopiperidine	ug/L	<10.0		<11.2					
N-Nitrosopyrrolidine	ug/L	<10.0		<11.2					
o,o,o-Triethylphosphorothioate	ug/L	<10.0		<11.2					
o-Toluidine	ug/L	<10.0		<11.2					
p-[Dimethylamino]azobenzene	ug/L	<10.0		<11.2					
Parathion	ug/L	<10.0		<11.2					
PCB-1016	ug/L	<.800		<.909					
PCB-1221	ug/L	<.800		<.909					
PCB-1232	ug/L	<.800		<.909					
PCB-1242	ug/L	<.800		<.909					
PCB-1248	ug/L	<.800		<.909					
PCB-1254	ug/L	<.800		<.909					
PCB-1260	ug/L	<.800		<.909					
Pentachlorobenzene	ug/L	<10.0		<11.2					
Pentachloronitrobenzene	ug/L	<10.0		<11.2					
Pentachlorophenol	ug/L	<10.0		<11.2					
pH	SU					6.45	6.47	6.50	
Phenacetin	ug/L	<10.0		<11.2					
Phenanthrene	ug/L	<10.0		<11.2					
Phenol	ug/L	<10.0		<11.2					
Phorate	ug/L	<10.0		<11.2					
p-Phenylenediamine	ug/L	<10.0		<11.2					
Pronamide	ug/L	<10.0		<11.2					
Propionitrile	ug/L	<10		<10					
Pyrene	ug/L	<10.0		<11.2					
Safrole	ug/L	<10.0		<11.2					
Selenium	ug/L	<5.00	<5.00	<5.00	<5.00	<3.34	<5.00	<5.00	
Silver	ug/L	<20.000	<20.000	<20.000	<20.000	<.042	<1.000	<1.000	
Styrene	ug/L	<1.0	<1.0	<1.0	<1.0	<.1	<1.0	<1.0	
Sulfate	mg/L					212	997	1230	
Sulfide	mg/L	<1		<1					
Tetrachloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.18	<1.00	<1.00	
Thallium	ug/L	<2.0000	<2.0000	<2.0000	<2.0000	<.0325	.0470	<1.0000	
Thionazin	ug/L	<10.0		<11.2					
Tin	ug/L	<100		516	<100				
Total Suspended Solids	mg/L					56.0	79.7	35.0	
Toxaphene	ug/L	<2.00		<2.22					
trans-1,2-Dichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	
trans-1,3-Dichloropropene	ug/L	<5.00	<5.00	<5.00	<5.00	<.22	<5.00	<5.00	
trans-1,4-Dichloro-2-butene	ug/L	<10.00	<10.00	<10.00	<10.00	<.13	<10.00	<10.00	
Trichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.19	<1.00	<1.00	
Trichlorofluoromethane	ug/L	<4.00	<4.00	<4.00	<4.00	<.17	<4.00	<4.00	
Vanadium	ug/L	<50.000	<50.000	<50.000	<50.000	.579	1.020	<5.000	
Vinyl Acetate	ug/L	<2.00	<2.00	<2.00	<2.00	<.74	<10.00	<10.00	
Vinyl Chloride	ug/L	<1.0	<1.0	<1.0	<1.0	<.1	<1.0	<1.0	
Xylenes, Total	ug/L	<3.00	<3.00	<3.00	<3.00	<.13	<3.00	<3.00	
Zinc	ug/L	<20.00	39.80	107.00	<20.00	7.78	13.60	31.80	

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

Table 9

Analytical Data Summary for MW-335

Constituents	Units	9/19/2012	3/27/2013	9/25/2013	4/15/2014	9/25/2014	3/11/2015	9/2/2015	3/22/2016
1,1,1,2-Tetrachloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	<1.00
1,1,1-Trichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.12	<1.00	<1.00	<1.00
1,1,2,2-Tetrachloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.10	<1.00	<1.00	<1.00
1,1,2-Trichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.12	<1.00	<1.00	<1.00
1,1-Dichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	<1.00
1,1-Dichloroethene	ug/L	<2.00	<2.00	<2.00	<2.00	<.15	<2.00	<2.00	<2.00
1,1-Dichloropropene	ug/L								
1,2,3-Trichloropropane	ug/L	<1.00	<1.00	<1.00	<1.00	<.19	<1.00	<1.00	<1.00
1,2,4,5-Tetrachlorobenzene	ug/L								
1,2,4-Trichlorobenzene	ug/L								
1,2-Dibromo-3-chloropropane	ug/L	<10.00	<10.00	<10.00	<10.00	<.12	<10.00	<10.00	<10.00
1,2-Dibromoethane	ug/L	<10.00	<10.00	<10.00	<10.00	<.13	<10.00	<10.00	<10.00
1,2-Dichlorobenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.14	<1.00	<1.00	<1.00
1,2-Dichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.18	<1.00	<1.00	<1.00
1,2-Dichloropropane	ug/L	<1.00	<1.00	<1.00	<1.00	<.87	<1.00	<1.00	<1.00
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	<1.00	<1.00	<1.00	<1.00	<.20	<1.00	<1.00	<1.00
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	ug/L	<10.00	<10.00	<10.00	<10.00	<.47	<10.00	<10.00	<10.00
2-Chloronaphthalene	ug/L								
2-Chlorophenol	ug/L								
2-Hexanone	ug/L	<10.0	<10.0	<10.0	<10.0	<.2	<10.0	<10.0	<10.0
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	ug/L	<10.00	<10.00	<10.00	<10.00	<.22	<10.00	<10.00	<10.00
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	<10.00	<10.00	<10.00	<10.00	<1.79	<10.00	<10.00	<10.00
Acetonitrile	ug/L								
Acetophenone	ug/L								
Acrolein	ug/L								
Acrylonitrile	ug/L	<10.00	<10.00	<10.00	<10.00	<.53	<10.00	<10.00	<10.00
Aldrin	ug/L								
Alkalinity as CaCO3	mg/L					609	594	593	666
Allyl Chloride	ug/L								
alpha-BHC	ug/L								
Aluminum	ug/L					391.0	51.5	413.0	83.1
Anthracene	ug/L								

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

Table 9

Analytical Data Summary for MW-335

Constituents	10/19/2016	3/7/2017	9/26/2017	3/14/2018	10/2/2018	3/28/2019	9/24/2019	11/7/2019	3/10/2020
1,1,1,2-Tetrachloroethane	<.21	<.21	<.21	<.21	<.38	<.38	<.38		<.38
1,1,1-Trichloroethane	<.12	<.12	<.12	<.12	<.19	<.19	<.19		<.19
1,1,2,2-Tetrachloroethane	<.10	<.10	<.10	<.10	<.47	<.47	<.47		<.47
1,1,2-Trichloroethane	<.12	<.12	<.12	<.12	<.45	<.45	<.45		<.45
1,1-Dichloroethane	<.21	<.21	<.21	<.21	<.22	<.22	<.22		<.22
1,1-Dichloroethene	<.15	<.15	<.15	<.15	<.56	<.56	<.56		<.56
1,1-Dichloropropene									<.43
1,2,3-Trichloropropane	<.19	<.19	<.19	<.19	<.59	<.59	<.59		<.59
1,2,4,5-Tetrachlorobenzene									<1.7
1,2,4-Trichlorobenzene									<.75
1,2-Dibromo-3-chloropropane	<.50	<.50	<.50	<.50	<1.20	<1.20	<1.20		<1.20
1,2-Dibromoethane	<.13	<.13	<.13	<.13	<.34	<.34	<.34		<.34
1,2-Dichlorobenzene	<.14	<.14	<.14	<.14	<.37	<.37	<.37		<.37
1,2-Dichloroethane	<.18	<.18	<.18	<.18	<.39	<.39	<.39		<.39
1,2-Dichloropropane	<.87	<.87	<.87	<.87	<.27	<.27	<.27		<.27
1,3,5-Trinitrobenzene									<1.38
1,3-Dichlorobenzene									<.3
1,3-Dichloropropane									<.4
1,3-Dinitrobenzene									<1.06
1,4-Dichlorobenzene	<.20	<.20	<.20	<.20	<.23	<.23	<.23		<.23
1,4-Naphthoquinone									<1.04
1,4-phenylenediamine									<.532
1-Naphthylamine									<.936
2,2-Dichloropropane									<.69
2,3,4,6-Tetrachlorophenol									<1.05
2,4,5-T									<.474
2,4,5-TP [Silvex]									<.316
2,4,5-Trichlorophenol									<1.17
2,4,6-Trichlorophenol									<1.28
2,4-D									<.509
2,4-Dichlorophenol									<1.17
2,4-Dimethylphenol									<1.06
2,4-Dinitrophenol									<6.06
2,4-Dinitrotoluene									<1.17
2,6-Dichlorophenol									<1.17
2,6-Dinitrotoluene									<1.17
2-Acetylaminofluorene									<1.28
2-Butanone	<1.04	<1.04	<1.04	<1.04	<2.10	<2.10	<2.10		<2.10
2-Chloronaphthalene									<1.38
2-Chlorophenol									<1.17
2-Hexanone	<.2	<.2	<.2	<.2	<2.0	<2.0	<2.0		<2.0
2-Methylnaphthalene									<1.38
2-Methylphenol									<1.06
2-Naphthylamine									<.915
2-Nitroaniline									<1.28
2-Nitrophenol									<1.7
3,3'-Dichlorobenzidine									<1.91
3,3'-Dimethylbenzidine									<2.13
3-Methylcholanthrene									<2.66
3-Nitroaniline									<1.06
4,4'-DDD									<.00189
4,4'-DDE									<.00221
4,4'-DDT									<.004
4,6-Dinitro-2-methylphenol									<2.66
4-Aminobiphenyl									<1.02
4-Bromophenyl phenyl ether									<2.02
4-Chloro-3-methylphenol									<1.01
4-Chloroaniline									<1.28
4-Chlorophenyl phenyl ether									<1.38
4-Methyl-2-pentanone	<.22	<.22	<.22	<.22	<2.10	<2.10	<2.10		<2.10
4-Nitroaniline									<1.81
4-Nitrophenol									<2.66
5-Nitro-o-toluidine									<3.3
7,12-Dimethylbenz(a)anthracene									<.979
Acenaphthene									<1.38
Acenaphthylene									<1.38
Acetone	<1.79	<1.79	2.49	2.33	<3.10	<3.10	<3.10		<3.10
Acetonitrile									<404
Acetophenone									<3.19
Acrolein									<3.6
Acrylonitrile	<.53	<.53	<.53	<.53	<2.20	<2.20	<2.20		<2.20
Aldrin									<.00474
Alkalinity as CaCO3	484	505	500	475	520	572	178		466
Allyl Chloride									<.7
alpha-BHC									<.00179
Aluminum	31.8	<41.3	<41.3	<165.0	<24.6	<27.0	63.7		41.9
Anthracene									<1.17

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

Table 9

Analytical Data Summary for MW-335

Constituents	9/16/2020	4/15/2021	10/27/2021	4/14/2022	9/1/2022	3/6/2023	9/29/2023
1,1,1,2-Tetrachloroethane	<.38	<.38	<.38	<.38	<1.00	<1.00	<1.00
1,1,1-Trichloroethane	<.19	<.19	<.19	<.19	<1.00	<1.00	<1.00
1,1,2,2-Tetrachloroethane	<.47	<.47	<.47	<.47	<1.00	<1.00	<1.00
1,1,2-Trichloroethane	<.45	<.45	<.45	<.45	<1.00	<1.00	<1.00
1,1-Dichloroethane	<.22	<.22	<.22	<.22	<1.00	<1.00	<1.00
1,1-Dichloroethene	<.56	<.56	<.56	<.56	<1.00	<1.00	<1.00
1,1-Dichloropropene							
1,2,3-Trichloropropane	<.59	<.59	<.59	<.59	<1.00	<1.00	<1.00
1,2,4,5-Tetrachlorobenzene							
1,2,4-Trichlorobenzene							
1,2-Dibromo-3-chloropropane	<1.20	<1.20	<1.20	<1.20	<5.00	<5.00	<5.00
1,2-Dibromoethane	<.34	<.34	<.34	<.34	<1.00	<1.00	<1.00
1,2-Dichlorobenzene	<.37	<.37	<.37	<.37	<1.00	<1.00	<1.00
1,2-Dichloroethane	<.39	<.39	<.39	<.39	<1.00	<1.00	<1.00
1,2-Dichloropropane	<.27	<.27	<.27	<.27	<1.00	<1.00	<1.00
1,3,5-Trinitrobenzene							
1,3-Dichlorobenzene							
1,3-Dichloropropane							
1,3-Dinitrobenzene							
1,4-Dichlorobenzene	<.23	<.23	<.23	<.23	<1.00	<1.00	<1.00
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	<2.10	<2.10	<2.10	<2.10	<10.00	<10.00	<10.00
2-Chloronaphthalene							
2-Chlorophenol							
2-Hexanone	<2.0	<2.0	<2.0	<2.0	<5.0	<5.0	<5.0
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	<2.10	<2.10	<2.10	<2.10	<5.00	<5.00	<5.00
4-Nitroaniline							
4-Nitrophenol							
5-Nitro-o-toluidine							
7,12-Dimethylbenz(a)anthracene							
Acenaphthene							
Acenaphthylene							
Acetone	<3.10	<3.10	<3.10	<3.10	<10.00	<10.00	<10.00
Acetonitrile							
Acetophenone							
Acrolein							
Acrylonitrile	<2.20	<2.20	<2.20	<2.20	<5.00	<5.00	<5.00
Aldrin							
Alkalinity as CaCO3	400	228	518	647	592	443	558
Allyl Chloride							
alpha-BHC							
Aluminum	<12.0	37.4	51.8	336.0	173.0	372.0	342.0
Anthracene							

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

Table 9

Analytical Data Summary for MW-335

Constituents	Units	9/19/2012	3/27/2013	9/25/2013	4/15/2014	9/25/2014	3/11/2015	9/2/2015	3/22/2016
Antimony	ug/L	<6.000	<6.000	<6.000	<6.000	<.161	<1.000	<1.000	<.237
Arsenic	ug/L	6.810	1.580	4.150	1.740	4.180	2.510	4.860	3.660
Barium	ug/L	14.60	11.80	6.65	6.36	14.90	13.10	15.40	12.20
Benzene	ug/L	<.50	<.50	<.50	<.50	<.11	<.50	<.50	<.50
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	ug/L	<1.000	.331	.530	<1.000	.482	<1.000	<1.000	.311
beta-BHC	ug/L								
bis (2-chloroisopropyl) ether	ug/L								
Bis(2-chloroethoxy)methane	ug/L								
Bis(2-chloroethyl)ether	ug/L								
Bis(2-ethylhexyl)phthalate	ug/L								
Bromochloromethane	ug/L	<5.00	<5.00	<5.00	<5.00	<.12	<5.00	<5.00	<5.00
Bromodichloromethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.12	<1.00	<1.00	<1.00
Bromoform	ug/L	<5.00	<5.00	<5.00	<5.00	<.14	<5.00	<5.00	<5.00
Bromomethane	ug/L	<20.000	<4.000	<4.000	<4.000	<.220	<4.000	<4.000	<4.000
Butylbenzylphthalate	ug/L								
Cadmium	ug/L	<.500	<.500	<.500	.177	.311	<.500	<.500	.038
Carbon Disulfide	ug/L	<1.00	<1.00	<1.00	<1.00	<.15	<1.00	<1.00	<1.00
Carbon Tetrachloride	ug/L	<2.00	<2.00	<2.00	<2.00	<.24	<2.00	<2.00	<2.00
Chlordane (technical)	ug/L								
Chlorobenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.19	<1.00	<1.00	<1.00
Chlorobenzilate	ug/L								
Chlorodibromomethane	ug/L	<5.00	<5.00	<5.00	<5.00	<.20	<5.00	<5.00	<5.00
Chloroethane	ug/L	<4.00	<4.00	<4.00	<4.00	<.15	<4.00	<4.00	<4.00
Chloroform	ug/L	<1.00	<1.00	<1.00	<1.00	<.28	<1.00	<1.00	<1.00
Chloromethane	ug/L	<3.000	<3.000	<3.000	<3.000	<.310	<3.000	<3.000	<3.000
Chloroprene	ug/L								
Chromium	ug/L		<20.000	2.930	<40.000	<1.240	<5.000	<5.000	<.355
Chrysene	ug/L								
cis-1,2-Dichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.13	<1.00	<1.00	<1.00
cis-1,3-Dichloropropene	ug/L	<5.00	<5.00	<5.00	<5.00	<.15	<5.00	<5.00	<5.00
Cobalt	ug/L	56.500	52.600	46.000	57.500	55.700	50.300	47.500	45.800
Copper	ug/L	<20.000	<20.000	<20.000	<40.000	.663	<2.000	<2.000	<1.220
Cyanide	mg/L								
delta-BHC	ug/L								
Diallate	ug/L								
Dibenzo(a,h)anthracene	ug/L								
Dibenzofuran	ug/L								
Dibromomethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.18	<1.00	<1.00	<1.00
Dichlorodifluoromethane	ug/L								
Dieldrin	ug/L								
Diethyl phthalate	ug/L								
Dimethoate	ug/L								
Dimethyl phthalate	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								
Ethyl Parathion	ug/L								
Ethylbenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	<1.00
Famphur	ug/L								
Fluoranthene	ug/L								
Fluorene	ug/L								
gamma-BHC (Lindane)	ug/L								
Heptachlor	ug/L								
Heptachlor Epoxide	ug/L								
Hexachlorobenzene	ug/L								
Hexachlorobutadiene	ug/L								
Hexachlorocyclopentadiene	ug/L								
Hexachloroethane	ug/L								
Hexachloropropene	ug/L								
Indeno[1,2,3-cd]pyrene	ug/L								
Iodomethane	ug/L	<10.0	<10.0	<10.0	<10.0	<.8	<10.0	<10.0	<10.0
Iron	ug/L					11600	7200	14300	10300

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

Table 9

Analytical Data Summary for MW-335

Constituents	10/19/2016	3/7/2017	9/26/2017	3/14/2018	10/2/2018	3/28/2019	9/24/2019	11/7/2019	3/10/2020
Antimony	<.237	<.185	<.185	<.740	<1.320	<.530	<1.060	<.530	<.580
Arsenic	1.300	.776	.713	<2.020	.876	.961	3.260	1.370	<.880
Barium	12.10	15.10	12.10	13.30	11.30	11.30	12.90	12.30	11.50
Benzene	<.11	<.11	<.11	<.11	<.22	<.22	<.22		<.22
Benzo[a]anthracene									<1.17
Benzo[a]pyrene									<1.6
Benzo[b]fluoranthene									<1.28
Benzo[g,h,i]perylene									<1.7
Benzo[k]fluoranthene									<1.28
Benzyl alcohol									<1.17
Beryllium	.225	.160	<.125	<.500	<.530	<.270	<.540	.447	<.270
beta-BHC									<.00505
bis (2-chloroisopropyl) ether									<1.28
Bis(2-chloroethoxy)methane									<1.17
Bis(2-chloroethyl)ether									<1.17
Bis(2-ethylhexyl)phthalate									<2.77
Bromochloromethane	<.12	<.12	<.12	<.12	<.54	<.54	<.54		<.54
Bromodichloromethane	<.12	<.12	<.12	<.12	<.39	<.39	<.39		<.39
Bromoform	<.14	<.14	<.14	<.14	<.78	<.78	<.78		<.78
Bromomethane	<.220	<.220	.402	<.220	<1.100	<1.100	<1.100		<1.100
Butylbenzylphthalate									<1.6
Cadmium	.197	.210	.133	<.176	.169	<.077	.122	.328	.221
Carbon Disulfide	<.15	<.15	<.15	<.15	<.45	<.45	<.45		<.45
Carbon Tetrachloride	<.24	<.24	<.24	<.24	<.65	<.65	<.65		<.65
Chlordane (technical)									<.0674
Chlorobenzene	<.19	<.19	<.19	<.19	<.40	<.40	<.40		<.40
Chlorobenzilate									<3.09
Chlorodibromomethane	<.20	<.20	<.20	<.20	<.75	<.75	<.75		<.75
Chloroethane	<.15	<.15	<.15	<.15	<.79	<.79	<.79		<.79
Chloroform	<.28	<.28	<.28	<.28	<1.30	<1.30	<1.30		<1.30
Chloromethane	.336	<.310	<.310	<.310	<.610	<.610	<.610		<.610
Chloroprene									<.23
Chromium	<.355	<.729	<.729	<2.920	<1.140	<.980	<1.960	<.980	<1.100
Chrysene									<1.17
cis-1,2-Dichloroethene	<.13	<.13	<.13	<.13	<.21	<.21	<.21		<.21
cis-1,3-Dichloropropene	<.15	<.15	<.15	<.15	<.25	<.25	<.25		<.25
Cobalt	66.000	74.300	52.100	66.000	45.000	39.600	382.000	144.000	86.200
Copper	<1.220	<2.190	<2.190	<8.760	1.030	<2.000	<4.000	<2.000	<3.200
Cyanide									<.005
delta-BHC									<.00242
Diallate									<1.38
Dibenzo(a,h)anthracene									<2.02
Dibenzofuran									<1.28
Dibromomethane	<.18	<.18	<.18	<.18	<.33	<.33	<.33		<.33
Dichlorodifluoromethane									<.25
Dieldrin									<.00211
Diethyl phthalate									<1.17
Dimethoate									<1.06
Dimethyl phthalate									<2.66
Di-n-butyl phthalate									<1.28
Di-n-octyl phthalate									<3.19
Dinoseb									<.532
Diphenylamine									<.936
Disulfoton									<.681
Endosulfan I									<.00211
Endosulfan II									<.002
Endosulfan Sulfate									<.00263
Endrin									<.002
Endrin Aldehyde									<.00768
Ethyl Methacrylate									<.68
Ethyl Methanesulfonate									<.532
Ethyl Parathion									<1.7
Ethylbenzene	<.21	<.21	<.21	<.21	<.31	<.31	<.31		<.31
Famphur									<.681
Fluoranthene									<1
Fluorene									<1.38
gamma-BHC (Lindane)									<.002
Heptachlor									<.00274
Heptachlor Epoxide									<.00642
Hexachlorobenzene									<1.49
Hexachlorobutadiene									<1.28
Hexachlorocyclopentadiene									<2.23
Hexachloroethane									<1.38
Hexachloropropene									<1.7
Indeno[1,2,3-cd]pyrene									<2.13
Iodomethane	<.8	<.8	<.8	<.8	<7.0	<7.0	<7.0		<7.0
Iron	4110	4290	2420	1370	2650	7080	32700		2900

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

Table 9

Analytical Data Summary for MW-335

Constituents	9/16/2020	4/15/2021	10/27/2021	4/14/2022	9/1/2022	3/6/2023	9/29/2023
Antimony	<.510	<1.100	<1.100	<2.760	<2.000	<2.000	<2.000
Arsenic	<.880	<.750	1.250	5.900	7.100	16.900	5.100
Barium	24.30	17.20	12.80	12.30	12.00	17.00	11.60
Benzene	<.22	<.22	<.22	<.22	<1.00	<1.00	<1.00
Benzo[a]anthracene							
Benzo[a]pyrene							
Benzo[b]fluoranthene							
Benzo[g,h,i]perylene							
Benzo[k]fluoranthene							
Benzyl alcohol							
Beryllium	<.270	<.270	<.270	<1.080	<4.000	<4.000	<4.000
beta-BHC							
bis (2-chloroisopropyl) ether							
Bis(2-chloroethoxy)methane							
Bis(2-chloroethyl)ether							
Bis(2-ethylhexyl)phthalate							
Bromochloromethane	<.54	<.54	<.54	<.54	<1.00	<1.00	<1.00
Bromodichloromethane	<.39	<.39	<.39	<.39	<1.00	<1.00	<1.00
Bromoform	<.78	<.78	<.78	<.78	<1.00	<1.00	<1.00
Bromomethane	<1.100	<1.100	<1.100	<1.100	<1.000	<1.000	<1.000
Butylbenzylphthalate							
Cadmium	.143	.066	.159	1.010	<.800	<.800	<.800
Carbon Disulfide	<.45	<.45	<.45	<.45	<1.00	<1.00	<1.00
Carbon Tetrachloride	<.65	<.65	<.65	<.65	<1.00	<1.00	<1.00
Chlordane (technical)							
Chlorobenzene	<.40	<.40	<.40	<.40	<1.00	<1.00	<1.00
Chlorobenzilate							
Chlorodibromomethane	<.75	<.75	<.75	<.75	<1.00	<1.00	<1.00
Chloroethane	<.79	<.79	<.79	<.79	<1.00	<1.00	<1.00
Chloroform	<1.30	<1.30	<1.30	<1.30	<1.00	<1.00	<1.00
Chloromethane	<.610	<.610	<.610	<.610	<1.000	<1.000	<1.000
Chloroprene							
Chromium	<1.100	<1.100	<1.100	<4.400	<8.000	<8.000	<8.000
Chrysene							
cis-1,2-Dichloroethene	<.21	<.21	<.21	<.21	<1.00	<1.00	<1.00
cis-1,3-Dichloropropene	<.25	<.25	<.25	<.25	<1.00	<1.00	<1.00
Cobalt	.138	.177	81.800	43.100	42.300	68.200	39.700
Copper	<1.500	<1.400	<1.400	<7.200	<4.000	4.700	<4.000
Cyanide							
delta-BHC							
Diallate							
Dibenzo(a,h)anthracene							
Dibenzofuran							
Dibromomethane	<.33	<.33	<.33	<.33	<1.00	<1.00	<1.00
Dichlorodifluoromethane							
Dieldrin							
Diethyl phthalate							
Dimethoate							
Dimethyl phthalate							
Di-n-butyl phthalate							
Di-n-octyl phthalate							
Dinoseb							
Diphenylamine							
Disulfoton							
Endosulfan I							
Endosulfan II							
Endosulfan Sulfate							
Endrin							
Endrin Aldehyde							
Ethyl Methacrylate							
Ethyl Methanesulfonate							
Ethyl Parathion							
Ethylbenzene	<.31	<.31	<.31	<.31	<1.00	<1.00	<1.00
Famphur							
Fluoranthene							
Fluorene							
gamma-BHC (Lindane)							
Heptachlor							
Heptachlor Epoxide							
Hexachlorobenzene							
Hexachlorobutadiene							
Hexachlorocyclopentadiene							
Hexachloroethane							
Hexachloropropene							
Indeno[1,2,3-cd]pyrene							
Iodomethane	<7.0	<7.0	<7.0	<7.0	<1.0	<1.0	<1.0
Iron	<50	104	4540	9650	10100	9540	11000

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

Table 9

Analytical Data Summary for MW-335

Constituents	Units	9/19/2012	3/27/2013	9/25/2013	4/15/2014	9/25/2014	3/11/2015	9/2/2015	3/22/2016
Isobutanol	ug/L								
Isodrin	ug/L								
Isophorone	ug/L								
Isosafrole	ug/L								
Kepone	ug/L								
Lead	ug/L	<4.000	<4.000	<4.000	<4.000	.913	.134	1.280	.374
m,p-Xylene	ug/L								
Mercury	ug/L								
Methacrylonitrile	ug/L								
Methapyrilene	ug/L								
Methoxychlor	ug/L								
Methyl Methacrylate	ug/L								
Methyl Methanesulfonate	ug/L								
Methyl Parathion	ug/L								
Methylene Chloride	ug/L	<5.000	<5.000	<5.000	<5.000	.617	<5.000	<5.000	<5.000
Methylphenol, 3 4	ug/L								
Naphthalene	ug/L								
Nickel	ug/L	50.4	35.0	40.7	93.3	51.2	60.9	46.8	35.0
Nitrobenzene	ug/L								
N-Nitrosodiethylamine	ug/L								
N-Nitrosodimethylamine	ug/L								
N-Nitrosodi-n-butylamine	ug/L								
N-Nitrosodi-n-propylamine	ug/L								
N-Nitrosodiphenylamine	ug/L								
N-Nitrosomethylethylamine	ug/L								
N-Nitrosopiperidine	ug/L								
N-Nitrosopyrrolidine	ug/L								
o,o,o-Triethylphosphorothioate	ug/L								
o-Toluidine	ug/L								
o-Xylene	ug/L								
PCB-1016	ug/L								
PCB-1221	ug/L								
PCB-1232	ug/L								
PCB-1242	ug/L								
PCB-1248	ug/L								
PCB-1254	ug/L								
PCB-1260	ug/L								
p-Dimethylamino azobenzene	ug/L								
Pentachlorobenzene	ug/L								
Pentachloronitrobenzene	ug/L								
Pentachlorophenol	ug/L								
pH	SU					6.26	6.26	6.37	6.35
Phenacetin	ug/L								
Phenanthrene	ug/L								
Phenol	ug/L								
Phorate	ug/L								
Pronamide	ug/L								
Propionitrile	ug/L								
Pyrene	ug/L								
Safrole	ug/L								
Selenium	ug/L	<5.000	<5.000	<5.000	<5.000	<3.340	<5.000	<5.000	.708
Silver	ug/L	<20.000	<20.000	<20.000	<40.000	<.042	<1.000	<1.000	<.153
Styrene	ug/L	<1.00	<1.00	<1.00	<1.00	<.10	<1.00	<1.00	<1.00
Sulfate	mg/L					2810	3040	2580	2950
Sulfide	mg/L								
Tetrachloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.18	<1.00	<1.00	<1.00
Thallium	ug/L	<2.0000	<2.0000	<2.0000	<2.0000	<.0325	<1.0000	<1.0000	.0370
Thionazin	ug/L								
Tin	ug/L								
Toluene	ug/L								
Total Suspended Solids	mg/L					142.00	7.75	147.00	8.00
Toxaphene	ug/L								
trans-1,2-Dichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	<1.00
trans-1,3-Dichloropropene	ug/L	<5.00	<5.00	<5.00	<5.00	<.22	<5.00	<5.00	<5.00
trans-1,4-Dichloro-2-butene	ug/L	<10.00	<10.00	<10.00	<10.00	<.13	<10.00	<10.00	<10.00
Trichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.19	<1.00	<1.00	<1.00
Trichlorofluoromethane	ug/L	<4.00	<4.00	<4.00	<4.00	<.17	<4.00	<4.00	<4.00
Vanadium	ug/L	<50.000	<50.000	<50.000	<100.000	.508	<5.000	<5.000	<.255
Vinyl Acetate	ug/L	<2.00	<2.00	<2.00	<2.00	<.74	<10.00	<10.00	<10.00
Vinyl Chloride	ug/L	<1.00	<1.00	<1.00	<1.00	<.10	<1.00	<1.00	<1.00
Xylenes, Total	ug/L	<3.000	<3.000	<3.000	<3.000	<.130	<3.000	<3.000	<3.000
Zinc	ug/L	77.2	138.0	251.0	<40.0	67.4	66.2	63.4	59.8

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

Table 9

Analytical Data Summary for MW-335

Constituents	10/19/2016	3/7/2017	9/26/2017	3/14/2018	10/2/2018	3/28/2019	9/24/2019	11/7/2019	3/10/2020
Isobutanol									<553
Isodrin									<.617
Isophorone									<1.05
Isosafrole									<.532
Kepone									<1.91
Lead	<.211	<.324	<.324	<1.300	<.186	<.270	<.270	<.270	<.270
m,p-Xylene									<.38
Mercury									<.1
Methacrylonitrile									<3.3
Methapyrilene									<2.02
Methoxychlor									<.00221
Methyl Methacrylate									<.76
Methyl Methanesulfonate									<.532
Methyl Parathion									<.798
Methylene Chloride	.260	<.170	<.170	<.170	<1.700	<1.700	<1.700		<1.700
Methylphenol, 3 4									<.809
Naphthalene									<3
Nickel	121.0	161.0	92.9	115.0	80.9	41.9	300.0	252.0	151.0
Nitrobenzene									<1.17
N-Nitrosodiethylamine									<.532
N-Nitrosodimethylamine									<.968
N-Nitrosodi-n-butylamine									<.532
N-Nitrosodi-n-propylamine									<1.06
N-Nitrosodiphenylamine									<1.01
N-Nitrosomethylethylamine									<1.38
N-Nitrosopiperidine									<.532
N-Nitrosopyrrolidine									<.532
o,o,o-Triethylphosphorothioate									<.532
o-Toluidine									<.713
o-Xylene									<.4
PCB-1016									<.274
PCB-1221									<.274
PCB-1232									<.274
PCB-1242									<.274
PCB-1248									<.221
PCB-1254									<.221
PCB-1260									<.221
p-Dimethylamino azobenzene									<.83
Pentachlorobenzene									<.617
Pentachloronitrobenzene									<.532
Pentachlorophenol									<2.45
pH	6.06	6.12	6.19	6.22	6.28	6.33	6.02		6.06
Phenacetin									<1.91
Phenanthrene									<1.17
Phenol									<2.55
Phorate									<.532
Pronamide									<.532
Propionitrile									<3.4
Pyrene									<1.49
Safrole									<.532
Selenium	<.630	<.928	<.928	<3.710	<.982	<1.000	<2.000	<1.000	<1.000
Silver	<.153	<.140	<.140	<.560	<.115	<.370	<.370	<.370	<.370
Styrene	<.10	<.10	<.10	<.10	<.37	<.37	<.37		<.37
Sulfate	3120	3160	3050	2820	3070	2730	2930		2880
Sulfide									<.231
Tetrachloroethene	<.18	<.18	<.18	<.18	<.48	<.48	<.48		<.48
Thallium	.0310	<.0644	.0680	<.2580	<.5700	<.2700	<.2700	<.2700	<.2600
Thionazin									<.809
Tin									<2.4
Toluene					<.43	<.43	<.43		<.43
Total Suspended Solids	2.00	1.50	1.75	1.88	2.25	4.00	5.75	2.25	2.25
Toxaphene									<.0611
trans-1,2-Dichloroethene	<.21	<.21	<.21	<.21	<.27	<.27	<.27		<.27
trans-1,3-Dichloropropene	<.22	<.22	<.22	<.22	<.56	<.56	<.56		<.56
trans-1,4-Dichloro-2-butene	<.13	<.13	<.13	<.13	<1.10	<1.10	<1.10		<1.10
Trichloroethene	<.19	<.19	<.19	<.19	<.43	<.43	<.43		<.43
Trichlorofluoromethane	<.17	<.17	<.17	<.17	<.38	<.38	<.38		<.38
Vanadium	<.255	<.840	<.840	<3.360	<2.150	<.820	<1.640	<.820	<.820
Vinyl Acetate	<.74	<.74	<.74	<.74	<2.50	<2.50	<2.50		<2.50
Vinyl Chloride	<.10	<.10	<.10	<.10	<.60	<.60	<.18		<.18
Xylenes, Total	<.130	.173	<.130	<.130	<.400	<.400	<.400		<.400
Zinc	81.0	76.2	60.3	65.0	55.4	38.8	30.2	147.0	82.9

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

Table 9

Analytical Data Summary for MW-335

Constituents	9/16/2020	4/15/2021	10/27/2021	4/14/2022	9/1/2022	3/6/2023	9/29/2023
Isobutanol							
Isodrin							
Isophorone							
Isosafrole							
Kepone							
Lead	<.110	<.210	.490	1.190	<4.000	<4.000	<4.000
m,p-Xylene							
Mercury							
Methacrylonitrile							
Methapyrilene							
Methoxychlor							
Methyl Methacrylate							
Methyl Methanesulfonate							
Methyl Parathion							
Methylene Chloride	<1.700	<1.700	<1.700	<1.700	<5.000	<5.000	<5.000
Methylphenol, 3 4							
Naphthalene							
Nickel	<1.9	<1.9	149.0	48.8	37.0	106.0	38.9
Nitrobenzene							
N-Nitrosodiethylamine							
N-Nitrosodimethylamine							
N-Nitrosodi-n-butylamine							
N-Nitrosodi-n-propylamine							
N-Nitrosodiphenylamine							
N-Nitrosomethylethylamine							
N-Nitrosopiperidine							
N-Nitrosopyrrolidine							
o,o,o-Triethylphosphorothioate							
o-Toluidine							
o-Xylene							
PCB-1016							
PCB-1221							
PCB-1232							
PCB-1242							
PCB-1248							
PCB-1254							
PCB-1260							
p-Dimethylamino azobenzene							
Pentachlorobenzene							
Pentachloronitrobenzene							
Pentachlorophenol							
pH	6.94	7.24	6.10	6.53	6.20	6.30	6.20
Phenacetin							
Phenanthrene							
Phenol							
Phorate							
Pronamide							
Propionitrile							
Pyrene							
Safrole							
Selenium	<1.000	<.960	<.960	<3.840	<4.000	<4.000	<4.000
Silver	<.370	<.420	<.420	<1.960	<4.000	<4.000	<4.000
Styrene	<.37	<.37	<.37	<.37	<1.00	<1.00	<1.00
Sulfate	548	574	2870	2810	2610	2900	2650
Sulfide							
Tetrachloroethene	<.48	<.48	<.48	<.48	<1.00	<1.00	<1.00
Thallium	<.2600	<.2600	<.2600	<1.0400	<2.0000	<2.0000	<2.0000
Thionazin							
Tin							
Toluene	<.43	<.43	<.43	<.43	<1.00	<1.00	<1.00
Total Suspended Solids	1.25	2.88	2.88	162.00			
Toxaphene							
trans-1,2-Dichloroethene	<.27	<.27	<.27	<.27	<1.00	<1.00	<1.00
trans-1,3-Dichloropropene	<.56	<.56	<.56	<.56	<1.00	<1.00	<1.00
trans-1,4-Dichloro-2-butene	<1.10	<1.10	<1.10	<1.10	<5.00	<5.00	<5.00
Trichloroethene	<.43	<.43	<.43	<.43	<1.00	<1.00	<1.00
Trichlorofluoromethane	<.38	<.38	<.38	<.38	<1.00	<1.00	<1.00
Vanadium	<.850	<1.100	<1.100	<4.400	<20.000	<20.000	<20.000
Vinyl Acetate	<2.50	<2.50	<2.50	<2.50	<5.00	<5.00	<5.00
Vinyl Chloride	<.18	<.18	<.18	<.18	<1.00	<1.00	<1.00
Xylenes, Total	<.400	<.400	<.400	<.400	<2.000	<2.000	<2.000
Zinc	11.2	<10.0	81.0	56.9	43.9	69.2	41.6

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

Table 9

Analytical Data Summary for MW-344

Constituents	Units	9/20/2012	3/27/2013	9/25/2013	4/15/2014	9/26/2014	3/12/2015	9/2/2015	3/23/2016
(3 4)-Methylphenol	ug/L								
1,1,1,2-Tetrachloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	<1.00
1,1,1-Trichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.12	<1.00	<1.00	<1.00
1,1,2,2-Tetrachloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.10	<1.00	<1.00	<1.00
1,1,2-Trichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.12	<1.00	<1.00	<1.00
1,1-Dichloroethane	ug/L	<1.000	<1.000	<1.000	<1.000	<.210	<1.000	<1.000	<1.000
1,1-Dichloroethene	ug/L	<2.00	<2.00	<2.00	<2.00	<.15	<2.00	<2.00	<1.00
1,1-Dichloropropene	ug/L	<1.00		<1.00					
1,2,3-Trichloropropane	ug/L	<1.00	<1.00	<1.00	<1.00	<.19	<1.00	<1.00	<10.00
1,2,4,5-Tetrachlorobenzene	ug/L	<10.000		<11.200					
1,2,4-Trichlorobenzene	ug/L	<5.00		<5.00					
1,2-Dibromo-3-chloropropane	ug/L	<10.00	<10.00	<10.00	<10.00	<.12	<10.00	<10.00	<10.00
1,2-Dibromoethane	ug/L	<10.00	<10.00	<10.00	<10.00	<.13	<10.00	<10.00	<1.00
1,2-Dichlorobenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.14	<1.00	<1.00	<1.00
1,2-Dichloroethane	ug/L	<1.000	<1.000	<1.000	<1.000	<.180	<1.000	<1.000	<2.000
1,2-Dichloropropane	ug/L	<1.00	<1.00	<1.00	<1.00	<.87	<1.00	<1.00	<10.00
1,2-Dinitrobenzene	ug/L								
1,3,5-Trinitrobenzene	ug/L	<10.00		<11.20					
1,3-Dichlorobenzene	ug/L	<1.0		<1.0					
1,3-Dichloropropane	ug/L	<1.0		<1.0					
1,3-Dinitrobenzene	ug/L	<10.00		<11.20					
1,4-Dichlorobenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.20	<1.00	<1.00	<10.00
1,4-Naphthoquinone	ug/L	<10.000		<11.200					
1,4-phenylenediamine	ug/L								
1-Naphthylamine	ug/L	<10.000		<11.200					
2,2`-oxybis[1-Chloropropane]	ug/L	<10.0		<11.2					
2,2-Dichloropropane	ug/L	<4.00		<4.00					
2,3,4,6-Tetrachlorophenol	ug/L	<10.000		<11.200					
2,4,5-T	ug/L	<1.000		<1.150					
2,4,5-TP [Silvex]	ug/L	<1.000		<1.150					
2,4,5-Trichlorophenol	ug/L	<10.000		<11.200					
2,4,6-Trichlorophenol	ug/L	<10.000		<11.200					
2,4-D	ug/L	<1.000		<1.150					
2,4-Dichlorophenol	ug/L	<10.000		<11.200					
2,4-Dimethylphenol	ug/L	<10.000		<11.200					
2,4-Dinitrophenol	ug/L	<20.00		<22.50					
2,4-Dinitrotoluene	ug/L	<10.000		<11.200					
2,6-Dichlorophenol	ug/L	<10.000		<11.200					
2,6-Dinitrotoluene	ug/L	<10.000		<11.200					
2-Acetylaminofluorene	ug/L	<10.00		<11.20					
2-Butanone	ug/L	<10.00	<10.00	<10.00	<10.00	<.47	<10.00	<10.00	<5.00
2-Chloronaphthalene	ug/L	<10.000		<11.200					
2-Chlorophenol	ug/L	<10.000		<11.200					
2-Hexanone	ug/L	<10.0	<10.0	<10.0	<10.0	<.2	<10.0	<10.0	<1.0
2-Methylnaphthalene	ug/L	<10.0		<11.2					
2-Methylphenol	ug/L								
2-Methylphenol [o-Cresol]	ug/L	<10.000		<11.200					
2-Naphthylamine	ug/L	<10.000		<11.200					
2-Nitroaniline	ug/L	<10.00		<11.20					
2-Nitrophenol	ug/L	<10.00		<11.20					
3,3'-Dichlorobenzidine	ug/L								
3,3-Dichlorobenzidine	ug/L	<10.000		<56.200					
3,3-Dimethylbenzidine	ug/L	<10.000		<11.200					
3-Methylcholanthrene	ug/L	<10.000		<11.200					
3-Nitroaniline	ug/L	<10.000		<11.200					
4,4`-DDD	ug/L	<.03200		<.03520					
4,4`-DDE	ug/L	<.03200		<.03520					
4,4`-DDT	ug/L	<.03200		<.03520					
4,6-Dinitro-2-methylphenol	ug/L	<10.00		<11.20					
4-Aminobiphenyl	ug/L	<10.000		<11.200					
4-Bromophenyl phenyl ether	ug/L	<10.000		<11.200					
4-Chloro-3-methylphenol	ug/L	<10.000		<11.200					
4-Chloroaniline	ug/L	<10.000		<11.200					
4-Chlorophenyl phenyl ether	ug/L	<10.000		<11.200					
4-Methyl-2-pentanone	ug/L	<10.00	<10.00	<10.00	<10.00	<.22	<10.00	<10.00	<10.00
4-Nitroaniline	ug/L	<10.000		<11.200					
4-Nitrophenol	ug/L	<10.00		<11.20					
5-Nitro-o-toluidine	ug/L	<10.000		<11.200					
7,12-Dimethylbenz(a)anthracene	ug/L								
7,12-Dimethylbenz[a]anthracene	ug/L	<10.000		<11.200					
Acenaphthene	ug/L	<10.000		<11.200					
Acenaphthylene	ug/L								
Acetone	ug/L	<10.00	<10.00	<10.00	<10.00	<1.79	<10.00	<10.00	<10.00
Acetonitrile	ug/L	<10000		<10000					
Acetophenone	ug/L	<10.000		<11.200					
Acrolein	ug/L	<10.0		<10.0					
Acrylonitrile	ug/L	<10.00	<10.00	<10.00	<10.00	<.53	<10.00	<10.00	<.50

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

Table 9

Analytical Data Summary for MW-344

Constituents	10/19/2016	3/7/2017	9/26/2017	3/14/2018	10/2/2018	3/28/2019	9/24/2019	3/10/2020	9/15/2020
(3 4)-Methylphenol									
1,1,1,2-Tetrachloroethane	<.21	<.21	<.21	<.21	<.38	<.38	<.38	<.38	<.38
1,1,1-Trichloroethane	<.12	<.12	<.12	<.12	<.19	<.19	<.19	<.19	<.19
1,1,2,2-Tetrachloroethane	<.10	<.10	<.10	<.10	<.47	<.47	<.47	<.47	<.47
1,1,2-Trichloroethane	<.12	<.12	<.12	<.12	<.45	<.45	<.45	<.45	<.45
1,1-Dichloroethane	<.210	.290	.475	.474	<.220	<.220	<.220	<.220	.408
1,1-Dichloroethene	<.15	<.15	<.15	<.15	<.56	<.56	<.56	<.56	<.56
1,1-Dichloropropene					<.43				
1,2,3-Trichloropropane	<.19	<.19	<.19	<.19	<.59	<.59	<.59	<.59	<.59
1,2,4,5-Tetrachlorobenzene					<.147				
1,2,4-Trichlorobenzene					<.75				
1,2-Dibromo-3-chloropropane	<.50	<.50	<.50	<.50	<1.20	<1.20	<1.20	<1.20	<1.20
1,2-Dibromoethane	<.13	<.13	<.13	<.13	<.34	<.34	<.34	<.34	<.34
1,2-Dichlorobenzene	<.14	<.14	<.14	<.14	<.37	<.37	<.37	<.37	<.37
1,2-Dichloroethane	<.180	<.180	.207	<.180	<.390	<.390	<.390	<.390	<.390
1,2-Dichloropropane	<.87	<.87	<.87	<.87	<.27	<.27	<.27	<.27	<.27
1,2-Dinitrobenzene									
1,3,5-Trinitrobenzene					<1.35				
1,3-Dichlorobenzene					<.3				
1,3-Dichloropropane					<.4				
1,3-Dinitrobenzene					<1.06				
1,4-Dichlorobenzene	<.20	<.20	<.20	<.20	<.23	<.23	<.23	<.23	<.23
1,4-Naphthoquinone					<.379				
1,4-phenylenediamine					<8.84				
1-Naphthylamine					<.253				
2,2`-oxybis[1-Chloropropane]									
2,2-Dichloropropane					<.69				
2,3,4,6-Tetrachlorophenol					<.526				
2,4,5-T					<.473				
2,4,5-TP [Silvex]					<.316				
2,4,5-Trichlorophenol					<.737				
2,4,6-Trichlorophenol					<.737				
2,4-D					<.508				
2,4-Dichlorophenol					<.326				
2,4-Dimethylphenol					<.221				
2,4-Dinitrophenol					<2.72				
2,4-Dinitrotoluene					<.484				
2,6-Dichlorophenol					<.232				
2,6-Dinitrotoluene					<.253				
2-Acetylaminofluorene					<1.31				
2-Butanone	<1.04	<1.04	<1.04	<1.04	<2.10	<2.10	<2.10	<2.10	<2.10
2-Chloronaphthalene					<.242				
2-Chlorophenol					<.158				
2-Hexanone	<.2	<.2	<.2	<.2	<2.0	<2.0	<2.0	<2.0	<2.0
2-Methylnaphthalene					<.2				
2-Methylphenol									
2-Methylphenol [o-Cresol]					<.189				
2-Naphthylamine					<.232				
2-Nitroaniline					<1.31				
2-Nitrophenol					<1.01				
3,3'-Dichlorobenzidine									
3,3-Dichlorobenzidine					<.853				
3,3-Dimethylbenzidine					<.221				
3-Methylcholanthrene					<.937				
3-Nitroaniline					<.611				
4,4`-DDD					<.00196				
4,4`-DDE					<.00228				
4,4`-DDT					<.00413				
4,6-Dinitro-2-methylphenol					<2.34				
4-Aminobiphenyl					<.316				
4-Bromophenyl phenyl ether					<.305				
4-Chloro-3-methylphenol					<.274				
4-Chloroaniline					<.158				
4-Chlorophenyl phenyl ether					<.263				
4-Methyl-2-pentanone	<.22	<.22	<.22	<.22	<2.10	<2.10	<2.10	<2.10	<2.10
4-Nitroaniline					<.337				
4-Nitrophenol					<1.45				
5-Nitro-o-toluidine					<.179				
7,12-Dimethylbenz(a)anthracene									
7,12-Dimethylbenz[a]anthracene					<.263				
Acenaphthene					<.316				
Acenaphthylene					<.611				
Acetone	<1.79	<1.79	<1.79	3.22	<3.10	3.61	<3.10	<3.10	<3.10
Acetonitrile					<126				
Acetophenone					<.368				
Acrolein					<3.6				
Acrylonitrile	<.53	<.53	<.53	<.53	<2.20	<2.20	<2.20	<2.20	<2.20

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

Table 9

Analytical Data Summary for MW-344

Constituents	4/15/2021	10/27/2021	4/14/2022	9/1/2022	3/6/2023	9/29/2023
(3 4)-Methylphenol						<8
1,1,1,2-Tetrachloroethane	<.38	<.38	<.38	<1.00	<1.00	<1.00
1,1,1-Trichloroethane	<.19	<.19	<.19	<1.00	<1.00	<1.00
1,1,2,2-Tetrachloroethane	<.47	<.47	<.47	<1.00	<1.00	<1.00
1,1,2-Trichloroethane	<.45	<.45	<.45	<1.00	<1.00	<1.00
1,1-Dichloroethane	.345	<.220	<.220	<1.000	<1.000	<1.000
1,1-Dichloroethene	<.56	<.56	<.56	<1.00	<1.00	<1.00
1,1-Dichloropropene						<1.00
1,2,3-Trichloropropane	<.59	<.59	<.59	<1.00	<1.00	<1.00
1,2,4,5-Tetrachlorobenzene						<8.000
1,2,4-Trichlorobenzene						<1.00
1,2-Dibromo-3-chloropropane	<1.20	<1.20	<1.20	<5.00	<5.00	<1.00
1,2-Dibromoethane	<.34	<.34	<.34	<1.00	<1.00	<1.00
1,2-Dichlorobenzene	<.37	<.37	<.37	<1.00	<1.00	<1.00
1,2-Dichloroethane	<.390	<.390	<.390	<1.000	<1.000	<1.000
1,2-Dichloropropane	<.27	<.27	<.27	<1.00	<1.00	<1.00
1,2-Dinitrobenzene						<8
1,3,5-Trinitrobenzene						<8.00
1,3-Dichlorobenzene						<1.0
1,3-Dichloropropane						<1.0
1,3-Dinitrobenzene						<8.00
1,4-Dichlorobenzene	<.23	<.23	<.23	<1.00	<1.00	<1.00
1,4-Naphthoquinone						<8.000
1,4-phenylenediamine						<8.00
1-Naphthylamine						<8.000
2,2`-oxybis[1-Chloropropane]						
2,2-Dichloropropane						<1.00
2,3,4,6-Tetrachlorophenol						<8.000
2,4,5-T						<.500
2,4,5-TP [Silvex]						<.500
2,4,5-Trichlorophenol						<8.000
2,4,6-Trichlorophenol						<8.000
2,4-D						<2.000
2,4-Dichlorophenol						<8.000
2,4-Dimethylphenol						<8.000
2,4-Dinitrophenol						<8.00
2,4-Dinitrotoluene						<8.000
2,6-Dichlorophenol						<8.000
2,6-Dinitrotoluene						<8.000
2-Acetylaminofluorene						<8.00
2-Butanone	<2.10	<2.10	<2.10	<10.00	<10.00	<5.00
2-Chloronaphthalene						<8.000
2-Chlorophenol						<8.000
2-Hexanone	<2.0	<2.0	<2.0	<5.0	<5.0	<5.0
2-Methylnaphthalene						<8.0
2-Methylphenol						<8
2-Methylphenol [o-Cresol]						
2-Naphthylamine						<8.000
2-Nitroaniline						<8.00
2-Nitrophenol						<8.00
3,3'-Dichlorobenzidine						<8
3,3-Dichlorobenzidine						
3,3-Dimethylbenzidine						<8.000
3-Methylcholanthrene						<8.000
3-Nitroaniline						<8.000
4,4`-DDD						<.05000
4,4`-DDE						<.05000
4,4`-DDT						<.05000
4,6-Dinitro-2-methylphenol						<8.00
4-Aminobiphenyl						<8.000
4-Bromophenyl phenyl ether						<8.000
4-Chloro-3-methylphenol						<8.000
4-Chloroaniline						<8.000
4-Chlorophenyl phenyl ether						<8.000
4-Methyl-2-pentanone	<2.10	<2.10	<2.10	<5.00	<5.00	<5.00
4-Nitroaniline						<8.000
4-Nitrophenol						<8.00
5-Nitro-o-toluidine						<8.000
7,12-Dimethylbenz(a)anthracene						<8
7,12-Dimethylbenz[a]anthracene						
Acenaphthene						<8.000
Acenaphthylene						<8.000
Acetone	<3.10	<3.10	<3.10	<10.00	<10.00	<10.00
Acetonitrile						<10
Acetophenone						<8.000
Acrolein						<10.0
Acrylonitrile	<2.20	<2.20	<2.20	<5.00	<5.00	<5.00

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

Table 9

Analytical Data Summary for MW-344

Constituents	Units	9/20/2012	3/27/2013	9/25/2013	4/15/2014	9/26/2014	3/12/2015	9/2/2015	3/23/2016
Aldrin	ug/L	<.03200		<.03520					
Alkalinity as CaCO3	mg/L					175	184	170	165
Allyl Chloride	ug/L	<20.0		<2.0					
alpha-BHC	ug/L	<.03200		<.03520					
Aluminum	ug/L					33.0	19.3	<50.0	51.3
Anthracene	ug/L	<10.000		<11.200					
Antimony	ug/L	<6.000	<6.000	3.660	5.020	<.161	<1.000	<1.000	<.237
Arsenic	ug/L	<4.000	<1.000	<2.000	<1.000	<.945	1.050	<2.000	2.100
Azobenzene	ug/L								
Barium	ug/L	23.20	20.60	11.90	8.72	17.80	17.00	17.50	14.90
Benzene	ug/L	<.500	<.500	.215	.268	.198	.281	<.500	<5.000
Benzo[a]anthracene	ug/L	<10.000		<11.200					
Benzo[a]pyrene	ug/L	<10.00		<11.20					
Benzo[b]fluoranthene	ug/L	<10.00		<11.20					
Benzo[ghi]perylene	ug/L	<10.00		<11.20					
Benzo[k]fluoranthene	ug/L	<10.0		<11.2					
Benzyl alcohol	ug/L	<10.000		<11.200					
Beryllium	ug/L	<1.000	<1.000	<1.000	<1.000	.212	<1.000	<1.000	<.221
beta-BHC	ug/L	<.03200		<.03520					
bis (2-chloroisopropyl) ether	ug/L								
Bis(2-chloroethoxy)methane	ug/L	<10.000		<11.200					
Bis(2-chloroethyl)ether	ug/L	<10.0		<11.2					
Bis(2-ethylhexyl)phthalate	ug/L	<10.00		<11.20					
Bis[2-Chloroisopropyl]ether	ug/L								
Bromochloromethane	ug/L	<5.00	<5.00	<5.00	<5.00	<.12	<5.00	<5.00	<1.00
Bromodichloromethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.12	<1.00	<1.00	<5.00
Bromoform	ug/L	<5.00	<5.00	<5.00	<5.00	<.14	<5.00	<5.00	<1.00
Bromomethane	ug/L	<20.00	<4.00	<4.00	<4.00	<.22	<4.00	<4.00	<1.00
Butylbenzylphthalate	ug/L	<10.00		<11.20					
Cadmium	ug/L	<.500	<.500	<.500	.117	.142	.143	<.500	.156
Carbon Disulfide	ug/L	<1.00	<1.00	<1.00	<1.00	<.15	<1.00	<1.00	<2.00
Carbon Tetrachloride	ug/L	<2.00	<2.00	<2.00	<2.00	<.24	<2.00	<2.00	<1.00
Chlordane	ug/L	<2.0000		<2.2000					
Chlorobenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.19	<1.00	<1.00	<4.00
Chlorobenzilate	ug/L	<10.000		<11.200					
Chlorodibromomethane	ug/L	<5.00	<5.00	<5.00	<5.00	<.20	<5.00	<5.00	<10.00
Chloroethane	ug/L	<4.000	<4.000	.514	<4.000	<.150	<4.000	<4.000	<1.000
Chloroform	ug/L	<1.00	<1.00	<1.00	<1.00	<.28	<1.00	<1.00	<5.00
Chloromethane	ug/L	<3.00	<3.00	<3.00	<3.00	<.31	<3.00	<3.00	<4.00
Chloroprene	ug/L	<1.00		<1.00					
Chromium	ug/L	<20.000	<20.000	5.520	<20.000	<1.240	<5.000	<5.000	<.355
Chrysene	ug/L	<10.000		<11.200					
cis-1,2-Dichloroethene	ug/L	<1.000	.301	.976	1.300	.819	<1.000	1.140	1.120
cis-1,3-Dichloropropene	ug/L	<5.00	<5.00	<5.00	<5.00	<.15	<5.00	<5.00	<1.00
Cobalt	ug/L	93.2	172.0	105.0	50.0	164.0	176.0	202.0	269.0
Copper	ug/L	<20.000	<20.000	<20.000	<20.000	<.485	<2.000	<2.000	<1.220
Cyanide	mg/L	<.0100		<.0100					
delta-BHC	ug/L	<.0320		<.0352					
Diallate	ug/L	<10.000		<11.200					
Dibenzo(a,h)anthracene	ug/L	<10.00		<11.20					
Dibenzofuran	ug/L	<10.000		<11.200					
Dibromomethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.18	<1.00	<1.00	<10.00
Dichlorodifluoromethane	ug/L	<3.00		<3.00					
Dieldrin	ug/L	<.03200		<.03520					
Diethyl phthalate	ug/L	<10.000		<11.200					
Dimethoate	ug/L	<10.000		<11.200					
Dimethyl phthalate	ug/L	<10.00		<11.20					
Di-n-butyl phthalate	ug/L								
Di-n-butylphthalate	ug/L	<10.00		<11.20					
Di-n-octyl phthalate	ug/L								
Di-n-octylphthalate	ug/L	<10.00		<22.50					
Dinoseb	ug/L	<10.000		<11.200					
Diphenylamine	ug/L	<10.000		<11.200					
Disulfoton	ug/L	<10.000		<11.200					
Endosulfan I	ug/L	<.03200		<.03520					
Endosulfan II	ug/L	<.03200		<.03520					
Endosulfan Sulfate	ug/L	<.03200		<.03520					
Endrin	ug/L	<.03200		<.03520					
Endrin Aldehyde	ug/L	<.03200		<.03520					
Ethyl Methacrylate	ug/L	<2.00		<2.00					
Ethyl Methanesulfonate	ug/L	<10.000		<11.200					
Ethyl Parathion	ug/L								
Ethylbenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	<3.00
Famphur	ug/L	<20.000		<22.500					
Fluoranthene	ug/L	<10.000		<11.200					
Fluorene	ug/L	<10.000		<11.200					
gamma-BHC (Lindane)	ug/L	<.0320		<.0352					

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

Table 9

Analytical Data Summary for MW-344

Constituents	10/19/2016	3/7/2017	9/26/2017	3/14/2018	10/2/2018	3/28/2019	9/24/2019	3/10/2020	9/15/2020
Aldrin					<.00489				
Alkalinity as CaCO3	232	221	237	198	206	175	371	153	194
Allyl Chloride					<.7				
alpha-BHC					<.00185				
Aluminum	<20.8	<41.3	<41.3	<165.0	25.1	<27.0	184.0	<30.0	28.6
Anthracene					<.179				
Antimony	<.237	<.185	<.185	<.740	<1.320	<.530	<.530	<.580	<.510
Arsenic	<.672	.739	.715	<2.020	1.450	<.750	1.040	<.880	1.810
Azobenzene									
Barium	13.40	15.50	13.30	13.70	13.20	10.70	12.30	10.00	11.80
Benzene	.594	.543	.894	.715	.732	<.220	.541	<.220	.836
Benzo[a]anthracene					<.358				
Benzo[a]pyrene					<1.34				
Benzo[b]fluoranthene					<1.05				
Benzo[ghi]perylene					<1.39				
Benzo[k]fluoranthene					<.6				
Benzyl alcohol					<.632				
Beryllium	<.221	<.125	<.125	<.500	<.530	<.270	.401	<.270	<.270
beta-BHC					<.00522				
bis (2-chloroisopropyl) ether					<.189				
Bis(2-chloroethoxy)methane					<.274				
Bis(2-chloroethyl)ether					<.2				
Bis(2-ethylhexyl)phthalate					<2.44				
Bis[2-Chloroisopropyl]ether									
Bromochloromethane	<.12	<.12	<.12	<.12	<.54	<.54	<.54	<.54	<.54
Bromodichloromethane	<.12	<.12	<.12	<.12	<.39	<.39	<.39	<.39	<.39
Bromoform	<.14	<.14	<.14	<.14	<.78	<.78	<.78	<.78	<.78
Bromomethane	<.22	<.22	<.22	<.22	<1.10	<1.10	<1.10	<1.10	<1.10
Butylbenzylphthalate					<1.61				
Cadmium	.094	.125	.077	<.176	.302	.085	.421	.055	.061
Carbon Disulfide	<.15	<.15	<.15	<.15	<.45	<.45	<.45	<.45	<.45
Carbon Tetrachloride	<.24	<.24	<.24	<.24	<.65	<.65	<.65	<.65	<.65
Chlordane					<.0696				
Chlorobenzene	<.19	<.19	<.19	<.19	<.40	<.40	<.40	<.40	<.40
Chlorobenzilate					<.221				
Chlorodibromomethane	<.20	<.20	<.20	<.20	<.75	<.75	<.75	<.75	<.75
Chloroethane	<.150	<.150	.462	<.150	<.790	<.790	<.790	<.790	<.790
Chloroform	<.28	<.28	<.28	<.28	<1.30	<1.30	<1.30	<1.30	<1.30
Chloromethane	<.31	<.31	<.31	<.31	<.61	<.61	<.61	<.61	<.61
Chloroprene					<.23				
Chromium	<.355	<.729	<.729	<2.920	1.360	<.980	<.980	<1.100	<1.100
Chrysene					<.326				
cis-1,2-Dichloroethene	2.040	1.820	2.480	2.240	1.900	1.180	1.820	1.360	2.440
cis-1,3-Dichloropropene	<.15	<.15	<.15	<.15	<.25	<.25	<.25	<.25	<.25
Cobalt	57.6	107.0	21.8	114.0	198.0	128.0	146.0	206.0	263.0
Copper	<1.220	<2.190	<2.190	<8.760	<.497	<2.000	<2.000	<3.200	<1.500
Cyanide					<.0042				
delta-BHC					.0029				
Diallate					<.242				
Dibenzo(a,h)anthracene					<1.93				
Dibenzofuran					<.253				
Dibromomethane	<.18	<.18	<.18	<.18	<.33	<.33	<.33	<.33	<.33
Dichlorodifluoromethane					<.25				
Dieldrin					<.00217				
Diethyl phthalate					<.284				
Dimethoate					<.284				
Dimethyl phthalate					<2.31				
Di-n-butyl phthalate									
Di-n-butylphthalate					<1.21				
Di-n-octyl phthalate									
Di-n-octylphthalate					<2.79				
Dinoseb					<.453				
Diphenylamine					<.695				
Disulfoton					<.305				
Endosulfan I					.00217				
Endosulfan II					<.00207				
Endosulfan Sulfate					<.00272				
Endrin					.00264				
Endrin Aldehyde					<.00793				
Ethyl Methacrylate					<.68				
Ethyl Methanesulfonate					<.158				
Ethyl Parathion					<.189				
Ethylbenzene	<.21	<.21	<.21	<.21	<.31	<.31	<.31	<.31	<.31
Famphur					<.495				
Fluoranthene					<.716				
Fluorene					<.305				
gamma-BHC (Lindane)					.0022				

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

Table 9

Analytical Data Summary for MW-344

Constituents	4/15/2021	10/27/2021	4/14/2022	9/1/2022	3/6/2023	9/29/2023
Aldrin						<.05000
Alkalinity as CaCO3	188	209	196	200	197	219
Allyl Chloride						<1.0
alpha-BHC						<.05000
Aluminum	47.7	54.7	<68.0	<100.0	77.0	110.0
Anthracene						<8.000
Antimony	<1.100	<1.100	<2.760	<2.000	<2.000	<2.000
Arsenic	2.590	3.050	<3.000	<4.000	<4.000	<4.000
Azobenzene						<8
Barium	12.70	12.50	11.00	11.90	11.70	12.20
Benzene	.722	.918	.390	<1.000	<1.000	1.100
Benzo[a]anthracene						<8.000
Benzo[a]pyrene						<8.00
Benzo[b]fluoranthene						<8.00
Benzo[ghi]perylene						<8.00
Benzo[k]fluoranthene						<8.0
Benzyl alcohol						<8.000
Beryllium	<.270	<.270	<1.080	<4.000	<4.000	<4.000
beta-BHC						<.05000
bis (2-chloroisopropyl) ether						
Bis(2-chloroethoxy)methane						<8.000
Bis(2-chloroethyl)ether						<8.0
Bis(2-ethylhexyl)phthalate						<6.00
Bis[2-Chloroisopropyl]ether						<8
Bromochloromethane	<.54	<.54	<.54	<1.00	<1.00	<1.00
Bromodichloromethane	<.39	<.39	<.39	<1.00	<1.00	<1.00
Bromoform	<.78	<.78	<.78	<1.00	<1.00	<1.00
Bromomethane	<1.10	<1.10	<1.10	<1.00	<1.00	<1.00
Butylbenzylphthalate						<8.00
Cadmium	<.051	.066	<.220	<.800	<.800	<.800
Carbon Disulfide	<.45	<.45	<.45	<1.00	<1.00	<1.00
Carbon Tetrachloride	<.65	<.65	<.65	<1.00	<1.00	<1.00
Chlordane						<.1000
Chlorobenzene	<.40	<.40	<.40	<1.00	<1.00	<1.00
Chlorobenzilate						<8.000
Chlorodibromomethane	<.75	<.75	<.75	<1.00	<1.00	<1.00
Chloroethane	<.790	<.790	<.790	<1.000	<1.000	<1.000
Chloroform	<1.30	<1.30	<1.30	<1.00	<1.00	<1.00
Chloromethane	<.61	<.61	<.61	<1.00	<1.00	<1.00
Chloroprene						<1.00
Chromium	<1.100	<1.100	<4.400	<8.000	<8.000	<8.000
Chrysene						<8.000
cis-1,2-Dichloroethene	2.020	2.180	1.270	1.900	<1.000	2.400
cis-1,3-Dichloropropene	<.25	<.25	<.25	<1.00	<1.00	<1.00
Cobalt	258.0	223.0	310.0	224.0	209.0	151.0
Copper	<1.400	<1.400	<7.200	<4.000	<4.000	<4.000
Cyanide						<.0050
delta-BHC						<.0500
Diallate						<8.000
Dibenzo(a,h)anthracene						<8.00
Dibenzofuran						<8.000
Dibromomethane	<.33	<.33	<.33	<1.00	<1.00	<1.00
Dichlorodifluoromethane						<1.00
Dieldrin						<.05000
Diethyl phthalate						<8.000
Dimethoate						<.400
Dimethyl phthalate						<8.00
Di-n-butyl phthalate						<8
Di-n-butylphthalate						
Di-n-octyl phthalate						<8
Di-n-octylphthalate						
Dinoseb						<.500
Diphenylamine						<8.000
Disulfoton						<.400
Endosulfan I						<.05000
Endosulfan II						<.05000
Endosulfan Sulfate						<.05000
Endrin						<.05000
Endrin Aldehyde						<.05000
Ethyl Methacrylate						<10.00
Ethyl Methanesulfonate						<8.000
Ethyl Parathion						
Ethylbenzene	<.31	<.31	<.31	<1.00	<1.00	<1.00
Famphur						<.400
Fluoranthene						<8.000
Fluorene						<8.000
gamma-BHC (Lindane)						<.0500

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

Table 9

Analytical Data Summary for MW-344

Constituents	Units	9/20/2012	3/27/2013	9/25/2013	4/15/2014	9/26/2014	3/12/2015	9/2/2015	3/23/2016
Heptachlor	ug/L	<.03200		<.03520					
Heptachlor Epoxide	ug/L	<.03200		<.03520					
Hexachlorobenzene	ug/L	<10.000		<11.200					
Hexachlorobutadiene	ug/L	<10.000		<11.200					
Hexachlorocyclopentadiene	ug/L	<10.00		<22.50					
Hexachloroethane	ug/L	<10.000		<11.200					
Hexachloropropene	ug/L	<10.00		<11.20					
Indeno[1,2,3-cd]pyrene	ug/L	<10.00		<11.20					
Iodomethane	ug/L	<10.0	<10.0	<10.0	<10.0	<.8	<10.0	<10.0	<1.0
Iron	ug/L					7680.0	10800.0	23000.0	32100.0
Isobutanol	ug/L	<10000		<10000					
Isodrin	ug/L	<10.0		<11.2					
Isophorone	ug/L	<10.000		<11.200					
Isosafrole	ug/L	<10.000		<11.200					
Kepone	ug/L	<10.000		<11.200					
Lead	ug/L	<4.0000	<4.0000	<4.0000	<4.0000	<.0967	<.5000	<.5000	.2710
m,p-Xylene	ug/L								
Mercury	ug/L	<.2670		<.2000					
Methacrylonitrile	ug/L	<1.0		<1.0					
Methapyrilene	ug/L	<10.00		<11.20					
Methoxychlor	ug/L	<.03200		<.03520					
Methyl Methacrylate	ug/L	<2.00		<2.00					
Methyl Methanesulfonate	ug/L	<10.000		<11.200					
Methyl Parathion	ug/L	<10.000		<11.200					
Methylene Chloride	ug/L	<5.000	<5.000	<5.000	<5.000	<.170	<5.000	<5.000	<10.000
Methylphenol, 3 4	ug/L								
Naphthalene	ug/L	<5		<5					
Nickel	ug/L	84.2	164.0	110.0	51.3	131.0	107.0	152.0	202.0
Nitrobenzene	ug/L	<10.000		<11.200					
N-Nitrosodiethylamine	ug/L	<10.000		<11.200					
N-Nitrosodimethylamine	ug/L	<10.0		<11.2					
N-Nitrosodi-n-butylamine	ug/L	<10.000		<11.200					
N-Nitrosodi-n-propylamine	ug/L	<10.000		<11.200					
N-Nitrosodiphenylamine	ug/L	<10.000		<11.200					
N-Nitrosomethylethylamine	ug/L	<10.000		<11.200					
N-Nitrosopiperidine	ug/L	<10.000		<11.200					
N-Nitrosopyrrolidine	ug/L	<10.000		<11.200					
o,o,o-Triethylphosphorothioate	ug/L	<10.000		<11.200					
o-Toluidine	ug/L	<10.000		<11.200					
o-Xylene	ug/L								
p-[Dimethylamino]azobenzene	ug/L	<10.0		<11.2					
Parathion	ug/L	<10.0		<11.2					
PCB-1016	ug/L	<.8000		<.8890					
PCB-1221	ug/L	<.800		<.889					
PCB-1232	ug/L	<.800		<.889					
PCB-1242	ug/L	<.800		<.889					
PCB-1248	ug/L	<.800		<.889					
PCB-1254	ug/L	<.8000		<.8890					
PCB-1260	ug/L	<.8000		<.8890					
p-Dimethylamino azobenzene	ug/L								
Pentachlorobenzene	ug/L	<10.000		<11.200					
Pentachloronitrobenzene	ug/L	<10.000		<11.200					
Pentachlorophenol	ug/L	<10.00		<11.20					
pH	SU					5.75	5.76	5.80	5.77
Phenacetin	ug/L	<10.000		<11.200					
Phenanthrene	ug/L	<10.000		<11.200					
Phenol	ug/L	<10.00		<11.20					
Phorate	ug/L	<10.000		<11.200					
p-Phenylenediamine	ug/L	<10.0		<11.2					
Pronamide	ug/L	<10.000		<11.200					
Propionitrile	ug/L	<10.0		<10.0					
Pyrene	ug/L	<10.000		<11.200					
Safrole	ug/L	<10.000		<11.200					
Selenium	ug/L	<5.000	<5.000	<5.000	<5.000	<3.340	<5.000	<5.000	.801
Silver	ug/L	<20.000	<20.000	<20.000	<20.000	<.042	<1.000	<1.000	<.153
Styrene	ug/L	<1.00	<1.00	<1.00	<1.00	<.10	<1.00	<1.00	<1.00
Sulfate	mg/L					2570	2790	2540	3120
Sulfide	mg/L	<1.000		<1.000					
Tetrachloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.18	<1.00	<1.00	<1.00
Thallium	ug/L	<2.0000	<2.0000	<2.0000	<2.0000	<.0325	<1.0000	<1.0000	<.0255
Thionazin	ug/L	<10.000		<11.200					
Tin	ug/L	<100.000		605.000	<100.000	93.500	81.500	<200.000	<.255
Toluene	ug/L								
Total Suspended Solids	mg/L					2.430	<5.000	3.670	17.000
Toxaphene	ug/L	<2.000		<2.200					
trans-1,2-Dichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	<5.00
trans-1,3-Dichloropropene	ug/L	<5.00	<5.00	<5.00	<5.00	<.22	<5.00	<5.00	<5.00

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

Table 9

Analytical Data Summary for MW-344

Constituents	10/19/2016	3/7/2017	9/26/2017	3/14/2018	10/2/2018	3/28/2019	9/24/2019	3/10/2020	9/15/2020
Heptachlor					<.00283				
Heptachlor Epoxide					<.00663				
Hexachlorobenzene					<.284				
Hexachlorobutadiene					<.179				
Hexachlorocyclopentadiene					<1.99				
Hexachloroethane					<.147				
Hexachloropropene					<1.73				
Indeno[1,2,3-cd]pyrene					<1.55				
Iodomethane	<.8	<.8	<.8	<.8	<7.0	<7.0	<7.0	<7.0	<7.0
Iron	6280.0	8830.0	3200.0	7750.0	14600.0	74.7	8830.0	659.0	20100.0
Isobutanol					<177				
Isodrin					<.4				
Isophorone					<.232				
Isosafrole					<.189				
Kepone					<.253				
Lead	<.2110	<.3240	<.3240	<1.3000	.3370	<.2700	<.2700	<.2700	<.1100
m,p-Xylene					<.38				
Mercury					<.0984				
Methacrylonitrile					<3.3				
Methapyrilene					<1.43				
Methoxychlor					<.00228				
Methyl Methacrylate					<.76				
Methyl Methanesulfonate					<.147				
Methyl Parathion					<.158				
Methylene Chloride	.251	<.170	<.170	<.170	<1.700	<1.700	<1.700	<1.700	<1.700
Methylphenol, 3 4					<.189				
Naphthalene					<3				
Nickel	44.2	89.1	21.5	82.9	133.0	91.0	278.0	156.0	205.0
Nitrobenzene					<.316				
N-Nitrosodiethylamine					<.316				
N-Nitrosodimethylamine					<.2				
N-Nitrosodi-n-butylamine					<.305				
N-Nitrosodi-n-propylamine					<.274				
N-Nitrosodiphenylamine					<.695				
N-Nitrosomethylethylamine					<.211				
N-Nitrosopiperidine					<.158				
N-Nitrosopyrrolidine					<.242				
o,o,o-Triethylphosphorothioate					<.253				
o-Toluidine					<.189				
o-Xylene					<.4				
p-[Dimethylamino]azobenzene									
Parathion									
PCB-1016					<.0467				
PCB-1221					<.172				
PCB-1232					<.118				
PCB-1242					<.140				
PCB-1248					<.118				
PCB-1254					<.0989				
PCB-1260					<.0473				
p-Dimethylamino azobenzene					<.253				
Pentachlorobenzene					<.232				
Pentachloronitrobenzene					<.347				
Pentachlorophenol					<2.44				
pH	5.82	5.84	5.90	5.89	5.98	6.08	5.77	5.91	5.90
Phenacetin					<.589				
Phenanthrene					<.632				
Phenol					<2.53				
Phorate					<.179				
p-Phenylenediamine									
Pronamide					<.274				
Propionitrile					<3.4				
Pyrene					<.274				
Safrole					<.211				
Selenium	<.630	<.928	<.928	<3.710	1.060	<1.000	<1.000	<1.000	<1.000
Silver	<.153	<.140	<.140	<.560	<.115	<.370	<.370	<.370	<.370
Styrene	<.10	<.10	<.10	<.10	<.37	<.37	<.37	<.37	<.37
Sulfate	2730	1950	1800	2060	2030	2040	2650	2490	2370
Sulfide					<.231				
Tetrachloroethene	<.18	<.18	<.18	<.18	<.48	<.48	<.48	<.48	<.48
Thallium	.0410	<.0644	<.0644	<.2580	<.5700	<.2700	<.2700	<.2600	<.2600
Thionazin					<.326				
Tin	<.832		<1.620	<6.480	<1.300	<1.800			
Toluene					<.43	<.43	<.43	<.43	<.43
Total Suspended Solids	3.500	2.750	4.880	2.000	3.130	.875	3.000	4.880	6.380
Toxaphene					<.063				
trans-1,2-Dichloroethene	<.21	<.21	<.21	<.21	<.27	<.27	<.27	<.27	<.27
trans-1,3-Dichloropropene	<.22	<.22	<.22	<.22	<.56	<.56	<.56	<.56	<.56

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

Table 9

Analytical Data Summary for MW-344

Constituents	4/15/2021	10/27/2021	4/14/2022	9/1/2022	3/6/2023	9/29/2023
Heptachlor						<.05000
Heptachlor Epoxide						<.05000
Hexachlorobenzene						<.050
Hexachlorobutadiene						<8.000
Hexachlorocyclopentadiene						<8.00
Hexachloroethane						<8.000
Hexachloropropene						<8.00
Indeno[1,2,3-cd]pyrene						<8.00
Iodomethane	<7.0	<7.0	<7.0	<1.0	<1.0	<2.0
Iron	20500.0	20500.0	23600.0	4530.0	11600.0	8330.0
Isobutanol						<1000
Isodrin						<8.0
Isophorone						<8.000
Isosafrole						<8.000
Kepone						<8.000
Lead	.2960	.7260	<.9600	<4.0000	<4.0000	<4.0000
m,p-Xylene						
Mercury						<.5000
Methacrylonitrile						<1.0
Methapyrilene						<8.00
Methoxychlor						<.05000
Methyl Methacrylate						<1.00
Methyl Methanesulfonate						<8.000
Methyl Parathion						<.400
Methylene Chloride	<1.700	<1.700	<1.700	<5.000	<5.000	<5.000
Methylphenol, 3 4						
Naphthalene						<8
Nickel	214.0	189.0	267.0	178.0	165.0	124.0
Nitrobenzene						<8.000
N-Nitrosodiethylamine						<8.000
N-Nitrosodimethylamine						<8.0
N-Nitrosodi-n-butylamine						<8.000
N-Nitrosodi-n-propylamine						<8.000
N-Nitrosodiphenylamine						<8.000
N-Nitrosomethylethylamine						<8.000
N-Nitrosopiperidine						<8.000
N-Nitrosopyrrolidine						<8.000
o,o,o-Triethylphosphorothioate						<.400
o-Toluidine						<8.000
o-Xylene						
p-[Dimethylamino]azobenzene						<8.0
Parathion						<.4
PCB-1016						<.2000
PCB-1221						<.200
PCB-1232						<.200
PCB-1242						<.200
PCB-1248						<.200
PCB-1254						<.2000
PCB-1260						<.2000
p-Dimethylamino azobenzene						
Pentachlorobenzene						<8.000
Pentachloronitrobenzene						<8.000
Pentachlorophenol						<8.00
pH	5.83	5.89	5.93	5.80	6.00	5.80
Phenacetin						<8.000
Phenanthrene						<8.000
Phenol						<8.00
Phorate						<.400
p-Phenylenediamine						
Pronamide						<8.000
Propionitrile						<10.0
Pyrene						<8.000
Safrole						<8.000
Selenium	<.960	<.960	<3.840	<4.000	<4.000	<4.000
Silver	<.420	<.420	<1.960	<4.000	<4.000	<4.000
Styrene	<.37	<.37	<.37	<1.00	<1.00	<1.00
Sulfate	2410	2220	2620	2190	2150	2160
Sulfide						
Tetrachloroethene	<.48	<.48	<.48	<1.00	<1.00	<1.00
Thallium	<.2600	<.2600	<1.0400	<2.0000	<2.0000	<2.0000
Thionazin						<.400
Tin						<20.000
Toluene	<.43	<.43	<.43	<1.00	<1.00	<1.00
Total Suspended Solids	13.000	9.500	21.000			
Toxaphene						<.200
trans-1,2-Dichloroethene	<.27	<.27	<.27	<1.00	<1.00	<1.00
trans-1,3-Dichloropropene	<.56	<.56	<.56	<1.00	<1.00	<1.00

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

Table 9

Analytical Data Summary for MW-344

Constituents	Units	9/20/2012	3/27/2013	9/25/2013	4/15/2014	9/26/2014	3/12/2015	9/2/2015	3/23/2016
trans-1,4-Dichloro-2-butene	ug/L	<10.00	<10.00	<10.00	<10.00	<.13	<10.00	<10.00	<1.00
Trichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.19	<1.00	<1.00	<4.00
Trichlorofluoromethane	ug/L	<4.00	<4.00	<4.00	<4.00	<.17	<4.00	<4.00	<1.00
Vanadium	ug/L	<50.000	<50.000	<50.000	<50.000	<.449	<5.000	<5.000	.277
Vinyl Acetate	ug/L	<2.00	<2.00	<2.00	<2.00	<.74	<10.00	<10.00	<1.00
Vinyl Chloride	ug/L	1.500	1.320	.858	.884	.484	.428	<1.000	<3.000
Xylenes, Total	ug/L	<3.00	<3.00	<3.00	<3.00	<.13	<3.00	<3.00	<3.00
Zinc	ug/L	<20.0	68.8	176.0	<60.0	23.2	16.3	22.0	24.1

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

Table 9

Analytical Data Summary for MW-344

Constituents	10/19/2016	3/7/2017	9/26/2017	3/14/2018	10/2/2018	3/28/2019	9/24/2019	3/10/2020	9/15/2020
trans-1,4-Dichloro-2-butene	<.13	<.13	<.13	<.13	<1.10	<1.10	<1.10	<1.10	<1.10
Trichloroethene	<.19	<.19	<.19	<.19	<.43	<.43	<.43	<.43	<.43
Trichlorofluoromethane	<.17	<.17	<.17	<.17	<.38	<.38	<.38	<.38	<.38
Vanadium	<.255	<.840	<.840	<3.360	<2.150	<.820	<.820	<.820	<.850
Vinyl Acetate	<.74	<.74	<.74	<.74	<2.50	<2.50	<2.50	<2.50	<2.50
Vinyl Chloride	.587	1.050	.705	.569	<.600	<.600	.513	<.180	.903
Xylenes, Total	<.13	<.13	<.13	<.13	<.40	<.40	<.40	<.40	<.40
Zinc	7.3	14.0	<11.5	<46.0	22.9	12.9	146.0	16.7	22.1

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

Table 9

Analytical Data Summary for MW-344

Constituents	4/15/2021	10/27/2021	4/14/2022	9/1/2022	3/6/2023	9/29/2023
trans-1,4-Dichloro-2-butene	<1.10	<1.10	<1.10	<5.00	<5.00	<5.00
Trichloroethene	<.43	<.43	<.43	<1.00	<1.00	<1.00
Trichlorofluoromethane	<.38	<.38	<.38	<1.00	<1.00	<1.00
Vanadium	<1.100	<1.100	<4.400	<20.000	<20.000	<20.000
Vinyl Acetate	<2.50	<2.50	<2.50	<5.00	<5.00	<5.00
Vinyl Chloride	.840	.986	.383	<1.000	<1.000	<1.000
Xylenes, Total	<.40	<.40	<.40	<2.00	<2.00	<2.00
Zinc	19.3	20.7	<40.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-345

Constituents	Units	9/19/2012	3/27/2013	9/25/2013	4/15/2014	9/25/2014	3/12/2015	9/2/2015
1,1,1,2-Tetrachloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00
1,1,1-Trichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.12	<1.00	<1.00
1,1,2,2-Tetrachloroethane	ug/L	<1.0	<1.0	<1.0	<1.0	<.1	<1.0	<1.0
1,1,2-Trichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.12	<1.00	<1.00
1,1-Dichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00
1,1-Dichloroethene	ug/L	<2.00	<2.00	<2.00	<2.00	<.15	<2.00	<2.00
1,1-Dichloropropene	ug/L	<1		<1				
1,2,3-Trichloropropane	ug/L	<1.00	<1.00	<1.00	<1.00	<.19	<1.00	<1.00
1,2,4,5-Tetrachlorobenzene	ug/L	<10.0		<10.5				
1,2,4-Trichlorobenzene	ug/L	<5		<5				
1,2-Dibromo-3-chloropropane	ug/L	<10.00	<10.00	<10.00	<10.00	<.12	<10.00	<10.00
1,2-Dibromoethane	ug/L	<10.00	<10.00	<10.00	<10.00	<.13	<10.00	<10.00
1,2-Dichlorobenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.14	<1.00	<1.00
1,2-Dichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.18	<1.00	<1.00
1,2-Dichloropropane	ug/L	<1.00	<1.00	<1.00	<1.00	<.87	<1.00	<1.00
1,3,5-Trinitrobenzene	ug/L	<10.0		<10.5				
1,3-Dichlorobenzene	ug/L	<1		<1				
1,3-Dichloropropane	ug/L	<1		<1				
1,3-Dinitrobenzene	ug/L	<10.0		<10.5				
1,4-Dichlorobenzene	ug/L	<1.0	<1.0	<1.0	<1.0	<.2	<1.0	<1.0
1,4-Naphthoquinone	ug/L	<10.0		<10.5				
1-Naphthylamine	ug/L	<10.0		<10.5				
2,2`-oxybis[1-Chloropropane]	ug/L	<10.0		<10.5				
2,2-Dichloropropane	ug/L	<4		<4				
2,3,4,6-Tetrachlorophenol	ug/L	<10.0		<10.5				
2,4,5-T	ug/L	<1.00		<1.02				
2,4,5-TP [Silvex]	ug/L	<1.00		<1.02				
2,4,5-Trichlorophenol	ug/L	<10.0		<10.5				
2,4,6-Trichlorophenol	ug/L	<10.0		<10.5				
2,4-D	ug/L	<1.00		<1.02				
2,4-Dichlorophenol	ug/L	<10.0		<10.5				
2,4-Dimethylphenol	ug/L	<10.0		<10.5				
2,4-Dinitrophenol	ug/L	<20.0		<21.1				
2,4-Dinitrotoluene	ug/L	<10.0		<10.5				
2,6-Dichlorophenol	ug/L	<10.0		<10.5				
2,6-Dinitrotoluene	ug/L	<10.0		<10.5				
2-Acetylaminofluorene	ug/L	<10.0		<10.5				
2-Butanone	ug/L	<10.00	<10.00	<10.00	<10.00	<.47	<10.00	<10.00
2-Chloronaphthalene	ug/L	<10.0		<10.5				
2-Chlorophenol	ug/L	<10.0		<10.5				
2-Hexanone	ug/L	<10.0	<10.0	<10.0	<10.0	<.2	<10.0	<10.0
2-Methylnaphthalene	ug/L	<10.0		<10.5				
2-Methylphenol [o-Cresol]	ug/L	<10.0		<10.5				
2-Naphthylamine	ug/L	<10.0		<10.5				
2-Nitroaniline	ug/L	<10.0		<10.5				
2-Nitrophenol	ug/L	<10.0		<10.5				
3,3-Dichlorobenzidine	ug/L	<10.0		<52.6				
3,3-Dimethylbenzidine	ug/L	<10.0		<10.5				
3-Methylcholanthrene	ug/L	<10.0		<10.5				
3-Nitroaniline	ug/L	<10.0		<10.5				
4,4`-DDD	ug/L	<.0404		<.0360				
4,4`-DDE	ug/L	<.0404		<.0360				
4,4`-DDT	ug/L	<.0404		<.0360				
4,6-Dinitro-2-methylphenol	ug/L	<10.0		<10.5				
4-Aminobiphenyl	ug/L	<10.0		<10.5				
4-Bromophenyl phenyl ether	ug/L	<10.0		<10.5				
4-Chloro-3-methylphenol	ug/L	<10.0		<10.5				
4-Chloroaniline	ug/L	<10.0		<10.5				
4-Chlorophenyl phenyl ether	ug/L	<10.0		<10.5				
4-Methyl-2-pentanone	ug/L	<10.00	<10.00	<10.00	<10.00	<.22	<10.00	<10.00
4-Nitroaniline	ug/L	<10.0		<10.5				
4-Nitrophenol	ug/L	<10.0		<10.5				
5-Nitro-o-toluidine	ug/L	<10.0		<10.5				
7,12-Dimethylbenz[a]anthracene	ug/L	<10.0		<10.5				
Acenaphthene	ug/L	<10.0		<10.5				
Acetone	ug/L	<10.00	<10.00	<10.00	<10.00	<1.79	<10.00	<10.00
Acetonitrile	ug/L	<10000		<10000				
Acetophenone	ug/L	<10.0		<10.5				
Acrolein	ug/L	<10		<10				
Acrylonitrile	ug/L	<10.00	<10.00	<10.00	<10.00	<.53	<10.00	<10.00
Aldrin	ug/L	<.0404		<.0360				
Alkalinity as CaCO3	mg/L					330	329	346
Allyl Chloride	ug/L	<20		<2				
alpha-BHC	ug/L	<.0404		<.0360				
Aluminum	ug/L					<8.46	<50.00	<50.00
Anthracene	ug/L	<10.0		<10.5				
Antimony	ug/L	<12.000	<6.000	<6.000	<6.000	<.161	<1.000	<1.000

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

Table 9

Analytical Data Summary for MW-345

Constituents	Units	9/19/2012	3/27/2013	9/25/2013	4/15/2014	9/25/2014	3/12/2015	9/2/2015
Arsenic	ug/L	<1.000	<1.000	<1.000	<1.000	<.945	<2.000	<2.000
Barium	ug/L	205	226	216	189	230	219	239
Benzene	ug/L	<.50	<.50	<.50	<.50	<.11	<.50	<.50
Benzo[a]anthracene	ug/L	<10.0		<10.5				
Benzo[a]pyrene	ug/L	<10.0		<10.5				
Benzo[b]fluoranthene	ug/L	<10.0		<10.5				
Benzo[ghi]perylene	ug/L	<10.0		<10.5				
Benzo[k]fluoranthene	ug/L	<10.0		<10.5				
Benzyl alcohol	ug/L	<10.0		<10.5				
Beryllium	ug/L	<1.000	<1.000	<1.000	<1.000	<.039	<1.000	<1.000
beta-BHC	ug/L	<.0404		<.0360				
Bis(2-chloroethoxy)methane	ug/L	<10.0		<10.5				
Bis(2-chloroethyl)ether	ug/L	<10.0		<10.5				
Bis(2-ethylhexyl)phthalate	ug/L	<10.0		<10.5				
Bromochloromethane	ug/L	<5.00	<5.00	<5.00	<5.00	<.12	<5.00	<5.00
Bromodichloromethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.12	<1.00	<1.00
Bromoform	ug/L	<5.00	<5.00	<5.00	<5.00	<.14	<5.00	<5.00
Bromomethane	ug/L	<20.00	<4.00	<4.00	<4.00	<.22	<4.00	<4.00
Butylbenzylphthalate	ug/L	<10.0		<10.5				
Cadmium	ug/L	<.500	.214	<.500	<.500	<.112	<.500	<.500
Carbon Disulfide	ug/L	<1.00	<1.00	<1.00	<1.00	<.15	<1.00	<1.00
Carbon Tetrachloride	ug/L	<2.00	<2.00	<2.00	<2.00	<.24	<2.00	<2.00
Chlordane	ug/L	<2.53		<2.25				
Chlorobenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.19	<1.00	<1.00
Chlorobenzilate	ug/L	<10.0		<10.5				
Chlorodibromomethane	ug/L	<5.0	<5.0	<5.0	<5.0	<.2	<5.0	<5.0
Chloroethane	ug/L	<4.00	<4.00	<4.00	<4.00	<.15	<4.00	<4.00
Chloroform	ug/L	<1.00	<1.00	<1.00	<1.00	<.28	<1.00	<1.00
Chloromethane	ug/L	<3.00	<3.00	<3.00	<3.00	<.31	<3.00	<3.00
Chloroprene	ug/L	<1		<1				
Chromium	ug/L	<20.00	<20.00	1.79	<20.00	<1.24	<5.00	<5.00
Chrysene	ug/L	<10.0		<10.5				
cis-1,2-Dichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.13	<1.00	<1.00
cis-1,3-Dichloropropene	ug/L	<5.00	<5.00	<5.00	<5.00	<.15	<5.00	<5.00
Cobalt	ug/L	<20.0000	<20.0000	<7.0000	<7.0000	<.0528	<.5000	<.5000
Copper	ug/L	<20.000	<20.000	<20.000	<20.000	<.485	<2.000	<2.000
Cyanide	mg/L	<.01		<.01				
delta-BHC	ug/L	<.0404		<.0360				
Diallate	ug/L	<10.0		<10.5				
Dibenzo(a,h)anthracene	ug/L	<10.0		<10.5				
Dibenzofuran	ug/L	<10.0		<10.5				
Dibromomethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.18	<1.00	<1.00
Dichlorodifluoromethane	ug/L	<3.00		1.49				
Dieldrin	ug/L	<.0404		<.0360				
Diethyl phthalate	ug/L	<10.0		<10.5				
Dimethoate	ug/L	<10.0		<10.5				
Dimethyl phthalate	ug/L	<10.0		<10.5				
Di-n-butylphthalate	ug/L	<10.0		<10.5				
Di-n-octylphthalate	ug/L	<10.0		<21.1				
Dinoseb	ug/L	<10.0		<10.5				
Diphenylamine	ug/L	<10.0		<10.5				
Disulfoton	ug/L	<10.0		<10.5				
Endosulfan I	ug/L	<.0404		<.0360				
Endosulfan II	ug/L	<.0404		<.0360				
Endosulfan Sulfate	ug/L	<.0404		<.0360				
Endrin	ug/L	<.0404		<.0360				
Endrin Aldehyde	ug/L	<.0404		<.0360				
Ethyl Methacrylate	ug/L	<2		<2				
Ethyl Methanesulfonate	ug/L	<10.0		<10.5				
Ethylbenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00
Famphur	ug/L	<20.0		<21.1				
Fluoranthene	ug/L	<10.0		<10.5				
Fluorene	ug/L	<10.0		<10.5				
gamma-BHC (Lindane)	ug/L	<.0404		<.0360				
Heptachlor	ug/L	<.0404		<.0360				
Heptachlor Epoxide	ug/L	<.0404		<.0360				
Hexachlorobenzene	ug/L	<10.0		<10.5				
Hexachlorobutadiene	ug/L	<10.0		<10.5				
Hexachlorocyclopentadiene	ug/L	<10.0		<21.1				
Hexachloroethane	ug/L	<10.0		<10.5				
Hexachloropropene	ug/L	<10.0		<10.5				
Indeno[1,2,3-cd]pyrene	ug/L	<10.0		<10.5				
Iodomethane	ug/L	<10.0	<10.0	<10.0	<10.0	<.8	<10.0	<10.0
Iron	ug/L					<51.1	<100.0	<100.0
Isobutanol	ug/L	<10000		<10000				
Isodrin	ug/L	<10.0		<10.5				
Isophorone	ug/L	<10.0		<10.5				

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

Table 9

Analytical Data Summary for MW-345

Constituents	Units	9/19/2012	3/27/2013	9/25/2013	4/15/2014	9/25/2014	3/12/2015	9/2/2015
Isosafrole	ug/L	<10.0		<10.5				
Kepone	ug/L	<10.0		<10.5				
Lead	ug/L	<4.0000	<4.0000	<4.0000	<4.0000	<.0967	<.5000	<.5000
Mercury	ug/L	<.267		<.200				
Methacrylonitrile	ug/L	<1		<1				
Methapyrilene	ug/L	<10.0		<10.5				
Methoxychlor	ug/L	<.0404		<.0360				
Methyl Methacrylate	ug/L	<2		<2				
Methyl Methanesulfonate	ug/L	<10.0		<10.5				
Methyl Parathion	ug/L	<10.0		<10.5				
Methylene Chloride	ug/L	<5.000	<5.000	<5.000	<5.000	.596	<5.000	<5.000
Naphthalene	ug/L	<5		<5				
Nickel	ug/L	<50.000	<50.000	<50.000	<50.000	<.581	.691	<5.000
Nitrobenzene	ug/L	<10.0		<10.5				
N-Nitrosodiethylamine	ug/L	<10.0		<10.5				
N-Nitrosodimethylamine	ug/L	<10.0		<10.5				
N-Nitrosodi-n-butylamine	ug/L	<10.0		<10.5				
N-Nitrosodi-n-propylamine	ug/L	<10.0		<10.5				
N-Nitrosodiphenylamine	ug/L	<10.0		<10.5				
N-Nitrosomethylethylamine	ug/L	<10.0		<10.5				
N-Nitrosopiperidine	ug/L	<10.0		<10.5				
N-Nitrosopyrrolidine	ug/L	<10.0		<10.5				
o,o,o-Triethylphosphorothioate	ug/L	<10.0		<10.5				
o-Toluidine	ug/L	<10.0		<10.5				
p-[Dimethylamino]azobenzene	ug/L	<10.0		<10.5				
Parathion	ug/L	<10.0		<10.5				
PCB-1016	ug/L	<.800		<.879				
PCB-1221	ug/L	<.800		<.879				
PCB-1232	ug/L	<.800		<.879				
PCB-1242	ug/L	<.800		<.879				
PCB-1248	ug/L	<.800		<.879				
PCB-1254	ug/L	<.800		<.879				
PCB-1260	ug/L	<.800		<.879				
Pentachlorobenzene	ug/L	<10.0		<10.5				
Pentachloronitrobenzene	ug/L	<10.0		<10.5				
Pentachlorophenol	ug/L	<10.0		<10.5				
pH	SU					7.08	7.05	7.13
Phenacetin	ug/L	<10.0		<10.5				
Phenanthrene	ug/L	<10.0		<10.5				
Phenol	ug/L	<10.0		<10.5				
Phorate	ug/L	<10.0		<10.5				
p-Phenylenediamine	ug/L	<10.0		<10.5				
Pronamide	ug/L	<10.0		<10.5				
Propionitrile	ug/L	<10		<10				
Pyrene	ug/L	<10.0		<10.5				
Safrole	ug/L	<10.0		<10.5				
Selenium	ug/L	<5.00	<5.00	<5.00	<5.00	<3.34	<5.00	<5.00
Silver	ug/L	<20.000	<20.000	<20.000	<20.000	<.042	<1.000	<1.000
Styrene	ug/L	<1.0	<1.0	<1.0	<1.0	<.1	<1.0	<1.0
Sulfate	mg/L					50.3	35.0	35.2
Sulfide	mg/L	<1		<1				
Tetrachloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.18	<1.00	<1.00
Thallium	ug/L	<4.0000	<2.0000	<2.0000	<2.0000	<.0325	<1.0000	<1.0000
Thionazin	ug/L	<10.0		<10.5				
Tin	ug/L	<100		270	<100			
Total Suspended Solids	mg/L					<1.41	<5.00	<5.00
Toxaphene	ug/L	<2.53		<2.25				
trans-1,2-Dichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00
trans-1,3-Dichloropropene	ug/L	<5.00	<5.00	<5.00	<5.00	<.22	<5.00	<5.00
trans-1,4-Dichloro-2-butene	ug/L	<10.00	<10.00	<10.00	<10.00	<.13	<10.00	<10.00
Trichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.19	<1.00	<1.00
Trichlorofluoromethane	ug/L	<4.00	<4.00	<4.00	<4.00	<.17	<4.00	<4.00
Vanadium	ug/L	<50.000	<50.000	<50.000	<50.000	<.449	<5.000	<5.000
Vinyl Acetate	ug/L	<2.00	<2.00	<2.00	<2.00	<.74	<10.00	<10.00
Vinyl Chloride	ug/L	<1.0	<1.0	<1.0	<1.0	<.1	<1.0	<1.0
Xylenes, Total	ug/L	<3.00	<3.00	<3.00	<3.00	<.13	<3.00	<3.00
Zinc	ug/L	<20.00	22.90	83.60	<60.00	<6.95	<10.00	13.60

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

Table 9

Analytical Data Summary for MW-380

Constituents	Units	9/19/2012	3/27/2013	9/25/2013	11/15/2013	4/16/2014	9/26/2014	3/11/2015	9/2/2015
1,1,1,2-Tetrachloroethane	ug/L	<1.00	<1.00	<1.00		<1.00	<.21	<1.00	<1.00
1,1,1-Trichloroethane	ug/L	<1.00	<1.00	<1.00		<1.00	<.12	<1.00	<1.00
1,1,2,2-Tetrachloroethane	ug/L	<1.00	<1.00	<1.00		<1.00	<.10	<1.00	<1.00
1,1,2-Trichloroethane	ug/L	<1.00	<1.00	<1.00		<1.00	<.12	<1.00	<1.00
1,1-Dichloroethane	ug/L	<1.00	<1.00	<1.00		<1.00	<.21	<1.00	<1.00
1,1-Dichloroethene	ug/L	<2.00	<2.00	<2.00		<2.00	<.15	<2.00	<2.00
1,1-Dichloropropene	ug/L	<1		<1					
1,2,3-Trichloropropane	ug/L	<1.00	<1.00	<1.00		<1.00	<.19	<1.00	<1.00
1,2,4,5-Tetrachlorobenzene	ug/L	<10.0		<10.8					
1,2,4-Trichlorobenzene	ug/L	<5		<5					
1,2-Dibromo-3-chloropropane	ug/L	<10.00	<10.00	<10.00		<10.00	<.12	<10.00	<10.00
1,2-Dibromoethane	ug/L	<10.00	<10.00	<10.00		<10.00	<.13	<10.00	<10.00
1,2-Dichlorobenzene	ug/L	<1.00	<1.00	<1.00		<1.00	<.14	<1.00	<1.00
1,2-Dichloroethane	ug/L	<1.00	<1.00	<1.00		<1.00	<.18	<1.00	<1.00
1,2-Dichloropropane	ug/L	<1.00	<1.00	<1.00		<1.00	<.87	<1.00	<1.00
1,3,5-Trinitrobenzene	ug/L	<10.0		<10.8					
1,3-Dichlorobenzene	ug/L	<1		<1					
1,3-Dichloropropane	ug/L	<1		<1					
1,3-Dinitrobenzene	ug/L	<10.0		<10.8					
1,4-Dichlorobenzene	ug/L	<1.00	<1.00	<1.00		<1.00	<.20	<1.00	<1.00
1,4-Naphthoquinone	ug/L	<10.0		<10.8					
1-Naphthylamine	ug/L	<10.0		<10.8					
2,2`-oxybis[1-Chloropropane]	ug/L	<10.0		<10.8					
2,2-Dichloropropane	ug/L	<4		<4					
2,3,4,6-Tetrachlorophenol	ug/L	<10.0		<10.8					
2,4,5-T	ug/L	<1.00		<1.08					
2,4,5-TP [Silvex]	ug/L	<1.00		<1.08					
2,4,5-Trichlorophenol	ug/L	<10.0		<10.8					
2,4,6-Trichlorophenol	ug/L	<10.0		<10.8					
2,4-D	ug/L	<1.00		<1.08					
2,4-Dichlorophenol	ug/L	<10.0		<10.8					
2,4-Dimethylphenol	ug/L	<10.0		<10.8					
2,4-Dinitrophenol	ug/L	<20.0		<21.5					
2,4-Dinitrotoluene	ug/L	<10.0		<10.8					
2,6-Dichlorophenol	ug/L	<10.0		<10.8					
2,6-Dinitrotoluene	ug/L	<10.0		<10.8					
2-Acetylaminofluorene	ug/L	<10.0		<10.8					
2-Butanone	ug/L	<10.00	<10.00	<10.00		<10.00	<.47	<10.00	<10.00
2-Chloronaphthalene	ug/L	<10.0		<10.8					
2-Chlorophenol	ug/L	<10.0		<10.8					
2-Hexanone	ug/L	<10.0	<10.0	<10.0		<10.0	<.2	<10.0	<10.0
2-Methylnaphthalene	ug/L	<10.0		<10.8					
2-Methylphenol [o-Cresol]	ug/L	<10.0		<10.8					
2-Naphthylamine	ug/L	<10.0		<10.8					
2-Nitroaniline	ug/L	<10.0		<10.8					
2-Nitrophenol	ug/L	<10.0		<10.8					
3,3-Dichlorobenzidine	ug/L	<10.0		<53.8					
3,3-Dimethylbenzidine	ug/L	<10.0		<10.8					
3-Methylcholanthrene	ug/L	<10.0		<10.8					
3-Nitroaniline	ug/L	<10.0		<10.8					
4,4`-DDD	ug/L	<.0320		<.0356					
4,4`-DDE	ug/L	<.0320		<.0356					
4,4`-DDT	ug/L	<.0320		<.0356					
4,6-Dinitro-2-methylphenol	ug/L	<10.0		<10.8					
4-Aminobiphenyl	ug/L	<10.0		<10.8					
4-Bromophenyl phenyl ether	ug/L	<10.0		<10.8					
4-Chloro-3-methylphenol	ug/L	<10.0		<10.8					
4-Chloroaniline	ug/L	<10.0		<10.8					
4-Chlorophenyl phenyl ether	ug/L	<10.0		<10.8					
4-Methyl-2-pentanone	ug/L	<10.00	<10.00	<10.00		<10.00	<.22	<10.00	<10.00
4-Nitroaniline	ug/L	<10.0		<10.8					
4-Nitrophenol	ug/L	<10.0		<10.8					
5-Nitro-o-toluidine	ug/L	<10.0		<10.8					
7,12-Dimethylbenz[a]anthracene	ug/L	<10.0		<10.8					
Acenaphthene	ug/L	<10.0		<10.8					
Acetone	ug/L	<10.00	<10.00	<10.00		<10.00	<1.79	<10.00	<10.00
Acetonitrile	ug/L	<10000		<10000					
Acetophenone	ug/L	<10.0		<10.8					
Acrolein	ug/L	<10		<10					
Acrylonitrile	ug/L	<10.00	<10.00	<10.00		<10.00	<.53	<10.00	<10.00
Aldrin	ug/L	<.0320		<.0356					
Alkalinity as CaCO3	mg/L						<1.27	<5.00	<5.00
Allyl Chloride	ug/L	<20		<2					
alpha-BHC	ug/L	<.0320		<.0356					
Aluminum	ug/L						45700	17300	34200
Anthracene	ug/L	<10.0		<10.8					
Antimony	ug/L	<6.000	<6.000	<6.000		<6.000	<.161	.180	<1.000

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

Table 9

Analytical Data Summary for MW-380

Constituents	3/23/2016	10/20/2016	3/9/2017	6/28/2017	9/26/2017	3/14/2018	10/2/2018	3/28/2019	9/24/2019
1,1,1,2-Tetrachloroethane	<1.00	<.21	<.21		<.21	<.21	<.38	<.38	<.38
1,1,1-Trichloroethane	<1.00	<.12	<.12		<.12	<.12	<.19	<.19	<.19
1,1,2,2-Tetrachloroethane	<1.00	<.10	<.10		<.10	<.10	<.47	<.47	<.47
1,1,2-Trichloroethane	<1.00	<.12	<.12		<.12	<.12	<.45	<.45	<.45
1,1-Dichloroethane	<1.00	<.21	<.21		<.21	<.21	<.22	<.22	<.22
1,1-Dichloroethene	<2.00	<.15	<.15		<.15	<.15	<.56	<.56	<.56
1,1-Dichloropropene									
1,2,3-Trichloropropane	<1.00	<.19	<.19		<.19	<.19	<.59	<.59	<.59
1,2,4,5-Tetrachlorobenzene									
1,2,4-Trichlorobenzene									
1,2-Dibromo-3-chloropropane	<10.00	<.50	<.50		<.50	<.50	<1.20	<1.20	<1.20
1,2-Dibromoethane	<10.00	<.13	<.13		<.13	<.13	<.34	<.34	<.34
1,2-Dichlorobenzene	<1.00	<.14	<.14		<.14	<.14	<.37	<.37	<.37
1,2-Dichloroethane	<1.00	<.18	<.18		<.18	<.18	<.39	<.39	<.39
1,2-Dichloropropane	<1.00	<.87	<.87		<.87	<.87	<.27	<.27	<.27
1,3,5-Trinitrobenzene									
1,3-Dichlorobenzene									
1,3-Dichloropropane									
1,3-Dinitrobenzene									
1,4-Dichlorobenzene	<1.00	<.20	<.20		<.20	<.20	<.23	<.23	<.23
1,4-Naphthoquinone									
1-Naphthylamine									
2,2`-oxybis[1-Chloropropane]									
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	<10.00	<1.04	<1.04		<1.04	<1.04	<2.10	<2.10	<2.10
2-Chloronaphthalene									
2-Chlorophenol									
2-Hexanone	<10.0	<.2	<.2		<.2	<.2	<2.0	<2.0	<2.0
2-Methylnaphthalene									
2-Methylphenol [o-Cresol]									
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	<10.00	<.22	<.22		<.22	<.22	<2.10	<2.10	<2.10
4-Nitroaniline									
4-Nitrophenol									
5-Nitro-o-toluidine									
7,12-Dimethylbenz[a]anthracene									
Acenaphthene									
Acetone	<10.00	<1.79	12.20	4.52	<1.79	2.46	<3.10	<3.10	<3.10
Acetonitrile									
Acetophenone									
Acrolein									
Acrylonitrile	<10.00	<.53	<.53		<.53	<.53	<2.20	<2.20	<2.20
Aldrin									
Alkalinity as CaCO3	<5.00	<2.41	<1.60		<1.60	<1.60	<1.90	<1.90	24.80
Allyl Chloride									
alpha-BHC									
Aluminum	31600	19400	50400		15900	31200	21100	17900	12400
Anthracene									
Antimony	<.237	<3.560	<.185		<1.850		<1.320	<3.710	<.530

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

Table 9

Analytical Data Summary for MW-380

Constituents	3/10/2020	9/15/2020	4/15/2021	10/27/2021	4/13/2022	9/1/2022	3/6/2023	9/29/2023
1,1,1,2-Tetrachloroethane	<.38	<.38	<.38	<.38	<.38	<1.00	<1.00	<1.00
1,1,1-Trichloroethane	<.19	<.19	<.19	<.19	<.19	<1.00	<1.00	<1.00
1,1,2,2-Tetrachloroethane	<.47	<.47	<.47	<.47	<.47	<1.00	<1.00	<1.00
1,1,2-Trichloroethane	<.45	<.45	<.45	<.45	<.45	<1.00	<1.00	<1.00
1,1-Dichloroethane	<.22	<.22	<.22	<.22	<.22	<1.00	<1.00	<1.00
1,1-Dichloroethene	<.56	<.56	<.56	<.56	<.56	<1.00	<1.00	<1.00
1,1-Dichloropropene								
1,2,3-Trichloropropane	<.59	<.59	<.59	<.59	<.59	<1.00	<1.00	<1.00
1,2,4,5-Tetrachlorobenzene								
1,2,4-Trichlorobenzene								
1,2-Dibromo-3-chloropropane	<1.20	<1.20	<1.20	<1.20	<1.20	<5.00	<5.00	<5.00
1,2-Dibromoethane	<.34	<.34	<.34	<.34	<.34	<1.00	<1.00	<1.00
1,2-Dichlorobenzene	<.37	<.37	<.37	<.37	<.37	<1.00	<1.00	<1.00
1,2-Dichloroethane	<.39	<.39	<.39	<.39	<.39	<1.00	<1.00	<1.00
1,2-Dichloropropane	<.27	<.27	<.27	<.27	<.27	<1.00	<1.00	<1.00
1,3,5-Trinitrobenzene								
1,3-Dichlorobenzene								
1,3-Dichloropropane								
1,3-Dinitrobenzene								
1,4-Dichlorobenzene	<.23	<.23	<.23	<.23	<.23	<1.00	<1.00	<1.00
1,4-Naphthoquinone								
1-Naphthylamine								
2,2`-oxybis[1-Chloropropane]								
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	<2.10	<2.10	<2.10	<2.10	<2.10	<10.00	<10.00	<10.00
2-Chloronaphthalene								
2-Chlorophenol								
2-Hexanone	<2.0	<2.0	<2.0	<2.0	<2.0	<5.0	<5.0	<5.0
2-Methylnaphthalene								
2-Methylphenol [o-Cresol]								
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	<2.10	<2.10	<2.10	<2.10	<2.10	<5.00	<5.00	<5.00
4-Nitroaniline								
4-Nitrophenol								
5-Nitro-o-toluidine								
7,12-Dimethylbenz[a]anthracene								
Acenaphthene								
Acetone	<3.10	<3.10	<3.10	<3.10	<3.10	<10.00	<10.00	<10.00
Acetonitrile								
Acetophenone								
Acrolein								
Acrylonitrile	<2.20	<2.20	<2.20	<2.20	<2.20	<5.00	<5.00	<5.00
Aldrin								
Alkalinity as CaCO3	<1.90	<1.90	<2.30	54.50	19.60	<20.00	43.00	<10.00
Allyl Chloride								
alpha-BHC								
Aluminum	18500	32300	39100	20400	10200	4740	19200	14500
Anthracene								
Antimony	<.580	<.510	<1.100	<1.100	<6.900	<2.000	<2.000	<2.000

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

Table 9

Analytical Data Summary for MW-380

Constituents	Units	9/19/2012	3/27/2013	9/25/2013	11/15/2013	4/16/2014	9/26/2014	3/11/2015	9/2/2015
Arsenic	ug/L	<8.00	<5.00	2.05		<5.00	<9.45	<20.00	<60.00
Barium	ug/L	<10.00	10.70	4.91		<10.00	7.97	8.05	9.31
Benzene	ug/L	<.50	<.50	<.50		<.50	<.11	<.50	<.50
Benzo[a]anthracene	ug/L	<10.0		<10.8					
Benzo[a]pyrene	ug/L	<10.0		<10.8					
Benzo[b]fluoranthene	ug/L	<10.0		<10.8					
Benzo[ghi]perylene	ug/L	<10.0		<10.8					
Benzo[k]fluoranthene	ug/L	<10.0		<10.8					
Benzyl alcohol	ug/L	<10.0		<10.8					
Beryllium	ug/L	9.72	6.40	17.60		5.13	8.07	<10.00	<30.00
beta-BHC	ug/L	<.0320		<.0356					
Bis(2-chloroethoxy)methane	ug/L	<10.0		<10.8					
Bis(2-chloroethyl)ether	ug/L	<10.0		<10.8					
Bis(2-ethylhexyl)phthalate	ug/L	<10.0		<10.8					
Bromochloromethane	ug/L	<5.00	<5.00	<5.00		<5.00	<.12	<5.00	<5.00
Bromodichloromethane	ug/L	<1.00	<1.00	<1.00		<1.00	<.12	<1.00	<1.00
Bromoform	ug/L	<5.00	<5.00	<5.00		<5.00	<.14	<5.00	<5.00
Bromomethane	ug/L	<20.00	<4.00	<4.00		<4.00	<.22	<4.00	<4.00
Butylbenzylphthalate	ug/L	<10.0		<10.8					
Cadmium	ug/L	14.700000	5.390000	21.200001		7.180000	12.700000	15.900000	10.500000
Carbon Disulfide	ug/L	<1.00	<1.00	<1.00		<1.00	<.15	<1.00	<1.00
Carbon Tetrachloride	ug/L	<2.00	<2.00	<2.00		<2.00	<.24	<2.00	<2.00
Chlordane	ug/L	<2.00		<2.22					
Chlorobenzene	ug/L	<1.00	<1.00	<1.00		<1.00	<.19	<1.00	<1.00
Chlorobenzilate	ug/L	<10.0		<10.8					
Chlorodibromomethane	ug/L	<5.00	<5.00	<5.00		<5.00	<.20	<5.00	<5.00
Chloroethane	ug/L	<4.00	<4.00	<4.00		<4.00	<.15	<4.00	<4.00
Chloroform	ug/L	<1.00	<1.00	<1.00		<1.00	<.28	<1.00	<1.00
Chloromethane	ug/L	<3.00	<3.00	<3.00		<3.00	<.31	<3.00	<3.00
Chloroprene	ug/L	<1		<1					
Chromium	ug/L	<20.00000	<20.00000	5.72000		<20.00000	23.80000	<50.00000	<150.00000
Chrysene	ug/L	<10.0		<10.8					
cis-1,2-Dichloroethene	ug/L	<1.00	<1.00	<1.00		<1.00	<.13	<1.00	<1.00
cis-1,3-Dichloropropene	ug/L	<5.00	<5.00	<5.00		<5.00	<.15	<5.00	<5.00
Cobalt	ug/L	1420	1120	1450		563	1140	1490	<15
Copper	ug/L	<20.00	<20.00	<20.00		<20.00	<4.85	<20.00	<2.00
Cyanide	mg/L	<.01		<.01					
delta-BHC	ug/L	<.0320		<.0356					
Diallate	ug/L	<10.0		<10.8					
Dibenzo(a,h)anthracene	ug/L	<10.0		<10.8					
Dibenzofuran	ug/L	<10.0		<10.8					
Dibromomethane	ug/L	<1.00	<1.00	<1.00		<1.00	<.18	<1.00	<1.00
Dichlorodifluoromethane	ug/L	<3		<3					
Dieldrin	ug/L	<.0320		<.0356					
Diethyl phthalate	ug/L	<10.0		<10.8					
Dimethoate	ug/L	<10.0		<10.8					
Dimethyl phthalate	ug/L	<10.0		<10.8					
Di-n-butylphthalate	ug/L	<10.0		<10.8					
Di-n-octylphthalate	ug/L	<10.0		<21.5					
Dinoseb	ug/L	<10.0		<10.8					
Diphenylamine	ug/L	<10.0		<10.8					
Disulfoton	ug/L	<10.0		<10.8					
Endosulfan I	ug/L	<.0320		<.0356					
Endosulfan II	ug/L	<.0320		<.0356					
Endosulfan Sulfate	ug/L	<.0320		<.0356					
Endrin	ug/L	<.0320		<.0356					
Endrin Aldehyde	ug/L	<.0320		<.0356					
Ethyl Methacrylate	ug/L	<2		<2					
Ethyl Methanesulfonate	ug/L	<10.0		<10.8					
Ethylbenzene	ug/L	<1.00	<1.00	<1.00		<1.00	<.21	<1.00	<1.00
Famphur	ug/L	<20.0		<21.5					
Fluoranthene	ug/L	<10.0		<10.8					
Fluorene	ug/L	<10.0		<10.8					
gamma-BHC (Lindane)	ug/L	<.0320		<.0356					
Heptachlor	ug/L	<.0320		<.0356					
Heptachlor Epoxide	ug/L	<.0320		<.0356					
Hexachlorobenzene	ug/L	<10.0		<10.8					
Hexachlorobutadiene	ug/L	<10.0		<10.8					
Hexachlorocyclopentadiene	ug/L	<10.0		<21.5					
Hexachloroethane	ug/L	<10.0		<10.8					
Hexachloropropene	ug/L	<10.0		<10.8					
Indeno[1,2,3-cd]pyrene	ug/L	<10.0		<10.8					
Iodomethane	ug/L	<10.0	<10.0	<10.0		<10.0	<.8	<10.0	<10.0
Iron	ug/L						255000	290000	367000
Isobutanol	ug/L	<10000		<10000					
Isodrin	ug/L	<10.0		<10.8					
Isophorone	ug/L	<10.0		<10.8					

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

Table 9

Analytical Data Summary for MW-380

Constituents	3/23/2016	10/20/2016	3/9/2017	6/28/2017	9/26/2017	3/14/2018	10/2/2018	3/28/2019	9/24/2019
Arsenic	4.94	<6.72	<50.50		<5.05	<25.30	5.63	<5.25	<5.25
Barium	6.95	8.93	<104.00		9.17	<52.00	7.98	6.56	11.10
Benzene	<.50	<.11	<.11		<.11	<.11	<.22	<.22	<.22
Benzo[a]anthracene									
Benzo[a]pyrene									
Benzo[b]fluoranthene									
Benzo[ghi]perylene									
Benzo[k]fluoranthene									
Benzyl alcohol									
Beryllium	7.23	6.11	11.60		4.72	6.90	6.99	5.15	2.86
beta-BHC									
Bis(2-chloroethoxy)methane									
Bis(2-chloroethyl)ether									
Bis(2-ethylhexyl)phthalate									
Bromochloromethane	<5.00	<.12	<.12		<.12	<.12	<.54	<.54	<.54
Bromodichloromethane	<1.00	<.12	<.12		<.12	<.12	<.39	<.39	<.39
Bromoform	<5.00	<.14	<.14		<.14	<.14	<.78	<.78	<.78
Bromomethane	<4.00	<.22	<.22		<.22	.31	<1.10	<1.10	<1.10
Butylbenzylphthalate									
Cadmium	6.330000	9.980000	57.400002	5.210000	9.290000	10.600000	12.500000	4.400000	6.880000
Carbon Disulfide	<1.00	<.15	<.15		<.15	<.15	<.45	<.45	<.45
Carbon Tetrachloride	<2.00	<.24	<.24		<.24	<.24	<.65	<.65	<.65
Chlordane									
Chlorobenzene	<1.00	<.19	<.19		<.19	<.19	<.40	<.40	<.40
Chlorobenzilate									
Chlorodibromomethane	<5.00	<.20	<.20		<.20	<.20	<.75	<.75	<.75
Chloroethane	<4.00	<.15	<.15		<.15	<.15	<.79	<.79	<.79
Chloroform	<1.00	<.28	<.28		<.28	<.28	<1.30	<1.30	<1.30
Chloromethane	<3.00	<.31	<.31		<.31	<.31	<.61	<.61	<.61
Chloroprene									
Chromium	<.35500	1.28000	<72.89999		<7.29000	<36.50000	2.35000	<6.86000	<6.86000
Chrysene									
cis-1,2-Dichloroethene	<1.00	<.13	<.13		<.13	<.13	<.21	<.21	<.21
cis-1,3-Dichloropropene	<5.00	<.15	<.15		<.15	<.15	<.25	<.25	<.25
Cobalt	1120	1150	1840		1290	1430	1040	607	867
Copper	2.04	4.42	3.43		<21.90	<110.00	1.68	<14.00	<14.00
Cyanide									
delta-BHC									
Diallate									
Dibenzo(a,h)anthracene									
Dibenzofuran									
Dibromomethane	<1.00	<.18	<.18		<.18	<.18	<.33	<.33	<.33
Dichlorodifluoromethane									
Dieldrin									
Diethyl phthalate									
Dimethoate									
Dimethyl phthalate									
Di-n-butylphthalate									
Di-n-octylphthalate									
Dinoseb									
Diphenylamine									
Disulfoton									
Endosulfan I									
Endosulfan II									
Endosulfan Sulfate									
Endrin									
Endrin Aldehyde									
Ethyl Methacrylate									
Ethyl Methanesulfonate									
Ethylbenzene	<1.00	<.21	<.21		<.21	<.21	<.31	<.31	<.31
Famphur									
Fluoranthene									
Fluorene									
gamma-BHC (Lindane)									
Heptachlor									
Heptachlor Epoxide									
Hexachlorobenzene									
Hexachlorobutadiene									
Hexachlorocyclopentadiene									
Hexachloroethane									
Hexachloropropene									
Indeno[1,2,3-cd]pyrene									
Iodomethane	<10.0	<.8	<.8		<.8	<.8	<7.0	<7.0	<7.0
Iron	394000	374000	422000		305000	410000	342000	321000	336000
Isobutanol									
Isodrin									
Isophorone									

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

Table 9

Analytical Data Summary for MW-380

Constituents	3/10/2020	9/15/2020	4/15/2021	10/27/2021	4/13/2022	9/1/2022	3/6/2023	9/29/2023
Arsenic	2.35	4.62	3.56	3.45	<7.50	<4.00	4.30	4.60
Barium	6.49	8.70	7.31	9.42	<8.80	10.40	7.70	9.70
Benzene	<.22	<.22	<.22	<.22	<.22	<1.00	<1.00	<1.00
Benzo[a]anthracene								
Benzo[a]pyrene								
Benzo[b]fluoranthene								
Benzo[ghi]perylene								
Benzo[k]fluoranthene								
Benzyl alcohol								
Beryllium	2.85	7.51	7.42	6.22	<2.70	<4.00	4.70	5.00
beta-BHC								
Bis(2-chloroethoxy)methane								
Bis(2-chloroethyl)ether								
Bis(2-ethylhexyl)phthalate								
Bromochloromethane	<.54	<.54	<.54	<.54	<.54	<1.00	<1.00	<1.00
Bromodichloromethane	<.39	<.39	<.39	<.39	<.39	<1.00	<1.00	<1.00
Bromoform	<.78	<.78	<.78	<.78	<.78	<1.00	<1.00	<1.00
Bromomethane	<1.10	<1.10	<1.10	<1.10	<1.10	<1.00	<1.00	<1.00
Butylbenzylphthalate								
Cadmium	5.900000	8.940001	10.500000	7.250000	1.360000	<.800000	3.100000	9.200000
Carbon Disulfide	<.45	<.45	<.45	<.45	<.45	<1.00	<1.00	<1.00
Carbon Tetrachloride	<.65	<.65	<.65	<.65	<.65	<1.00	<1.00	<1.00
Chlordane								
Chlorobenzene	<.40	<.40	<.40	<.40	<.40	<1.00	<1.00	<1.00
Chlorobenzilate								
Chlorodibromomethane	<.75	<.75	<.75	<.75	<.75	<1.00	<1.00	<1.00
Chloroethane	<.79	<.79	<.79	<.79	<.79	<1.00	<1.00	<1.00
Chloroform	<1.30	<1.30	<1.30	<1.30	<1.30	<1.00	<1.00	<1.00
Chloromethane	<.61	<.61	<.61	<.61	<.61	<1.00	<1.00	<1.00
Chloroprene								
Chromium	<1.10000	1.69000	2.34000	1.57000	<11.00000	<8.00000	<8.00000	<8.00000
Chrysene								
cis-1,2-Dichloroethene	<.21	<.21	<.21	<.21	<.21	<1.00	<1.00	<1.00
cis-1,3-Dichloropropene	<.25	<.25	<.25	<.25	<.25	<1.00	<1.00	<1.00
Cobalt	856	1180	1150	795	701	407	758	1130
Copper	<3.20	3.53	1.99	1.62	<18.00	<4.00	<4.00	<4.00
Cyanide								
delta-BHC								
Diallate								
Dibenzo(a,h)anthracene								
Dibenzofuran								
Dibromomethane	<.33	<.33	<.33	<.33	<.33	<1.00	<1.00	<1.00
Dichlorodifluoromethane								
Dieldrin								
Diethyl phthalate								
Dimethoate								
Dimethyl phthalate								
Di-n-butylphthalate								
Di-n-octylphthalate								
Dinoseb								
Diphenylamine								
Disulfoton								
Endosulfan I								
Endosulfan II								
Endosulfan Sulfate								
Endrin								
Endrin Aldehyde								
Ethyl Methacrylate								
Ethyl Methanesulfonate								
Ethylbenzene	<.31	<.31	<.31	<.31	<.31	<1.00	<1.00	<1.00
Famphur								
Fluoranthene								
Fluorene								
gamma-BHC (Lindane)								
Heptachlor								
Heptachlor Epoxide								
Hexachlorobenzene								
Hexachlorobutadiene								
Hexachlorocyclopentadiene								
Hexachloroethane								
Hexachloropropene								
Indeno[1,2,3-cd]pyrene								
Iodomethane	<7.0	<7.0	<7.0	<7.0	<7.0	<1.0	<1.0	<1.0
Iron	307000	419000	495000	436000	501000	462000	453000	435000
Isobutanol								
Isodrin								
Isophorone								

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

Table 9

Analytical Data Summary for MW-380

Constituents	Units	9/19/2012	3/27/2013	9/25/2013	11/15/2013	4/16/2014	9/26/2014	3/11/2015	9/2/2015
Isosafrole	ug/L	<10.0		<10.8					
Kepone	ug/L	<10.0		<10.8					
Lead	ug/L	<4.000	<4.000	<4.000		<4.000	.816	.928	.757
Mercury	ug/L	<.267		<.200					
Methacrylonitrile	ug/L	<1		<1					
Methapyrilene	ug/L	<10.0		<10.8					
Methoxychlor	ug/L	<.0320		<.0356					
Methyl Methacrylate	ug/L	<2		<2					
Methyl Methanesulfonate	ug/L	<10.0		<10.8					
Methyl Parathion	ug/L	<10.0		<10.8					
Methylene Chloride	ug/L	<5.00	<5.00	<5.00		<5.00	<.17	<5.00	<5.00
Naphthalene	ug/L	<5		<5					
Nickel	ug/L	2120	1600	2140		818	1650	1290	1970
Nitrobenzene	ug/L	<10.0		<10.8					
N-Nitrosodiethylamine	ug/L	<10.0		<10.8					
N-Nitrosodimethylamine	ug/L	<10.0		<10.8					
N-Nitrosodi-n-butylamine	ug/L	<10.0		<10.8					
N-Nitrosodi-n-propylamine	ug/L	<10.0		<10.8					
N-Nitrosodiphenylamine	ug/L	<10.0		<10.8					
N-Nitrosomethylethylamine	ug/L	<10.0		<10.8					
N-Nitrosopiperidine	ug/L	<10.0		<10.8					
N-Nitrosopyrrolidine	ug/L	<10.0		<10.8					
o,o,o-Triethylphosphorothioate	ug/L	<10.0		<10.8					
o-Toluidine	ug/L	<10.0		<10.8					
p-[Dimethylamino]azobenzene	ug/L	<10.0		<10.8					
Parathion	ug/L	<10.0		<10.8					
PCB-1016	ug/L	<.800		<.899					
PCB-1221	ug/L	<.800		<.899					
PCB-1232	ug/L	<.800		<.899					
PCB-1242	ug/L	<.800		<.899					
PCB-1248	ug/L	<.800		<.899					
PCB-1254	ug/L	<.800		<.899					
PCB-1260	ug/L	<.800		<.899					
Pentachlorobenzene	ug/L	<10.0		<10.8					
Pentachloronitrobenzene	ug/L	<10.0		<10.8					
Pentachlorophenol	ug/L	<10.0		<10.8					
pH	SU						4.02	4.37	4.50
Phenacetin	ug/L	<10.0		<10.8					
Phenanthrene	ug/L	<10.0		<10.8					
Phenol	ug/L	<10.0		<10.8					
Phorate	ug/L	<10.0		<10.8					
p-Phenylenediamine	ug/L	<10.0		<10.8					
Pronamide	ug/L	<10.0		<10.8					
Propionitrile	ug/L	<10		<10					
Pyrene	ug/L	<10.0		<10.8					
Safrole	ug/L	<10.0		<10.8					
Selenium	ug/L	<5.00	<5.00	<5.00		<5.00	<33.40	<50.00	<150.00
Silver	ug/L		<20.000	<20.000		<20.000	<.420	<1.000	<1.000
Styrene	ug/L	<1.00	<1.00	<1.00		<1.00	<.10	<1.00	<1.00
Sulfate	mg/L						4760	7010	4480
Sulfide	mg/L	<1.0		7.8	<1.0	<1.0			
Tetrachloroethene	ug/L	<1.00	<1.00	<1.00		<1.00	<.18	<1.00	<1.00
Thallium	ug/L	<2.000	<2.000	<2.000		<2.000	.268	.181	<1.000
Thionazin	ug/L	<10.0		<10.8					
Tin	ug/L	<100		490		<100			
Toluene	ug/L								
Total Suspended Solids	mg/L						40.00	11.30	11.00
Toxaphene	ug/L	<2.00		<2.22					
trans-1,2-Dichloroethene	ug/L	<1.00	<1.00	<1.00		<1.00	<.21	<1.00	<1.00
trans-1,3-Dichloropropene	ug/L	<5.00	<5.00	<5.00		<5.00	<.22	<5.00	<5.00
trans-1,4-Dichloro-2-butene	ug/L	<10.00	<10.00	<10.00		<10.00	<.13	<10.00	<10.00
Trichloroethene	ug/L	<1.00	<1.00	<1.00		<1.00	<.19	<1.00	<1.00
Trichlorofluoromethane	ug/L	<4.00	<4.00	<4.00		<4.00	<.17	<4.00	<4.00
Vanadium	ug/L	<50.00	19.40	6.71		<50.00	<4.49	5.35	<150.00
Vinyl Acetate	ug/L	<2.00	<2.00	<2.00		<2.00	<.74	<10.00	<10.00
Vinyl Chloride	ug/L	<1.00	<1.00	<1.00		<1.00	<.10	<1.00	<1.00
Xylenes, Total	ug/L	<3.000	<3.000	<3.000		<3.000	<.130	<3.000	<3.000
Zinc	ug/L	5060	4530	6480		2370	4830	4540	5390

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

Table 9

Analytical Data Summary for MW-380

Constituents	3/23/2016	10/20/2016	3/9/2017	6/28/2017	9/26/2017	3/14/2018	10/2/2018	3/28/2019	9/24/2019
Isosafrole									
Kepone									
Lead	.306	.474	1.740		<3.240	<16.200	.637	<1.890	.332
Mercury									
Methacrylonitrile									
Methapyrilene									
Methoxychlor									
Methyl Methacrylate									
Methyl Methanesulfonate									
Methyl Parathion									
Methylene Chloride	<5.00	.30	<.17		<.17	<.17	<1.70	<1.70	<1.70
Naphthalene									
Nickel	1450	1430	2660		1270	2070	1440	807	1270
Nitrobenzene									
N-Nitrosodiethylamine									
N-Nitrosodimethylamine									
N-Nitrosodi-n-butylamine									
N-Nitrosodi-n-propylamine									
N-Nitrosodiphenylamine									
N-Nitrosomethylethylamine									
N-Nitrosopiperidine									
N-Nitrosopyrrolidine									
o,o,o-Triethylphosphorothioate									
o-Toluidine									
p-[Dimethylamino]azobenzene									
Parathion									
PCB-1016									
PCB-1221									
PCB-1232									
PCB-1242									
PCB-1248									
PCB-1254									
PCB-1260									
Pentachlorobenzene									
Pentachloronitrobenzene									
Pentachlorophenol									
pH	4.70	4.61	4.42		4.77	4.48	4.69	4.79	4.92
Phenacetin									
Phenanthrene									
Phenol									
Phorate									
p-Phenylenediamine									
Pronamide									
Propionitrile									
Pyrene									
Safrole									
Selenium	11.90	13.70	32.20		<9.28	<46.40	23.30	<7.00	10.60
Silver	<.153	<2.300	<14.000		<1.400	<7.000	<.115	<2.590	<.370
Styrene	<1.00	<.10	<.10		<.10	<.10	<.37	<.37	<.37
Sulfate	8560	7320	6160		3920	7210	3150	3650	2850
Sulfide									
Tetrachloroethene	<1.00	<.18	<.18		<.18	<.18	<.48	<.48	<.48
Thallium	.103	.293	.357		.239	<3.220	<.570	<1.890	<.270
Thionazin									
Tin									
Toluene							<.43	<.43	<.43
Total Suspended Solids	39.30	37.00	12.50	6.25	6.38	18.50	48.30	18.50	14.00
Toxaphene									
trans-1,2-Dichloroethene	<1.00	<.21	<.21		<.21	<.21	<.27	<.27	<.27
trans-1,3-Dichloropropene	<5.00	<.22	<.22		<.22	<.22	<.56	<.56	<.56
trans-1,4-Dichloro-2-butene	<10.00	<.13	<.13		<.13	<.13	<1.10	<1.10	<1.10
Trichloroethene	<1.00	<.19	<.19		<.19	<.19	<.43	<.43	<.43
Trichlorofluoromethane	<4.00	<.17	<.17		<.17	<.17	<.38	<.38	<.38
Vanadium	4.65	<3.83	6.02		<8.40	<42.00	4.78	<5.74	1.59
Vinyl Acetate	<10.00	<.74	<.74		<.74	<.74	<2.50	<2.50	<2.50
Vinyl Chloride	<1.00	<.10	<.10		<.10	<.10	<.60	<.60	<.18
Xylenes, Total	<3.000	<.130	.672		<.130	<.130	<.400	<.400	<.400
Zinc	3870	3890	8780	4580	3580	4970	4170	3250	2730

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

Table 9

Analytical Data Summary for MW-380

Constituents	3/10/2020	9/15/2020	4/15/2021	10/27/2021	4/13/2022	9/1/2022	3/6/2023	9/29/2023
Isosafrole								
Kepone								
Lead	<.270	.463	.408	1.100	<2.400	<4.000	<4.000	<4.000
Mercury								
Methacrylonitrile								
Methapyrilene								
Methoxychlor								
Methyl Methacrylate								
Methyl Methanesulfonate								
Methyl Parathion								
Methylene Chloride	<1.70	<1.70	<1.70	<1.70	<1.70	<5.00	<5.00	<5.00
Naphthalene								
Nickel	1130	1670	1450	1100	1020	531	965	1410
Nitrobenzene								
N-Nitrosodiethylamine								
N-Nitrosodimethylamine								
N-Nitrosodi-n-butylamine								
N-Nitrosodi-n-propylamine								
N-Nitrosodiphenylamine								
N-Nitrosomethylethylamine								
N-Nitrosopiperidine								
N-Nitrosopyrrolidine								
o,o,o-Triethylphosphorothioate								
o-Toluidine								
p-[Dimethylamino]azobenzene								
Parathion								
PCB-1016								
PCB-1221								
PCB-1232								
PCB-1242								
PCB-1248								
PCB-1254								
PCB-1260								
Pentachlorobenzene								
Pentachloronitrobenzene								
Pentachlorophenol								
pH	4.89	4.67	4.79	4.93	5.35	5.40	3.70	4.80
Phenacetin								
Phenanthrene								
Phenol								
Phorate								
p-Phenylenediamine								
Pronamide								
Propionitrile								
Pyrene								
Safrole								
Selenium	7.70	15.60	13.30	5.48	<9.60	<4.00	9.60	9.60
Silver	<.370	<.370	<.420	<.420	<4.900	<4.000	<4.000	<4.000
Styrene	<.37	<.37	<.37	<.37	<.37	<1.00	<1.00	<1.00
Sulfate	3000	3450	3760	3100	3430	3210	3410	3450
Sulfide								
Tetrachloroethene	<.48	<.48	<.48	<.48	<.48	<1.00	<1.00	<1.00
Thallium	<.260	.292	<.260	<.260	<2.600	<2.000	<2.000	<2.000
Thionazin								
Tin								
Toluene	<.43	<.43	<.43	<.43	<.43	<1.00	<1.00	<1.00
Total Suspended Solids	17.00	26.10	29.40	62.20	62.00			
Toxaphene								
trans-1,2-Dichloroethene	<.27	<.27	<.27	<.27	<.27	<1.00	<1.00	<1.00
trans-1,3-Dichloropropene	<.56	<.56	<.56	<.56	<.56	<1.00	<1.00	<1.00
trans-1,4-Dichloro-2-butene	<1.10	<1.10	<1.10	<1.10	<1.10	<5.00	<5.00	<5.00
Trichloroethene	<.43	<.43	<.43	<.43	<.43	<1.00	<1.00	<1.00
Trichlorofluoromethane	<.38	<.38	<.38	<.38	<.38	<1.00	<1.00	<1.00
Vanadium	2.03	5.37	5.86	4.68	<11.00	<20.00	<20.00	<20.00
Vinyl Acetate	<2.50	<2.50	<2.50	<2.50	<2.50	<5.00	<5.00	<5.00
Vinyl Chloride	<.18	<.18	<.18	<.18	<.18	<1.00	<1.00	<1.00
Xylenes, Total	<.400	<.400	<.400	<.400	<.400	<2.000	<2.000	<2.000
Zinc	2960	4610	4780	2980	2610	669	2290	4800

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

Table 9

Analytical Data Summary for MW-381

Constituents	Units	9/20/2012	3/27/2013	9/26/2013	4/16/2014	9/26/2014	3/12/2015	9/2/2015	11/10/2015	3/23/2016
1,1,1,2-Tetrachloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00		<1.00
1,1,1-Trichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.12	<1.00	<1.00		<1.00
1,1,2,2-Tetrachloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.10	<1.00	<1.00		<1.00
1,1,2-Trichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.12	<1.00	<1.00		<1.00
1,1-Dichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00		<1.00
1,1-Dichloroethene	ug/L	<2.00	<2.00	<2.00	<2.00	<.15	<2.00	<2.00		<2.00
1,2,3-Trichloropropane	ug/L	<1.00	<1.00	<1.00	<1.00	<.19	<1.00	<1.00		<1.00
1,2-Dibromo-3-chloropropane	ug/L	<10.00	<10.00	<10.00	<10.00	<.12	<10.00	<10.00		<10.00
1,2-Dibromoethane	ug/L	<10.00	<10.00	<10.00	<10.00	<.13	<10.00	<10.00		<10.00
1,2-Dichlorobenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.14	<1.00	<1.00		<1.00
1,2-Dichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.18	<1.00	<1.00		<1.00
1,2-Dichloropropane	ug/L	<1.00	<1.00	<1.00	<1.00	<.87	<1.00	<1.00		<1.00
1,4-Dichlorobenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.20	<1.00	<1.00		<1.00
2-Butanone	ug/L	<10.00	<10.00	<10.00	<10.00	<.47	<10.00	<10.00		<10.00
2-Hexanone	ug/L	<10.0	<10.0	<10.0	<10.0	<.2	<10.0	<10.0		<10.0
4-Methyl-2-pentanone	ug/L	<10.00	<10.00	<10.00	<10.00	<.22	<10.00	<10.00		<10.00
Acetone	ug/L	<10.00	<10.00	<10.00	<10.00	<1.79	<10.00	<10.00		<10.00
Acrylonitrile	ug/L	<10.00	<10.00	<10.00	<10.00	<.53	<10.00	<10.00		<10.00
Alkalinity as CaCO3	mg/L					294	259	310		263
Aluminum	ug/L					333.0	16.7	<50.0		23.6
Antimony	ug/L	<6.000	<6.000	<6.000	<6.000	<.161	<1.000	<1.000		<.237
Arsenic	ug/L	<1.000	<1.000	.518	<1.000	<.945	<2.000	7.140		<.672
Barium	ug/L	19.20	15.30	8.58	4.11	15.20	9.02	83.30	10.80	8.22
Benzene	ug/L	<.50	<.50	<.50	<.50	<.11	<.50	<.50		<.50
Beryllium	ug/L	<1.000	<1.000	<1.000	<1.000	<.039	<1.000	<1.000		<.221
Bromochloromethane	ug/L	<5.00	<5.00	<5.00	<5.00	<.12	<5.00	<5.00		<5.00
Bromodichloromethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.12	<1.00	<1.00		<1.00
Bromoform	ug/L	<5.00	<5.00	<5.00	<5.00	<.14	<5.00	<5.00		<5.00
Bromomethane	ug/L	<20.000	<4.000	<4.000	<4.000	<.220	<4.000	<4.000		<4.000
Cadmium	ug/L	<.500	<.500	.560	<.500	.813	.160	<.500		1.080
Carbon Disulfide	ug/L	<1.00	<1.00	<1.00	<1.00	<.15	<1.00	<1.00		<1.00
Carbon Tetrachloride	ug/L	<2.00	<2.00	<2.00	<2.00	<.24	<2.00	<2.00		<2.00
Chlorobenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.19	<1.00	<1.00		<1.00
Chlorodibromomethane	ug/L	<5.00	<5.00	<5.00	<5.00	<.20	<5.00	<5.00		<5.00
Chloroethane	ug/L	<4.00	<4.00	<4.00	<4.00	<.15	<4.00	<4.00		<4.00
Chloroform	ug/L	<1.00	<1.00	<1.00	<1.00	<.28	<1.00	<1.00		<1.00
Chloromethane	ug/L	<3.00	<3.00	<3.00	<3.00	<.31	<3.00	<3.00		<3.00
Chromium	ug/L	<20.000	<20.000	3.900	<20.000	<1.240	<5.000	<5.000		<.355
cis-1,2-Dichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.13	<1.00	<1.00		<1.00
cis-1,3-Dichloropropene	ug/L	<5.00	<5.00	<5.00	<5.00	<.15	<5.00	<5.00		<5.00
Cobalt	ug/L	10.100	<20.000	4.480	<7.000	1.030	.226	49.000		.438
Copper	ug/L	<20.00	<20.00	<20.00	<20.00	3.36	1.48	<2.00		1.62
Dibromomethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.18	<1.00	<1.00		<1.00
Ethylbenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00		<1.00
Iodomethane	ug/L	<10.0	<10.0	<10.0	<10.0	<.8	<10.0	<10.0		<10.0
Iron	ug/L					407.0	87.6	77300.0		111.0
Lead	ug/L	<4.000	<4.000	<4.000	<4.000	1.000	.165	<.500		<.211
Methylene Chloride	ug/L	<5.000	<5.000	<5.000	<5.000	<.170	<5.000	<5.000		<5.000
Nickel	ug/L	<50.00	<50.00	27.00	<50.00	29.80	7.88	21.50		43.10
pH	SU					6.28	6.27	6.40		6.46
Selenium	ug/L	<5.000	<5.000	<5.000	<5.000	<3.340	<5.000	<5.000		<.630
Silver	ug/L	<20.000	<20.000	<20.000	<20.000	<.042	<1.000	<1.000		<.153
Styrene	ug/L	<1.00	<1.00	<1.00	<1.00	<.10	<1.00	<1.00		<1.00
Sulfate	mg/L					1420	1730	1300		1390
Tetrachloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.18	<1.00	<1.00		<1.00
Thallium	ug/L	<2.0000	<2.0000	<2.0000	<2.0000	<.0325	<1.0000	<1.0000		<.0255
Toluene	ug/L									
Total Suspended Solids	mg/L					114.00	6.00	23.00		6.00
trans-1,2-Dichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00		<1.00
trans-1,3-Dichloropropene	ug/L	<5.00	<5.00	<5.00	<5.00	<.22	<5.00	<5.00		<5.00
trans-1,4-Dichloro-2-butene	ug/L	<10.00	<10.00	<10.00	<10.00	<.13	<10.00	<10.00		<10.00
Trichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.19	<1.00	<1.00		<1.00
Trichlorofluoromethane	ug/L	<4.00	<4.00	<4.00	<4.00	<.17	<4.00	<4.00		<4.00
Vanadium	ug/L	<50.000	<50.000	<50.000	<50.000	1.030	<5.000	<5.000		<.255
Vinyl Acetate	ug/L	<2.00	<2.00	<2.00	<2.00	<.74	<10.00	<10.00		<10.00
Vinyl Chloride	ug/L	<1.00	<1.00	<1.00	<1.00	<.10	<1.00	<1.00		<1.00
Xylenes, Total	ug/L	<3.000	<3.000	<3.000	<3.000	<.130	<3.000	<3.000		<3.000
Zinc	ug/L	<20.0	67.2	195.0	<60.0	27.6	14.4	10.4		60.8

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

Table 9

Analytical Data Summary for MW-381

Constituents	10/19/2016	3/7/2017	9/26/2017	3/14/2018	10/2/2018	3/28/2019	9/24/2019	3/10/2020	9/15/2020
1,1,1,2-Tetrachloroethane	<.21	<.21	<.21	<.21	<.38	<.38	<.38	<.38	<.38
1,1,1-Trichloroethane	<.12	<.12	<.12	<.12	<.19	<.19	<.19	<.19	<.19
1,1,2,2-Tetrachloroethane	<.10	<.10	<.10	<.10	<.47	<.47	<.47	<.47	<.47
1,1,2-Trichloroethane	<.12	<.12	<.12	<.12	<.45	<.45	<.45	<.45	<.45
1,1-Dichloroethane	<.21	<.21	<.21	<.21	<.22	<.22	<.22	<.22	<.22
1,1-Dichloroethene	<.15	<.15	<.15	<.15	<.56	<.56	<.56	<.56	<.56
1,2,3-Trichloropropane	<.19	<.19	<.19	<.19	<.59	<.59	<.59	<.59	<.59
1,2-Dibromo-3-chloropropane	<.50	<.50	<.50	<.50	<1.20	<1.20	<1.20	<1.20	<1.20
1,2-Dibromoethane	<.13	<.13	<.13	<.13	<.34	<.34	<.34	<.34	<.34
1,2-Dichlorobenzene	<.14	<.14	<.14	<.14	<.37	<.37	<.37	<.37	<.37
1,2-Dichloroethane	<.18	<.18	<.18	<.18	<.39	<.39	<.39	<.39	<.39
1,2-Dichloropropane	<.87	<.87	<.87	<.87	<.27	<.27	<.27	<.27	<.27
1,4-Dichlorobenzene	<.20	<.20	<.20	<.20	<.23	<.23	<.23	<.23	<.23
2-Butanone	<1.04	<1.04	<1.04	<1.04	<2.10	<2.10	<2.10	<2.10	<2.10
2-Hexanone	<.2	<.2	<.2	<.2	<2.0	<2.0	<2.0	<2.0	<2.0
4-Methyl-2-pentanone	<.22	<.22	<.22	<.22	<2.10	<2.10	<2.10	<2.10	<2.10
Acetone	<1.79	<1.79	2.94	2.87	<3.10	<3.10	<3.10	<3.10	<3.10
Acrylonitrile	<.53	<.53	<.53	<.53	<2.20	<2.20	<2.20	<2.20	<2.20
Alkalinity as CaCO3	294	180	304	135	196	191	223	475	308
Aluminum	92.3	66.2	<41.3	<165.0	981.0	<27.0	37.1	<30.0	228.0
Antimony	<.237	<.185	<.185	<.740	<1.320	<.530	<.530	<.580	<.510
Arsenic	<.672	<.505	<.505	<2.020	.811	<.750	<.750	<.880	<.880
Barium	11.50	9.80	9.70	8.29	16.90	6.71	13.40	8.15	14.10
Benzene	<.11	<.11	<.11	<.11	<.22	<.22	<.22	<.22	<.22
Beryllium	<.221	<.125	<.125	<.500	<.530	<.270	<.270	<.270	<.270
Bromochloromethane	<.12	<.12	<.12	<.12	<.54	<.54	<.54	<.54	<.54
Bromodichloromethane	<.12	<.12	<.12	<.12	<.39	<.39	<.39	<.39	<.39
Bromoform	<.14	<.14	<.14	<.14	<.78	<.78	<.78	<.78	<.78
Bromomethane	<.220	<.220	.322	.240	<1.100	<1.100	<1.100	<1.100	<1.100
Cadmium	.473	.054	.126	<.176	<.167	<.077	.046	.043	.169
Carbon Disulfide	<.15	<.15	<.15	<.15	<.45	<.45	<.45	<.45	<.45
Carbon Tetrachloride	<.24	<.24	<.24	<.24	<.65	<.65	<.65	<.65	<.65
Chlorobenzene	<.19	<.19	<.19	<.19	<.40	<.40	<.40	<.40	<.40
Chlorodibromomethane	<.20	<.20	<.20	<.20	<.75	<.75	<.75	<.75	<.75
Chloroethane	<.15	<.15	<.15	<.15	<.79	<.79	<.79	<.79	<.79
Chloroform	<.28	<.28	<.28	<.28	<1.30	<1.30	<1.30	<1.30	<1.30
Chloromethane	<.31	<.31	<.31	<.31	<.61	<.61	<.61	<.61	<.61
Chromium	<.355	<.729	<.729	<2.920	2.470	<.980	<.980	<1.100	<1.100
cis-1,2-Dichloroethene	<.13	<.13	<.13	<.13	<.21	<.21	<.21	<.21	<.21
cis-1,3-Dichloropropene	<.15	<.15	<.15	<.15	<.25	<.25	<.25	<.25	<.25
Cobalt	.315	.080	.071	<.181	.704	<.091	.101	.092	.673
Copper	1.80	<2.19	<2.19	<8.76	3.46	<2.00	2.50	<3.20	2.36
Dibromomethane	<.18	<.18	<.18	<.18	<.33	<.33	<.33	<.33	<.33
Ethylbenzene	<.21	<.21	<.21	<.21	<.31	<.31	<.31	<.31	<.31
Iodomethane	<.8	<.8	<.8	<.8	<7.0	<7.0	<7.0	<7.0	<7.0
Iron	129.0	<47.8	<47.8	<191.0	849.0	138.0	<66.0	56.4	243.0
Lead	.917	<.324	<.324	<1.300	.722	<.270	.297	<.270	.561
Methylene Chloride	.283	<.170	<.170	<.170	<1.700	<1.700	<1.700	<1.700	<1.700
Nickel	16.30	2.60	4.49	<3.72	3.38	2.21	3.47	3.11	10.20
pH	6.41	6.43	6.48	6.66	6.52	6.69	6.48	6.60	6.57
Selenium	<.630	<.928	<.928	<3.710	<.982	<1.000	<1.000	<1.000	<1.000
Silver	<.153	<.140	<.140	<.560	<.115	<.370	<.370	<.370	<.370
Styrene	<.10	<.10	<.10	<.10	<.37	<.37	<.37	<.37	<.37
Sulfate	1250	1580	1240	1490	1070	721	1070	740	890
Tetrachloroethene	<.18	<.18	<.18	<.18	<.48	<.48	<.48	<.48	<.48
Thallium	<.0255	<.0644	<.0644	<.2580	<.5700	<.2700	<.2700	<.2600	<.2600
Toluene					<.43	<.43	<.43	<.43	<.43
Total Suspended Solids	7.50	2.63	12.30	1.38	17.50	1.00	41.30	2.50	18.80
trans-1,2-Dichloroethene	<.21	<.21	<.21	<.21	<.27	<.27	<.27	<.27	<.27
trans-1,3-Dichloropropene	<.22	<.22	<.22	<.22	<.56	<.56	<.56	<.56	<.56
trans-1,4-Dichloro-2-butene	<.13	<.13	<.13	<.13	<1.10	<1.10	<1.10	<1.10	<1.10
Trichloroethene	<.19	<.19	<.19	<.19	<.43	<.43	<.43	<.43	<.43
Trichlorofluoromethane	<.17	<.17	<.17	<.17	<.38	<.38	<.38	<.38	<.38
Vanadium	.349	<.840	<.840	<3.360	2.980	<.820	<.820	<.820	<.850
Vinyl Acetate	<.74	<.74	<.74	<.74	<2.50	<2.50	<2.50	<2.50	<2.50
Vinyl Chloride	<.10	<.10	<.10	<.10	<.60	<.60	<.18	<.18	<.18
Xylenes, Total	.242	.435	<.130	<.130	<.400	<.400	<.400	<.400	<.400
Zinc	11.9	<11.5	<11.5	<46.0	9.1	<10.0	<10.0	<10.0	<10.0

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

Table 9

Analytical Data Summary for MW-381

Constituents	4/15/2021	10/27/2021	4/14/2022	9/1/2022	3/6/2023	9/29/2023
1,1,1,2-Tetrachloroethane	<.38	<.38	<.38	<1.00	<1.00	<1.00
1,1,1-Trichloroethane	<.19	<.19	<.19	<1.00	<1.00	<1.00
1,1,2,2-Tetrachloroethane	<.47	<.47	<.47	<1.00	<1.00	<1.00
1,1,2-Trichloroethane	<.45	<.45	<.45	<1.00	<1.00	<1.00
1,1-Dichloroethane	<.22	<.22	<.22	<1.00	<1.00	<1.00
1,1-Dichloroethene	<.56	<.56	<.56	<1.00	<1.00	<1.00
1,2,3-Trichloropropane	<.59	<.59	<.59	<1.00	<1.00	<1.00
1,2-Dibromo-3-chloropropane	<1.20	<1.20	<1.20	<5.00	<5.00	<5.00
1,2-Dibromoethane	<.34	<.34	<.34	<1.00	<1.00	<1.00
1,2-Dichlorobenzene	<.37	<.37	<.37	<1.00	<1.00	<1.00
1,2-Dichloroethane	<.39	<.39	<.39	<1.00	<1.00	<1.00
1,2-Dichloropropane	<.27	<.27	<.27	<1.00	<1.00	<1.00
1,4-Dichlorobenzene	<.23	<.23	<.23	<1.00	<1.00	<1.00
2-Butanone	<2.10	<2.10	<2.10	<10.00	<10.00	<10.00
2-Hexanone	<2.0	<2.0	<2.0	<5.0	<5.0	<5.0
4-Methyl-2-pentanone	<2.10	<2.10	<2.10	<5.00	<5.00	<5.00
Acetone	<3.10	<3.10	<3.10	<10.00	<10.00	<10.00
Acrylonitrile	<2.20	<2.20	<2.20	<5.00	<5.00	<5.00
Alkalinity as CaCO3	208	263	206	239	170	263
Aluminum	22.9	59.6	479.0	212.0	102.0	351.0
Antimony	<1.100	<1.100	.839	<2.000	<2.000	<2.000
Arsenic	<.750	<.750	<.750	<4.000	<4.000	<4.000
Barium	8.92	12.70	15.50	12.80	8.50	16.80
Benzene	<.22	<.22	<.22	<1.00	<1.00	<1.00
Beryllium	<.270	<.270	<.270	<4.000	<4.000	<4.000
Bromochloromethane	<.54	<.54	<.54	<1.00	<1.00	<1.00
Bromodichloromethane	<.39	<.39	<.39	<1.00	<1.00	<1.00
Bromoform	<.78	<.78	<.78	<1.00	<1.00	<1.00
Bromomethane	<1.100	<1.100	<1.100	<1.000	<1.000	<1.000
Cadmium	<.051	<.051	<.055	<.800	<.800	<.800
Carbon Disulfide	<.45	<.45	<.45	<1.00	<1.00	<1.00
Carbon Tetrachloride	<.65	<.65	<.65	<1.00	<1.00	<1.00
Chlorobenzene	<.40	<.40	<.40	<1.00	<1.00	<1.00
Chlorodibromomethane	<.75	<.75	<.75	<1.00	<1.00	<1.00
Chloroethane	<.79	<.79	<.79	<1.00	<1.00	<1.00
Chloroform	<1.30	<1.30	<1.30	<1.00	<1.00	<1.00
Chloromethane	<.61	<.61	<.61	<1.00	<1.00	<1.00
Chromium	<1.100	1.230	<1.100	<8.000	<8.000	<8.000
cis-1,2-Dichloroethene	<.21	<.21	<.21	<1.00	<1.00	<1.00
cis-1,3-Dichloropropene	<.25	<.25	<.25	<1.00	<1.00	<1.00
Cobalt	.091	.369	.978	.400	1.200	2.100
Copper	2.24	1.96	2.73	<4.00	4.00	<4.00
Dibromomethane	<.33	<.33	<.33	<1.00	<1.00	<1.00
Ethylbenzene	<.31	<.31	<.31	<1.00	<1.00	<1.00
Iodomethane	<7.0	<7.0	<7.0	<1.0	<1.0	<1.0
Iron	62.8	93.5	584.0	150.0	126.0	287.0
Lead	.221	.623	1.310	<4.000	<4.000	<4.000
Methylene Chloride	<1.700	<1.700	<1.700	<5.000	<5.000	<5.000
Nickel	<1.90	2.35	4.47	<4.00	13.00	5.30
pH	6.84	6.43	6.78	6.40	6.80	6.60
Selenium	<.960	<.960	<.960	<4.000	<4.000	<4.000
Silver	<.420	<.420	<.490	<4.000	<4.000	<4.000
Styrene	<.37	<.37	<.37	<1.00	<1.00	<1.00
Sulfate	730	887	655	789	711	777
Tetrachloroethene	<.48	<.48	<.48	<1.00	<1.00	<1.00
Thallium	<.2600	<.2600	<.2600	<2.0000	<2.0000	<2.0000
Toluene	<.43	<.43	<.43	<1.00	<1.00	<1.00
Total Suspended Solids	4.75	3.63	73.30			
trans-1,2-Dichloroethene	<.27	<.27	<.27	<1.00	<1.00	<1.00
trans-1,3-Dichloropropene	<.56	<.56	<.56	<1.00	<1.00	<1.00
trans-1,4-Dichloro-2-butene	<1.10	<1.10	<1.10	<5.00	<5.00	<5.00
Trichloroethene	<.43	<.43	<.43	<1.00	<1.00	<1.00
Trichlorofluoromethane	<.38	<.38	<.38	<1.00	<1.00	<1.00
Vanadium	<1.100	<1.100	1.500	<20.000	<20.000	<20.000
Vinyl Acetate	<2.50	<2.50	<2.50	<5.00	<5.00	<5.00
Vinyl Chloride	<.18	<.18	<.18	<1.00	<1.00	<1.00
Xylenes, Total	<.400	<.400	<.400	<2.000	<2.000	<2.000
Zinc	<10.0	<10.0	<10.0	<20.0	<20.0	32.4

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

Table 9

Analytical Data Summary for MW-382R

Constituents	Units	9/20/2012	3/27/2013	9/25/2013	4/15/2014	9/26/2014	3/12/2015	9/2/2015	3/23/2016
(3 4)-Methylphenol	ug/L								
1,1,1,2-Tetrachloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	<1.00
1,1,1-Trichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.12	<1.00	<1.00	<1.00
1,1,2,2-Tetrachloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.10	<1.00	<1.00	<1.00
1,1,2-Trichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.12	<1.00	<1.00	<1.00
1,1-Dichloroethane	ug/L	2.10	2.43	2.00	3.54	2.00	2.23	1.62	1.65
1,1-Dichloroethene	ug/L	<2.00	<2.00	<2.00	<2.00	<.15	<2.00	<2.00	<1.00
1,1-Dichloropropene	ug/L	<1.00		<1.00					
1,2,3-Trichloropropane	ug/L	<1.00	<1.00	<1.00	<1.00	<.19	<1.00	<1.00	<1.00
1,2,4,5-Tetrachlorobenzene	ug/L	<10.000		<10.000					
1,2,4-Trichlorobenzene	ug/L	<5.00		<5.00					
1,2-Dibromo-3-chloropropane	ug/L	<10.00	<10.00	<10.00	<10.00	<.12	<10.00	<10.00	<10.00
1,2-Dibromoethane	ug/L	<10.00	<10.00	<10.00	<10.00	<.13	<10.00	<10.00	<1.00
1,2-Dichlorobenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.14	<1.00	<1.00	<1.00
1,2-Dichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.18	<1.00	<1.00	<1.00
1,2-Dichloropropane	ug/L	<1.00	<1.00	<1.00	<1.00	<.87	<1.00	<1.00	<1.00
1,2-Dinitrobenzene	ug/L								
1,3,5-Trinitrobenzene	ug/L	<10.00		<10.00					
1,3-Dichlorobenzene	ug/L	<1.0		<1.0					
1,3-Dichloropropane	ug/L	<1.0		<1.0					
1,3-Dinitrobenzene	ug/L	<10.00		<10.00					
1,4-Dichlorobenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.20	<1.00	<1.00	<10.00
1,4-Naphthoquinone	ug/L	<10.000		<10.000					
1,4-phenylenediamine	ug/L								
1-Naphthylamine	ug/L	<10.000		<10.000					
2,2`-oxybis[1-Chloropropane]	ug/L	<10		<10					
2,2-Dichloropropane	ug/L	<4.00		<4.00					
2,3,4,6-Tetrachlorophenol	ug/L	<10.000		<10.000					
2,4,5-T	ug/L	<1.000		<1.080					
2,4,5-TP [Silvex]	ug/L	<1.000		<1.080					
2,4,5-Trichlorophenol	ug/L	<10.000		<10.000					
2,4,6-Trichlorophenol	ug/L	<10.000		<10.000					
2,4-D	ug/L	<1.000		<1.080					
2,4-Dichlorophenol	ug/L	<10.00		<10.00					
2,4-Dimethylphenol	ug/L	<10.000		<10.000					
2,4-Dinitrophenol	ug/L	<20.00		<20.00					
2,4-Dinitrotoluene	ug/L	<10.000		<10.000					
2,6-Dichlorophenol	ug/L	<10.000		<10.000					
2,6-Dinitrotoluene	ug/L	<10.000		<10.000					
2-Acetylaminofluorene	ug/L	<10.00		<10.00					
2-Butanone	ug/L	<10.00	<10.00	<10.00	<10.00	<.47	<10.00	<10.00	<10.00
2-Chloronaphthalene	ug/L	<10.000		<10.000					
2-Chlorophenol	ug/L	<10.00		<10.00					
2-Hexanone	ug/L	<10.0	<10.0	<10.0	<10.0	<.2	<10.0	<10.0	<3.0
2-Methylnaphthalene	ug/L	<10.000		<10.000					
2-Methylphenol	ug/L								
2-Methylphenol [o-Cresol]	ug/L	<10.000		<10.000					
2-Naphthylamine	ug/L	<10.000		<10.000					
2-Nitroaniline	ug/L	<10.00		<10.00					
2-Nitrophenol	ug/L	<10.00		<10.00					
3,3'-Dichlorobenzidine	ug/L								
3,3-Dichlorobenzidine	ug/L	<10.000		<50.000					
3,3-Dimethylbenzidine	ug/L	<10.000		<10.000					
3-Methylcholanthrene	ug/L	<10.000		<10.000					
3-Nitroaniline	ug/L	<10.000		<10.000					
4,4`-DDD	ug/L	<.03200		<.03230					
4,4`-DDE	ug/L	<.03200		<.03230					
4,4`-DDT	ug/L	<.03200		<.03230					
4,6-Dinitro-2-methylphenol	ug/L	<10.00		<10.00					
4-Aminobiphenyl	ug/L	<10.000		<10.000					
4-Bromophenyl phenyl ether	ug/L	<10.000		<10.000					
4-Chloro-3-methylphenol	ug/L	<10.000		<10.000					
4-Chloroaniline	ug/L	<10.00		<10.00					
4-Chlorophenyl phenyl ether	ug/L	<10.000		<10.000					
4-Methyl-2-pentanone	ug/L	<10.00	<10.00	<10.00	<10.00	<.22	<10.00	<10.00	<1.00
4-Nitroaniline	ug/L	<10.00		<10.00					
4-Nitrophenol	ug/L	<10.00		<10.00					
5-Nitro-o-toluidine	ug/L	<10.000		<10.000					
7,12-Dimethylbenz(a)anthracene	ug/L								
7,12-Dimethylbenz[a]anthracene	ug/L	<10.000		<10.000					
Acenaphthene	ug/L	<10.000		<10.000					
Acenaphthylene	ug/L								
Acetone	ug/L	<10.00	<10.00	<10.00	<10.00	<1.79	<10.00	<10.00	<10.00
Acetonitrile	ug/L	<10000		<10000					
Acetophenone	ug/L	<10.000		<10.000					
Acrolein	ug/L	<10.0		<10.0					
Acrylonitrile	ug/L	<10.00	<10.00	<10.00	<10.00	<.53	<10.00	<10.00	<.50

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

Table 9

Analytical Data Summary for MW-382R

Constituents	10/19/2016	3/7/2017	9/26/2017	3/14/2018	10/2/2018	3/28/2019	9/24/2019	3/10/2020	9/16/2020
(3 4)-Methylphenol									
1,1,1,2-Tetrachloroethane	<.21	<.21	<.21	<.21	<.38	<.38	<.38	<.38	<.38
1,1,1-Trichloroethane	<.12	<.12	<.12	<.12	<.19	<.19	<.19	<.19	<.19
1,1,2,2-Tetrachloroethane	<.10	<.10	<.10	<.10	<.47	<.47	<.47	<.47	<.47
1,1,2-Trichloroethane	<.12	<.12	<.12	<.12	<.45	<.45	<.45	<.45	<.45
1,1-Dichloroethane	2.31	1.81	1.93	2.60	1.51	1.60	1.71	1.74	2.00
1,1-Dichloroethene	<.15	<.15	<.15	<.15	<.56	<.56	<.56	<.56	<.56
1,1-Dichloropropene					<.43				
1,2,3-Trichloropropane	<.19	<.19	<.19	<.19	<.59	<.59	<.59	<.59	<.59
1,2,4,5-Tetrachlorobenzene					<.149				
1,2,4-Trichlorobenzene					<.75				
1,2-Dibromo-3-chloropropane	<.50	<.50	<.50	<.50	<1.20	<1.20	<1.20	<1.20	<1.20
1,2-Dibromoethane	<.13	<.13	<.13	<.13	<.34	<.34	<.34	<.34	<.34
1,2-Dichlorobenzene	<.14	<.14	<.14	<.14	<.37	<.37	<.37	<.37	<.37
1,2-Dichloroethane	<.18	<.18	<.18	<.18	<.39	<.39	<.39	<.39	<.39
1,2-Dichloropropane	<.87	<.87	<.87	<.87	<.27	<.27	<.27	<.27	<.27
1,2-Dinitrobenzene									
1,3,5-Trinitrobenzene					<1.36				
1,3-Dichlorobenzene					<.3				
1,3-Dichloropropane					<.4				
1,3-Dinitrobenzene					<1.07				
1,4-Dichlorobenzene	<.20	<.20	<.20	<.20	<.23	<.23	<.23	<.23	<.23
1,4-Naphthoquinone					<.383				
1,4-phenylenediamine					<8.94				
1-Naphthylamine					<.255				
2,2`-oxybis[1-Chloropropane]									
2,2-Dichloropropane					<.69				
2,3,4,6-Tetrachlorophenol					<.532				
2,4,5-T					<.477				
2,4,5-TP [Silvex]					<.319				
2,4,5-Trichlorophenol					<.745				
2,4,6-Trichlorophenol					<.745				
2,4-D					<.513				
2,4-Dichlorophenol					<.33				
2,4-Dimethylphenol					<.223				
2,4-Dinitrophenol					<2.74				
2,4-Dinitrotoluene					<.489				
2,6-Dichlorophenol					<.234				
2,6-Dinitrotoluene					<.255				
2-Acetylaminofluorene					<1.32				
2-Butanone	<1.04	<1.04	<1.04	<1.04	<2.10	<2.10	<2.10	<2.10	<2.10
2-Chloronaphthalene					<.245				
2-Chlorophenol					<.16				
2-Hexanone	<.2	<.2	<.2	<.2	<2.0	<2.0	<2.0	<2.0	<2.0
2-Methylnaphthalene					<.202				
2-Methylphenol									
2-Methylphenol [o-Cresol]					<.191				
2-Naphthylamine					<.234				
2-Nitroaniline					<1.32				
2-Nitrophenol					<1.02				
3,3'-Dichlorobenzidine									
3,3-Dichlorobenzidine					<.862				
3,3-Dimethylbenzidine					<.223				
3-Methylcholanthrene					<.947				
3-Nitroaniline					<.617				
4,4`-DDD					<.00194				
4,4`-DDE					<.00226				
4,4`-DDT					<.00409				
4,6-Dinitro-2-methylphenol					<2.36				
4-Aminobiphenyl					<.319				
4-Bromophenyl phenyl ether					<.309				
4-Chloro-3-methylphenol					<.277				
4-Chloroaniline					<.16				
4-Chlorophenyl phenyl ether					<.266				
4-Methyl-2-pentanone	<.22	<.22	<.22	<.22	<2.10	<2.10	<2.10	<2.10	<2.10
4-Nitroaniline					<.34				
4-Nitrophenol					<1.47				
5-Nitro-o-toluidine					<.181				
7,12-Dimethylbenz(a)anthracene									
7,12-Dimethylbenz[a]anthracene					<.266				
Acenaphthene					<.319				
Acenaphthylene					<.617				
Acetone	<1.79	<1.79	<1.79	2.06	<3.10	<3.10	<3.10	<3.10	<3.10
Acetonitrile					<126				
Acetophenone					<.372				
Acrolein					<3.6				
Acrylonitrile	<.53	<.53	<.53	<.53	<2.20	<2.20	<2.20	<2.20	<2.20

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

Table 9

Analytical Data Summary for MW-382R

Constituents	4/15/2021	10/27/2021	4/14/2022	9/1/2022	3/6/2023	9/29/2023
(3 4)-Methylphenol						<8
1,1,1,2-Tetrachloroethane	<.38	<.38	<.38	<1.00	<1.00	<1.00
1,1,1-Trichloroethane	<.19	<.19	<.19	<1.00	<1.00	<1.00
1,1,2,2-Tetrachloroethane	<.47	<.47	<.47	<1.00	<1.00	<1.00
1,1,2-Trichloroethane	<.45	<.45	<.45	<1.00	<1.00	<1.00
1,1-Dichloroethane	1.41	1.69	1.09	<1.00	1.40	<1.00
1,1-Dichloroethene	<.56	<.56	<.56	<1.00	<1.00	<1.00
1,1-Dichloropropene						<1.00
1,2,3-Trichloropropane	<.59	<.59	<.59	<1.00	<1.00	<1.00
1,2,4,5-Tetrachlorobenzene						<8.000
1,2,4-Trichlorobenzene						<1.00
1,2-Dibromo-3-chloropropane	<1.20	<1.20	<1.20	<5.00	<5.00	<1.00
1,2-Dibromoethane	<.34	<.34	<.34	<1.00	<1.00	<1.00
1,2-Dichlorobenzene	<.37	<.37	<.37	<1.00	<1.00	<1.00
1,2-Dichloroethane	<.39	<.39	<.39	<1.00	<1.00	<1.00
1,2-Dichloropropane	<.27	<.27	<.27	<1.00	<1.00	<1.00
1,2-Dinitrobenzene						<8
1,3,5-Trinitrobenzene						<8.00
1,3-Dichlorobenzene						<1.0
1,3-Dichloropropane						<1.0
1,3-Dinitrobenzene						<8.00
1,4-Dichlorobenzene	<.23	<.23	<.23	<1.00	<1.00	<1.00
1,4-Naphthoquinone						<8.000
1,4-phenylenediamine						<8.00
1-Naphthylamine						<8.000
2,2`-oxybis[1-Chloropropane]						
2,2-Dichloropropane						<1.00
2,3,4,6-Tetrachlorophenol						<8.000
2,4,5-T						<.500
2,4,5-TP [Silvex]						<.500
2,4,5-Trichlorophenol						<8.000
2,4,6-Trichlorophenol						<8.000
2,4-D						<2.000
2,4-Dichlorophenol						<8.00
2,4-Dimethylphenol						<8.000
2,4-Dinitrophenol						<8.00
2,4-Dinitrotoluene						<8.000
2,6-Dichlorophenol						<8.000
2,6-Dinitrotoluene						<8.000
2-Acetylaminofluorene						<8.00
2-Butanone	<2.10	<2.10	<2.10	<10.00	<10.00	<5.00
2-Chloronaphthalene						<8.000
2-Chlorophenol						<8.00
2-Hexanone	<2.0	<2.0	<2.0	<5.0	<5.0	<5.0
2-Methylnaphthalene						<8.000
2-Methylphenol						<8
2-Methylphenol [o-Cresol]						
2-Naphthylamine						<8.000
2-Nitroaniline						<8.00
2-Nitrophenol						<8.00
3,3'-Dichlorobenzidine						<8
3,3-Dichlorobenzidine						
3,3-Dimethylbenzidine						<8.000
3-Methylcholanthrene						<8.000
3-Nitroaniline						<8.000
4,4`-DDD						<.05000
4,4`-DDE						<.05000
4,4`-DDT						<.05000
4,6-Dinitro-2-methylphenol						<8.00
4-Aminobiphenyl						<8.000
4-Bromophenyl phenyl ether						<8.000
4-Chloro-3-methylphenol						<8.000
4-Chloroaniline						<8.00
4-Chlorophenyl phenyl ether						<8.000
4-Methyl-2-pentanone	<2.10	<2.10	<2.10	<5.00	<5.00	<5.00
4-Nitroaniline						<8.00
4-Nitrophenol						<8.00
5-Nitro-o-toluidine						<8.000
7,12-Dimethylbenz(a)anthracene						<8
7,12-Dimethylbenz[a]anthracene						
Acenaphthene						<8.000
Acenaphthylene						<8.000
Acetone	<3.10	<3.10	<3.10	<10.00	<10.00	<10.00
Acetonitrile						<10
Acetophenone						<8.000
Acrolein						<10.0
Acrylonitrile	<2.20	<2.20	<2.20	<5.00	<5.00	<5.00

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

Table 9

Analytical Data Summary for MW-382R

Constituents	Units	9/20/2012	3/27/2013	9/25/2013	4/15/2014	9/26/2014	3/12/2015	9/2/2015	3/23/2016
Aldrin	ug/L	<.03200		<.03230					
Alkalinity as CaCO3	mg/L					330	340	320	361
Allyl Chloride	ug/L	<20.0		<2.0					
alpha-BHC	ug/L	<.03200		<.03230					
Aluminum	ug/L					24.3	<50.0	<50.0	<20.8
Anthracene	ug/L	<10.000		<10.000					
Antimony	ug/L	<12.000	<6.000		<6.000	<.161	<1.000	<1.000	<.237
Arsenic	ug/L	<2.000	<1.000	<2.000	<1.000	<.945	<2.000	<2.000	<.672
Azobenzene	ug/L								
Barium	ug/L	27.9	26.0	25.3	16.7	25.4	25.5	28.4	24.2
Benzene	ug/L	<.50	<.50	<.50	<.50	<.11	<.50	<.50	<5.00
Benzo[a]anthracene	ug/L	<10.000		<10.000					
Benzo[a]pyrene	ug/L	<10.00		<10.00					
Benzo[b]fluoranthene	ug/L	<10.00		<10.00					
Benzo[ghi]perylene	ug/L	<10.0		<10.0					
Benzo[k]fluoranthene	ug/L	<10.000		<10.000					
Benzyl alcohol	ug/L	<10.000		<10.000					
Beryllium	ug/L	<1.000	<1.000	<1.000	<1.000	<.039	<1.000	<1.000	<.221
beta-BHC	ug/L	<.03200		<.03230					
bis (2-chloroisopropyl) ether	ug/L								
Bis(2-chloroethoxy)methane	ug/L	<10.000		<10.000					
Bis(2-chloroethyl)ether	ug/L	<10.000		<10.000					
Bis(2-ethylhexyl)phthalate	ug/L	<10.00		<10.00					
Bis[2-Chloroisopropyl]ether	ug/L								
Bromochloromethane	ug/L	<5.00	<5.00	<5.00	<5.00	<.12	<5.00	<5.00	<1.00
Bromodichloromethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.12	<1.00	<1.00	<5.00
Bromoform	ug/L	<5.00	<5.00	<5.00	<5.00	<.14	<5.00	<5.00	<1.00
Bromomethane	ug/L	<20.000	<4.000	<4.000	<4.000	<.220	<4.000	<4.000	<10.000
Butylbenzylphthalate	ug/L	<10.00		<10.00					
Cadmium	ug/L	<.5000	<.5000	<.5000	<.5000	<.1120	<.5000	<.5000	<.0351
Carbon Disulfide	ug/L	<1.00	<1.00	<1.00	<1.00	<.15	<1.00	<1.00	<2.00
Carbon Tetrachloride	ug/L	<2.00	<2.00	<2.00	<2.00	<.24	<2.00	<2.00	<1.00
Chlordane	ug/L	<2.0000		<2.0200					
Chlorobenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.19	<1.00	<1.00	<4.00
Chlorobenzilate	ug/L	<10.000		<10.000					
Chlorodibromomethane	ug/L	<5.00	<5.00	<5.00	<5.00	<.20	<5.00	<5.00	<10.00
Chloroethane	ug/L	<4.000	<4.000	.433	<4.000	<.150	<4.000	<4.000	<1.000
Chloroform	ug/L	<1.00	<1.00	<1.00	<1.00	<.28	<1.00	<1.00	<5.00
Chloromethane	ug/L	<3.00	<3.00	<3.00	<3.00	<.31	<3.00	<3.00	<1.00
Chloroprene	ug/L	<1.00		<1.00					
Chromium	ug/L	<20.000	<20.000	5.910	<20.000	<1.240	<5.000	<5.000	<.355
Chrysene	ug/L	<10.00		<10.00					
cis-1,2-Dichloroethene	ug/L	<1.000	.383	.320	.267	.270	<1.000	<1.000	<5.000
cis-1,3-Dichloropropene	ug/L	<5.00	<5.00	<5.00	<5.00	<.15	<5.00	<5.00	<10.00
Cobalt	ug/L	1.760	<20.000	2.920	<7.000	1.400	1.440	1.170	.734
Copper	ug/L	<20.000	<20.000	<20.000	<20.000	<.485	<2.000	<2.000	<1.220
Cyanide	mg/L	<.0100		<.0100					
delta-BHC	ug/L	<.03200		<.03230					
Diallate	ug/L	<10.000		<10.000					
Dibenzo(a,h)anthracene	ug/L	<10.00		<10.00					
Dibenzofuran	ug/L	<10.000		<10.000					
Dibromomethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.18	<1.00	<1.00	<5.00
Dichlorodifluoromethane	ug/L	<5.000	2.400	2.730	2.140	2.700	1.590	<3.000	<1.000
Dieldrin	ug/L	<.03200		<.03230					
Diethyl phthalate	ug/L	<10.000		<10.000					
Dimethoate	ug/L	<10.000		<10.000					
Dimethyl phthalate	ug/L	<10.00		<10.00					
Di-n-butyl phthalate	ug/L								
Di-n-butylphthalate	ug/L	<10.00		<10.00					
Di-n-octyl phthalate	ug/L								
Di-n-octylphthalate	ug/L	<10.00		<20.00					
Dinoseb	ug/L	<10.000		<10.000					
Diphenylamine	ug/L	<10.000		<10.000					
Disulfoton	ug/L	<10.000		<10.000					
Endosulfan I	ug/L	<.03200		<.03230					
Endosulfan II	ug/L	<.03200		<.03230					
Endosulfan Sulfate	ug/L	<.03200		<.03230					
Endrin	ug/L	<.03200		<.03230					
Endrin Aldehyde	ug/L	<.03200		<.03230					
Ethyl Methacrylate	ug/L	<2.00		<2.00					
Ethyl Methanesulfonate	ug/L	<10.00		<10.00					
Ethyl Parathion	ug/L								
Ethylbenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	<4.00
Famphur	ug/L	<20.0		<20.0					
Fluoranthene	ug/L	<10.000		<10.000					
Fluorene	ug/L	<10.000		<10.000					
gamma-BHC (Lindane)	ug/L	<.03200		<.03230					

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

Table 9

Analytical Data Summary for MW-382R

Constituents	10/19/2016	3/7/2017	9/26/2017	3/14/2018	10/2/2018	3/28/2019	9/24/2019	3/10/2020	9/16/2020
Aldrin					<.00484				
Alkalinity as CaCO3	355	330	345	337	350	330	332	325	356
Allyl Chloride					<.7				
alpha-BHC					<.00183				
Aluminum	<20.8	<41.3	<207.0	<165.0	<24.6	<27.0	<27.0	<30.0	<12.0
Anthracene					<.181				
Antimony	<.237	<.185	<.925	<.740	<1.320	<.530	<.530	<.580	<.510
Arsenic	<.672	<.505	<2.530	<2.020	.751	<.750	<.750	<.880	<.880
Azobenzene									
Barium	23.6	26.0	24.8	23.8	23.0	20.4	28.6	21.3	20.7
Benzene	<.11	<.11	<.11	<.11	<.22	<.22	<.22	<.22	<.22
Benzo[a]anthracene					<.362				
Benzo[a]pyrene					<1.35				
Benzo[b]fluoranthene					<1.06				
Benzo[ghi]perylene					<1.4				
Benzo[k]fluoranthene					<.606				
Benzyl alcohol					<.638				
Beryllium	<.221	<.125	<.625	<.500	<.530	<.270	<.270	<.270	<.270
beta-BHC					<.00516				
bis (2-chloroisopropyl) ether					<.191				
Bis(2-chloroethoxy)methane					<.277				
Bis(2-chloroethyl)ether					<.202				
Bis(2-ethylhexyl)phthalate					<2.47				
Bis[2-Chloroisopropyl]ether									
Bromochloromethane	<.12	<.12	<.12	<.12	<.54	<.54	<.54	<.54	<.54
Bromodichloromethane	<.12	<.12	<.12	<.12	<.39	<.39	<.39	<.39	<.39
Bromoform	<.14	<.14	<.14	<.14	<.78	<.78	<.78	<.78	<.78
Bromomethane	<.220	<.220	<.220	.253	<1.100	<1.100	<1.100	<1.100	<1.100
Butylbenzylphthalate					<1.63				
Cadmium	<.0351	<.0441	<.2210	<.1760	<.1670	<.0770	<.0390	<.0390	<.0490
Carbon Disulfide	<.15	<.15	<.15	<.15	<.45	<.45	<.45	<.45	<.45
Carbon Tetrachloride	<.24	<.24	<.24	<.24	<.65	<.65	<.65	<.65	<.65
Chlordane					<.0688				
Chlorobenzene	<.19	<.19	<.19	<.19	<.40	<.40	<.40	<.40	<.40
Chlorobenzilate					<.223				
Chlorodibromomethane	<.20	<.20	<.20	<.20	<.75	<.75	<.75	<.75	<.75
Chloroethane	<.150	<.150	<.150	<.150	<.790	<.790	<.790	<.790	<.790
Chloroform	<.28	<.28	<.28	<.28	<1.30	<1.30	<1.30	<1.30	<1.30
Chloromethane	<.31	<.31	<.31	<.31	<.61	<.61	<.61	<.61	<.61
Chloroprene					<.23				
Chromium	<.355	<.729	<3.650	<2.920	1.320	<.980	<.980	<1.100	<1.100
Chrysene					<.33				
cis-1,2-Dichloroethene	.414	.385	.484	.449	.401	.439	.345	<.210	.487
cis-1,3-Dichloropropene	<.15	<.15	<.15	<.15	<.25	<.25	<.25	<.25	<.25
Cobalt	1.160	1.870	1.530	1.790	2.840	.851	9.880	.703	2.330
Copper	<1.220	<2.190	<11.000	<8.760	.859	<2.000	<2.000	<3.200	<1.500
Cyanide					<.0042				
delta-BHC					<.00247				
Diallate					<.245				
Dibenzo(a,h)anthracene					<1.95				
Dibenzofuran					<.255				
Dibromomethane	<.18	<.18	<.18	<.18	<.33	<.33	<.33	<.33	<.33
Dichlorodifluoromethane	1.770	1.860	.898	1.110	.962				
Dieldrin					<.00215				
Diethyl phthalate					<.287				
Dimethoate					<.287				
Dimethyl phthalate					<2.33				
Di-n-butyl phthalate									
Di-n-butylphthalate					<1.22				
Di-n-octyl phthalate									
Di-n-octylphthalate					<2.82				
Dinoseb					<.457				
Diphenylamine					<.702				
Disulfoton					<.309				
Endosulfan I					<.00215				
Endosulfan II					<.00204				
Endosulfan Sulfate					<.00269				
Endrin					<.00204				
Endrin Aldehyde					<.00785				
Ethyl Methacrylate					<.68				
Ethyl Methanesulfonate					<.16				
Ethyl Parathion					<.191				
Ethylbenzene	<.21	<.21	<.21	<.21	<.31	<.31	<.31	<.31	<.31
Famphur					<.5				
Fluoranthene					<.723				
Fluorene					<.309				
gamma-BHC (Lindane)					<.00204				

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

Table 9

Analytical Data Summary for MW-382R

Constituents	4/15/2021	10/27/2021	4/14/2022	9/1/2022	3/6/2023	9/29/2023
Aldrin						<.05000
Alkalinity as CaCO3	386	445	372	347	376	379
Allyl Chloride						<1.0
alpha-BHC						<.05000
Aluminum	18.0	21.3	<68.0	135.0	241.0	135.0
Anthracene						<8.000
Antimony	<1.100	<1.100	<2.760	<2.000	<2.000	<2.000
Arsenic	<.750	<.750	<3.000	<4.000	<4.000	<4.000
Azobenzene						<8
Barium	23.7	22.2	21.7	20.9	29.7	28.0
Benzene	<.22	<.22	<.22	<1.00	<1.00	<1.00
Benzo[a]anthracene						<8.000
Benzo[a]pyrene						<8.00
Benzo[b]fluoranthene						<8.00
Benzo[ghi]perylene						<8.0
Benzo[k]fluoranthene						<8.000
Benzyl alcohol						<8.000
Beryllium	<.270	<.270	<1.080	<4.000	<4.000	<4.000
beta-BHC						<.05000
bis (2-chloroisopropyl) ether						
Bis(2-chloroethoxy)methane						<8.000
Bis(2-chloroethyl)ether						<8.000
Bis(2-ethylhexyl)phthalate						16.00
Bis[2-Chloroisopropyl]ether						<8
Bromochloromethane	<.54	<.54	<.54	<1.00	<1.00	<1.00
Bromodichloromethane	<.39	<.39	<.39	<1.00	<1.00	<1.00
Bromoform	<.78	<.78	<.78	<1.00	<1.00	<1.00
Bromomethane	<1.100	<1.100	<1.100	<1.000	<1.000	<1.000
Butylbenzylphthalate						<8.00
Cadmium	<.0510	<.0510	<.2200	<.8000	<.8000	<.8000
Carbon Disulfide	<.45	<.45	<.45	<1.00	<1.00	<1.00
Carbon Tetrachloride	<.65	<.65	<.65	<1.00	<1.00	<1.00
Chlordane						<.1000
Chlorobenzene	<.40	<.40	<.40	<1.00	<1.00	<1.00
Chlorobenzilate						<8.000
Chlorodibromomethane	<.75	<.75	<.75	<1.00	<1.00	<1.00
Chloroethane	<.790	<.790	<.790	<1.000	<1.000	<1.000
Chloroform	<1.30	<1.30	<1.30	<1.00	<1.00	<1.00
Chloromethane	<.61	<.61	<.61	<1.00	<1.00	<1.00
Chloroprene						<1.00
Chromium	<1.100	<1.100	<4.400	<8.000	<8.000	<8.000
Chrysene						<8.00
cis-1,2-Dichloroethene	.289	.406	.307	<1.000	<1.000	<1.000
cis-1,3-Dichloropropene	<.25	<.25	<.25	<1.00	<1.00	<1.00
Cobalt	2.990	3.650	2.530	4.200	1.200	1.500
Copper	<1.400	<1.400	<7.200	<4.000	<4.000	<4.000
Cyanide						<.0050
delta-BHC						<.05000
Diallate						<8.000
Dibenzo(a,h)anthracene						<8.00
Dibenzofuran						<8.000
Dibromomethane	<.33	<.33	<.33	<1.00	<1.00	<1.00
Dichlorodifluoromethane						<1.000
Dieldrin						<.05000
Diethyl phthalate						<8.000
Dimethoate						<.400
Dimethyl phthalate						<8.00
Di-n-butyl phthalate						<8
Di-n-butylphthalate						
Di-n-octyl phthalate						<8
Di-n-octylphthalate						
Dinoseb						<.500
Diphenylamine						<8.000
Disulfoton						<.400
Endosulfan I						<.05000
Endosulfan II						<.05000
Endosulfan Sulfate						<.05000
Endrin						<.05000
Endrin Aldehyde						<.05000
Ethyl Methacrylate						<10.00
Ethyl Methanesulfonate						<8.00
Ethyl Parathion						
Ethylbenzene	<.31	<.31	<.31	<1.00	<1.00	<1.00
Famphur						<.4
Fluoranthene						<8.000
Fluorene						<8.000
gamma-BHC (Lindane)						<.05000

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

Table 9

Analytical Data Summary for MW-382R

Constituents	Units	9/20/2012	3/27/2013	9/25/2013	4/15/2014	9/26/2014	3/12/2015	9/2/2015	3/23/2016
Heptachlor	ug/L	<.0320		<.0323					
Heptachlor Epoxide	ug/L	<.03200		<.03230					
Hexachlorobenzene	ug/L	<10.000		<10.000					
Hexachlorobutadiene	ug/L	<10.000		<10.000					
Hexachlorocyclopentadiene	ug/L	<10.00		<20.00					
Hexachloroethane	ug/L	<10.000		<10.000					
Hexachloropropene	ug/L	<10.00		<10.00					
Indeno[1,2,3-cd]pyrene	ug/L	<10.00		<10.00					
Iodomethane	ug/L	<10.0	<10.0	<10.0	<10.0	<.8	<10.0	<10.0	<1.0
Iron	ug/L					116.0	52.1	<100.0	305.0
Isobutanol	ug/L	<10000		<10000					
Isodrin	ug/L	<10.000		<10.000					
Isophorone	ug/L	<10.000		<10.000					
Isosafrole	ug/L	<10.000		<10.000					
Kepone	ug/L	<10.000		<10.000					
Lead	ug/L	<4.0000	<4.0000	<4.0000	<4.0000	<.0967	<.5000	<.5000	<.2110
m,p-Xylene	ug/L								
Mercury	ug/L	<.2670		<.2000					
Methacrylonitrile	ug/L	<1.0		<1.0					
Methapyrilene	ug/L	<10.00		<10.00					
Methoxychlor	ug/L	<.03200		<.03230					
Methyl Methacrylate	ug/L	<2.00		<2.00					
Methyl Methanesulfonate	ug/L	<10.000		<10.000					
Methyl Parathion	ug/L	<10.00		<10.00					
Methylene Chloride	ug/L	<5.000	.193	<5.000	<5.000	<.170	<5.000	<5.000	<10.000
Methylphenol, 3 4	ug/L								
Naphthalene	ug/L	<5		<5					
Nickel	ug/L	<50.00	<50.00	6.59	<50.00	3.58	3.44	<5.00	3.38
Nitrobenzene	ug/L	<10.000		<10.000					
N-Nitrosodiethylamine	ug/L	<10.000		<10.000					
N-Nitrosodimethylamine	ug/L	<10.000		<10.000					
N-Nitrosodi-n-butylamine	ug/L	<10.000		<10.000					
N-Nitrosodi-n-propylamine	ug/L	<10.000		<10.000					
N-Nitrosodiphenylamine	ug/L	<10.000		<10.000					
N-Nitrosomethylethylamine	ug/L	<10.000		<10.000					
N-Nitrosopiperidine	ug/L	<10.00		<10.00					
N-Nitrosopyrrolidine	ug/L	<10.000		<10.000					
o,o,o-Triethylphosphorothioate	ug/L	<10.000		<10.000					
o-Toluidine	ug/L	<10.000		<10.000					
o-Xylene	ug/L								
p-[Dimethylamino]azobenzene	ug/L	<10		<10					
Parathion	ug/L	<10.0		<10.0					
PCB-1016	ug/L	<.8000		<.8990					
PCB-1221	ug/L	<.800		<.899					
PCB-1232	ug/L	<.800		<.899					
PCB-1242	ug/L	<.800		<.899					
PCB-1248	ug/L	<.800		<.899					
PCB-1254	ug/L	<.8000		<.8990					
PCB-1260	ug/L	<.8000		<.8990					
p-Dimethylamino azobenzene	ug/L								
Pentachlorobenzene	ug/L	<10.000		<10.000					
Pentachloronitrobenzene	ug/L	<10.000		<10.000					
Pentachlorophenol	ug/L	<10.00		<10.00					
pH	SU					6.34	6.42	6.43	6.50
Phenacetin	ug/L	<10.000		<10.000					
Phenanthrene	ug/L	<10.000		<10.000					
Phenol	ug/L	<10.00		<10.00					
Phorate	ug/L	<10.000		<10.000					
p-Phenylenediamine	ug/L	<10		<10					
Pronamide	ug/L	<10.000		<10.000					
Propionitrile	ug/L	<10.0		<10.0					
Pyrene	ug/L	<10.000		<10.000					
Safrole	ug/L	<10.000		<10.000					
Selenium	ug/L	<5.000	<5.000	<5.000	<5.000	<3.340	<5.000	<5.000	<.630
Silver	ug/L	<20.000	<20.000	<20.000	<20.000	<.042	<1.000	<1.000	<.153
Styrene	ug/L	<1.00	<1.00	<1.00	<1.00	<.10	<1.00	<1.00	<1.00
Sulfate	mg/L					1190	1230	1110	1270
Sulfide	mg/L	<1.000	<1.000	4.810	<1.000	<.219	<1.000	<1.000	<1.000
Tetrachloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.18	<1.00	<1.00	<1.00
Thallium	ug/L	<2.0000	<2.0000	<2.0000	<2.0000	<.0325	<1.0000	<1.0000	<.0255
Thionazin	ug/L	<10.00		<10.00					
Tin	ug/L	<100.000		606.000	<100.000	153.000	37.700	<100.000	<.255
Toluene	ug/L								
Total Suspended Solids	mg/L					3.140	4.140	3.670	4.330
Toxaphene	ug/L	<2.0000		<2.0200					
trans-1,2-Dichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	<5.00
trans-1,3-Dichloropropene	ug/L	<5.00	<5.00	<5.00	<5.00	<.22	<5.00	<5.00	<1.00

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

Table 9

Analytical Data Summary for MW-382R

Constituents	10/19/2016	3/7/2017	9/26/2017	3/14/2018	10/2/2018	3/28/2019	9/24/2019	3/10/2020	9/16/2020
Heptachlor					<.0028				
Heptachlor Epoxide					<.00656				
Hexachlorobenzene					<.287				
Hexachlorobutadiene					<.181				
Hexachlorocyclopentadiene					<2.01				
Hexachloroethane					<.149				
Hexachloropropene					<1.74				
Indeno[1,2,3-cd]pyrene					<1.56				
Iodomethane	<.8	<.8	<.8	<.8	<7.0	<7.0	<7.0	<7.0	<7.0
Iron	70.4	59.4	<239.0	<191.0	112.0	<66.0	1010.0	218.0	106.0
Isobutanol					<177				
Isodrin					<.404				
Isophorone					<.234				
Isosafrole					<.191				
Kepone					<.255				
Lead	<.2110	<.3240	<1.6200	<1.3000	<.1860	<.2700	<.2700	<.2700	<.1100
m,p-Xylene					<.38				
Mercury					<.0984				
Methacrylonitrile					<3.3				
Methapyrilene					<1.45				
Methoxychlor					<.00226				
Methyl Methacrylate					<.76				
Methyl Methanesulfonate					<.149				
Methyl Parathion					<.16				
Methylene Chloride	.394	.312	<.170	<.170	<1.700	<1.700	<1.700	<1.700	<1.700
Methylphenol, 3 4					<.191				
Naphthalene					<3				
Nickel	3.20	4.23	<4.65	3.83	3.67	3.30	6.26	4.26	4.36
Nitrobenzene					<.319				
N-Nitrosodiethylamine					<.319				
N-Nitrosodimethylamine					<.202				
N-Nitrosodi-n-butylamine					<.309				
N-Nitrosodi-n-propylamine					<.277				
N-Nitrosodiphenylamine					<.702				
N-Nitrosomethylethylamine					<.213				
N-Nitrosopiperidine					<.16				
N-Nitrosopyrrolidine					<.245				
o,o,o-Triethylphosphorothioate					<.255				
o-Toluidine					<.191				
o-Xylene					<.4				
p-[Dimethylamino]azobenzene									
Parathion									
PCB-1016					<.0462				
PCB-1221					<.170				
PCB-1232					<.117				
PCB-1242					<.138				
PCB-1248					<.117				
PCB-1254					<.0979				
PCB-1260					<.0468				
p-Dimethylamino azobenzene					<.255				
Pentachlorobenzene					<.234				
Pentachloronitrobenzene					<.351				
Pentachlorophenol					<2.47				
pH	6.37	6.40	6.46	6.46	6.65	6.42	6.48	6.50	6.53
Phenacetin					<.596				
Phenanthrene					<.638				
Phenol					<2.55				
Phorate					<.181				
p-Phenylenediamine									
Pronamide					<.277				
Propionitrile					<3.4				
Pyrene					<.277				
Safrole					<.213				
Selenium	<.630	<.928	<4.640	<3.710	<.982	<1.000	<1.000	<1.000	<1.000
Silver	<.153	<.140	<.700	<.560	<.115	<.370	<.370	<.370	<.370
Styrene	<.10	<.10	<.10	<.10	<.37	<.37	<.37	<.37	<.37
Sulfate	1240	1330	1300	1260	1150	1280	1230	1250	1340
Sulfide	<.180	<.180	<.231	4.640	<.231	<.231			
Tetrachloroethene	<.18	<.18	<.18	<.18	<.48	<.48	<.48	<.48	<.48
Thallium	<.0255	<.0644	<.0644	<.2580	<.5700	<.2700	<.2700	<.2600	<.2600
Thionazin					<.33				
Tin	<.832	<1.620	<1.620	15.000	<1.300				
Toluene					<.43	<.43	<.43	<.43	<.43
Total Suspended Solids	.625	1.000	1.130	.875	<.638	1.500	.875	2.630	1.250
Toxaphene					<.0624				
trans-1,2-Dichloroethene	<.21	<.21	<.21	<.21	<.27	<.27	<.27	<.27	<.27
trans-1,3-Dichloropropene	<.22	<.22	<.22	<.22	<.56	<.56	<.56	<.56	<.56

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

Table 9

Analytical Data Summary for MW-382R

Constituents	4/15/2021	10/27/2021	4/14/2022	9/1/2022	3/6/2023	9/29/2023
Heptachlor						<.0500
Heptachlor Epoxide						<.05000
Hexachlorobenzene						<.050
Hexachlorobutadiene						<8.000
Hexachlorocyclopentadiene						<8.00
Hexachloroethane						<8.000
Hexachloropropene						<8.00
Indeno[1,2,3-cd]pyrene						<8.00
Iodomethane	<7.0	<7.0	<7.0	<1.0	<1.0	<2.0
Iron	222.0	386.0	262.0	423.0	685.0	<100.0
Isobutanol						<1000
Isodrin						<8.000
Isophorone						<8.000
Isosafrole						<8.000
Kepone						<8.000
Lead	<.2100	.5860	<.9600	<4.0000	<4.0000	<4.0000
m,p-Xylene						
Mercury						<.5000
Methacrylonitrile						<1.0
Methapyrilene						<8.00
Methoxychlor						<.05000
Methyl Methacrylate						<1.00
Methyl Methanesulfonate						<8.000
Methyl Parathion						<.40
Methylene Chloride	<1.700	<1.700	<1.700	<5.000	<5.000	<5.000
Methylphenol, 3 4						
Naphthalene						<8
Nickel	4.94	6.01	<7.60	6.70	4.50	6.10
Nitrobenzene						<8.000
N-Nitrosodiethylamine						<8.000
N-Nitrosodimethylamine						<8.000
N-Nitrosodi-n-butylamine						<8.000
N-Nitrosodi-n-propylamine						<8.000
N-Nitrosodiphenylamine						<8.000
N-Nitrosomethylethylamine						<8.000
N-Nitrosopiperidine						<8.00
N-Nitrosopyrrolidine						<8.000
o,o,o-Triethylphosphorothioate						<.400
o-Toluidine						<8.000
o-Xylene						
p-[Dimethylamino]azobenzene						<8
Parathion						<.4
PCB-1016						<.2000
PCB-1221						<.200
PCB-1232						<.200
PCB-1242						<.200
PCB-1248						<.200
PCB-1254						<.2000
PCB-1260						<.2000
p-Dimethylamino azobenzene						
Pentachlorobenzene						<8.000
Pentachloronitrobenzene						<8.000
Pentachlorophenol						<8.00
pH	6.48	6.43	6.62	6.30	7.10	6.50
Phenacetin						<8.000
Phenanthrene						<8.000
Phenol						<8.00
Phorate						<.400
p-Phenylenediamine						
Pronamide						<8.000
Propionitrile						<10.0
Pyrene						<8.000
Safrole						<8.000
Selenium	<.960	<.960	<3.840	<4.000	<4.000	<4.000
Silver	<.420	<.420	<1.960	<4.000	<4.000	<4.000
Styrene	<.37	<.37	<.37	<1.00	<1.00	<1.00
Sulfate	1480	1330	1320	1250	1060	1090
Sulfide						
Tetrachloroethene	<.48	<.48	<.48	<1.00	<1.00	<1.00
Thallium	<.2600	<.2600	<1.0400	<2.0000	<2.0000	<2.0000
Thionazin						<.40
Tin						<20.000
Toluene	<.43	<.43	<.43	<1.00	<1.00	<1.00
Total Suspended Solids	3.130	5.500	40.200			
Toxaphene						<.2000
trans-1,2-Dichloroethene	<.27	<.27	<.27	<1.00	<1.00	<1.00
trans-1,3-Dichloropropene	<.56	<.56	<.56	<1.00	<1.00	<1.00

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

Table 9

Analytical Data Summary for MW-382R

Constituents	Units	9/20/2012	3/27/2013	9/25/2013	4/15/2014	9/26/2014	3/12/2015	9/2/2015	3/23/2016
trans-1,4-Dichloro-2-butene	ug/L	<10.00	<10.00	<10.00	<10.00	<.13	<10.00	<10.00	<1.00
Trichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.19	<1.00	<1.00	<1.00
Trichlorofluoromethane	ug/L	<4.00	<4.00	<4.00	<4.00	<.17	<4.00	<4.00	<10.00
Vanadium	ug/L	<50.000	<50.000	<50.000	<50.000	1.410	<5.000	<5.000	<5.210
Vinyl Acetate	ug/L	<2.00	<2.00	<2.00	<2.00	<.74	<10.00	<10.00	<3.00
Vinyl Chloride	ug/L	<1.000	<1.000	.345	<1.000	<.100	<1.000	<1.000	<1.000
Xylenes, Total	ug/L	<3.000	<3.000	.134	<3.000	<.130	<3.000	<3.000	<3.000
Zinc	ug/L	<20.00	58.40	175.00	<60.00	<6.95	<10.00	<10.00	<10000.00

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

Table 9

Analytical Data Summary for MW-382R

Constituents	10/19/2016	3/7/2017	9/26/2017	3/14/2018	10/2/2018	3/28/2019	9/24/2019	3/10/2020	9/16/2020
trans-1,4-Dichloro-2-butene	<.13	<.13	<.13	<.13	<1.10	<1.10	<1.10	<1.10	<1.10
Trichloroethene	<.19	<.19	<.19	<.19	<.43	<.43	<.43	<.43	<.43
Trichlorofluoromethane	<.17	<.17	<.17	<.17	<.38	<.38	<.38	<.38	<.38
Vanadium	<.255	<.840	<4.200	<3.360	<2.150	<.820	<.820	<.820	<.850
Vinyl Acetate	<.74	<.74	<.74	<.74	<2.50	<2.50	<2.50	<2.50	<2.50
Vinyl Chloride	<.100	<.100	<.100	.296	<.600	<.600	<.180	<.180	<.180
Xylenes, Total	<.130	<.130	<.130	<.130	<.400	<.400	<.400	<.400	<.400
Zinc	<5.21	<11.50	<57.50	<46.00	<6.92	<10.00	<10.00	<10.00	<10.00

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

Table 9

Analytical Data Summary for MW-382R

Constituents	4/15/2021	10/27/2021	4/14/2022	9/1/2022	3/6/2023	9/29/2023
trans-1,4-Dichloro-2-butene	<1.10	<1.10	<1.10	<5.00	<5.00	<5.00
Trichloroethene	<.43	<.43	<.43	<1.00	<1.00	<1.00
Trichlorofluoromethane	<.38	<.38	<.38	<1.00	<1.00	<1.00
Vanadium	<1.100	<1.100	<4.400	<20.000	<20.000	<20.000
Vinyl Acetate	<2.50	<2.50	<2.50	<5.00	<5.00	<5.00
Vinyl Chloride	.206	.241	<.180	<1.000	<1.000	<1.000
Xylenes, Total	<.400	<.400	<.400	<2.000	<2.000	<2.000
Zinc	<10.00	<10.00	<40.00	<20.00	<20.00	<20.00

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

Table 9

Analytical Data Summary for MW-383

Constituents	Units	9/19/2012	3/27/2013	9/26/2013	4/15/2014	9/25/2014	3/11/2015	9/2/2015	11/10/2015
1,1,1,2-Tetrachloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	
1,1,1-Trichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.12	<1.00	<1.00	
1,1,2,2-Tetrachloroethane	ug/L	<1.0	<1.0	<1.0	<1.0	<.1	<1.0	<1.0	
1,1,2-Trichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.12	<1.00	<1.00	
1,1-Dichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	
1,1-Dichloroethene	ug/L	<2.00	<2.00	<2.00	<2.00	<.15	<2.00	<2.00	
1,1-Dichloropropene	ug/L	<1		<1					
1,2,3-Trichloropropane	ug/L	<1.00	<1.00	<1.00	<1.00	<.19	<1.00	<1.00	
1,2,4,5-Tetrachlorobenzene	ug/L	<10.0		<11.1					
1,2,4-Trichlorobenzene	ug/L	<5		<5					
1,2-Dibromo-3-chloropropane	ug/L	<10.00	<10.00	<10.00	<10.00	<.12	<10.00	<10.00	
1,2-Dibromoethane	ug/L	<10.00	<10.00	<10.00	<10.00	<.13	<10.00	<10.00	
1,2-Dichlorobenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.14	<1.00	<1.00	
1,2-Dichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.18	<1.00	<1.00	
1,2-Dichloropropane	ug/L	<1.00	<1.00	<1.00	<1.00	<.87	<1.00	<1.00	
1,3,5-Trinitrobenzene	ug/L	<10.0		<11.1					
1,3-Dichlorobenzene	ug/L	<1		<1					
1,3-Dichloropropane	ug/L	<1		<1					
1,3-Dinitrobenzene	ug/L	<10.0		<11.1					
1,4-Dichlorobenzene	ug/L	<1.0	<1.0	<1.0	<1.0	<.2	<1.0	<1.0	
1,4-Naphthoquinone	ug/L	<10.0		<11.1					
1-Naphthylamine	ug/L	<10.0		<11.1					
2,2`-oxybis[1-Chloropropane]	ug/L	<10.0		<11.1					
2,2-Dichloropropane	ug/L	<4		<4					
2,3,4,6-Tetrachlorophenol	ug/L	<10.0		<11.1					
2,4,5-T	ug/L	<1.10		<1.07					
2,4,5-TP [Silvex]	ug/L	<1.10		<1.07					
2,4,5-Trichlorophenol	ug/L	<10.0		<11.1					
2,4,6-Trichlorophenol	ug/L	<10.0		<11.1					
2,4-D	ug/L	<1.10		<1.07					
2,4-Dichlorophenol	ug/L	<10.0		<11.1					
2,4-Dimethylphenol	ug/L	<10.0		<11.1					
2,4-Dinitrophenol	ug/L	<20.0		<22.2					
2,4-Dinitrotoluene	ug/L	<10.0		<11.1					
2,6-Dichlorophenol	ug/L	<10.0		<11.1					
2,6-Dinitrotoluene	ug/L	<10.0		<11.1					
2-Acetylaminofluorene	ug/L	<10.0		<11.1					
2-Butanone	ug/L	<10.00	<10.00	<10.00	<10.00	<.47	<10.00	<10.00	
2-Chloronaphthalene	ug/L	<10.0		<11.1					
2-Chlorophenol	ug/L	<10.0		<11.1					
2-Hexanone	ug/L	<10.0	<10.0	<10.0	<10.0	<.2	<10.0	<10.0	
2-Methylnaphthalene	ug/L	<10.0		<11.1					
2-Methylphenol [o-Cresol]	ug/L	<10.0		<11.1					
2-Naphthylamine	ug/L	<10.0		<11.1					
2-Nitroaniline	ug/L	<10.0		<11.1					
2-Nitrophenol	ug/L	<10.0		<11.1					
3,3-Dichlorobenzidine	ug/L	<10.0		<55.6					
3,3-Dimethylbenzidine	ug/L	<10.0		<11.1					
3-Methylcholanthrene	ug/L	<10.0		<11.1					
3-Nitroaniline	ug/L	<10.0		<11.1					
4,4`-DDD	ug/L	<.032		<.036					
4,4`-DDE	ug/L	<.032		<.036					
4,4`-DDT	ug/L	<.032		<.036					
4,6-Dinitro-2-methylphenol	ug/L	<10.0		<11.1					
4-Aminobiphenyl	ug/L	<10.0		<11.1					
4-Bromophenyl phenyl ether	ug/L	<10.0		<11.1					
4-Chloro-3-methylphenol	ug/L	<10.0		<11.1					
4-Chloroaniline	ug/L	<10.0		<11.1					
4-Chlorophenyl phenyl ether	ug/L	<10.0		<11.1					
4-Methyl-2-pentanone	ug/L	<10.00	<10.00	<10.00	<10.00	<.22	<10.00	<10.00	
4-Nitroaniline	ug/L	<10.0		<11.1					
4-Nitrophenol	ug/L	<10.0		<11.1					
5-Nitro-o-toluidine	ug/L	<10.0		<11.1					
7,12-Dimethylbenz[a]anthracene	ug/L	<10.0		<11.1					
Acenaphthene	ug/L	<10.0		<11.1					
Acetone	ug/L	<10.00	<10.00	<10.00	<10.00	<1.79	<10.00	<10.00	
Acetonitrile	ug/L	<10000		1170					
Acetophenone	ug/L	<10.0		<11.1					
Acrolein	ug/L	<10		<10					
Acrylonitrile	ug/L	<10.00	<10.00	<10.00	<10.00	<.53	<10.00	<10.00	
Aldrin	ug/L	<.032		<.036					
Alkalinity as CaCO3	mg/L					464	410	397	
Allyl Chloride	ug/L	<20		<2					
alpha-BHC	ug/L	<.032		<.036					
Aluminum	ug/L					9.65	<50.00	<50.00	
Anthracene	ug/L	<10.0		<11.1					
Antimony	ug/L	<6.000	<6.000	<6.000	<6.000	<.161	<1.000	<1.000	

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

Table 9

Analytical Data Summary for MW-383

Constituents	Units	9/19/2012	3/27/2013	9/26/2013	4/15/2014	9/25/2014	3/11/2015	9/2/2015	11/10/2015
Arsenic	ug/L	6.410	.264	13.100	2.740	11.400	3.180	42.500	8.190
Barium	ug/L	183	129	187	131	263	163	301	
Benzene	ug/L	<.50	<.50	<.50	<.50	<.11	<.50	<.50	
Benzo[a]anthracene	ug/L	<10.0		<11.1					
Benzo[a]pyrene	ug/L	<10.0		<11.1					
Benzo[b]fluoranthene	ug/L	<10.0		<11.1					
Benzo[ghi]perylene	ug/L	<10.0		<11.1					
Benzo[k]fluoranthene	ug/L	<10.0		<11.1					
Benzyl alcohol	ug/L	<10.0		<11.1					
Beryllium	ug/L	<1.000	<1.000	<1.000	<1.000	<.039	<1.000	<1.000	
beta-BHC	ug/L	<.032		<.036					
Bis(2-chloroethoxy)methane	ug/L	<10.0		<11.1					
Bis(2-chloroethyl)ether	ug/L	<10.0		<11.1					
Bis(2-ethylhexyl)phthalate	ug/L	<10.0		<11.1					
Bromochloromethane	ug/L	<5.00	<5.00	<5.00	<5.00	<.12	<5.00	<5.00	
Bromodichloromethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.12	<1.00	<1.00	
Bromoform	ug/L	<5.00	<5.00	<5.00	<5.00	<.14	<5.00	<5.00	
Bromomethane	ug/L	<20.00	<4.00	<4.00	<4.00	<.22	<4.00	<4.00	
Butylbenzylphthalate	ug/L	<10.0		<11.1					
Cadmium	ug/L	<.500	<.500	<.500	<.500	<.112	<.500	<.500	
Carbon Disulfide	ug/L	<1.00	<1.00	<1.00	<1.00	<.15	<1.00	<1.00	
Carbon Tetrachloride	ug/L	<2.00	<2.00	<2.00	<2.00	<.24	<2.00	<2.00	
Chlordane	ug/L	<2.00		<2.25					
Chlorobenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.19	<1.00	<1.00	
Chlorobenzilate	ug/L	<10.0		<11.1					
Chlorodibromomethane	ug/L	<5.0	<5.0	<5.0	<5.0	<.2	<5.0	<5.0	
Chloroethane	ug/L	<4.00	<4.00	<4.00	<4.00	<.15	<4.00	<4.00	
Chloroform	ug/L	<1.00	<1.00	<1.00	<1.00	<.28	<1.00	<1.00	
Chloromethane	ug/L	<3.00	<3.00	<3.00	<3.00	<.31	<3.00	<3.00	
Chloroprene	ug/L	<1		<1					
Chromium	ug/L	<20.00	<20.00	1.57	<20.00	<1.24	<5.00	<5.00	
Chrysene	ug/L	<10.0		<11.1					
cis-1,2-Dichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.13	<1.00	<1.00	
cis-1,3-Dichloropropene	ug/L	<5.00	<5.00	<5.00	<5.00	<.15	<5.00	<5.00	
Cobalt	ug/L	<20.00	<20.00	<7.00	<7.00	7.93	1.62	8.12	
Copper	ug/L	<20.00	<20.00	<20.00	<20.00	1.14	<2.00	<2.00	
Cyanide	mg/L	<.01		<.01					
delta-BHC	ug/L	<.032		<.036					
Diallate	ug/L	<10.0		<11.1					
Dibenzo(a,h)anthracene	ug/L	<10.0		<11.1					
Dibenzofuran	ug/L	<10.0		<11.1					
Dibromomethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.18	<1.00	<1.00	
Dichlorodifluoromethane	ug/L	<3		<3					
Dieldrin	ug/L	<.032		<.036					
Diethyl phthalate	ug/L	<10.0		<11.1					
Dimethoate	ug/L	<10.0		<11.1					
Dimethyl phthalate	ug/L	<10.0		<11.1					
Di-n-butylphthalate	ug/L	<10.0		<11.1					
Di-n-octylphthalate	ug/L	<10.0		<22.2					
Dinoseb	ug/L	<10.0		<11.1					
Diphenylamine	ug/L	<10.0		<11.1					
Disulfoton	ug/L	<10.0		<11.1					
Endosulfan I	ug/L	<.032		<.036					
Endosulfan II	ug/L	<.032		<.036					
Endosulfan Sulfate	ug/L	<.032		<.036					
Endrin	ug/L	<.032		<.036					
Endrin Aldehyde	ug/L	<.032		<.036					
Ethyl Methacrylate	ug/L	<2		<2					
Ethyl Methanesulfonate	ug/L	<10.0		<11.1					
Ethylbenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	
Famphur	ug/L	<20.0		<22.2					
Fluoranthene	ug/L	<10.0		<11.1					
Fluorene	ug/L	<10.0		<11.1					
gamma-BHC (Lindane)	ug/L	<.032		<.036					
Heptachlor	ug/L	<.032		<.036					
Heptachlor Epoxide	ug/L	<.032		<.036					
Hexachlorobenzene	ug/L	<10.0		<11.1					
Hexachlorobutadiene	ug/L	<10.0		<11.1					
Hexachlorocyclopentadiene	ug/L	<10.0		<22.2					
Hexachloroethane	ug/L	<10.0		<11.1					
Hexachloropropene	ug/L	<10.0		<11.1					
Indeno[1,2,3-cd]pyrene	ug/L	<10.0		<11.1					
Iodomethane	ug/L	<10.0	<10.0	<10.0	<10.0	<.8	<10.0	<10.0	
Iron	ug/L					35400	1010	50000	
Isobutanol	ug/L	<10000		<10000					
Isodrin	ug/L	<10.0		<11.1					
Isophorone	ug/L	<10.0		<11.1					

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

Table 9

Analytical Data Summary for MW-383

Constituents	Units	9/19/2012	3/27/2013	9/26/2013	4/15/2014	9/25/2014	3/11/2015	9/2/2015	11/10/2015
Isosafrole	ug/L	<10.0		<11.1					
Kepone	ug/L	<10.0		<11.1					
Lead	ug/L	<4.0000	<4.0000	<4.0000	<4.0000	<.0967	<.5000	<.5000	
Mercury	ug/L	<.267		<.200					
Methacrylonitrile	ug/L	<1		<1					
Methapyrilene	ug/L	<10.0		<11.1					
Methoxychlor	ug/L	<.032		<.036					
Methyl Methacrylate	ug/L	<2		<2					
Methyl Methanesulfonate	ug/L	<10.0		<11.1					
Methyl Parathion	ug/L	<10.0		<11.1					
Methylene Chloride	ug/L	<5.000	.238	<5.000	<5.000	.424	<5.000	<5.000	
Naphthalene	ug/L	<5		<5					
Nickel	ug/L	<50.00	<50.00	<50.00	<50.00	6.14	1.59	5.56	
Nitrobenzene	ug/L	<10.0		<11.1					
N-Nitrosodiethylamine	ug/L	<10.0		<11.1					
N-Nitrosodimethylamine	ug/L	<10.0		<11.1					
N-Nitrosodi-n-butylamine	ug/L	<10.0		<11.1					
N-Nitrosodi-n-propylamine	ug/L	<10.0		<11.1					
N-Nitrosodiphenylamine	ug/L	<10.0		<11.1					
N-Nitrosomethylethylamine	ug/L	<10.0		<11.1					
N-Nitrosopiperidine	ug/L	<10.0		<11.1					
N-Nitrosopyrrolidine	ug/L	<10.0		<11.1					
o,o,o-Triethylphosphorothioate	ug/L	<10.0		<11.1					
o-Toluidine	ug/L	<10.0		<11.1					
p-[Dimethylamino]azobenzene	ug/L	<10.0		<11.1					
Parathion	ug/L	<10.0		<11.1					
PCB-1016	ug/L	<.800		<.825					
PCB-1221	ug/L	<.800		<.825					
PCB-1232	ug/L	<.800		<.825					
PCB-1242	ug/L	<.800		<.825					
PCB-1248	ug/L	<.800		<.825					
PCB-1254	ug/L	<.800		<.825					
PCB-1260	ug/L	<.800		<.825					
Pentachlorobenzene	ug/L	<10.0		<11.1					
Pentachloronitrobenzene	ug/L	<10.0		<11.1					
Pentachlorophenol	ug/L	<10.0		<11.1					
pH	SU					6.48	6.61	6.64	
Phenacetin	ug/L	<10.0		<11.1					
Phenanthrene	ug/L	<10.0		<11.1					
Phenol	ug/L	<10.0		<11.1					
Phorate	ug/L	<10.0		<11.1					
p-Phenylenediamine	ug/L	<10.0		<11.1					
Pronamide	ug/L	<10.0		<11.1					
Propionitrile	ug/L	<10		<10					
Pyrene	ug/L	<10.0		<11.1					
Safrole	ug/L	<10.0		<11.1					
Selenium	ug/L	<5.00	<5.00	<5.00	<5.00	<3.34	<5.00	<5.00	
Silver	ug/L	<20.000	<20.000	<20.000	<20.000	<.042	<1.000	<1.000	
Styrene	ug/L	<1.0	<1.0	<1.0	<1.0	<.1	<1.0	<1.0	
Sulfate	mg/L					322.0	126.0	61.7	
Sulfide	mg/L	<1		<1					
Tetrachloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.18	<1.00	<1.00	
Thallium	ug/L	<4.0000	<2.0000	<2.0000	<2.0000	<.0325	<1.0000	<1.0000	
Thionazin	ug/L	<10.0		<11.1					
Tin	ug/L	<100		348	<100				
Total Suspended Solids	mg/L					46.0	2.5	40.0	
Toxaphene	ug/L	<2.00		<2.25					
trans-1,2-Dichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	
trans-1,3-Dichloropropene	ug/L	<5.00	<5.00	<5.00	<5.00	<.22	<5.00	<5.00	
trans-1,4-Dichloro-2-butene	ug/L	<10.00	<10.00	<10.00	<10.00	<.13	<10.00	<10.00	
Trichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.19	<1.00	<1.00	
Trichlorofluoromethane	ug/L	<4.00	<4.00	<4.00	<4.00	<.17	<4.00	<4.00	
Vanadium	ug/L	<50.000	<50.000	<50.000	<50.000	.877	<5.000	<5.000	
Vinyl Acetate	ug/L	<2.00	<2.00	<2.00	<2.00	<.74	<10.00	<10.00	
Vinyl Chloride	ug/L	<1.0	<1.0	<1.0	<1.0	<.1	<1.0	<1.0	
Xylenes, Total	ug/L	<3.00	<3.00	<3.00	<3.00	<.13	<3.00	<3.00	
Zinc	ug/L	<20.0	34.0	77.6	<60.0	8.2	<10.0	<10.0	

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

Table 9

Analytical Data Summary for MW-384

Constituents	Units	9/20/2012	3/28/2013	9/25/2013	4/15/2014	9/25/2014	3/11/2015	9/1/2015	3/22/2016	10/20/2016
1,1,1,2-Tetrachloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	<1.00	<.21
1,1,1-Trichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.12	<1.00	<1.00	<1.00	<.12
1,1,2,2-Tetrachloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.10	<1.00	<1.00	<1.00	<.10
1,1,2-Trichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.12	<1.00	<1.00	<1.00	<.12
1,1-Dichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	<1.00	<.21
1,1-Dichloroethene	ug/L	<2.00	<2.00	<2.00	<2.00	<.15	<2.00	<2.00	<2.00	<.15
1,2,3-Trichloropropane	ug/L	<1.00	<1.00	<1.00	<1.00	<.19	<1.00	<1.00	<1.00	<.19
1,2-Dibromo-3-chloropropane	ug/L	<10.00	<10.00	<10.00	<10.00	<.12	<10.00	<10.00	<10.00	<.50
1,2-Dibromoethane	ug/L	<10.00	<10.00	<10.00	<10.00	<.13	<10.00	<10.00	<10.00	<.13
1,2-Dichlorobenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.14	<1.00	<1.00	<1.00	<.14
1,2-Dichloroethane	ug/L	<1.000	<1.000	<1.000	<1.000	<.180	<1.000	<1.000	<1.000	<.180
1,2-Dichloropropane	ug/L	<1.00	<1.00	<1.00	<1.00	<.87	<1.00	<1.00	<1.00	<.87
1,4-Dichlorobenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.20	<1.00	<1.00	<1.00	<.20
2-Butanone	ug/L	<10.00	<10.00	<10.00	<10.00	<.47	<10.00	<10.00	<10.00	<1.04
2-Hexanone	ug/L	<10.0	<10.0	<10.0	<10.0	<.2	<10.0	<10.0	<10.0	<.2
4-Methyl-2-pentanone	ug/L	<10.00	<10.00	<10.00	<10.00	<.22	<10.00	<10.00	<10.00	<.22
Acetone	ug/L	<10.00	<10.00	<10.00	<10.00	<1.79	<10.00	<10.00	<10.00	<1.79
Acrylonitrile	ug/L	<10.00	<10.00	<10.00	<10.00	<.53	<10.00	<10.00	<10.00	<.53
Alkalinity as CaCO3	mg/L					227.0	43.2	165.0	30.9	97.9
Aluminum	ug/L					53.8	53.0	<50.0	85.3	37.1
Antimony	ug/L	<6.000	<6.000	<6.000		<.161	<1.000	<1.000	<.237	<.237
Arsenic	ug/L	<2.00	<1.00	2.14	<1.00	1.77	1.99	<2.00	1.89	1.90
Barium	ug/L	12.20	12.40	5.03	<20.00	10.20	10.90	10.30	9.61	9.63
Benzene	ug/L	<.50	<.50	<.50	<.50	<.11	<.50	<.50	<.50	<.11
Beryllium	ug/L	<1.000	<1.000	.480	<1.000	.438	<1.000	<1.000	.274	1.440
Bromochloromethane	ug/L	<5.00	<5.00	<5.00	<5.00	<.12	<5.00	<5.00	<5.00	<.12
Bromodichloromethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.12	<1.00	<1.00	<1.00	<.12
Bromoform	ug/L	<5.00	<5.00	<5.00	<5.00	<.14	<5.00	<5.00	<5.00	<.14
Bromomethane	ug/L	<20.000	<4.000	<4.000	<4.000	<.220	<4.000	<4.000	<4.000	.313
Cadmium	ug/L	<.5000	<.5000	<.5000	<.5000	<.1120	<.5000	<.5000	.0700	.0620
Carbon Disulfide	ug/L	<1.00	<1.00	<1.00	<1.00	<.15	<1.00	<1.00	<1.00	<.15
Carbon Tetrachloride	ug/L	<2.00	<2.00	<2.00	<2.00	<.24	<2.00	<2.00	<2.00	<.24
Chlorobenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.19	<1.00	<1.00	<1.00	<.19
Chlorodibromomethane	ug/L	<5.00	<5.00	<5.00	<5.00	<.20	<5.00	<5.00	<5.00	<.20
Chloroethane	ug/L	<4.00	<4.00	<4.00	<4.00	<.15	<4.00	<4.00	<4.00	<.15
Chloroform	ug/L	<1.00	<1.00	<1.00	<1.00	<.28	<1.00	<1.00	<1.00	<.28
Chloromethane	ug/L	<3.00	<3.00	<3.00	<3.00	<.31	<3.00	<3.00	<3.00	<.31
Chromium	ug/L	<20.000	<20.000	3.350	<40.000	10.000	<5.000	<5.000	<.355	<.355
cis-1,2-Dichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.13	<1.00	<1.00	<1.00	<.13
cis-1,3-Dichloropropene	ug/L	<5.00	<5.00	<5.00	<5.00	<.15	<5.00	<5.00	<5.00	<.15
Cobalt	ug/L	80.3	32.5	54.2	30.0	47.3	85.1	40.7	45.3	68.7
Copper	ug/L	<20.000	<20.000	<20.000	<40.000	<.485	<2.000	<2.000	<1.220	<1.220
Dibromomethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.18	<1.00	<1.00	<1.00	<.18
Ethylbenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	<1.00	<.21
Iodomethane	ug/L	<10.0	<10.0	<10.0	<10.0	<.8	<10.0	<10.0	<10.0	<.8
Iron	ug/L					95000	320000	73300	128000	284000
Lead	ug/L	<4.0000	<4.0000	<4.0000	<4.0000	<.0967	1.2400	<.5000	<.2110	<.2110
Methylene Chloride	ug/L	<5.000	<5.000	<5.000	<5.000	.520	<5.000	<5.000	<5.000	<.170
Nickel	ug/L	222.0	90.9	168.0	117.0	106.0	142.0	104.0	129.0	125.0
pH	SU					6.04	5.76	6.39	6.11	5.84
Selenium	ug/L	<5.000	<5.000	<5.000	<5.000	<3.340	<5.000	<5.000	<.630	<.630
Silver	ug/L	<20.000	<20.000		<40.000	<.042	<1.000	<1.000	<.153	<.153
Styrene	ug/L	<1.00	<1.00	<1.00	<1.00	<.10	<1.00	<1.00	<1.00	<.10
Sulfate	mg/L					3250	3710	2920	3740	3970
Tetrachloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.18	<1.00	<1.00	<1.00	<.18
Thallium	ug/L	<2.0000	<2.0000	<2.0000	<2.0000	<.0325	<1.0000	<1.0000	<.0255	<.0255
Toluene	ug/L									
Total Suspended Solids	mg/L					42.00	26.00	9.33	56.70	9.13
trans-1,2-Dichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	<1.00	<.21
trans-1,3-Dichloropropene	ug/L	<5.00	<5.00	<5.00	<5.00	<.22	<5.00	<5.00	<5.00	<.22
trans-1,4-Dichloro-2-butene	ug/L	<10.00	<10.00	<10.00	<10.00	<.13	<10.00	<10.00	<10.00	<.13
Trichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.19	<1.00	<1.00	<1.00	<.19
Trichlorofluoromethane	ug/L	<4.00	<4.00	<4.00	<4.00	<.17	<4.00	<4.00	<4.00	<.17
Vanadium	ug/L	<50.000	<50.000	<50.000	<100.000	.640	<5.000	<5.000	.263	<.255
Vinyl Acetate	ug/L	<2.00	<2.00	<2.00	<2.00	<.74	<10.00	<10.00	<10.00	<.74
Vinyl Chloride	ug/L	<1.00	<1.00	<1.00	<1.00	<.10	<1.00	<1.00	<1.00	<.10
Xylenes, Total	ug/L	<3.000	<3.000	<3.000	<3.000	<.130	<3.000	3.000	<3.000	.707
Zinc	ug/L	126.0	117.0	320.0	<40.0	58.3	296.0	50.6	84.9	238.0

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

Table 9

Analytical Data Summary for MW-384

Constituents	3/9/2017	9/27/2017	3/14/2018	10/2/2018	3/28/2019	9/24/2019	3/10/2020	9/15/2020	4/16/2021
1,1,1,2-Tetrachloroethane	<.21	<.21	<.21	<.38	<.38	<.38	<.38	<.38	<.38
1,1,1-Trichloroethane	<.12	<.12	<.12	<.19	<.19	<.19	<.19	<.19	<.19
1,1,2,2-Tetrachloroethane	<.10	<.10	<.10	<.47	<.47	<.47	<.47	<.47	<.47
1,1,2-Trichloroethane	<.12	<.12	<.12	<.45	<.45	<.45	<.45	<.45	<.45
1,1-Dichloroethane	<.21	<.21	<.21	<.22	<.22	<.22	<.22	<.22	<.22
1,1-Dichloroethene	<.15	<.15	<.15	<.56	<.56	<.56	<.56	<.56	<.56
1,2,3-Trichloropropane	<.19	<.19	<.19	<.59	<.59	<.59	<.59	<.59	<.59
1,2-Dibromo-3-chloropropane	<.50	<.50	<.50	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20
1,2-Dibromoethane	<.13	<.13	<.13	<.34	<.34	<.34	<.34	<.34	<.34
1,2-Dichlorobenzene	<.14	<.14	<.14	<.37	<.37	<.37	<.37	<.37	<.37
1,2-Dichloroethane	<.180	<.180	.195	<.390	<.390	<.390	<.390	<.390	<.390
1,2-Dichloropropane	<.87	<.87	<.87	<.27	<.27	<.27	<.27	<.27	<.27
1,4-Dichlorobenzene	<.20	<.20	<.20	<.23	<.23	<.23	<.23	<.23	<.23
2-Butanone	<1.04	<1.04	<1.04	<2.10	<2.10	<2.10	<2.10	<2.10	<2.10
2-Hexanone	<.2	<.2	<.2	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
4-Methyl-2-pentanone	<.22	<.22	<.22	<2.10	<2.10	<2.10	<2.10	<2.10	<2.10
Acetone	2.77	2.49	<1.79	<3.10	<3.10	<3.10	<3.10	<3.10	<3.10
Acrylonitrile	<.53	<.53	<.53	<2.20	<2.20	<2.20	<2.20	<2.20	<2.20
Alkalinity as CaCO3	196.0	165.0	64.9	144.0	227.0	272.0	88.7	130.0	129.0
Aluminum	<41.3	<41.3	<165.0	46.4	<27.0	82.6	461.0	49.4	54.7
Antimony	<.185	<.185	<.740	<1.320	<.530	<.530	<.580	<.510	<1.100
Arsenic	1.33	1.55	2.83	3.06	1.68	2.28	4.09	3.15	2.79
Barium	10.50	11.40	10.00	9.11	9.49	11.70	10.90	9.95	10.50
Benzene	<.11	<.11	<.11	<.22	<.22	<.22	<.22	<.22	<.22
Beryllium	.166	.280	1.240	<.530	<.270	.350	1.080	.993	.955
Bromochloromethane	<.12	<.12	<.12	<.54	<.54	<.54	<.54	<.54	<.54
Bromodichloromethane	<.12	<.12	<.12	<.39	<.39	<.39	<.39	<.39	<.39
Bromoform	<.14	<.14	<.14	<.78	<.78	<.78	<.78	<.78	<.78
Bromomethane	<.220	<.220	<.220	<1.100	<1.100	<1.100	<1.100	<1.100	<1.100
Cadmium	<.0441	<.0441	<.1760	.2420	<.0770	<.0390	.0430	<.0490	<.0510
Carbon Disulfide	<.15	<.15	<.15	<.45	<.45	<.45	<.45	<.45	<.45
Carbon Tetrachloride	<.24	<.24	<.24	<.65	<.65	<.65	<.65	<.65	<.65
Chlorobenzene	<.19	<.19	<.19	<.40	<.40	<.40	<.40	<.40	<.40
Chlorodibromomethane	<.20	<.20	<.20	<.75	<.75	<.75	<.75	<.75	<.75
Chloroethane	<.15	<.15	<.15	<.79	<.79	<.79	<.79	<.79	<.79
Chloroform	<.28	<.28	<.28	<1.30	<1.30	<1.30	<1.30	<1.30	<1.30
Chloromethane	<.31	<.31	<.31	<.61	<.61	<.61	<.61	<.61	<.61
Chromium	<.729	<.729	<2.920	<1.140	<.980	<.980	3.540	<1.100	<1.100
cis-1,2-Dichloroethene	<.13	<.13	<.13	<.21	<.21	<.21	<.21	<.21	<.21
cis-1,3-Dichloropropene	<.15	<.15	<.15	<.25	<.25	<.25	<.25	<.25	<.25
Cobalt	61.0	41.7	54.0	41.9	26.3	33.6	33.8	42.2	38.2
Copper	<2.190	<2.190	<8.760	<.497	<2.000	<2.000	<3.200	<1.500	<1.400
Dibromomethane	<.18	<.18	<.18	<.33	<.33	<.33	<.33	<.33	<.33
Ethylbenzene	<.21	<.21	<.21	<.31	<.31	<.31	<.31	<.31	<.31
Iodomethane	<.8	<.8	<.8	<7.0	<7.0	<7.0	<7.0	<7.0	<7.0
Iron	71000	101000	279000	168000	60300	77500	246000	253000	245000
Lead	<.3240	<.3240	<1.3000	<.1860	<.2700	<.2700	.8490	<.1100	<.2100
Methylene Chloride	<.170	.292	<.170	<1.700	<1.700	<1.700	<1.700	<1.700	<1.700
Nickel	99.7	108.0	129.0	118.0	72.8	92.6	99.3	123.0	115.0
pH	6.46	6.13	5.90	5.97	6.42	6.43	5.74	5.93	6.04
Selenium	<.928	<.928	<3.710	<.982	<1.000	<1.000	1.060	<1.000	<.960
Silver	<.140	<.140	<.560	<.115	<.370	<.370	<.370	<.370	<.420
Styrene	<.10	<.10	<.10	<.37	<.37	<.37	<.37	<.37	<.37
Sulfate	3030	2950	2790	2630	3380	2920	2730	2830	2790
Tetrachloroethene	<.18	<.18	<.18	<.48	<.48	<.48	<.48	<.48	<.48
Thallium	<.0644	<.0644	<.2580	<.5700	<.2700	<.2700	<.2600	<.2600	<.2600
Toluene				<.43	<.43	<.43	<.43	<.43	<.43
Total Suspended Solids	7.88	7.75	22.50	15.30	10.30	9.63	187.00	13.60	11.80
trans-1,2-Dichloroethene	<.21	<.21	<.21	<.27	<.27	<.27	<.27	<.27	<.27
trans-1,3-Dichloropropene	<.22	<.22	<.22	<.56	<.56	<.56	<.56	<.56	<.56
trans-1,4-Dichloro-2-butene	<.13	<.13	<.13	<1.10	<1.10	<1.10	<1.10	<1.10	<1.10
Trichloroethene	<.19	<.19	<.19	<.43	<.43	<.43	<.43	<.43	<.43
Trichlorofluoromethane	<.17	<.17	<.17	<.38	<.38	<.38	<.38	<.38	<.38
Vanadium	<.840	<.840	<3.360	<2.150	<.820	<.820	1.570	<.850	<1.100
Vinyl Acetate	<.74	<.74	<.74	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50
Vinyl Chloride	<.10	<.10	<.10	<.60	<.60	<.18	<.18	<.18	<.18
Xylenes, Total	.949	<.130	<.130	<.400	<.400	<.400	<.400	<.400	<.400
Zinc	57.9	54.0	144.0	111.0	30.2	48.7	78.3	96.7	72.7

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

Table 9

Analytical Data Summary for MW-384

Constituents	10/28/2021	4/14/2022	9/1/2022	3/6/2023	9/29/2023
1,1,1,2-Tetrachloroethane	<.38	<.38	<1.00	<1.00	<1.00
1,1,1-Trichloroethane	<.19	<.19	<1.00	<1.00	<1.00
1,1,2,2-Tetrachloroethane	<.47	<.47	<1.00	<1.00	<1.00
1,1,2-Trichloroethane	<.45	<.45	<1.00	<1.00	<1.00
1,1-Dichloroethane	<.22	<.22	<1.00	<1.00	<1.00
1,1-Dichloroethene	<.56	<.56	<1.00	<1.00	<1.00
1,2,3-Trichloropropane	<.59	<.59	<1.00	<1.00	<1.00
1,2-Dibromo-3-chloropropane	<1.20	<1.20	<5.00	<5.00	<5.00
1,2-Dibromoethane	<.34	<.34	<1.00	<1.00	<1.00
1,2-Dichlorobenzene	<.37	<.37	<1.00	<1.00	<1.00
1,2-Dichloroethane	<.390	<.390	<1.000	<1.000	<1.000
1,2-Dichloropropane	<.27	<.27	<1.00	<1.00	<1.00
1,4-Dichlorobenzene	<.23	<.23	<1.00	<1.00	<1.00
2-Butanone	<2.10	<2.10	<10.00	<10.00	<10.00
2-Hexanone	<2.0	<2.0	<5.0	<5.0	<5.0
4-Methyl-2-pentanone	<2.10	<2.10	<5.00	<5.00	<5.00
Acetone	<3.10	<3.10	<10.00	<10.00	<10.00
Acrylonitrile	<2.20	<2.20	<5.00	<5.00	<5.00
Alkalinity as CaCO3	272.0	225.0	82.0	106.0	125.0
Aluminum	<68.0	<68.0	<100.0	<50.0	117.0
Antimony	<4.400	<2.760	<2.000	<2.000	<2.000
Arsenic	<3.00	<3.00	<4.00	<4.00	<4.00
Barium	9.71	8.26	11.20	10.70	10.00
Benzene	<.22	<.22	<1.00	<1.00	<1.00
Beryllium	<1.080	<1.080	<4.000	<4.000	<4.000
Bromochloromethane	<.54	<.54	<1.00	<1.00	<1.00
Bromodichloromethane	<.39	<.39	<1.00	<1.00	<1.00
Bromoform	<.78	<.78	<1.00	<1.00	<1.00
Bromomethane	<1.100	<1.100	<1.000	<1.000	<1.000
Cadmium	<.2040	<.2200	<.8000	<.8000	<.8000
Carbon Disulfide	<.45	<.45	<1.00	<1.00	<1.00
Carbon Tetrachloride	<.65	<.65	<1.00	<1.00	<1.00
Chlorobenzene	<.40	<.40	<1.00	<1.00	<1.00
Chlorodibromomethane	<.75	<.75	<1.00	<1.00	<1.00
Chloroethane	<.79	<.79	<1.00	<1.00	<1.00
Chloroform	<1.30	<1.30	<1.00	<1.00	<1.00
Chloromethane	<.61	<.61	<1.00	<1.00	<1.00
Chromium	<4.400	<4.400	<8.000	<8.000	<8.000
cis-1,2-Dichloroethene	<.21	<.21	<1.00	<1.00	<1.00
cis-1,3-Dichloropropene	<.25	<.25	<1.00	<1.00	<1.00
Cobalt	30.4	17.3	16.8	8.4	14.6
Copper	<5.600	<7.200	<4.000	<4.000	<4.000
Dibromomethane	<.33	<.33	<1.00	<1.00	<1.00
Ethylbenzene	<.31	<.31	<1.00	<1.00	<1.00
Iodomethane	<7.0	<7.0	<1.0	<1.0	<1.0
Iron	127000	99800	65200	5520	103000
Lead	1.0200	<.9600	<4.0000	<4.0000	<4.0000
Methylene Chloride	<1.700	<1.700	<5.000	<5.000	<5.000
Nickel	88.4	68.0	74.8	43.2	54.4
pH	6.08	6.23	5.60	6.00	5.80
Selenium	<3.840	<3.840	<4.000	<4.000	<4.000
Silver	<1.680	<1.960	<4.000	<4.000	<4.000
Styrene	<.37	<.37	<1.00	<1.00	<1.00
Sulfate	2560	2760	2550	2430	2450
Tetrachloroethene	<.48	<.48	<1.00	<1.00	<1.00
Thallium	<1.0400	<1.0400	<2.0000	<2.0000	<2.0000
Toluene	<.43	<.43	<1.00	<1.00	<1.00
Total Suspended Solids	15.30	48.00			
trans-1,2-Dichloroethene	<.27	<.27	<1.00	<1.00	<1.00
trans-1,3-Dichloropropene	<.56	<.56	<1.00	<1.00	<1.00
trans-1,4-Dichloro-2-butene	<1.10	<1.10	<5.00	<5.00	<5.00
Trichloroethene	<.43	<.43	<1.00	<1.00	<1.00
Trichlorofluoromethane	<.38	<.38	<1.00	<1.00	<1.00
Vanadium	<4.400	<4.400	<20.000	<20.000	<20.000
Vinyl Acetate	<2.50	<2.50	<5.00	<5.00	<5.00
Vinyl Chloride	<.18	<.18	<1.00	<1.00	<1.00
Xylenes, Total	<.400	<.400	<2.000	<2.000	<2.000
Zinc	<40.0	<40.0	<20.0	<20.0	20.3

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

Table 9

Analytical Data Summary for MW-385

Constituents	Units	9/20/2012	3/28/2013	9/25/2013	4/15/2014	9/25/2014	3/11/2015	9/2/2015	3/22/2016	10/20/2016
1,1,1,2-Tetrachloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	<1.00	<.21
1,1,1-Trichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.12	<1.00	<1.00	<1.00	<.12
1,1,2,2-Tetrachloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.10	<1.00	<1.00	<1.00	<.10
1,1,2-Trichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.12	<1.00	<1.00	<1.00	<.12
1,1-Dichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	<1.00	<.21
1,1-Dichloroethene	ug/L	<2.00	<2.00	<2.00	<2.00	<.15	<2.00	<2.00	<2.00	<.15
1,2,3-Trichloropropane	ug/L	<1.00	<1.00	<1.00	<1.00	<.19	<1.00	<1.00	<1.00	<.19
1,2-Dibromo-3-chloropropane	ug/L	<10.00	<10.00	<10.00	<10.00	<.12	<10.00	<10.00	<10.00	<.50
1,2-Dibromoethane	ug/L	<10.00	<10.00	<10.00	<10.00	<.13	<10.00	<10.00	<10.00	<.13
1,2-Dichlorobenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.14	<1.00	<1.00	<1.00	<.14
1,2-Dichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.18	<1.00	<1.00	<1.00	<.18
1,2-Dichloropropane	ug/L	<1.00	<1.00	<1.00	<1.00	<.87	<1.00	<1.00	<1.00	<.87
1,4-Dichlorobenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.20	<1.00	<1.00	<1.00	<.20
2-Butanone	ug/L	<10.00	<10.00	<10.00	<10.00	<.47	<10.00	<10.00	<10.00	<1.04
2-Hexanone	ug/L	<10.0	<10.0	<10.0	<10.0	<.2	<10.0	<10.0	<10.0	<.2
4-Methyl-2-pentanone	ug/L	<10.00	<10.00	<10.00	<10.00	<.22	<10.00	<10.00	<10.00	<.22
Acetone	ug/L	<10.00	<10.00	<10.00	<10.00	<1.79	<10.00	<10.00	<10.00	<1.79
Acrylonitrile	ug/L	<10.00	<10.00	<10.00	<10.00	<.53	<10.00	<10.00	<10.00	<.53
Alkalinity as CaCO3	mg/L					418	389	356	412	422
Aluminum	ug/L					114.0	69.3	<50.0	<20.8	21.8
Antimony	ug/L	<6.000	<6.000	<6.000	<6.000	<.161	<1.000	<1.000	<.237	<.237
Arsenic	ug/L	<2.000	<1.000	2.150	<1.000	1.440	<2.000	<2.000	.738	.673
Barium	ug/L	16.40	12.70	9.06	3.47	14.60	13.10	16.00	11.80	13.60
Benzene	ug/L	<.50	<.50	<.50	<.50	<.11	<.50	<.50	<.50	<.11
Beryllium	ug/L	<1.000	<1.000	<1.000	<1.000	.112	<1.000	<1.000	<.221	<.221
Bromochloromethane	ug/L	<5.00	<5.00	<5.00	<5.00	<.12	<5.00	<5.00	<5.00	<.12
Bromodichloromethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.12	<1.00	<1.00	<1.00	<.12
Bromoform	ug/L	<5.00	<5.00	<5.00	<5.00	<.14	<5.00	<5.00	<5.00	<.14
Bromomethane	ug/L	<20.000	<4.000	<4.000	<4.000	<.220	<4.000	<4.000	<4.000	.599
Cadmium	ug/L	<.500	<.500	<.500	<.500	.127	<.500	<.500	.169	.109
Carbon Disulfide	ug/L	<1.00	<1.00	<1.00	<1.00	<.15	<1.00	<1.00	<1.00	<.15
Carbon Tetrachloride	ug/L	<2.00	<2.00	<2.00	<2.00	<.24	<2.00	<2.00	<2.00	<.24
Chlorobenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.19	<1.00	<1.00	<1.00	<.19
Chlorodibromomethane	ug/L	<5.00	<5.00	<5.00	<5.00	<.20	<5.00	<5.00	<5.00	<.20
Chloroethane	ug/L	<4.00	<4.00	<4.00	<4.00	<.15	<4.00	<4.00	<4.00	<.15
Chloroform	ug/L	<1.00	<1.00	<1.00	<1.00	<.28	<1.00	<1.00	<1.00	<.28
Chloromethane	ug/L	<3.00	<3.00	<3.00	<3.00	<.31	<3.00	<3.00	<3.00	<.31
Chromium	ug/L	<20.000	<20.000	4.310	<20.000	1.720	<5.000	<5.000	<.355	<.355
cis-1,2-Dichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.13	<1.00	<1.00	<1.00	<.13
cis-1,3-Dichloropropene	ug/L	<5.00	<5.00	<5.00	<5.00	<.15	<5.00	<5.00	<5.00	<.15
Cobalt	ug/L	17.00	13.20	12.10	7.12	8.88	6.50	8.37	3.17	3.00
Copper	ug/L	<20.000	<20.000	<20.000	<20.000	<.485	<2.000	<2.000	<1.220	<1.220
Dibromomethane	ug/L	<1.00	<1.00	<1.00	<1.00	<.18	<1.00	<1.00	<1.00	<.18
Ethylbenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	<1.00	<.21
Iodomethane	ug/L	<10.0	<10.0	<10.0	<10.0	<.8	<10.0	<10.0	<10.0	<.8
Iron	ug/L					34500	41000	39100	38900	33400
Lead	ug/L	<4.000	<4.000	<4.000	<4.000	.247	.872	<.500	<.211	<.211
Methylene Chloride	ug/L	<5.000	.343	<5.000	<5.000	.448	<5.000	<5.000	<5.000	.224
Nickel	ug/L	53.1	47.4	54.9	40.2	42.4	37.1	41.9	31.7	29.8
pH	SU					6.42	6.53	6.78	6.55	6.61
Selenium	ug/L	<5.000	<5.000	<5.000	<5.000	<3.340	<5.000	<5.000	<.630	<.630
Silver	ug/L	<20.000	<20.000	<20.000	<20.000	<.042	<1.000	<1.000	<.153	<.153
Styrene	ug/L	<1.00	<1.00	<1.00	<1.00	<.10	<1.00	<1.00	<1.00	<.10
Sulfate	mg/L					2220	2320	2210	2380	2160
Tetrachloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.18	<1.00	<1.00	<1.00	<.18
Thallium	ug/L	<2.0000	<2.0000	<2.0000	<2.0000	<.0325	<1.0000	<1.0000	<.0255	<.0255
Toluene	ug/L									
Total Suspended Solids	mg/L					37.50	43.70	26.00	65.00	8.00
trans-1,2-Dichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.21	<1.00	<1.00	<1.00	<.21
trans-1,3-Dichloropropene	ug/L	<5.00	<5.00	<5.00	<5.00	<.22	<5.00	<5.00	<5.00	<.22
trans-1,4-Dichloro-2-butene	ug/L	<10.00	<10.00	<10.00	<10.00	<.13	<10.00	<10.00	<10.00	<.13
Trichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<.19	<1.00	<1.00	<1.00	<.19
Trichlorofluoromethane	ug/L	<4.00	<4.00	<4.00	<4.00	<.17	<4.00	<4.00	<4.00	<.17
Vanadium	ug/L	<50.000	<50.000	<50.000	<50.000	.939	<5.000	<5.000	<.255	<.255
Vinyl Acetate	ug/L	<2.00	<2.00	<2.00	<2.00	<.74	<10.00	<10.00	<10.00	<.74
Vinyl Chloride	ug/L	<1.00	<1.00	<1.00	<1.00	<.10	<1.00	<1.00	<1.00	<.10
Xylenes, Total	ug/L	<3.000	<3.000	<3.000	<3.000	<.130	<3.000	<3.000	<3.000	.387
Zinc	ug/L	43.5	120.0	233.0	<60.0	60.2	51.5	60.9	40.5	37.7

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

Table 9

Analytical Data Summary for MW-385

Constituents	3/8/2017	9/27/2017	3/14/2018	10/2/2018	3/28/2019	9/24/2019	3/10/2020	9/16/2020	4/16/2021
1,1,1,2-Tetrachloroethane	<.21	<.21	<.21	<.38	<.38	<.38	<.38	<.38	<.38
1,1,1-Trichloroethane	<.12	<.12	<.12	<.19	<.19	<.19	<.19	<.19	<.19
1,1,2,2-Tetrachloroethane	<.10	<.10	<.10	<.47	<.47	<.47	<.47	<.47	<.47
1,1,2-Trichloroethane	<.12	<.12	<.12	<.45	<.45	<.45	<.45	<.45	<.45
1,1-Dichloroethane	<.21	<.21	<.21	<.22	<.22	<.22	<.22	<.22	<.22
1,1-Dichloroethene	<.15	<.15	<.15	<.56	<.56	<.56	<.56	<.56	<.56
1,2,3-Trichloropropane	<.19	<.19	<.19	<.59	<.59	<.59	<.59	<.59	<.59
1,2-Dibromo-3-chloropropane	<.50	<.50	<.50	<1.20	<1.20	<1.20	<1.20	<1.20	<1.20
1,2-Dibromoethane	<.13	<.13	<.13	<.34	<.34	<.34	<.34	<.34	<.34
1,2-Dichlorobenzene	<.14	<.14	<.14	<.37	<.37	<.37	<.37	<.37	<.37
1,2-Dichloroethane	<.18	<.18	<.18	<.39	<.39	<.39	<.39	<.39	<.39
1,2-Dichloropropane	<.87	<.87	<.87	<.27	<.27	<.27	<.27	<.27	<.27
1,4-Dichlorobenzene	<.20	<.20	<.20	<.23	<.23	<.23	<.23	<.23	<.23
2-Butanone	<1.04	<1.04	<1.04	<2.10	<2.10	<2.10	<2.10	<2.10	<2.10
2-Hexanone	<.2	<.2	<.2	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
4-Methyl-2-pentanone	<.22	<.22	<.22	<2.10	<2.10	<2.10	<2.10	<2.10	<2.10
Acetone	3.51	3.14	<1.79	<3.10	<3.10	<3.10	<3.10	<3.10	<3.10
Acrylonitrile	<.53	<.53	<.53	<2.20	<2.20	<2.20	<2.20	<2.20	<2.20
Alkalinity as CaCO3	376	402	368	376	350	396	399	518	485
Aluminum	<41.3	<41.3	<165.0	<24.6	<27.0	<27.0	<30.0	<12.0	<15.0
Antimony	<.185	<.185	<.740	<1.320	<.530	<.530	<.580	<.510	<1.100
Arsenic	<.505	.850	<2.020	1.050	<.750	<.750	<.880	<.880	<.750
Barium	10.90	14.00	11.00	14.20	10.50	13.20	11.60	13.00	12.40
Benzene	<.11	<.11	<.11	<.22	<.22	<.22	<.22	<.22	<.22
Beryllium	<.125	<.125	<.500	<.530	<.270	<.270	<.270	<.270	<.270
Bromochloromethane	<.12	<.12	<.12	<.54	<.54	<.54	<.54	<.54	<.54
Bromodichloromethane	<.12	<.12	<.12	<.39	<.39	<.39	<.39	<.39	<.39
Bromoform	<.14	<.14	<.14	<.78	<.78	<.78	<.78	<.78	<.78
Bromomethane	<.220	<.220	<.220	<1.100	<1.100	<1.100	<1.100	<1.100	<1.100
Cadmium	.116	.074	<.176	<.167	<.077	.059	.059	<.049	<.051
Carbon Disulfide	<.15	<.15	<.15	<.45	<.45	<.45	<.45	<.45	<.45
Carbon Tetrachloride	<.24	<.24	<.24	<.65	<.65	<.65	<.65	<.65	<.65
Chlorobenzene	<.19	<.19	<.19	<.40	<.40	<.40	<.40	<.40	<.40
Chlorodibromomethane	<.20	<.20	<.20	<.75	<.75	<.75	<.75	<.75	<.75
Chloroethane	<.15	<.15	<.15	<.79	<.79	<.79	<.79	<.79	<.79
Chloroform	<.28	<.28	<.28	<1.30	<1.30	<1.30	<1.30	<1.30	<1.30
Chloromethane	<.31	<.31	<.31	<.61	<.61	<.61	<.61	<.61	<.61
Chromium	<.729	<.729	<2.920	<1.140	<.980	<.980	<1.100	<1.100	<1.100
cis-1,2-Dichloroethene	<.13	<.13	<.13	<.21	<.21	<.21	<.21	<.21	<.21
cis-1,3-Dichloropropene	<.15	<.15	<.15	<.25	<.25	<.25	<.25	<.25	<.25
Cobalt	5.66	4.14	4.35	7.00	4.42	8.28	7.52	6.76	7.18
Copper	<2.190	<2.190	<8.760	.514	<2.000	<2.000	<3.200	<1.500	<1.400
Dibromomethane	<.18	<.18	<.18	<.33	<.33	<.33	<.33	<.33	<.33
Ethylbenzene	<.21	<.21	<.21	<.31	<.31	<.31	<.31	<.31	<.31
Iodomethane	<.8	<.8	<.8	<7.0	<7.0	<7.0	<7.0	<7.0	<7.0
Iron	28300	38700	29500	36300	21500	37400	40100	40500	49400
Lead	<.324	<.324	<1.300	<.186	<.270	<.270	<.270	<.110	<.210
Methylene Chloride	.501	.380	<.170	<1.700	<1.700	<1.700	<1.700	<1.700	<1.700
Nickel	34.6	41.8	29.4	37.3	26.4	40.9	39.7	37.3	39.3
pH	6.55	6.48	6.56	6.68	6.82	6.53	6.49	6.76	6.67
Selenium	<.928	<.928	<3.710	<.982	<1.000	<1.000	<1.000	<1.000	<.960
Silver	<.140	<.140	<.560	<.115	<.370	<.370	<.370	<.370	<.420
Styrene	<.10	<.10	<.10	<.37	<.37	<.37	<.37	<.37	<.37
Sulfate	2300	2300	2240	2180	2290	2240	2220	2190	2320
Tetrachloroethene	<.18	<.18	<.18	<.48	<.48	<.48	<.48	<.48	<.48
Thallium	<.0644	<.0644	<.2580	<.5700	<.2700	<.2700	<.2600	<.2600	<.2600
Toluene				<.43	<.43	<.43	<.43	<.43	<.43
Total Suspended Solids	7.88	18.50	21.60	22.70	18.00	14.00	16.10	37.60	46.10
trans-1,2-Dichloroethene	<.21	<.21	<.21	<.27	<.27	<.27	<.27	<.27	<.27
trans-1,3-Dichloropropene	<.22	<.22	<.22	<.56	<.56	<.56	<.56	<.56	<.56
trans-1,4-Dichloro-2-butene	<.13	<.13	<.13	<1.10	<1.10	<1.10	<1.10	<1.10	<1.10
Trichloroethene	<.19	<.19	<.19	<.43	<.43	<.43	<.43	<.43	<.43
Trichlorofluoromethane	<.17	<.17	<.17	<.38	<.38	<.38	<.38	<.38	<.38
Vanadium	<.840	<.840	<3.360	<2.150	<.820	<.820	<.820	<.850	<1.100
Vinyl Acetate	<.74	<.74	<.74	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50
Vinyl Chloride	<.10	<.10	<.10	<.60	<.60	<.18	<.18	<.18	<.18
Xylenes, Total	.898	.164	<.130	<.400	<.400	<.400	<.400	<.400	<.400
Zinc	39.9	41.5	<46.0	56.9	28.4	51.4	53.4	46.3	48.5

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

Table 9

Analytical Data Summary for MW-385

Constituents	10/28/2021	4/14/2022	9/1/2022	3/6/2023	9/29/2023
1,1,1,2-Tetrachloroethane	<.38	<.38	<1.00	<1.00	<1.00
1,1,1-Trichloroethane	<.19	<.19	<1.00	<1.00	<1.00
1,1,2,2-Tetrachloroethane	<.47	<.47	<1.00	<1.00	<1.00
1,1,2-Trichloroethane	<.45	<.45	<1.00	<1.00	<1.00
1,1-Dichloroethane	<.22	<.22	<1.00	<1.00	<1.00
1,1-Dichloroethene	<.56	<.56	<1.00	<1.00	<1.00
1,2,3-Trichloropropane	<.59	<.59	<1.00	<1.00	<1.00
1,2-Dibromo-3-chloropropane	<1.20	<1.20	<5.00	<5.00	<5.00
1,2-Dibromoethane	<.34	<.34	<1.00	<1.00	<1.00
1,2-Dichlorobenzene	<.37	<.37	<1.00	<1.00	<1.00
1,2-Dichloroethane	<.39	<.39	<1.00	<1.00	<1.00
1,2-Dichloropropane	<.27	<.27	<1.00	<1.00	<1.00
1,4-Dichlorobenzene	<.23	<.23	<1.00	<1.00	<1.00
2-Butanone	<2.10	<2.10	<10.00	<10.00	<10.00
2-Hexanone	<2.0	<2.0	<5.0	<5.0	<5.0
4-Methyl-2-pentanone	<2.10	<2.10	<5.00	<5.00	<5.00
Acetone	<3.10	<3.10	<10.00	<10.00	<10.00
Acrylonitrile	<2.20	<2.20	<5.00	<5.00	<5.00
Alkalinity as CaCO3	672	598	533	410	515
Aluminum	<17.0	75.7	2000.0	<50.0	269.0
Antimony	<1.100	<2.760	<2.000	<2.000	<2.000
Arsenic	.965	<3.000	<4.000	<4.000	<4.000
Barium	15.30	11.60	18.20	11.00	15.10
Benzene	<.22	<.22	<1.00	<1.00	<1.00
Beryllium	<.270	<1.080	<4.000	<4.000	<4.000
Bromochloromethane	<.54	<.54	<1.00	<1.00	<1.00
Bromodichloromethane	<.39	<.39	<1.00	<1.00	<1.00
Bromoform	<.78	<.78	<1.00	<1.00	<1.00
Bromomethane	<1.100	<1.100	<1.000	<1.000	<1.000
Cadmium	.065	<.220	<.800	<.800	<.800
Carbon Disulfide	<.45	<.45	<1.00	<1.00	<1.00
Carbon Tetrachloride	<.65	<.65	<1.00	<1.00	<1.00
Chlorobenzene	<.40	<.40	<1.00	<1.00	<1.00
Chlorodibromomethane	<.75	<.75	<1.00	<1.00	<1.00
Chloroethane	<.79	<.79	<1.00	<1.00	<1.00
Chloroform	<1.30	<1.30	<1.00	<1.00	<1.00
Chloromethane	<.61	<.61	<1.00	<1.00	<1.00
Chromium	<1.100	<4.400	<8.000	<8.000	<8.000
cis-1,2-Dichloroethene	<.21	<.21	<1.00	<1.00	<1.00
cis-1,3-Dichloropropene	<.25	<.25	<1.00	<1.00	<1.00
Cobalt	7.50	6.70	8.80	2.40	6.70
Copper	<1.400	<7.200	<4.000	<4.000	<4.000
Dibromomethane	<.33	<.33	<1.00	<1.00	<1.00
Ethylbenzene	<.31	<.31	<1.00	<1.00	<1.00
Iodomethane	<7.0	<7.0	<1.0	<1.0	<1.0
Iron	57400	70600	97700	22600	67600
Lead	.602	<.960	<4.000	<4.000	<4.000
Methylene Chloride	<1.700	<1.700	<5.000	<5.000	<5.000
Nickel	41.8	40.9	48.5	16.8	43.6
pH	6.54	6.72	6.40	6.70	6.60
Selenium	<.960	<3.840	<4.000	<4.000	<4.000
Silver	<.420	<1.960	<4.000	<4.000	<4.000
Styrene	<.37	<.37	<1.00	<1.00	<1.00
Sulfate	2050	2160	2040	1960	2140
Tetrachloroethene	<.48	<.48	<1.00	<1.00	<1.00
Thallium	<.2600	<1.0400	<2.0000	<2.0000	<2.0000
Toluene	<.43	<.43	<1.00	<1.00	<1.00
Total Suspended Solids	62.00	138.00			
trans-1,2-Dichloroethene	<.27	<.27	<1.00	<1.00	<1.00
trans-1,3-Dichloropropene	<.56	<.56	<1.00	<1.00	<1.00
trans-1,4-Dichloro-2-butene	<1.10	<1.10	<5.00	<5.00	<5.00
Trichloroethene	<.43	<.43	<1.00	<1.00	<1.00
Trichlorofluoromethane	<.38	<.38	<1.00	<1.00	<1.00
Vanadium	<1.100	<4.400	<20.000	<20.000	<20.000
Vinyl Acetate	<2.50	<2.50	<5.00	<5.00	<5.00
Vinyl Chloride	<.18	<.18	<1.00	<1.00	<1.00
Xylenes, Total	<.400	<.400	<2.000	<2.000	<2.000
Zinc	47.4	50.9	77.4	<20.0	44.2

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

Table 9

Analytical Data Summary for MW-390

Constituents	Units	9/18/2012	3/27/2013	9/25/2013	4/15/2014	9/1/2015	3/22/2016	10/21/2016	3/8/2017
1,1,1,2-Tetrachloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.21	<.21
1,1,1-Trichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.12	<.12
1,1,2,2-Tetrachloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.10	<.10
1,1,2-Trichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.12	<.12
1,1-Dichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.21	<.21
1,1-Dichloroethene	ug/L	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<.15	<.15
1,1-Dichloropropene	ug/L	<1		<1					
1,2,3-Trichloropropane	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.19	<.19
1,2,4,5-Tetrachlorobenzene	ug/L	<10.0		<10.1					
1,2,4-Trichlorobenzene	ug/L	<5		<5					
1,2-Dibromo-3-chloropropane	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<.5	<.5
1,2-Dibromoethane	ug/L	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<.13	<.13
1,2-Dichlorobenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.14	<.14
1,2-Dichloroethane	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.18	<.18
1,2-Dichloropropane	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.87	<.87
1,3,5-Trinitrobenzene	ug/L	<10.0		<10.1					
1,3-Dichlorobenzene	ug/L	<1		<1					
1,3-Dichloropropane	ug/L	<1		<1					
1,3-Dinitrobenzene	ug/L	<10.0		<10.1					
1,4-Dichlorobenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.20	<.20
1,4-Naphthoquinone	ug/L	<10.0		<10.1					
1-Naphthylamine	ug/L	<10.0		<10.1					
2,2`-oxybis[1-Chloropropane]	ug/L	<10.0		<10.1					
2,2-Dichloropropane	ug/L	<4		<4					
2,3,4,6-Tetrachlorophenol	ug/L	<10.0		<10.1					
2,4,5-T	ug/L	<1.10		<1.02					
2,4,5-TP [Silvex]	ug/L	<1.10		<1.02					
2,4,5-Trichlorophenol	ug/L	<10.0		<10.1					
2,4,6-Trichlorophenol	ug/L	<10.0		<10.1					
2,4-D	ug/L	<1.10		<1.02					
2,4-Dichlorophenol	ug/L	<10.0		<10.1					
2,4-Dimethylphenol	ug/L	<10.0		<10.1					
2,4-Dinitrophenol	ug/L	<20.0		<20.2					
2,4-Dinitrotoluene	ug/L	<10.0		<10.1					
2,6-Dichlorophenol	ug/L	<10.0		<10.1					
2,6-Dinitrotoluene	ug/L	<10.0		<10.1					
2-Acetylaminofluorene	ug/L	<10.0		<10.1					
2-Butanone	ug/L	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<1.04	<1.04
2-Chloronaphthalene	ug/L	<10.0		<10.1					
2-Chlorophenol	ug/L	<10.0		<10.1					
2-Hexanone	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<.2	<.2
2-Methylnaphthalene	ug/L	<10.0		<10.1					
2-Methylphenol [o-Cresol]	ug/L	<10.0		<10.1					
2-Naphthylamine	ug/L	<10.0		<10.1					
2-Nitroaniline	ug/L	<10.0		<10.1					
2-Nitrophenol	ug/L	<10.0		<10.1					
3,3-Dichlorobenzidine	ug/L	<10.0		<50.5					
3,3-Dimethylbenzidine	ug/L	<10.0		<10.1					
3-Methylcholanthrene	ug/L	<10.0		<10.1					
3-Nitroaniline	ug/L	<10.0		<10.1					
4,4`-DDD	ug/L	<.0320		<.0327					
4,4`-DDE	ug/L	<.0320		<.0327					
4,4`-DDT	ug/L	<.0320		<.0327					
4,6-Dinitro-2-methylphenol	ug/L	<10.0		<10.1					
4-Aminobiphenyl	ug/L	<10.0		<10.1					
4-Bromophenyl phenyl ether	ug/L	<10.0		<10.1					
4-Chloro-3-methylphenol	ug/L	<10.0		<10.1					
4-Chloroaniline	ug/L	<10.0		<10.1					
4-Chlorophenyl phenyl ether	ug/L	<10.0		<10.1					
4-Methyl-2-pentanone	ug/L	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<.22	<.22
4-Nitroaniline	ug/L	<10.0		<10.1					
4-Nitrophenol	ug/L	<10.0		<10.1					
5-Nitro-o-toluidine	ug/L	<10.0		<10.1					
7,12-Dimethylbenz[a]anthracene	ug/L	<10.0		<10.1					
Acenaphthene	ug/L	<10.0		<10.1					
Acetone	ug/L	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<1.79	7.42
Acetonitrile	ug/L	<10000		<10000					
Acetophenone	ug/L	<10.0		<10.1					
Acrolein	ug/L	<10		<10					
Acrylonitrile	ug/L	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<.53	<.53
Aldrin	ug/L	<.0320		<.0327					
Alkalinity as CaCO3	mg/L					217	170	170	201
Allyl Chloride	ug/L	<20		<2					
alpha-BHC	ug/L	<.0320		<.0327					
Aluminum	ug/L					67.4	31.4	201.0	<41.3
Anthracene	ug/L	<10.0		<10.1					
Antimony	ug/L	<6.000	<6.000	<6.000	<6.000	<1.000	<.237	<.237	<.185

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

Table 9

Analytical Data Summary for MW-390

Constituents	9/25/2017	3/13/2018	10/1/2018	3/27/2019	9/23/2019	3/9/2020	9/17/2020	4/14/2021	10/26/2021
1,1,1,2-Tetrachloroethane	<.21	<.21	<.38	<.38	<.38	<.38	<.38	<.38	<.38
1,1,1-Trichloroethane	<.12	<.12	<.19	<.19	<.19	<.19	<.19	<.19	<.19
1,1,2,2-Tetrachloroethane	<.10	<.10	<.47	<.47	<.47	<.47	<.47	<.47	<.47
1,1,2-Trichloroethane	<.12	<.12	<.45	<.45	<.45	<.45	<.45	<.45	<.45
1,1-Dichloroethane	<.21	<.21	<.22	<.22	<.22	<.22	<.22	<.22	<.22
1,1-Dichloroethene	<.15	<.15	<.56	<.56	<.56	<.56	<.56	<.56	<.56
1,1-Dichloropropene									
1,2,3-Trichloropropane	<.19	<.19	<.59	<.59	<.59	<.59	<.59	<.59	<.59
1,2,4,5-Tetrachlorobenzene									
1,2,4-Trichlorobenzene									
1,2-Dibromo-3-chloropropane	<.5	<.5	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2
1,2-Dibromoethane	<.13	<.13	<.34	<.34	<.34	<.34	<.34	<.34	<.34
1,2-Dichlorobenzene	<.14	<.14	<.37	<.37	<.37	<.37	<.37	<.37	<.37
1,2-Dichloroethane	<.18	<.18	<.39	<.39	<.39	<.39	<.39	<.39	<.39
1,2-Dichloropropane	<.87	<.87	<.27	<.27	<.27	<.27	<.27	<.27	<.27
1,3,5-Trinitrobenzene									
1,3-Dichlorobenzene									
1,3-Dichloropropane									
1,3-Dinitrobenzene									
1,4-Dichlorobenzene	<.20	<.20	<.23	<.23	<.23	<.23	<.23	<.23	<.23
1,4-Naphthoquinone									
1-Naphthylamine									
2,2`-oxybis[1-Chloropropane]									
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	<1.04	<1.04	<2.10	<2.10	<2.10	<2.10	<2.10	<2.10	<2.10
2-Chloronaphthalene									
2-Chlorophenol									
2-Hexanone	<.2	<.2	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
2-Methylnaphthalene									
2-Methylphenol [o-Cresol]									
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	<.22	<.22	<2.10	<2.10	<2.10	<2.10	<2.10	<2.10	<2.10
4-Nitroaniline									
4-Nitrophenol									
5-Nitro-o-toluidine									
7,12-Dimethylbenz[a]anthracene									
Acenaphthene									
Acetone	2.90	<1.79	<3.10	3.35	<3.10	5.37	<3.10	<3.10	<3.10
Acetonitrile									
Acetophenone									
Acrolein									
Acrylonitrile	<.53	<.53	<2.20	<2.20	<2.20	<2.20	<2.20	<2.20	<2.20
Aldrin									
Alkalinity as CaCO3	273	254	350	252	213	209	248	287	299
Allyl Chloride									
alpha-BHC									
Aluminum	<41.3	<165.0	246.0	<27.0	188.0	112.0	24.8	92.9	131.0
Anthracene									
Antimony	<.185	<.740	<1.320	<.530	<2.120	<.580	<.510	<1.100	<1.100

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

Table 9

Analytical Data Summary for MW-390

Constituents	4/14/2022	9/1/2022	3/6/2023	9/29/2023
1,1,1,2-Tetrachloroethane	<.38	<1.00	<1.00	<1.00
1,1,1-Trichloroethane	<.19	<1.00	<1.00	<1.00
1,1,2,2-Tetrachloroethane	<.47	<1.00	<1.00	<1.00
1,1,2-Trichloroethane	<.45	<1.00	<1.00	<1.00
1,1-Dichloroethane	<.22	<1.00	<1.00	<1.00
1,1-Dichloroethene	<.56	<1.00	<1.00	<1.00
1,1-Dichloropropene				
1,2,3-Trichloropropane	<.59	<1.00	<1.00	<1.00
1,2,4,5-Tetrachlorobenzene				
1,2,4-Trichlorobenzene				
1,2-Dibromo-3-chloropropane	<1.2	<5.0	<5.0	<5.0
1,2-Dibromoethane	<.34	<1.00	<1.00	<1.00
1,2-Dichlorobenzene	<.37	<1.00	<1.00	<1.00
1,2-Dichloroethane	<.39	<1.00	<1.00	<1.00
1,2-Dichloropropane	<.27	<1.00	<1.00	<1.00
1,3,5-Trinitrobenzene				
1,3-Dichlorobenzene				
1,3-Dichloropropane				
1,3-Dinitrobenzene				
1,4-Dichlorobenzene	<.23	<1.00	<1.00	<1.00
1,4-Naphthoquinone				
1-Naphthylamine				
2,2`-oxybis[1-Chloropropane]				
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	<2.10	<10.00	<10.00	<10.00
2-Chloronaphthalene				
2-Chlorophenol				
2-Hexanone	<2.0	<5.0	<5.0	<5.0
2-Methylnaphthalene				
2-Methylphenol [o-Cresol]				
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	<2.10	<5.00	<5.00	<5.00
4-Nitroaniline				
4-Nitrophenol				
5-Nitro-o-toluidine				
7,12-Dimethylbenz[a]anthracene				
Acenaphthene				
Acetone	<3.10	<10.00	<10.00	<10.00
Acetonitrile				
Acetophenone				
Acrolein				
Acrylonitrile	<2.20	<5.00	<5.00	<5.00
Aldrin				
Alkalinity as CaCO3	216	218	203	250
Allyl Chloride				
alpha-BHC				
Aluminum	281.0	100.0	<50.0	232.0
Anthracene				
Antimony	<2.760	<2.000	<2.000	<2.000

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

Table 9

Analytical Data Summary for MW-390

Constituents	Units	9/18/2012	3/27/2013	9/25/2013	4/15/2014	9/1/2015	3/22/2016	10/21/2016	3/8/2017
Arsenic	ug/L	13.90	14.00	14.70	17.60	22.30	16.70	13.70	7.25
Barium	ug/L	30.6	23.5	29.7	13.0	49.9	36.1	28.8	17.8
Benzene	ug/L	<.50	<.50	<.50	<.50	<.50	<.50	<.11	<.11
Benzo[a]anthracene	ug/L	<10.0		<10.1					
Benzo[a]pyrene	ug/L	<10.0		<10.1					
Benzo[b]fluoranthene	ug/L	<10.0		<10.1					
Benzo[ghi]perylene	ug/L	<10.0		<10.1					
Benzo[k]fluoranthene	ug/L	<10.0		<10.1					
Benzyl alcohol	ug/L	<10.0		<10.1					
Beryllium	ug/L	<1.000	<1.000	.200	<1.000	<1.000	<.221	<.221	<.125
beta-BHC	ug/L	<.0320		<.0327					
Bis(2-chloroethoxy)methane	ug/L	<10.0		<10.1					
Bis(2-chloroethyl)ether	ug/L	<10.0		<10.1					
Bis(2-ethylhexyl)phthalate	ug/L	<10.0		<10.1					
Bromochloromethane	ug/L	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<.12	<.12
Bromodichloromethane	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.12	<.12
Bromoform	ug/L	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<.14	<.14
Bromomethane	ug/L	<20.00	<4.00	<4.00	<4.00	<4.00	<4.00	<.22	<.22
Butylbenzylphthalate	ug/L	<10.0		<10.1					
Cadmium	ug/L	.6620	.2810	<.5000	.3260	<.5000	<.0351	.3020	.0770
Carbon Disulfide	ug/L	<1.000	<1.000	<1.000	<1.000	<1.000	<1.000	<.150	<.150
Carbon Tetrachloride	ug/L	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	<.24	<.24
Chlordane	ug/L	<2.00		<2.04					
Chlorobenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.19	<.19
Chlorobenzilate	ug/L	<10.0		<10.1					
Chlorodibromomethane	ug/L	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<.20	<.20
Chloroethane	ug/L	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<.15	<.15
Chloroform	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.28	<.28
Chloromethane	ug/L	<3.00	<3.00	<3.00	<3.00	<3.00	<3.00	<.31	<.31
Chloroprene	ug/L	<1		<1					
Chromium	ug/L	<20.000	<20.000	5.510	<20.000	<5.000	.542	1.020	<.729
Chrysene	ug/L	<10.0		<10.1					
cis-1,2-Dichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.13	<.13
cis-1,3-Dichloropropene	ug/L	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<.15	<.15
Cobalt	ug/L	108.0	123.0	97.7	103.0	108.0	92.9	90.4	120.0
Copper	ug/L	<20.00	<20.00	<20.00	<20.00	<2.00	<1.22	<1.22	<2.19
Cyanide	mg/L	<.01		<.01					
delta-BHC	ug/L	<.0320		<.0327					
Diallate	ug/L	<10.0		<10.1					
Dibenzo(a,h)anthracene	ug/L	<10.0		<10.1					
Dibenzofuran	ug/L	<10.0		<10.1					
Dibromomethane	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.18	<.18
Dichlorodifluoromethane	ug/L	<3.00	<3.00	<3.00	<3.00			<.20	<.20
Dieldrin	ug/L	<.0320		<.0327					
Diethyl phthalate	ug/L	<10.0		<10.1					
Dimethoate	ug/L	<10.0		<10.1					
Dimethyl phthalate	ug/L	<10.0		<10.1					
Di-n-butylphthalate	ug/L	<10.0		<10.1					
Di-n-octylphthalate	ug/L	<10.0		<20.2					
Dinoseb	ug/L	<10.0		<10.1					
Diphenylamine	ug/L	<10.0		<10.1					
Disulfoton	ug/L	<10.0		<10.1					
Endosulfan I	ug/L	<.0320		<.0327					
Endosulfan II	ug/L	<.0320		<.0327					
Endosulfan Sulfate	ug/L	<.0320		<.0327					
Endrin	ug/L	<.0320		<.0327					
Endrin Aldehyde	ug/L	<.0320		<.0327					
Ethyl Methacrylate	ug/L	<2		<2					
Ethyl Methanesulfonate	ug/L	<10.0		<10.1					
Ethylbenzene	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.21	<.21
Famphur	ug/L	<20.0		<20.2					
Fluoranthene	ug/L	<10.0		<10.1					
Fluorene	ug/L	<10.0		<10.1					
gamma-BHC (Lindane)	ug/L	<.0320		<.0327					
Heptachlor	ug/L	<.0320		<.0327					
Heptachlor Epoxide	ug/L	<.0320		<.0327					
Hexachlorobenzene	ug/L	<10.0		<10.1					
Hexachlorobutadiene	ug/L	<10.0		<10.1					
Hexachlorocyclopentadiene	ug/L	<10.0		<20.2					
Hexachloroethane	ug/L	<10.0		<10.1					
Hexachloropropene	ug/L	<10.0		<10.1					
Indeno[1,2,3-cd]pyrene	ug/L	<10.0		<10.1					
Iodomethane	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<.8	<.8
Iron	ug/L					139000	111000	100000	92700
Isobutanol	ug/L	<10000		<10000					
Isodrin	ug/L	<10.0		<10.1					
Isophorone	ug/L	<10.0		<10.1					

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

Table 9

Analytical Data Summary for MW-390

Constituents	9/25/2017	3/13/2018	10/1/2018	3/27/2019	9/23/2019	3/9/2020	9/17/2020	4/14/2021	10/26/2021
Arsenic	13.60	14.70	13.90	15.00	19.70	19.00	14.80	15.70	11.30
Barium	28.2	21.5	26.6	30.0	29.3	26.9	26.0	26.1	25.4
Benzene	<.11	<.11	<.22	<.22	<.22	<.22	<.22	<.22	<.22
Benzo[a]anthracene									
Benzo[a]pyrene									
Benzo[b]fluoranthene									
Benzo[ghi]perylene									
Benzo[k]fluoranthene									
Benzyl alcohol									
Beryllium	<.125	<.500	<.530	<.270	<1.080	<.270	<.540	<.270	<.270
beta-BHC									
Bis(2-chloroethoxy)methane									
Bis(2-chloroethyl)ether									
Bis(2-ethylhexyl)phthalate									
Bromochloromethane	<.12	<.12	<.54	<.54	<.54	<.54	<.54	<.54	<.54
Bromodichloromethane	<.12	<.12	<.39	<.39	<.39	<.39	<.39	<.39	<.39
Bromoform	<.14	<.14	<.78	<.78	<.78	<.78	<.78	<.78	<.78
Bromomethane	<.22	<.22	<1.10	<1.10	<1.10	<1.10	<1.10	<1.10	<1.10
Butylbenzylphthalate									
Cadmium	<.0441	<.1760	<.1670	<.0770	1.1200	.4670	.1080	.5250	.3080
Carbon Disulfide	.177	<.150	<.450	<.450	<.450	<.450	<.450	<.450	<.450
Carbon Tetrachloride	<.24	<.24	<.65	<.65	<.65	<.65	<.65	<.65	<.65
Chlordane									
Chlorobenzene	<.19	<.19	<.40	<.40	<.40	<.40	<.40	<.40	<.40
Chlorobenzilate									
Chlorodibromomethane	<.20	<.20	<.75	<.75	<.75	<.75	<.75	<.75	<.75
Chloroethane	<.15	<.15	<.79	<.79	<.79	<.79	<.79	<.79	<.79
Chloroform	<.28	<.28	<1.30	<1.30	<1.30	<1.30	<1.30	<1.30	<1.30
Chloromethane	<.31	<.31	<.61	<.61	<.61	<.61	<.61	<.61	<.61
Chloroprene									
Chromium	<.729	<2.920	2.060	<.980	<3.920	<1.100	<1.100	<1.100	<1.100
Chrysene									
cis-1,2-Dichloroethene	<.13	<.13	<.21	<.21	<.21	<.21	<.21	<.21	<.21
cis-1,3-Dichloropropene	<.15	<.15	<.25	<.25	<.25	<.25	<.25	<.25	<.25
Cobalt	107.0	98.2	98.9	114.0	112.0	102.0	108.0	110.0	113.0
Copper	<2.19	<8.76	1.55	<2.00	<8.00	<3.20	<1.50	<1.40	<1.40
Cyanide									
delta-BHC									
Diallate									
Dibenzo(a,h)anthracene									
Dibenzofuran									
Dibromomethane	<.18	<.18	<.33	<.33	<.33	<.33	<.33	<.33	<.33
Dichlorodifluoromethane	<.20	<.20	<.25		<.25				
Dieldrin									
Diethyl phthalate									
Dimethoate									
Dimethyl phthalate									
Di-n-butylphthalate									
Di-n-octylphthalate									
Dinoseb									
Diphenylamine									
Disulfoton									
Endosulfan I									
Endosulfan II									
Endosulfan Sulfate									
Endrin									
Endrin Aldehyde									
Ethyl Methacrylate									
Ethyl Methanesulfonate									
Ethylbenzene	<.21	<.21	<.31	<.31	<.31	<.31	<.31	<.31	<.31
Famphur									
Fluoranthene									
Fluorene									
gamma-BHC (Lindane)									
Heptachlor									
Heptachlor Epoxide									
Hexachlorobenzene									
Hexachlorobutadiene									
Hexachlorocyclopentadiene									
Hexachloroethane									
Hexachloropropene									
Indeno[1,2,3-cd]pyrene									
Iodomethane	<.8	<.8	<7.0	<7.0	<7.0	<7.0	<7.0	<7.0	<7.0
Iron	98900	91100	115000	138000	148000	119000	117000	123000	115000
Isobutanol									
Isodrin									
Isophorone									

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

Table 9

Analytical Data Summary for MW-390

Constituents	4/14/2022	9/1/2022	3/6/2023	9/29/2023
Arsenic	22.50	19.40	16.30	16.00
Barium	19.0	14.9	17.3	12.9
Benzene	<.22	<1.00	<1.00	<1.00
Benzo[a]anthracene				
Benzo[a]pyrene				
Benzo[b]fluoranthene				
Benzo[ghi]perylene				
Benzo[k]fluoranthene				
Benzyl alcohol				
Beryllium	<1.080	<4.000	<4.000	<4.000
beta-BHC				
Bis(2-chloroethoxy)methane				
Bis(2-chloroethyl)ether				
Bis(2-ethylhexyl)phthalate				
Bromochloromethane	<.54	<1.00	<1.00	<1.00
Bromodichloromethane	<.39	<1.00	<1.00	<1.00
Bromoform	<.78	<1.00	<1.00	<1.00
Bromomethane	<1.10	<1.00	<1.00	<1.00
Butylbenzylphthalate				
Cadmium	1.1900	<.8000	<.8000	<.8000
Carbon Disulfide	<.450	<1.000	<1.000	<1.000
Carbon Tetrachloride	<.65	<1.00	<1.00	<1.00
Chlordane				
Chlorobenzene	<.40	<1.00	<1.00	<1.00
Chlorobenzilate				
Chlorodibromomethane	<.75	<1.00	<1.00	<1.00
Chloroethane	<.79	<1.00	<1.00	<1.00
Chloroform	<1.30	<1.00	<1.00	<1.00
Chloromethane	<.61	<1.00	<1.00	<1.00
Chloroprene				
Chromium	<4.400	<8.000	<8.000	<8.000
Chrysene				
cis-1,2-Dichloroethene	<.21	<1.00	<1.00	<1.00
cis-1,3-Dichloropropene	<.25	<1.00	<1.00	<1.00
Cobalt	106.0	103.0	113.0	96.9
Copper	<7.20	<4.00	<4.00	<4.00
Cyanide				
delta-BHC				
Diallate				
Dibenzo(a,h)anthracene				
Dibenzofuran				
Dibromomethane	<.33	<1.00	<1.00	<1.00
Dichlorodifluoromethane				
Dieldrin				
Diethyl phthalate				
Dimethoate				
Dimethyl phthalate				
Di-n-butylphthalate				
Di-n-octylphthalate				
Dinoseb				
Diphenylamine				
Disulfoton				
Endosulfan I				
Endosulfan II				
Endosulfan Sulfate				
Endrin				
Endrin Aldehyde				
Ethyl Methacrylate				
Ethyl Methanesulfonate				
Ethylbenzene	<.31	<1.00	<1.00	<1.00
Famphur				
Fluoranthene				
Fluorene				
gamma-BHC (Lindane)				
Heptachlor				
Heptachlor Epoxide				
Hexachlorobenzene				
Hexachlorobutadiene				
Hexachlorocyclopentadiene				
Hexachloroethane				
Hexachloropropene				
Indeno[1,2,3-cd]pyrene				
Iodomethane	<7.0	<1.0	<1.0	<1.0
Iron	137000	131000	144000	132000
Isobutanol				
Isodrin				
Isophorone				

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

Table 9

Analytical Data Summary for MW-390

Constituents	Units	9/18/2012	3/27/2013	9/25/2013	4/15/2014	9/1/2015	3/22/2016	10/21/2016	3/8/2017
Isosafrole	ug/L	<10.0		<10.1					
Kepone	ug/L	<10.0		<10.1					
Lead	ug/L	<4.000	<4.000	<4.000	<4.000	.720	<.211	2.860	<.324
Mercury	ug/L	<.267		<.200					
Methacrylonitrile	ug/L	<1		<1					
Methapyrilene	ug/L	<10.0		<10.1					
Methoxychlor	ug/L	<.0320		<.0327					
Methyl Methacrylate	ug/L	<2		<2					
Methyl Methanesulfonate	ug/L	<10.0		<10.1					
Methyl Parathion	ug/L	<10.0		<10.1					
Methylene Chloride	ug/L	<5.000	<5.000	<5.000	<5.000	<5.000	<5.000	.397	<.170
Naphthalene	ug/L	<5		<5					
Nickel	ug/L	<50.0	63.8	60.3	51.0	54.5	45.4	49.7	61.3
Nitrobenzene	ug/L	<10.0		<10.1					
N-Nitrosodiethylamine	ug/L	<10.0		<10.1					
N-Nitrosodimethylamine	ug/L	<10.0		<10.1					
N-Nitrosodi-n-butylamine	ug/L	<10.0		<10.1					
N-Nitrosodi-n-propylamine	ug/L	<10.0		<10.1					
N-Nitrosodiphenylamine	ug/L	<10.0		<10.1					
N-Nitrosomethylethylamine	ug/L	<10.0		<10.1					
N-Nitrosopiperidine	ug/L	<10.0		<10.1					
N-Nitrosopyrrolidine	ug/L	<10.0		<10.1					
o,o,o-Triethylphosphorothioate	ug/L	<10.0		<10.1					
o-Toluidine	ug/L	<10.0		<10.1					
p-[Dimethylamino]azobenzene	ug/L	<10.0		<10.1					
Parathion	ug/L	<10.0		<10.1					
PCB-1016	ug/L	<.8		<.8					
PCB-1221	ug/L	<.8		<.8					
PCB-1232	ug/L	<.8		<.8					
PCB-1242	ug/L	<.8		<.8					
PCB-1248	ug/L	<.8		<.8					
PCB-1254	ug/L	<.8		<.8					
PCB-1260	ug/L	<.8		<.8					
Pentachlorobenzene	ug/L	<10.0		<10.1					
Pentachloronitrobenzene	ug/L	<10.0		<10.1					
Pentachlorophenol	ug/L	<10.0		<10.1					
pH	SU					6.20	6.03	5.88	5.81
Phenacetin	ug/L	<10.0		<10.1					
Phenanthrene	ug/L	<10.0		<10.1					
Phenol	ug/L	<10.0		<10.1					
Phorate	ug/L	<10.0		<10.1					
p-Phenylenediamine	ug/L	<10.0		<10.1					
Pronamide	ug/L	<10.0		<10.1					
Propionitrile	ug/L	<10		<10					
Pyrene	ug/L	<10.0		<10.1					
Safrole	ug/L	<10.0		<10.1					
Selenium	ug/L	<5.000	<5.000	<5.000	<5.000	<5.000	<.630	<.630	<.928
Silver	ug/L	<20.000	<20.000	<20.000	<20.000	<1.000	<.153	<.153	<.140
Styrene	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.10	<.10
Sulfate	mg/L					1530	1630	1710	2710
Sulfide	mg/L	<1.000	<1.000	<1.000	<1.000			<.180	<.180
Tetrachloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.18	<.18
Thallium	ug/L	<2.0000	<2.0000	<2.0000	<2.0000	<1.0000	<.0255	.0450	<.0644
Thionazin	ug/L	<10.0		<10.1					
Tin	ug/L	<100.000	<100.000	632.000	<100.000			<.832	<1.620
Toluene	ug/L								
Total Suspended Solids	mg/L					53.30	84.00	99.10	23.00
Toxaphene	ug/L	<2.00		<2.04					
trans-1,2-Dichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.21	<.21
trans-1,3-Dichloropropene	ug/L	<5.00	<5.00	<5.00	<5.00	<5.00	<5.00	<.22	<.22
trans-1,4-Dichloro-2-butene	ug/L	<10.00	<10.00	<10.00	<10.00	<10.00	<10.00	<.13	<.13
Trichloroethene	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.19	<.19
Trichlorofluoromethane	ug/L	<4.00	<4.00	<4.00	<4.00	<4.00	<4.00	<.17	<.17
Vanadium	ug/L	<50.000	8.910	<50.000	<50.000	<5.000	.378	.669	<.840
Vinyl Acetate	ug/L	<2.00	<2.00	<2.00	<2.00	<10.00	<10.00	<.74	<.74
Vinyl Chloride	ug/L	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<.10	<.10
Xylenes, Total	ug/L	<3.000	<3.000	<3.000	<3.000	<3.000	<3.000	.464	.566
Zinc	ug/L	94.00	207.00	200.00	27.30	48.80	<5.21	101.00	308.00

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

Table 9

Analytical Data Summary for MW-390

Constituents	9/25/2017	3/13/2018	10/1/2018	3/27/2019	9/23/2019	3/9/2020	9/17/2020	4/14/2021	10/26/2021
Isosafrole									
Kepone									
Lead	<.324	<1.300	.871	<.270	2.940	2.270	.410	1.730	2.380
Mercury									
Methacrylonitrile									
Methapyrilene									
Methoxychlor									
Methyl Methacrylate									
Methyl Methanesulfonate									
Methyl Parathion									
Methylene Chloride	<.170	.209	<1.700	<1.700	<1.700	<1.700	<1.700	<1.700	<1.700
Naphthalene									
Nickel	45.4	48.3	47.7	54.6	60.7	54.0	58.4	55.1	53.8
Nitrobenzene									
N-Nitrosodiethylamine									
N-Nitrosodimethylamine									
N-Nitrosodi-n-butylamine									
N-Nitrosodi-n-propylamine									
N-Nitrosodiphenylamine									
N-Nitrosomethylethylamine									
N-Nitrosopiperidine									
N-Nitrosopyrrolidine									
o,o,o-Triethylphosphorothioate									
o-Toluidine									
p-[Dimethylamino]azobenzene									
Parathion									
PCB-1016									
PCB-1221									
PCB-1232									
PCB-1242									
PCB-1248									
PCB-1254									
PCB-1260									
Pentachlorobenzene									
Pentachloronitrobenzene									
Pentachlorophenol									
pH	6.14	6.24	6.15	6.07	5.98	5.96	6.30	6.14	6.02
Phenacetin									
Phenanthrene									
Phenol									
Phorate									
p-Phenylenediamine									
Pronamide									
Propionitrile									
Pyrene									
Safrole									
Selenium	<.928	<3.710	<.982	<1.000	<4.000	<1.000	<1.000	<.960	<.960
Silver	.173	<.560	<.115	<.370	<1.480	<.370	<.370	<.420	<.420
Styrene	<.10	<.10	<.37	<.37	<.37	<.37	<.37	<.37	<.37
Sulfate	1710	1900	1790	2290	1770	1810	2010	1910	1740
Sulfide	1.940	<.231	<.231	<.231	.383	<.231	<10.000	16.200	<.231
Tetrachloroethene	<.18	<.18	<.48	<.48	<.48	<.48	<.48	<.48	<.48
Thallium	<.0644	<.2580	<.5700	<.2700	<1.0800	<.2600	<.2600	1.1700	<.2600
Thionazin									
Tin	<1.620	<6.480	<1.300	<1.800	<1.800				
Toluene			<.43	<.43	<.43	<.43	<.43	<.43	<.43
Total Suspended Solids	23.30	34.30	34.10	24.20	76.00	66.80	68.50	8.67	84.00
Toxaphene									
trans-1,2-Dichloroethene	<.21	<.21	<.27	<.27	<.27	<.27	<.27	<.27	<.27
trans-1,3-Dichloropropene	<.22	<.22	<.56	<.56	<.56	<.56	<.56	<.56	<.56
trans-1,4-Dichloro-2-butene	<.13	<.13	<1.10	<1.10	<1.10	<1.10	<1.10	<1.10	<1.10
Trichloroethene	<.19	<.19	<.43	<.43	<.43	<.43	<.43	<.43	<.43
Trichlorofluoromethane	<.17	<.17	<.38	<.38	<.38	<.38	<.38	<.38	<.38
Vanadium	<.840	<3.360	<2.150	<.820	<3.280	<.820	<.850	<1.100	<1.100
Vinyl Acetate	<.74	<.74	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50	<2.50
Vinyl Chloride	<.10	<.10	<.60	<.60	<.18	<.18	<.18	<.18	<.18
Xylenes, Total	<.130	<.130	<.400	1.050	<.400	<.400	<.400	<.400	<.400
Zinc	65.00	100.00	85.60	75.70	293.00	118.00	94.30	192.00	56.20

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

Table 9

Analytical Data Summary for MW-390

Constituents	4/14/2022	9/1/2022	3/6/2023	9/29/2023
Isosafrole				
Kepone				
Lead	4.780	<4.000	<4.000	<4.000
Mercury				
Methacrylonitrile				
Methapyrilene				
Methoxychlor				
Methyl Methacrylate				
Methyl Methanesulfonate				
Methyl Parathion				
Methylene Chloride	<1.700	<5.000	<5.000	<5.000
Naphthalene				
Nickel	56.0	53.5	62.0	50.0
Nitrobenzene				
N-Nitrosodiethylamine				
N-Nitrosodimethylamine				
N-Nitrosodi-n-butylamine				
N-Nitrosodi-n-propylamine				
N-Nitrosodiphenylamine				
N-Nitrosomethylethylamine				
N-Nitrosopiperidine				
N-Nitrosopyrrolidine				
o,o,o-Triethylphosphorothioate				
o-Toluidine				
p-[Dimethylamino]azobenzene				
Parathion				
PCB-1016				
PCB-1221				
PCB-1232				
PCB-1242				
PCB-1248				
PCB-1254				
PCB-1260				
Pentachlorobenzene				
Pentachloronitrobenzene				
Pentachlorophenol				
pH	6.17	6.00	6.00	5.90
Phenacetin				
Phenanthrene				
Phenol				
Phorate				
p-Phenylenediamine				
Pronamide				
Propionitrile				
Pyrene				
Safrole				
Selenium	<3.840	<4.000	<4.000	<4.000
Silver	<1.960	<4.000	<4.000	<4.000
Styrene	<.37	<1.00	<1.00	<1.00
Sulfate	2270	2010	1910	1940
Sulfide	<.231	<.300		
Tetrachloroethene	<.48	<1.00	<1.00	<1.00
Thallium	<1.0400	<2.0000	<2.0000	<2.0000
Thionazin				
Tin				
Toluene	<.43	<1.00	<1.00	<1.00
Total Suspended Solids	154.00			
Toxaphene				
trans-1,2-Dichloroethene	<.27	<1.00	<1.00	<1.00
trans-1,3-Dichloropropene	<.56	<1.00	<1.00	<1.00
trans-1,4-Dichloro-2-butene	<1.10	<5.00	<5.00	<5.00
Trichloroethene	<.43	<1.00	<1.00	<1.00
Trichlorofluoromethane	<.38	<1.00	<1.00	<1.00
Vanadium	<4.400	<20.000	<20.000	<20.000
Vinyl Acetate	<2.50	<5.00	<5.00	<5.00
Vinyl Chloride	<.18	<1.00	<1.00	<1.00
Xylenes, Total	<.400	<2.000	<2.000	<2.000
Zinc	487.00	107.00	115.00	122.00

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

Table 9

Analytical Data Summary for MW-601

Constituents	Units	3/9/2020	9/15/2020	4/16/2021	10/28/2021	4/13/2022	9/1/2022	3/6/2023	9/29/2023
1,1,1,2-Tetrachloroethane	ug/L	<.38	<.38	<.38	<.38	<.38	<1.00	<1.00	<1.00
1,1,1-Trichloroethane	ug/L	<.19	<.19	<.19	<.19	<.19	<1.00	<1.00	<1.00
1,1,2,2-Tetrachloroethane	ug/L	<.47	<.47	<.47	<.47	<.47	<1.00	<1.00	<1.00
1,1,2-Trichloroethane	ug/L	<.45	<.45	<.45	<.45	<.45	<1.00	<1.00	<1.00
1,1-Dichloroethane	ug/L	<.22	<.22	<.22	<.22	<.22	<1.00	<1.00	<1.00
1,1-Dichloroethene	ug/L	<.56	<.56	<.56	<.56	<.56	<1.00	<1.00	<1.00
1,2,3-Trichloropropane	ug/L	<.59	<.59	<.59	<.59	<.59	<1.00	<1.00	<1.00
1,2-Dibromo-3-chloropropane	ug/L	<1.2	<1.2	<1.2	<1.2	<1.2	<5.0	<5.0	<5.0
1,2-Dibromoethane	ug/L	<.34	<.34	<.34	<.34	<.34	<1.00	<1.00	<1.00
1,2-Dichlorobenzene	ug/L	<.37	<.37	<.37	<.37	<.37	<1.00	<1.00	<1.00
1,2-Dichloroethane	ug/L	<.39	<.39	<.39	<.39	<.39	<1.00	<1.00	<1.00
1,2-Dichloropropane	ug/L	<.27	<.27	<.27	<.27	<.27	<1.00	<1.00	<1.00
1,4-Dichlorobenzene	ug/L	<.23	<.23	<.23	<.23	<.23	<1.00	<1.00	<1.00
2-Butanone	ug/L	<2.1	<2.1	<2.1	<2.1	<2.1	<10.0	<10.0	<10.0
2-Hexanone	ug/L	<2	<2	<2	<2	<2	<5	<5	<5
4-Methyl-2-pentanone	ug/L	<2.1	<2.1	<2.1	<2.1	<2.1	<5.0	<5.0	<5.0
Acetone	ug/L	<3.1	<3.1	<3.1	<3.1	<3.1	<10.0	<10.0	<10.0
Acrylonitrile	ug/L	<2.2	<2.2	<2.2	<2.2	<2.2	<5.0	<5.0	<5.0
Alkalinity as CaCO3	mg/L	114.0	108.0	69.3	163.0	155.0		99.0	155.0
Aluminum	ug/L	<30.0	40.9	253.0	191.0	141.0		<50.0	116.0
Antimony	ug/L	<.58	<.51	<1.10	<4.40	<2.76	<2.00	<2.00	<2.00
Arsenic	ug/L	<.88	<.88	<.75	3.82	<3.00	<4.00	<4.00	<4.00
Barium	ug/L	10.90	30.90	13.50	8.82	14.00	17.00	12.60	18.10
Benzene	ug/L	<.22	<.22	<.22	<.22	<.22	<1.00	<1.00	<1.00
Beryllium	ug/L	<.27	<.27	<.27	<1.08	<1.08	<4.00	<4.00	<4.00
Bromochloromethane	ug/L	<.54	<.54	<.54	<.54	<.54	<1.00	<1.00	<1.00
Bromodichloromethane	ug/L	<.39	<.39	<.39	<.39	<.39	<1.00	<1.00	<1.00
Bromoform	ug/L	<.78	<.78	<.78	<.78	<.78	<1.00	<1.00	<1.00
Bromomethane	ug/L	<1.1	<1.1	<1.1	<1.1	<1.1	<1.0	<1.0	<1.0
Cadmium	ug/L	.089	.213	.098	<.204	<.220	<.800	<.800	<.800
Carbon Disulfide	ug/L	<.45	<.45	<.45	<.45	<.45	<1.00	<1.00	<1.00
Carbon Tetrachloride	ug/L	<.65	<.65	<.65	<.65	<.65	<1.00	<1.00	<1.00
Chlorobenzene	ug/L	<.4	<.4	<.4	<.4	<.4	<1.0	<1.0	<1.0
Chlorodibromomethane	ug/L	<.75	<.75	<.75	<.75	<.75	<1.00	<1.00	<1.00
Chloroethane	ug/L	<.79	<.79	<.79	<.79	<.79	<1.00	<1.00	<1.00
Chloroform	ug/L	<1.3	<1.3	<1.3	<1.3	<1.3	<1.0	<1.0	<1.0
Chloromethane	ug/L	<.61	<.61	<.61	<.61	<.61	<1.00	<1.00	<1.00
Chromium	ug/L	<1.1	<1.1	<1.1	<4.4	<4.4	<8.0	<8.0	<8.0
cis-1,2-Dichloroethene	ug/L	<.21	<.21	<.21	<.21	<.21	<1.00	<1.00	<1.00
cis-1,3-Dichloropropene	ug/L	<.25	<.25	<.25	<.25	<.25	<1.00	<1.00	<1.00
Cobalt	ug/L	252.0	238.0	310.0	48.8	113.0	83.8	.8	183.0
Copper	ug/L	<3.2	<1.5	<1.4	<5.6	<7.2	<4.0	<4.0	<4.0
Dibromomethane	ug/L	<.33	<.33	<.33	<.33	<.33	<1.00	<1.00	<1.00
Ethylbenzene	ug/L	<.31	<.31	<.31	<.31	<.31	<1.00	<1.00	<1.00
Iodomethane	ug/L	<7	<7	<7	<7	<7	<1	<1	<1
Iron	ug/L	65400	57300	87300	309000	23200		380	60000
Lead	ug/L	<.270	.179	.357	<.840	<.960	<4.000	<4.000	<4.000
Methylene Chloride	ug/L	<1.7	<1.7	<1.7	<1.7	<1.7	<5.0	<5.0	<5.0
Nickel	ug/L	387.0	359.0	464.0	84.6	160.0	116.0	<4.0	243.0
pH	SU	5.88	5.96	6.06	5.72	6.24		6.90	6.20
Selenium	ug/L	<1.00	<1.00	<.96	<3.84	<3.84	<4.00	<4.00	<4.00
Silver	ug/L	<.37	<.37	<.42	<1.68	<1.96	<4.00	<4.00	<4.00
Styrene	ug/L	<.37	<.37	<.37	<.37	<.37	<1.00	<1.00	<1.00
Sulfate	mg/L	2570	2230	2540	2120	2270		672	2260
Tetrachloroethene	ug/L	<.48	<.48	<.48	<.48	<.48	<1.00	<1.00	<1.00
Thallium	ug/L	<.26	<.26	<.26	<1.04	<1.04	<2.00	<2.00	<2.00
Toluene	ug/L	<.43	<.43	<.43	<.43	<.43	<1.00	<1.00	<1.00
Total Suspended Solids	mg/L	3.63	17.10	19.10	23.30	32.80			
trans-1,2-Dichloroethene	ug/L	<.27	<.27	<.27	<.27	<.27	<1.00	<1.00	<1.00
trans-1,3-Dichloropropene	ug/L	<.56	<.56	<.56	<.56	<.56	<1.00	<1.00	<1.00
trans-1,4-Dichloro-2-butene	ug/L	<1.1	<1.1	<1.1	<1.1	<1.1	<5.0	<5.0	<5.0
Trichloroethene	ug/L	<.43	<.43	<.43	<.43	<.43	<1.00	<1.00	<1.00
Trichlorofluoromethane	ug/L	<.38	<.38	<.38	<.38	<.38	<1.00	<1.00	<1.00
Vanadium	ug/L	<.82	<.85	<1.10	<4.40	<4.40	<20.00	<20.00	<20.00
Vinyl Acetate	ug/L	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	<5.0	<5.0
Vinyl Chloride	ug/L	<.18	<.18	<.18	<.18	<.18	<1.00	<1.00	<1.00
Xylenes, Total	ug/L	<.4	<.4	<.4	<.4	<.4	<2.0	<2.0	<2.0
Zinc	ug/L	129.0	122.0	164.0	381.0	67.9	39.7	<20.0	70.4

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

Table 9

Analytical Data Summary for MW-602

Constituents	Units	3/9/2020	9/17/2020	4/15/2021	10/28/2021	4/13/2022	9/1/2022	3/6/2023	9/29/2023
1,1,1,2-Tetrachloroethane	ug/L	<.38	<.38	<.38	<.38	<.38	<1.00	<1.00	<1.00
1,1,1-Trichloroethane	ug/L	<.19	<.19	<.19	<.19	<.19	<1.00	<1.00	<1.00
1,1,2,2-Tetrachloroethane	ug/L	<.47	<.47	<.47	<.47	<.47	<1.00	<1.00	<1.00
1,1,2-Trichloroethane	ug/L	<.45	<.45	<.45	<.45	<.45	<1.00	<1.00	<1.00
1,1-Dichloroethane	ug/L	<.22	<.22	<.22	<.22	<.22	<1.00	<1.00	<1.00
1,1-Dichloroethene	ug/L	<.56	<.56	<.56	<.56	<.56	<1.00	<1.00	<1.00
1,2,3-Trichloropropane	ug/L	<.59	<.59	<.59	<.59	<.59	<1.00	<1.00	<1.00
1,2-Dibromo-3-chloropropane	ug/L	<1.2	<1.2	<1.2	<1.2	<1.2	<5.0	<5.0	<5.0
1,2-Dibromoethane	ug/L	<.34	<.34	<.34	<.34	<.34	<1.00	<1.00	<1.00
1,2-Dichlorobenzene	ug/L	<.37	<.37	<.37	<.37	<.37	<1.00	<1.00	<1.00
1,2-Dichloroethane	ug/L	<.39	<.39	<.39	<.39	<.39	<1.00	<1.00	<1.00
1,2-Dichloropropane	ug/L	<.27	<.27	<.27	<.27	<.27	<1.00	<1.00	<1.00
1,4-Dichlorobenzene	ug/L	<.23	<.23	<.23	<.23	<.23	<1.00	<1.00	<1.00
2-Butanone	ug/L	<2.1	<2.1	<2.1	<2.1	<2.1	<10.0	<10.0	<10.0
2-Hexanone	ug/L	<2	<2	<2	<2	<2	<5	<5	<5
4-Methyl-2-pentanone	ug/L	<2.1	<2.1	<2.1	<2.1	<2.1	<5.0	<5.0	<5.0
Acetone	ug/L	<3.1	<3.1	<3.1	<3.1	<3.1	<10.0	<10.0	<10.0
Acrylonitrile	ug/L	<2.2	<2.2	<2.2	<2.2	<2.2	<5.0	<5.0	<5.0
Alkalinity as CaCO3	mg/L	85.5	108.0	24.8	<4.6	155.0		85.0	94.0
Aluminum	ug/L	34.9	22.6	28.2	31.7	77.9		<50.0	182.0
Antimony	ug/L	<.58	<.51	<1.10	<1.10	<2.76	<2.00	<2.00	<2.00
Arsenic	ug/L	1.73	1.63	2.16	1.69	<3.00	<4.00	<4.00	<4.00
Barium	ug/L	12.7	10.4	11.4	11.4	12.0	12.6	10.5	12.4
Benzene	ug/L	<.22	<.22	<.22	<.22	<.22	<1.00	<1.00	<1.00
Beryllium	ug/L	<.27	<.54	<.27	<.27	<1.08	<4.00	<4.00	<4.00
Bromochloromethane	ug/L	<.54	<.54	<.54	<.54	<.54	<1.00	<1.00	<1.00
Bromodichloromethane	ug/L	<.39	<.39	<.39	<.39	<.39	<1.00	<1.00	<1.00
Bromoform	ug/L	<.78	<.78	<.78	<.78	<.78	<1.00	<1.00	<1.00
Bromomethane	ug/L	<1.1	<1.1	<1.1	<1.1	<1.1	<1.0	<1.0	<1.0
Cadmium	ug/L	.089	.112	.109	.190	<.220	<.800	<.800	<.800
Carbon Disulfide	ug/L	<.45	<.45	<.45	<.45	<.45	<1.00	<1.00	<1.00
Carbon Tetrachloride	ug/L	<.65	<.65	<.65	<.65	<.65	<1.00	<1.00	<1.00
Chlorobenzene	ug/L	<.4	<.4	<.4	<.4	<.4	<1.0	<1.0	<1.0
Chlorodibromomethane	ug/L	<.75	<.75	<.75	<.75	<.75	<1.00	<1.00	<1.00
Chloroethane	ug/L	<.79	<.79	<.79	<.79	<.79	<1.00	<1.00	<1.00
Chloroform	ug/L	<1.3	<1.3	<1.3	<1.3	<1.3	<1.0	<1.0	<1.0
Chloromethane	ug/L	<.61	<.61	<.61	<.61	<.61	<1.00	<1.00	<1.00
Chromium	ug/L	<1.1	<1.1	<1.1	<1.1	<4.4	<8.0	<8.0	<8.0
cis-1,2-Dichloroethene	ug/L	<.21	<.21	<.21	<.21	<.21	<1.00	<1.00	<1.00
cis-1,3-Dichloropropene	ug/L	<.25	<.25	<.25	<.25	<.25	<1.00	<1.00	<1.00
Cobalt	ug/L	168	216	236	205	198	247	194	203
Copper	ug/L	<3.20	<1.50	2.41	<1.40	<7.20	<4.00	<4.00	<4.00
Dibromomethane	ug/L	<.33	<.33	<.33	<.33	<.33	<1.00	<1.00	<1.00
Ethylbenzene	ug/L	<.31	<.31	<.31	<.31	<.31	<1.00	<1.00	<1.00
Iodomethane	ug/L	<7	<7	<7	<7	<7	<1	<1	<1
Iron	ug/L	88900	101000	110000	70800	88600		100000	51800
Lead	ug/L	<.270	<.110	<.210	.676	<.960	<4.000	<4.000	<4.000
Methylene Chloride	ug/L	<1.7	<1.7	<1.7	<1.7	<1.7	<5.0	<5.0	<5.0
Nickel	ug/L	242	324	345	296	253	356	270	289
pH	SU	5.94	5.89	5.93	5.62	5.92		5.60	5.60
Selenium	ug/L	<1.00	<1.00	<.96	<.96	<3.84	<4.00	<4.00	<4.00
Silver	ug/L	<.37	<.37	<.42	<.42	<1.96	<4.00	<4.00	<4.00
Styrene	ug/L	<.37	<.37	<.37	<.37	<.37	<1.00	<1.00	<1.00
Sulfate	mg/L	1490	1730	1720	1690	2050		1900	1870
Tetrachloroethene	ug/L	<.48	<.48	<.48	<.48	<.48	<1.00	<1.00	<1.00
Thallium	ug/L	<.26	<.26	<.26	<.26	<1.04	<2.00	<2.00	<2.00
Toluene	ug/L	<.43	<.43	<.43	<.43	<.43	<1.00	<1.00	<1.00
Total Suspended Solids	mg/L	17.50	5.88	37.60	32.30	58.00			
trans-1,2-Dichloroethene	ug/L	<.27	<.27	<.27	<.27	<.27	<1.00	<1.00	<1.00
trans-1,3-Dichloropropene	ug/L	<.56	<.56	<.56	<.56	<.56	<1.00	<1.00	<1.00
trans-1,4-Dichloro-2-butene	ug/L	<1.1	<1.1	<1.1	<1.1	<1.1	<5.0	<5.0	<5.0
Trichloroethene	ug/L	<.43	<.43	<.43	<.43	<.43	<1.00	<1.00	<1.00
Trichlorofluoromethane	ug/L	<.38	<.38	<.38	<.38	<.38	<1.00	<1.00	<1.00
Vanadium	ug/L	<.82	<.85	<1.10	<1.10	<4.40	<20.00	<20.00	<20.00
Vinyl Acetate	ug/L	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	<5.0	<5.0
Vinyl Chloride	ug/L	<.18	<.18	<.18	<.18	<.18	<1.00	<1.00	<1.00
Xylenes, Total	ug/L	<.4	<.4	<.4	<.4	<.4	<2.0	<2.0	<2.0
Zinc	ug/L	104	157	166	136	107	158	102	120

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

Table 9

Analytical Data Summary for MW-603

Constituents	Units	3/10/2020	9/17/2020	4/14/2021	10/26/2021	4/14/2022	9/1/2022	3/6/2023	9/29/2023
1,1,1,2-Tetrachloroethane	ug/L	<.38	<.38	<.38	<.38	<.38	<1.00	<1.00	<1.00
1,1,1-Trichloroethane	ug/L	<.19	<.19	<.19	<.19	<.19	<1.00	<1.00	<1.00
1,1,2,2-Tetrachloroethane	ug/L	<.47	<.47	<.47	<.47	<.47	<1.00	<1.00	<1.00
1,1,2-Trichloroethane	ug/L	<.45	<.45	<.45	<.45	<.45	<1.00	<1.00	<1.00
1,1-Dichloroethane	ug/L	<.22	<.22	<.22	<.22	<.22	<1.00	<1.00	<1.00
1,1-Dichloroethene	ug/L	<.56	<.56	<.56	<.56	<.56	<1.00	<1.00	<1.00
1,2,3-Trichloropropane	ug/L	<.59	<.59	<.59	<.59	<.59	<1.00	<1.00	<1.00
1,2-Dibromo-3-chloropropane	ug/L	<1.2	<1.2	<1.2	<1.2	<1.2	<5.0	<5.0	<5.0
1,2-Dibromoethane	ug/L	<.34	<.34	<.34	<.34	<.34	<1.00	<1.00	<1.00
1,2-Dichlorobenzene	ug/L	<.37	<.37	<.37	<.37	<.37	<1.00	<1.00	<1.00
1,2-Dichloroethane	ug/L	<.39	<.39	<.39	<.39	<.39	<1.00	<1.00	<1.00
1,2-Dichloropropane	ug/L	<.27	<.27	<.27	<.27	<.27	<1.00	<1.00	<1.00
1,4-Dichlorobenzene	ug/L	<.23	<.23	<.23	<.23	<.23	<1.00	<1.00	<1.00
2-Butanone	ug/L	<2.1	<2.1	<2.1	<2.1	<2.1	<10.0	<10.0	<10.0
2-Hexanone	ug/L	<2	<2	<2	<2	<2	<5	<5	<5
4-Methyl-2-pentanone	ug/L	<2.1	<2.1	<2.1	<2.1	<2.1	<5.0	<5.0	<5.0
Acetone	ug/L	<3.1	<3.1	<3.1	<3.1	<3.1	<10.0	<10.0	<10.0
Acrylonitrile	ug/L	<2.2	<2.2	<2.2	<2.2	<2.2	<5.0	<5.0	<5.0
Alkalinity as CaCO3	mg/L	475	497	455	464	451		361	410
Aluminum	ug/L	630.0	29.1	15.1	71.0	94.4		128.0	128.0
Antimony	ug/L	<.58	<.51	<1.10	<1.10	<2.76	<2.00	<2.00	<2.00
Arsenic	ug/L	4.24	6.53	6.47	5.35	4.55	<4.00	5.20	4.90
Barium	ug/L	42.8	26.8	41.3	31.4	23.8	20.8	34.6	22.5
Benzene	ug/L	.312	<.220	<.220	<.220	<.220	<1.000	<1.000	<1.000
Beryllium	ug/L	<.27	<.27	<.27	<.27	<1.08	<4.00	<4.00	<4.00
Bromochloromethane	ug/L	<.54	<.54	<.54	<.54	<.54	<1.00	<1.00	<1.00
Bromodichloromethane	ug/L	<.39	<.39	<.39	<.39	<.39	<1.00	<1.00	<1.00
Bromoform	ug/L	<.78	<.78	<.78	<.78	<.78	<1.00	<1.00	<1.00
Bromomethane	ug/L	<1.1	<1.1	<1.1	<1.1	<1.1	<1.0	<1.0	<1.0
Cadmium	ug/L	.070	<.049	<.051	.112	<.220	<.800	<.800	<.800
Carbon Disulfide	ug/L	<.45	<.45	<.45	<.45	<.45	<1.00	<1.00	<1.00
Carbon Tetrachloride	ug/L	<.65	<.65	<.65	<.65	<.65	<1.00	<1.00	<1.00
Chlorobenzene	ug/L	<.4	<.4	<.4	<.4	<.4	<1.0	<1.0	<1.0
Chlorodibromomethane	ug/L	<.75	<.75	<.75	<.75	<.75	<1.00	<1.00	<1.00
Chloroethane	ug/L	<.79	<.79	<.79	<.79	<.79	<1.00	<1.00	<1.00
Chloroform	ug/L	<1.3	<1.3	<1.3	<1.3	<1.3	<1.0	<1.0	<1.0
Chloromethane	ug/L	<.61	<.61	<.61	<.61	<.61	<1.00	<1.00	<1.00
Chromium	ug/L	1.35	<1.10	<1.10	<1.10	<4.40	<8.00	<8.00	<8.00
cis-1,2-Dichloroethene	ug/L	<.21	<.21	<.21	<.21	<.21	<1.00	<1.00	<1.00
cis-1,3-Dichloropropene	ug/L	<.25	<.25	<.25	<.25	<.25	<1.00	<1.00	<1.00
Cobalt	ug/L	24.6	50.4	33.6	26.1	34.9	55.9	19.7	12.5
Copper	ug/L	<3.2	<1.5	<1.4	<1.4	<7.2	<4.0	<4.0	<4.0
Dibromomethane	ug/L	<.33	<.33	<.33	<.33	<.33	<1.00	<1.00	<1.00
Ethylbenzene	ug/L	<.31	<.31	<.31	<.31	<.31	<1.00	<1.00	<1.00
Iodomethane	ug/L	<7	<7	<7	<7	<7	<1	<1	<1
Iron	ug/L	34000	41000	62500	53300	48200		43700	49800
Lead	ug/L	2.360	<.110	<.210	.704	<.960	<4.000	<4.000	<4.000
Methylene Chloride	ug/L	<1.7	<1.7	<1.7	<1.7	<1.7	<5.0	<5.0	<5.0
Nickel	ug/L	11.00	16.90	8.45	18.50	21.10	34.80	9.50	5.20
pH	SU	6.42	6.41	6.55	6.46	6.61		6.50	6.40
Selenium	ug/L	<1.00	<1.00	<.96	<.96	<3.84	<4.00	<4.00	<4.00
Silver	ug/L	<.37	<.37	<.42	<.42	<1.96	<4.00	<4.00	<4.00
Styrene	ug/L	<.37	<.37	<.37	<.37	<.37	<1.00	<1.00	<1.00
Sulfate	mg/L	1160	1330	1530	1680	1680		2170	2300
Tetrachloroethene	ug/L	<.48	<.48	<.48	<.48	<.48	<1.00	<1.00	<1.00
Thallium	ug/L	<.26	<.26	<.26	<.26	<1.04	<2.00	<2.00	<2.00
Toluene	ug/L	<.43	<.43	<.43	<.43	<.43	<1.00	<1.00	<1.00
Total Suspended Solids	mg/L	118.0	25.1	39.8	56.0	62.0			
trans-1,2-Dichloroethene	ug/L	<.27	<.27	<.27	<.27	<.27	<1.00	<1.00	<1.00
trans-1,3-Dichloropropene	ug/L	<.56	<.56	<.56	<.56	<.56	<1.00	<1.00	<1.00
trans-1,4-Dichloro-2-butene	ug/L	<1.1	<1.1	<1.1	<1.1	<1.1	<5.0	<5.0	<5.0
Trichloroethene	ug/L	<.43	<.43	<.43	<.43	<.43	<1.00	<1.00	<1.00
Trichlorofluoromethane	ug/L	<.38	<.38	<.38	<.38	<.38	<1.00	<1.00	<1.00
Vanadium	ug/L	2.18	<.85	<1.10	<1.10	<4.40	<20.00	<20.00	<20.00
Vinyl Acetate	ug/L	<2.5	<2.5	<2.5	<2.5	<2.5	<5.0	<5.0	<5.0
Vinyl Chloride	ug/L	<.18	<.18	<.18	<.18	<.18	<1.00	<1.00	<1.00
Xylenes, Total	ug/L	<.4	<.4	<.4	<.4	<.4	<2.0	<2.0	<2.0
Zinc	ug/L	12.3	<10.0	<10.0	10.4	<40.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for SW-1

Constituents	Units	9/25/2014	3/11/2015	9/2/2015	3/23/2016	10/20/2016	3/9/2017	9/27/2017	3/14/2018	10/1/2018
Alkalinity as CaCO3	mg/L	124.00	103.00	98.00	165.00	4.44	20.60	<1.60	119.00	124.00
Aluminum	ug/L	447.0	1060.0	9510.0	496.0	<20.8	127.0	260.0	<207.0	145.0
Antimony	ug/L									
Arsenic	ug/L									
Barium	ug/L									
Beryllium	ug/L									
Cadmium	ug/L									
Chromium	ug/L									
Cobalt	ug/L									
Copper	ug/L									
Iron	ug/L	5850.0	2530.0	15500.0	1410.0	68.5	275.0	534.0	632.0	5030.0
Lead	ug/L									
Nickel	ug/L									
pH	SU	6.83	6.58	7.22	7.71	6.42	6.78	5.57	7.23	7.29
Selenium	ug/L									
Silver	ug/L									
Sulfate	mg/L	2940	1810	2910	3010	2470	536	416	2470	3020
Thallium	ug/L									
Total Suspended Solids	mg/L	46.5	23.3	314.0	8.8					
Vanadium	ug/L									
Zinc	ug/L									

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

Table 9

Analytical Data Summary for SW-1

Constituents	3/28/2019	9/23/2019	3/9/2020	9/16/2020	4/15/2021	10/27/2021	4/13/2022	3/6/2023
Alkalinity as CaCO3	191.00	34.70	57.00	64.80	198.00	136.00	144.00	85.00
Aluminum	813.0	185.0	268.0	77.6	67.0	224.0	<68.0	57.0
Antimony							<2.76	
Arsenic							<3	
Barium							12.3	
Beryllium							<1.08	
Cadmium							<.22	
Chromium							<4.4	
Cobalt							8.59	
Copper							<7.2	
Iron	14800.0	909.0	1790.0	739.0	1140.0	407.0	<144.0	208.0
Lead							<.96	
Nickel							17.3	
pH	7.21	7.12	6.63	7.59	8.14	7.47	8.04	7.10
Selenium							<3.84	
Silver							<1.96	
Sulfate	2970	823	1390	876	2090	221	1190	652
Thallium							<1.04	
Total Suspended Solids								
Vanadium							<4.4	
Zinc							<40	

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

Table 9

Analytical Data Summary for SW-2 [East Pond]

Constituents	Units	3/11/2015	3/23/2016	3/9/2017
Alkalinity as CaCO3	mg/L	<5	237	211
Aluminum	ug/L	9210.0	<67.6	128.0
Iron	ug/L	17100	3020	699
pH	SU	4.08	7.25	7.76
Sulfate	mg/L	1810	1490	1590
Total Suspended Solids	mg/L	153	8	

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

Table 10 – Historic SSI and SSL **- NOT USED**

Table 10
Historic SSI & SSL
Annual Water Quality Report
SCISWA Sanitary Landfill
Permit No. 63-SDP-02-77P

NOT REQUIRED

Table 11 – Corrective Action Trend Analysis **- NOT USED**

Table 11
Corrective Action Trend Analysis
Annual Water Quality Report
SCISWA Sanitary Landfill
Permit No. 63-SDP-02-77P

NOT REQUIRED

Table 12 – Leachate Levels

Table 12
Leachate Level Monitoring
Annual Water Quality Report
SCISWA Sanitary Landfill
Permit No. 63-SDP-02-77P

2023 Monthly Leachate Monitoring

		January			February			March			April			May			June		
		Test Date	1/27/2023		Test Date	2/11/2023		Test Date	3/23/2023		Test Date	4/26/2023		Test Date	5/22/2023		Test Date	6/5/2023	
Location	Units	TD	DTW	Thickness	TD	DTW	Thickness	TD	DTW	Thickness	TD	DTW	Thickness	TD	DTW	Thickness	TD	DTW	Thickness
LW-477	feet	40.5	28.7	11.8	40.5	28.7	11.9	40.5	28.7	11.8	40.5	28.5	12.0	40.5	28.3	12.2	40.5	28.3	12.2
LW-478R	feet	86.9	86.7	0.2	86.9	86.8	0.1	86.9	86.9	0.0	86.9	86.9	0.0	86.9	86.4	0.5	86.9	86.4	0.5
LW-479	feet	36.9	24.9	12.0	35.9	24.8	11.2	36.9	25.1	11.8	36.9	25.1	11.8	26.9	25.1	1.8	3.9	25.2	-21.3
LW-471R	feet	20.1	20.1	0.0	20.1	20.1	0.0	20.1	20.1	0.0	20.1	20.1	0.0	20.1	20.1	0.0	20.1	20.1	0.0
LHPZ-N3	feet	9.9	9.6	0.3	9.9	9.9	0.0	9.9	9.9	0.0	9.9	9.9	0.0	9.9	9.9	0.0	9.9	9.9	0.0
LHPZ-4A	Inches	1.4	1.4	1.2	1.4	1.4	1.2	1.4	1.4	1.2	1.4	1.4	1.2	1.4	1.4	1.2	1.4	1.4	1.4

		July			August			September			October			November			December		
		Test Date	7/28/2023		Test Date	8/25/2023		Test Date	9/25/2023		Test Date	10/23/2023		Test Date	11/30/2023		Test Date	12/21/2023	
Location	Units	TD	DTW	Thickness	TD	DTW	Thickness	TD	DTW	Thickness	TD	DTW	Thickness	TD	DTW	Thickness	TD	DTW	Thickness
LW-477	feet	40.5	28.4	12.1	40.5	28.6	11.9	40.5	29.0	11.5	40.5	29.1	11.4	40.5	28.4	12.2	40.5	28.9	11.6
LW-478R	feet	86.9	86.4	0.5	86.9	86.9	0.0	86.9	86.9	0.0	86.9	86.9	0.0	86.9	86.9	0.0	86.9	86.9	0.0
LW-479	feet	36.9	25.2	11.7	36.9	25.3	11.6	36.9	25.4	11.5	36.9	25.4	11.5	36.9	25.3	11.6	36.9	25.9	11.0
LW-471R	feet	20.1	20.1	0.0	20.1	20.1	0.0	20.1	20.1	0.0	20.1	20.1	0.0	20.1	20.1	0.0	20.1	20.1	0.0
LHPZ-N3	feet	9.9	9.9	0.0	9.9	9.9	0.0	9.9	9.9	0.0	9.9	9.9	0.0	9.9	9.9	0.0	9.9	9.9	0.0
LHPZ-4A	Inches	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4

TD = Total Depth
DTW = Depth to water
Thickness = Liquid Head at Point
Inches in Bottom = Inches of liquid above the transducer set at the bottom of the LHPZ

Table 13 – Gas Monitoring Summary

Table 13
Landfill Gas Monitoring
Annual Water Quality Report
SCISWA Sanitary Landfill
Permit No. 63-SDP-02-77P

Landfill Gas Monitoring 2023

	1st Quarter Results				2nd Quarter Results				3rd Quarter Results				4th Quarter Results			
	Date	Tuesday, March 28, 2023			Date	Thursday, June 8, 2023			Date	Friday, September 1, 2023			Date	Wednesday, December 20, 2023		
	Temp	34°-56°			Temp	66°-74°			Temp	61°-81°			Temp	43°-48°		
	Wind	6-8 mph from SE			Wind	8 mph from NW to 7mph from SSE			Wind	5 mph from SE to 8 mph from S			Wind	6 mph from S to 3 mph from (SSE)		
	Precip	None			Precip	Slight			Precip	None			Precip	None		
	Comments				Comments	Cloudy w/ smoke haze			Comments	No water at east or north outfall			Comments	GP4 top needs replaced		
Monitoring Point	CH4 - NOTE: (LEL OR VOL) SPECIFY UNLESS ZERO	02 (VOL)	H2S (PPM)	CO (PPM)	CH4 - NOTE: (LEL OR VOL) SPECIFY UNLESS ZERO	02 (VOL)	H2S (PPM)	CO (PPM)	CH4 - NOTE: (LEL OR VOL) SPECIFY UNLESS ZERO	02 (VOL)	H2S (PPM)	CO (PPM)	CH4 - NOTE: (LEL OR VOL) SPECIFY UNLESS ZERO	02 (VOL)	H2S (PPM)	CO (PPM)
Scale House	0.0%	22.5%	0.0	0.0	0.0%	20.9%	0.0	0.0	0.0%	20.9%	0.0	0.0	0.0%	20.9%	0.0	0.0
Monitoring well 368	0.0%	22.5%	0.0	0.0	0.0%	20.9%	0.0	0.0	0.0%	20.9%	0.0	0.0	0.0%	20.9%	0.0	0.0
Maintance Shop	0.0%	22.4%	0.0	0.0	0.0%	20.9%	0.0	0.0	0.0%	20.9%	0.0	0.0	0.0%	20.9%	0.0	0.0
Monitoring well 305	0.0%	22.3%	0.0	0.0	0.0%	20.9%	0.0	0.0	0.0%	20.9%	0.0	0.0	0.0%	20.9%	0.0	0.0
Monitoring well 304	0.0%	21.5%	0.0	0.0	0.0%	20.9%	0.0	0.0	0.0%	20.9%	0.0	0.0	0.0%	20.9%	0.0	0.0
Gas Probe 1	0.0%	17.5%	0.0	0.0	0.0%	20.7%	0.0	0.0	0.0%	20.6%	0.0	0.0	0.0%	19.8%	0.0	0.0
Gas Vent GP1-1 (farthest east)	0.0%	22.4%	0.0	0.0	0.0%	20.9%	0.0	0.0	0.0%	20.9%	0.0	0.0	0.0%	20.9%	0.0	0.0
Gas Vent GP1-2	0.0%	22.4%	0.0	0.0	0.0%	20.9%	0.0	0.0	0.0%	20.7%	0.0	0.0	0.0%	2.9%	0.0	0.0
Gas Vent GP1-3 (farthest west)	0.0%	22.3%	0.0	0.0	0.0%	20.9%	0.0	0.0	4.0% (LEL)	19.1%	0.0	0.0	19% (LEL)	2.0%	0.0	0.0
Gas Probe 2	0.0%	0.9%	0.0	0.0	0.0%	17.7%	0.0	0.0	0.0%	19.3%	0.0	0.0	0.0%	18.4%	0.0	0.0
Gas Probe 3	0.0%	22.3%	0.0	0.0	0.0%	20.7%	0.0	0.0	0.0%	20.9%	0.0	0.0	0.0%	20.9%	0.0	0.0
Gas Probe 4	0.0%	2.3%	0.0	0.0	0.0%	18.1%	0.0	0.0	0.0%	20.9%	0.0	0.0	0.0%	20.9%	0.0	0.0
Monitoring well 381	0.0%	22.0%	0.0	0.0	0.0%	19.9%	0.0	0.0	0.0%	20.4%	0.0	0.0	0.0%	20.9%	0.0	0.0
Gas Probe 10	0.0%	21.9%	0.0	0.0	0.0%	11.2%	0.0	0.0	0.0%	19.5%	0.0	0.0	0.0%	20.8%	0.0	0.0
Gas Probe 5	0.0%	21.5%	0.0	0.0	0.0%	18.2%	0.0	0.0	0.0%	20.3%	0.0	0.0	0.0%	20.9%	0.0	0.0
Gas Probe 6	0.0%	22.0%	0.0	0.0	1.0% (LEL)	19.0%	0.0	0.0	0.0%	20.6%	0.0	0.0	0.0%	20.9%	0.0	0.0
Gas Probe 7	0.0%	21.0%	0.0	0.0	1.0% (LEL)	20.4%	0.0	0.0	0.0%	19.8%	0.0	0.0	0.0%	20.2%	0.0	0.0
Monitoring well 332	0.0%	21.9%	0.0	0.0	0.0%	20.9%	0.0	0.0	0.0%	20.9%	0.0	0.0	0.0%	20.9%	0.0	0.0
Gas Probe 8	0.0%	5.3%	0.0	0.0	0.0%	12.2%	0.0	0.0	0.0%	13.8%	0.0	0.0	0.0%	13.5%	0.0	0.0
Gas Probe 9	0.0%	15.4%	0.0	0.0	0.0%	20.3%	0.0	0.0	0.0%	19.8%	0.0	0.0	0.0%	17.6%	0.0	0.0
Leachate pond pump house	2.0% (LEL)	22.5%	0.0	0.0	0.0%	20.9%	0.0		0.0%	20.9%	0.0	0.0	0.0%	20.9%	0.0	0.0
CALIBRATE POND PUMP HS	done				done				done				done			
Gas Vent N-1 thru N-5 Flare	100% (VOL)	1.5%	90.5	2.5	64.5% (VOL)	4.3%	0.9	3.0	76.0% (VOL)	0.5%	100.0	17.0	80.5% (VOL)	0.0%	100.0	17.0
GV N-1 thru N-5 Flow Rate	175.0	FPM	Temp =	68.6°	103.9	FPM	Temp=	77.7°	87.0	FPM	Temp =	91.5°	130.5	FPM	Temp=	51.9°
10k Leachate Tank Pumphouse	2% (LEL)	22.5%	0.0	0.0	0.0%	20.9%	0.0	0.0	0.0%	20.9%	0.0	0.0	0.0%	20.9%	0.0	0.0
CALIBRATE 10K TANK PUMP HS	done				done				NOT FUNCTIONING				NOT FUNCTIONING			
Cell 4A pump house	0.0%	22.5%	0.0	0.0	0.0%	20.9%	0.0	0.0	0.0%	20.9%	0.0	0.0	0.0%	20.9%	0.0	0.0
CALIBRATE 4A PUMP HS	done				done				done				done			
4F Clean out Flare	100% (VOL)	13.0%	18.5	0	49.5% (VOL)	6.6%	0.5	0	60.0% (VOL)	4.9	6.5	0	86.5%(VOL)	0	4.0	0.0
4F Cleanout Flow Rate	570.00	FPM	Temp=	68°	164.8	FPM	Temp =	66.5°	74.2	FPM	Temp =	75.8°	96.6	FPM	Temp=	50.5°
Monitoring well 331	0.0%	21.9%	0.0	0.0	0.0%	20.9%	0.0	0.0	0.0%	20.9%	0.0	0.0	0.0%	20.9%	0.0	0

Monitoring Points not included in Gas Plan but sampled/reported regardless				
	JEN FRAMPTON	RICK HURT	RICK HURT	RICK HURT

Notes:	CH4 measured in %LEL or %VOL NOTED	02 measured in %VOL	H2S measured in PPM	CO measured in PPM

Appendix A

Listing of Existing Site Monitoring Wells

Well Number	Year drilled	Drilling Company	Screened Interval (Elevation)	Bottom Boring (Elevation)	Status
MW-101	1991	LW	696.6-681.6	678	Standby
MW-103	1991	LW	707.8-692.8	686	Standby
MW-105	1994	Tuthill	710.3-690.3	643	Standby
MW-106	1994	Tuthill	707-687	673	Standby
MW-107	1994	Tuthill	713-693	686	Standby
MW-300	1994	Tuthill	783-773	761	HMSP Program
MW-303	1994	Tuthill	761-751	750	HMSP Program
MW-304	1994	Tuthill	785.5-775.5	774	HMSP Program
MW-305	1994	Tuthill	785-775	769	Water Level
MW-306	1994	Tuthill	777-767	761	Standby
MW-307	1994	Tuthill	794.2-784.2	766	HMSP Program
MW-308	1994	Tuthill	783.3-773.3	754	Standby
MW-309	1994	Tuthill	775.9-765.9	738	Water Level
MW-311	1994	Tuthill	787.2-777.2	757	Water Level
MW-312	1994	Tuthill	785.8-775.8	756	HMSP Program
MW-313	1994	Tuthill	772.5-762.5	759	HMSP Program
MW-331	1990	Patzig	762.8-752.8	742	Standby
MW-332	1990	Patzig	789.3-779.3	775	Standby
MW-333	1990	Patzig	777.4-767.4	761	Water Level
MW-335	1990	Patzig	761.8-751.8	745	HMSP Program
MW-344	1991	LW	765.4-755.4	755	HMSP Program
MW-345	1991	LW	769.1-759.1	758	Water Level
MW-368	1991	LW	839.2-829.2	828.5	Water Level
MW-376	1991	LW	758.9-753.9	701	Standby
MW-380	2008	Terracon	782.3-772.3	772.3	HMSP Program
MW-381	2008	Terracon	787.3-777.3	777.3	HMSP Program
MW-382R	2011	Terracon	766.5-756.5	754.5	HMSP Program
MW-383	2008	Terracon	777.6-767.6	765.1	Water Level
MW-384	2009	GSI	774.7-764.7	764	HMSP Program
MW-385	2009	GSI	778.9-768.9	769	HMSP Program
MW-390	2010	Terracon	799-784	781	HMSP Program
MW-601	2019	SGS	773.4-763.4	763	Preliminary HMSP
MW-602	2019	SGS	763.9-753.9	753	Preliminary HMSP
MW-603	2019	SGS	776.5-766.5	764	Preliminary HMSP

TPZ = Temporary Piezometer
ACC = American Coals Corporation, Bussey, Iowa
Patzig = Patzig Testing, Des Moines, Iowa
Terracon = Terracon, Des Moines, Iowa
LW = Layne-Western, Ames, Iowa
Tuthill = Tuthill, Inc., Marengo, Iowa
GSI = Geotechnical Services, Inc., Des Moines, Iowa
SGS = SGS Testing, Blair, Nebraska

Appendix B

Field Sampling Forms

SCISWA SANITARY LANDFILL
PERMIT # 63-SDP-02-77P

3/6/2023 Sampled by: Todd Whipple Weather Conditions: Breezy, Overcast, 40 degrees

IDNR Form 542-1322

Monitoring Well: MW-300

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

GENERAL INFORMATION

TOC	793.22
Well Depth	19.98
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	793.22
Well Depth	19.98
Top Screen	783.24
Bottom Screen	773.24
Bottom Well	773.24
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	14.00
Top sample	779.22
Bottom sample	775.22
Turbidity(NTU)	2.30

Date	Time	Water Level	Water Elevation	Notes
3/6/2023	11:52	12.23	780.99	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		2.30
Appendix I	Metals	250	250		2.30
Appendix I	VOC	120	120		2.30
Full Appendix II	10 more containers	5620			
Acid Mine Drainage	AMD	250	250		
Sulfide	Sulfide	250			
Supplemental	Minerals	750	0		
Total			630	0	

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

TOC	793.22
Well Depth	19.98

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	3/6/2023	11:52	12.23	780.99		0.0	
After purging				793.22			
Top of Screen January 1990				783.24			
				-2.25	feet above (+) or below (-) top screen		
Bottom of Well January 1990				773.24			
Bottom of Well	3/6/2023		19.98	773.24			
				0.00	feet sedimentation		
Before Sampling				793.22			
Recovery				793.22			
Recovery				793.22			
Recovery				793.22			
Recovery				793.22			

IDNR Form 542-1322

Monitoring Well: MW-303

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

GENERAL INFORMATION

TOC	810.22
Well Depth	57.62
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	810.22
Well Depth	57.62
Top Screen	762.60
Bottom Screen	752.60
Bottom Well	752.25
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	51.50
Top sample	758.72
Bottom sample	754.72
Turbidity(NTU)	21.66

Date	Time	Water Level	Water Elevation	Notes
3/6/2023	14:52	32.45	777.77	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		21.66
Appendix I	Metals	250	250		21.66
Appendix I	VOC	120	120		21.66
Full Appendix II	10 more containers	5620			
Acid Mine Drainage	AMD	250	250		
Sulfide	Sulfide	250			
Supplemental	Minerals	750	0		
Total			630	0	

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

TOC	810.22
Well Depth	57.62

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	3/6/2023	14:52	32.45	777.77		0.0	
After purging				810.22			
Top of Screen January 1990				762.60			
				15.17	feet above (+) or below (-) top screen		
Bottom of Well January 1990				752.60			
Bottom of Well	3/6/2023		57.62	752.60			
				0.00	feet sedimentation		
Before Sampling				810.22			
Recovery				810.22			
Recovery				810.22			
Recovery				810.22			
Recovery				810.22			

IDNR Form 542-1322

Monitoring Well: MW-304

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

GENERAL INFORMATION

TOC	818.51
Well Depth	42.26
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	818.51
Well Depth	42.26
Top Screen	786.25
Bottom Screen	776.25
Bottom Well	776.25
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	36.00
Top sample	782.51
Bottom sample	778.51
Turbidity(NTU)	23.60

Date	Time	Water Level	Water Elevation	Notes
3/6/2023	14:12	18.36	800.15	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		23.60
Appendix I	Metals	250	250		23.60
Appendix I	VOC	120	120		23.60
Full Appendix II	10 more containers	5620			
Acid Mine Drainage	AMD	250	250		
Sulfide	Sulfide	250			
Supplemental	Minerals	750	0		
Total			630	0	

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

TOC	818.51
Well Depth	42.26

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	3/6/2023	14:12	18.36	800.15		0.0	
After purging				818.51			
Top of Screen January 1990				786.25			
				13.90	feet above (+) or below (-) top screen		
Bottom of Well January 1990				776.25			
Bottom of Well	3/6/2023		42.26	776.25			
				0.00	feet sedimentation		
Before Sampling				818.51			
Recovery				818.51			
Recovery				818.51			
Recovery				818.51			
Recovery				818.51			

IDNR Form 542-1322

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

Monitoring Well: MW-307
Background Well

GENERAL INFORMATION

TOC	822.23
Well Depth	37.52
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	822.23
Well Depth	37.52
Top Screen	794.71
Bottom Screen	784.71
Bottom Well	784.71
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	33.60
Top sample	788.63
Bottom sample	784.63
Turbidity(NTU)	2.61

Date	Time	Water Level	Water Elevation	Notes
3/6/2023	8:13	33.60	788.63	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		2.61
Appendix I	Metals	250	250		2.61
Appendix I	VOC	120	120		2.61
Full Appendix II	10 more containers	5620			
Acid Mine Drainage	AMD	250	250		
Sulfide	Sulfide	250	250		
Supplemental	Minerals	750	0		
Total			880	0	

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

TOC	822.23	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	37.52	Before purging	3/6/2023	8:13	33.60	788.63		0.0	
		After purging				822.23			
		Top of Screen January 1990				794.71			
						-6.08	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				784.71			
		Bottom of Well	3/6/2023		37.52	784.71			
						0.00	feet sedimentation		
		Before Sampling				822.23			
		Recovery				822.23			
		Recovery				822.23			
		Recovery				822.23			
		Recovery				822.23			

IDNR Form 542-1322

Monitoring Well: MW-312
Background Well

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

GENERAL INFORMATION

TOC	828.05
Well Depth	40.03
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	828.05
Well Depth	40.03
Top Screen	798.02
Bottom Screen	788.02
Bottom Well	788.02
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	34.00
Top sample	794.05
Bottom sample	790.05
Turbidity(NTU)	43.81

Date	Time	Water Level	Water Elevation	Notes
3/6/2023	11:03	27.45	800.6	

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		43.81
Appendix I	Metals	250	250		43.81
Appendix I	VOC	120	120		43.81
Full Appendix II	10 more containers	5620			
Acid Mine Drainage	AMD	250	250		
Sulfide	Sulfide	250	250		
Supplemental	Minerals	750	0		
Total			880	0	

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

TOC	828.05
Well Depth	40.03

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	3/6/2023	11:03	27.45	800.60		0.0	
After purging				828.05			
Top of Screen January 1990				798.02			
				2.58	feet above (+) or below (-) top screen		
Bottom of Well January 1990				788.02			
Bottom of Well	3/6/2023		40.03	788.02			
				0.00	feet sedimentation		
Before Sampling				828.05			
Recovery				828.05			
Recovery				828.05			
Recovery				828.05			
Recovery				828.05			

IDNR Form 542-1322

Monitoring Well: MW-313

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

GENERAL INFORMATION

TOC	813.06
Well Depth	49.21
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	813.06
Well Depth	49.21
Top Screen	773.85
Bottom Screen	763.85
Bottom Well	763.85
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	43.00
Top sample	770.06
Bottom sample	766.06
Turbidity(NTU)	16.43

Date	Time	Water Level	Water Elevation	Notes
3/6/2023	13:30	5.96	807.1	

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		16.43
Appendix I	Metals	250	250		16.43
Appendix I	VOC	120	120		16.43
Full Appendix II	10 more containers	5620			
Acid Mine Drainage	AMD	250	250		
Sulfide	Sulfide	250			
Supplemental	Minerals	750	0		
Total			630	0	

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

TOC	813.06
Well Depth	49.21

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	3/6/2023	13:30	5.96	807.10		0.0	
After purging				813.06			
Top of Screen January 1990				773.85			
				33.25	feet above (+) or below (-) top screen		
Bottom of Well January 1990				763.85			
Bottom of Well	3/6/2023		49.12	763.94			
				0.09	feet sedimentation		
Before Sampling				813.06			
Recovery				813.06			
Recovery				813.06			
Recovery				813.06			
Recovery				813.06			

IDNR Form 542-1322

Monitoring Well: MW-335

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

GENERAL INFORMATION

TOC	791.74
Well Depth	42.09
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	791.74
Well Depth	42.09
Top Screen	759.65
Bottom Screen	749.65
Bottom Well	1006.84
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	36.00
Top sample	755.74
Bottom sample	751.74
Turbidity(NTU)	146.80

Date	Time	Water Level	Water Elevation	Notes
3/6/2023	13:53	16.10	775.64	

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		146.80
Appendix I	Metals	250	250		146.80
Appendix I	VOC	120	120		146.80
Full Appendix II	10 more containers	5620			
Acid Mine Drainage	AMD	250	250		
Sulfide	Sulfide	250			
Supplemental	Minerals	750	0		
Total			630	0	

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

TOC	791.74
Well Depth	42.09

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	3/6/2023		16.10	775.64		0.0	
After purging				791.74			
Top of Screen January 1990				759.65			
				15.99	feet above (+) or below (-) top screen		
Bottom of Well January 1990				749.65			
Bottom of Well	3/6/2023		42.09	749.65			
				0.00	feet sedimentation		
Before Sampling				791.74			
Recovery				791.74			
Recovery				791.74			
Recovery				791.74			
Recovery				791.74			

IDNR Form 542-1322

Monitoring Well: MW-344

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

GENERAL INFORMATION

TOC	786.5
Well Depth	30.21
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	786.5
Well Depth	30.21
Top Screen	766.29
Bottom Screen	756.29
Bottom Well	756.29
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	24.00
Top sample	762.50
Bottom sample	758.50
Turbidity(NTU)	147.20

Date	Time	Water Level	Water Elevation	Notes
3/6/2023	12:45	8.35	778.15	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		147.20
Appendix I	Metals	250	250		147.20
Appendix I	VOC	120	120		147.20
Full Appendix II	10 more containers	5620			
Acid Mine Drainage	AMD	250	250		
Sulfide	Sulfide	250			
Supplemental	Minerals	750	0		
Total			630	0	

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

TOC	786.5
Well Depth	30.21

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	3/6/2023	12:45	8.35	778.15		0.0	
After purging				786.50			
Top of Screen January 1990				766.29			
				11.86	feet above (+) or below (-) top screen		
Bottom of Well January 1990				756.29			
Bottom of Well	3/6/2023		30.50	756.00			
				-0.29	feet sedimentation		
Before Sampling				786.50			
Recovery				786.50			
Recovery				786.50			
Recovery				786.50			
Recovery				786.50			

IDNR Form 542-1322

Monitoring Well: MW-380

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

GENERAL INFORMATION

TOC	789.92
Well Depth	17.62
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	789.92
Well Depth	17.62
Top Screen	782.30
Bottom Screen	772.30
Bottom Well	772.30
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	11.60
Top sample	778.32
Bottom sample	774.32
Turbidity(NTU)	9.77

Date	Time	Water Level	Water Elevation	Notes
3/6/2023	11:28	7.75	782.17	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		9.77
Appendix I	Metals	250	250		9.77
Appendix I	VOC	120	120		9.77
Full Appendix II	10 more containers	5620			
Acid Mine Drainage	AMD	250	250		
Sulfide	Sulfide	250			
Supplemental	Minerals	750	0		
Total			630	0	

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

TOC	789.92	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	17.62	Before purging	3/6/2023	11:28	7.75	782.17		0.0	
		After purging				789.92			
		Top of Screen January 1990				782.30			
						-0.13	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				772.30			
		Bottom of Well	3/6/2023		17.62	772.30			
						0.00	feet sedimentation		
		Before Sampling				789.92			
		Recovery				789.92			
		Recovery				789.92			
		Recovery				789.92			
		Recovery				789.92			

IDNR Form 542-1322

Monitoring Well: MW-381

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

GENERAL INFORMATION

TOC	801.43
Well Depth	24.12
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	801.43
Well Depth	24.12
Top Screen	787.31
Bottom Screen	777.31
Bottom Well	777.31
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	18.00
Top sample	783.43
Bottom sample	779.43
Turbidity(NTU)	24.84

Date	Time	Water Level	Water Elevation	Notes
3/6/2023	12:16	7.73	793.70	

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		24.84
Appendix I	Metals	250	250		24.84
Appendix I	VOC	120	120		24.84
Full Appendix II	10 more containers	5620			
Acid Mine Drainage	AMD	250	250		
Sulfide	Sulfide	250			
Supplemental	Minerals	750	0		
Total			630	0	

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

TOC	801.43
Well Depth	24.12

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	3/6/2023	12:16	7.73	793.70		0.0	
After purging				801.43			
Top of Screen January 1990				787.31			
				6.39	feet above (+) or below (-) top screen		
Bottom of Well January 1990				777.31			
Bottom of Well	3/6/2023		24.12	777.31			
				0.00	feet sedimentation		
Before Sampling				801.43			
Recovery				801.43			
Recovery				801.43			
Recovery				801.43			
Recovery				801.43			

IDNR Form 542-1322

Monitoring Well: MW-382R

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

GENERAL INFORMATION

TOC	789.9
Well Depth	32.82
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	789.9
Well Depth	32.82
Top Screen	767.08
Bottom Screen	757.08
Bottom Well	757.08
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	27.00
Top sample	762.90
Bottom sample	758.90
Turbidity(NTU)	47.34

Date	Time	Water Level	Water Elevation	Notes
3/6/2023	13:05	12.88	777.02	

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		47.34
Appendix I	Metals	250	250		47.34
Appendix I	VOC	120	120		47.34
Full Appendix II	10 more containers	5620			
Acid Mine Drainage	AMD	250	250		
Sulfide	Sulfide	250			
Supplemental	Minerals	750	0		
Total			630	0	

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

TOC	789.9
Well Depth	32.82

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	3/6/2023		12.88	777.02		0.0	
After purging				789.90			
Top of Screen January 1990				767.08			
				9.94	feet above (+) or below (-) top screen		
Bottom of Well January 1990				757.08			
Bottom of Well	3/6/2023		32.82	757.08			
				0.00	feet sedimentation		
Before Sampling				789.90			
Recovery				789.90			
Recovery				789.90			
Recovery				789.90			
Recovery				789.90			

IDNR Form 542-1322

Monitoring Well: MW-384

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

GENERAL INFORMATION

TOC	787
Well Depth	22.32
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	787
Well Depth	22.32
Top Screen	774.68
Bottom Screen	764.68
Bottom Well	764.68
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	16.00
Top sample	771.00
Bottom sample	767.00
Turbidity(NTU)	65.14

Date	Time	Water Level	Water Elevation	Notes
3/6/2023	8:47	16.61	770.39	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		65.14
Appendix I	Metals	250	250		65.14
Appendix I	VOC	120	120		65.14
Full Appendix II	10 more containers	5620			
Acid Mine Drainage	AMD	250	250		
Sulfide	Sulfide	250			
Supplemental	Minerals	750	0		
Total			630	0	

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

TOC	787
Well Depth	22.32

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	3/6/2023	8:47	16.61	770.39		0.0	
After purging				787.00			
Top of Screen January 1990				774.68			
				-4.29	feet above (+) or below (-) top screen		
Bottom of Well January 1990				764.68			
Bottom of Well	3/6/2023		22.32	764.68			
				0.00	feet sedimentation		
Before Sampling				787.00			
Recovery				787.00			
Recovery				787.00			
Recovery				787.00			
Recovery				787.00			

IDNR Form 542-1322

Monitoring Well: MW-385

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

GENERAL INFORMATION

TOC	786.34
Well Depth	16.98
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	786.34
Well Depth	16.98
Top Screen	779.36
Bottom Screen	769.36
Bottom Well	769.36
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	11.50
Top sample	774.84
Bottom sample	770.84
Turbidity(NTU)	36.07

Date	Time	Water Level	Water Elevation	Notes
3/6/2023	9:11	12.11	774.23	

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		36.07
Appendix I	Metals	250	250		36.07
Appendix I	VOC	120	120		36.07
Full Appendix II	10 more containers	5620			
Acid Mine Drainage	AMD	250	250		
Sulfide	Sulfide	250			
Supplemental	Minerals	750	0		
Total			630	0	

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

TOC	786.34
Well Depth	16.98

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	3/6/2023	9:11	12.11	774.23		0.0	
After purging				786.34			
Top of Screen January 1990				779.36			
				-5.13	feet above (+) or below (-) top screen		
Bottom of Well January 1990				769.36			
Bottom of Well	3/6/2023		16.98	769.36			
				0.00	feet sedimentation		
Before Sampling				786.34			
Recovery				786.34			
Recovery				786.34			
Recovery				786.34			
Recovery				786.34			

IDNR Form 542-1322

Monitoring Well: MW-390
Background Well

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

GENERAL INFORMATION

TOC	834.97
Well Depth	51.65
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	834.97
Well Depth	51.65
Top Screen	793.32
Bottom Screen	783.32
Bottom Well	783.32
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	45.00
Top sample	789.97
Bottom sample	785.97
Turbidity(NTU)	10.35

Date	Time	Water Level	Water Elevation	Notes
3/6/2023	7:52	36.96	798.01	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		10.35
Appendix I	Metals	250	250		10.35
Appendix I	VOC	120	120		10.35
Full Appendix II	10 more containers	5620			
Acid Mine Drainage	AMD	250	250		
Sulfide	Sulfide	250	250		
Supplemental	Minerals	750	0		
Total			880	0	

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

TOC	834.97
Well Depth	51.65

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	3/6/2023	7:52	36.96	798.01		0.0	
After purging				834.97			
Top of Screen January 1990				793.32			
				4.69	feet above (+) or below (-) top screen		
Bottom of Well January 1990				783.32			
Bottom of Well	3/6/2023		51.65	783.32			
				0.00	feet sedimentation		
Before Sampling				834.97			
Recovery				834.97			
Recovery				834.97			
Recovery				834.97			
Recovery				834.97			

IDNR Form 542-1324

SW-1

Date	Time	Type	Flowing	Quantity			Discolored	Odor	Litter
3/6/2023		Sediment Basin Outlet	yes	25 gpm			No	No	No
									Turbidity (NTU)
									2.61

GU-4A

Date	Time	Type	Flowing	Quantity			Discolored	Odor	Litter
3/6/2023		tile outlet	yes	10 gpm			No	No	No
									Turbidity (NTU)
									1.01

IDNR Form 542-1322

Monitoring Well: MW-601

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

GENERAL INFORMATION

TOC	782.44
Well Depth	19.07
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	782.44
Well Depth	19.07
Top Screen	773.37
Bottom Screen	763.37
Bottom Well	763.37
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	13.50
Top sample	768.94
Bottom sample	764.94
Turbidity(NTU)	2.25

Date	Time	Water Level	Water Elevation	Notes
3/6/2023	9:39	11.22	771.22	

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		2.25
Appendix I	Metals	250	250		2.25
Appendix I	VOC	120	120		2.25
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	bis 2	946			
Supplemental	Minerals	750	0		
Total			380	0	

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

TOC	782.44
Well Depth	19.07

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	3/6/2023	9:39	11.22	771.22		0.0	
After purging				782.44			
Top of Screen January 1990				773.37			
				-2.15	feet above (+) or below (-) top screen		
Bottom of Well January 1990				763.37			
Bottom of Well	3/6/2023		19.75	762.69			
				-0.68	feet sedimentation		
Before Sampling				782.44			
Recovery				782.44			
Recovery				782.44			
Recovery				782.44			
Recovery				782.44			

IDNR Form 542-1322

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

Monitoring Well: MW-602

GENERAL INFORMATION

TOC	780.46
Well Depth	26.55
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	780.46	
Well Depth	26.55	
Top Screen	763.91	
Bottom Screen	753.91	
Bottom Well	753.91	
Sampler Length (ft)	4.00	
Sampler Volume (mL)	440.00	
Feet cordage	21.00	
Top sample	759.46	
Bottom sample	755.46	
Turbidity(NTU)	109.90	red

Date	Time	Water Level	Water Elevation	Notes
3/6/2023	10:04	17.16	763.30	

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		109.90
Appendix I	Metals	250	250		109.90
Appendix I	VOC	120	120		109.90
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	bis 2	946			
Supplemental	Minerals	750	0		
Total			380	0	

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

TOC	780.46	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	26.55	Before purging	3/6/2023	10:04	17.16	763.30		0.0	
		After purging				780.46			
		Top of Screen January 1990				763.91			
						-0.61	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				753.91			
		Bottom of Well	3/6/2023		27.31	753.15			
						-0.76	feet sedimentation		
		Before Sampling				780.46			
		Recovery				780.46			
		Recovery				780.46			
		Recovery				780.46			
		Recovery				780.46			

IDNR Form 542-1322

Monitoring Well: MW-603

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

GENERAL INFORMATION

TOC	818.55
Well Depth	52.06
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	818.55
Well Depth	52.06
Top Screen	776.49
Bottom Screen	766.49
Bottom Well	766.49
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	46.00
Top sample	772.55
Bottom sample	768.55
Turbidity(NTU)	39.96

Date	Time	Water Level	Water Elevation	Notes
3/6/2023	10:30	37.62	780.93	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		39.96
Appendix I	Metals	250	250		39.96
Appendix I	VOC	120	120		39.96
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	bis 2	946			
Supplemental	Minerals	750	0		
Total			380	0	

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

TOC	818.55	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	52.06	Before purging	3/6/2023	10:30	37.62	780.93		0.0	
		After purging				818.55			
		Top of Screen January 1990				776.49			
						4.44	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				766.49			
		Bottom of Well	3/6/2023		52.31	766.24			
						-0.25	feet sedimentation		
		Before Sampling				818.55			
		Recovery				818.55			
		Recovery				818.55			
		Recovery				818.55			
		Recovery				818.55			

SCISWA SANITARY LANDFILL
PERMIT # 63-SDP-02-77P

9/29/2023 Sampled by: Todd Whipple Weather Conditions: Clear sunny 65-85 degrees

IDNR Form 542-1322

Monitoring Well: MW-300

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

GENERAL INFORMATION

TOC	793.22
Well Depth	19.98
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	793.22
Well Depth	19.98
Top Screen	783.24
Bottom Screen	773.24
Bottom Well	773.24
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	15.50
Top sample	777.72
Bottom sample	773.72
Turbidity(NTU)	5.47

Date	Time	Water Level	Water Elevation	Notes
9/29/2023	11:35	15.68	777.54	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		5.47
Appendix I	Metals	250	250		5.47
Appendix I	VOC	120	120		5.47
Full Appendix II	10 more containers	5620			
Acid Mine Drainage	AMD	250	250		
Sulfide	Sulfide	250			
Supplemental	Minerals	750	0		
Total			630	0	

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

TOC	793.22	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	19.98	Before purging	9/29/2023	11:35	15.68	777.54		0.0	
		After purging				793.22			
		Top of Screen January 1990				783.24			
						-5.70	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				773.24			
		Bottom of Well	9/29/2023		19.98	773.24			
						0.00	feet sedimentation		
		Before Sampling				793.22			
		Recovery				793.22			
		Recovery				793.22			
		Recovery				793.22			
		Recovery				793.22			

IDNR Form 542-1322

Monitoring Well: MW-303

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

GENERAL INFORMATION

TOC	810.22
Well Depth	57.62
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	810.22
Well Depth	57.62
Top Screen	762.60
Bottom Screen	752.60
Bottom Well	752.25
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	51.50
Top sample	758.72
Bottom sample	754.72
Turbidity(NTU)	22.60

Date	Time	Water Level	Water Elevation	Notes
9/29/2023	12:59	34.26	775.96	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		22.60
Appendix I	Metals	250	250		22.60
Appendix I	VOC	120	120		22.60
Full Appendix II	10 more containers	5620			
Acid Mine Drainage	AMD	250	250		
Sulfide	Sulfide	250			
Supplemental	Minerals	750	0		
Total			630	0	

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

TOC	810.22
Well Depth	57.62

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	9/29/2023	12:59	34.26	775.96		0.0	
After purging				810.22			
Top of Screen January 1990				762.60			
				13.36	feet above (+) or below (-) top screen		
Bottom of Well January 1990				752.60			
Bottom of Well	9/29/2023		57.62	752.60			
				0.00	feet sedimentation		
Before Sampling				810.22			
Recovery				810.22			
Recovery				810.22			
Recovery				810.22			
Recovery				810.22			

IDNR Form 542-1322

Monitoring Well:	MW-304	**Primary Sampling Method:**	No-Purge for Appendix I
		Secondary Sampling Method:	Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	818.51
Well Depth	42.26
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	818.51
Well Depth	42.26
Top Screen	786.25
Bottom Screen	776.25
Bottom Well	776.25
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	36.00
Top sample	782.51
Bottom sample	778.51
Turbidity(NTU)	25.62

Date	Time	Water Level	Water Elevation	Notes
9/29/2023	13:15	20.50	798.01	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		25.62
Appendix I	Metals	250	250		25.62
Appendix I	VOC	120	120		25.62
Full Appendix II	10 more containers	5620			
Acid Mine Drainage	AMD	250	250		
Sulfide	Sulfide	250			
Supplemental	Minerals	750	0		
Total			630	0	

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

TOC	818.51	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	42.26	Before purging	9/29/2023	13:15	20.50	798.01		0.0	
		After purging				818.51			
		Top of Screen January 1990				786.25			
						11.76	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				776.25			
		Bottom of Well	9/29/2023		42.26	776.25			
						0.00	feet sedimentation		
		Before Sampling				818.51			
		Recovery				818.51			
		Recovery				818.51			
		Recovery				818.51			
		Recovery				818.51			

IDNR Form 542-1322

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

Monitoring Well: MW-307
Background Well

GENERAL INFORMATION

TOC	822.23
Well Depth	37.52
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	822.23
Well Depth	37.52
Top Screen	794.71
Bottom Screen	784.71
Bottom Well	784.71
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	34.00
Top sample	788.23
Bottom sample	784.23
Turbidity(NTU)	5.20

Date	Time	Water Level	Water Elevation	Notes
9/29/2023	9:07	34.41	787.82	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		5.20
Appendix I	Metals	250	250		5.20
Appendix I	VOC	120	120		5.20
Full Appendix II	10 more containers	5620			
Acid Mine Drainage	AMD	250	250		
Sulfide	Sulfide	250	250		
Supplemental	Minerals	750	0		
Total			880	0	

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

TOC	822.23
Well Depth	37.52

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	9/29/2023	9:07	34.41	787.82		0.0	
After purging				822.23			
Top of Screen January 1990				794.71			
				-6.89	feet above (+) or below (-) top screen		
Bottom of Well January 1990				784.71			
Bottom of Well	9/29/2023		37.52	784.71			
				0.00	feet sedimentation		
Before Sampling				822.23			
Recovery				822.23			
Recovery				822.23			
Recovery				822.23			
Recovery				822.23			

IDNR Form 542-1322

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

Monitoring Well: MW-312
Background Well

GENERAL INFORMATION

TOC	828.05
Well Depth	40.03
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	828.05
Well Depth	40.03
Top Screen	798.02
Bottom Screen	788.02
Bottom Well	788.02
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	34.00
Top sample	794.05
Bottom sample	790.05
Turbidity(NTU)	9.35

Date	Time	Water Level	Water Elevation	Notes
9/29/2023	10:56	28.33	799.72	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		9.35
Appendix I	Metals	250	250		9.35
Appendix I	VOC	120	120		9.35
Full Appendix II	10 more containers	5620			
Acid Mine Drainage	AMD	250	250		
Sulfide	Sulfide	250	250		
Supplemental	Minerals	750	0		
Total			880	0	

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

TOC	828.05
Well Depth	40.03

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	9/29/2023	10:56	28.33	799.72		0.0	
After purging				828.05			
Top of Screen January 1990				798.02			
				1.70	feet above (+) or below (-) top screen		
Bottom of Well January 1990				788.02			
Bottom of Well	9/29/2023		40.03	788.02			
				0.00	feet sedimentation		
Before Sampling				828.05			
Recovery				828.05			
Recovery				828.05			
Recovery				828.05			
Recovery				828.05			

IDNR Form 542-1322

Monitoring Well:	MW-313
Primary Sampling Method:	No-Purge for Appendix I
Secondary Sampling Method:	Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	813.06
Well Depth	49.21
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	813.06
Well Depth	49.21
Top Screen	773.85
Bottom Screen	763.85
Bottom Well	763.85
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	43.00
Top sample	770.06
Bottom sample	766.06
Turbidity(NTU)	9.94

Date	Time	Water Level	Water Elevation	Notes
9/29/2023	12:20	26.03	787.03	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		9.94
Appendix I	Metals	250	250		9.94
Appendix I	VOC	120	120		9.94
Full Appendix II	10 more containers	5620			
Acid Mine Drainage	AMD	250	250		
Sulfide	Sulfide	250			
Supplemental	Minerals	750	0		
Total			630	0	

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

TOC	813.06
Well Depth	49.21

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	9/29/2023	12:20	26.03	787.03		0.0	
After purging				813.06			
Top of Screen January 1990				773.85			
				13.18	feet above (+) or below (-) top screen		
Bottom of Well January 1990				763.85			
Bottom of Well	9/29/2023		49.12	763.94			
				0.09	feet sedimentation		
Before Sampling				813.06			
Recovery				813.06			
Recovery				813.06			
Recovery				813.06			
Recovery				813.06			

IDNR Form 542-1322

Primary Sampling Method: No-Purge for Appendix I

Monitoring Well: MW-335

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

GENERAL INFORMATION

TOC	791.74
Well Depth	42.09
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	791.74
Well Depth	42.09
Top Screen	759.65
Bottom Screen	749.65
Bottom Well	1006.84
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	36.00
Top sample	755.74
Bottom sample	751.74
Turbidity(NTU)	22.03

Date	Time	Water Level	Water Elevation	Notes
9/29/2023	12:43	17.16	774.58	

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		22.03
Appendix I	Metals	250	250		22.03
Appendix I	VOC	120	120		22.03
Full Appendix II	10 more containers	5620			
Acid Mine Drainage	AMD	250	250		
Sulfide	Sulfide	250			
Supplemental	Minerals	750	0		
Total			630	0	

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

TOC	791.74
Well Depth	42.09

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	9/29/2023		17.16	774.58		0.0	
After purging				791.74			
Top of Screen January 1990				759.65			
				14.93	feet above (+) or below (-) top screen		
Bottom of Well January 1990				749.65			
Bottom of Well	9/29/2023		42.09	749.65			
				0.00	feet sedimentation		
Before Sampling				791.74			
Recovery				791.74			
Recovery				791.74			
Recovery				791.74			
Recovery				791.74			

IDNR Form 542-1322

Monitoring Well: MW-344

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

GENERAL INFORMATION

TOC	786.5
Well Depth	30.21
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	786.5
Well Depth	30.21
Top Screen	766.29
Bottom Screen	756.29
Bottom Well	756.29
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	25.00
Top sample	761.50
Bottom sample	757.50
Turbidity(NTU)	10.14

Date	Time	Water Level	Water Elevation	Notes
9/29/2023	14:40	15.63	770.87	

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		10.14
Appendix I	Metals	250	250		10.14
Appendix I	VOC	120	120		10.14
Full Appendix II	10 more containers	5620	5620		
Acid Mine Drainage	AMD	250	250		
Sulfide	Sulfide	250			
Supplemental	Minerals	750	0		
Total			6250	0	

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

TOC	786.5	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	30.21	Before purging	9/29/2023	14:40	15.63	770.87	4	1.7	no
		After purging	9/29/2023	15:01	26.54	759.96			
		Top of Screen January 1990				766.29			
						4.58	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				756.29			
		Bottom of Well	9/29/2023		30.50	756.00			
						-0.29	feet sedimentation		
		Before Sampling				786.50			
		Recovery				786.50			
		Recovery				786.50			
		Recovery				786.50			
		Recovery				786.50			

IDNR Form 542-1322

Monitoring Well: MW-380

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

GENERAL INFORMATION

TOC	789.92
Well Depth	17.62
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	789.92
Well Depth	17.62
Top Screen	782.30
Bottom Screen	772.30
Bottom Well	772.30
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	12.00
Top sample	777.92
Bottom sample	773.92
Turbidity(NTU)	10.74

Date	Time	Water Level	Water Elevation	Notes
9/29/2023	11:17	9.17	780.75	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		10.74
Appendix I	Metals	250	250		10.74
Appendix I	VOC	120	120		10.74
Full Appendix II	10 more containers	5620			
Acid Mine Drainage	AMD	250	250		
Sulfide	Sulfide	250			
Supplemental	Minerals	750	0		
Total			630	0	

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

TOC	789.92
Well Depth	17.62

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	9/29/2023	11:17	9.17	780.75		0.0	
After purging				789.92			
Top of Screen January 1990				782.30			
				-1.55	feet above (+) or below (-) top screen		
Bottom of Well January 1990				772.30			
Bottom of Well	9/29/2023		17.62	772.30			
				0.00	feet sedimentation		
Before Sampling				789.92			
Recovery				789.92			
Recovery				789.92			
Recovery				789.92			
Recovery				789.92			

IDNR Form 542-1322

Monitoring Well: MW-381

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

GENERAL INFORMATION

TOC	801.43
Well Depth	24.12
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	801.43
Well Depth	24.12
Top Screen	787.31
Bottom Screen	777.31
Bottom Well	777.31
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	20.00
Top sample	781.43
Bottom sample	777.43
Turbidity(NTU)	8.36

Date	Time	Water Level	Water Elevation	Notes
9/29/2023	11:53	20.00	781.43	

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		8.36
Appendix I	Metals	250	250		8.36
Appendix I	VOC	120	120		8.36
Full Appendix II	10 more containers	5620			
Acid Mine Drainage	AMD	250	250		
Sulfide	Sulfide	250			
Supplemental	Minerals	750	0		
Total			630	0	

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

TOC	801.43
Well Depth	24.12

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	9/29/2023	11:53	20.00	781.43		0.0	
After purging				801.43			
Top of Screen January 1990				787.31			
				-5.88	feet above (+) or below (-) top screen		
Bottom of Well January 1990				777.31			
Bottom of Well	9/29/2023		24.12	777.31			
				0.00	feet sedimentation		
Before Sampling				801.43			
Recovery				801.43			
Recovery				801.43			
Recovery				801.43			
Recovery				801.43			

IDNR Form 542-1322

Monitoring Well: MW-382R

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

GENERAL INFORMATION

TOC	789.9
Well Depth	32.82
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	789.9
Well Depth	32.82
Top Screen	767.08
Bottom Screen	757.08
Bottom Well	757.08
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	27.00
Top sample	762.90
Bottom sample	758.90
Turbidity(NTU)	9.64

Date	Time	Water Level	Water Elevation	Notes
9/29/2023	15:20	15.30	774.60	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		9.64
Appendix I	Metals	250	250		9.64
Appendix I	VOC	120	120		9.64
Full Appendix II	10 more containers	5620	5620		
Acid Mine Drainage	AMD	250	250		
Sulfide	Sulfide	250			
Supplemental	Minerals	750	0		
Total			6250	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	789.9								
Well Depth	32.82	Before purging	9/29/2023		15.30	774.60	4	1.4	no
		After purging	9/29/2023	15:39	22.60	767.30			
		Top of Screen January 1990				767.08			
						7.52	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				757.08			
		Bottom of Well	9/29/2023		32.82	757.08			
						0.00	feet sedimentation		
		Before Sampling				789.90			
		Recovery				789.90			
		Recovery				789.90			
		Recovery				789.90			
		Recovery				789.90			

IDNR Form 542-1322

Monitoring Well: MW-384

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

GENERAL INFORMATION

TOC	787
Well Depth	22.32
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	787
Well Depth	22.32
Top Screen	774.68
Bottom Screen	764.68
Bottom Well	764.68
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	17.50
Top sample	769.50
Bottom sample	765.50
Turbidity(NTU)	7.26

Date	Time	Water Level	Water Elevation	Notes
9/29/2023	14:04	17.65	769.35	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		7.26
Appendix I	Metals	250	250		7.26
Appendix I	VOC	120	120		7.26
Full Appendix II	10 more containers	5620			
Acid Mine Drainage	AMD	250	250		
Sulfide	Sulfide	250			
Supplemental	Minerals	750	0		
Total			630	0	

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

TOC	787
Well Depth	22.32

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	9/29/2023	14:04	17.65	769.35		0.0	
After purging				787.00			
Top of Screen January 1990				774.68			
				-5.33	feet above (+) or below (-) top screen		
Bottom of Well January 1990				764.68			
Bottom of Well	9/29/2023		22.32	764.68			
				0.00	feet sedimentation		
Before Sampling				787.00			
Recovery				787.00			
Recovery				787.00			
Recovery				787.00			
Recovery				787.00			

IDNR Form 542-1322

Monitoring Well: MW-385

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

GENERAL INFORMATION

TOC	786.34
Well Depth	16.98
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	786.34
Well Depth	16.98
Top Screen	779.36
Bottom Screen	769.36
Bottom Well	769.36
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	13.00
Top sample	773.34
Bottom sample	769.34
Turbidity(NTU)	40.06

Date	Time	Water Level	Water Elevation	Notes
9/29/2023	13:50	13.52	772.82	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		40.06
Appendix I	Metals	250	250		40.06
Appendix I	VOC	120	120		40.06
Full Appendix II	10 more containers	5620			
Acid Mine Drainage	AMD	250	250		
Sulfide	Sulfide	250			
Supplemental	Minerals	750	0		
Total			630	0	

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

TOC	786.34	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	16.98	Before purging	9/29/2023	13:50	13.52	772.82		0.0	
		After purging				786.34			
		Top of Screen January 1990				779.36			
						-6.54	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				769.36			
		Bottom of Well	9/29/2023		16.98	769.36			
						0.00	feet sedimentation		
		Before Sampling				786.34			
		Recovery				786.34			
		Recovery				786.34			
		Recovery				786.34			
		Recovery				786.34			

IDNR Form 542-1322

Monitoring Well: MW-390
Background Well

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

GENERAL INFORMATION

TOC	834.97
Well Depth	51.65
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	834.97
Well Depth	51.65
Top Screen	793.32
Bottom Screen	783.32
Bottom Well	783.32
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	45.00
Top sample	789.97
Bottom sample	785.97
Turbidity(NTU)	21.13

Date	Time	Water Level	Water Elevation	Notes
9/29/2023	9:26	38.22	796.75	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		21.13
Appendix I	Metals	250	250		21.13
Appendix I	VOC	120	120		21.13
Full Appendix II	10 more containers	5620			
Acid Mine Drainage	AMD	250	250		
Sulfide	Sulfide	250	250		
Supplemental	Minerals	750	0		
Total			880	0	

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

TOC	834.97
Well Depth	51.65

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	9/29/2023	9:26	38.22	796.75		0.0	
After purging				834.97			
Top of Screen January 1990				793.32			
				3.43	feet above (+) or below (-) top screen		
Bottom of Well January 1990				783.32			
Bottom of Well	9/29/2023		51.65	783.32			
				0.00	feet sedimentation		
Before Sampling				834.97			
Recovery				834.97			
Recovery				834.97			
Recovery				834.97			
Recovery				834.97			

IDNR Form 542-1324

	Date	Time	Type	Flowing	Quantity			Discolored	Odor	Litter
SW-1	9/29/2023		Sediment Basin Outlet	dry				No	No	No
										Turbidity (NTU)

	Date	Time	Type	Flowing	Quantity			Discolored	Odor	Litter
GU-4A	9/29/2023		tile outlet	dry				No	No	No
										Turbidity (NTU)

IDNR Form 542-1322

Monitoring Well: MW-601

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

GENERAL INFORMATION

TOC	782.44
Well Depth	19.07
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	782.44
Well Depth	19.07
Top Screen	773.37
Bottom Screen	763.37
Bottom Well	763.37
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	14.00
Top sample	768.44
Bottom sample	764.44
Turbidity(NTU)	17.62

Date	Time	Water Level	Water Elevation	Notes
9/29/2023	9:50	13.20	769.24	

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		17.62
Appendix I	Metals	250	250		17.62
Appendix I	VOC	120	120		17.62
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	bis 2	946			
Supplemental	Minerals	750	0		
Total			380	0	

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

			Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
TOC	782.44	2" dia.							
Well Depth	19.07	Before purging	9/29/2023	9:50	13.20	769.24		0.0	
		After purging				782.44			
		Top of Screen January 1990				773.37			
						-4.13	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				763.37			
		Bottom of Well	9/29/2023		19.75	762.69			
						-0.68	feet sedimentation		
		Before Sampling				782.44			
		Recovery				782.44			
		Recovery				782.44			
		Recovery				782.44			
		Recovery				782.44			

IDNR Form 542-1322

Monitoring Well: MW-602

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

GENERAL INFORMATION

TOC	780.46
Well Depth	26.55
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	780.46
Well Depth	26.55
Top Screen	763.91
Bottom Screen	753.91
Bottom Well	753.91
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	21.50
Top sample	758.96
Bottom sample	754.96
Turbidity(NTU)	53.02

Date	Time	Water Level	Water Elevation	Notes
9/29/2023	10:10	19.77	760.69	

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		53.02
Appendix I	Metals	250	250		53.02
Appendix I	VOC	120	120		53.02
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	bis 2	946			
Supplemental	Minerals	750	0		
Total			380	0	

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

TOC	780.46
Well Depth	26.55

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	9/29/2023	10:10	19.77	760.69		0.0	
After purging				780.46			
Top of Screen January 1990				763.91			
				-3.22	feet above (+) or below (-) top screen		
Bottom of Well January 1990				753.91			
Bottom of Well	9/29/2023		27.31	753.15			
				-0.76	feet sedimentation		
Before Sampling				780.46			
Recovery				780.46			
Recovery				780.46			
Recovery				780.46			
Recovery				780.46			

IDNR Form 542-1322

Monitoring Well: MW-603

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

GENERAL INFORMATION

TOC	818.55
Well Depth	52.06
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	818.55
Well Depth	52.06
Top Screen	776.49
Bottom Screen	766.49
Bottom Well	766.49
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	46.00
Top sample	772.55
Bottom sample	768.55
Turbidity(NTU)	15.94

Date	Time	Water Level	Water Elevation	Notes
9/29/2023	10:30	38.68	779.87	

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		15.94
Appendix I	Metals	250	250		15.94
Appendix I	VOC	120	120		15.94
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	bis 2	946			
Supplemental	Minerals	750	0		
Total			380	0	

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

TOC	818.55
Well Depth	52.06

2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Before purging	9/29/2023	10:30	38.68	779.87		0.0	
After purging				818.55			
Top of Screen January 1990				776.49			
				3.38	feet above (+) or below (-) top screen		
Bottom of Well January 1990				766.49			
Bottom of Well	9/29/2023		52.31	766.24			
				-0.25	feet sedimentation		
Before Sampling				818.55			
Recovery				818.55			
Recovery				818.55			
Recovery				818.55			
Recovery				818.55			

Appendix C

Statistical Report

Appendix C.1 - Otter Creek Statistical Report

Results of the Ground Water Statistics

for South Central Iowa Solid Waste Agency Landfill

First Semi-Annual Monitoring Events in 2023

Prepared for:
South Central Iowa Solid Waste Agency Landfill
1736 Highway T17
Tracy, IA 50256

Prepared by:
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April 2023

INTRODUCTION

This report contains the results of the statistical analyses used to evaluate the ground water data obtained during the first semi-annual monitoring event in 2023 at the South Central Iowa Solid Waste Agency (SCISWA) Landfill. The ground water monitoring wells were sampled on March 6, 2023 and analyzed for the parameters required by permit. 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. Both intrawell and interwell methodologies are described and then applied to the SCISWA Landfill data. The statistical plan conforms with IAC 567, Chapter 113.10, USEPA Guidance document ("*Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities, Unified Guidance*", March 2009), and the American Society for Testing and Materials (ASTM) standard D6312-98, *Developing Appropriate Statistical Approaches for Ground-Water Detection Monitoring Programs*.

Ground Water Monitoring Program

The groundwater monitoring network for SCISWA Landfill includes wells MW-300, MW-303, MW-304, MW-307 (upgradient), MW-312 (upgradient), MW-313, MW-335, MW-344, MW-380, MW-381, MW-382R, MW-384, MW-385, MW-390 (upgradient), MW-601, MW-602, and MW-603. An underdrain (GU-4A) and surface water sample point (SW-1) are also available. Each of the groundwater monitoring wells is to be sampled at least semiannually and analyzed for the detection monitoring parameters listed below.

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 events in 2023 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. Both of these methods were applied to the SCISWA Landfill data using the DUMPStat® statistical program. DUMPStat® is a program for the statistical analysis of groundwater monitoring data using methods described in "Statistical Methods for Groundwater Monitoring" by Dr. Robert D. Gibbons. The DUMPStat program is consistent with all USEPA regulations and guidance and the ASTM D6312-98 guidance. Ground water statistics are to be done on the constituents listed.

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 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 detection monitoring constituents were evaluated using the combined Shewhart-CUSUM control chart method. The background used to determine control limits includes the data obtained from September 2012 through 2021. A summary of the intrawell statistics is included in Attachment B, 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 most current data, the control limit exceedances detected are summarized in the table below.

Control Limit Exceedances at SCISWA Landfill during the First Semi-Annual Monitoring Event in 2023

Well	Parameter	Result	CUSUM Value	Control Limit	Prediction Limit Type	Verified/ Awaiting verification
MW-335	Arsenic, μg/L	16.9	21.6552	11.6924	Normal	Awaiting verification
	Copper, μg/L	4.7	--	2.0000	Nonparametric	Awaiting verification

An increasing trend was detected in the background data for nickel at MW-335.

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. The site-wide false positive rate is 5% and the test becomes sensitive to 3 standard deviation units over background.

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.

<u>Results of the Interwell Statistics</u>

The background data used in this statistical analysis includes the ground water data collected from ground water wells MW-307, MW-312, and MW-390 during the period from September 2012 through the current data. A summary of the background data from monitoring wells MW-307, MW-312, and MW-390 is listed in Attachment C, 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-300, MW-303, MW-304, MW-313, MW-335, MW-344, MW-380, MW-381, MW-382R, MW-384, and MW-385, compared to the site prediction limits. Prediction limit exceedances are flagged with asterisks. For the most current data, the site prediction limit exceedances detected are summarized in the table below.

Prediction Limit Exceedances during the First Semi-Annual Monitoring Event in 2023

Well	Parameter	Result	Prediction Limit	Prediction Limit Type	Verified/ Awaiting verification
MW-300	Cobalt, μg/L	294	140.5096	Normal	Verified
	Nickel, μg/L	343	149.2409	Normal	Verified
MW-303	Barium, μg/L	73.9	49.9000	Nonparametric	Verified
MW-304	Barium, μg/L	66.5	49.9000	Nonparametric	Verified

Prediction Limit Exceedances during the First Semi-Annual Monitoring Event in 2023 (cont.)

Well	Parameter	Result	Prediction Limit	Prediction Limit Type	Verified/ Awaiting verification
MW-344	Cobalt, µg/L	209	140.5096	Normal	Verified
	Nickel, µg/L	165	149.2409	Normal	Verified
MW-380	Beryllium, µg/L	4.7	1.0000	Nonparametric	Verified
	Cadmium, µg/L	3.1	1.1900	Nonparametric	Awaiting verification
	Cobalt, µg/L	758	140.5096	Normal	Verified
	Nickel, µg/L	965	149.2409	Normal	Verified
	Selenium, µg/L	9.6	3.8400	Nonparametric	Awaiting verification

The detection frequencies of the parameters in the up and down gradient monitoring wells are summarized in Table 3. Table 4 summarizes the results of the Shapiro-Wilk test. Table 5 is a summary of the statistics and prediction limits determined. 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 2% and the test becomes sensitive to 4 standard deviation unit increases over background.

The trace metals which have exceeded ground water protection standards (GWPS) or verified statistical exceedances were evaluated against the GWPS using confidence limits (Attachment D). The 95% lower confidence limit (LCL) for the mean of the historical data was used to evaluate whether the regulated unit is in compliance with the GWPS 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 GU-4A (18.931 µg/L) exceeded the GWPS of 2.1 µg/L.
The 95% LCL for cobalt at MW-303 (8.391 µg/L) exceeded the GWPS of 2.1 µg/L.
The 95% LCL for cobalt at MW-307 (18.951 µg/L) exceeded the GWPS of 2.1 µg/L.
The 95% LCL for cobalt at MW-312 (34.077 µg/L) exceeded the GWPS of 2.1 µg/L.
The 95% LCL for cobalt at MW-335 (35.959 µg/L) exceeded the GWPS of 2.1 µg/L.
The 95% LCL for cobalt at MW-344 (187.182 µg/L) exceeded the GWPS of 2.1 µg/L.
The 95% LCL for nickel at MW-344 (145.766 µg/L) exceeded the GWPS of 100 µg/L.
The 95% LCL for cobalt at MW-380 (457.688 µg/L) exceeded the GWPS of 2.1 µg/L.
The 95% LCL for nickel at MW-380 (604.318 µg/L) exceeded the GWPS of 100 µg/L.
The 95% LCL for cobalt at MW-384 (7.538 µg/L) exceeded the GWPS of 2.1 µg/L.
The 95% LCL for cobalt at MW-385 (3.089 µg/L) exceeded the GWPS of 2.1 µg/L.
The 95% LCL for arsenic at MW-390 (11.757 µg/L) exceeded the GWPS of 10 µg/L.

The 95% LCL for cobalt at MW-390 (102.800 µg/L) exceeded the GWPS of 2.1 µg/L.

The calculated 95% LCL for the remainder of the verified exceedances did not exceed GWPS.

Volatile Organic Compounds

Volatile Organic Compounds (VOCs) are generally man-made compounds not present in ambient ground water. If VOCs are detected above their statistical limit (i.e., the laboratory PQL or reporting limit), a verification resample will be conducted at the next scheduled sampling event. A statistical exceedance will be indicated if the VOC detection is confirmed by the subsequent monitoring. VOCs detected in the ground water at SCISWA Landfill during the first semi-annual monitoring event in 2023 are summarized below. Historical VOC detections are summarized in Attachment E.

Organic compounds detected during the first semi-annual monitoring event in 2023

Well	VOC Detected	Result, µg/L	Reporting Limit, µg/L	Verified/ Awaiting Verification	Groundwater Standard, µg/L
MW-382R	1,1-Dichloroethane	1.4	1	Verified	140[b]

a - USEPA MCL, b – Iowa Statewide Standard

The VOCs detections did not exceed GWPS. The verified VOC detections were evaluated against the GWPS using confidence limits (Attachment F). The analysis was conducted to evaluate whether verified concentrations are significantly above the water quality standard. The calculated LCLs for historically detected VOCs are below the respective GWPS.

CONCLUSIONS

This document describes a comprehensive statistical plan designated for the SCISWA Landfill. The groundwater monitoring network for SCISWA Landfill includes wells MW-300, MW-303, MW-304, MW-307 (upgradient), MW-312 (upgradient), MW-313, MW-335, MW-344, MW-380, MW-381, MW-382R, MW-384, MW-385, MW-390 (upgradient). The ground water data was compared to background using control charts (intrawell) and using prediction limits (interwell).

For the most current data, there are control limit exceedances detected for arsenic and copper at MW-335 awaiting verification.

Verified site prediction limit exceedances were detected for cobalt and nickel at MW-300, barium at MW-303, barium at MW-304, cobalt and nickel at MW-344, and beryllium, cobalt and nickel at MW-380.

There were no confirmed exceedances using both intrawell and interwell comparisons.

There is a verified detection of 1,1-dichloroethane at MW-382R.

Attachment A

Ground Water Data

Table 1

Analytical Data Summary for 3/6/2023

Constituents	Units	GU-4A	MW-300	MW-303	MW-304	MW-307	MW-312	MW-313	MW-335	MW-344	MW-380
1,1,1,2-Tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	ug/L	<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
1,2-Dibromo-3-chloropropane	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-Butanone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
2-Hexanone	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-Methyl-2-pentanone	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic	ug/L	<4.0	<4.0	<4.0	<4.0	4.3	<4.0	4.9	16.9	<4.0	4.3
Barium	ug/L	14.4	13.4	73.9	66.5	8.9	25.3	22.6	17.0	11.7	7.7
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	4.7
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	3.1
Carbon Disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon Tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorodibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium	ug/L	<8	<8	<8	<8	<8	<8	<8	<8	<8	<8
cis-1,2-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt	ug/L	38.2	294.0	27.9	4.4	48.5	44.8	1.4	68.2	209.0	758.0
Copper	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	4.7	<4.0	<4.0
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Iodomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methylene Chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel	ug/L	90.9	343.0	28.6	4.1	83.7	64.8	19.8	106.0	165.0	965.0
Selenium	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	9.6
Silver	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,4-Dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl Acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl Chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, Total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc	ug/L	81.2	122.0	<20.0	<20.0	324.0	<20.0	<20.0	69.2	<20.0	2290.0

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

Table 1

Analytical Data Summary for 3/6/2023

Constituents	MW-381	MW-382R	MW-384	MW-385	MW-390	MW-601	MW-602	MW-603
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	1.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-Dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-Trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dibromo-3-chloropropane	<5	<5	<5	<5	<5	<5	<5	<5
1,2-Dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1
1,4-Dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1
2-Butanone	<10	<10	<10	<10	<10	<10	<10	<10
2-Hexanone	<5	<5	<5	<5	<5	<5	<5	<5
4-Methyl-2-pentanone	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5
Antimony	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic	<4.0	<4.0	<4.0	<4.0	16.3	<4.0	<4.0	5.2
Barium	8.5	29.7	10.7	11.0	17.3	12.6	10.5	34.6
Benzene	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon Disulfide	<1	<1	<1	<1	<1	<1	<1	<1
Carbon Tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1
Chlorodibromomethane	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1
Chromium	<8	<8	<8	<8	<8	<8	<8	<8
cis-1,2-Dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1
cis-1,3-Dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt	1.2	1.2	8.4	2.4	113.0	.8	194.0	19.7
Copper	4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1
Iodomethane	<1	<1	<1	<1	<1	<1	<1	<1
Lead	<4	<4	<4	<4	<4	<4	<4	<4
Methylene Chloride	<5	<5	<5	<5	<5	<5	<5	<5
Nickel	13.0	4.5	43.2	16.8	62.0	<4.0	270.0	9.5
Selenium	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Silver	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethene	<1	<1	<1	<1	<1	<1	<1	<1
Thallium	<2	<2	<2	<2	<2	<2	<2	<2
Toluene	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,2-Dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,4-Dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium	<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	<20.0	<20.0	<20.0	<20.0	115.0	<20.0	102.0	<20.0

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

Attachment B

Summary Tables and Graphs for the Intrawell Comparisons

Table 1

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

Constituent	Units	Well	N(back)	N(mon)	N(tot)	Mean	SD	R(i-1)	R(i)	S(i-1)	S(i)	Limit	Type	Conf	
Antimony	ug/L	MW-300	19	3	34			2.0000	2.0000			1.0000	nonpar	.99	**
Arsenic	ug/L	MW-300	19	3	34	2.0375	0.4972	4.0000	4.0000	2.0375	2.0375	4.7721	normal		
Barium	ug/L	MW-300	18	3	34	13.0861	1.9733	12.6000	13.4000	13.0861	13.0861	23.9395	normal		
Beryllium	ug/L	MW-300	19	3	34			4.0000	4.0000			0.5300	nonpar	.99	**
Cadmium	ug/L	MW-300	19	3	34	0.7042	1.8006	0.9000	0.8000	0.7042	0.7042	10.6077	normal		
Chromium	ug/L	MW-300	19	3	34			8.0000	8.0000			3.6900	nonpar	.99	**
Cobalt	ug/L	MW-300	18	3	34	286.0000	66.7727	1370.0000	294.0000	1322.8410	286.0000	653.2496	normal		
Copper	ug/L	MW-300	19	3	34			4.0000	4.0000			32.0000	nonpar	.99	**
Lead	ug/L	MW-300	19	3	34	0.6372	0.3297	4.0000	4.0000	0.6372	0.6372	2.4507	normal		
Nickel	ug/L	MW-300	19	3	34	228.5053	55.8503	1720.0000	343.0000	1772.7194	395.7194	535.6816	normal		
Selenium	ug/L	MW-300	19	3	34			4.8000	4.0000			3.3400	nonpar	.99	**
Silver	ug/L	MW-300	19	3	34			4.0000	4.0000			0.5600	nonpar	.99	**
Thallium	ug/L	MW-300	19	3	34	0.2528	0.0475	2.0000	2.0000	0.2528	0.2528	0.5139	normal		
Vanadium	ug/L	MW-300	19	3	34			20.0000	20.0000			2.1500	nonpar	.99	**
Zinc	ug/L	MW-300	19	3	34	244.3421	255.4130	1230.0000	122.0000	1038.4403	724.5384	1649.1135	normal		
Antimony	ug/L	MW-303	18	3	34			2.0000	2.0000			0.5300	nonpar	.99	**
Arsenic	ug/L	MW-303	19	3	34	1.0109	0.4638	4.0000	4.0000	1.0109	1.0109	3.5619	normal		
Barium	ug/L	MW-303	19	3	34	48.5000	23.8902	58.0000	73.9000	48.5000	55.9824	179.8960	normal		
Beryllium	ug/L	MW-303	19	3	34			4.0000	4.0000			0.2700	nonpar	.99	**
Cadmium	ug/L	MW-303	19	3	34			0.8000	0.8000			0.1000	nonpar	.99	**
Chromium	ug/L	MW-303	18	3	34			8.0000	8.0000			4.7600	nonpar	.99	**
Cobalt	ug/L	MW-303	19	3	34	18.4263	3.4367	9.9000	27.9000	18.4263	25.3225	37.3282	normal		
Copper	ug/L	MW-303	18	3	34			4.0000	4.0000			2.0000	nonpar	.99	**
Lead	ug/L	MW-303	19	3	34	0.4141	0.6266	4.0000	4.0000	0.4141	0.4141	3.8603	normal		
Nickel	ug/L	MW-303	19	3	34	38.9368	11.8360	30.9000	28.6000	38.9368	38.9368	104.0349	normal		
Selenium	ug/L	MW-303	19	3	34			4.0000	4.0000			1.0000	nonpar	.99	**
Silver	ug/L	MW-303	19	3	34			4.0000	4.0000			0.3700	nonpar	.99	**
Thallium	ug/L	MW-303	19	3	34			2.0000	2.0000			0.9040	nonpar	.99	**
Vanadium	ug/L	MW-303	19	3	34			20.0000	20.0000			8.7300	nonpar	.99	**
Zinc	ug/L	MW-303	19	3	34	24.8742	44.8621	20.0000	20.0000	24.8742	24.8742	271.6156	normal		
Antimony	ug/L	MW-304	14	3	17			2.0000	2.0000			0.8160	nonpar	.99	**
Arsenic	ug/L	MW-304	14	3	17	2.2164	2.2660	4.0000	4.0000	2.2164	2.2164	14.6794	normal		
Barium	ug/L	MW-304	14	3	17	66.5214	19.1409	60.2000	66.5000	66.5214	66.5214	171.7966	normal		
Beryllium	ug/L	MW-304	14	3	17			4.0000	4.0000			0.2210	nonpar	.99	**
Cadmium	ug/L	MW-304	14	3	17			0.8000	0.8000			0.3710	nonpar	.99	**
Chromium	ug/L	MW-304	14	3	17			8.0000	8.0000			1.2800	nonpar	.99	**
Cobalt	ug/L	MW-304	13	3	17	8.1031	3.3997	7.8000	4.4000	23.4974	17.2445	26.8014	normal		
Copper	ug/L	MW-304	14	3	17			4.0000	4.0000			2.8700	nonpar	.99	**
Lead	ug/L	MW-304	14	3	17			4.0000	4.0000			0.7370	nonpar	.99	**
Nickel	ug/L	MW-304	13	3	17	6.1354	2.3844	6.8000	4.1000	6.1354	6.1354	19.2496	normal		
Selenium	ug/L	MW-304	14	3	17			4.0000	4.0000			1.2400	nonpar	.99	**
Silver	ug/L	MW-304	14	3	17			4.0000	4.0000			0.1800	nonpar	.99	**
Thallium	ug/L	MW-304	14	3	17			2.0000	2.0000			0.2600	nonpar	.99	**
Vanadium	ug/L	MW-304	14	3	17			20.0000	20.0000			0.8400	nonpar	.99	**
Zinc	ug/L	MW-304	12	3	17	9.8533	1.6475	20.0000	20.0000	9.8533	9.8533	18.9147	normal		
Antimony	ug/L	MW-307	17	3	31			2.0000	2.0000			1.0000	nonpar	.99	**

N(back) and N(mon) = Non-outlier measurements in the background and monitoring periods.
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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).
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** - Detection Frequency < 25%.
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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	
Arsenic	ug/L	MW-307	17	3	31	3.2082	1.3796	4.0000	4.3000	3.2082	3.2653	10.7959	normal		
Barium	ug/L	MW-307	16	3	31	9.4050	2.3782	8.3000	8.9000	9.4050	9.4050	22.4849	normal		
Beryllium	ug/L	MW-307	17	3	31	0.6852	0.2854	4.0000	4.0000	0.6852	0.6852	2.2551	normal		
Cadmium	ug/L	MW-307	17	3	31	0.2898	0.2332	0.8000	0.8000	0.2898	0.2898	1.5724	normal		
Chromium	ug/L	MW-307	17	3	31			8.0000	8.0000			1.6000	nonpar	.99	**
Cobalt	ug/L	MW-307	16	3	31	54.4500	12.2189	39.9000	48.5000	54.4500	54.4500	121.6539	normal		
Copper	ug/L	MW-307	17	3	31			4.0000	4.0000			2.1900	nonpar	.99	**
Lead	ug/L	MW-307	17	3	31			4.0000	4.0000			0.7700	nonpar	.99	**
Nickel	ug/L	MW-307	17	3	31	85.1118	22.4967	70.0000	83.7000	85.1118	85.1118	208.8434	normal		
Selenium	ug/L	MW-307	17	3	31	2.8825	1.4130	4.0000	4.0000	2.8825	2.8825	10.6538	normal		
Silver	ug/L	MW-307	15	3	31			4.0000	4.0000			0.4200	nonpar	.99	**
Thallium	ug/L	MW-307	17	3	31			2.0000	2.0000			0.2700	nonpar	.99	**
Vanadium	ug/L	MW-307	16	3	31			20.0000	20.0000			1.1000	nonpar	.99	**
Zinc	ug/L	MW-307	16	3	31	421.3125	117.2108	271.0000	324.0000	421.3125	421.3125	1065.9717	normal		
Antimony	ug/L	MW-312	19	3	22			2.0000	2.0000			1.0000	nonpar	.99	**
Arsenic	ug/L	MW-312	19	3	22	1.2584	0.4060	4.0000	4.0000	1.2584	1.2584	3.4916	normal		
Barium	ug/L	MW-312	19	3	22	14.3563	3.5081	23.9000	25.3000	21.2689	29.5816	33.6507	normal		
Beryllium	ug/L	MW-312	19	3	22	0.4429	0.1366	4.0000	4.0000	0.4429	0.4429	1.1944	normal		
Cadmium	ug/L	MW-312	19	3	22			0.8000	0.8000			0.2460	nonpar	.99	**
Chromium	ug/L	MW-312	19	3	22			8.0000	8.0000			3.9000	nonpar	.99	**
Cobalt	ug/L	MW-312	19	3	22	36.5316	8.3421	34.0000	44.8000	36.5316	38.5435	82.4129	normal		
Copper	ug/L	MW-312	19	3	22			4.0000	4.0000			2.1900	nonpar	.99	**
Lead	ug/L	MW-312	19	3	22			4.0000	4.0000			1.6700	nonpar	.99	**
Nickel	ug/L	MW-312	19	3	22	102.1684	22.8484	64.5000	64.8000	102.1684	102.1684	227.8348	normal		
Selenium	ug/L	MW-312	19	3	22			4.0000	4.0000			1.0000	nonpar	.99	**
Silver	ug/L	MW-312	19	3	22			4.0000	4.0000			0.4200	nonpar	.99	**
Thallium	ug/L	MW-312	19	3	22			2.0000	2.0000			0.2700	nonpar	.99	**
Vanadium	ug/L	MW-312	19	3	22			20.0000	20.0000			1.1000	nonpar	.99	**
Zinc	ug/L	MW-312	19	3	22	32.0316	50.1704	20.0000	20.0000	32.0316	32.0316	307.9690	normal		
Antimony	ug/L	MW-313	18	3	34			2.0000	2.0000			1.0000	nonpar	.99	**
Arsenic	ug/L	MW-313	19	3	34	5.6137	6.0073	6.0000	4.9000	5.6137	5.6137	38.6537	normal		
Barium	ug/L	MW-313	19	3	34	25.9579	12.4960	15.3000	22.6000	25.9579	25.9579	94.6857	normal		
Beryllium	ug/L	MW-313	19	3	34			4.0000	4.0000			0.2700	nonpar	.99	**
Cadmium	ug/L	MW-313	19	3	34	0.1401	0.0446	0.8000	0.8000	0.1401	0.1401	0.3855	normal		
Chromium	ug/L	MW-313	19	3	34			8.0000	8.0000			2.9800	nonpar	.99	**
Cobalt	ug/L	MW-313	19	3	34	13.8165	16.6174	2.8000	1.4000	13.8165	13.8165	105.2120	normal		
Copper	ug/L	MW-313	19	3	34			4.0000	4.0000			2.9900	nonpar	.99	**
Lead	ug/L	MW-313	19	3	34	0.4094	0.2358	4.0000	4.0000	0.4094	0.4094	1.7062	normal		
Nickel	ug/L	MW-313	19	3	34	29.2011	22.2832	7.2000	19.8000	29.2011	29.2011	151.7589	normal		
Selenium	ug/L	MW-313	19	3	34			4.0000	4.0000			1.0000	nonpar	.99	**
Silver	ug/L	MW-313	19	3	34			4.0000	4.0000			0.3700	nonpar	.99	**
Thallium	ug/L	MW-313	19	3	34			2.0000	2.0000			0.2600	nonpar	.99	**
Vanadium	ug/L	MW-313	19	3	34	16.3084	20.8998	20.0000	20.0000	16.3084	16.3084	131.2575	normal		
Zinc	ug/L	MW-313	19	3	34	21.4774	25.4503	20.0000	20.0000	21.4774	21.4774	161.4540	normal		
Antimony	ug/L	MW-335	20	3	35			2.0000	2.0000			0.7400	nonpar	.99	**
Arsenic	ug/L	MW-335	20	3	35	2.1758	1.7303	7.1000	16.9000	8.2288	21.6552	11.6924	normal		

N(back) and N(mon) = Non-outlier measurements in the background and monitoring periods.
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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	
Barium	ug/L	MW-335	20	3	35	13.0605	3.6877	12.0000	17.0000	13.0605	14.2342	33.3427	normal		
Beryllium	ug/L	MW-335	20	3	35	0.4493	0.1047	4.0000	4.0000	0.4493	0.4493	1.0249	normal		
Cadmium	ug/L	MW-335	20	3	35	0.2887	0.1722	0.8000	0.8000	0.4631	0.2887	1.2355	normal		
Chromium	ug/L	MW-335	19	3	35			8.0000	8.0000			2.9300	nonpar	.99	**
Cobalt	ug/L	MW-335	17	3	35	62.7588	24.7589	42.3000	68.2000	62.7588	62.7588	198.9330	normal		
Copper	ug/L	MW-335	20	3	35			4.0000	4.7000			2.0000	nonpar	.99	**
Lead	ug/L	MW-335	20	3	35	0.3620	0.2657	4.0000	4.0000	0.4293	0.3620	1.8237	normal		
Nickel	ug/L	MW-335	18	3	35	104.3333	75.5987	37.0000	106.0000	104.3333	104.3333	520.1264	normal		
Selenium	ug/L	MW-335	20	3	35			4.0000	4.0000			1.0000	nonpar	.99	**
Silver	ug/L	MW-335	20	3	35			4.0000	4.0000			0.3700	nonpar	.99	**
Thallium	ug/L	MW-335	20	3	35			2.0000	2.0000			0.2700	nonpar	.99	**
Vanadium	ug/L	MW-335	20	3	35			20.0000	20.0000			1.1000	nonpar	.99	**
Zinc	ug/L	MW-335	20	3	35	73.6000	54.9016	43.9000	69.2000	73.6000	73.6000	375.5586	normal		
Antimony	ug/L	MW-344	19	3	34			2.0000	2.0000			5.0200	nonpar	.99	**
Arsenic	ug/L	MW-344	19	3	34	1.2918	0.6384	4.0000	4.0000	1.2918	1.2918	4.8027	normal		
Barium	ug/L	MW-344	19	3	34	14.2484	3.6378	11.9000	11.7000	14.2484	14.2484	34.2564	normal		
Beryllium	ug/L	MW-344	19	3	34			4.0000	4.0000			0.4010	nonpar	.99	**
Cadmium	ug/L	MW-344	19	3	34	0.2549	0.1916	0.8000	0.8000	0.2549	0.2549	1.3088	normal		
Chromium	ug/L	MW-344	19	3	34			8.0000	8.0000			5.5200	nonpar	.99	**
Cobalt	ug/L	MW-344	19	3	34	155.4526	73.3058	224.0000	209.0000	268.5887	267.1567	558.6346	normal		
Copper	ug/L	MW-344	19	3	34			4.0000	4.0000			2.0000	nonpar	.99	**
Lead	ug/L	MW-344	19	3	34			4.0000	4.0000			0.7260	nonpar	.99	**
Nickel	ug/L	MW-344	19	3	34	131.8526	66.3648	178.0000	165.0000	213.6001	196.9739	496.8592	normal		
Selenium	ug/L	MW-344	19	3	34			4.0000	4.0000			1.0600	nonpar	.99	**
Silver	ug/L	MW-344	19	3	34			4.0000	4.0000			0.3700	nonpar	.99	**
Thallium	ug/L	MW-344	19	3	34			2.0000	2.0000			0.2600	nonpar	.99	**
Vanadium	ug/L	MW-344	19	3	34			20.0000	20.0000			1.1000	nonpar	.99	**
Zinc	ug/L	MW-344	19	3	34	36.4368	45.8120	20.0000	20.0000	36.4368	36.4368	288.4030	normal		
Antimony	ug/L	MW-380	18	3	34			2.0000	2.0000			1.1000	nonpar	.99	**
Arsenic	ug/L	MW-380	19	3	34	5.6442	1.6391	4.0000	4.3000	5.6442	5.6442	14.6594	normal		
Barium	ug/L	MW-380	17	3	34	8.4441	1.6486	10.4000	7.7000	9.1635	8.4441	17.5116	normal		
Beryllium	ug/L	MW-380	19	3	34	7.4989	3.3671	4.0000	4.7000	7.4989	7.4989	26.0180	normal		
Cadmium	ug/L	MW-380	19	3	35	9.7553	4.2708	0.8000	3.1000	9.7553	9.7553	33.2446	normal		
Chromium	ug/L	MW-380	19	3	34	14.6711	8.5880	8.0000	8.0000	14.6711	14.6711	61.9049	normal		
Cobalt	ug/L	MW-380	18	3	34	1139.3333	325.1624	407.0000	758.0000	1139.3333	1139.3333	2927.7265	normal		
Copper	ug/L	MW-380	19	3	34	13.6163	8.6109	4.0000	4.0000	13.6163	13.6163	60.9762	normal		
Lead	ug/L	MW-380	19	3	34	2.1032	1.6916	4.0000	4.0000	2.1032	2.1032	11.4069	normal		
Nickel	ug/L	MW-380	19	3	34	1543.9474	478.1781	531.0000	965.0000	1543.9474	1543.9474	4173.9268	normal		
Selenium	ug/L	MW-380	19	3	34	10.7253	6.8124	4.0000	9.6000	10.7253	10.7253	48.1936	normal		
Silver	ug/L	MW-380	18	3	34			4.0000	4.0000			1.0000	nonpar	.99	**
Thallium	ug/L	MW-380	19	3	34	0.7228	0.3760	2.0000	2.0000	0.7228	0.7228	2.7908	normal		
Vanadium	ug/L	MW-380	19	3	34	7.0337	3.7039	20.0000	20.0000	7.0337	7.0337	27.4053	normal		
Zinc	ug/L	MW-380	20	3	35	4417.5000	1437.7646	669.0000	2290.0000	4417.5000	4417.5000	12325.2054	normal		
Antimony	ug/L	MW-381	19	3	34			2.0000	2.0000			0.7400	nonpar	.99	**
Arsenic	ug/L	MW-381	19	3	34			4.0000	4.0000			7.1400	nonpar	.99	**
Barium	ug/L	MW-381	19	3	35	11.0842	3.8217	12.8000	8.5000	11.4832	11.0842	32.1037	normal		

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Constituent	Units	Well	N(back)	N(mon)	N(tot)	Mean	SD	R(i-1)	R(i)	S(i-1)	S(i)	Limit	Type	Conf	
Beryllium	ug/L	MW-381	19	3	34			4.0000	4.0000			0.2700	nonpar	.99	**
Cadmium	ug/L	MW-381	19	3	34	0.2688	0.2736	0.8000	0.8000	0.2688	0.2688	1.7735	normal		
Chromium	ug/L	MW-381	19	3	34			8.0000	8.0000			3.9000	nonpar	.99	**
Cobalt	ug/L	MW-381	19	3	34	3.6049	11.2517	0.4000	1.2000	3.6049	3.6049	65.4894	normal		
Copper	ug/L	MW-381	19	3	34	2.7779	0.6573	4.0000	4.0000	2.7779	3.5070	6.3932	normal		
Lead	ug/L	MW-381	19	3	34	0.5266	0.1986	4.0000	4.0000	0.5266	0.5266	1.6188	normal		
Nickel	ug/L	MW-381	19	3	34	22.4942	20.1734	4.0000	13.0000	22.4942	22.4942	133.4479	normal		
Selenium	ug/L	MW-381	19	3	34			4.0000	4.0000			1.0000	nonpar	.99	**
Silver	ug/L	MW-381	19	3	34			4.0000	4.0000			0.3700	nonpar	.99	**
Thallium	ug/L	MW-381	19	3	34			2.0000	2.0000			0.2600	nonpar	.99	**
Vanadium	ug/L	MW-381	19	3	34			20.0000	20.0000			2.9800	nonpar	.99	**
Zinc	ug/L	MW-381	19	3	34	26.6526	44.1854	20.0000	20.0000	26.6526	26.6526	269.6723	normal		
Antimony	ug/L	MW-382R	18	3	28			2.0000	2.0000			0.7400	nonpar	.99	**
Arsenic	ug/L	MW-382R	19	3	28			4.0000	4.0000			0.8800	nonpar	.99	**
Barium	ug/L	MW-382R	19	3	28	24.0789	2.9735	20.9000	29.7000	24.0789	27.4699	40.4332	normal		
Beryllium	ug/L	MW-382R	19	3	28			4.0000	4.0000			0.2700	nonpar	.99	**
Cadmium	ug/L	MW-382R	19	3	28			0.8000	0.8000			0.1120	nonpar	.99	**
Chromium	ug/L	MW-382R	19	3	28			8.0000	8.0000			5.9100	nonpar	.99	**
Cobalt	ug/L	MW-382R	19	3	28	2.7904	2.5011	4.2000	1.2000	2.7904	2.7904	16.5465	normal		
Copper	ug/L	MW-382R	19	3	28			4.0000	4.0000			2.0000	nonpar	.99	**
Lead	ug/L	MW-382R	19	3	28			4.0000	4.0000			0.5860	nonpar	.99	**
Nickel	ug/L	MW-382R	16	3	28	4.3969	1.0788	6.7000	4.5000	5.8909	5.1850	10.3302	normal		
Selenium	ug/L	MW-382R	19	3	28			4.0000	4.0000			1.0000	nonpar	.99	**
Silver	ug/L	MW-382R	19	3	28			4.0000	4.0000			0.4200	nonpar	.99	**
Thallium	ug/L	MW-382R	19	3	28			2.0000	2.0000			0.2600	nonpar	.99	**
Vanadium	ug/L	MW-382R	19	3	28			20.0000	20.0000			2.1500	nonpar	.99	**
Zinc	ug/L	MW-382R	19	3	28			20.0000	20.0000			175.0000	nonpar	.99	**
Antimony	ug/L	MW-384	18	3	30			2.0000	2.0000			0.5800	nonpar	.99	**
Arsenic	ug/L	MW-384	19	3	30	2.2342	0.6672	4.0000	4.0000	2.2342	2.2342	5.9036	normal		
Barium	ug/L	MW-384	19	3	30	10.7121	2.7304	11.2000	10.7000	10.7121	10.7121	25.7294	normal		
Beryllium	ug/L	MW-384	19	3	30	0.8261	0.3678	4.0000	4.0000	0.8261	0.8261	2.8490	normal		
Cadmium	ug/L	MW-384	19	3	30			0.8000	0.8000			0.2420	nonpar	.99	**
Chromium	ug/L	MW-384	19	3	30			8.0000	8.0000			10.0000	nonpar	.99	**
Cobalt	ug/L	MW-384	19	3	30	46.6947	16.8008	16.8000	8.4000	46.6947	46.6947	139.0992	normal		
Copper	ug/L	MW-384	19	3	30			4.0000	4.0000			2.0000	nonpar	.99	**
Lead	ug/L	MW-384	19	3	30			4.0000	4.0000			1.2400	nonpar	.99	**
Nickel	ug/L	MW-384	19	3	30	118.4053	33.0305	74.8000	43.2000	118.4053	118.4053	300.0729	normal		
Selenium	ug/L	MW-384	19	3	30			4.0000	4.0000			1.0600	nonpar	.99	**
Silver	ug/L	MW-384	18	3	30			4.0000	4.0000			0.3700	nonpar	.99	**
Thallium	ug/L	MW-384	19	3	30			2.0000	2.0000			0.2700	nonpar	.99	**
Vanadium	ug/L	MW-384	19	3	30			20.0000	20.0000			2.1500	nonpar	.99	**
Zinc	ug/L	MW-384	19	3	30	108.6474	85.5335	20.0000	20.0000	108.6474	108.6474	579.0818	normal		
Antimony	ug/L	MW-385	19	3	30			2.0000	2.0000			0.7400	nonpar	.99	**
Arsenic	ug/L	MW-385	19	3	30	0.9698	0.3226	4.0000	4.0000	0.9698	0.9698	2.7441	normal		
Barium	ug/L	MW-385	18	3	30	12.9644	1.9595	18.2000	11.0000	16.7304	13.2964	23.7414	normal		
Beryllium	ug/L	MW-385	19	3	30			4.0000	4.0000			0.2700	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.

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	
Cadmium	ug/L	MW-385	19	3	30	0.3304	0.2058	0.8000	0.8000	0.3304	0.3304	1.4623	normal		
Chromium	ug/L	MW-385	19	3	30			8.0000	8.0000			4.3100	nonpar	.99	**
Cobalt	ug/L	MW-385	19	3	30	7.4816	3.5142	8.8000	2.4000	7.4816	7.4816	26.8096	normal		
Copper	ug/L	MW-385	19	3	30			4.0000	4.0000			2.0000	nonpar	.99	**
Lead	ug/L	MW-385	19	3	30			4.0000	4.0000			0.8720	nonpar	.99	**
Nickel	ug/L	MW-385	19	3	30	39.3158	7.3755	48.5000	16.8000	42.9684	39.3158	79.8811	normal		
Selenium	ug/L	MW-385	19	3	30			4.0000	4.0000			1.0000	nonpar	.99	**
Silver	ug/L	MW-385	19	3	30			4.0000	4.0000			0.3700	nonpar	.99	**
Thallium	ug/L	MW-385	19	3	30			2.0000	2.0000			0.2600	nonpar	.99	**
Vanadium	ug/L	MW-385	19	3	30			20.0000	20.0000			1.1000	nonpar	.99	**
Zinc	ug/L	MW-385	18	3	30	51.1111	19.0098	77.4000	20.0000	63.1427	51.1111	155.6649	normal		
Antimony	ug/L	MW-390	17	3	28			2.0000	2.0000			1.0000	nonpar	.99	**
Arsenic	ug/L	MW-390	17	3	28	15.1676	3.3735	19.4000	16.3000	21.6721	20.2744	33.7217	normal		
Barium	ug/L	MW-390	17	3	28	27.6118	7.7772	14.9000	17.3000	27.6118	27.6118	70.3864	normal		
Beryllium	ug/L	MW-390	17	3	28			4.0000	4.0000			0.2700	nonpar	.99	**
Cadmium	ug/L	MW-390	17	3	28	0.3144	0.2610	0.8000	0.8000	0.4841	0.3144	1.7499	normal		
Chromium	ug/L	MW-390	17	3	28			8.0000	8.0000			5.5100	nonpar	.99	**
Cobalt	ug/L	MW-390	17	3	28	106.2412	8.9517	103.0000	113.0000	106.2412	106.2862	155.4754	normal		
Copper	ug/L	MW-390	17	3	28			4.0000	4.0000			2.1900	nonpar	.99	**
Lead	ug/L	MW-390	17	3	28	1.5224	0.7021	4.0000	4.0000	2.2044	1.5224	5.3839	normal		
Nickel	ug/L	MW-390	17	3	28	53.7647	5.6887	53.5000	62.0000	53.7647	57.7335	85.0525	normal		
Selenium	ug/L	MW-390	17	3	28			4.0000	4.0000			1.0000	nonpar	.99	**
Silver	ug/L	MW-390	17	3	28			4.0000	4.0000			0.4200	nonpar	.99	**
Thallium	ug/L	MW-390	17	3	28			2.0000	2.0000			1.1700	nonpar	.99	**
Vanadium	ug/L	MW-390	17	3	28			20.0000	20.0000			8.9100	nonpar	.99	**
Zinc	ug/L	MW-390	16	3	28	129.1187	85.2843	107.0000	115.0000	336.9549	258.8729	598.1822	normal		

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

Table 4

Dixon's Test Outliers
1% Significance Level

Constituent	Units	Well	Date	Result	ND Qualifier	Date Range	N	Critical Value
Barium	ug/L	MW-300	04/16/2014	3.4400		09/18/2012-10/27/2021	19	0.5503
Cobalt	ug/L	MW-300	04/16/2014	42.3000		09/18/2012-10/27/2021	19	0.5503
Cobalt	ug/L	MW-304	04/16/2021	37.2000		03/22/2016-10/27/2021	14	0.6403
Nickel	ug/L	MW-304	04/16/2021	27.1000		03/22/2016-10/27/2021	14	0.6403
Zinc	ug/L	MW-304	04/16/2021	66.3000		03/22/2016-10/27/2021	14	0.6174
Zinc	ug/L	MW-304	10/27/2021	31.1000		03/22/2016-10/27/2021	14	0.6174
Barium	ug/L	MW-307	09/26/2013	30.0000	< 30.0000	09/18/2012-10/28/2021	17	0.5798
Cobalt	ug/L	MW-307	10/28/2021	14.8000		09/18/2012-10/28/2021	17	0.5798
Zinc	ug/L	MW-307	10/28/2021	10.6000		09/18/2012-10/28/2021	17	0.5798
Cobalt	ug/L	MW-335	09/24/2019	382.0000		09/19/2012-10/27/2021	20	0.5381
Cobalt	ug/L	MW-335	09/16/2020	0.1380		09/19/2012-10/27/2021	20	0.5503
Cobalt	ug/L	MW-335	04/15/2021	0.1770		09/19/2012-10/27/2021	20	0.5503
Nickel	ug/L	MW-335	09/16/2020	1.9000	< 1.9000	09/19/2012-10/27/2021	20	0.5503
Nickel	ug/L	MW-335	04/15/2021	1.9000	< 1.9000	09/19/2012-10/27/2021	20	0.5503
Barium	ug/L	MW-380	03/09/2017	104.0000	< 104.0000	09/19/2012-10/27/2021	19	0.5643
Barium	ug/L	MW-380	03/14/2018	52.0000	< 52.0000	09/19/2012-10/27/2021	19	0.5643
Cadmium	ug/L	MW-380	03/09/2017	57.4000		09/19/2012-10/27/2021	20	0.5381
Cobalt	ug/L	MW-380	09/02/2015	15.0000	< 15.0000	09/19/2012-10/27/2021	19	0.5503
Barium	ug/L	MW-381	09/02/2015	83.3000		09/20/2012-10/27/2021	20	0.5381
Nickel	ug/L	MW-382R	09/20/2012	50.0000	< 50.0000	09/20/2012-10/27/2021	19	0.5643
Nickel	ug/L	MW-382R	03/27/2013	50.0000	< 50.0000	09/20/2012-10/27/2021	19	0.5643
Nickel	ug/L	MW-382R	04/15/2014	50.0000	< 50.0000	09/20/2012-10/27/2021	19	0.5643
Barium	ug/L	MW-385	04/15/2014	3.4700		09/20/2012-10/28/2021	19	0.5503
Zinc	ug/L	MW-385	09/25/2013	233.0000		09/20/2012-10/28/2021	19	0.5503
Zinc	ug/L	MW-390	03/22/2016	5.2100	< 5.2100	09/18/2012-10/26/2021	17	0.5798

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.

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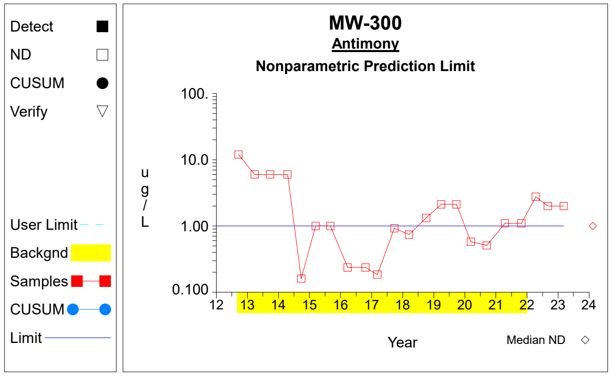
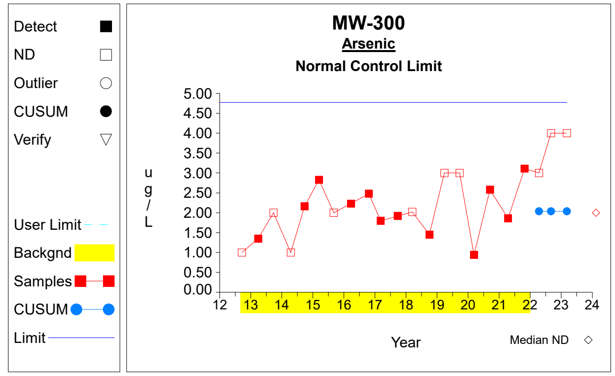
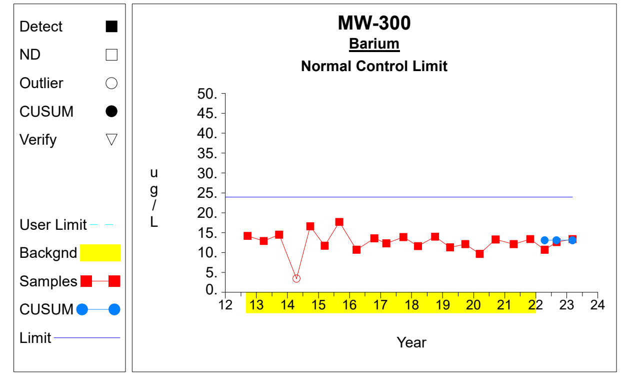
Intra-Well Control Charts / Prediction Limits



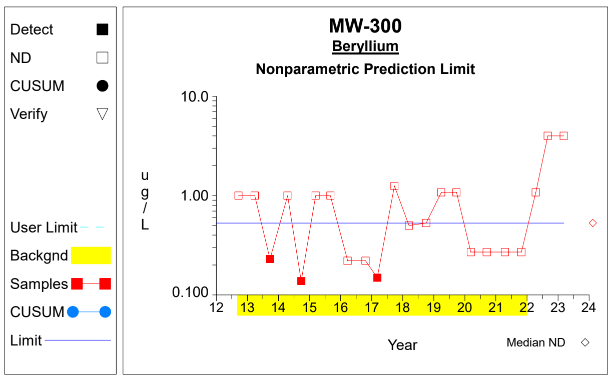
Graph 1



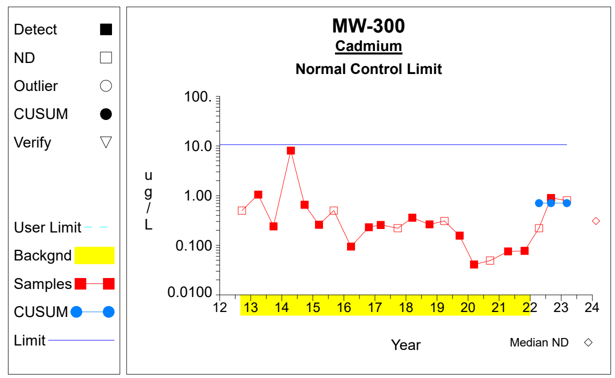
Graph 2



Graph 3



Graph 4



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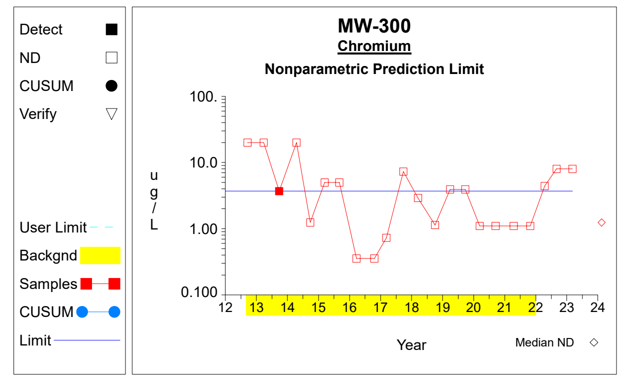
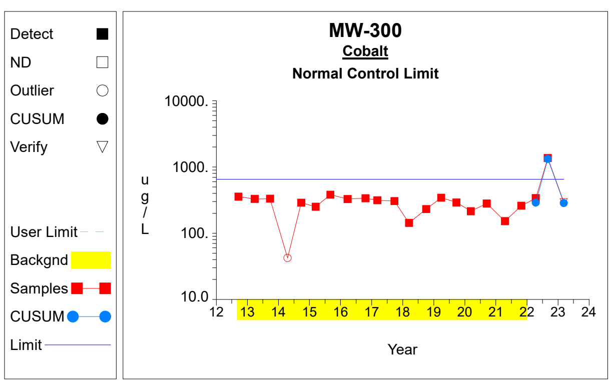


Graph 6



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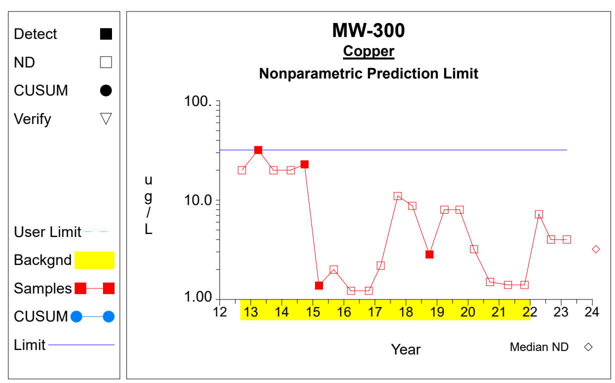

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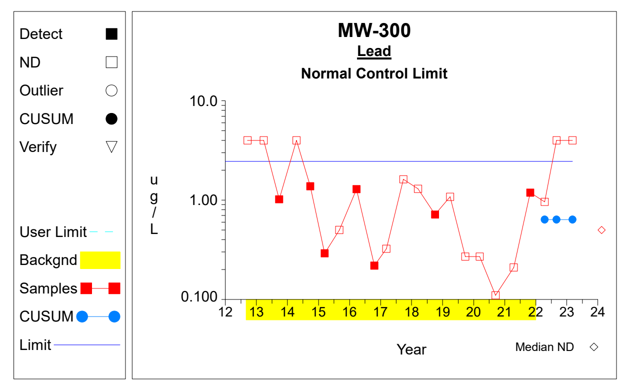

Graph 9

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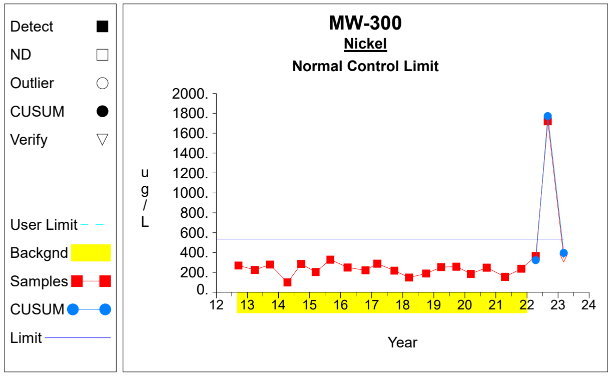
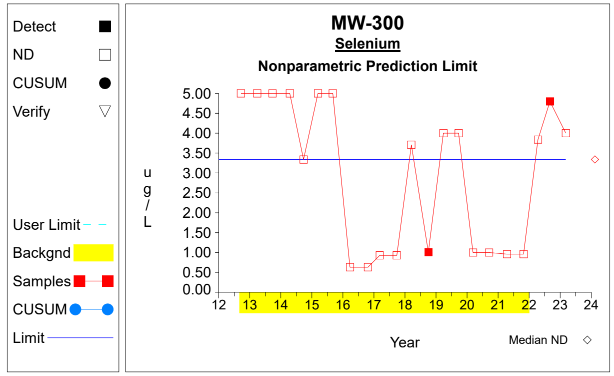
Intra-Well Control Charts / Prediction Limits



Graph 10



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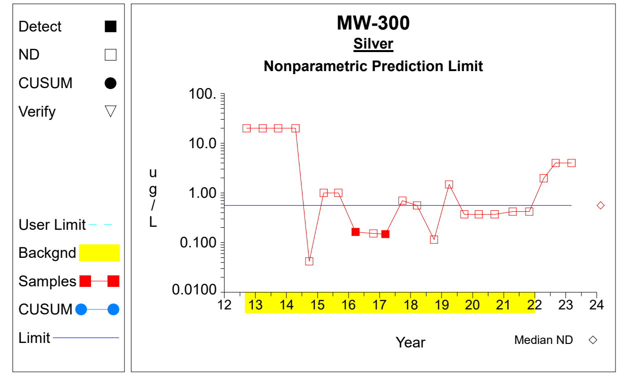

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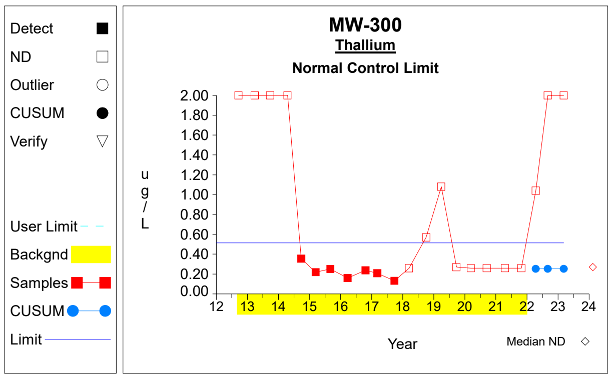
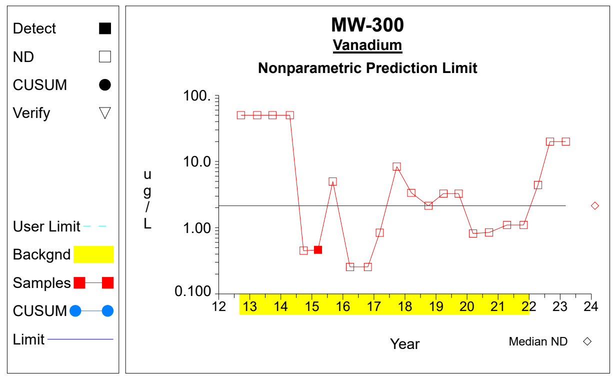
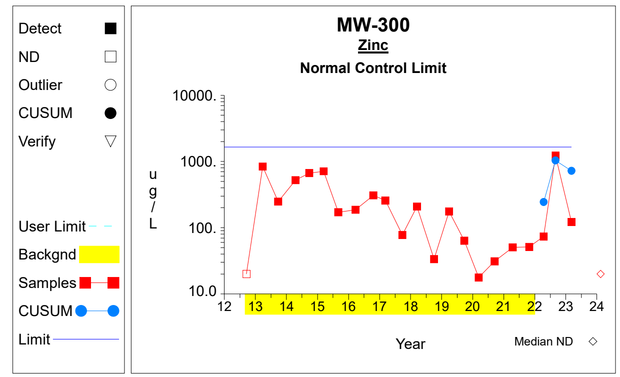


Graph 13



Graph 14



Graph 15

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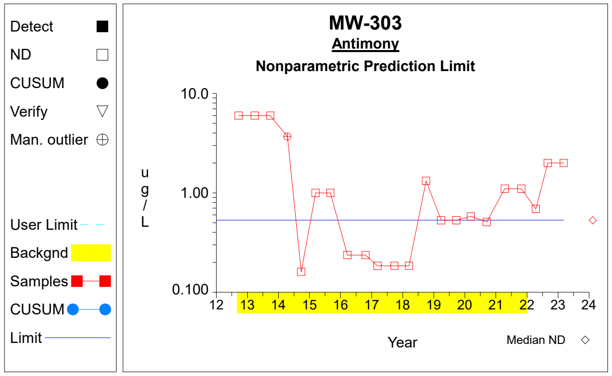
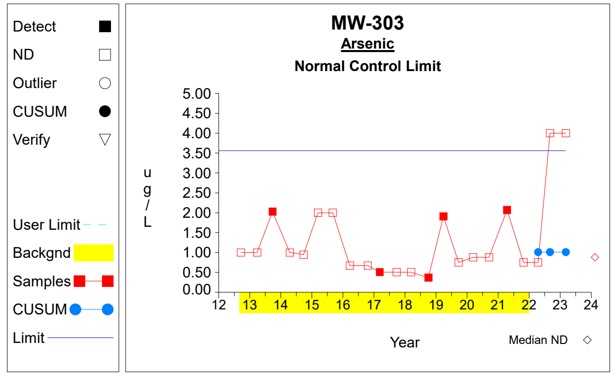
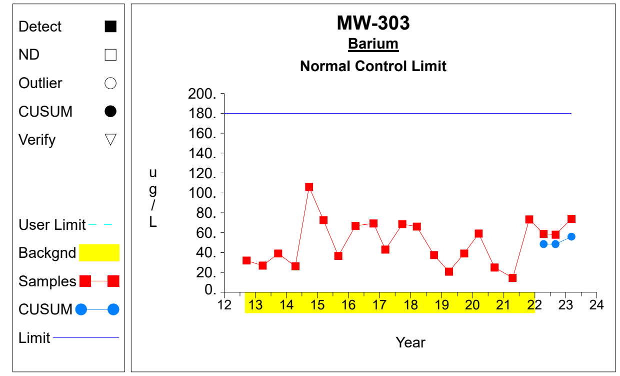
Intra-Well Control Charts / Prediction Limits



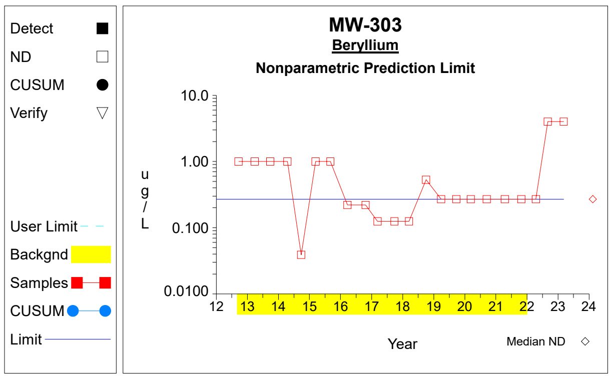
Graph 16



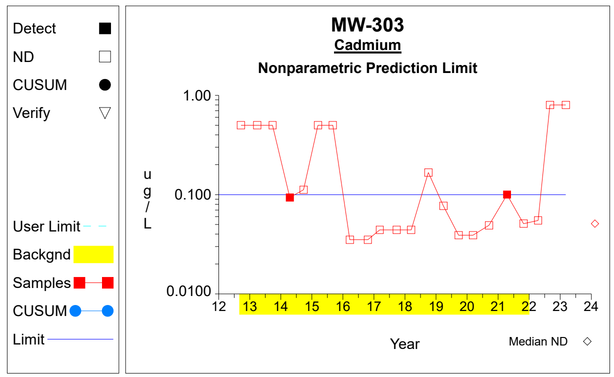
Graph 17



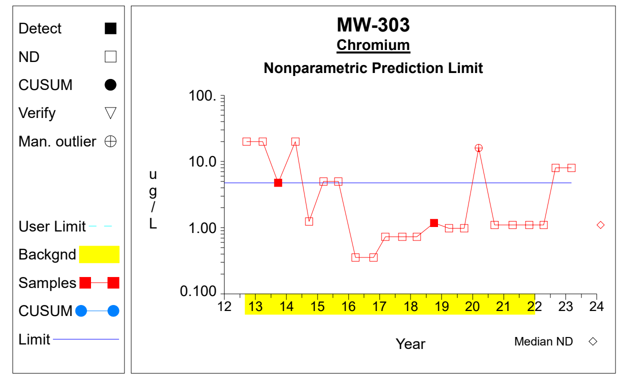
Graph 18



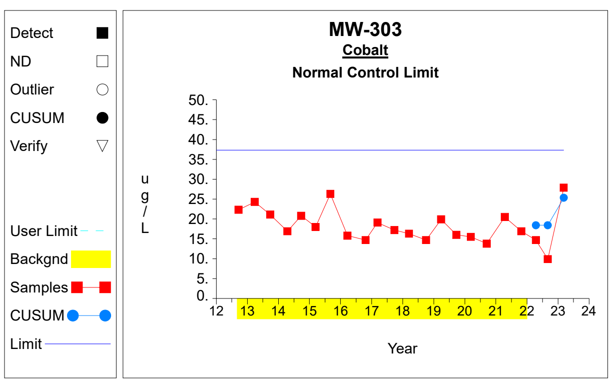
Graph 19



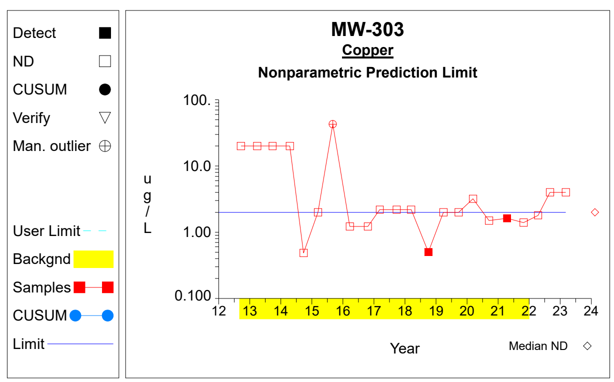
Graph 20



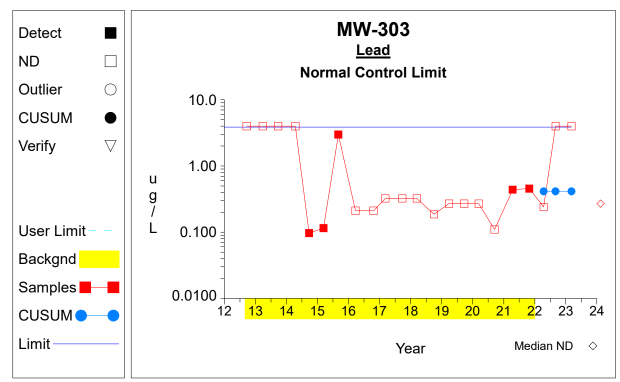
Graph 21



Graph 22



Graph 23



Graph 24

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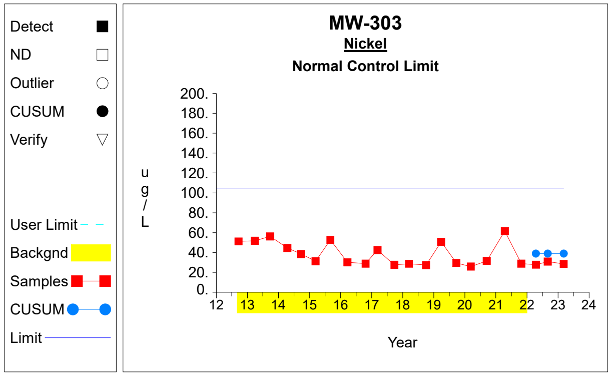
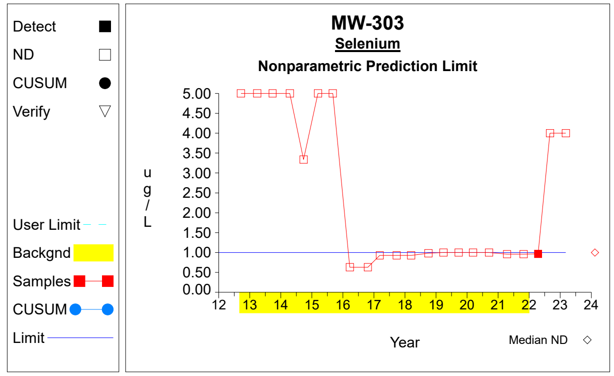
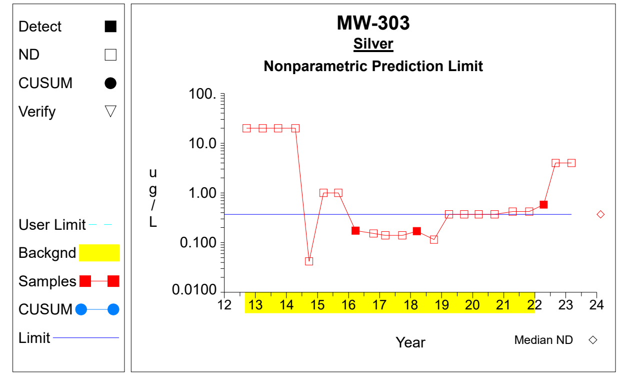
Intra-Well Control Charts / Prediction Limits



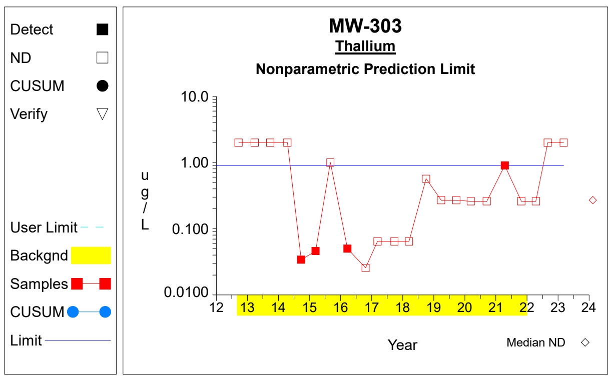
Graph 25



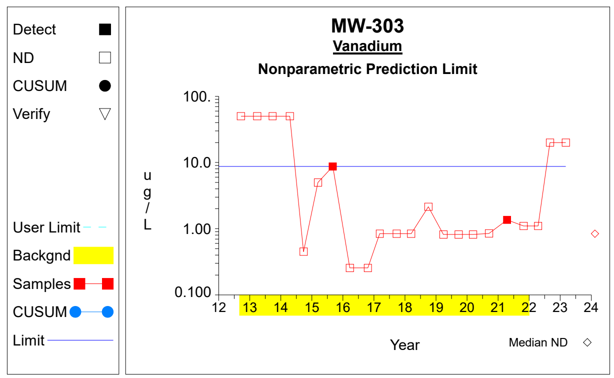
Graph 26



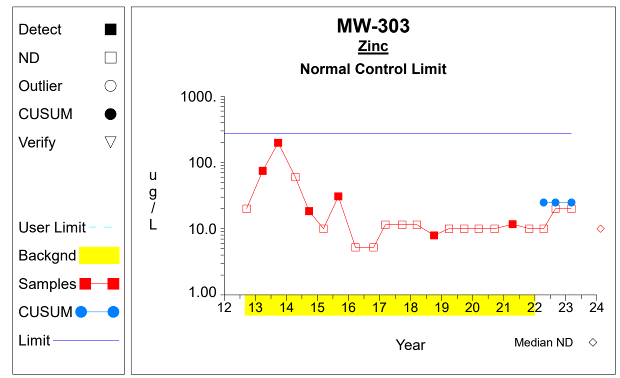
Graph 27



Graph 28



Graph 29



Graph 30

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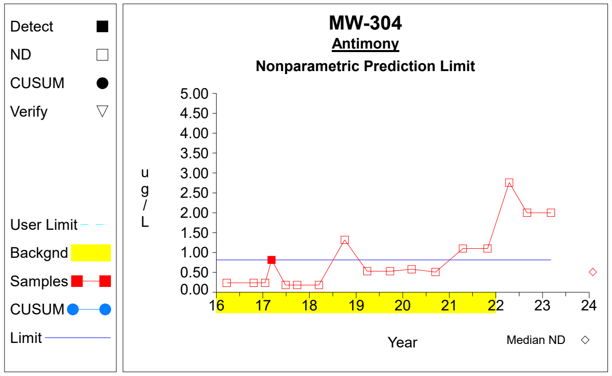
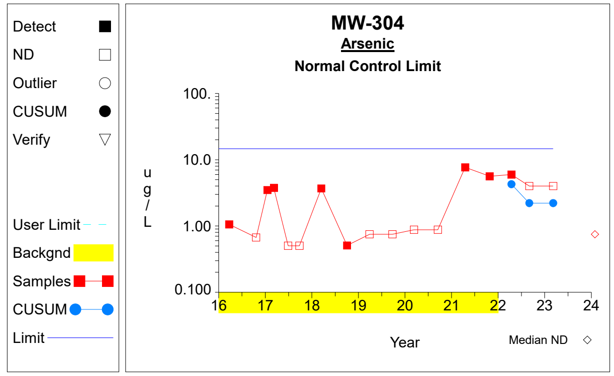
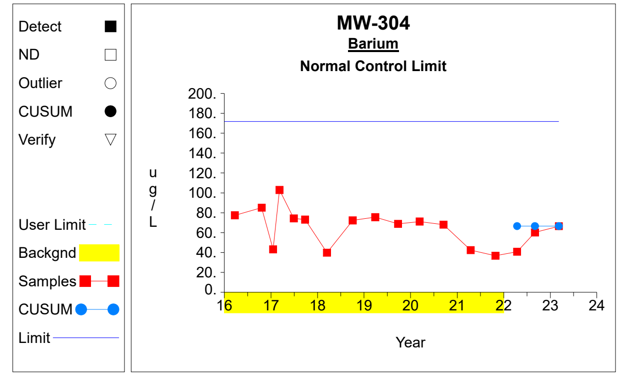


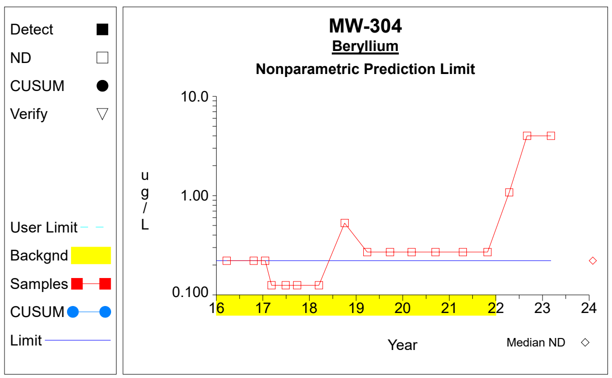
Graph 31



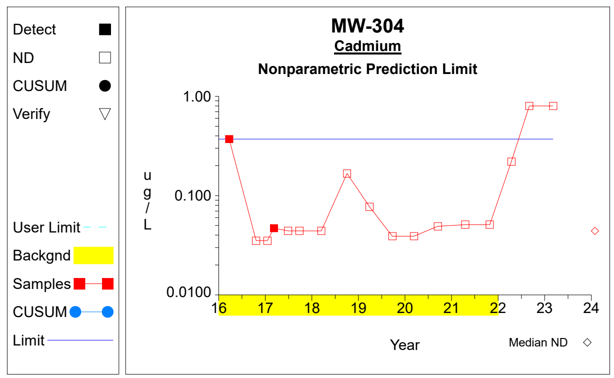
Graph 32



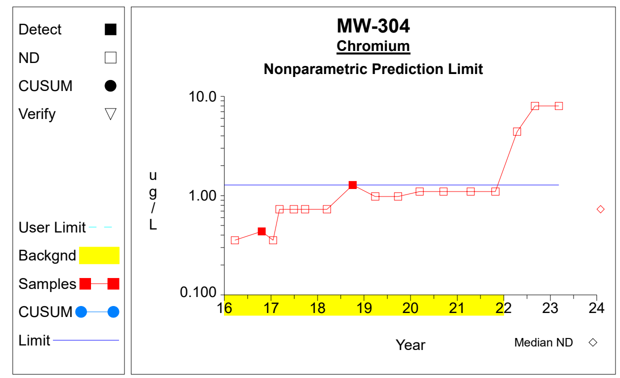
Graph 33



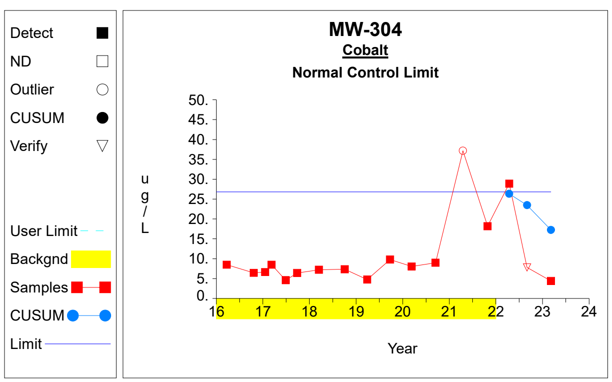
Graph 34



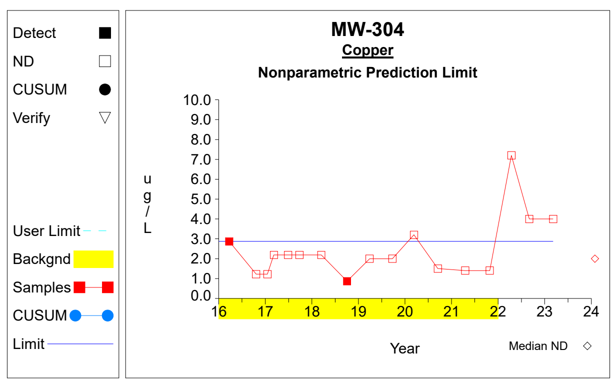
Graph 35



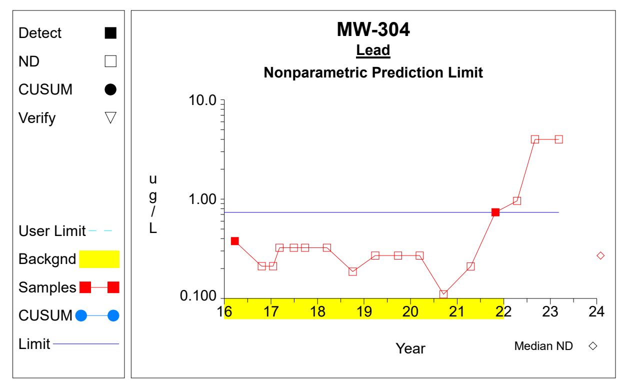
Graph 36



Graph 37



Graph 38



Graph 39

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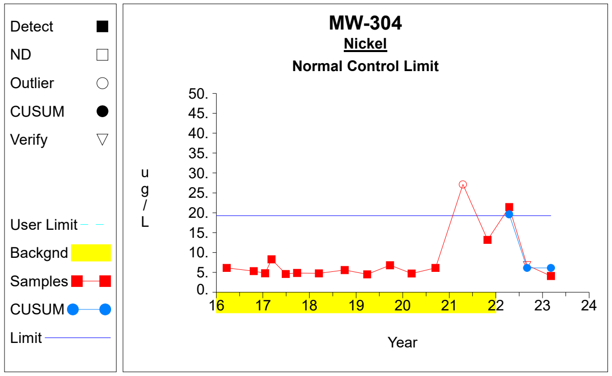
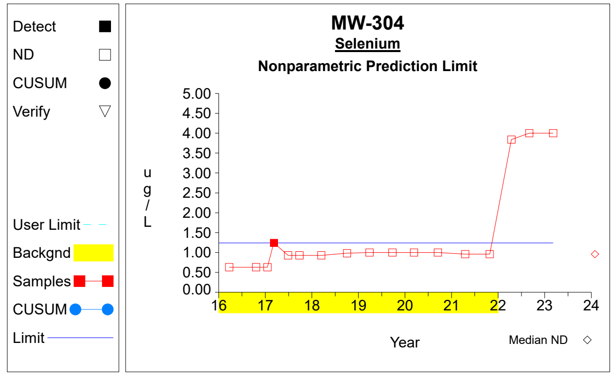
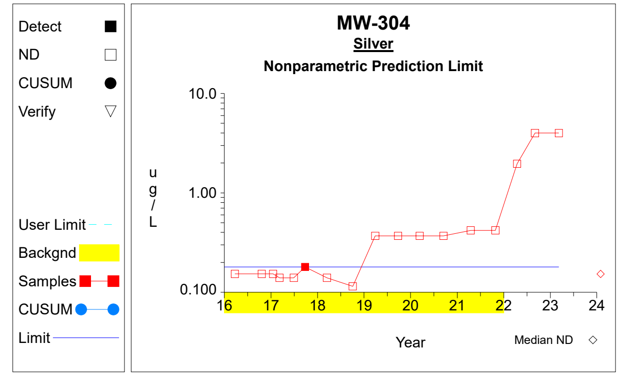
Intra-Well Control Charts / Prediction Limits



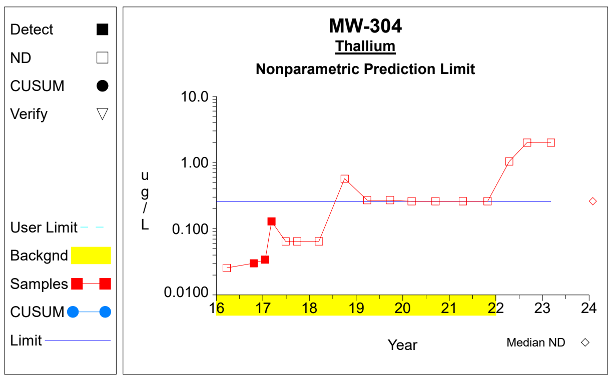
Graph 40



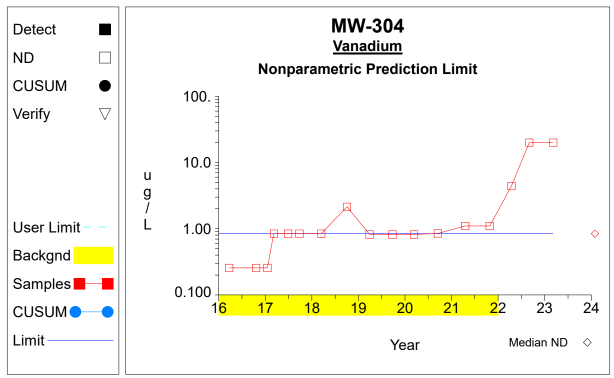
Graph 41



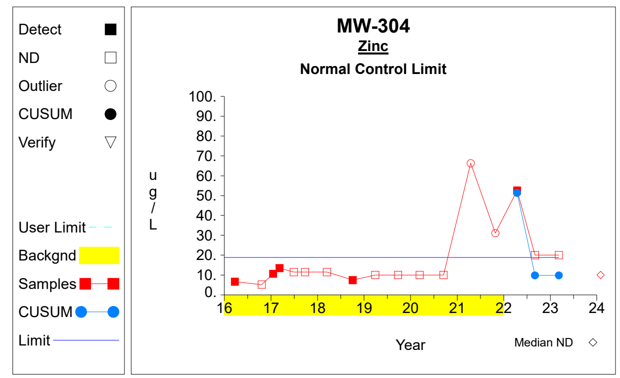
Graph 42



Graph 43



Graph 44



Graph 45

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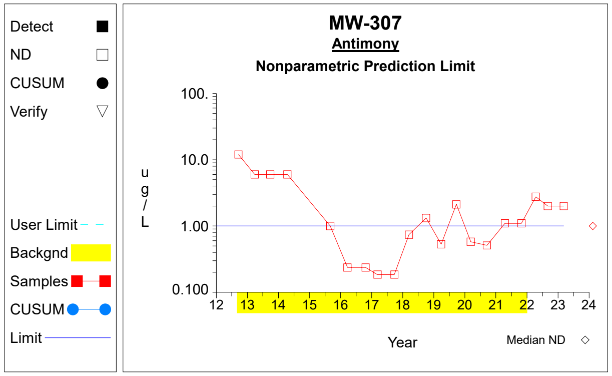
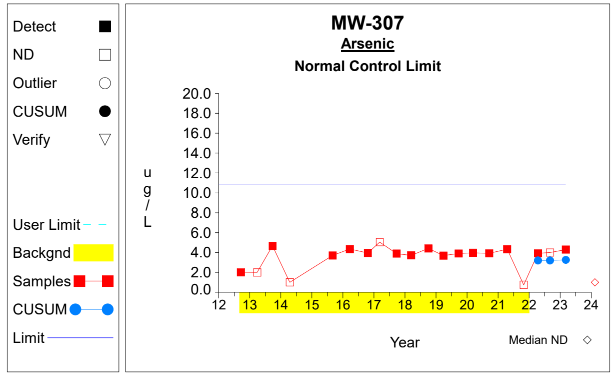
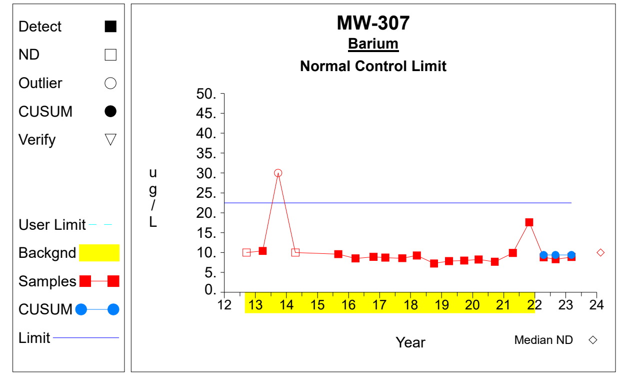
Intra-Well Control Charts / Prediction Limits



Graph 46



Graph 47



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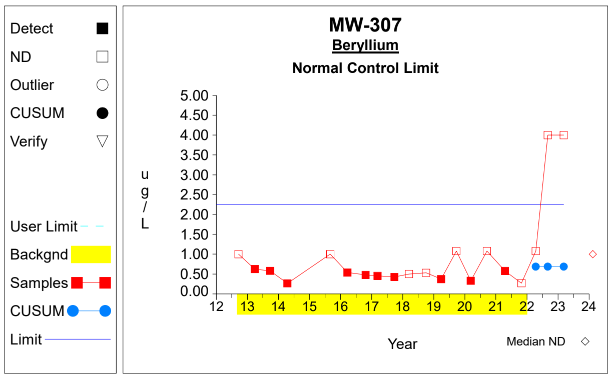
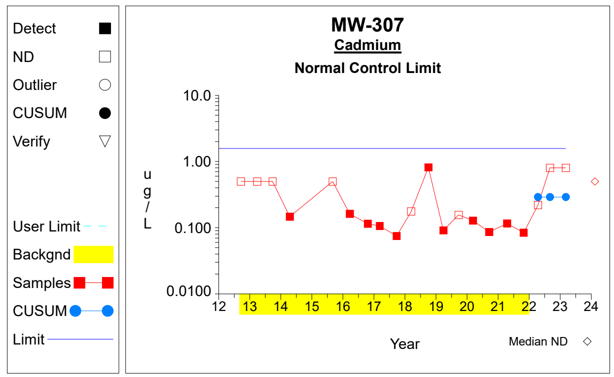


Graph 49



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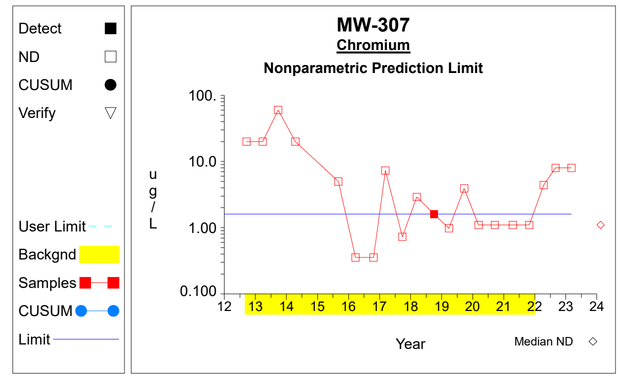

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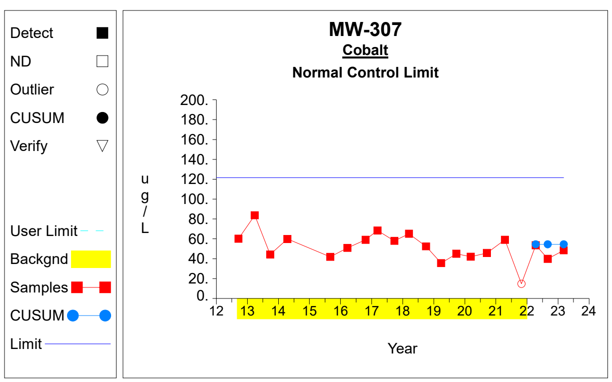

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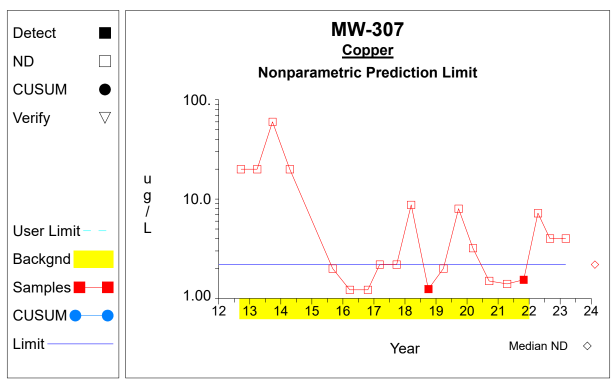

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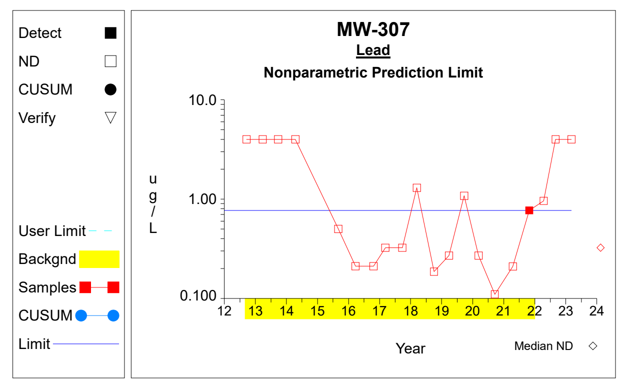

Graph 54

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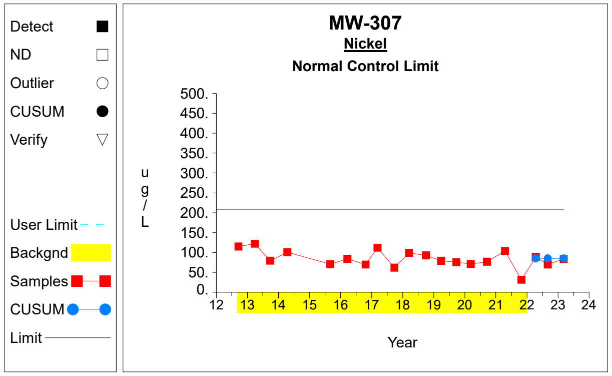
Intra-Well Control Charts / Prediction Limits



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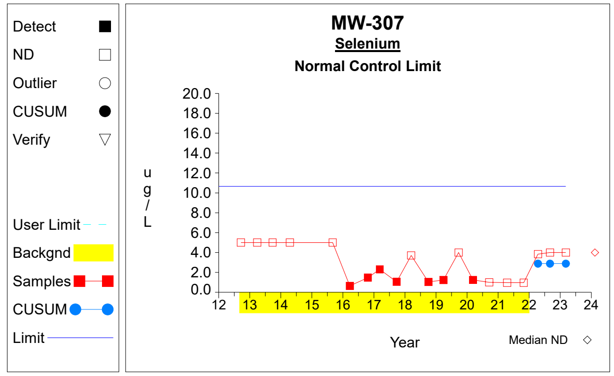
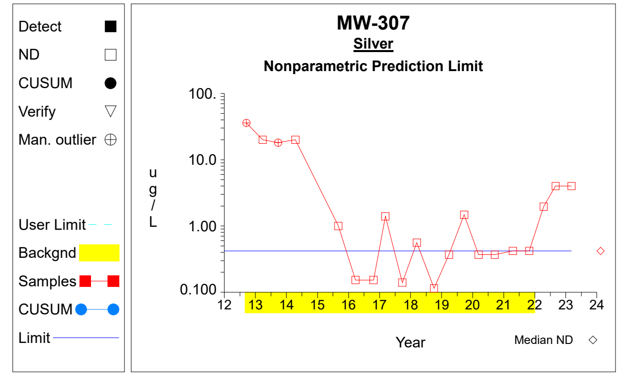
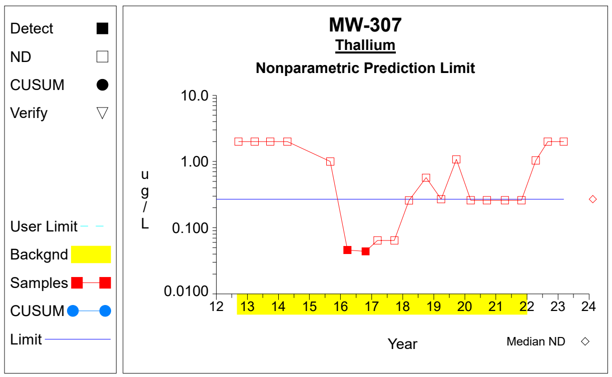


Graph 56



Graph 57



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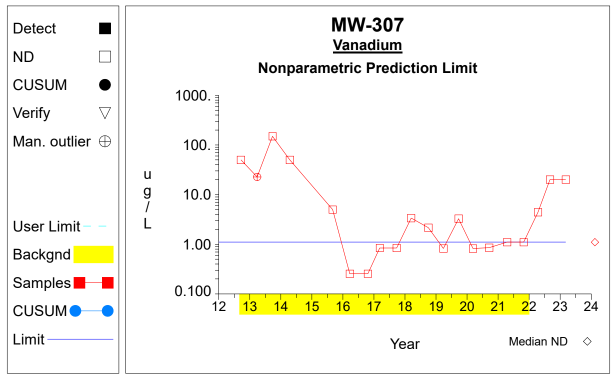
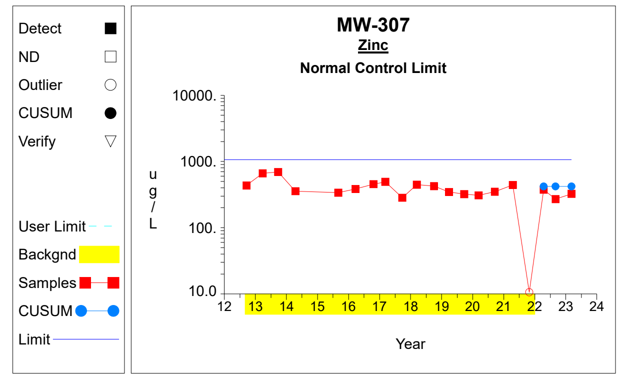


Graph 59



Graph 60

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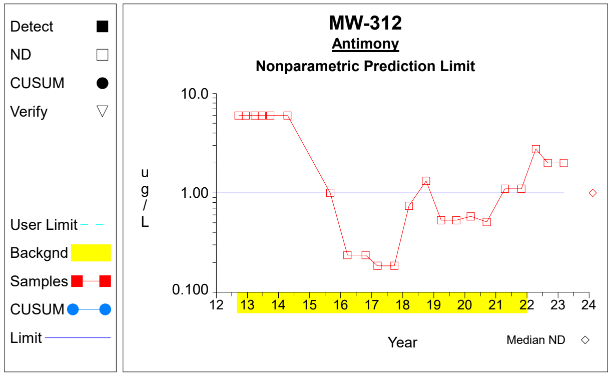
Intra-Well Control Charts / Prediction Limits



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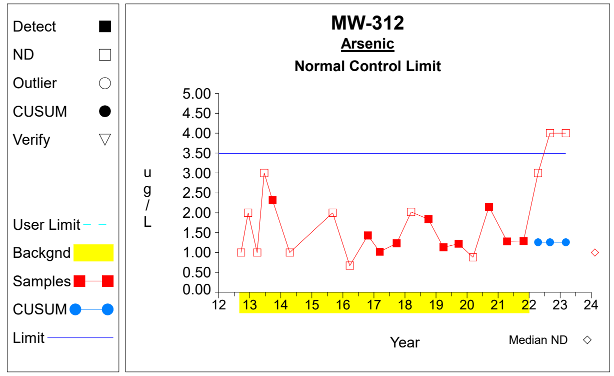
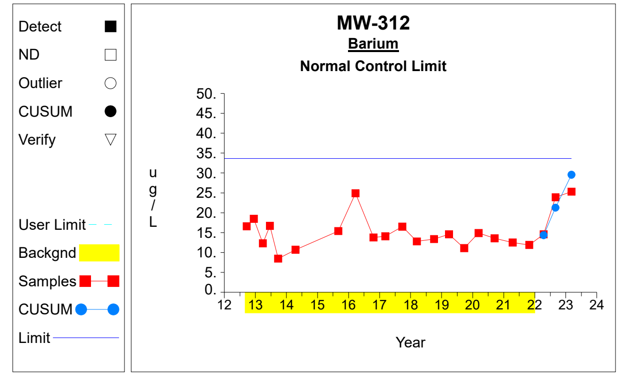
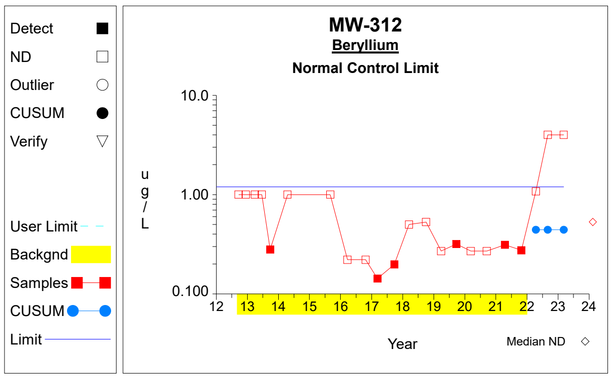


Graph 62



Graph 63



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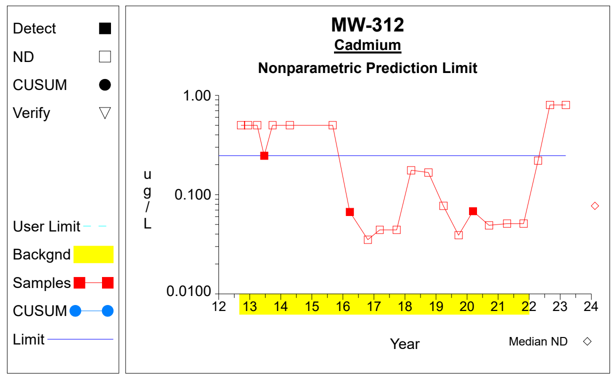

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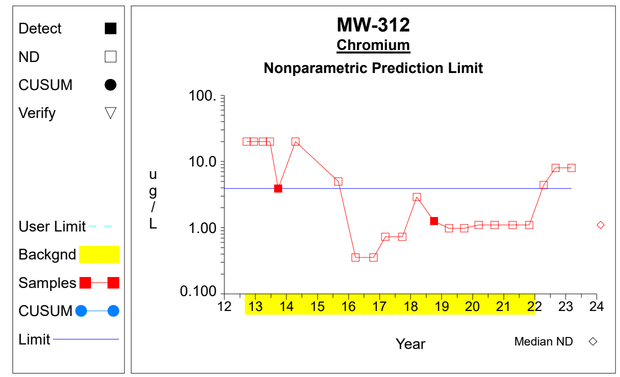
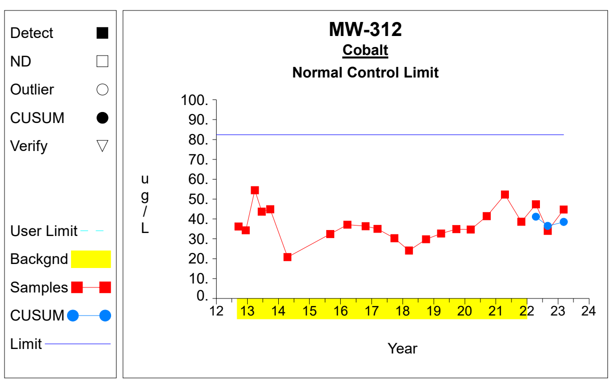


Graph 66



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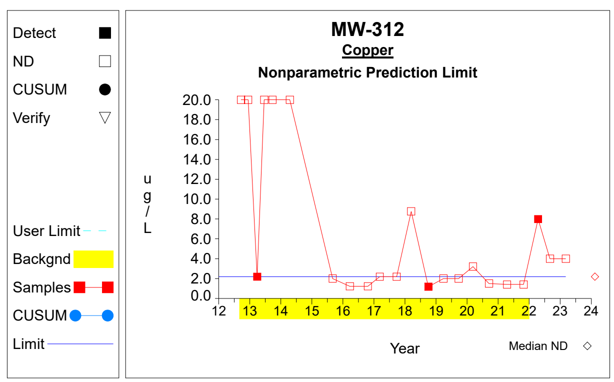

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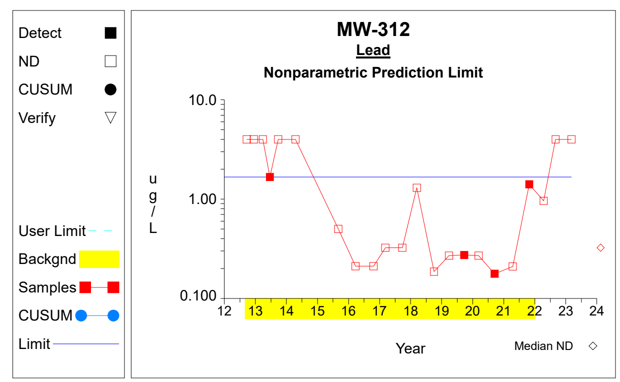

Graph 69

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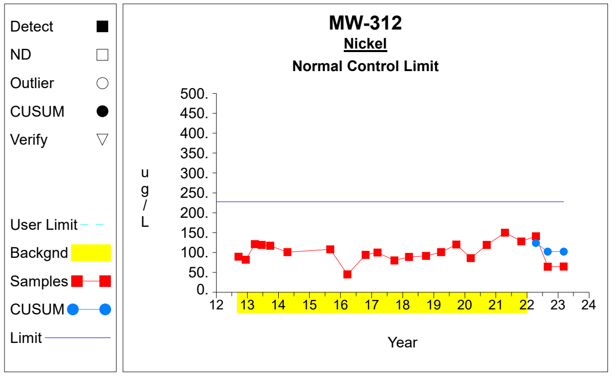
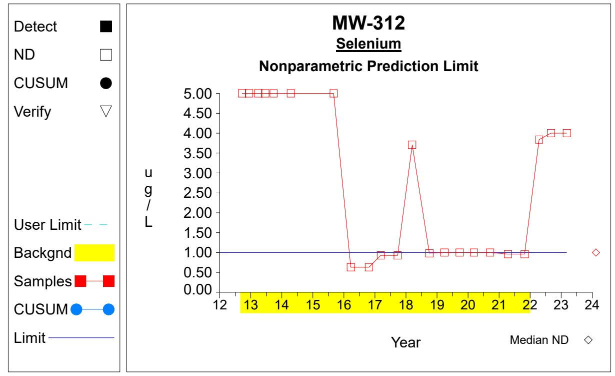
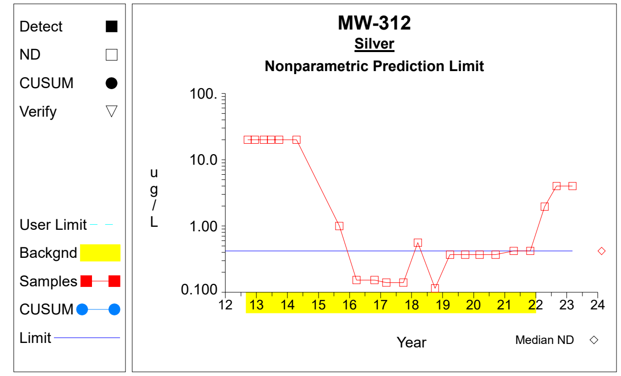
Intra-Well Control Charts / Prediction Limits



Graph 70



Graph 71



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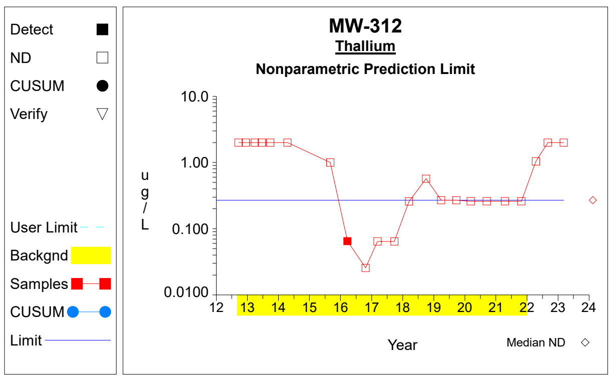

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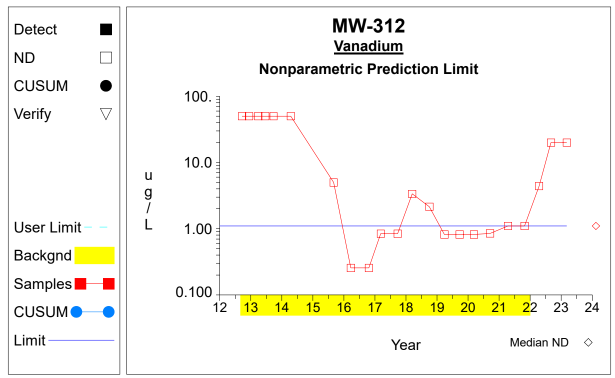

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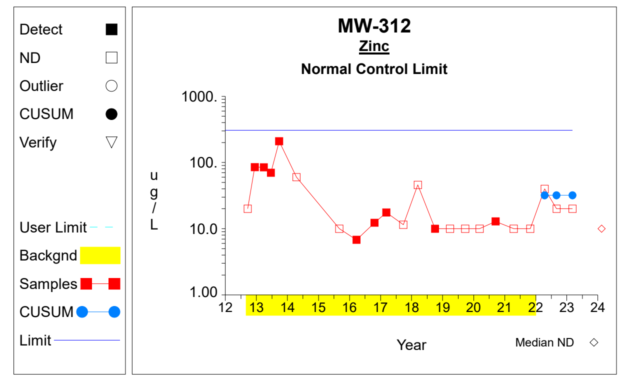

Graph 75

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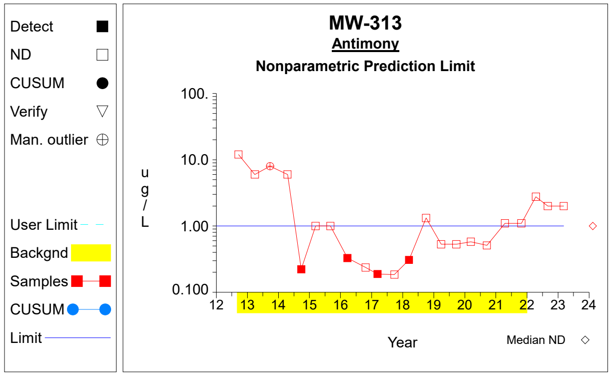
Intra-Well Control Charts / Prediction Limits



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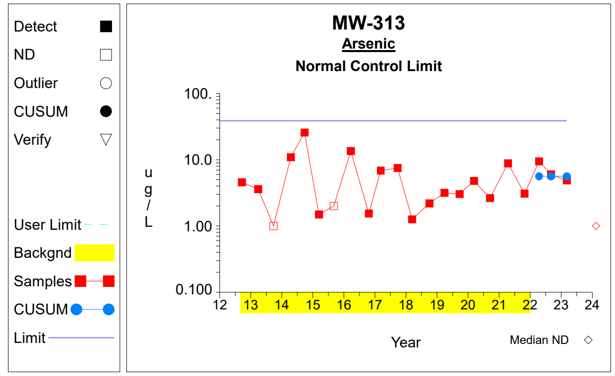
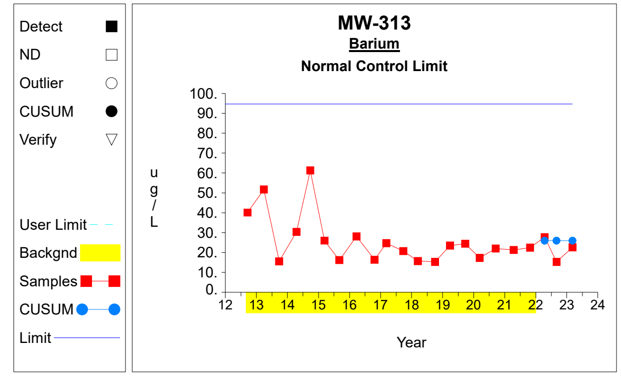


Graph 77



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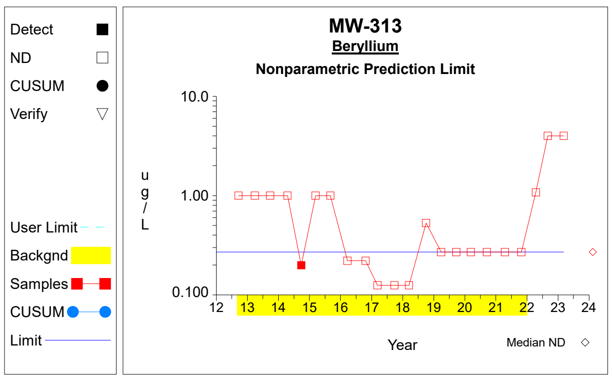

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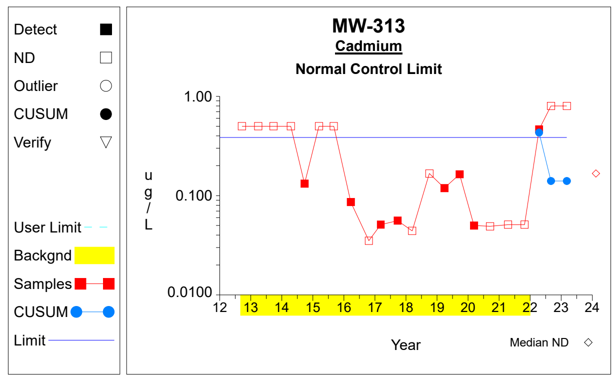

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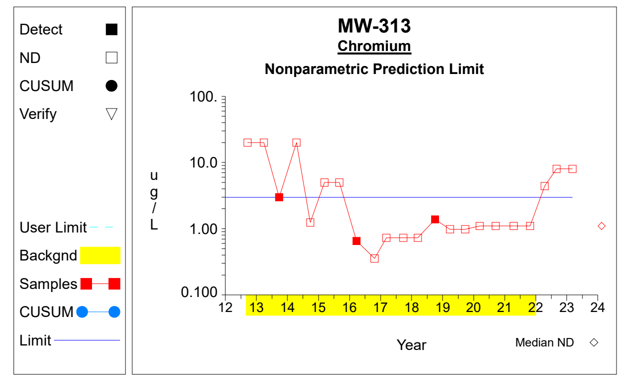

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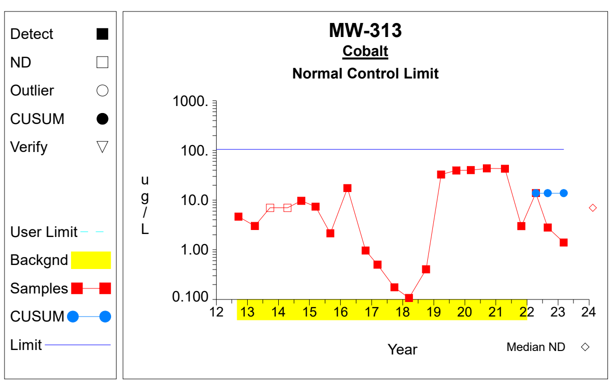

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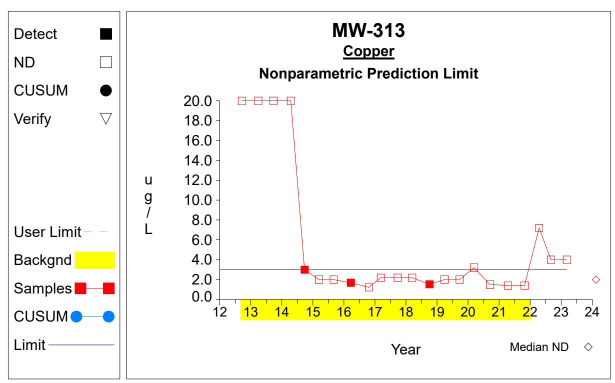
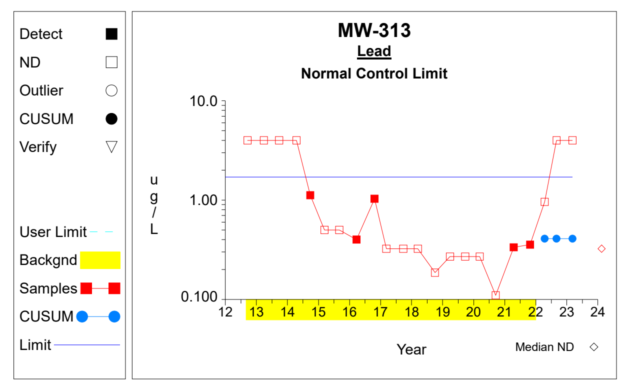


Graph 83



Graph 84

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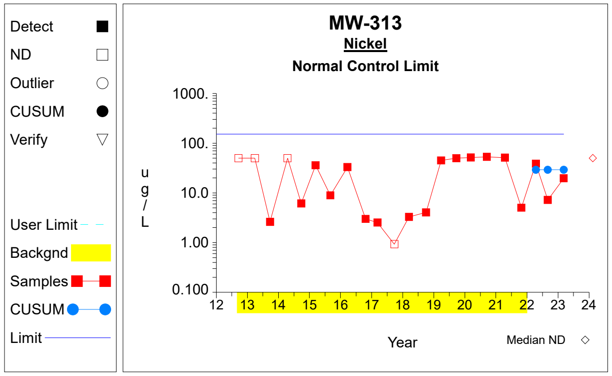
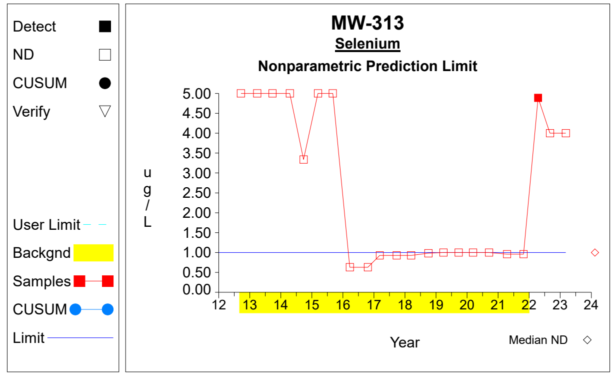
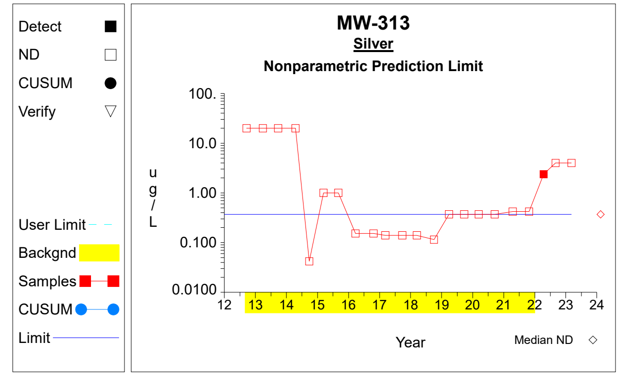
Intra-Well Control Charts / Prediction Limits



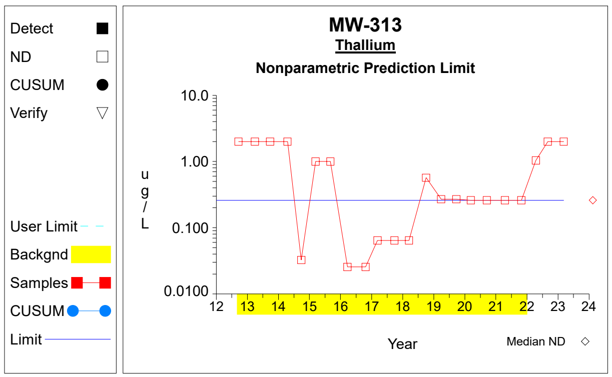
Graph 85



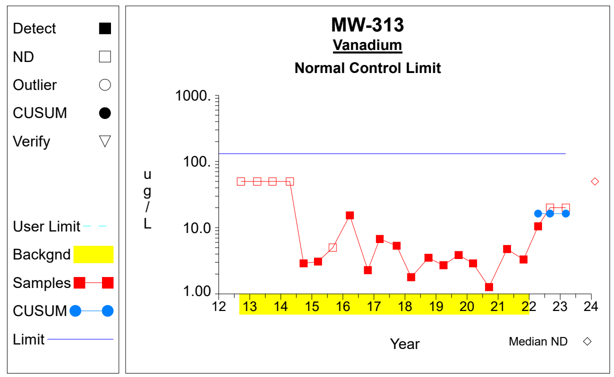
Graph 86



Graph 87



Graph 88



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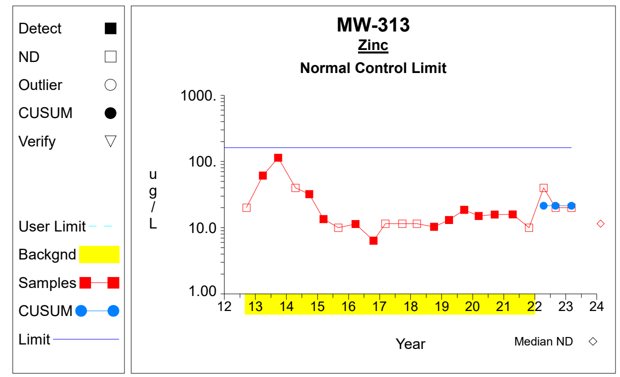

Graph 90

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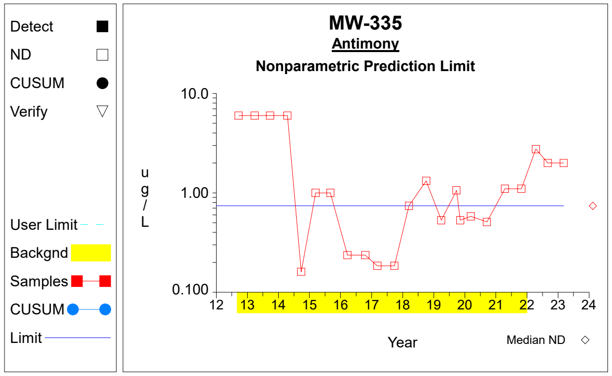
Intra-Well Control Charts / Prediction Limits



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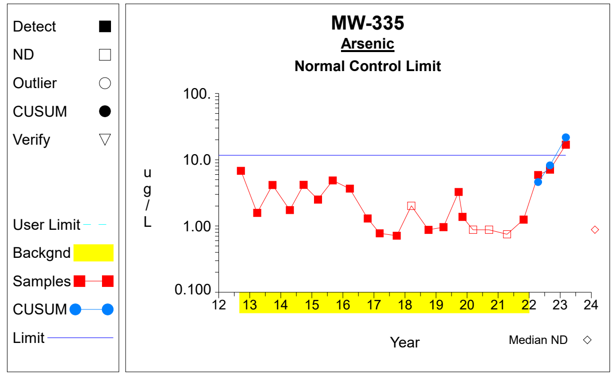

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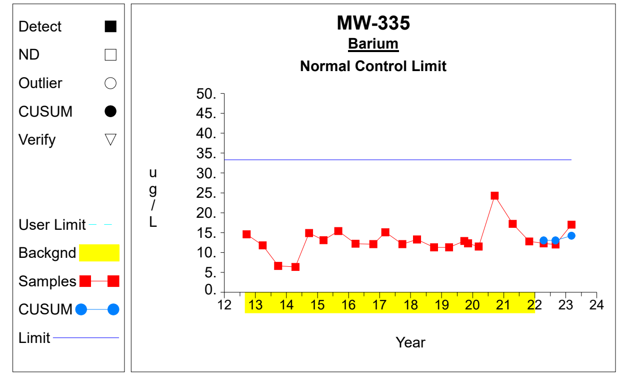

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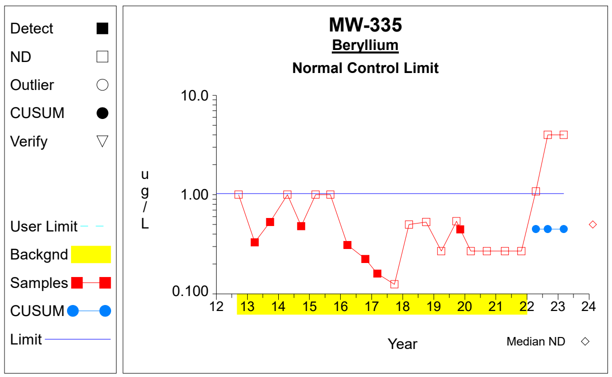
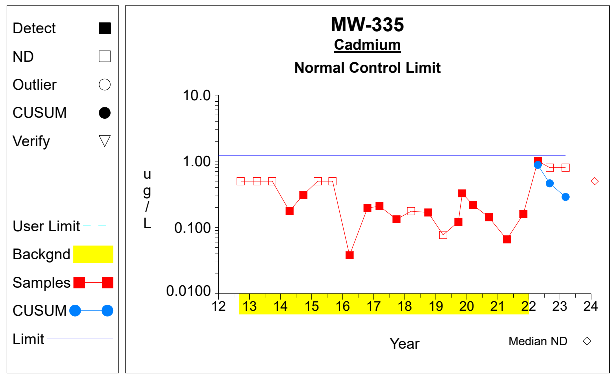
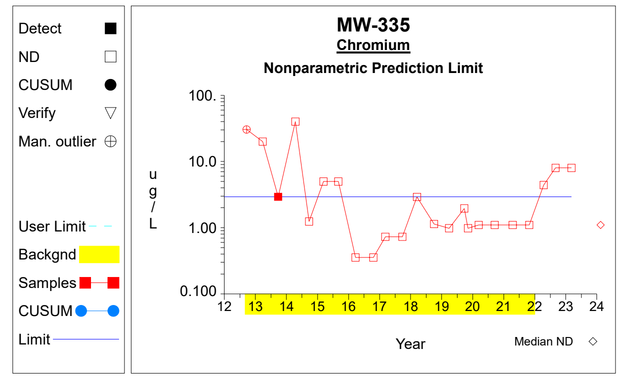


Graph 94



Graph 95



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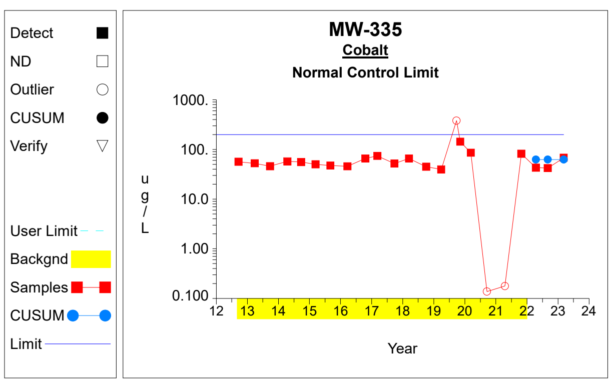

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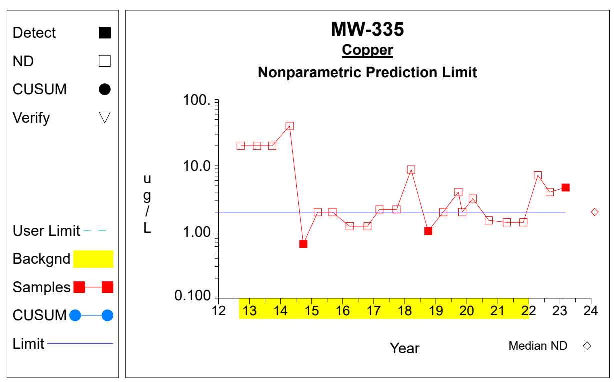
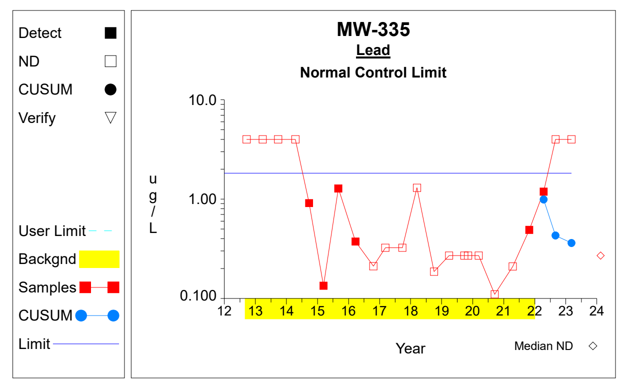


Graph 98



Graph 99

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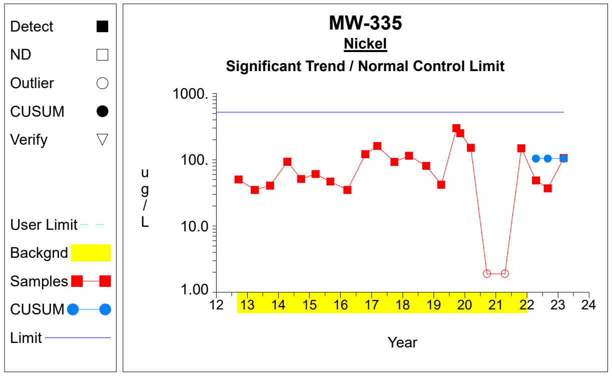
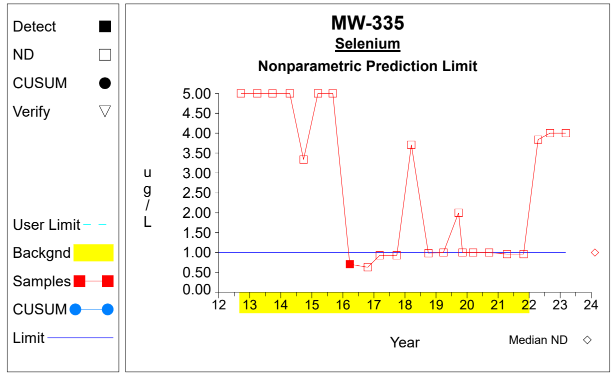
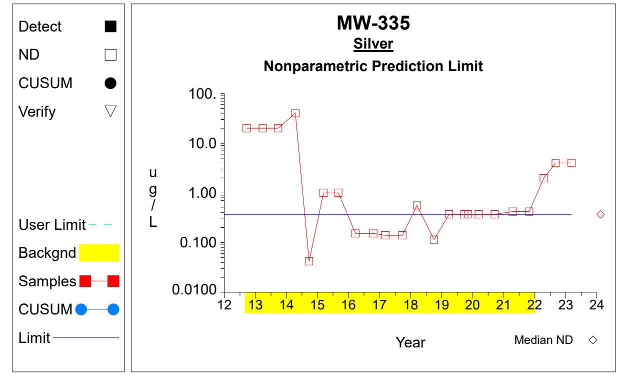
Intra-Well Control Charts / Prediction Limits



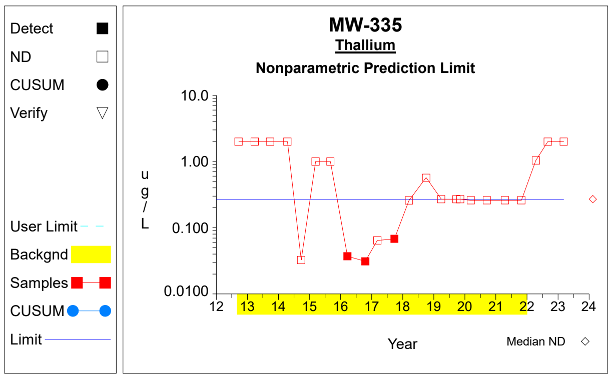
Graph 100



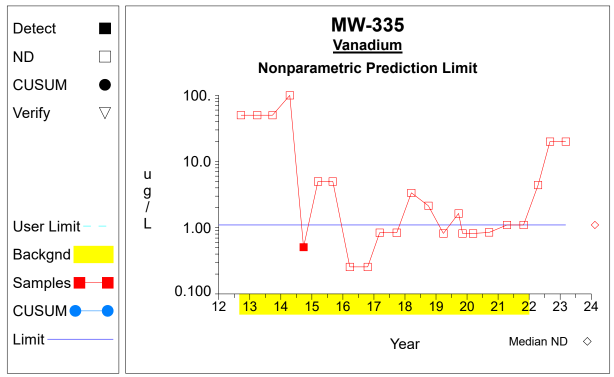
Graph 101



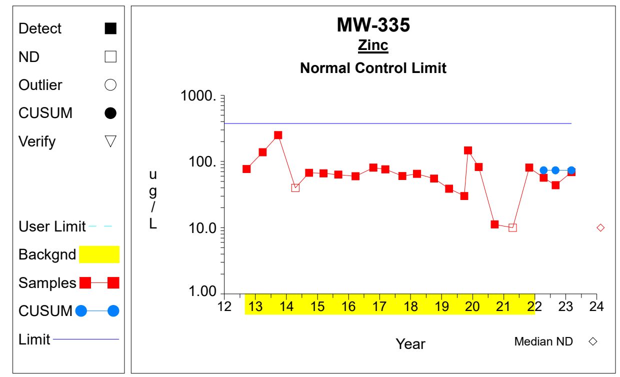
Graph 102



Graph 103



Graph 104



Graph 105

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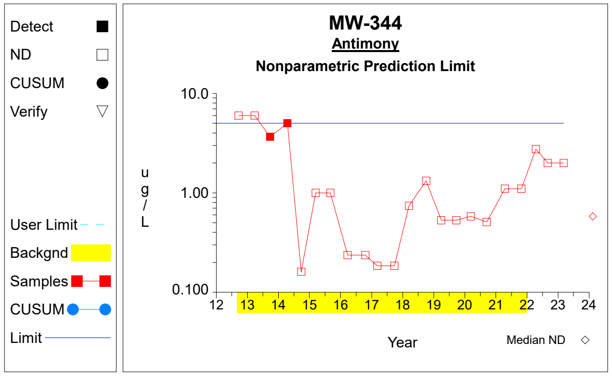
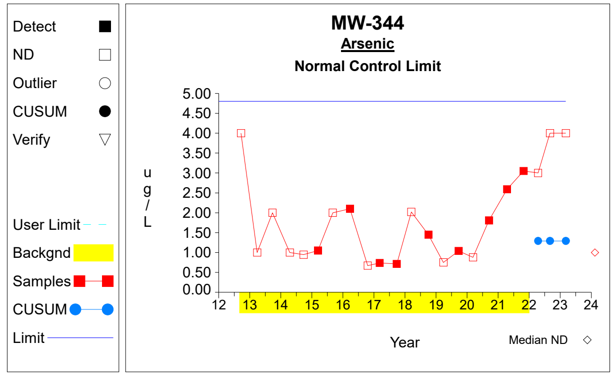
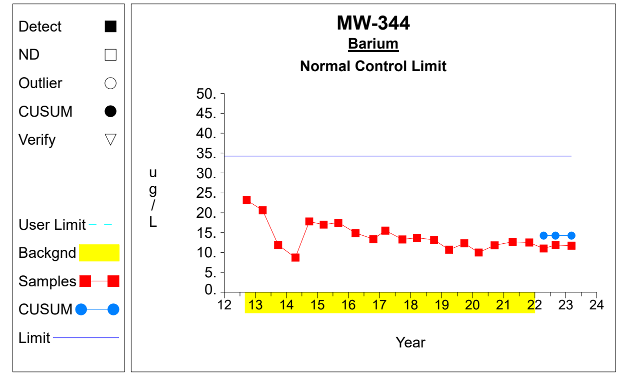
Intra-Well Control Charts / Prediction Limits



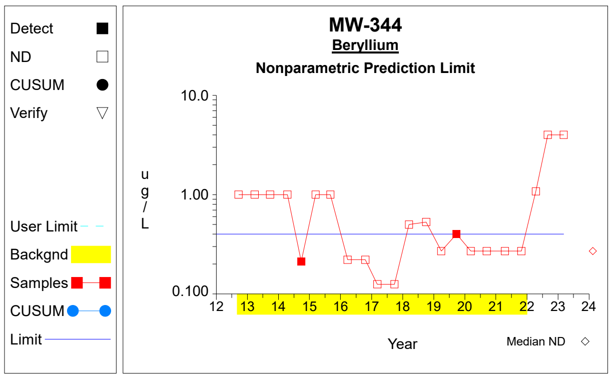
Graph 106



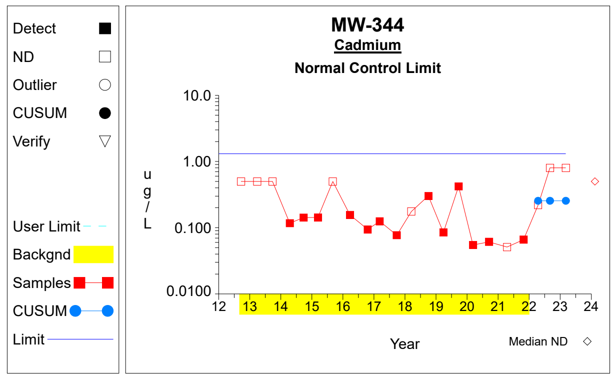
Graph 107



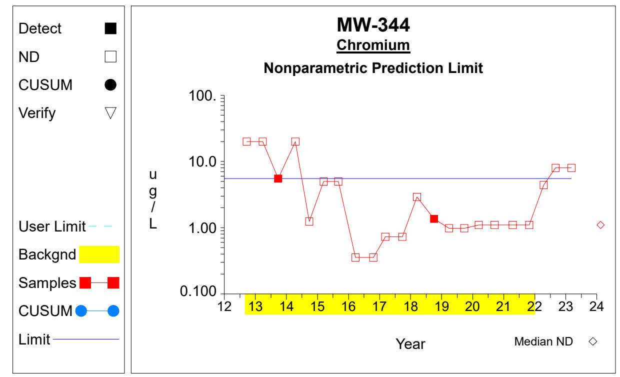
Graph 108



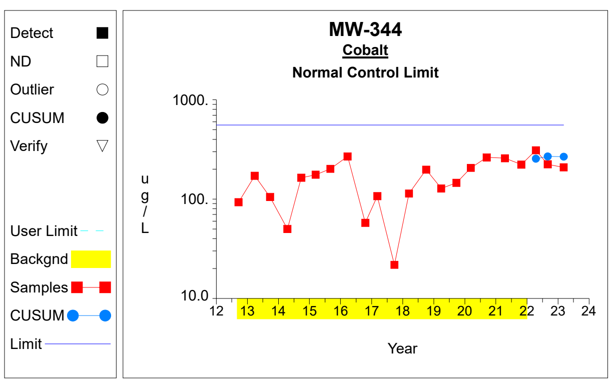
Graph 109



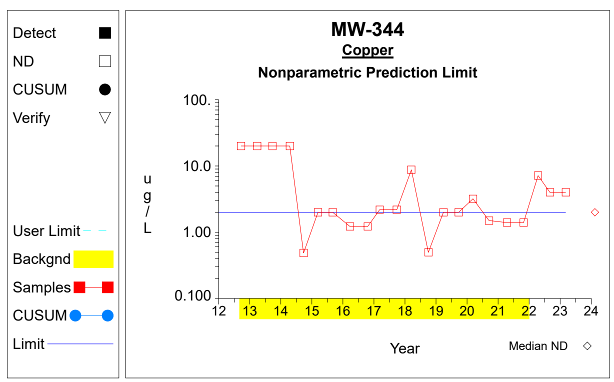
Graph 110



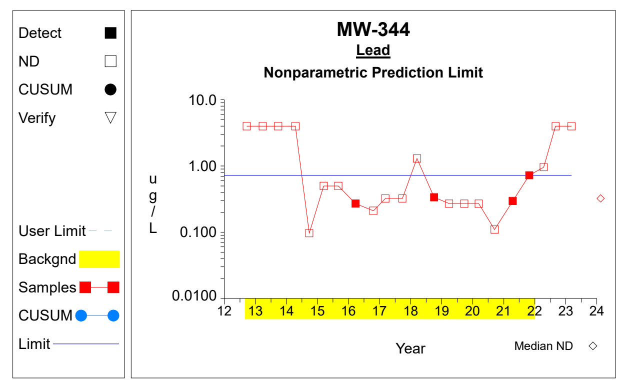
Graph 111



Graph 112



Graph 113



Graph 114

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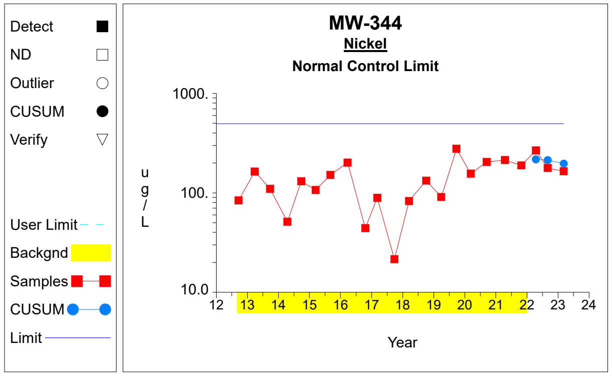
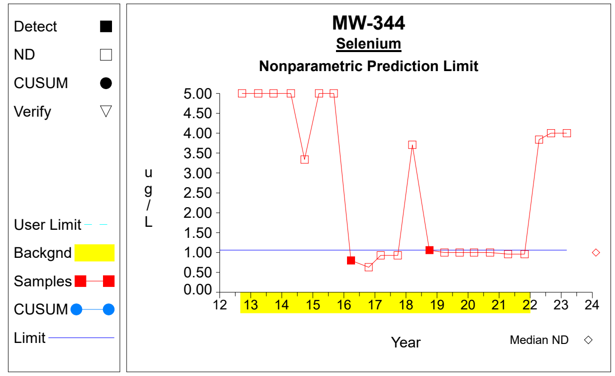
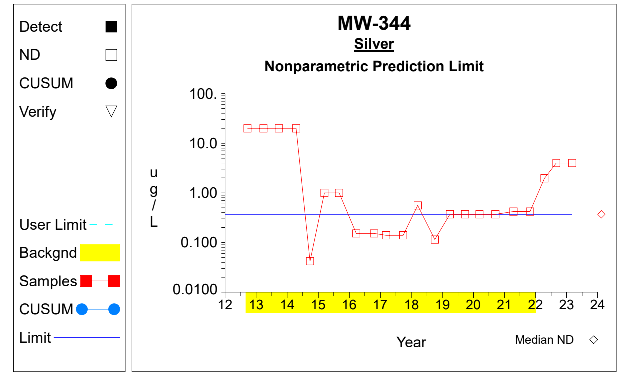
Intra-Well Control Charts / Prediction Limits



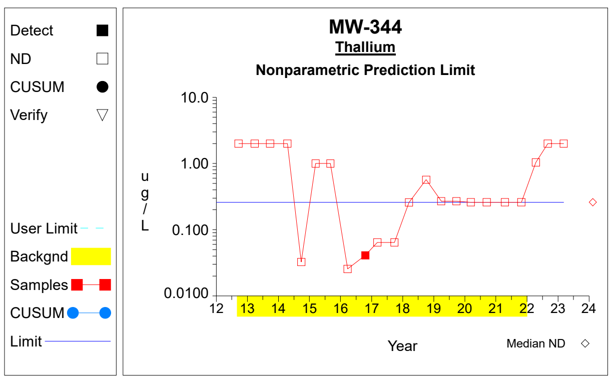
Graph 115



Graph 116



Graph 117



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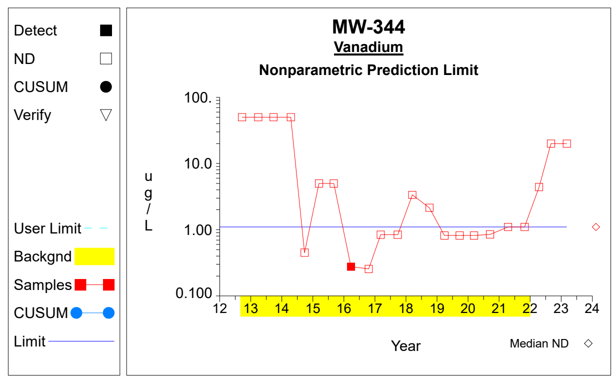

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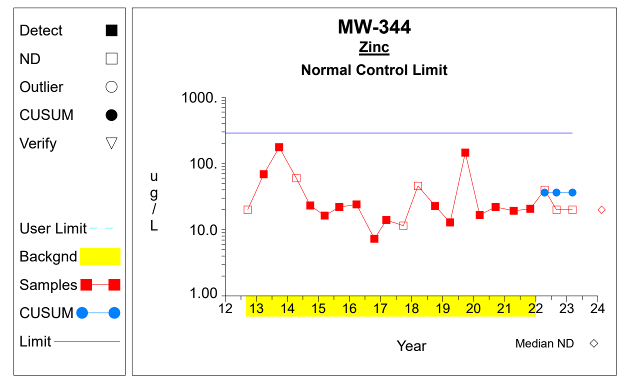

Graph 120

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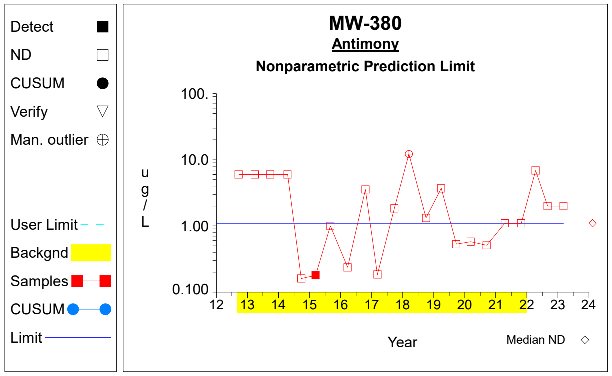

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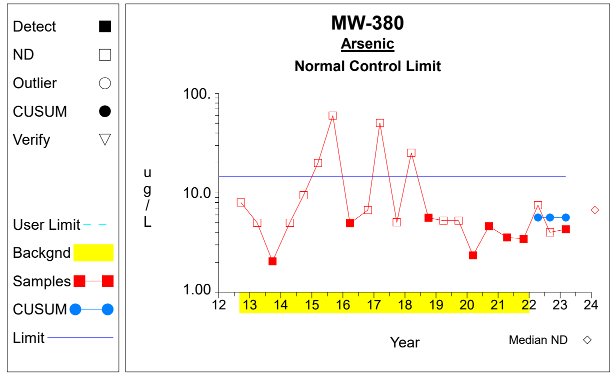

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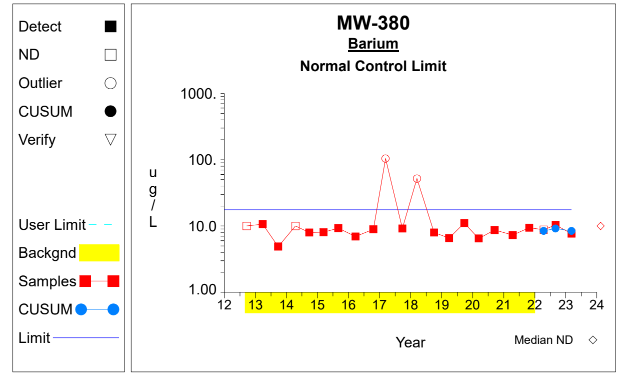

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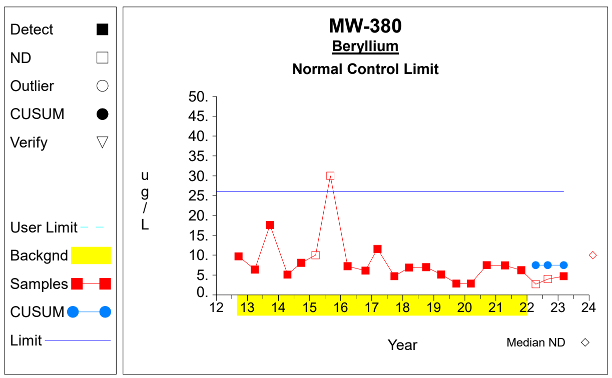

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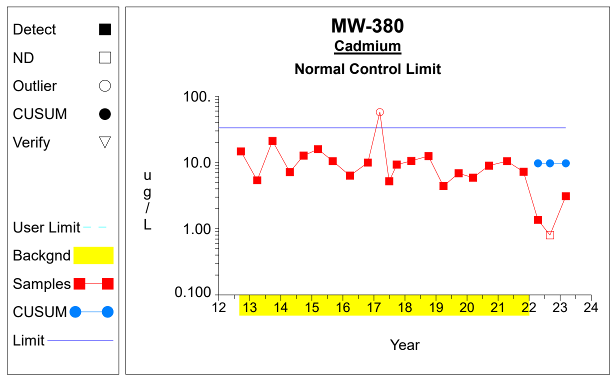

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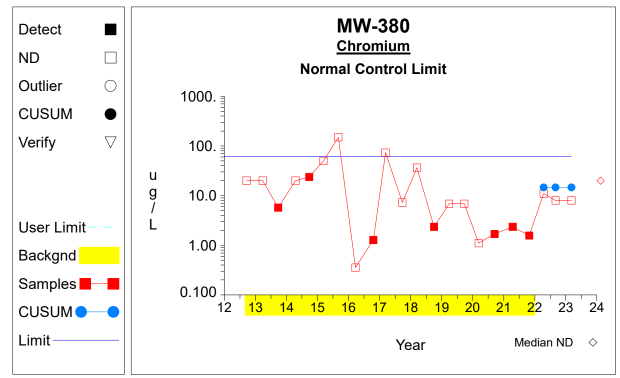

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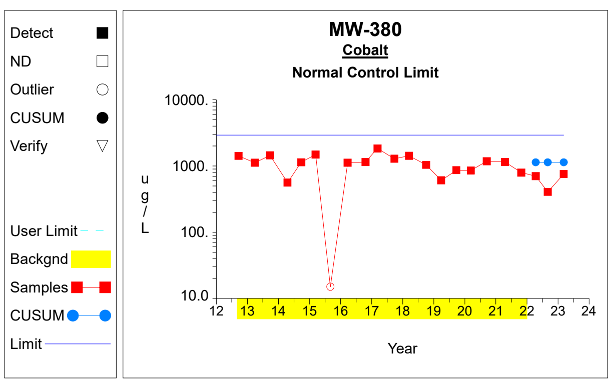

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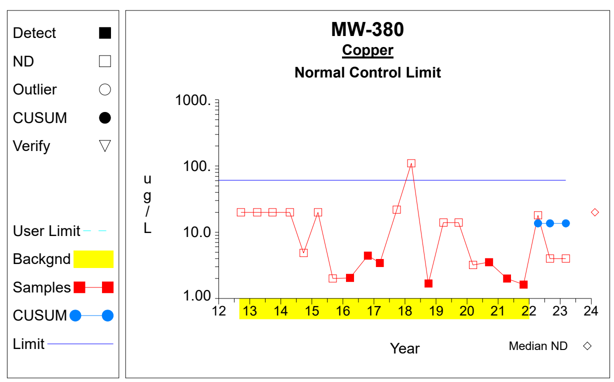

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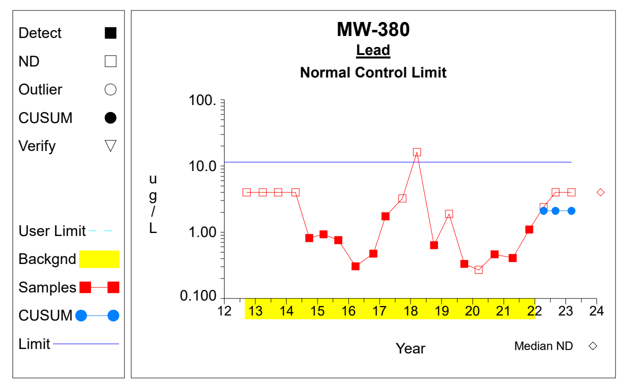

Graph 129

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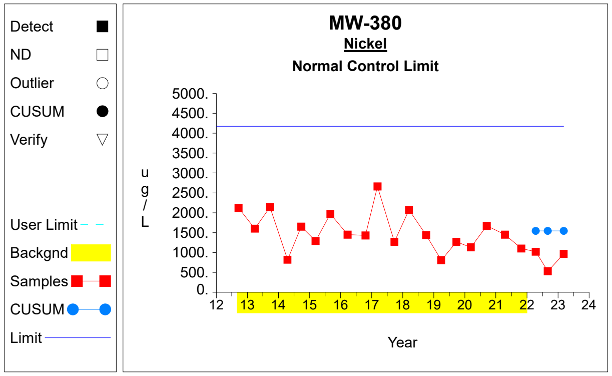

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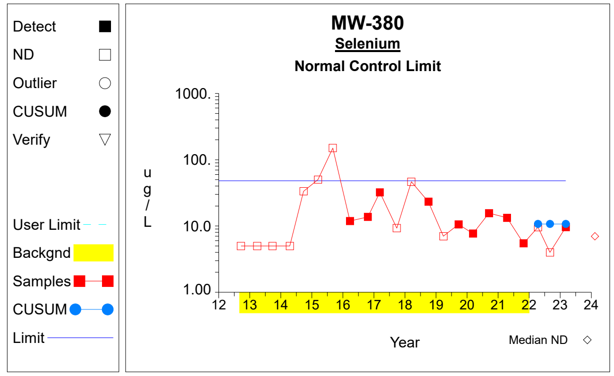

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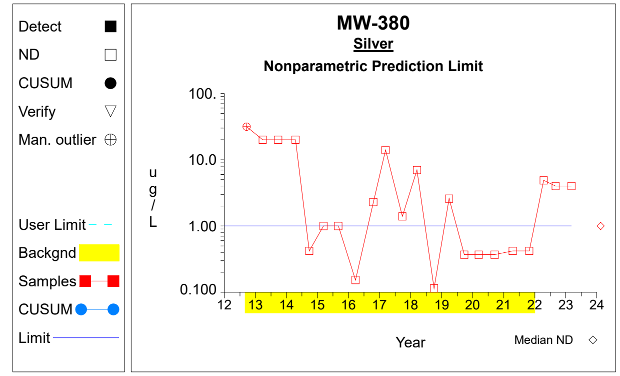

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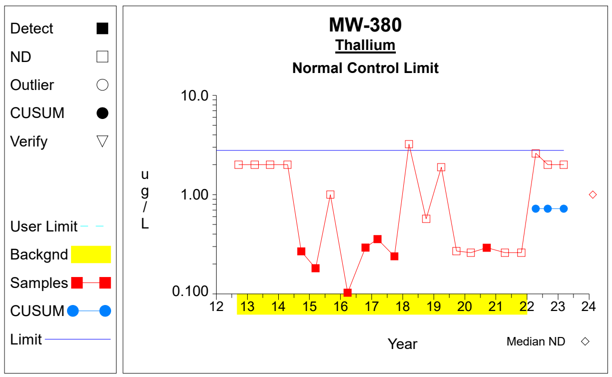

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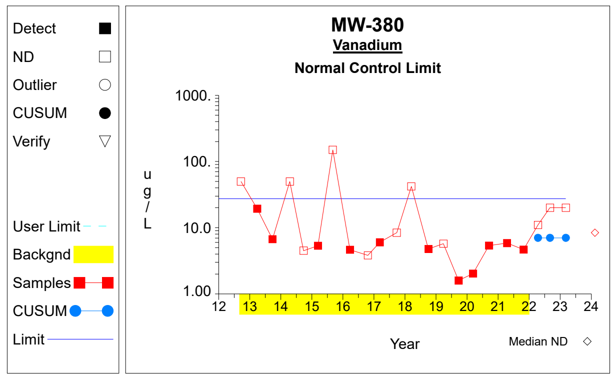

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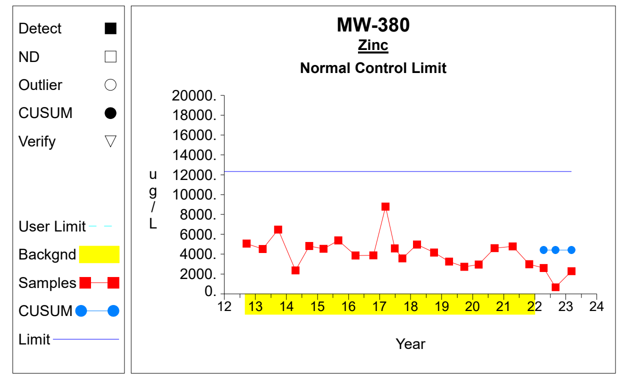
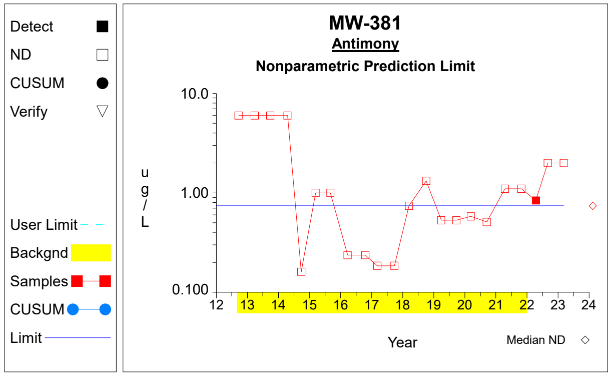


Graph 135

Intra-Well Control Charts / Prediction Limits



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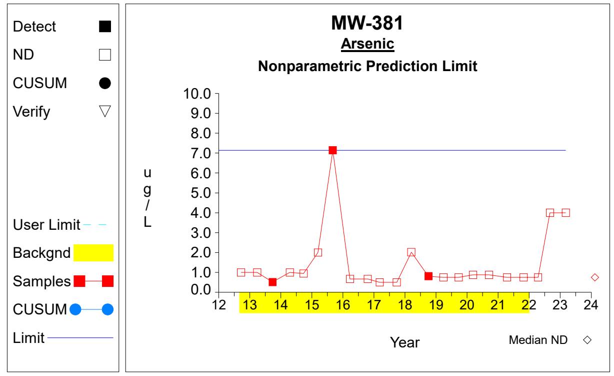

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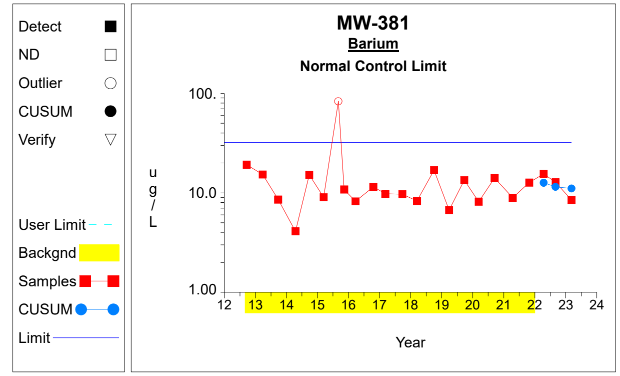

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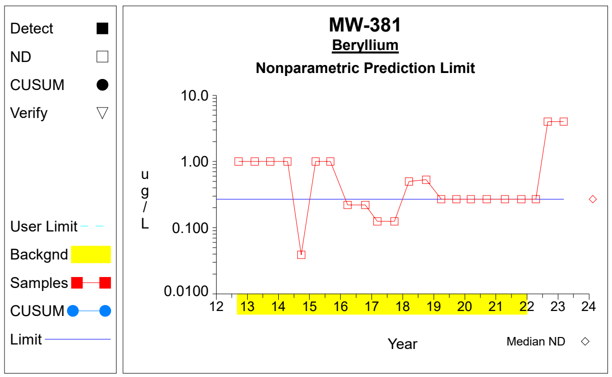

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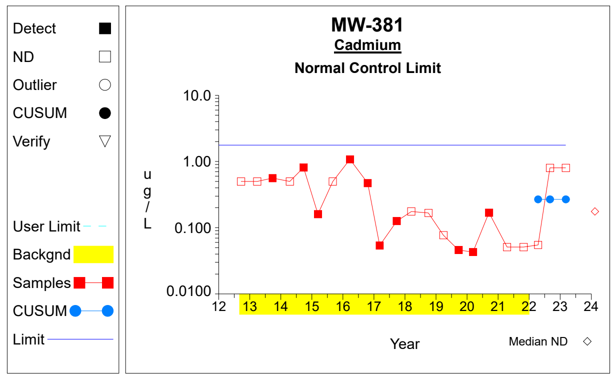

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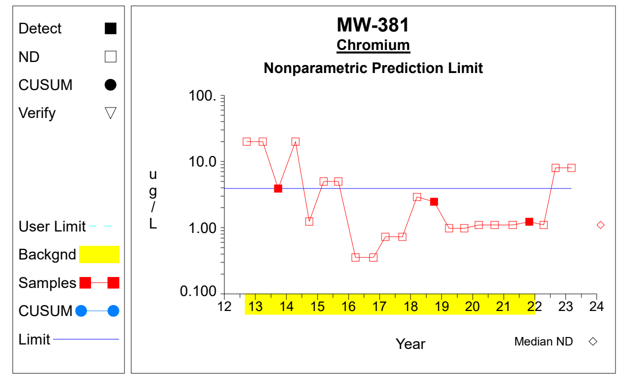

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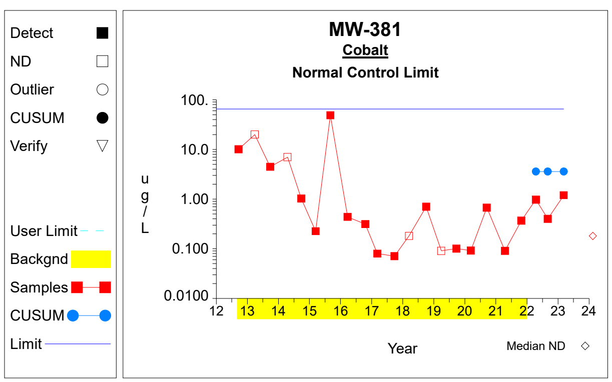

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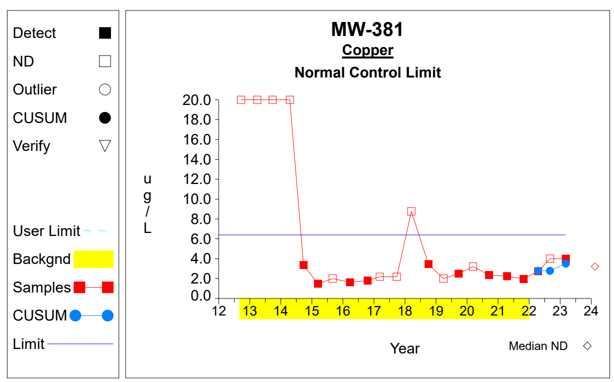

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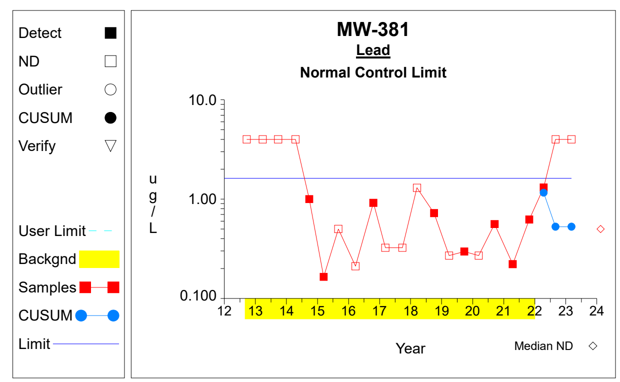

Graph 144

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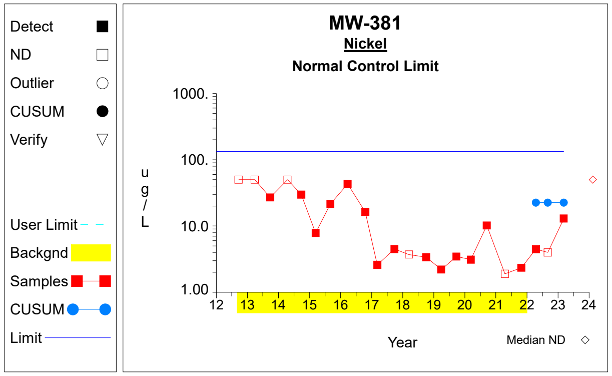

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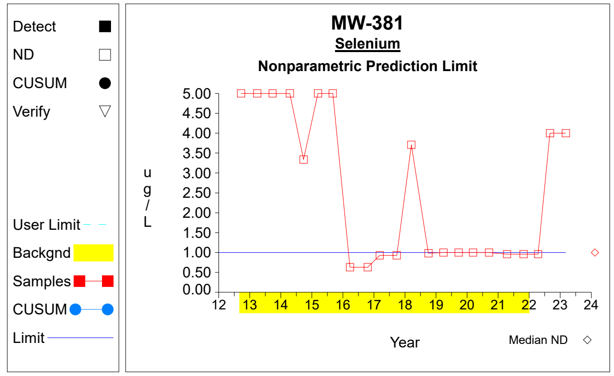

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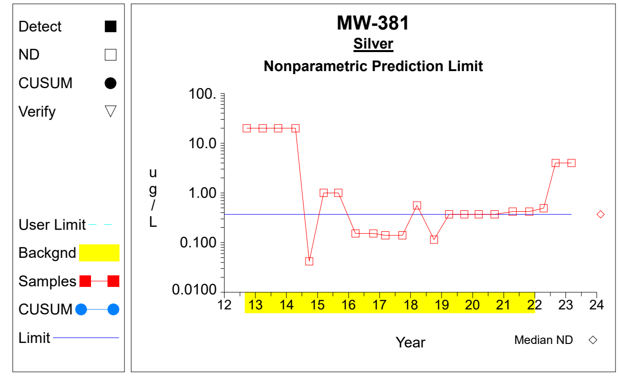

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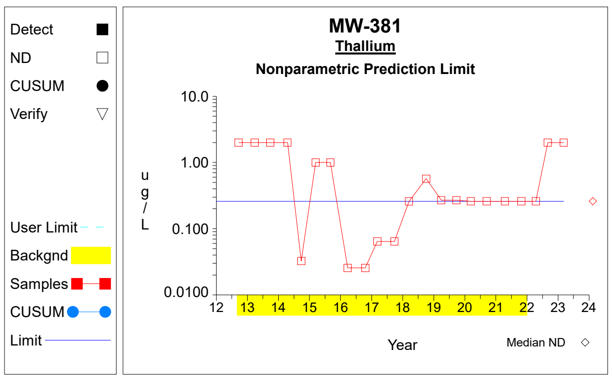

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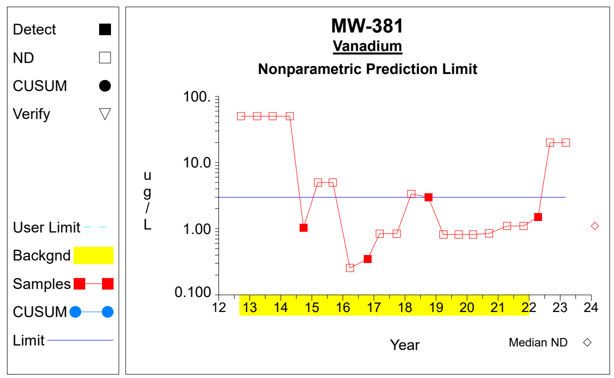

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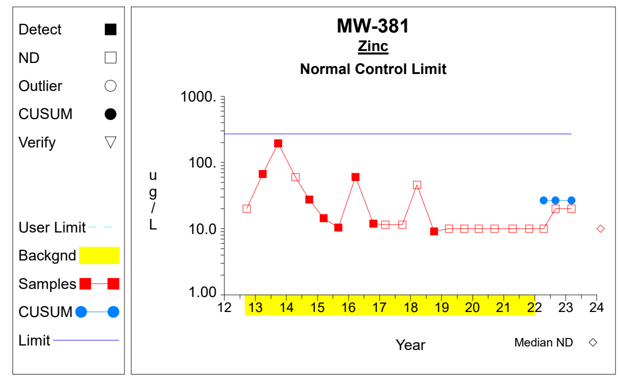

Graph 150

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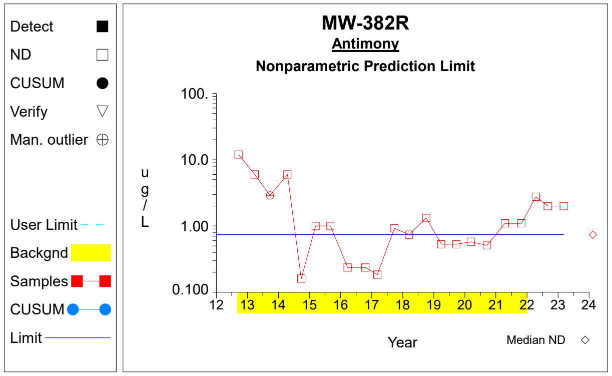

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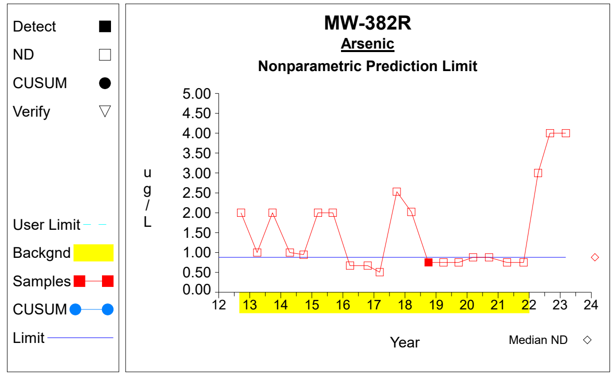

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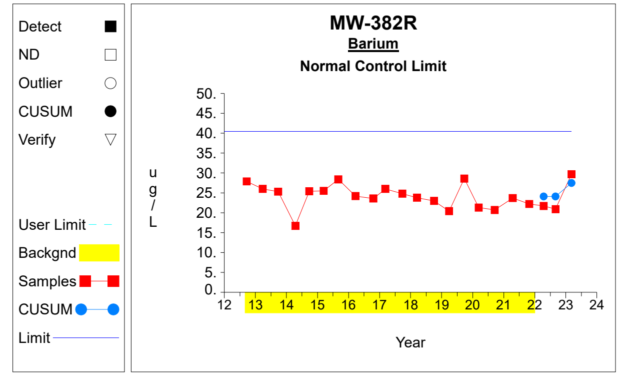

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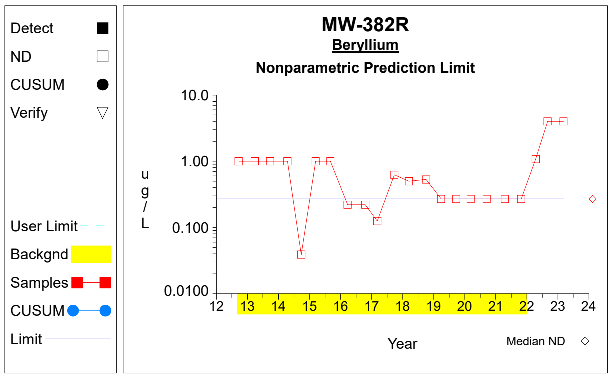

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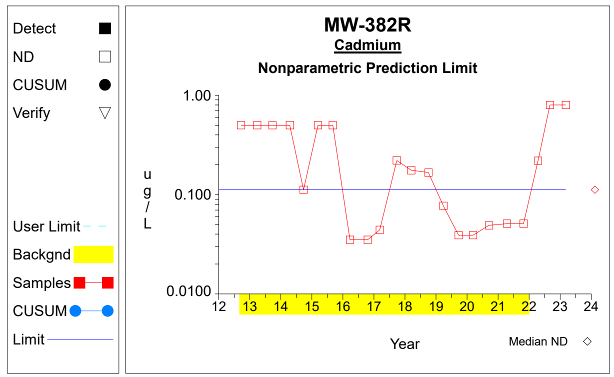

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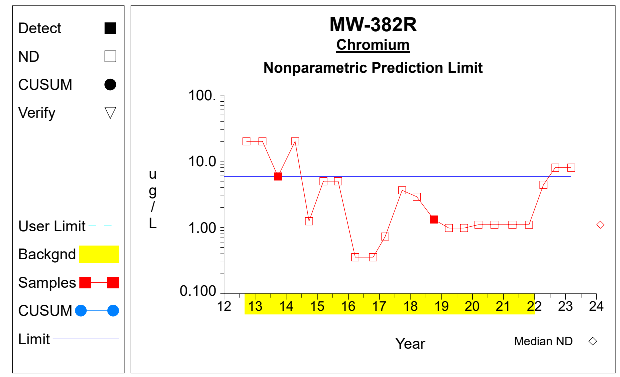

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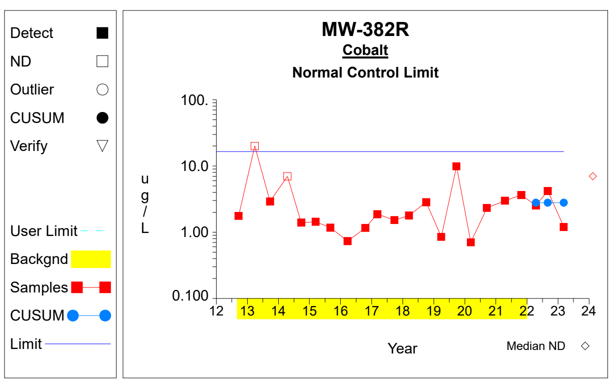

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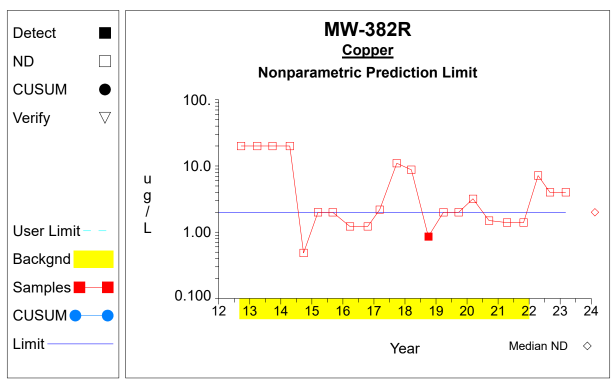

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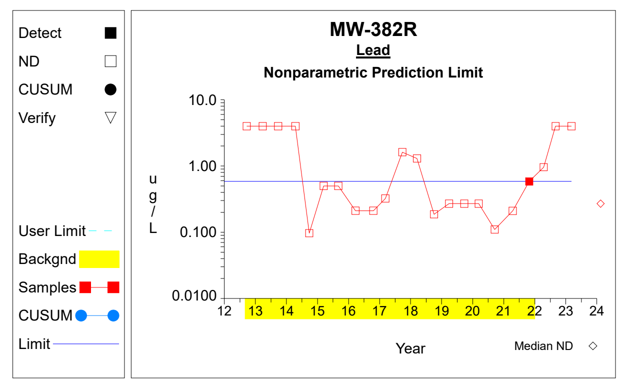

Graph 159

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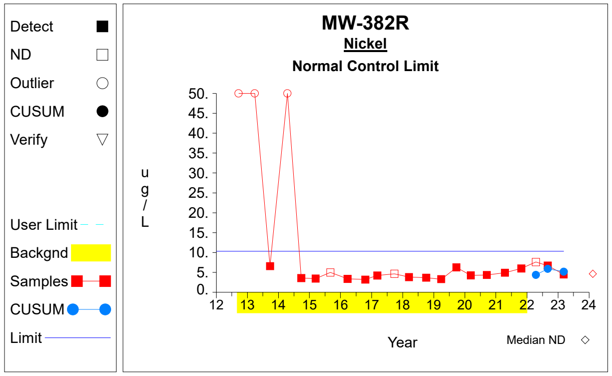

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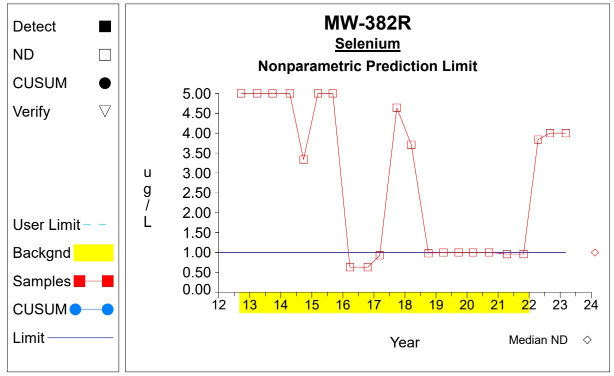

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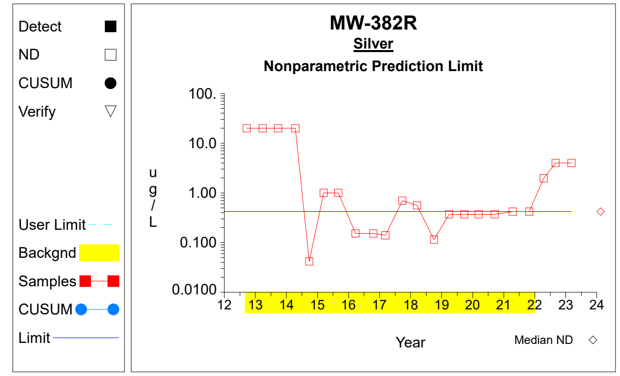

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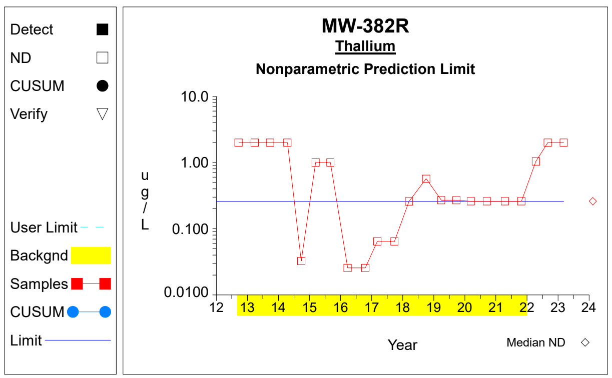

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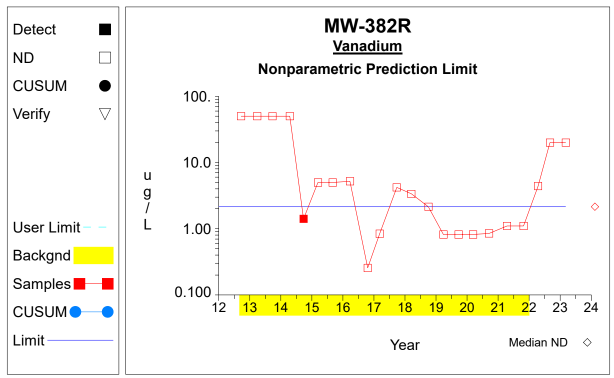

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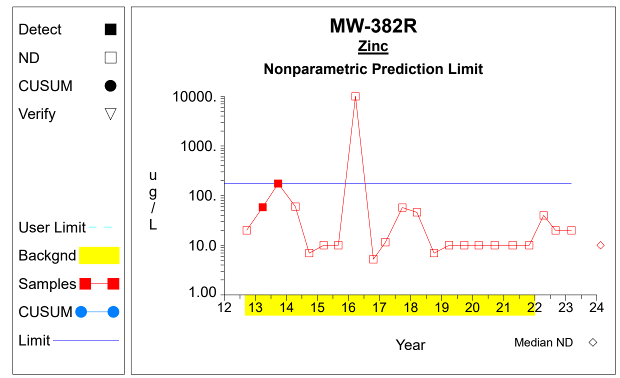

Graph 165

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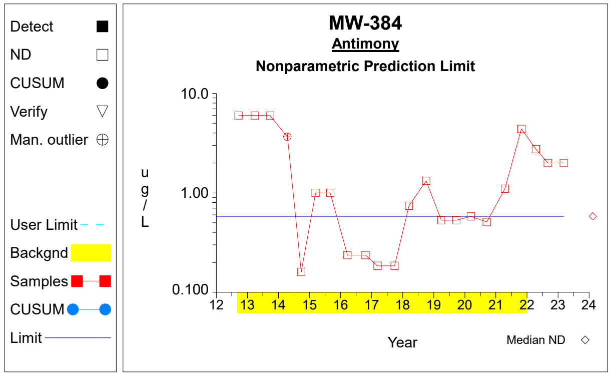

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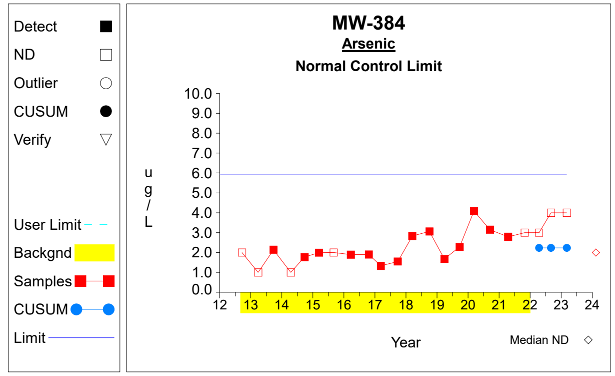

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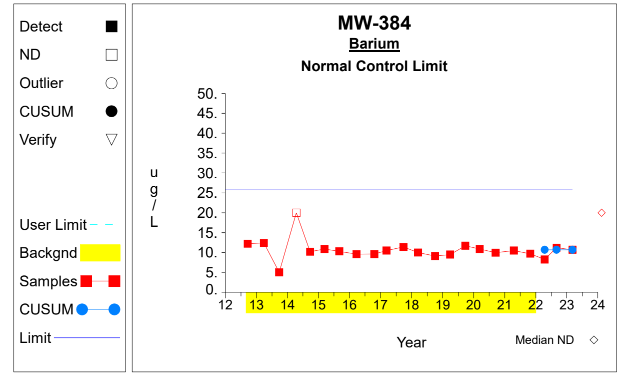

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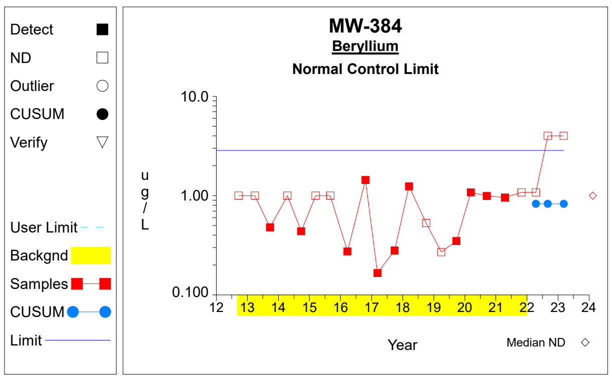

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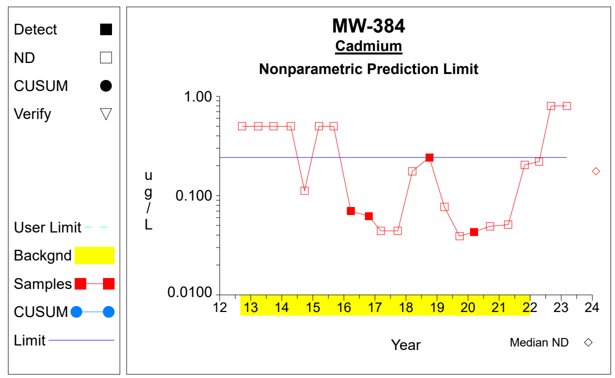

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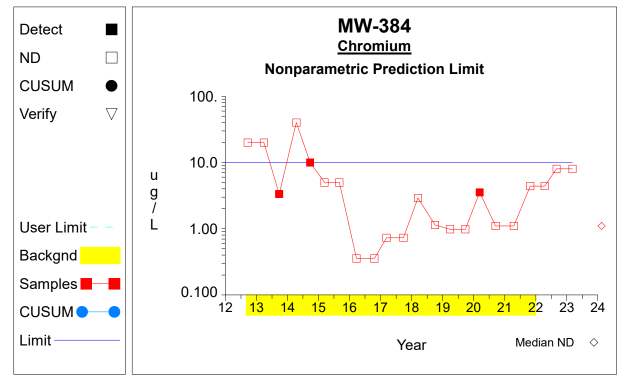

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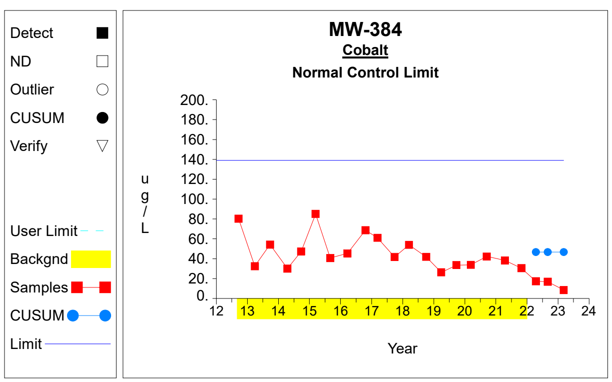

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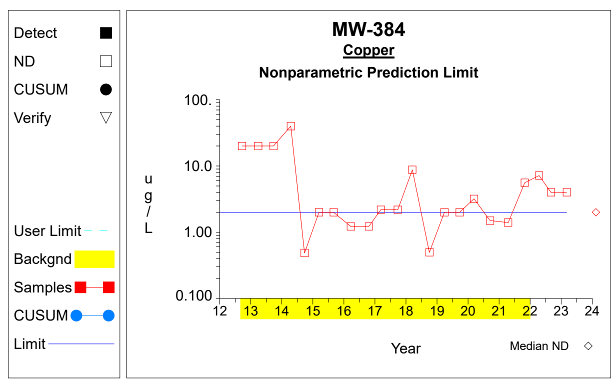

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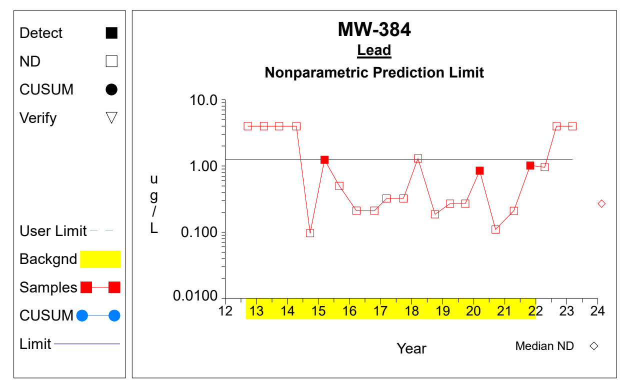

Graph 174

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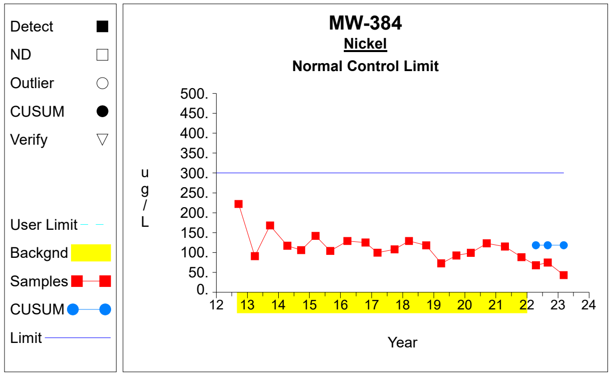
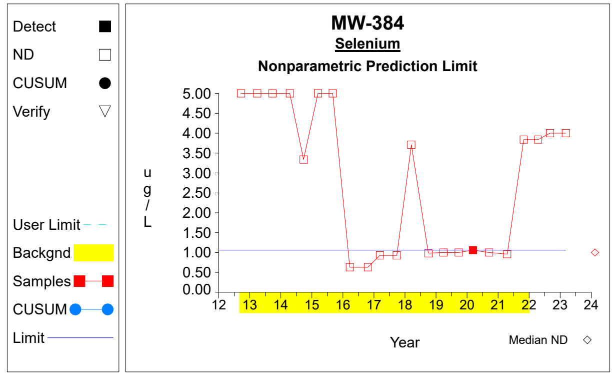


Graph 175



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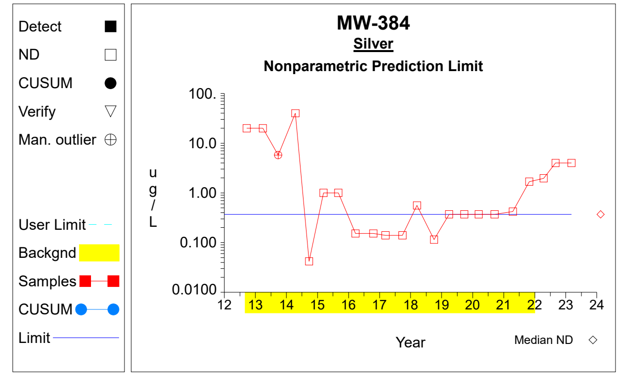

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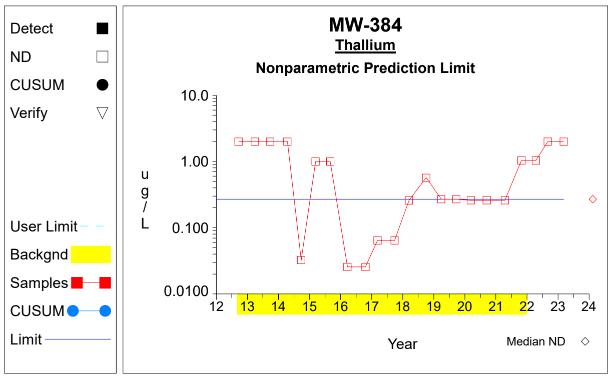

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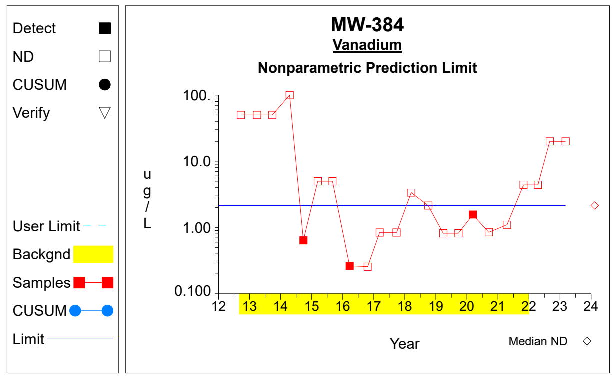
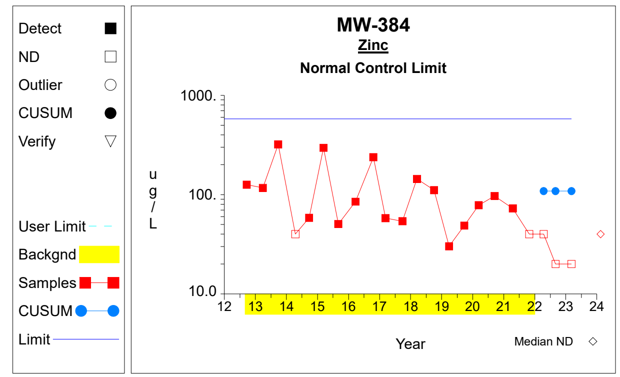


Graph 179



Graph 180

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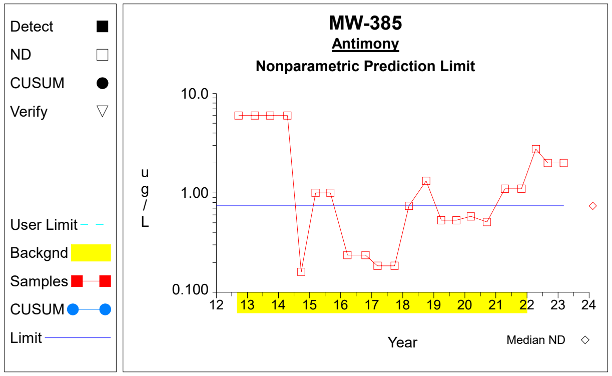
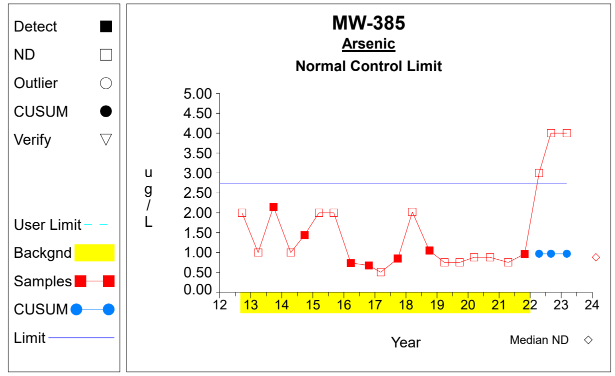
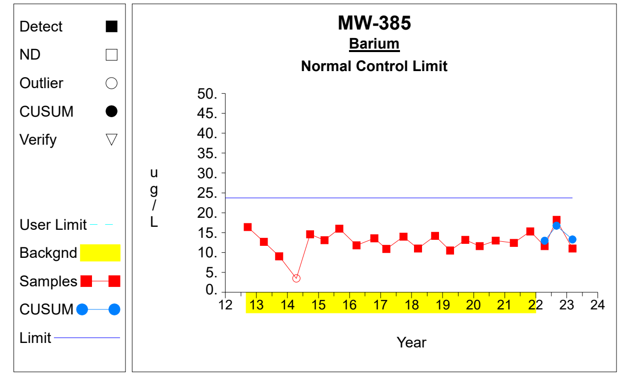


Graph 181



Graph 182



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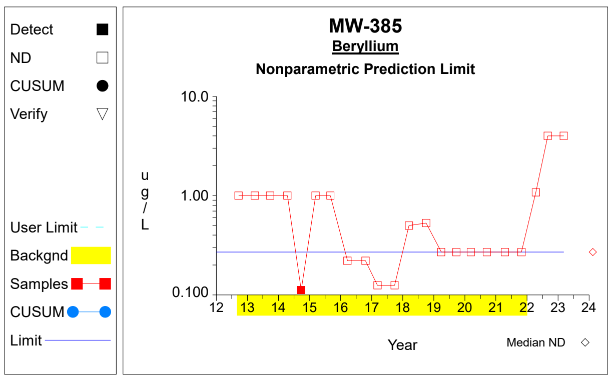

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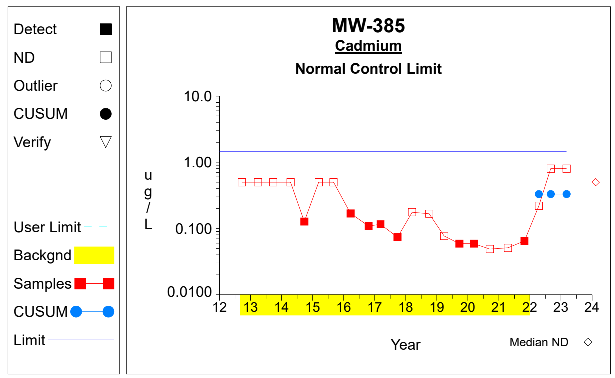

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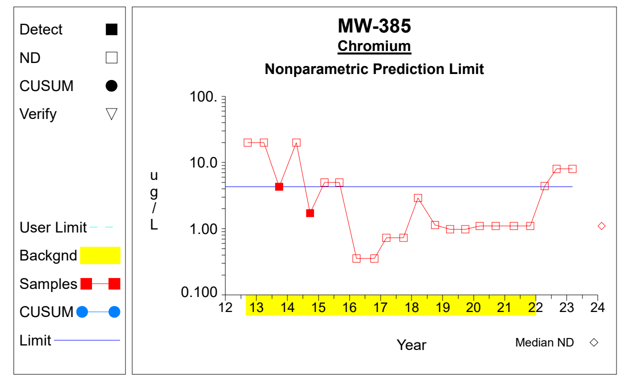

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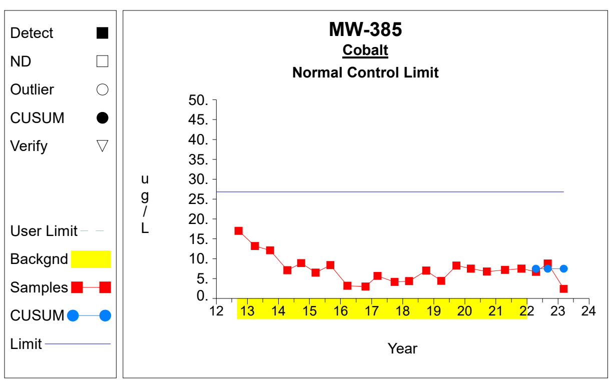

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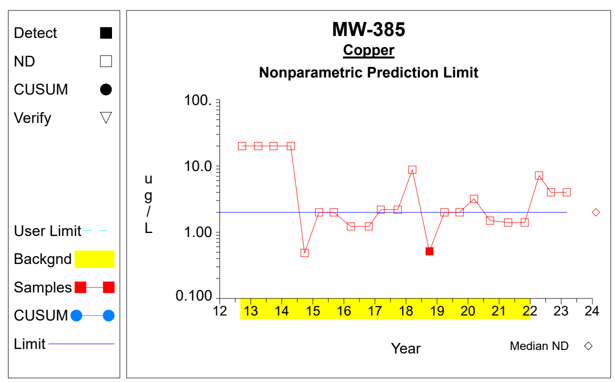
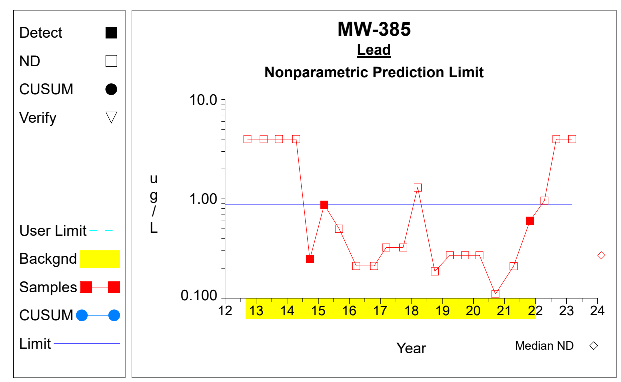


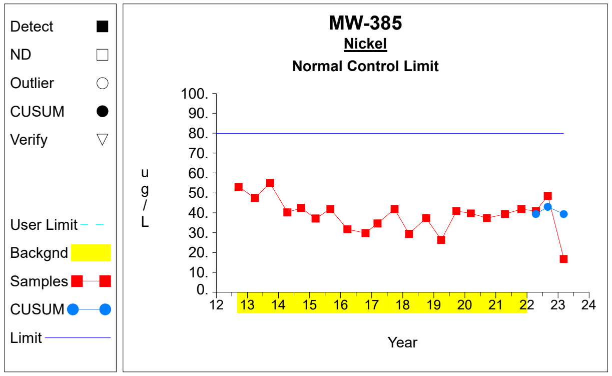
Graph 188



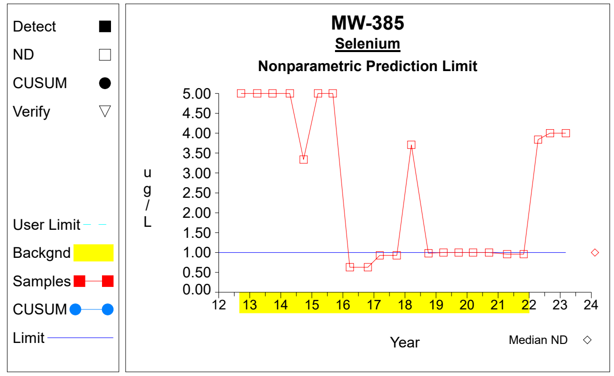
Graph 189

Prepared by: Otter Creek Environmental

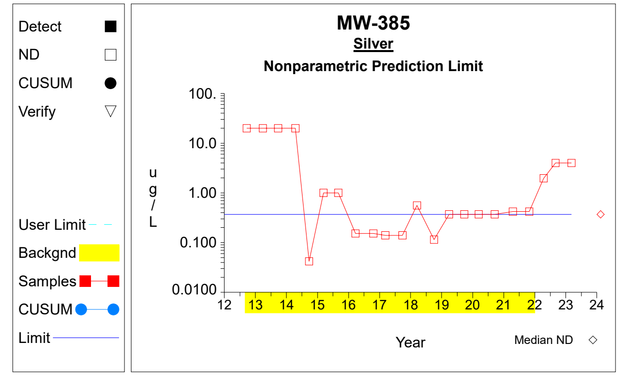
Intra-Well Control Charts / Prediction Limits



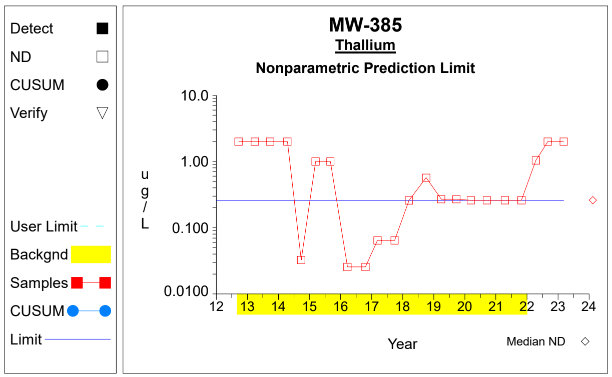
Graph 190



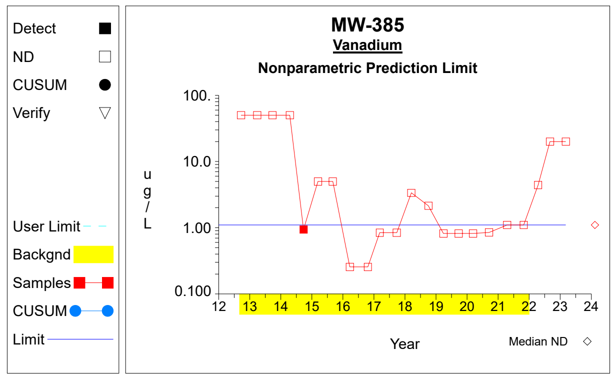
Graph 191



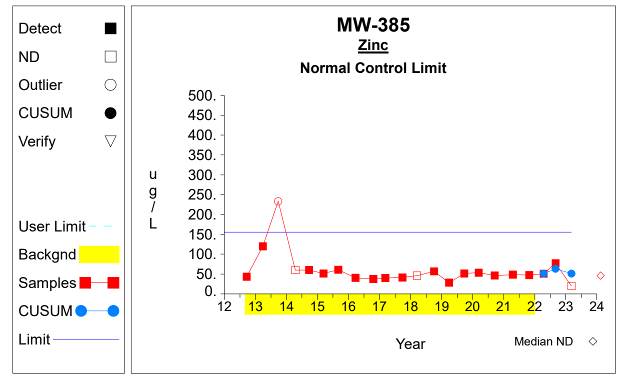
Graph 192



Graph 193



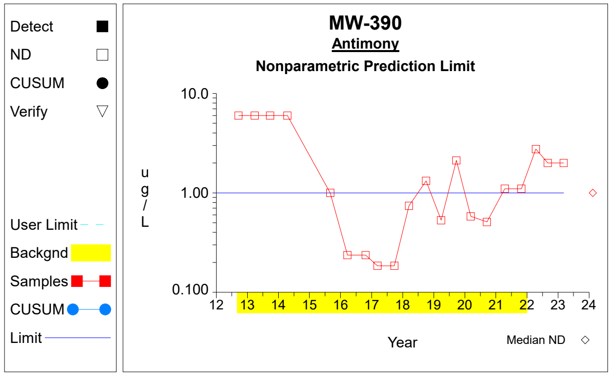
Graph 194



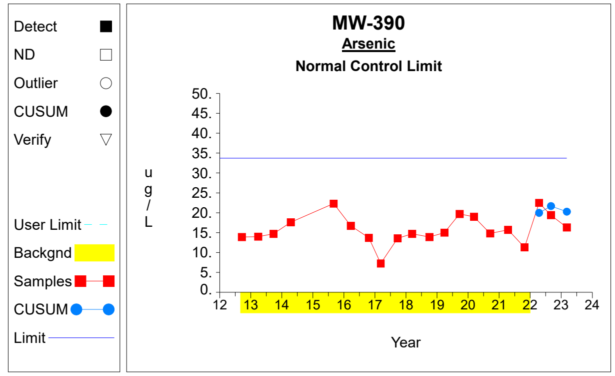
Graph 195

South Central Iowa SWA [GW] April 2023

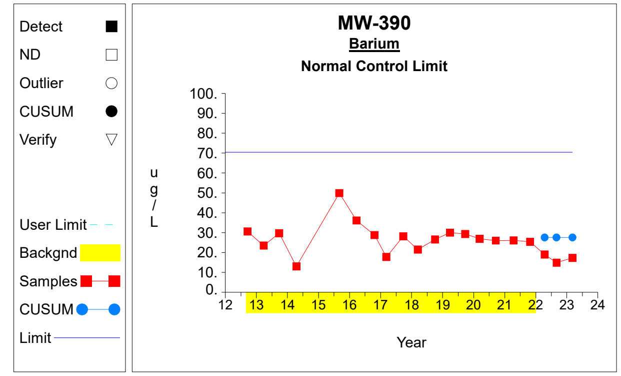
Intra-Well Control Charts / Prediction Limits



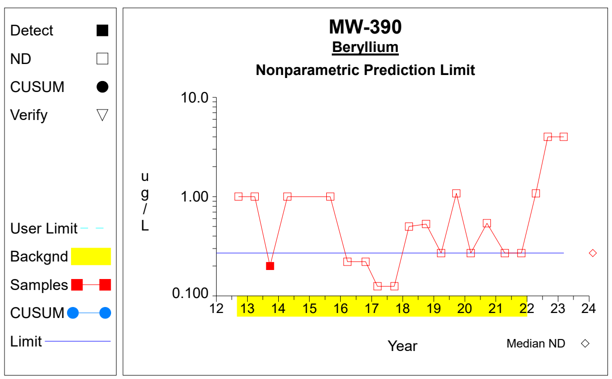
Graph 196



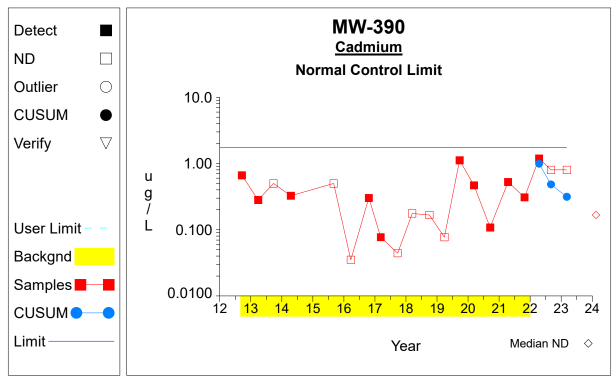
Graph 197



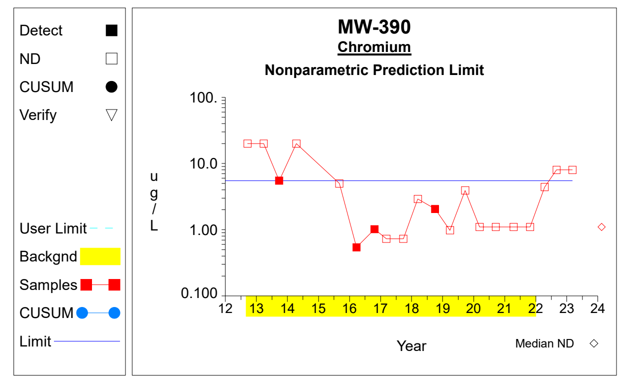
Graph 198



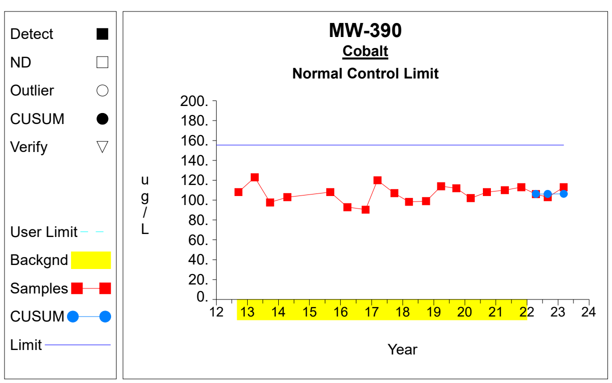
Graph 199



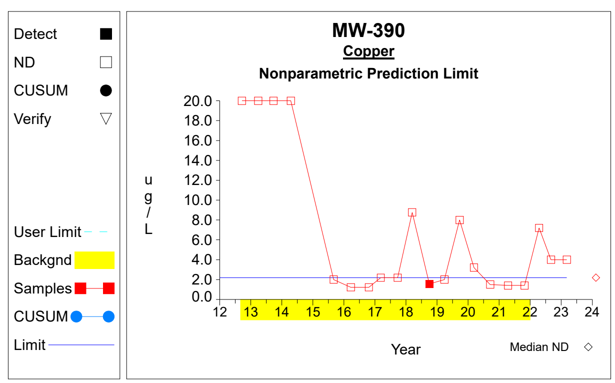
Graph 200



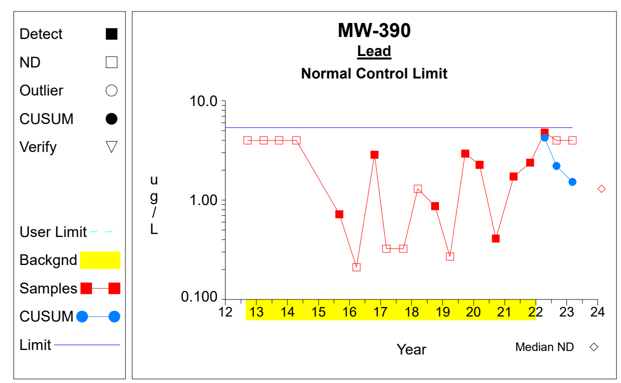
Graph 201



Graph 202



Graph 203

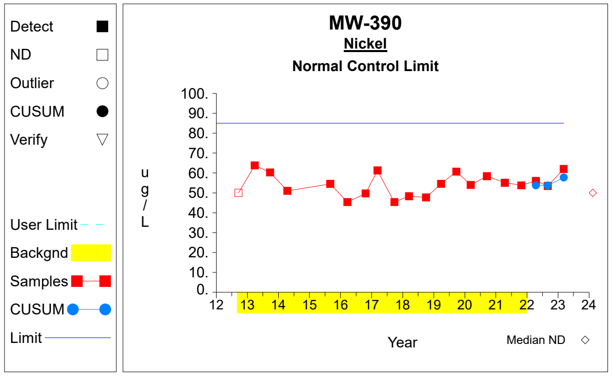


Graph 204

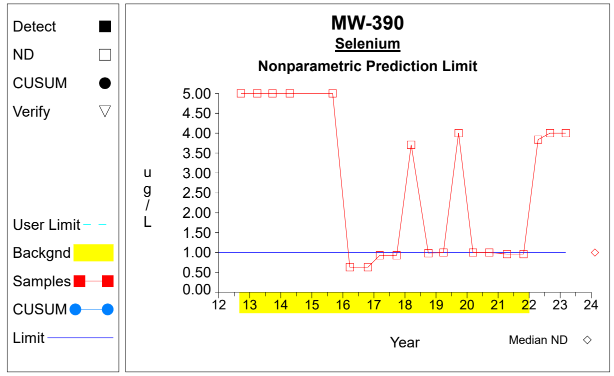
Prepared by: Otter Creek Environmental

South Central Iowa SWA [GW] April 2023

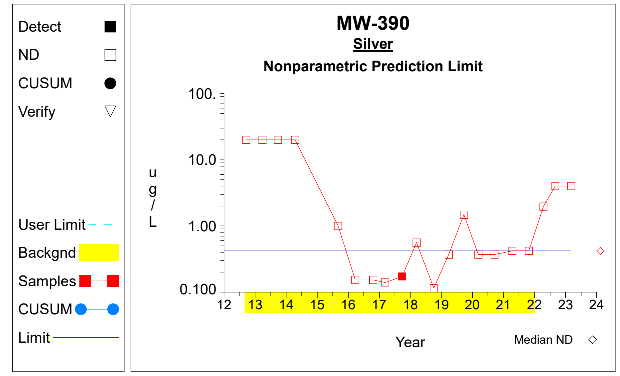
Intra-Well Control Charts / Prediction Limits



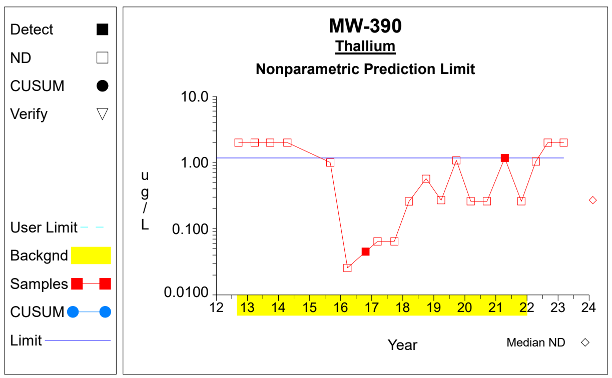
Graph 205



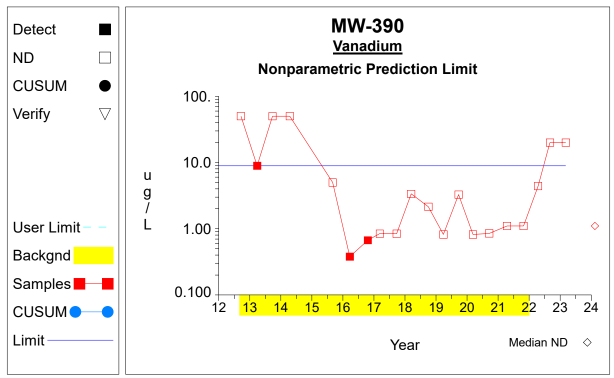
Graph 206



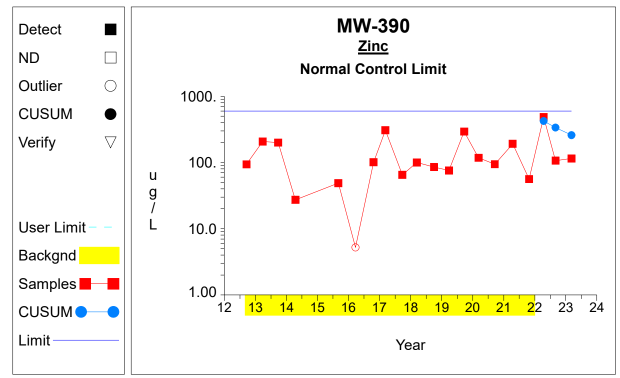
Graph 207



Graph 208



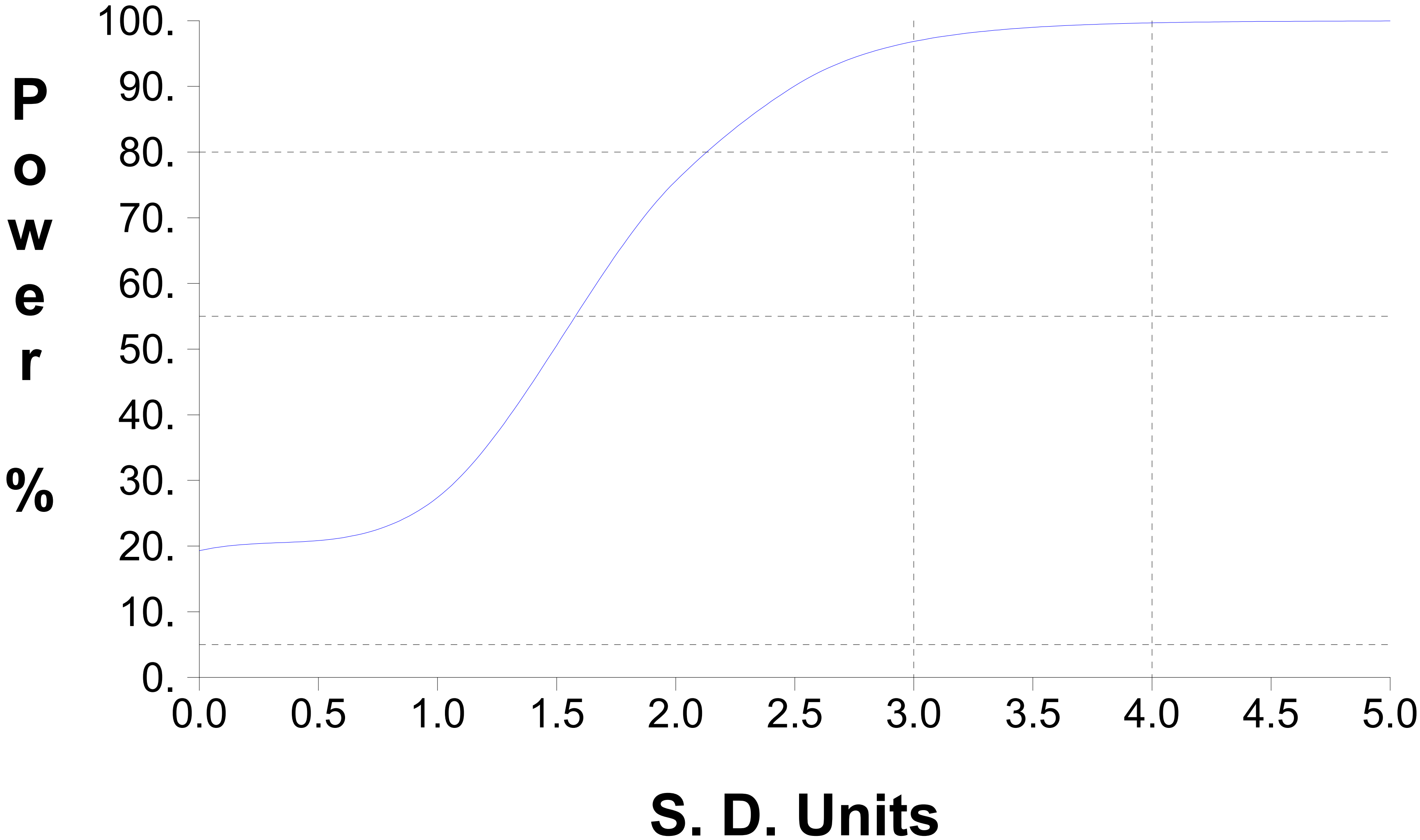
Graph 209



Graph 210

Prepared by: Otter Creek Environmental

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



Attachment C

Summary Tables and Graphs for the Interwell Comparisons

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Antimony	ug/L	MW-307	09/18/2012	ND	12.0000	1.1000	**
Antimony	ug/L	MW-307	03/27/2013	ND	6.0000	1.1000	**
Antimony	ug/L	MW-307	09/26/2013	ND	6.0000	1.1000	**
Antimony	ug/L	MW-307	04/15/2014	ND	6.0000	1.1000	**
Antimony	ug/L	MW-307	09/01/2015	ND	1.0000	1.1000	**
Antimony	ug/L	MW-307	03/22/2016	ND	0.2370	1.1000	**
Antimony	ug/L	MW-307	10/21/2016	ND	0.2370	1.1000	**
Antimony	ug/L	MW-307	03/08/2017	ND	0.1850	1.1000	**
Antimony	ug/L	MW-307	09/25/2017	ND	0.1850	1.1000	**
Antimony	ug/L	MW-307	03/13/2018	ND	0.7400	1.1000	**
Antimony	ug/L	MW-307	10/01/2018	ND	1.3200	1.1000	**
Antimony	ug/L	MW-307	03/27/2019	ND	0.5300	1.1000	**
Antimony	ug/L	MW-307	09/23/2019	ND	2.1200	1.1000	**
Antimony	ug/L	MW-307	03/09/2020	ND	0.5800	1.1000	**
Antimony	ug/L	MW-307	09/17/2020	ND	0.5100	1.1000	**
Antimony	ug/L	MW-307	04/16/2021	ND	1.1000		
Antimony	ug/L	MW-307	10/28/2021	ND	1.1000		
Antimony	ug/L	MW-307	04/13/2022	ND	2.7600	1.1000	**
Antimony	ug/L	MW-307	09/01/2022	ND	2.0000	1.1000	**
Antimony	ug/L	MW-307	03/06/2023	ND	2.0000	1.1000	**
Arsenic	ug/L	MW-307	09/18/2012		2.0100		
Arsenic	ug/L	MW-307	03/27/2013	ND	2.0000		
Arsenic	ug/L	MW-307	09/26/2013		4.6700		
Arsenic	ug/L	MW-307	04/15/2014	ND	1.0000	2.0000	**
Arsenic	ug/L	MW-307	09/01/2015		3.7000		
Arsenic	ug/L	MW-307	03/22/2016		4.3500		
Arsenic	ug/L	MW-307	10/21/2016		3.9600		
Arsenic	ug/L	MW-307	03/08/2017	ND	5.0500	2.0000	**
Arsenic	ug/L	MW-307	09/25/2017		3.8900		
Arsenic	ug/L	MW-307	03/13/2018		3.7200		
Arsenic	ug/L	MW-307	10/01/2018		4.4100		
Arsenic	ug/L	MW-307	03/27/2019		3.6900		
Arsenic	ug/L	MW-307	09/23/2019		3.9100		
Arsenic	ug/L	MW-307	03/09/2020		3.9700		
Arsenic	ug/L	MW-307	09/17/2020		3.9200		
Arsenic	ug/L	MW-307	04/16/2021		4.3400		
Arsenic	ug/L	MW-307	10/28/2021	ND	0.7500		*
Arsenic	ug/L	MW-307	04/13/2022		3.9200		
Arsenic	ug/L	MW-307	09/01/2022	ND	4.0000	2.0000	**
Arsenic	ug/L	MW-307	03/06/2023		4.3000		
Barium	ug/L	MW-307	09/18/2012	ND	10.0000		
Barium	ug/L	MW-307	03/27/2013		10.4000		
Barium	ug/L	MW-307	09/26/2013	ND	30.0000		*
Barium	ug/L	MW-307	04/15/2014	ND	10.0000		
Barium	ug/L	MW-307	09/01/2015		9.5900		
Barium	ug/L	MW-307	03/22/2016		8.5100		
Barium	ug/L	MW-307	10/21/2016		8.9200		
Barium	ug/L	MW-307	03/08/2017		8.7100		
Barium	ug/L	MW-307	09/25/2017		8.5700		
Barium	ug/L	MW-307	03/13/2018		9.2700		
Barium	ug/L	MW-307	10/01/2018		7.2400		
Barium	ug/L	MW-307	03/27/2019		7.8600		
Barium	ug/L	MW-307	09/23/2019		7.9700		
Barium	ug/L	MW-307	03/09/2020		8.2600		
Barium	ug/L	MW-307	09/17/2020		7.6700		
Barium	ug/L	MW-307	04/16/2021		9.9100		
Barium	ug/L	MW-307	10/28/2021		17.6000		
Barium	ug/L	MW-307	04/13/2022		8.8200		
Barium	ug/L	MW-307	09/01/2022		8.3000		
Barium	ug/L	MW-307	03/06/2023		8.9000		
Beryllium	ug/L	MW-307	09/18/2012	ND	1.0000		
Beryllium	ug/L	MW-307	03/27/2013		0.6240		
Beryllium	ug/L	MW-307	09/26/2013		0.5800		
Beryllium	ug/L	MW-307	04/15/2014		0.2650		
Beryllium	ug/L	MW-307	09/01/2015	ND	1.0000		
Beryllium	ug/L	MW-307	03/22/2016		0.5390		
Beryllium	ug/L	MW-307	10/21/2016		0.4770		
Beryllium	ug/L	MW-307	03/08/2017		0.4550		
Beryllium	ug/L	MW-307	09/25/2017		0.4270		
Beryllium	ug/L	MW-307	03/13/2018	ND	0.5000	1.0000	**
Beryllium	ug/L	MW-307	10/01/2018	ND	0.5300	1.0000	**
Beryllium	ug/L	MW-307	03/27/2019		0.3750		
Beryllium	ug/L	MW-307	09/23/2019	ND	1.0800	1.0000	**
Beryllium	ug/L	MW-307	03/09/2020		0.3300		

* - 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	ug/L	MW-307	09/17/2020	ND	1.0800	1.0000	**
Beryllium	ug/L	MW-307	04/16/2021		0.5770		
Beryllium	ug/L	MW-307	10/28/2021	ND	0.2700	1.0000	**
Beryllium	ug/L	MW-307	04/13/2022	ND	1.0800	1.0000	**
Beryllium	ug/L	MW-307	09/01/2022	ND	4.0000	1.0000	**
Beryllium	ug/L	MW-307	03/06/2023	ND	4.0000	1.0000	**
Cadmium	ug/L	MW-307	09/18/2012	ND	0.5000	0.2200	**
Cadmium	ug/L	MW-307	03/27/2013	ND	0.5000	0.2200	**
Cadmium	ug/L	MW-307	09/26/2013	ND	0.5000	0.2200	**
Cadmium	ug/L	MW-307	04/15/2014		0.1470		
Cadmium	ug/L	MW-307	09/01/2015	ND	0.5000	0.2200	**
Cadmium	ug/L	MW-307	03/22/2016		0.1620		
Cadmium	ug/L	MW-307	10/21/2016		0.1150		
Cadmium	ug/L	MW-307	03/08/2017		0.1060		
Cadmium	ug/L	MW-307	09/25/2017		0.0750		
Cadmium	ug/L	MW-307	03/13/2018	ND	0.1760	0.2200	**
Cadmium	ug/L	MW-307	10/01/2018		0.8170		
Cadmium	ug/L	MW-307	03/27/2019		0.0910		
Cadmium	ug/L	MW-307	09/23/2019	ND	0.1560	0.2200	**
Cadmium	ug/L	MW-307	03/09/2020		0.1280		
Cadmium	ug/L	MW-307	09/17/2020		0.0860		
Cadmium	ug/L	MW-307	04/16/2021		0.1160		
Cadmium	ug/L	MW-307	10/28/2021		0.0840		
Cadmium	ug/L	MW-307	04/13/2022	ND	0.2200		
Cadmium	ug/L	MW-307	09/01/2022	ND	0.8000	0.2200	**
Cadmium	ug/L	MW-307	03/06/2023	ND	0.8000	0.2200	**
Chromium	ug/L	MW-307	09/18/2012	ND	20.0000	2.9200	**
Chromium	ug/L	MW-307	03/27/2013	ND	20.0000	2.9200	**
Chromium	ug/L	MW-307	09/26/2013	ND	60.0000	2.9200	**
Chromium	ug/L	MW-307	04/15/2014	ND	20.0000	2.9200	**
Chromium	ug/L	MW-307	09/01/2015	ND	5.0000	2.9200	**
Chromium	ug/L	MW-307	03/22/2016	ND	0.3550	2.9200	**
Chromium	ug/L	MW-307	10/21/2016	ND	0.3550	2.9200	**
Chromium	ug/L	MW-307	03/08/2017	ND	7.2900	2.9200	**
Chromium	ug/L	MW-307	09/25/2017	ND	0.7290	2.9200	**
Chromium	ug/L	MW-307	03/13/2018	ND	2.9200		
Chromium	ug/L	MW-307	10/01/2018		1.6000		
Chromium	ug/L	MW-307	03/27/2019	ND	0.9800	2.9200	**
Chromium	ug/L	MW-307	09/23/2019	ND	3.9200	2.9200	**
Chromium	ug/L	MW-307	03/09/2020	ND	1.1000	2.9200	**
Chromium	ug/L	MW-307	09/17/2020	ND	1.1000	2.9200	**
Chromium	ug/L	MW-307	04/16/2021	ND	1.1000	2.9200	**
Chromium	ug/L	MW-307	10/28/2021	ND	1.1000	2.9200	**
Chromium	ug/L	MW-307	04/13/2022	ND	4.4000	2.9200	**
Chromium	ug/L	MW-307	09/01/2022	ND	8.0000	2.9200	**
Chromium	ug/L	MW-307	03/06/2023	ND	8.0000	2.9200	**
Cobalt	ug/L	MW-307	09/18/2012		60.1000		
Cobalt	ug/L	MW-307	03/27/2013		83.8000		
Cobalt	ug/L	MW-307	09/26/2013		44.3000		
Cobalt	ug/L	MW-307	04/15/2014		59.8000		
Cobalt	ug/L	MW-307	09/01/2015		41.9000		
Cobalt	ug/L	MW-307	03/22/2016		50.9000		
Cobalt	ug/L	MW-307	10/21/2016		59.1000		
Cobalt	ug/L	MW-307	03/08/2017		68.4000		
Cobalt	ug/L	MW-307	09/25/2017		58.0000		
Cobalt	ug/L	MW-307	03/13/2018		65.1000		
Cobalt	ug/L	MW-307	10/01/2018		52.4000		
Cobalt	ug/L	MW-307	03/27/2019		35.6000		
Cobalt	ug/L	MW-307	09/23/2019		44.9000		
Cobalt	ug/L	MW-307	03/09/2020		42.0000		
Cobalt	ug/L	MW-307	09/17/2020		45.8000		
Cobalt	ug/L	MW-307	04/16/2021		59.1000		
Cobalt	ug/L	MW-307	10/28/2021		14.8000		*
Cobalt	ug/L	MW-307	04/13/2022		53.5000		
Cobalt	ug/L	MW-307	09/01/2022		39.9000		
Cobalt	ug/L	MW-307	03/06/2023		48.5000		
Copper	ug/L	MW-307	09/18/2012	ND	20.0000	3.2000	**
Copper	ug/L	MW-307	03/27/2013	ND	20.0000	3.2000	**
Copper	ug/L	MW-307	09/26/2013	ND	60.0000	3.2000	**
Copper	ug/L	MW-307	04/15/2014	ND	20.0000	3.2000	**
Copper	ug/L	MW-307	09/01/2015	ND	2.0000	3.2000	**
Copper	ug/L	MW-307	03/22/2016	ND	1.2200	3.2000	**
Copper	ug/L	MW-307	10/21/2016	ND	1.2200	3.2000	**
Copper	ug/L	MW-307	03/08/2017	ND	2.1900	3.2000	**

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Copper	ug/L	MW-307	09/25/2017	ND	2.1900	3.2000	**
Copper	ug/L	MW-307	03/13/2018	ND	8.7600	3.2000	**
Copper	ug/L	MW-307	10/01/2018		1.2400		
Copper	ug/L	MW-307	03/27/2019	ND	2.0000	3.2000	**
Copper	ug/L	MW-307	09/23/2019	ND	8.0000	3.2000	**
Copper	ug/L	MW-307	03/09/2020	ND	3.2000		
Copper	ug/L	MW-307	09/17/2020	ND	1.5000	3.2000	**
Copper	ug/L	MW-307	04/16/2021	ND	1.4000	3.2000	**
Copper	ug/L	MW-307	10/28/2021		1.5400		
Copper	ug/L	MW-307	04/13/2022	ND	7.2000	3.2000	**
Copper	ug/L	MW-307	09/01/2022	ND	4.0000	3.2000	**
Copper	ug/L	MW-307	03/06/2023	ND	4.0000	3.2000	**
Lead	ug/L	MW-307	09/18/2012	ND	4.0000	0.9600	**
Lead	ug/L	MW-307	03/27/2013	ND	4.0000	0.9600	**
Lead	ug/L	MW-307	09/26/2013	ND	4.0000	0.9600	**
Lead	ug/L	MW-307	04/15/2014	ND	4.0000	0.9600	**
Lead	ug/L	MW-307	09/01/2015	ND	0.5000	0.9600	**
Lead	ug/L	MW-307	03/22/2016	ND	0.2110	0.9600	**
Lead	ug/L	MW-307	10/21/2016	ND	0.2110	0.9600	**
Lead	ug/L	MW-307	03/08/2017	ND	0.3240	0.9600	**
Lead	ug/L	MW-307	09/25/2017	ND	0.3240	0.9600	**
Lead	ug/L	MW-307	03/13/2018	ND	1.3000	0.9600	**
Lead	ug/L	MW-307	10/01/2018	ND	0.1860	0.9600	**
Lead	ug/L	MW-307	03/27/2019	ND	0.2700	0.9600	**
Lead	ug/L	MW-307	09/23/2019	ND	1.0800	0.9600	**
Lead	ug/L	MW-307	03/09/2020	ND	0.2700	0.9600	**
Lead	ug/L	MW-307	09/17/2020	ND	0.1100	0.9600	**
Lead	ug/L	MW-307	04/16/2021	ND	0.2100	0.9600	**
Lead	ug/L	MW-307	10/28/2021		0.7700		
Lead	ug/L	MW-307	04/13/2022	ND	0.9600		
Lead	ug/L	MW-307	09/01/2022	ND	4.0000	0.9600	**
Lead	ug/L	MW-307	03/06/2023	ND	4.0000	0.9600	**
Nickel	ug/L	MW-307	09/18/2012		115.0000		
Nickel	ug/L	MW-307	03/27/2013		122.0000		
Nickel	ug/L	MW-307	09/26/2013		79.6000		
Nickel	ug/L	MW-307	04/15/2014		101.0000		
Nickel	ug/L	MW-307	09/01/2015		70.9000		
Nickel	ug/L	MW-307	03/22/2016		84.3000		
Nickel	ug/L	MW-307	10/21/2016		69.8000		
Nickel	ug/L	MW-307	03/08/2017		112.0000		
Nickel	ug/L	MW-307	09/25/2017		62.0000		
Nickel	ug/L	MW-307	03/13/2018		98.9000		
Nickel	ug/L	MW-307	10/01/2018		92.9000		
Nickel	ug/L	MW-307	03/27/2019		79.1000		
Nickel	ug/L	MW-307	09/23/2019		75.9000		
Nickel	ug/L	MW-307	03/09/2020		71.1000		
Nickel	ug/L	MW-307	09/17/2020		76.9000		
Nickel	ug/L	MW-307	04/16/2021		104.0000		
Nickel	ug/L	MW-307	10/28/2021		31.5000		
Nickel	ug/L	MW-307	04/13/2022		88.8000		
Nickel	ug/L	MW-307	09/01/2022		70.0000		
Nickel	ug/L	MW-307	03/06/2023		83.7000		
Selenium	ug/L	MW-307	09/18/2012	ND	5.0000	3.8400	**
Selenium	ug/L	MW-307	03/27/2013	ND	5.0000	3.8400	**
Selenium	ug/L	MW-307	09/26/2013	ND	5.0000	3.8400	**
Selenium	ug/L	MW-307	04/15/2014	ND	5.0000	3.8400	**
Selenium	ug/L	MW-307	09/01/2015	ND	5.0000	3.8400	**
Selenium	ug/L	MW-307	03/22/2016		0.6430		
Selenium	ug/L	MW-307	10/21/2016		1.4800		
Selenium	ug/L	MW-307	03/08/2017		2.3100		
Selenium	ug/L	MW-307	09/25/2017		1.0600		
Selenium	ug/L	MW-307	03/13/2018	ND	3.7100	3.8400	**
Selenium	ug/L	MW-307	10/01/2018		1.0400		
Selenium	ug/L	MW-307	03/27/2019		1.2300		
Selenium	ug/L	MW-307	09/23/2019	ND	4.0000	3.8400	**
Selenium	ug/L	MW-307	03/09/2020		1.2400		
Selenium	ug/L	MW-307	09/17/2020	ND	1.0000	3.8400	**
Selenium	ug/L	MW-307	04/16/2021	ND	0.9600	3.8400	**
Selenium	ug/L	MW-307	10/28/2021	ND	0.9600	3.8400	**
Selenium	ug/L	MW-307	04/13/2022	ND	3.8400		
Selenium	ug/L	MW-307	09/01/2022	ND	4.0000	3.8400	**
Selenium	ug/L	MW-307	03/06/2023	ND	4.0000	3.8400	**
Silver	ug/L	MW-307	09/18/2012		36.0000		*
Silver	ug/L	MW-307	03/27/2013	ND	20.0000	0.5600	**

* - 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	ug/L	MW-307	09/26/2013		18.1000		*
Silver	ug/L	MW-307	04/15/2014	ND	20.0000	0.5600	**
Silver	ug/L	MW-307	09/01/2015	ND	1.0000	0.5600	**
Silver	ug/L	MW-307	03/22/2016	ND	0.1530	0.5600	**
Silver	ug/L	MW-307	10/21/2016	ND	0.1530	0.5600	**
Silver	ug/L	MW-307	03/08/2017	ND	1.4000	0.5600	**
Silver	ug/L	MW-307	09/25/2017	ND	0.1400	0.5600	**
Silver	ug/L	MW-307	03/13/2018	ND	0.5600		
Silver	ug/L	MW-307	10/01/2018	ND	0.1150	0.5600	**
Silver	ug/L	MW-307	03/27/2019	ND	0.3700	0.5600	**
Silver	ug/L	MW-307	09/23/2019	ND	1.4800	0.5600	**
Silver	ug/L	MW-307	03/09/2020	ND	0.3700	0.5600	**
Silver	ug/L	MW-307	09/17/2020	ND	0.3700	0.5600	**
Silver	ug/L	MW-307	04/16/2021	ND	0.4200	0.5600	**
Silver	ug/L	MW-307	10/28/2021	ND	0.4200	0.5600	**
Silver	ug/L	MW-307	04/13/2022	ND	1.9600	0.5600	**
Silver	ug/L	MW-307	09/01/2022	ND	4.0000	0.5600	**
Silver	ug/L	MW-307	03/06/2023	ND	4.0000	0.5600	**
Thallium	ug/L	MW-307	09/18/2012	ND	2.0000	0.5700	**
Thallium	ug/L	MW-307	03/27/2013	ND	2.0000	0.5700	**
Thallium	ug/L	MW-307	09/26/2013	ND	2.0000	0.5700	**
Thallium	ug/L	MW-307	04/15/2014	ND	2.0000	0.5700	**
Thallium	ug/L	MW-307	09/01/2015	ND	1.0000	0.5700	**
Thallium	ug/L	MW-307	03/22/2016		0.0460		
Thallium	ug/L	MW-307	10/21/2016		0.0440		
Thallium	ug/L	MW-307	03/08/2017	ND	0.0644	0.5700	**
Thallium	ug/L	MW-307	09/25/2017	ND	0.0644	0.5700	**
Thallium	ug/L	MW-307	03/13/2018	ND	0.2580	0.5700	**
Thallium	ug/L	MW-307	10/01/2018	ND	0.5700		
Thallium	ug/L	MW-307	03/27/2019	ND	0.2700	0.5700	**
Thallium	ug/L	MW-307	09/23/2019	ND	1.0800	0.5700	**
Thallium	ug/L	MW-307	03/09/2020	ND	0.2600	0.5700	**
Thallium	ug/L	MW-307	09/17/2020	ND	0.2600	0.5700	**
Thallium	ug/L	MW-307	04/16/2021	ND	0.2600	0.5700	**
Thallium	ug/L	MW-307	10/28/2021	ND	0.2600	0.5700	**
Thallium	ug/L	MW-307	04/13/2022	ND	1.0400	0.5700	**
Thallium	ug/L	MW-307	09/01/2022	ND	2.0000	0.5700	**
Thallium	ug/L	MW-307	03/06/2023	ND	2.0000	0.5700	**
Vanadium	ug/L	MW-307	09/18/2012	ND	50.0000	2.1500	**
Vanadium	ug/L	MW-307	03/27/2013		22.7000		*
Vanadium	ug/L	MW-307	09/26/2013	ND	150.0000	2.1500	**
Vanadium	ug/L	MW-307	04/15/2014	ND	50.0000	2.1500	**
Vanadium	ug/L	MW-307	09/01/2015	ND	5.0000	2.1500	**
Vanadium	ug/L	MW-307	03/22/2016	ND	0.2550	2.1500	**
Vanadium	ug/L	MW-307	10/21/2016	ND	0.2550	2.1500	**
Vanadium	ug/L	MW-307	03/08/2017	ND	0.8400	2.1500	**
Vanadium	ug/L	MW-307	09/25/2017	ND	0.8400	2.1500	**
Vanadium	ug/L	MW-307	03/13/2018	ND	3.3600	2.1500	**
Vanadium	ug/L	MW-307	10/01/2018	ND	2.1500		
Vanadium	ug/L	MW-307	03/27/2019	ND	0.8200	2.1500	**
Vanadium	ug/L	MW-307	09/23/2019	ND	3.2800	2.1500	**
Vanadium	ug/L	MW-307	03/09/2020	ND	0.8200	2.1500	**
Vanadium	ug/L	MW-307	09/17/2020	ND	0.8500	2.1500	**
Vanadium	ug/L	MW-307	04/16/2021	ND	1.1000	2.1500	**
Vanadium	ug/L	MW-307	10/28/2021	ND	1.1000	2.1500	**
Vanadium	ug/L	MW-307	04/13/2022	ND	4.4000	2.1500	**
Vanadium	ug/L	MW-307	09/01/2022	ND	20.0000	2.1500	**
Vanadium	ug/L	MW-307	03/06/2023	ND	20.0000	2.1500	**
Zinc	ug/L	MW-307	09/18/2012		434.0000		
Zinc	ug/L	MW-307	03/27/2013		663.0000		
Zinc	ug/L	MW-307	09/26/2013		695.0000		
Zinc	ug/L	MW-307	04/15/2014		356.0000		
Zinc	ug/L	MW-307	09/01/2015		338.0000		
Zinc	ug/L	MW-307	03/22/2016		385.0000		
Zinc	ug/L	MW-307	10/21/2016		456.0000		
Zinc	ug/L	MW-307	03/08/2017		492.0000		
Zinc	ug/L	MW-307	09/25/2017		283.0000		
Zinc	ug/L	MW-307	03/13/2018		447.0000		
Zinc	ug/L	MW-307	10/01/2018		424.0000		
Zinc	ug/L	MW-307	03/27/2019		346.0000		
Zinc	ug/L	MW-307	09/23/2019		322.0000		
Zinc	ug/L	MW-307	03/09/2020		308.0000		
Zinc	ug/L	MW-307	09/17/2020		349.0000		
Zinc	ug/L	MW-307	04/16/2021		443.0000		

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Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Zinc	ug/L	MW-307	10/28/2021		10.6000		*
Zinc	ug/L	MW-307	04/13/2022		374.0000		
Zinc	ug/L	MW-307	09/01/2022		271.0000		
Zinc	ug/L	MW-307	03/06/2023		324.0000		
Antimony	ug/L	MW-312	09/20/2012	ND	6.0000	1.1000	**
Antimony	ug/L	MW-312	12/12/2012	ND	6.0000	1.1000	**
Antimony	ug/L	MW-312	03/28/2013	ND	6.0000	1.1000	**
Antimony	ug/L	MW-312	06/19/2013	ND	6.0000	1.1000	**
Antimony	ug/L	MW-312	09/26/2013	ND	6.0000	1.1000	**
Antimony	ug/L	MW-312	04/16/2014	ND	6.0000	1.1000	**
Antimony	ug/L	MW-312	09/01/2015	ND	1.0000	1.1000	**
Antimony	ug/L	MW-312	03/22/2016	ND	0.2370	1.1000	**
Antimony	ug/L	MW-312	10/21/2016	ND	0.2370	1.1000	**
Antimony	ug/L	MW-312	03/08/2017	ND	0.1850	1.1000	**
Antimony	ug/L	MW-312	09/25/2017	ND	0.1850	1.1000	**
Antimony	ug/L	MW-312	03/13/2018	ND	0.7400	1.1000	**
Antimony	ug/L	MW-312	10/01/2018	ND	1.3200	1.1000	**
Antimony	ug/L	MW-312	03/27/2019	ND	0.5300	1.1000	**
Antimony	ug/L	MW-312	09/23/2019	ND	0.5300	1.1000	**
Antimony	ug/L	MW-312	03/09/2020	ND	0.5800	1.1000	**
Antimony	ug/L	MW-312	09/15/2020	ND	0.5100	1.1000	**
Antimony	ug/L	MW-312	04/15/2021	ND	1.1000		
Antimony	ug/L	MW-312	10/27/2021	ND	1.1000		
Antimony	ug/L	MW-312	04/14/2022	ND	2.7600	1.1000	**
Antimony	ug/L	MW-312	09/01/2022	ND	2.0000	1.1000	**
Antimony	ug/L	MW-312	03/06/2023	ND	2.0000	1.1000	**
Arsenic	ug/L	MW-312	09/20/2012	ND	1.0000	2.0000	**
Arsenic	ug/L	MW-312	12/12/2012	ND	2.0000		
Arsenic	ug/L	MW-312	03/28/2013	ND	1.0000	2.0000	**
Arsenic	ug/L	MW-312	06/19/2013	ND	3.0000	2.0000	**
Arsenic	ug/L	MW-312	09/26/2013		2.3200		
Arsenic	ug/L	MW-312	04/16/2014	ND	1.0000	2.0000	**
Arsenic	ug/L	MW-312	09/01/2015	ND	2.0000		
Arsenic	ug/L	MW-312	03/22/2016	ND	0.6720	2.0000	**
Arsenic	ug/L	MW-312	10/21/2016		1.4300		
Arsenic	ug/L	MW-312	03/08/2017		1.0200		
Arsenic	ug/L	MW-312	09/25/2017		1.2300		
Arsenic	ug/L	MW-312	03/13/2018	ND	2.0200	2.0000	**
Arsenic	ug/L	MW-312	10/01/2018		1.8400		
Arsenic	ug/L	MW-312	03/27/2019		1.1300		
Arsenic	ug/L	MW-312	09/23/2019		1.2200		
Arsenic	ug/L	MW-312	03/09/2020	ND	0.8800	2.0000	**
Arsenic	ug/L	MW-312	09/15/2020		2.1500		
Arsenic	ug/L	MW-312	04/15/2021		1.2800		
Arsenic	ug/L	MW-312	10/27/2021		1.2900		
Arsenic	ug/L	MW-312	04/14/2022	ND	3.0000	2.0000	**
Arsenic	ug/L	MW-312	09/01/2022	ND	4.0000	2.0000	**
Arsenic	ug/L	MW-312	03/06/2023	ND	4.0000	2.0000	**
Barium	ug/L	MW-312	09/20/2012		16.6000		
Barium	ug/L	MW-312	12/12/2012		18.5000		
Barium	ug/L	MW-312	03/28/2013		12.3000		
Barium	ug/L	MW-312	06/19/2013		16.7000		
Barium	ug/L	MW-312	09/26/2013		8.4700		
Barium	ug/L	MW-312	04/16/2014		10.7000		
Barium	ug/L	MW-312	09/01/2015		15.4000		
Barium	ug/L	MW-312	03/22/2016		24.9000		
Barium	ug/L	MW-312	10/21/2016		13.8000		
Barium	ug/L	MW-312	03/08/2017		14.1000		
Barium	ug/L	MW-312	09/25/2017		16.5000		
Barium	ug/L	MW-312	03/13/2018		12.8000		
Barium	ug/L	MW-312	10/01/2018		13.4000		
Barium	ug/L	MW-312	03/27/2019		14.6000		
Barium	ug/L	MW-312	09/23/2019		11.1000		
Barium	ug/L	MW-312	03/09/2020		14.9000		
Barium	ug/L	MW-312	09/15/2020		13.6000		
Barium	ug/L	MW-312	04/15/2021		12.5000		
Barium	ug/L	MW-312	10/27/2021		11.9000		
Barium	ug/L	MW-312	04/14/2022		14.6000		
Barium	ug/L	MW-312	09/01/2022		23.9000		
Barium	ug/L	MW-312	03/06/2023		25.3000		
Beryllium	ug/L	MW-312	09/20/2012	ND	1.0000		
Beryllium	ug/L	MW-312	12/12/2012	ND	1.0000		
Beryllium	ug/L	MW-312	03/28/2013	ND	1.0000		
Beryllium	ug/L	MW-312	06/19/2013	ND	1.0000		

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*** - ND value replaced with manual RL.
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Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Beryllium	ug/L	MW-312	09/26/2013		0.2800		
Beryllium	ug/L	MW-312	04/16/2014	ND	1.0000		
Beryllium	ug/L	MW-312	09/01/2015	ND	1.0000		
Beryllium	ug/L	MW-312	03/22/2016	ND	0.2210	1.0000	**
Beryllium	ug/L	MW-312	10/21/2016	ND	0.2210	1.0000	**
Beryllium	ug/L	MW-312	03/08/2017		0.1430		
Beryllium	ug/L	MW-312	09/25/2017		0.1980		
Beryllium	ug/L	MW-312	03/13/2018	ND	0.5000	1.0000	**
Beryllium	ug/L	MW-312	10/01/2018	ND	0.5300	1.0000	**
Beryllium	ug/L	MW-312	03/27/2019	ND	0.2700	1.0000	**
Beryllium	ug/L	MW-312	09/23/2019		0.3180		
Beryllium	ug/L	MW-312	03/09/2020	ND	0.2700	1.0000	**
Beryllium	ug/L	MW-312	09/15/2020	ND	0.2700	1.0000	**
Beryllium	ug/L	MW-312	04/15/2021		0.3120		
Beryllium	ug/L	MW-312	10/27/2021		0.2750		
Beryllium	ug/L	MW-312	04/14/2022	ND	1.0800	1.0000	**
Beryllium	ug/L	MW-312	09/01/2022	ND	4.0000	1.0000	**
Beryllium	ug/L	MW-312	03/06/2023	ND	4.0000	1.0000	**
Cadmium	ug/L	MW-312	09/20/2012	ND	0.5000	0.2200	**
Cadmium	ug/L	MW-312	12/12/2012	ND	0.5000	0.2200	**
Cadmium	ug/L	MW-312	03/28/2013	ND	0.5000	0.2200	**
Cadmium	ug/L	MW-312	06/19/2013		0.2460		
Cadmium	ug/L	MW-312	09/26/2013	ND	0.5000	0.2200	**
Cadmium	ug/L	MW-312	04/16/2014	ND	0.5000	0.2200	**
Cadmium	ug/L	MW-312	09/01/2015	ND	0.5000	0.2200	**
Cadmium	ug/L	MW-312	03/22/2016		0.0670		
Cadmium	ug/L	MW-312	10/21/2016	ND	0.0351	0.2200	**
Cadmium	ug/L	MW-312	03/08/2017	ND	0.0441	0.2200	**
Cadmium	ug/L	MW-312	09/25/2017	ND	0.0441	0.2200	**
Cadmium	ug/L	MW-312	03/13/2018	ND	0.1760	0.2200	**
Cadmium	ug/L	MW-312	10/01/2018	ND	0.1670	0.2200	**
Cadmium	ug/L	MW-312	03/27/2019	ND	0.0770	0.2200	**
Cadmium	ug/L	MW-312	09/23/2019	ND	0.0390	0.2200	**
Cadmium	ug/L	MW-312	03/09/2020		0.0680		
Cadmium	ug/L	MW-312	09/15/2020	ND	0.0490	0.2200	**
Cadmium	ug/L	MW-312	04/15/2021	ND	0.0510	0.2200	**
Cadmium	ug/L	MW-312	10/27/2021	ND	0.0510	0.2200	**
Cadmium	ug/L	MW-312	04/14/2022	ND	0.2200		
Cadmium	ug/L	MW-312	09/01/2022	ND	0.8000	0.2200	**
Cadmium	ug/L	MW-312	03/06/2023	ND	0.8000	0.2200	**
Chromium	ug/L	MW-312	09/20/2012	ND	20.0000	2.9200	**
Chromium	ug/L	MW-312	12/12/2012	ND	20.0000	2.9200	**
Chromium	ug/L	MW-312	03/28/2013	ND	20.0000	2.9200	**
Chromium	ug/L	MW-312	06/19/2013	ND	20.0000	2.9200	**
Chromium	ug/L	MW-312	09/26/2013		3.9000		
Chromium	ug/L	MW-312	04/16/2014	ND	20.0000	2.9200	**
Chromium	ug/L	MW-312	09/01/2015	ND	5.0000	2.9200	**
Chromium	ug/L	MW-312	03/22/2016	ND	0.3550	2.9200	**
Chromium	ug/L	MW-312	10/21/2016	ND	0.3550	2.9200	**
Chromium	ug/L	MW-312	03/08/2017	ND	0.7290	2.9200	**
Chromium	ug/L	MW-312	09/25/2017	ND	0.7290	2.9200	**
Chromium	ug/L	MW-312	03/13/2018	ND	2.9200		
Chromium	ug/L	MW-312	10/01/2018		1.2600		
Chromium	ug/L	MW-312	03/27/2019	ND	0.9800	2.9200	**
Chromium	ug/L	MW-312	09/23/2019	ND	0.9800	2.9200	**
Chromium	ug/L	MW-312	03/09/2020	ND	1.1000	2.9200	**
Chromium	ug/L	MW-312	09/15/2020	ND	1.1000	2.9200	**
Chromium	ug/L	MW-312	04/15/2021	ND	1.1000	2.9200	**
Chromium	ug/L	MW-312	10/27/2021	ND	1.1000	2.9200	**
Chromium	ug/L	MW-312	04/14/2022	ND	4.4000	2.9200	**
Chromium	ug/L	MW-312	09/01/2022	ND	8.0000	2.9200	**
Chromium	ug/L	MW-312	03/06/2023	ND	8.0000	2.9200	**
Cobalt	ug/L	MW-312	09/20/2012		36.2000		
Cobalt	ug/L	MW-312	12/12/2012		34.3000		
Cobalt	ug/L	MW-312	03/28/2013		54.5000		
Cobalt	ug/L	MW-312	06/19/2013		43.7000		
Cobalt	ug/L	MW-312	09/26/2013		44.9000		
Cobalt	ug/L	MW-312	04/16/2014		20.8000		
Cobalt	ug/L	MW-312	09/01/2015		32.4000		
Cobalt	ug/L	MW-312	03/22/2016		37.1000		
Cobalt	ug/L	MW-312	10/21/2016		36.4000		
Cobalt	ug/L	MW-312	03/08/2017		35.0000		
Cobalt	ug/L	MW-312	09/25/2017		30.3000		
Cobalt	ug/L	MW-312	03/13/2018		24.1000		

* - Outlier for that well and constituent.
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*** - ND value replaced with manual RL.
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Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Cobalt	ug/L	MW-312	10/01/2018		29.8000		
Cobalt	ug/L	MW-312	03/27/2019		32.7000		
Cobalt	ug/L	MW-312	09/23/2019		34.9000		
Cobalt	ug/L	MW-312	03/09/2020		34.7000		
Cobalt	ug/L	MW-312	09/15/2020		41.4000		
Cobalt	ug/L	MW-312	04/15/2021		52.3000		
Cobalt	ug/L	MW-312	10/27/2021		38.6000		
Cobalt	ug/L	MW-312	04/14/2022		47.4000		
Cobalt	ug/L	MW-312	09/01/2022		34.0000		
Cobalt	ug/L	MW-312	03/06/2023		44.8000		
Copper	ug/L	MW-312	09/20/2012	ND	20.0000	3.2000	**
Copper	ug/L	MW-312	12/12/2012	ND	20.0000	3.2000	**
Copper	ug/L	MW-312	03/28/2013		2.1900		
Copper	ug/L	MW-312	06/19/2013	ND	20.0000	3.2000	**
Copper	ug/L	MW-312	09/26/2013	ND	20.0000	3.2000	**
Copper	ug/L	MW-312	04/16/2014	ND	20.0000	3.2000	**
Copper	ug/L	MW-312	09/01/2015	ND	2.0000	3.2000	**
Copper	ug/L	MW-312	03/22/2016	ND	1.2200	3.2000	**
Copper	ug/L	MW-312	10/21/2016	ND	1.2200	3.2000	**
Copper	ug/L	MW-312	03/08/2017	ND	2.1900	3.2000	**
Copper	ug/L	MW-312	09/25/2017	ND	2.1900	3.2000	**
Copper	ug/L	MW-312	03/13/2018	ND	8.7600	3.2000	**
Copper	ug/L	MW-312	10/01/2018		1.1800		
Copper	ug/L	MW-312	03/27/2019	ND	2.0000	3.2000	**
Copper	ug/L	MW-312	09/23/2019	ND	2.0000	3.2000	**
Copper	ug/L	MW-312	03/09/2020	ND	3.2000		
Copper	ug/L	MW-312	09/15/2020	ND	1.5000	3.2000	**
Copper	ug/L	MW-312	04/15/2021	ND	1.4000	3.2000	**
Copper	ug/L	MW-312	10/27/2021	ND	1.4000	3.2000	**
Copper	ug/L	MW-312	04/14/2022		7.9900		
Copper	ug/L	MW-312	09/01/2022	ND	4.0000	3.2000	**
Copper	ug/L	MW-312	03/06/2023	ND	4.0000	3.2000	**
Lead	ug/L	MW-312	09/20/2012	ND	4.0000	0.9600	**
Lead	ug/L	MW-312	12/12/2012	ND	4.0000	0.9600	**
Lead	ug/L	MW-312	03/28/2013	ND	4.0000	0.9600	**
Lead	ug/L	MW-312	06/19/2013		1.6700		
Lead	ug/L	MW-312	09/26/2013	ND	4.0000	0.9600	**
Lead	ug/L	MW-312	04/16/2014	ND	4.0000	0.9600	**
Lead	ug/L	MW-312	09/01/2015	ND	0.5000	0.9600	**
Lead	ug/L	MW-312	03/22/2016	ND	0.2110	0.9600	**
Lead	ug/L	MW-312	10/21/2016	ND	0.2110	0.9600	**
Lead	ug/L	MW-312	03/08/2017	ND	0.3240	0.9600	**
Lead	ug/L	MW-312	09/25/2017	ND	0.3240	0.9600	**
Lead	ug/L	MW-312	03/13/2018	ND	1.3000	0.9600	**
Lead	ug/L	MW-312	10/01/2018	ND	0.1860	0.9600	**
Lead	ug/L	MW-312	03/27/2019	ND	0.2700	0.9600	**
Lead	ug/L	MW-312	09/23/2019		0.2740		
Lead	ug/L	MW-312	03/09/2020	ND	0.2700	0.9600	**
Lead	ug/L	MW-312	09/15/2020		0.1770		
Lead	ug/L	MW-312	04/15/2021	ND	0.2100	0.9600	**
Lead	ug/L	MW-312	10/27/2021		1.4100		
Lead	ug/L	MW-312	04/14/2022	ND	0.9600		
Lead	ug/L	MW-312	09/01/2022	ND	4.0000	0.9600	**
Lead	ug/L	MW-312	03/06/2023	ND	4.0000	0.9600	**
Nickel	ug/L	MW-312	09/20/2012		89.5000		
Nickel	ug/L	MW-312	12/12/2012		82.0000		
Nickel	ug/L	MW-312	03/28/2013		121.0000		
Nickel	ug/L	MW-312	06/19/2013		119.0000		
Nickel	ug/L	MW-312	09/26/2013		117.0000		
Nickel	ug/L	MW-312	04/16/2014		101.0000		
Nickel	ug/L	MW-312	09/01/2015		108.0000		
Nickel	ug/L	MW-312	03/22/2016		45.0000		
Nickel	ug/L	MW-312	10/21/2016		94.4000		
Nickel	ug/L	MW-312	03/08/2017		100.0000		
Nickel	ug/L	MW-312	09/25/2017		80.1000		
Nickel	ug/L	MW-312	03/13/2018		88.8000		
Nickel	ug/L	MW-312	10/01/2018		91.6000		
Nickel	ug/L	MW-312	03/27/2019		101.0000		
Nickel	ug/L	MW-312	09/23/2019		120.0000		
Nickel	ug/L	MW-312	03/09/2020		85.8000		
Nickel	ug/L	MW-312	09/15/2020		119.0000		
Nickel	ug/L	MW-312	04/15/2021		150.0000		
Nickel	ug/L	MW-312	10/27/2021		128.0000		
Nickel	ug/L	MW-312	04/14/2022		141.0000		

* - Outlier for that well and constituent.
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ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Nickel	ug/L	MW-312	09/01/2022		64.5000		
Nickel	ug/L	MW-312	03/06/2023		64.8000		
Selenium	ug/L	MW-312	09/20/2012	ND	5.0000	3.8400	**
Selenium	ug/L	MW-312	12/12/2012	ND	5.0000	3.8400	**
Selenium	ug/L	MW-312	03/28/2013	ND	5.0000	3.8400	**
Selenium	ug/L	MW-312	06/19/2013	ND	5.0000	3.8400	**
Selenium	ug/L	MW-312	09/26/2013	ND	5.0000	3.8400	**
Selenium	ug/L	MW-312	04/16/2014	ND	5.0000	3.8400	**
Selenium	ug/L	MW-312	09/01/2015	ND	5.0000	3.8400	**
Selenium	ug/L	MW-312	03/22/2016	ND	0.6300	3.8400	**
Selenium	ug/L	MW-312	10/21/2016	ND	0.6300	3.8400	**
Selenium	ug/L	MW-312	03/08/2017	ND	0.9280	3.8400	**
Selenium	ug/L	MW-312	09/25/2017	ND	0.9280	3.8400	**
Selenium	ug/L	MW-312	03/13/2018	ND	3.7100	3.8400	**
Selenium	ug/L	MW-312	10/01/2018	ND	0.9820	3.8400	**
Selenium	ug/L	MW-312	03/27/2019	ND	1.0000	3.8400	**
Selenium	ug/L	MW-312	09/23/2019	ND	1.0000	3.8400	**
Selenium	ug/L	MW-312	03/09/2020	ND	1.0000	3.8400	**
Selenium	ug/L	MW-312	09/15/2020	ND	1.0000	3.8400	**
Selenium	ug/L	MW-312	04/15/2021	ND	0.9600	3.8400	**
Selenium	ug/L	MW-312	10/27/2021	ND	0.9600	3.8400	**
Selenium	ug/L	MW-312	04/14/2022	ND	3.8400		
Selenium	ug/L	MW-312	09/01/2022	ND	4.0000	3.8400	**
Selenium	ug/L	MW-312	03/06/2023	ND	4.0000	3.8400	**
Silver	ug/L	MW-312	09/20/2012	ND	20.0000	0.5600	**
Silver	ug/L	MW-312	12/12/2012	ND	20.0000	0.5600	**
Silver	ug/L	MW-312	03/28/2013	ND	20.0000	0.5600	**
Silver	ug/L	MW-312	06/19/2013	ND	20.0000	0.5600	**
Silver	ug/L	MW-312	09/26/2013	ND	20.0000	0.5600	**
Silver	ug/L	MW-312	04/16/2014	ND	20.0000	0.5600	**
Silver	ug/L	MW-312	09/01/2015	ND	1.0000	0.5600	**
Silver	ug/L	MW-312	03/22/2016	ND	0.1530	0.5600	**
Silver	ug/L	MW-312	10/21/2016	ND	0.1530	0.5600	**
Silver	ug/L	MW-312	03/08/2017	ND	0.1400	0.5600	**
Silver	ug/L	MW-312	09/25/2017	ND	0.1400	0.5600	**
Silver	ug/L	MW-312	03/13/2018	ND	0.5600		
Silver	ug/L	MW-312	10/01/2018	ND	0.1150	0.5600	**
Silver	ug/L	MW-312	03/27/2019	ND	0.3700	0.5600	**
Silver	ug/L	MW-312	09/23/2019	ND	0.3700	0.5600	**
Silver	ug/L	MW-312	03/09/2020	ND	0.3700	0.5600	**
Silver	ug/L	MW-312	09/15/2020	ND	0.3700	0.5600	**
Silver	ug/L	MW-312	04/15/2021	ND	0.4200	0.5600	**
Silver	ug/L	MW-312	10/27/2021	ND	0.4200	0.5600	**
Silver	ug/L	MW-312	04/14/2022	ND	1.9600	0.5600	**
Silver	ug/L	MW-312	09/01/2022	ND	4.0000	0.5600	**
Silver	ug/L	MW-312	03/06/2023	ND	4.0000	0.5600	**
Thallium	ug/L	MW-312	09/20/2012	ND	2.0000	0.5700	**
Thallium	ug/L	MW-312	12/12/2012	ND	2.0000	0.5700	**
Thallium	ug/L	MW-312	03/28/2013	ND	2.0000	0.5700	**
Thallium	ug/L	MW-312	06/19/2013	ND	2.0000	0.5700	**
Thallium	ug/L	MW-312	09/26/2013	ND	2.0000	0.5700	**
Thallium	ug/L	MW-312	04/16/2014	ND	2.0000	0.5700	**
Thallium	ug/L	MW-312	09/01/2015	ND	1.0000	0.5700	**
Thallium	ug/L	MW-312	03/22/2016		0.0650		
Thallium	ug/L	MW-312	10/21/2016	ND	0.0255	0.5700	**
Thallium	ug/L	MW-312	03/08/2017	ND	0.0644	0.5700	**
Thallium	ug/L	MW-312	09/25/2017	ND	0.0644	0.5700	**
Thallium	ug/L	MW-312	03/13/2018	ND	0.2580	0.5700	**
Thallium	ug/L	MW-312	10/01/2018	ND	0.5700		
Thallium	ug/L	MW-312	03/27/2019	ND	0.2700	0.5700	**
Thallium	ug/L	MW-312	09/23/2019	ND	0.2700	0.5700	**
Thallium	ug/L	MW-312	03/09/2020	ND	0.2600	0.5700	**
Thallium	ug/L	MW-312	09/15/2020	ND	0.2600	0.5700	**
Thallium	ug/L	MW-312	04/15/2021	ND	0.2600	0.5700	**
Thallium	ug/L	MW-312	10/27/2021	ND	0.2600	0.5700	**
Thallium	ug/L	MW-312	04/14/2022	ND	1.0400	0.5700	**
Thallium	ug/L	MW-312	09/01/2022	ND	2.0000	0.5700	**
Thallium	ug/L	MW-312	03/06/2023	ND	2.0000	0.5700	**
Vanadium	ug/L	MW-312	09/20/2012	ND	50.0000	2.1500	**
Vanadium	ug/L	MW-312	12/12/2012	ND	50.0000	2.1500	**
Vanadium	ug/L	MW-312	03/28/2013	ND	50.0000	2.1500	**
Vanadium	ug/L	MW-312	06/19/2013	ND	50.0000	2.1500	**
Vanadium	ug/L	MW-312	09/26/2013	ND	50.0000	2.1500	**
Vanadium	ug/L	MW-312	04/16/2014	ND	50.0000	2.1500	**

* - 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	ug/L	MW-312	09/01/2015	ND	5.0000	2.1500	**
Vanadium	ug/L	MW-312	03/22/2016	ND	0.2550	2.1500	**
Vanadium	ug/L	MW-312	10/21/2016	ND	0.2550	2.1500	**
Vanadium	ug/L	MW-312	03/08/2017	ND	0.8400	2.1500	**
Vanadium	ug/L	MW-312	09/25/2017	ND	0.8400	2.1500	**
Vanadium	ug/L	MW-312	03/13/2018	ND	3.3600	2.1500	**
Vanadium	ug/L	MW-312	10/01/2018	ND	2.1500		
Vanadium	ug/L	MW-312	03/27/2019	ND	0.8200	2.1500	**
Vanadium	ug/L	MW-312	09/23/2019	ND	0.8200	2.1500	**
Vanadium	ug/L	MW-312	03/09/2020	ND	0.8200	2.1500	**
Vanadium	ug/L	MW-312	09/15/2020	ND	0.8500	2.1500	**
Vanadium	ug/L	MW-312	04/15/2021	ND	1.1000	2.1500	**
Vanadium	ug/L	MW-312	10/27/2021	ND	1.1000	2.1500	**
Vanadium	ug/L	MW-312	04/14/2022	ND	4.4000	2.1500	**
Vanadium	ug/L	MW-312	09/01/2022	ND	20.0000	2.1500	**
Vanadium	ug/L	MW-312	03/06/2023	ND	20.0000	2.1500	**
Zinc	ug/L	MW-312	09/20/2012	ND	20.0000	11.5000	**
Zinc	ug/L	MW-312	12/12/2012		85.0000		
Zinc	ug/L	MW-312	03/28/2013		84.9000		
Zinc	ug/L	MW-312	06/19/2013		70.1000		
Zinc	ug/L	MW-312	09/26/2013		209.0000		
Zinc	ug/L	MW-312	04/16/2014	ND	60.0000	11.5000	**
Zinc	ug/L	MW-312	09/01/2015	ND	10.0000	11.5000	**
Zinc	ug/L	MW-312	03/22/2016		6.8000		
Zinc	ug/L	MW-312	10/21/2016		12.3000		
Zinc	ug/L	MW-312	03/08/2017		17.6000		
Zinc	ug/L	MW-312	09/25/2017	ND	11.5000		
Zinc	ug/L	MW-312	03/13/2018	ND	46.0000	11.5000	**
Zinc	ug/L	MW-312	10/01/2018		10.0000		
Zinc	ug/L	MW-312	03/27/2019	ND	10.0000	11.5000	**
Zinc	ug/L	MW-312	09/23/2019	ND	10.0000	11.5000	**
Zinc	ug/L	MW-312	03/09/2020	ND	10.0000	11.5000	**
Zinc	ug/L	MW-312	09/15/2020		12.9000		
Zinc	ug/L	MW-312	04/15/2021	ND	10.0000	11.5000	**
Zinc	ug/L	MW-312	10/27/2021	ND	10.0000	11.5000	**
Zinc	ug/L	MW-312	04/14/2022	ND	40.0000	11.5000	**
Zinc	ug/L	MW-312	09/01/2022	ND	20.0000	11.5000	**
Zinc	ug/L	MW-312	03/06/2023	ND	20.0000	11.5000	**
Antimony	ug/L	MW-390	09/18/2012	ND	6.0000	1.1000	**
Antimony	ug/L	MW-390	03/27/2013	ND	6.0000	1.1000	**
Antimony	ug/L	MW-390	09/25/2013	ND	6.0000	1.1000	**
Antimony	ug/L	MW-390	04/15/2014	ND	6.0000	1.1000	**
Antimony	ug/L	MW-390	09/01/2015	ND	1.0000	1.1000	**
Antimony	ug/L	MW-390	03/22/2016	ND	0.2370	1.1000	**
Antimony	ug/L	MW-390	10/21/2016	ND	0.2370	1.1000	**
Antimony	ug/L	MW-390	03/08/2017	ND	0.1850	1.1000	**
Antimony	ug/L	MW-390	09/25/2017	ND	0.1850	1.1000	**
Antimony	ug/L	MW-390	03/13/2018	ND	0.7400	1.1000	**
Antimony	ug/L	MW-390	10/01/2018	ND	1.3200	1.1000	**
Antimony	ug/L	MW-390	03/27/2019	ND	0.5300	1.1000	**
Antimony	ug/L	MW-390	09/23/2019	ND	2.1200	1.1000	**
Antimony	ug/L	MW-390	03/09/2020	ND	0.5800	1.1000	**
Antimony	ug/L	MW-390	09/17/2020	ND	0.5100	1.1000	**
Antimony	ug/L	MW-390	04/14/2021	ND	1.1000		
Antimony	ug/L	MW-390	10/26/2021	ND	1.1000		
Antimony	ug/L	MW-390	04/14/2022	ND	2.7600	1.1000	**
Antimony	ug/L	MW-390	09/01/2022	ND	2.0000	1.1000	**
Antimony	ug/L	MW-390	03/06/2023	ND	2.0000	1.1000	**
Arsenic	ug/L	MW-390	09/18/2012		13.9000		
Arsenic	ug/L	MW-390	03/27/2013		14.0000		
Arsenic	ug/L	MW-390	09/25/2013		14.7000		
Arsenic	ug/L	MW-390	04/15/2014		17.6000		
Arsenic	ug/L	MW-390	09/01/2015		22.3000		
Arsenic	ug/L	MW-390	03/22/2016		16.7000		
Arsenic	ug/L	MW-390	10/21/2016		13.7000		
Arsenic	ug/L	MW-390	03/08/2017		7.2500		
Arsenic	ug/L	MW-390	09/25/2017		13.6000		
Arsenic	ug/L	MW-390	03/13/2018		14.7000		
Arsenic	ug/L	MW-390	10/01/2018		13.9000		
Arsenic	ug/L	MW-390	03/27/2019		15.0000		
Arsenic	ug/L	MW-390	09/23/2019		19.7000		
Arsenic	ug/L	MW-390	03/09/2020		19.0000		
Arsenic	ug/L	MW-390	09/17/2020		14.8000		
Arsenic	ug/L	MW-390	04/14/2021		15.7000		

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Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Arsenic	ug/L	MW-390	10/26/2021		11.3000		
Arsenic	ug/L	MW-390	04/14/2022		22.5000		
Arsenic	ug/L	MW-390	09/01/2022		19.4000		
Arsenic	ug/L	MW-390	03/06/2023		16.3000		
Barium	ug/L	MW-390	09/18/2012		30.6000		
Barium	ug/L	MW-390	03/27/2013		23.5000		
Barium	ug/L	MW-390	09/25/2013		29.7000		
Barium	ug/L	MW-390	04/15/2014		13.0000		
Barium	ug/L	MW-390	09/01/2015		49.9000		
Barium	ug/L	MW-390	03/22/2016		36.1000		
Barium	ug/L	MW-390	10/21/2016		28.8000		
Barium	ug/L	MW-390	03/08/2017		17.8000		
Barium	ug/L	MW-390	09/25/2017		28.2000		
Barium	ug/L	MW-390	03/13/2018		21.5000		
Barium	ug/L	MW-390	10/01/2018		26.6000		
Barium	ug/L	MW-390	03/27/2019		30.0000		
Barium	ug/L	MW-390	09/23/2019		29.3000		
Barium	ug/L	MW-390	03/09/2020		26.9000		
Barium	ug/L	MW-390	09/17/2020		26.0000		
Barium	ug/L	MW-390	04/14/2021		26.1000		
Barium	ug/L	MW-390	10/26/2021		25.4000		
Barium	ug/L	MW-390	04/14/2022		19.0000		
Barium	ug/L	MW-390	09/01/2022		14.9000		
Barium	ug/L	MW-390	03/06/2023		17.3000		
Beryllium	ug/L	MW-390	09/18/2012	ND	1.0000		
Beryllium	ug/L	MW-390	03/27/2013	ND	1.0000		
Beryllium	ug/L	MW-390	09/25/2013		0.2000		
Beryllium	ug/L	MW-390	04/15/2014	ND	1.0000		
Beryllium	ug/L	MW-390	09/01/2015	ND	1.0000		
Beryllium	ug/L	MW-390	03/22/2016	ND	0.2210	1.0000	**
Beryllium	ug/L	MW-390	10/21/2016	ND	0.2210	1.0000	**
Beryllium	ug/L	MW-390	03/08/2017	ND	0.1250	1.0000	**
Beryllium	ug/L	MW-390	09/25/2017	ND	0.1250	1.0000	**
Beryllium	ug/L	MW-390	03/13/2018	ND	0.5000	1.0000	**
Beryllium	ug/L	MW-390	10/01/2018	ND	0.5300	1.0000	**
Beryllium	ug/L	MW-390	03/27/2019	ND	0.2700	1.0000	**
Beryllium	ug/L	MW-390	09/23/2019	ND	1.0800	1.0000	**
Beryllium	ug/L	MW-390	03/09/2020	ND	0.2700	1.0000	**
Beryllium	ug/L	MW-390	09/17/2020	ND	0.5400	1.0000	**
Beryllium	ug/L	MW-390	04/14/2021	ND	0.2700	1.0000	**
Beryllium	ug/L	MW-390	10/26/2021	ND	0.2700	1.0000	**
Beryllium	ug/L	MW-390	04/14/2022	ND	1.0800	1.0000	**
Beryllium	ug/L	MW-390	09/01/2022	ND	4.0000	1.0000	**
Beryllium	ug/L	MW-390	03/06/2023	ND	4.0000	1.0000	**
Cadmium	ug/L	MW-390	09/18/2012		0.6620		
Cadmium	ug/L	MW-390	03/27/2013		0.2810		
Cadmium	ug/L	MW-390	09/25/2013	ND	0.5000	0.2200	**
Cadmium	ug/L	MW-390	04/15/2014		0.3260		
Cadmium	ug/L	MW-390	09/01/2015	ND	0.5000	0.2200	**
Cadmium	ug/L	MW-390	03/22/2016	ND	0.0351	0.2200	**
Cadmium	ug/L	MW-390	10/21/2016		0.3020		
Cadmium	ug/L	MW-390	03/08/2017		0.0770		
Cadmium	ug/L	MW-390	09/25/2017	ND	0.0441	0.2200	**
Cadmium	ug/L	MW-390	03/13/2018	ND	0.1760	0.2200	**
Cadmium	ug/L	MW-390	10/01/2018	ND	0.1670	0.2200	**
Cadmium	ug/L	MW-390	03/27/2019	ND	0.0770	0.2200	**
Cadmium	ug/L	MW-390	09/23/2019		1.1200		
Cadmium	ug/L	MW-390	03/09/2020		0.4670		
Cadmium	ug/L	MW-390	09/17/2020		0.1080		
Cadmium	ug/L	MW-390	04/14/2021		0.5250		
Cadmium	ug/L	MW-390	10/26/2021		0.3080		
Cadmium	ug/L	MW-390	04/14/2022		1.1900		
Cadmium	ug/L	MW-390	09/01/2022	ND	0.8000	0.2200	**
Cadmium	ug/L	MW-390	03/06/2023	ND	0.8000	0.2200	**
Chromium	ug/L	MW-390	09/18/2012	ND	20.0000	2.9200	**
Chromium	ug/L	MW-390	03/27/2013	ND	20.0000	2.9200	**
Chromium	ug/L	MW-390	09/25/2013		5.5100		
Chromium	ug/L	MW-390	04/15/2014	ND	20.0000	2.9200	**
Chromium	ug/L	MW-390	09/01/2015	ND	5.0000	2.9200	**
Chromium	ug/L	MW-390	03/22/2016		0.5420		
Chromium	ug/L	MW-390	10/21/2016		1.0200		
Chromium	ug/L	MW-390	03/08/2017	ND	0.7290	2.9200	**
Chromium	ug/L	MW-390	09/25/2017	ND	0.7290	2.9200	**
Chromium	ug/L	MW-390	03/13/2018	ND	2.9200		

* - 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	ug/L	MW-390	10/01/2018		2.0600		
Chromium	ug/L	MW-390	03/27/2019	ND	0.9800	2.9200	**
Chromium	ug/L	MW-390	09/23/2019	ND	3.9200	2.9200	**
Chromium	ug/L	MW-390	03/09/2020	ND	1.1000	2.9200	**
Chromium	ug/L	MW-390	09/17/2020	ND	1.1000	2.9200	**
Chromium	ug/L	MW-390	04/14/2021	ND	1.1000	2.9200	**
Chromium	ug/L	MW-390	10/26/2021	ND	1.1000	2.9200	**
Chromium	ug/L	MW-390	04/14/2022	ND	4.4000	2.9200	**
Chromium	ug/L	MW-390	09/01/2022	ND	8.0000	2.9200	**
Chromium	ug/L	MW-390	03/06/2023	ND	8.0000	2.9200	**
Cobalt	ug/L	MW-390	09/18/2012		108.0000		
Cobalt	ug/L	MW-390	03/27/2013		123.0000		
Cobalt	ug/L	MW-390	09/25/2013		97.7000		
Cobalt	ug/L	MW-390	04/15/2014		103.0000		
Cobalt	ug/L	MW-390	09/01/2015		108.0000		
Cobalt	ug/L	MW-390	03/22/2016		92.9000		
Cobalt	ug/L	MW-390	10/21/2016		90.4000		
Cobalt	ug/L	MW-390	03/08/2017		120.0000		
Cobalt	ug/L	MW-390	09/25/2017		107.0000		
Cobalt	ug/L	MW-390	03/13/2018		98.2000		
Cobalt	ug/L	MW-390	10/01/2018		98.9000		
Cobalt	ug/L	MW-390	03/27/2019		114.0000		
Cobalt	ug/L	MW-390	09/23/2019		112.0000		
Cobalt	ug/L	MW-390	03/09/2020		102.0000		
Cobalt	ug/L	MW-390	09/17/2020		108.0000		
Cobalt	ug/L	MW-390	04/14/2021		110.0000		
Cobalt	ug/L	MW-390	10/26/2021		113.0000		
Cobalt	ug/L	MW-390	04/14/2022		106.0000		
Cobalt	ug/L	MW-390	09/01/2022		103.0000		
Cobalt	ug/L	MW-390	03/06/2023		113.0000		
Copper	ug/L	MW-390	09/18/2012	ND	20.0000	3.2000	**
Copper	ug/L	MW-390	03/27/2013	ND	20.0000	3.2000	**
Copper	ug/L	MW-390	09/25/2013	ND	20.0000	3.2000	**
Copper	ug/L	MW-390	04/15/2014	ND	20.0000	3.2000	**
Copper	ug/L	MW-390	09/01/2015	ND	2.0000	3.2000	**
Copper	ug/L	MW-390	03/22/2016	ND	1.2200	3.2000	**
Copper	ug/L	MW-390	10/21/2016	ND	1.2200	3.2000	**
Copper	ug/L	MW-390	03/08/2017	ND	2.1900	3.2000	**
Copper	ug/L	MW-390	09/25/2017	ND	2.1900	3.2000	**
Copper	ug/L	MW-390	03/13/2018	ND	8.7600	3.2000	**
Copper	ug/L	MW-390	10/01/2018		1.5500		
Copper	ug/L	MW-390	03/27/2019	ND	2.0000	3.2000	**
Copper	ug/L	MW-390	09/23/2019	ND	8.0000	3.2000	**
Copper	ug/L	MW-390	03/09/2020	ND	3.2000		
Copper	ug/L	MW-390	09/17/2020	ND	1.5000	3.2000	**
Copper	ug/L	MW-390	04/14/2021	ND	1.4000	3.2000	**
Copper	ug/L	MW-390	10/26/2021	ND	1.4000	3.2000	**
Copper	ug/L	MW-390	04/14/2022	ND	7.2000	3.2000	**
Copper	ug/L	MW-390	09/01/2022	ND	4.0000	3.2000	**
Copper	ug/L	MW-390	03/06/2023	ND	4.0000	3.2000	**
Lead	ug/L	MW-390	09/18/2012	ND	4.0000	0.9600	**
Lead	ug/L	MW-390	03/27/2013	ND	4.0000	0.9600	**
Lead	ug/L	MW-390	09/25/2013	ND	4.0000	0.9600	**
Lead	ug/L	MW-390	04/15/2014	ND	4.0000	0.9600	**
Lead	ug/L	MW-390	09/01/2015		0.7200		
Lead	ug/L	MW-390	03/22/2016	ND	0.2110	0.9600	**
Lead	ug/L	MW-390	10/21/2016		2.8600		
Lead	ug/L	MW-390	03/08/2017	ND	0.3240	0.9600	**
Lead	ug/L	MW-390	09/25/2017	ND	0.3240	0.9600	**
Lead	ug/L	MW-390	03/13/2018	ND	1.3000	0.9600	**
Lead	ug/L	MW-390	10/01/2018		0.8710		
Lead	ug/L	MW-390	03/27/2019	ND	0.2700	0.9600	**
Lead	ug/L	MW-390	09/23/2019		2.9400		
Lead	ug/L	MW-390	03/09/2020		2.2700		
Lead	ug/L	MW-390	09/17/2020		0.4100		
Lead	ug/L	MW-390	04/14/2021		1.7300		
Lead	ug/L	MW-390	10/26/2021		2.3800		
Lead	ug/L	MW-390	04/14/2022		4.7800		
Lead	ug/L	MW-390	09/01/2022	ND	4.0000	0.9600	**
Lead	ug/L	MW-390	03/06/2023	ND	4.0000	0.9600	**
Nickel	ug/L	MW-390	09/18/2012	ND	50.0000		
Nickel	ug/L	MW-390	03/27/2013		63.8000		
Nickel	ug/L	MW-390	09/25/2013		60.3000		
Nickel	ug/L	MW-390	04/15/2014		51.0000		

* - 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	ug/L	MW-390	09/01/2015		54.5000		
Nickel	ug/L	MW-390	03/22/2016		45.4000		
Nickel	ug/L	MW-390	10/21/2016		49.7000		
Nickel	ug/L	MW-390	03/08/2017		61.3000		
Nickel	ug/L	MW-390	09/25/2017		45.4000		
Nickel	ug/L	MW-390	03/13/2018		48.3000		
Nickel	ug/L	MW-390	10/01/2018		47.7000		
Nickel	ug/L	MW-390	03/27/2019		54.6000		
Nickel	ug/L	MW-390	09/23/2019		60.7000		
Nickel	ug/L	MW-390	03/09/2020		54.0000		
Nickel	ug/L	MW-390	09/17/2020		58.4000		
Nickel	ug/L	MW-390	04/14/2021		55.1000		
Nickel	ug/L	MW-390	10/26/2021		53.8000		
Nickel	ug/L	MW-390	04/14/2022		56.0000		
Nickel	ug/L	MW-390	09/01/2022		53.5000		
Nickel	ug/L	MW-390	03/06/2023		62.0000		
Selenium	ug/L	MW-390	09/18/2012	ND	5.0000	3.8400	**
Selenium	ug/L	MW-390	03/27/2013	ND	5.0000	3.8400	**
Selenium	ug/L	MW-390	09/25/2013	ND	5.0000	3.8400	**
Selenium	ug/L	MW-390	04/15/2014	ND	5.0000	3.8400	**
Selenium	ug/L	MW-390	09/01/2015	ND	5.0000	3.8400	**
Selenium	ug/L	MW-390	03/22/2016	ND	0.6300	3.8400	**
Selenium	ug/L	MW-390	10/21/2016	ND	0.6300	3.8400	**
Selenium	ug/L	MW-390	03/08/2017	ND	0.9280	3.8400	**
Selenium	ug/L	MW-390	09/25/2017	ND	0.9280	3.8400	**
Selenium	ug/L	MW-390	03/13/2018	ND	3.7100	3.8400	**
Selenium	ug/L	MW-390	10/01/2018	ND	0.9820	3.8400	**
Selenium	ug/L	MW-390	03/27/2019	ND	1.0000	3.8400	**
Selenium	ug/L	MW-390	09/23/2019	ND	4.0000	3.8400	**
Selenium	ug/L	MW-390	03/09/2020	ND	1.0000	3.8400	**
Selenium	ug/L	MW-390	09/17/2020	ND	1.0000	3.8400	**
Selenium	ug/L	MW-390	04/14/2021	ND	0.9600	3.8400	**
Selenium	ug/L	MW-390	10/26/2021	ND	0.9600	3.8400	**
Selenium	ug/L	MW-390	04/14/2022	ND	3.8400		
Selenium	ug/L	MW-390	09/01/2022	ND	4.0000	3.8400	**
Selenium	ug/L	MW-390	03/06/2023	ND	4.0000	3.8400	**
Silver	ug/L	MW-390	09/18/2012	ND	20.0000	0.5600	**
Silver	ug/L	MW-390	03/27/2013	ND	20.0000	0.5600	**
Silver	ug/L	MW-390	09/25/2013	ND	20.0000	0.5600	**
Silver	ug/L	MW-390	04/15/2014	ND	20.0000	0.5600	**
Silver	ug/L	MW-390	09/01/2015	ND	1.0000	0.5600	**
Silver	ug/L	MW-390	03/22/2016	ND	0.1530	0.5600	**
Silver	ug/L	MW-390	10/21/2016	ND	0.1530	0.5600	**
Silver	ug/L	MW-390	03/08/2017	ND	0.1400	0.5600	**
Silver	ug/L	MW-390	09/25/2017		0.1730		
Silver	ug/L	MW-390	03/13/2018	ND	0.5600		
Silver	ug/L	MW-390	10/01/2018	ND	0.1150	0.5600	**
Silver	ug/L	MW-390	03/27/2019	ND	0.3700	0.5600	**
Silver	ug/L	MW-390	09/23/2019	ND	1.4800	0.5600	**
Silver	ug/L	MW-390	03/09/2020	ND	0.3700	0.5600	**
Silver	ug/L	MW-390	09/17/2020	ND	0.3700	0.5600	**
Silver	ug/L	MW-390	04/14/2021	ND	0.4200	0.5600	**
Silver	ug/L	MW-390	10/26/2021	ND	0.4200	0.5600	**
Silver	ug/L	MW-390	04/14/2022	ND	1.9600	0.5600	**
Silver	ug/L	MW-390	09/01/2022	ND	4.0000	0.5600	**
Silver	ug/L	MW-390	03/06/2023	ND	4.0000	0.5600	**
Thallium	ug/L	MW-390	09/18/2012	ND	2.0000	0.5700	**
Thallium	ug/L	MW-390	03/27/2013	ND	2.0000	0.5700	**
Thallium	ug/L	MW-390	09/25/2013	ND	2.0000	0.5700	**
Thallium	ug/L	MW-390	04/15/2014	ND	2.0000	0.5700	**
Thallium	ug/L	MW-390	09/01/2015	ND	1.0000	0.5700	**
Thallium	ug/L	MW-390	03/22/2016	ND	0.0255	0.5700	**
Thallium	ug/L	MW-390	10/21/2016		0.0450		
Thallium	ug/L	MW-390	03/08/2017	ND	0.0644	0.5700	**
Thallium	ug/L	MW-390	09/25/2017	ND	0.0644	0.5700	**
Thallium	ug/L	MW-390	03/13/2018	ND	0.2580	0.5700	**
Thallium	ug/L	MW-390	10/01/2018	ND	0.5700		
Thallium	ug/L	MW-390	03/27/2019	ND	0.2700	0.5700	**
Thallium	ug/L	MW-390	09/23/2019	ND	1.0800	0.5700	**
Thallium	ug/L	MW-390	03/09/2020	ND	0.2600	0.5700	**
Thallium	ug/L	MW-390	09/17/2020	ND	0.2600	0.5700	**
Thallium	ug/L	MW-390	04/14/2021		1.1700		
Thallium	ug/L	MW-390	10/26/2021	ND	0.2600	0.5700	**
Thallium	ug/L	MW-390	04/14/2022	ND	1.0400	0.5700	**

* - 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	ug/L	MW-390	09/01/2022	ND	2.0000	0.5700	**
Thallium	ug/L	MW-390	03/06/2023	ND	2.0000	0.5700	**
Vanadium	ug/L	MW-390	09/18/2012	ND	50.0000	2.1500	**
Vanadium	ug/L	MW-390	03/27/2013		8.9100		
Vanadium	ug/L	MW-390	09/25/2013	ND	50.0000	2.1500	**
Vanadium	ug/L	MW-390	04/15/2014	ND	50.0000	2.1500	**
Vanadium	ug/L	MW-390	09/01/2015	ND	5.0000	2.1500	**
Vanadium	ug/L	MW-390	03/22/2016		0.3780		
Vanadium	ug/L	MW-390	10/21/2016		0.6690		
Vanadium	ug/L	MW-390	03/08/2017	ND	0.8400	2.1500	**
Vanadium	ug/L	MW-390	09/25/2017	ND	0.8400	2.1500	**
Vanadium	ug/L	MW-390	03/13/2018	ND	3.3600	2.1500	**
Vanadium	ug/L	MW-390	10/01/2018	ND	2.1500		
Vanadium	ug/L	MW-390	03/27/2019	ND	0.8200	2.1500	**
Vanadium	ug/L	MW-390	09/23/2019	ND	3.2800	2.1500	**
Vanadium	ug/L	MW-390	03/09/2020	ND	0.8200	2.1500	**
Vanadium	ug/L	MW-390	09/17/2020	ND	0.8500	2.1500	**
Vanadium	ug/L	MW-390	04/14/2021	ND	1.1000	2.1500	**
Vanadium	ug/L	MW-390	10/26/2021	ND	1.1000	2.1500	**
Vanadium	ug/L	MW-390	04/14/2022	ND	4.4000	2.1500	**
Vanadium	ug/L	MW-390	09/01/2022	ND	20.0000	2.1500	**
Vanadium	ug/L	MW-390	03/06/2023	ND	20.0000	2.1500	**
Zinc	ug/L	MW-390	09/18/2012		94.0000		
Zinc	ug/L	MW-390	03/27/2013		207.0000		
Zinc	ug/L	MW-390	09/25/2013		200.0000		
Zinc	ug/L	MW-390	04/15/2014		27.3000		
Zinc	ug/L	MW-390	09/01/2015		48.8000		
Zinc	ug/L	MW-390	03/22/2016	ND	5.2100		*
Zinc	ug/L	MW-390	10/21/2016		101.0000		
Zinc	ug/L	MW-390	03/08/2017		308.0000		
Zinc	ug/L	MW-390	09/25/2017		65.0000		
Zinc	ug/L	MW-390	03/13/2018		100.0000		
Zinc	ug/L	MW-390	10/01/2018		85.6000		
Zinc	ug/L	MW-390	03/27/2019		75.7000		
Zinc	ug/L	MW-390	09/23/2019		293.0000		
Zinc	ug/L	MW-390	03/09/2020		118.0000		
Zinc	ug/L	MW-390	09/17/2020		94.3000		
Zinc	ug/L	MW-390	04/14/2021		192.0000		
Zinc	ug/L	MW-390	10/26/2021		56.2000		
Zinc	ug/L	MW-390	04/14/2022		487.0000		
Zinc	ug/L	MW-390	09/01/2022		107.0000		
Zinc	ug/L	MW-390	03/06/2023		115.0000		

* - 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	ug/L	MW-300	03/06/2023	ND	2.0000		1.1000
Arsenic	ug/L	MW-300	03/06/2023	ND	4.0000		22.5000
Barium	ug/L	MW-300	03/06/2023		13.4000		49.9000
Beryllium	ug/L	MW-300	03/06/2023	ND	4.0000		1.0000
Cadmium	ug/L	MW-300	03/06/2023	ND	0.8000		1.1900
Chromium	ug/L	MW-300	03/06/2023	ND	8.0000		5.5100
Cobalt	ug/L	MW-300	03/06/2023		294.0000	***	140.5096
Copper	ug/L	MW-300	03/06/2023	ND	4.0000		7.9900
Lead	ug/L	MW-300	03/06/2023	ND	4.0000		4.7800
Nickel	ug/L	MW-300	03/06/2023		343.0000	***	149.2409
Selenium	ug/L	MW-300	03/06/2023	ND	4.0000	**	3.8400
Silver	ug/L	MW-300	03/06/2023	ND	4.0000		0.5600
Thallium	ug/L	MW-300	03/06/2023	ND	2.0000		1.1700
Vanadium	ug/L	MW-300	03/06/2023	ND	20.0000		8.9100
Zinc	ug/L	MW-300	03/06/2023		122.0000		13315.5851
Antimony	ug/L	MW-303	03/06/2023	ND	2.0000		1.1000
Arsenic	ug/L	MW-303	03/06/2023	ND	4.0000		22.5000
Barium	ug/L	MW-303	03/06/2023		73.9000	***	49.9000
Beryllium	ug/L	MW-303	03/06/2023	ND	4.0000		1.0000
Cadmium	ug/L	MW-303	03/06/2023	ND	0.8000		1.1900
Chromium	ug/L	MW-303	03/06/2023	ND	8.0000		5.5100
Cobalt	ug/L	MW-303	03/06/2023		27.9000		140.5096
Copper	ug/L	MW-303	03/06/2023	ND	4.0000		7.9900
Lead	ug/L	MW-303	03/06/2023	ND	4.0000		4.7800
Nickel	ug/L	MW-303	03/06/2023		28.6000		149.2409
Selenium	ug/L	MW-303	03/06/2023	ND	4.0000		3.8400
Silver	ug/L	MW-303	03/06/2023	ND	4.0000		0.5600
Thallium	ug/L	MW-303	03/06/2023	ND	2.0000		1.1700
Vanadium	ug/L	MW-303	03/06/2023	ND	20.0000		8.9100
Zinc	ug/L	MW-303	03/06/2023	ND	20.0000		13315.5851
Antimony	ug/L	MW-304	03/06/2023	ND	2.0000		1.1000
Arsenic	ug/L	MW-304	03/06/2023	ND	4.0000		22.5000
Barium	ug/L	MW-304	03/06/2023		66.5000	***	49.9000
Beryllium	ug/L	MW-304	03/06/2023	ND	4.0000		1.0000
Cadmium	ug/L	MW-304	03/06/2023	ND	0.8000		1.1900
Chromium	ug/L	MW-304	03/06/2023	ND	8.0000		5.5100
Cobalt	ug/L	MW-304	03/06/2023		4.4000		140.5096
Copper	ug/L	MW-304	03/06/2023	ND	4.0000		7.9900
Lead	ug/L	MW-304	03/06/2023	ND	4.0000		4.7800
Nickel	ug/L	MW-304	03/06/2023		4.1000		149.2409
Selenium	ug/L	MW-304	03/06/2023	ND	4.0000		3.8400
Silver	ug/L	MW-304	03/06/2023	ND	4.0000		0.5600
Thallium	ug/L	MW-304	03/06/2023	ND	2.0000		1.1700
Vanadium	ug/L	MW-304	03/06/2023	ND	20.0000		8.9100
Zinc	ug/L	MW-304	03/06/2023	ND	20.0000		13315.5851
Antimony	ug/L	MW-313	03/06/2023	ND	2.0000		1.1000
Arsenic	ug/L	MW-313	03/06/2023		4.9000		22.5000
Barium	ug/L	MW-313	03/06/2023		22.6000		49.9000
Beryllium	ug/L	MW-313	03/06/2023	ND	4.0000		1.0000
Cadmium	ug/L	MW-313	03/06/2023	ND	0.8000		1.1900
Chromium	ug/L	MW-313	03/06/2023	ND	8.0000		5.5100
Cobalt	ug/L	MW-313	03/06/2023		1.4000		140.5096
Copper	ug/L	MW-313	03/06/2023	ND	4.0000		7.9900
Lead	ug/L	MW-313	03/06/2023	ND	4.0000		4.7800
Nickel	ug/L	MW-313	03/06/2023		19.8000		149.2409
Selenium	ug/L	MW-313	03/06/2023	ND	4.0000		3.8400
Silver	ug/L	MW-313	03/06/2023	ND	4.0000		0.5600
Thallium	ug/L	MW-313	03/06/2023	ND	2.0000		1.1700
Vanadium	ug/L	MW-313	03/06/2023	ND	20.0000		8.9100
Zinc	ug/L	MW-313	03/06/2023	ND	20.0000		13315.5851
Antimony	ug/L	MW-335	03/06/2023	ND	2.0000		1.1000
Arsenic	ug/L	MW-335	03/06/2023		16.9000		22.5000
Barium	ug/L	MW-335	03/06/2023		17.0000		49.9000
Beryllium	ug/L	MW-335	03/06/2023	ND	4.0000		1.0000
Cadmium	ug/L	MW-335	03/06/2023	ND	0.8000		1.1900
Chromium	ug/L	MW-335	03/06/2023	ND	8.0000		5.5100
Cobalt	ug/L	MW-335	03/06/2023		68.2000		140.5096
Copper	ug/L	MW-335	03/06/2023		4.7000		7.9900
Lead	ug/L	MW-335	03/06/2023	ND	4.0000		4.7800
Nickel	ug/L	MW-335	03/06/2023		106.0000		149.2409
Selenium	ug/L	MW-335	03/06/2023	ND	4.0000		3.8400
Silver	ug/L	MW-335	03/06/2023	ND	4.0000		0.5600

* - 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	ug/L	MW-335	03/06/2023	ND	2.0000		1.1700
Vanadium	ug/L	MW-335	03/06/2023	ND	20.0000		8.9100
Zinc	ug/L	MW-335	03/06/2023		69.2000		13315.5851
Antimony	ug/L	MW-344	03/06/2023	ND	2.0000		1.1000
Arsenic	ug/L	MW-344	03/06/2023	ND	4.0000		22.5000
Barium	ug/L	MW-344	03/06/2023		11.7000		49.9000
Beryllium	ug/L	MW-344	03/06/2023	ND	4.0000		1.0000
Cadmium	ug/L	MW-344	03/06/2023	ND	0.8000		1.1900
Chromium	ug/L	MW-344	03/06/2023	ND	8.0000		5.5100
Cobalt	ug/L	MW-344	03/06/2023		209.0000	***	140.5096
Copper	ug/L	MW-344	03/06/2023	ND	4.0000		7.9900
Lead	ug/L	MW-344	03/06/2023	ND	4.0000		4.7800
Nickel	ug/L	MW-344	03/06/2023		165.0000	***	149.2409
Selenium	ug/L	MW-344	03/06/2023	ND	4.0000		3.8400
Silver	ug/L	MW-344	03/06/2023	ND	4.0000		0.5600
Thallium	ug/L	MW-344	03/06/2023	ND	2.0000		1.1700
Vanadium	ug/L	MW-344	03/06/2023	ND	20.0000		8.9100
Zinc	ug/L	MW-344	03/06/2023	ND	20.0000		13315.5851
Antimony	ug/L	MW-380	03/06/2023	ND	2.0000		1.1000
Arsenic	ug/L	MW-380	03/06/2023		4.3000		22.5000
Barium	ug/L	MW-380	03/06/2023		7.7000		49.9000
Beryllium	ug/L	MW-380	03/06/2023		4.7000	*	1.0000
Cadmium	ug/L	MW-380	03/06/2023		3.1000	*	1.1900
Chromium	ug/L	MW-380	03/06/2023	ND	8.0000		5.5100
Cobalt	ug/L	MW-380	03/06/2023		758.0000	***	140.5096
Copper	ug/L	MW-380	03/06/2023	ND	4.0000		7.9900
Lead	ug/L	MW-380	03/06/2023	ND	4.0000		4.7800
Nickel	ug/L	MW-380	03/06/2023		965.0000	***	149.2409
Selenium	ug/L	MW-380	03/06/2023		9.6000	*	3.8400
Silver	ug/L	MW-380	03/06/2023	ND	4.0000		0.5600
Thallium	ug/L	MW-380	03/06/2023	ND	2.0000		1.1700
Vanadium	ug/L	MW-380	03/06/2023	ND	20.0000		8.9100
Zinc	ug/L	MW-380	03/06/2023		2290.0000		13315.5851
Antimony	ug/L	MW-381	03/06/2023	ND	2.0000		1.1000
Arsenic	ug/L	MW-381	03/06/2023	ND	4.0000		22.5000
Barium	ug/L	MW-381	03/06/2023		8.5000		49.9000
Beryllium	ug/L	MW-381	03/06/2023	ND	4.0000		1.0000
Cadmium	ug/L	MW-381	03/06/2023	ND	0.8000		1.1900
Chromium	ug/L	MW-381	03/06/2023	ND	8.0000		5.5100
Cobalt	ug/L	MW-381	03/06/2023		1.2000		140.5096
Copper	ug/L	MW-381	03/06/2023		4.0000		7.9900
Lead	ug/L	MW-381	03/06/2023	ND	4.0000		4.7800
Nickel	ug/L	MW-381	03/06/2023		13.0000		149.2409
Selenium	ug/L	MW-381	03/06/2023	ND	4.0000		3.8400
Silver	ug/L	MW-381	03/06/2023	ND	4.0000		0.5600
Thallium	ug/L	MW-381	03/06/2023	ND	2.0000		1.1700
Vanadium	ug/L	MW-381	03/06/2023	ND	20.0000		8.9100
Zinc	ug/L	MW-381	03/06/2023	ND	20.0000		13315.5851
Antimony	ug/L	MW-382R	03/06/2023	ND	2.0000		1.1000
Arsenic	ug/L	MW-382R	03/06/2023	ND	4.0000		22.5000
Barium	ug/L	MW-382R	03/06/2023		29.7000		49.9000
Beryllium	ug/L	MW-382R	03/06/2023	ND	4.0000		1.0000
Cadmium	ug/L	MW-382R	03/06/2023	ND	0.8000		1.1900
Chromium	ug/L	MW-382R	03/06/2023	ND	8.0000		5.5100
Cobalt	ug/L	MW-382R	03/06/2023		1.2000		140.5096
Copper	ug/L	MW-382R	03/06/2023	ND	4.0000		7.9900
Lead	ug/L	MW-382R	03/06/2023	ND	4.0000		4.7800
Nickel	ug/L	MW-382R	03/06/2023		4.5000		149.2409
Selenium	ug/L	MW-382R	03/06/2023	ND	4.0000		3.8400
Silver	ug/L	MW-382R	03/06/2023	ND	4.0000		0.5600
Thallium	ug/L	MW-382R	03/06/2023	ND	2.0000		1.1700
Vanadium	ug/L	MW-382R	03/06/2023	ND	20.0000		8.9100
Zinc	ug/L	MW-382R	03/06/2023	ND	20.0000		13315.5851
Antimony	ug/L	MW-384	03/06/2023	ND	2.0000		1.1000
Arsenic	ug/L	MW-384	03/06/2023	ND	4.0000		22.5000
Barium	ug/L	MW-384	03/06/2023		10.7000		49.9000
Beryllium	ug/L	MW-384	03/06/2023	ND	4.0000		1.0000
Cadmium	ug/L	MW-384	03/06/2023	ND	0.8000		1.1900
Chromium	ug/L	MW-384	03/06/2023	ND	8.0000		5.5100
Cobalt	ug/L	MW-384	03/06/2023		8.4000		140.5096
Copper	ug/L	MW-384	03/06/2023	ND	4.0000		7.9900
Lead	ug/L	MW-384	03/06/2023	ND	4.0000		4.7800

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

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Nickel	ug/L	MW-384	03/06/2023		43.2000		149.2409
Selenium	ug/L	MW-384	03/06/2023	ND	4.0000		3.8400
Silver	ug/L	MW-384	03/06/2023	ND	4.0000		0.5600
Thallium	ug/L	MW-384	03/06/2023	ND	2.0000		1.1700
Vanadium	ug/L	MW-384	03/06/2023	ND	20.0000		8.9100
Zinc	ug/L	MW-384	03/06/2023	ND	20.0000		13315.5851
Antimony	ug/L	MW-385	03/06/2023	ND	2.0000		1.1000
Arsenic	ug/L	MW-385	03/06/2023	ND	4.0000		22.5000
Barium	ug/L	MW-385	03/06/2023		11.0000		49.9000
Beryllium	ug/L	MW-385	03/06/2023	ND	4.0000		1.0000
Cadmium	ug/L	MW-385	03/06/2023	ND	0.8000		1.1900
Chromium	ug/L	MW-385	03/06/2023	ND	8.0000		5.5100
Cobalt	ug/L	MW-385	03/06/2023		2.4000		140.5096
Copper	ug/L	MW-385	03/06/2023	ND	4.0000		7.9900
Lead	ug/L	MW-385	03/06/2023	ND	4.0000		4.7800
Nickel	ug/L	MW-385	03/06/2023		16.8000		149.2409
Selenium	ug/L	MW-385	03/06/2023	ND	4.0000		3.8400
Silver	ug/L	MW-385	03/06/2023	ND	4.0000		0.5600
Thallium	ug/L	MW-385	03/06/2023	ND	2.0000		1.1700
Vanadium	ug/L	MW-385	03/06/2023	ND	20.0000		8.9100
Zinc	ug/L	MW-385	03/06/2023	ND	20.0000		13315.5851

* - 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	0	62	0.000	16	339	0.047
Arsenic	45	61	0.738	152	344	0.442
Barium	59	61	0.967	328	345	0.951
Beryllium	17	62	0.274	61	344	0.177
Cadmium	25	62	0.403	129	345	0.374
Chromium	7	62	0.113	31	342	0.091
Cobalt	61	61	1.000	311	344	0.904
Copper	6	62	0.097	41	343	0.120
Lead	14	62	0.226	63	344	0.183
Nickel	61	62	0.984	285	344	0.828
Selenium	7	62	0.113	20	344	0.058
Silver	1	60	0.017	7	342	0.020
Thallium	5	62	0.081	28	344	0.081
Vanadium	3	61	0.049	41	344	0.119
Zinc	47	60	0.783	240	345	0.696

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	0	62	0.000									nonpar
Arsenic	45	61	0.738	3.183	4.232					2.326	non-norm	nonpar
Barium	59	61	0.967	5.170	2.738					2.326	non-norm	nonpar
Beryllium	17	62	0.274	0.057	0.817					2.326	normal	nonpar
Cadmium	25	62	0.403	5.567	3.091					2.326	non-norm	nonpar
Chromium	7	62	0.113	0.735	1.408					2.326	normal	nonpar
Cobalt	61	61	1.000	0.952	1.621					2.326	normal	normal
Copper	6	62	0.097	0.633	0.290					2.326	normal	nonpar
Lead	14	62	0.226	0.581	0.573					2.326	normal	nonpar
Nickel	61	62	0.984	0.958	2.054					2.326	normal	normal
Selenium	7	62	0.113	0.678	0.593					2.326	normal	nonpar
Silver	1	60	0.017									nonpar
Thallium	5	62	0.081									nonpar
Vanadium	3	61	0.049	1.578	0.451					2.326	normal	nonpar
Zinc	47	60	0.783	4.610	0.420					2.326	lognor	lognor

* - 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	ug/L	0	62					1.1000	nonpar	***	0.99
Arsenic	ug/L	45	61					22.5000	nonpar		0.99
Barium	ug/L	59	61					49.9000	nonpar		0.99
Beryllium	ug/L	17	62					1.0000	nonpar	***	0.99
Cadmium	ug/L	25	62					1.1900	nonpar		0.99
Chromium	ug/L	7	62					5.5100	nonpar		0.99
Cobalt	ug/L	61	61	64.9426	31.3608	0.0100	2.4096	140.5096	normal		
Copper	ug/L	6	62					7.9900	nonpar		0.99
Lead	ug/L	14	62					4.7800	nonpar		0.99
Nickel	ug/L	61	62	79.6194	28.9101	0.0100	2.4082	149.2409	normal		
Selenium	ug/L	7	62					3.8400	nonpar	***	0.99
Silver	ug/L	1	60					0.5600	nonpar	***	0.99
Thallium	ug/L	5	62					1.1700	nonpar		0.99
Vanadium	ug/L	3	61					8.9100	nonpar		0.99
Zinc	ug/L	47	60	3.9047	2.3193	0.0100	2.4110	13315.5851	lognor		

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	ug/L	MW-307	10/28/2021	0.7500	< 0.7500	09/18/2012-03/06/2023	20	0.5381
Barium	ug/L	MW-307	09/26/2013	30.0000	< 30.0000	09/18/2012-03/06/2023	20	0.5381
Cobalt	ug/L	MW-307	10/28/2021	14.8000		09/18/2012-03/06/2023	20	0.5381
Zinc	ug/L	MW-307	10/28/2021	10.6000		09/18/2012-03/06/2023	20	0.5381
Zinc	ug/L	MW-390	03/22/2016	5.2100	< 5.2100	09/18/2012-03/06/2023	20	0.5381

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

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Cobalt	ug/L	MW-300	03/25/2008		630.0000	*	140.5096
Cobalt	ug/L	MW-300	04/22/2008		458.0000	*	140.5096
Cobalt	ug/L	MW-300	07/26/2008		413.0000	*	140.5096
Cobalt	ug/L	MW-300	08/27/2008		493.0000	*	140.5096
Cobalt	ug/L	MW-300	09/24/2008		555.0000	*	140.5096
Cobalt	ug/L	MW-300	03/17/2009		325.0000	*	140.5096
Cobalt	ug/L	MW-300	09/24/2009		350.0000	*	140.5096
Cobalt	ug/L	MW-300	03/25/2010		370.0000	*	140.5096
Cobalt	ug/L	MW-300	09/23/2010		437.0000	*	140.5096
Cobalt	ug/L	MW-300	03/29/2011		357.0000	*	140.5096
Cobalt	ug/L	MW-300	09/22/2011		304.0000	*	140.5096
Cobalt	ug/L	MW-300	03/15/2012		225.0000	*	140.5096
Cobalt	ug/L	MW-300	09/18/2012		357.0000	*	140.5096
Cobalt	ug/L	MW-300	03/27/2013		330.0000	*	140.5096
Cobalt	ug/L	MW-300	09/25/2013		332.0000	*	140.5096
Cobalt	ug/L	MW-300	04/16/2014		42.3000		140.5096
Cobalt	ug/L	MW-300	09/26/2014		289.0000	*	140.5096
Cobalt	ug/L	MW-300	03/12/2015		251.0000	*	140.5096
Cobalt	ug/L	MW-300	09/02/2015		383.0000	*	140.5096
Cobalt	ug/L	MW-300	03/23/2016		328.0000	*	140.5096
Cobalt	ug/L	MW-300	10/20/2016		337.0000	*	140.5096
Cobalt	ug/L	MW-300	03/07/2017		315.0000	*	140.5096
Cobalt	ug/L	MW-300	09/26/2017		306.0000	*	140.5096
Cobalt	ug/L	MW-300	03/14/2018		143.0000	*	140.5096
Cobalt	ug/L	MW-300	10/02/2018		232.0000	*	140.5096
Cobalt	ug/L	MW-300	03/28/2019		344.0000	*	140.5096
Cobalt	ug/L	MW-300	09/24/2019		292.0000	*	140.5096
Cobalt	ug/L	MW-300	03/10/2020		215.0000	*	140.5096
Cobalt	ug/L	MW-300	09/15/2020		282.0000	*	140.5096
Cobalt	ug/L	MW-300	04/15/2021		152.0000	*	140.5096
Cobalt	ug/L	MW-300	10/27/2021		260.0000	*	140.5096
Cobalt	ug/L	MW-300	04/13/2022		339.0000	*	140.5096
Cobalt	ug/L	MW-300	09/01/2022		1370.0000	*	140.5096
Cobalt	ug/L	MW-300	03/06/2023		294.0000	*	140.5096
Nickel	ug/L	MW-300	03/25/2008		544.0000	*	149.2409
Nickel	ug/L	MW-300	04/22/2008		580.0000	*	149.2409
Nickel	ug/L	MW-300	07/26/2008		404.0000	*	149.2409
Nickel	ug/L	MW-300	08/27/2008		500.0000	*	149.2409
Nickel	ug/L	MW-300	09/24/2008		579.0000	*	149.2409
Nickel	ug/L	MW-300	03/17/2009		274.0000	*	149.2409
Nickel	ug/L	MW-300	09/24/2009		348.0000	*	149.2409
Nickel	ug/L	MW-300	03/25/2010		576.0000	*	149.2409
Nickel	ug/L	MW-300	09/23/2010		484.0000	*	149.2409
Nickel	ug/L	MW-300	03/29/2011		337.0000	*	149.2409
Nickel	ug/L	MW-300	09/22/2011		262.0000	*	149.2409
Nickel	ug/L	MW-300	03/15/2012		247.0000	*	149.2409
Nickel	ug/L	MW-300	09/18/2012		269.0000	*	149.2409
Nickel	ug/L	MW-300	03/27/2013		225.0000	*	149.2409
Nickel	ug/L	MW-300	09/25/2013		279.0000	*	149.2409
Nickel	ug/L	MW-300	04/16/2014		98.6000		149.2409
Nickel	ug/L	MW-300	09/26/2014		286.0000	*	149.2409
Nickel	ug/L	MW-300	03/12/2015		204.0000	*	149.2409
Nickel	ug/L	MW-300	09/02/2015		329.0000	*	149.2409
Nickel	ug/L	MW-300	03/23/2016		250.0000	*	149.2409
Nickel	ug/L	MW-300	10/20/2016		221.0000	*	149.2409
Nickel	ug/L	MW-300	03/07/2017		288.0000	*	149.2409
Nickel	ug/L	MW-300	09/26/2017		218.0000	*	149.2409
Nickel	ug/L	MW-300	03/14/2018		149.0000		149.2409
Nickel	ug/L	MW-300	10/02/2018		189.0000	*	149.2409
Nickel	ug/L	MW-300	03/28/2019		253.0000	*	149.2409
Nickel	ug/L	MW-300	09/24/2019		257.0000	*	149.2409
Nickel	ug/L	MW-300	03/10/2020		185.0000	*	149.2409
Nickel	ug/L	MW-300	09/15/2020		248.0000	*	149.2409
Nickel	ug/L	MW-300	04/15/2021		156.0000	*	149.2409
Nickel	ug/L	MW-300	10/27/2021		237.0000	*	149.2409
Nickel	ug/L	MW-300	04/13/2022		365.0000	*	149.2409
Nickel	ug/L	MW-300	09/01/2022		1720.0000	*	149.2409
Nickel	ug/L	MW-300	03/06/2023		343.0000	*	149.2409
Selenium	ug/L	MW-300	03/25/2008	ND	5.0000		3.8400
Selenium	ug/L	MW-300	04/22/2008	ND	5.0000		3.8400
Selenium	ug/L	MW-300	07/26/2008	ND	5.0000		3.8400

* - 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
Selenium	ug/L	MW-300	08/27/2008	ND	5.0000		3.8400
Selenium	ug/L	MW-300	09/24/2008	ND	5.0000		3.8400
Selenium	ug/L	MW-300	03/17/2009	ND	5.0000		3.8400
Selenium	ug/L	MW-300	09/24/2009	ND	5.0000		3.8400
Selenium	ug/L	MW-300	03/25/2010	ND	5.0000		3.8400
Selenium	ug/L	MW-300	09/23/2010	ND	5.0000		3.8400
Selenium	ug/L	MW-300	03/29/2011	ND	5.0000		3.8400
Selenium	ug/L	MW-300	09/22/2011	ND	6.0000		3.8400
Selenium	ug/L	MW-300	03/15/2012	ND	5.0000		3.8400
Selenium	ug/L	MW-300	09/18/2012	ND	5.0000		3.8400
Selenium	ug/L	MW-300	03/27/2013	ND	5.0000		3.8400
Selenium	ug/L	MW-300	09/25/2013	ND	5.0000		3.8400
Selenium	ug/L	MW-300	04/16/2014	ND	5.0000		3.8400
Selenium	ug/L	MW-300	09/26/2014	ND	3.3400		3.8400
Selenium	ug/L	MW-300	03/12/2015	ND	5.0000		3.8400
Selenium	ug/L	MW-300	09/02/2015	ND	5.0000		3.8400
Selenium	ug/L	MW-300	03/23/2016	ND	0.6300		3.8400
Selenium	ug/L	MW-300	10/20/2016	ND	0.6300		3.8400
Selenium	ug/L	MW-300	03/07/2017	ND	0.9280		3.8400
Selenium	ug/L	MW-300	09/26/2017	ND	0.9280		3.8400
Selenium	ug/L	MW-300	03/14/2018	ND	3.7100		3.8400
Selenium	ug/L	MW-300	10/02/2018		1.0100		3.8400
Selenium	ug/L	MW-300	03/28/2019	ND	4.0000		3.8400
Selenium	ug/L	MW-300	09/24/2019	ND	4.0000		3.8400
Selenium	ug/L	MW-300	03/10/2020	ND	1.0000		3.8400
Selenium	ug/L	MW-300	09/15/2020	ND	1.0000		3.8400
Selenium	ug/L	MW-300	04/15/2021	ND	0.9600		3.8400
Selenium	ug/L	MW-300	10/27/2021	ND	0.9600		3.8400
Selenium	ug/L	MW-300	04/13/2022	ND	3.8400		3.8400
Selenium	ug/L	MW-300	09/01/2022		4.8000	*	3.8400
Selenium	ug/L	MW-300	03/06/2023	ND	4.0000		3.8400
Barium	ug/L	MW-303	03/24/2008		26.6000		49.9000
Barium	ug/L	MW-303	04/21/2008	ND	10.0000		49.9000
Barium	ug/L	MW-303	07/23/2008		14.1000		49.9000
Barium	ug/L	MW-303	08/26/2008		30.8000		49.9000
Barium	ug/L	MW-303	09/23/2008	ND	10.0000		49.9000
Barium	ug/L	MW-303	03/17/2009		12.3000		49.9000
Barium	ug/L	MW-303	09/24/2009		23.4000		49.9000
Barium	ug/L	MW-303	03/24/2010		17.7000		49.9000
Barium	ug/L	MW-303	09/22/2010		23.9000		49.9000
Barium	ug/L	MW-303	03/28/2011		14.5000		49.9000
Barium	ug/L	MW-303	09/22/2011		20.4000		49.9000
Barium	ug/L	MW-303	03/16/2012		30.1000		49.9000
Barium	ug/L	MW-303	09/19/2012		31.9000		49.9000
Barium	ug/L	MW-303	03/27/2013		26.8000		49.9000
Barium	ug/L	MW-303	09/26/2013		39.1000		49.9000
Barium	ug/L	MW-303	04/15/2014		26.1000		49.9000
Barium	ug/L	MW-303	09/25/2014		106.0000	*	49.9000
Barium	ug/L	MW-303	03/11/2015		72.5000	*	49.9000
Barium	ug/L	MW-303	09/02/2015		36.6000		49.9000
Barium	ug/L	MW-303	03/22/2016		66.8000	*	49.9000
Barium	ug/L	MW-303	10/21/2016		69.2000	*	49.9000
Barium	ug/L	MW-303	03/08/2017		42.9000		49.9000
Barium	ug/L	MW-303	09/25/2017		68.4000	*	49.9000
Barium	ug/L	MW-303	03/13/2018		66.1000	*	49.9000
Barium	ug/L	MW-303	10/01/2018		37.4000		49.9000
Barium	ug/L	MW-303	03/27/2019		20.8000		49.9000
Barium	ug/L	MW-303	09/23/2019		39.1000		49.9000
Barium	ug/L	MW-303	03/10/2020		59.0000	*	49.9000
Barium	ug/L	MW-303	09/15/2020		25.0000		49.9000
Barium	ug/L	MW-303	04/14/2021		14.5000		49.9000
Barium	ug/L	MW-303	10/27/2021		73.3000	*	49.9000
Barium	ug/L	MW-303	04/14/2022		58.8000	*	49.9000
Barium	ug/L	MW-303	09/01/2022		58.0000	*	49.9000
Barium	ug/L	MW-303	03/06/2023		73.9000	*	49.9000
Barium	ug/L	MW-304	03/22/2016		77.5000	*	49.9000
Barium	ug/L	MW-304	10/20/2016		85.1000	*	49.9000
Barium	ug/L	MW-304	01/18/2017		43.2000		49.9000
Barium	ug/L	MW-304	03/07/2017		103.0000	*	49.9000
Barium	ug/L	MW-304	06/28/2017		74.3000	*	49.9000
Barium	ug/L	MW-304	09/26/2017		73.1000	*	49.9000

* - Significantly increased over background.
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*** - Manual exclusion.
ND = Not Detected, Result = detection limit.

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Barium	ug/L	MW-304	03/14/2018		39.9000		49.9000
Barium	ug/L	MW-304	10/02/2018		72.3000	*	49.9000
Barium	ug/L	MW-304	03/28/2019		75.6000	*	49.9000
Barium	ug/L	MW-304	09/24/2019		68.9000	*	49.9000
Barium	ug/L	MW-304	03/10/2020		71.1000	*	49.9000
Barium	ug/L	MW-304	09/15/2020		68.1000	*	49.9000
Barium	ug/L	MW-304	04/16/2021		42.4000		49.9000
Barium	ug/L	MW-304	10/27/2021		36.8000		49.9000
Barium	ug/L	MW-304	04/14/2022		40.8000		49.9000
Barium	ug/L	MW-304	09/01/2022		60.2000	*	49.9000
Barium	ug/L	MW-304	03/06/2023		66.5000	*	49.9000
Cobalt	ug/L	MW-344	03/25/2008	ND	20.0000		140.5096
Cobalt	ug/L	MW-344	04/22/2008	ND	20.0000		140.5096
Cobalt	ug/L	MW-344	07/26/2008	ND	20.0000		140.5096
Cobalt	ug/L	MW-344	08/27/2008	ND	20.0000		140.5096
Cobalt	ug/L	MW-344	09/24/2008	ND	20.0000		140.5096
Cobalt	ug/L	MW-344	03/18/2009	ND	20.0000		140.5096
Cobalt	ug/L	MW-344	09/24/2009		23.3000		140.5096
Cobalt	ug/L	MW-344	03/25/2010		34.7000		140.5096
Cobalt	ug/L	MW-344	09/22/2010		45.0000		140.5096
Cobalt	ug/L	MW-344	03/28/2011		33.2000		140.5096
Cobalt	ug/L	MW-344	09/22/2011		47.9000		140.5096
Cobalt	ug/L	MW-344	03/16/2012		86.5000		140.5096
Cobalt	ug/L	MW-344	09/20/2012		93.2000		140.5096
Cobalt	ug/L	MW-344	03/27/2013		172.0000	*	140.5096
Cobalt	ug/L	MW-344	09/25/2013		105.0000		140.5096
Cobalt	ug/L	MW-344	04/15/2014		50.0000		140.5096
Cobalt	ug/L	MW-344	09/26/2014		164.0000	*	140.5096
Cobalt	ug/L	MW-344	03/12/2015		176.0000	*	140.5096
Cobalt	ug/L	MW-344	09/02/2015		202.0000	*	140.5096
Cobalt	ug/L	MW-344	03/23/2016		269.0000	*	140.5096
Cobalt	ug/L	MW-344	10/19/2016		57.6000		140.5096
Cobalt	ug/L	MW-344	03/07/2017		107.0000		140.5096
Cobalt	ug/L	MW-344	09/26/2017		21.8000		140.5096
Cobalt	ug/L	MW-344	03/14/2018		114.0000		140.5096
Cobalt	ug/L	MW-344	10/02/2018		198.0000	*	140.5096
Cobalt	ug/L	MW-344	03/28/2019		128.0000		140.5096
Cobalt	ug/L	MW-344	09/24/2019		146.0000	*	140.5096
Cobalt	ug/L	MW-344	03/10/2020		206.0000	*	140.5096
Cobalt	ug/L	MW-344	09/15/2020		263.0000	*	140.5096
Cobalt	ug/L	MW-344	04/15/2021		258.0000	*	140.5096
Cobalt	ug/L	MW-344	10/27/2021		223.0000	*	140.5096
Cobalt	ug/L	MW-344	04/14/2022		310.0000	*	140.5096
Cobalt	ug/L	MW-344	09/01/2022		224.0000	*	140.5096
Cobalt	ug/L	MW-344	03/06/2023		209.0000	*	140.5096
Nickel	ug/L	MW-344	03/25/2008	ND	50.0000		149.2409
Nickel	ug/L	MW-344	04/22/2008	ND	50.0000		149.2409
Nickel	ug/L	MW-344	07/26/2008	ND	50.0000		149.2409
Nickel	ug/L	MW-344	08/27/2008	ND	50.0000		149.2409
Nickel	ug/L	MW-344	09/24/2008	ND	50.0000		149.2409
Nickel	ug/L	MW-344	03/18/2009	ND	50.0000		149.2409
Nickel	ug/L	MW-344	09/24/2009	ND	50.0000		149.2409
Nickel	ug/L	MW-344	03/25/2010		57.0000		149.2409
Nickel	ug/L	MW-344	09/22/2010		70.1000		149.2409
Nickel	ug/L	MW-344	03/28/2011	ND	50.0000		149.2409
Nickel	ug/L	MW-344	09/22/2011		60.9000		149.2409
Nickel	ug/L	MW-344	03/16/2012		98.3000		149.2409
Nickel	ug/L	MW-344	09/20/2012		84.2000		149.2409
Nickel	ug/L	MW-344	03/27/2013		164.0000	*	149.2409
Nickel	ug/L	MW-344	09/25/2013		110.0000		149.2409
Nickel	ug/L	MW-344	04/15/2014		51.3000		149.2409
Nickel	ug/L	MW-344	09/26/2014		131.0000		149.2409
Nickel	ug/L	MW-344	03/12/2015		107.0000		149.2409
Nickel	ug/L	MW-344	09/02/2015		152.0000	*	149.2409
Nickel	ug/L	MW-344	03/23/2016		202.0000	*	149.2409
Nickel	ug/L	MW-344	10/19/2016		44.2000		149.2409
Nickel	ug/L	MW-344	03/07/2017		89.1000		149.2409
Nickel	ug/L	MW-344	09/26/2017		21.5000		149.2409
Nickel	ug/L	MW-344	03/14/2018		82.9000		149.2409
Nickel	ug/L	MW-344	10/02/2018		133.0000		149.2409
Nickel	ug/L	MW-344	03/28/2019		91.0000		149.2409

* - Significantly increased over background.
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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	ug/L	MW-344	09/24/2019		278.0000	*	149.2409
Nickel	ug/L	MW-344	03/10/2020		156.0000	*	149.2409
Nickel	ug/L	MW-344	09/15/2020		205.0000	*	149.2409
Nickel	ug/L	MW-344	04/15/2021		214.0000	*	149.2409
Nickel	ug/L	MW-344	10/27/2021		189.0000	*	149.2409
Nickel	ug/L	MW-344	04/14/2022		267.0000	*	149.2409
Nickel	ug/L	MW-344	09/01/2022		178.0000	*	149.2409
Nickel	ug/L	MW-344	03/06/2023		165.0000	*	149.2409
Beryllium	ug/L	MW-380	03/25/2008		136.0000	*	1.0000
Beryllium	ug/L	MW-380	04/21/2008		12.6000	*	1.0000
Beryllium	ug/L	MW-380	07/26/2008		17.9000	*	1.0000
Beryllium	ug/L	MW-380	08/26/2008		22.3000	*	1.0000
Beryllium	ug/L	MW-380	09/24/2008		28.5000	*	1.0000
Beryllium	ug/L	MW-380	03/17/2009		16.0000	*	1.0000
Beryllium	ug/L	MW-380	09/24/2009		22.6000	*	1.0000
Beryllium	ug/L	MW-380	03/25/2010		12.9000	*	1.0000
Beryllium	ug/L	MW-380	09/22/2010		21.6000	*	1.0000
Beryllium	ug/L	MW-380	03/28/2011		16.6000	*	1.0000
Beryllium	ug/L	MW-380	09/22/2011		19.6000	*	1.0000
Beryllium	ug/L	MW-380	03/15/2012		8.5400	*	1.0000
Beryllium	ug/L	MW-380	09/19/2012		9.7200	*	1.0000
Beryllium	ug/L	MW-380	03/27/2013		6.4000	*	1.0000
Beryllium	ug/L	MW-380	09/25/2013		17.6000	*	1.0000
Beryllium	ug/L	MW-380	04/16/2014		5.1300	*	1.0000
Beryllium	ug/L	MW-380	09/26/2014		8.0700	*	1.0000
Beryllium	ug/L	MW-380	03/11/2015	ND	10.0000		1.0000
Beryllium	ug/L	MW-380	09/02/2015	ND	30.0000		1.0000
Beryllium	ug/L	MW-380	03/23/2016		7.2300	*	1.0000
Beryllium	ug/L	MW-380	10/20/2016		6.1100	*	1.0000
Beryllium	ug/L	MW-380	03/09/2017		11.6000	*	1.0000
Beryllium	ug/L	MW-380	09/26/2017		4.7200	*	1.0000
Beryllium	ug/L	MW-380	03/14/2018		6.9000	*	1.0000
Beryllium	ug/L	MW-380	10/02/2018		6.9900	*	1.0000
Beryllium	ug/L	MW-380	03/28/2019		5.1500	*	1.0000
Beryllium	ug/L	MW-380	09/24/2019		2.8600	*	1.0000
Beryllium	ug/L	MW-380	03/10/2020		2.8500	*	1.0000
Beryllium	ug/L	MW-380	09/15/2020		7.5100	*	1.0000
Beryllium	ug/L	MW-380	04/15/2021		7.4200	*	1.0000
Beryllium	ug/L	MW-380	10/27/2021		6.2200	*	1.0000
Beryllium	ug/L	MW-380	04/13/2022	ND	2.7000		1.0000
Beryllium	ug/L	MW-380	09/01/2022	ND	4.0000		1.0000
Beryllium	ug/L	MW-380	03/06/2023		4.7000	*	1.0000
Cadmium	ug/L	MW-380	03/25/2008		12.2000	*	1.1900
Cadmium	ug/L	MW-380	04/21/2008		14.8000	*	1.1900
Cadmium	ug/L	MW-380	07/26/2008		20.1000	*	1.1900
Cadmium	ug/L	MW-380	08/26/2008		18.8000	*	1.1900
Cadmium	ug/L	MW-380	09/24/2008		27.0000	*	1.1900
Cadmium	ug/L	MW-380	03/17/2009		17.5000	*	1.1900
Cadmium	ug/L	MW-380	09/24/2009		18.0000	*	1.1900
Cadmium	ug/L	MW-380	03/25/2010		16.2000	*	1.1900
Cadmium	ug/L	MW-380	09/22/2010		17.1000	*	1.1900
Cadmium	ug/L	MW-380	03/28/2011		15.0000	*	1.1900
Cadmium	ug/L	MW-380	09/22/2011		16.1000	*	1.1900
Cadmium	ug/L	MW-380	03/15/2012		9.0000	*	1.1900
Cadmium	ug/L	MW-380	09/19/2012		14.7000	*	1.1900
Cadmium	ug/L	MW-380	03/27/2013		5.3900	*	1.1900
Cadmium	ug/L	MW-380	09/25/2013		21.2000	*	1.1900
Cadmium	ug/L	MW-380	04/16/2014		7.1800	*	1.1900
Cadmium	ug/L	MW-380	09/26/2014		12.7000	*	1.1900
Cadmium	ug/L	MW-380	03/11/2015		15.9000	*	1.1900
Cadmium	ug/L	MW-380	09/02/2015		10.5000	*	1.1900
Cadmium	ug/L	MW-380	03/23/2016		6.3300	*	1.1900
Cadmium	ug/L	MW-380	10/20/2016		9.9800	*	1.1900
Cadmium	ug/L	MW-380	03/09/2017		57.4000	*	1.1900
Cadmium	ug/L	MW-380	06/28/2017		5.2100	*	1.1900
Cadmium	ug/L	MW-380	09/26/2017		9.2900	*	1.1900
Cadmium	ug/L	MW-380	03/14/2018		10.6000	*	1.1900
Cadmium	ug/L	MW-380	10/02/2018		12.5000	*	1.1900
Cadmium	ug/L	MW-380	03/28/2019		4.4000	*	1.1900
Cadmium	ug/L	MW-380	09/24/2019		6.8800	*	1.1900
Cadmium	ug/L	MW-380	03/10/2020		5.9000	*	1.1900

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*** - 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
Cadmium	ug/L	MW-380	09/15/2020		8.9400	*	1.1900
Cadmium	ug/L	MW-380	04/15/2021		10.5000	*	1.1900
Cadmium	ug/L	MW-380	10/27/2021		7.2500	*	1.1900
Cadmium	ug/L	MW-380	04/13/2022		1.3600	*	1.1900
Cadmium	ug/L	MW-380	09/01/2022	ND	0.8000		1.1900
Cadmium	ug/L	MW-380	03/06/2023		3.1000	*	1.1900
Cobalt	ug/L	MW-380	03/25/2008		1180.0000	*	140.5096
Cobalt	ug/L	MW-380	04/21/2008		1250.0000	*	140.5096
Cobalt	ug/L	MW-380	07/26/2008		1510.0000	*	140.5096
Cobalt	ug/L	MW-380	08/26/2008		1310.0000	*	140.5096
Cobalt	ug/L	MW-380	09/24/2008		1480.0000	*	140.5096
Cobalt	ug/L	MW-380	03/17/2009		1400.0000	*	140.5096
Cobalt	ug/L	MW-380	09/24/2009		1490.0000	*	140.5096
Cobalt	ug/L	MW-380	03/25/2010		1250.0000	*	140.5096
Cobalt	ug/L	MW-380	09/22/2010		1390.0000	*	140.5096
Cobalt	ug/L	MW-380	03/28/2011		1410.0000	*	140.5096
Cobalt	ug/L	MW-380	09/22/2011		1270.0000	*	140.5096
Cobalt	ug/L	MW-380	03/15/2012		1500.0000	*	140.5096
Cobalt	ug/L	MW-380	09/19/2012		1420.0000	*	140.5096
Cobalt	ug/L	MW-380	03/27/2013		1120.0000	*	140.5096
Cobalt	ug/L	MW-380	09/25/2013		1450.0000	*	140.5096
Cobalt	ug/L	MW-380	04/16/2014		563.0000	*	140.5096
Cobalt	ug/L	MW-380	09/26/2014		1140.0000	*	140.5096
Cobalt	ug/L	MW-380	03/11/2015		1490.0000	*	140.5096
Cobalt	ug/L	MW-380	09/02/2015	ND	15.0000		140.5096
Cobalt	ug/L	MW-380	03/23/2016		1120.0000	*	140.5096
Cobalt	ug/L	MW-380	10/20/2016		1150.0000	*	140.5096
Cobalt	ug/L	MW-380	03/09/2017		1840.0000	*	140.5096
Cobalt	ug/L	MW-380	09/26/2017		1290.0000	*	140.5096
Cobalt	ug/L	MW-380	03/14/2018		1430.0000	*	140.5096
Cobalt	ug/L	MW-380	10/02/2018		1040.0000	*	140.5096
Cobalt	ug/L	MW-380	03/28/2019		607.0000	*	140.5096
Cobalt	ug/L	MW-380	09/24/2019		867.0000	*	140.5096
Cobalt	ug/L	MW-380	03/10/2020		856.0000	*	140.5096
Cobalt	ug/L	MW-380	09/15/2020		1180.0000	*	140.5096
Cobalt	ug/L	MW-380	04/15/2021		1150.0000	*	140.5096
Cobalt	ug/L	MW-380	10/27/2021		795.0000	*	140.5096
Cobalt	ug/L	MW-380	04/13/2022		701.0000	*	140.5096
Cobalt	ug/L	MW-380	09/01/2022		407.0000	*	140.5096
Cobalt	ug/L	MW-380	03/06/2023		758.0000	*	140.5096
Nickel	ug/L	MW-380	03/25/2008		1750.0000	*	149.2409
Nickel	ug/L	MW-380	04/21/2008		1930.0000	*	149.2409
Nickel	ug/L	MW-380	07/26/2008		2260.0000	*	149.2409
Nickel	ug/L	MW-380	08/26/2008		1940.0000	*	149.2409
Nickel	ug/L	MW-380	09/24/2008		2230.0000	*	149.2409
Nickel	ug/L	MW-380	03/17/2009		1990.0000	*	149.2409
Nickel	ug/L	MW-380	09/24/2009		2220.0000	*	149.2409
Nickel	ug/L	MW-380	03/25/2010		1810.0000	*	149.2409
Nickel	ug/L	MW-380	09/22/2010		2010.0000	*	149.2409
Nickel	ug/L	MW-380	03/28/2011		2090.0000	*	149.2409
Nickel	ug/L	MW-380	09/22/2011		1870.0000	*	149.2409
Nickel	ug/L	MW-380	03/15/2012		2130.0000	*	149.2409
Nickel	ug/L	MW-380	09/19/2012		2120.0000	*	149.2409
Nickel	ug/L	MW-380	03/27/2013		1600.0000	*	149.2409
Nickel	ug/L	MW-380	09/25/2013		2140.0000	*	149.2409
Nickel	ug/L	MW-380	04/16/2014		818.0000	*	149.2409
Nickel	ug/L	MW-380	09/26/2014		1650.0000	*	149.2409
Nickel	ug/L	MW-380	03/11/2015		1290.0000	*	149.2409
Nickel	ug/L	MW-380	09/02/2015		1970.0000	*	149.2409
Nickel	ug/L	MW-380	03/23/2016		1450.0000	*	149.2409
Nickel	ug/L	MW-380	10/20/2016		1430.0000	*	149.2409
Nickel	ug/L	MW-380	03/09/2017		2660.0000	*	149.2409
Nickel	ug/L	MW-380	09/26/2017		1270.0000	*	149.2409
Nickel	ug/L	MW-380	03/14/2018		2070.0000	*	149.2409
Nickel	ug/L	MW-380	10/02/2018		1440.0000	*	149.2409
Nickel	ug/L	MW-380	03/28/2019		807.0000	*	149.2409
Nickel	ug/L	MW-380	09/24/2019		1270.0000	*	149.2409
Nickel	ug/L	MW-380	03/10/2020		1130.0000	*	149.2409
Nickel	ug/L	MW-380	09/15/2020		1670.0000	*	149.2409
Nickel	ug/L	MW-380	04/15/2021		1450.0000	*	149.2409
Nickel	ug/L	MW-380	10/27/2021		1100.0000	*	149.2409

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

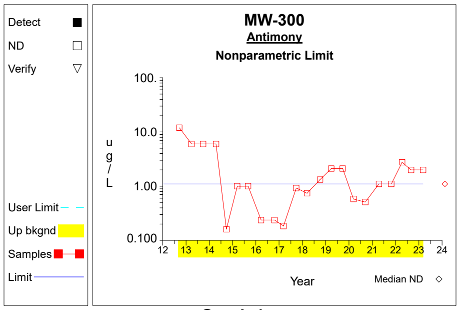
Table 8

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

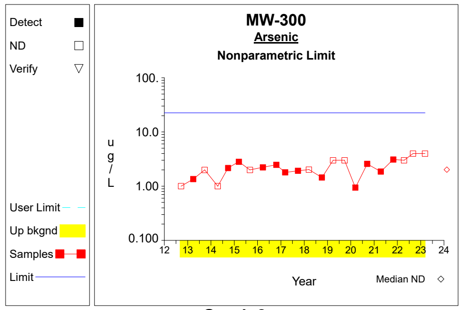
Constituent	Units	Well	Date		Result		Pred. Limit
Nickel	ug/L	MW-380	04/13/2022		1020.0000	*	149.2409
Nickel	ug/L	MW-380	09/01/2022		531.0000	*	149.2409
Nickel	ug/L	MW-380	03/06/2023		965.0000	*	149.2409
Selenium	ug/L	MW-380	03/25/2008	ND	5.0000		3.8400
Selenium	ug/L	MW-380	04/21/2008	ND	5.0000		3.8400
Selenium	ug/L	MW-380	07/26/2008	ND	5.0000		3.8400
Selenium	ug/L	MW-380	08/26/2008	ND	5.0000		3.8400
Selenium	ug/L	MW-380	09/24/2008	ND	15.0000		3.8400
Selenium	ug/L	MW-380	03/17/2009		5.2600	*	3.8400
Selenium	ug/L	MW-380	09/24/2009	ND	5.0000		3.8400
Selenium	ug/L	MW-380	03/25/2010	ND	5.0000		3.8400
Selenium	ug/L	MW-380	09/22/2010	ND	5.0000		3.8400
Selenium	ug/L	MW-380	03/28/2011	ND	5.0000		3.8400
Selenium	ug/L	MW-380	09/22/2011	ND	40.0000		3.8400
Selenium	ug/L	MW-380	03/15/2012	ND	5.0000		3.8400
Selenium	ug/L	MW-380	09/19/2012	ND	5.0000		3.8400
Selenium	ug/L	MW-380	03/27/2013	ND	5.0000		3.8400
Selenium	ug/L	MW-380	09/25/2013	ND	5.0000		3.8400
Selenium	ug/L	MW-380	04/16/2014	ND	5.0000		3.8400
Selenium	ug/L	MW-380	09/26/2014	ND	33.4000		3.8400
Selenium	ug/L	MW-380	03/11/2015	ND	50.0000		3.8400
Selenium	ug/L	MW-380	09/02/2015	ND	150.0000		3.8400
Selenium	ug/L	MW-380	03/23/2016		11.9000	*	3.8400
Selenium	ug/L	MW-380	10/20/2016		13.7000	*	3.8400
Selenium	ug/L	MW-380	03/09/2017		32.2000	*	3.8400
Selenium	ug/L	MW-380	09/26/2017	ND	9.2800		3.8400
Selenium	ug/L	MW-380	03/14/2018	ND	46.4000		3.8400
Selenium	ug/L	MW-380	10/02/2018		23.3000	*	3.8400
Selenium	ug/L	MW-380	03/28/2019	ND	7.0000		3.8400
Selenium	ug/L	MW-380	09/24/2019		10.6000	*	3.8400
Selenium	ug/L	MW-380	03/10/2020		7.7000	*	3.8400
Selenium	ug/L	MW-380	09/15/2020		15.6000	*	3.8400
Selenium	ug/L	MW-380	04/15/2021		13.3000	*	3.8400
Selenium	ug/L	MW-380	10/27/2021		5.4800	*	3.8400
Selenium	ug/L	MW-380	04/13/2022	ND	9.6000		3.8400
Selenium	ug/L	MW-380	09/01/2022	ND	4.0000		3.8400
Selenium	ug/L	MW-380	03/06/2023		9.6000	*	3.8400

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

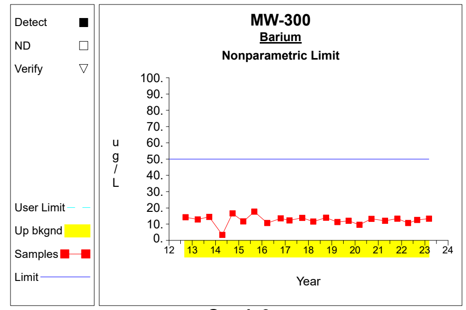
Up vs. Down Prediction Limits



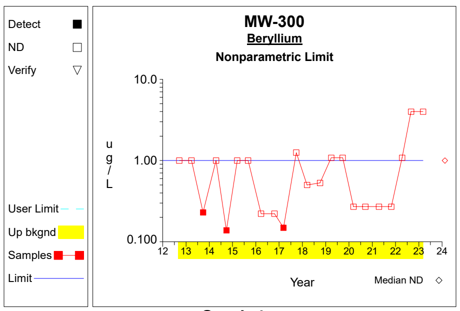
Graph 1



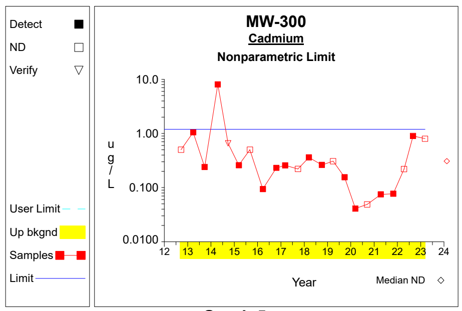
Graph 2



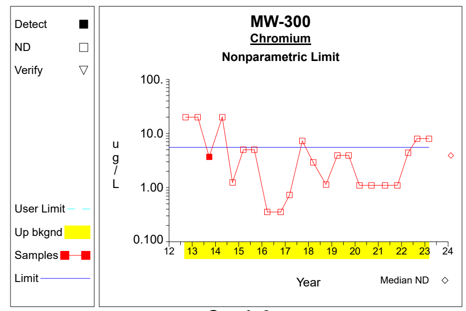
Graph 3



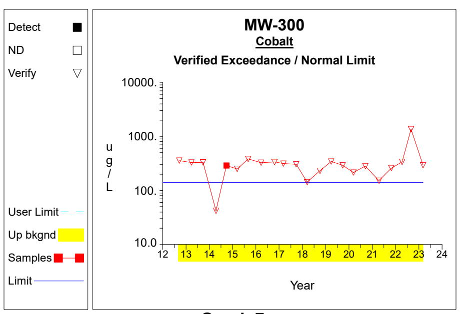
Graph 4



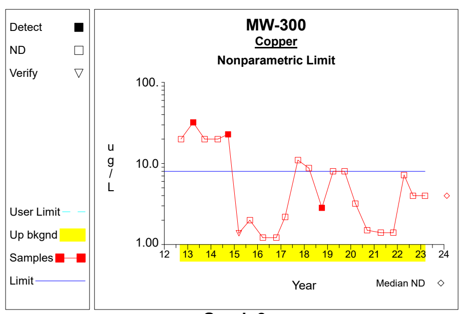
Graph 5



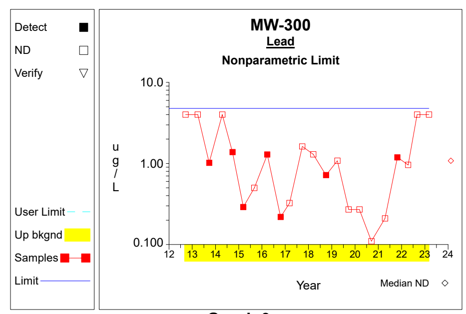
Graph 6



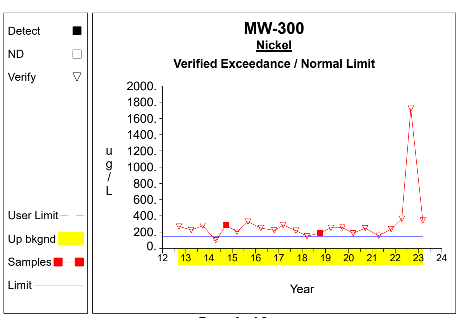
Graph 7



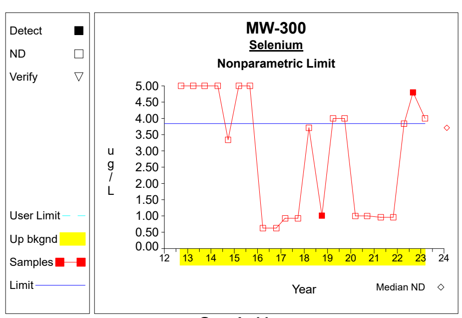
Graph 8



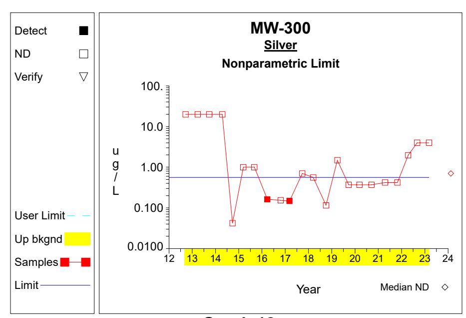
Graph 9



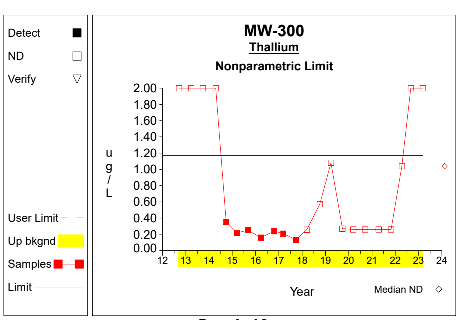
Graph 10



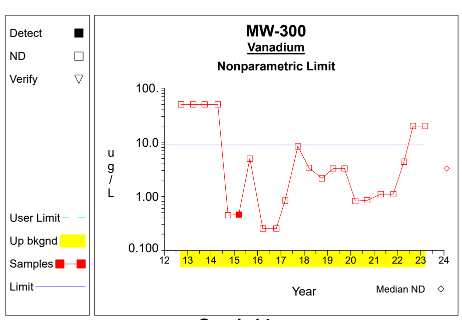
Graph 11



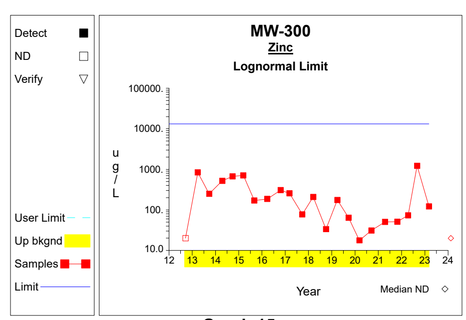
Graph 12



Graph 13

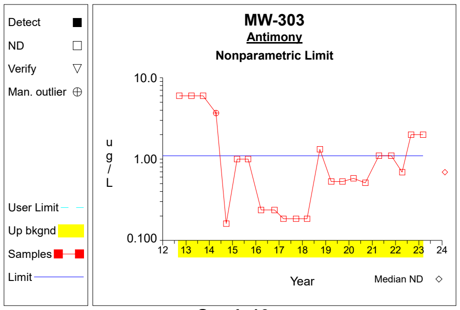


Graph 14

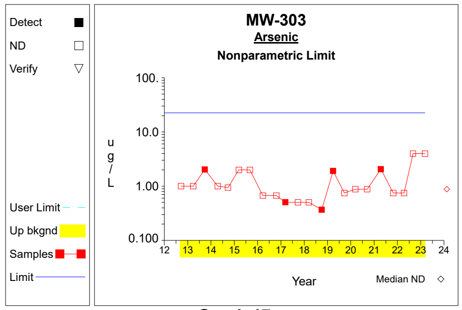


Graph 15

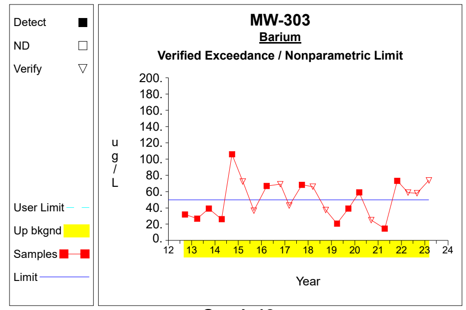
Up vs. Down Prediction Limits



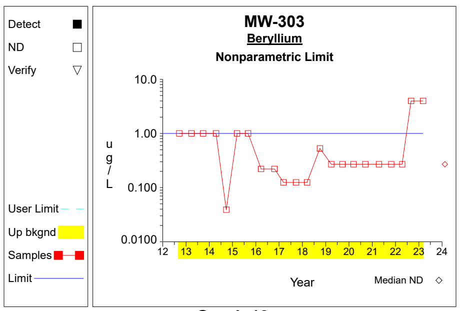
Graph 16



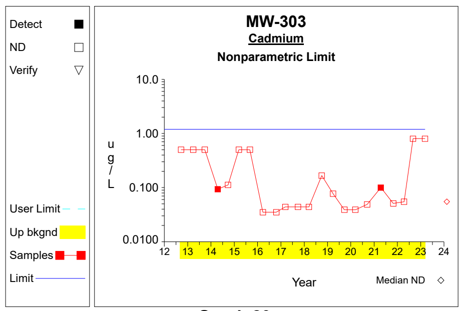
Graph 17



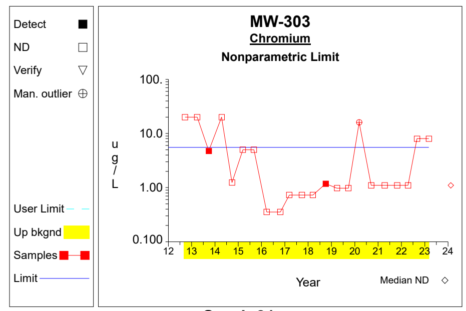
Graph 18



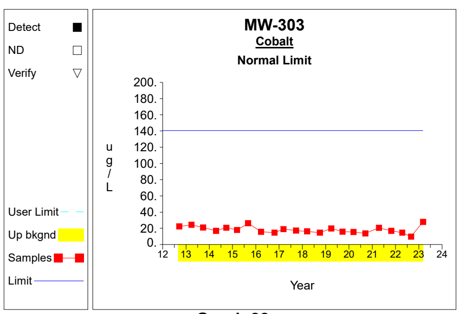
Graph 19



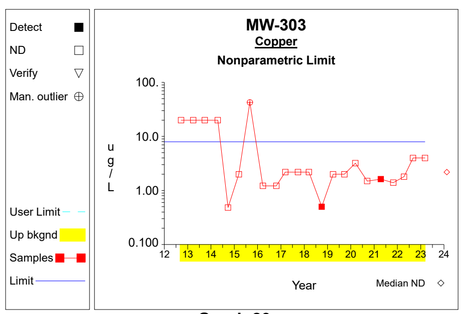
Graph 20



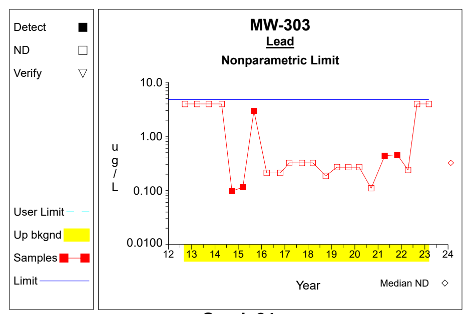
Graph 21



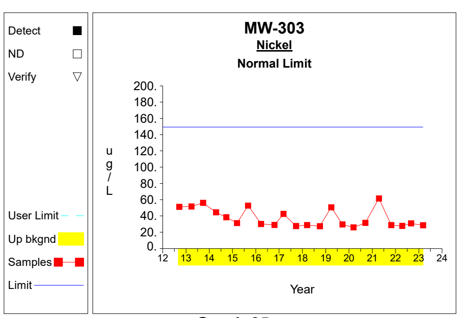
Graph 22



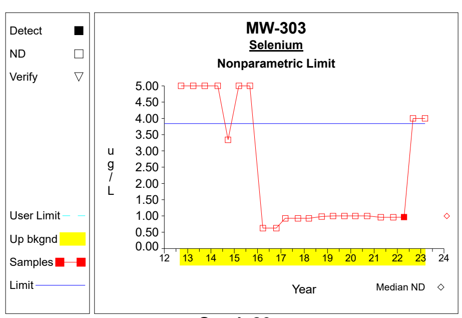
Graph 23



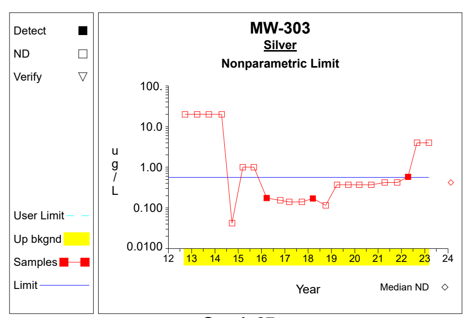
Graph 24



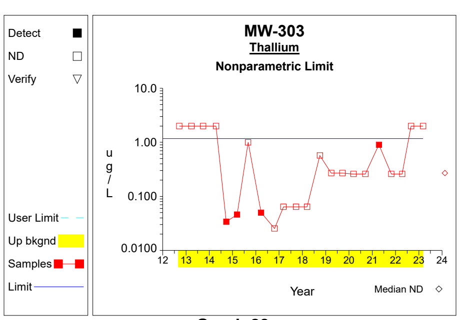
Graph 25



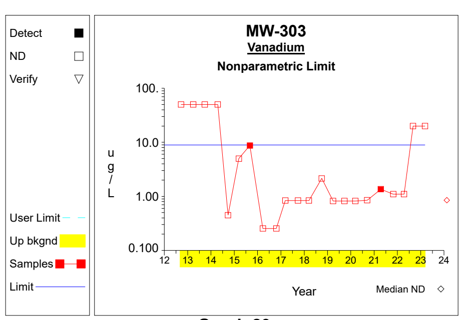
Graph 26



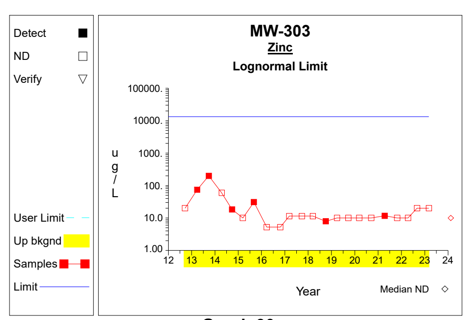
Graph 27



Graph 28



Graph 29



Graph 30

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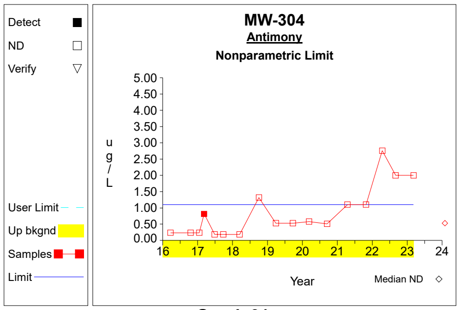
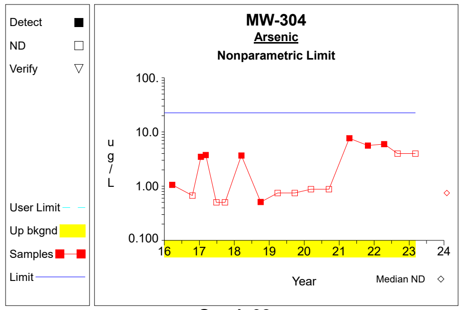
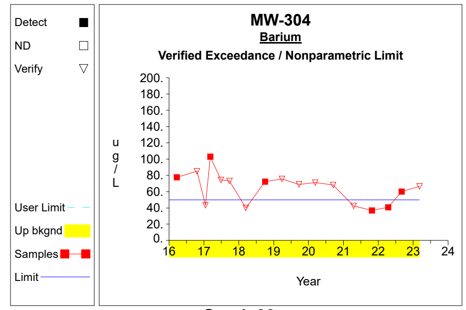
Up vs. Down Prediction Limits



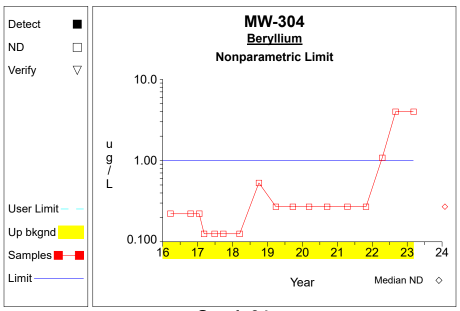
Graph 31



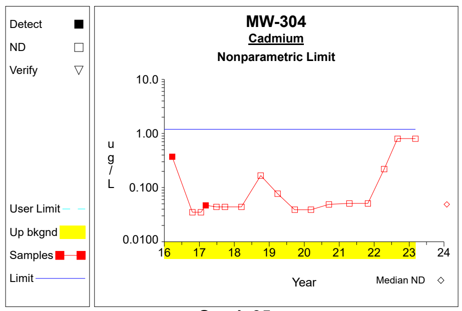
Graph 32



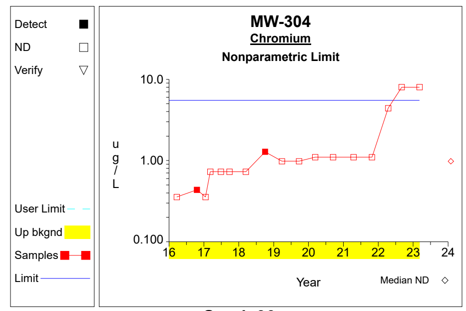
Graph 33



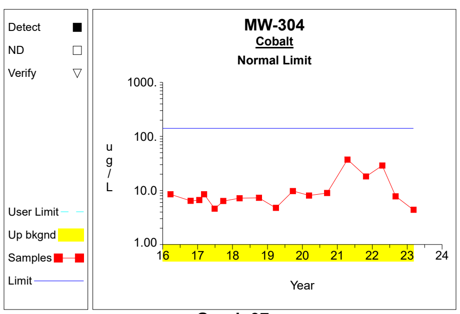
Graph 34



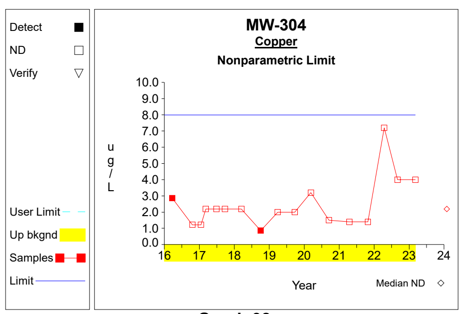
Graph 35



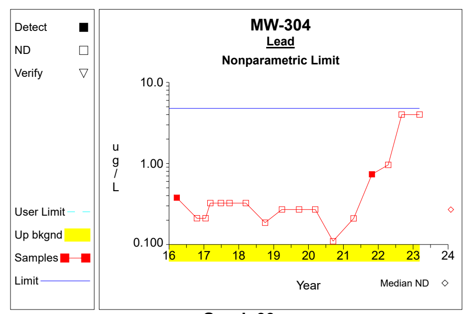
Graph 36



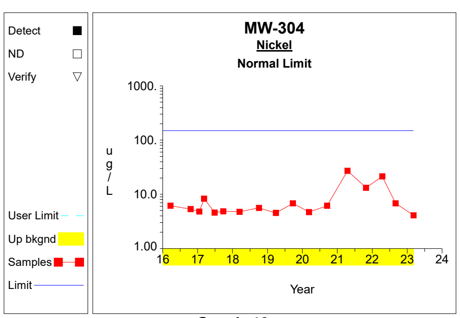
Graph 37



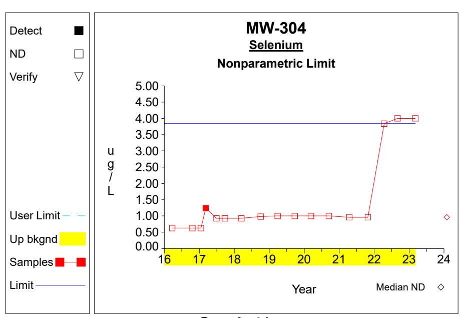
Graph 38



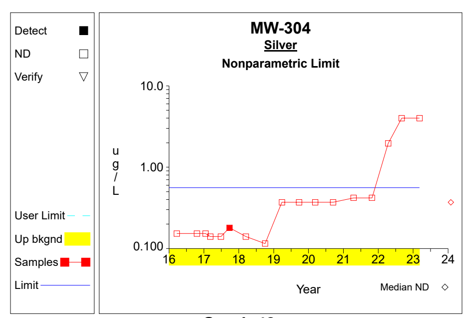
Graph 39



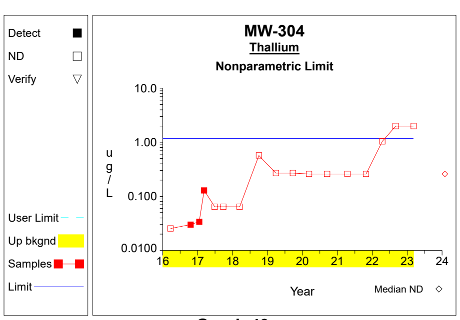
Graph 40



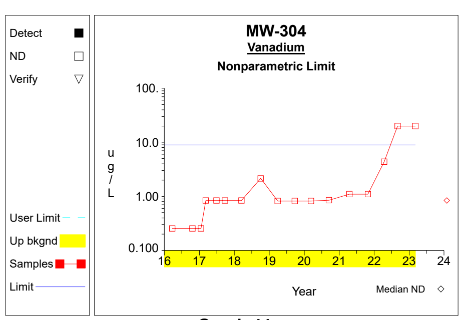
Graph 41



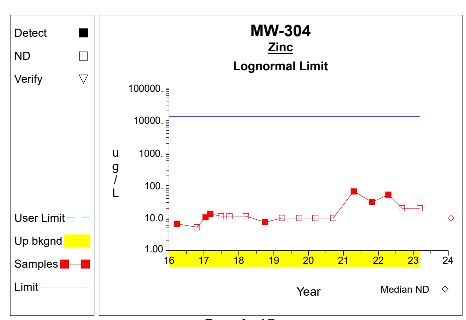
Graph 42



Graph 43



Graph 44



Graph 45

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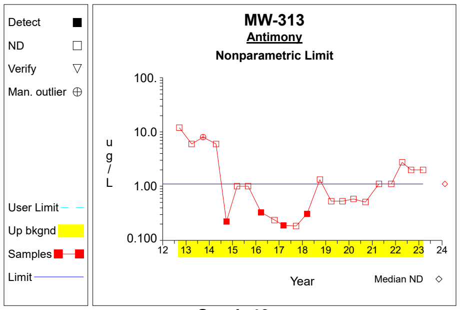
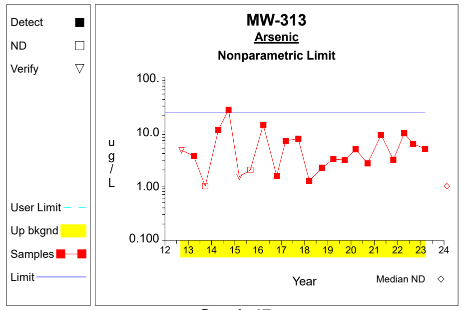
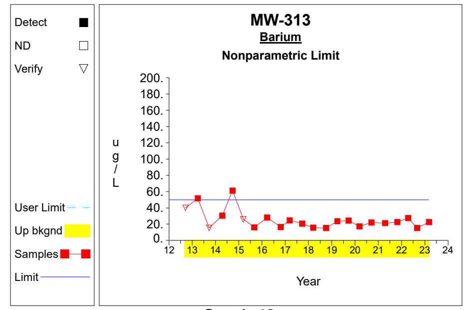
Up vs. Down Prediction Limits



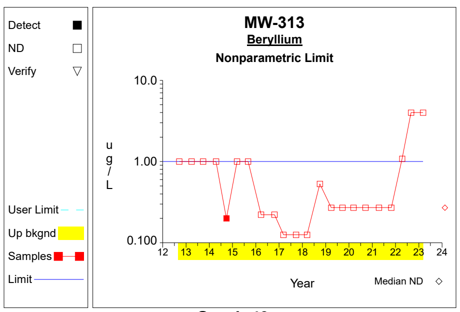
Graph 46



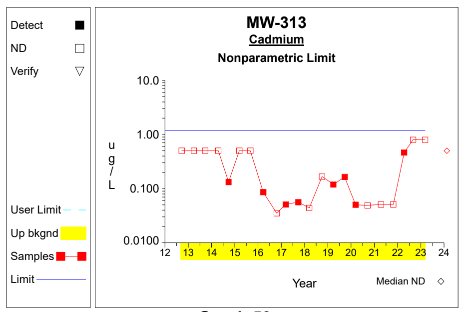
Graph 47



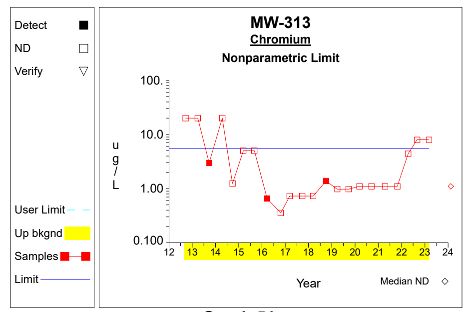
Graph 48



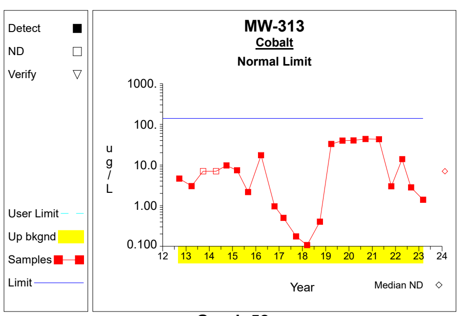
Graph 49



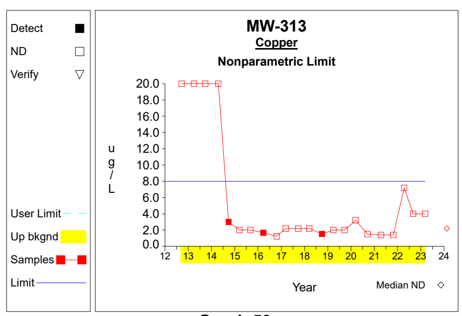
Graph 50



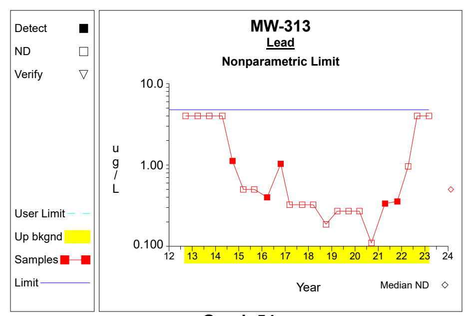
Graph 51



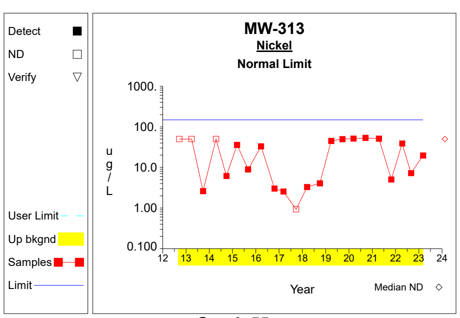
Graph 52



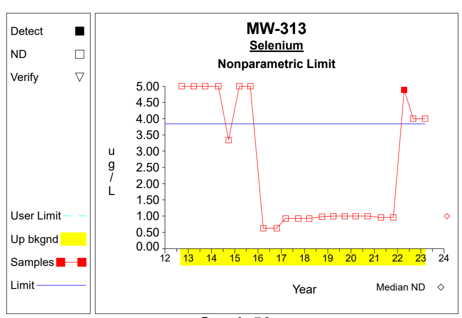
Graph 53



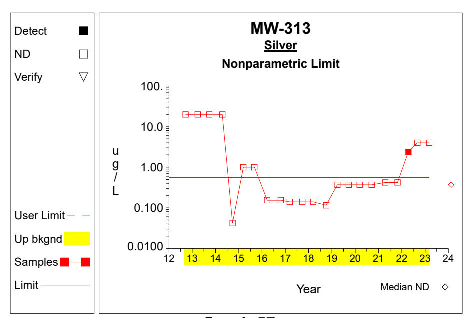
Graph 54



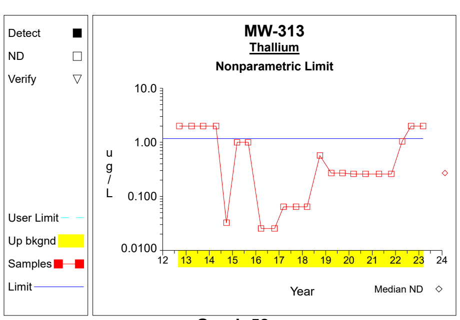
Graph 55



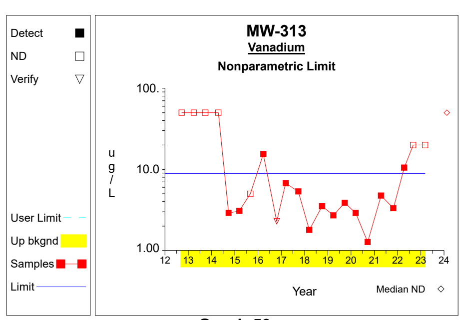
Graph 56



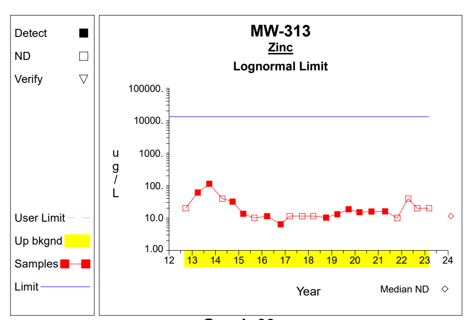
Graph 57



Graph 58



Graph 59



Graph 60

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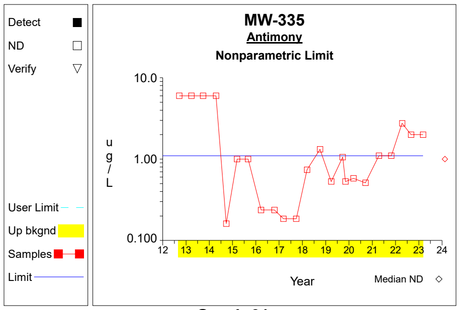
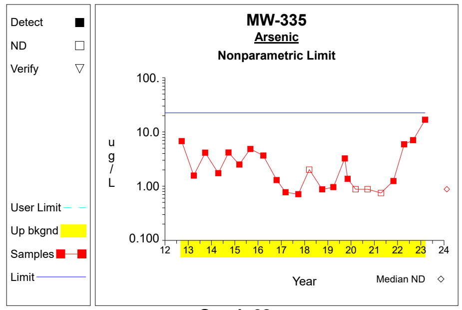
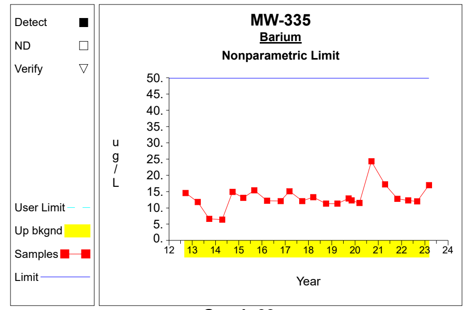
Up vs. Down Prediction Limits



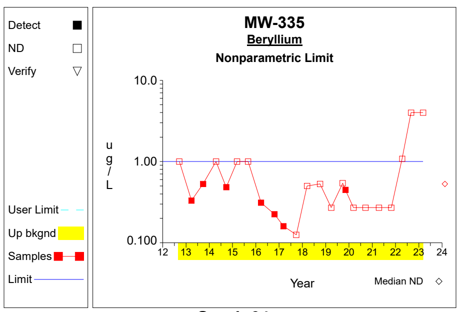
Graph 61



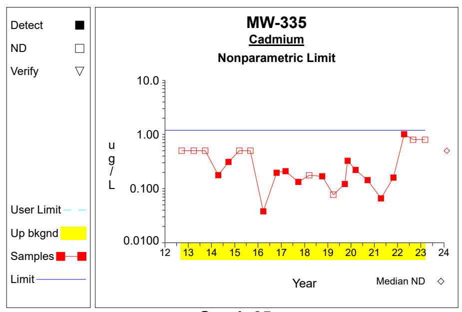
Graph 62



Graph 63



Graph 64



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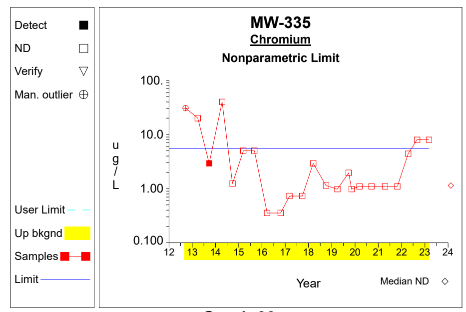

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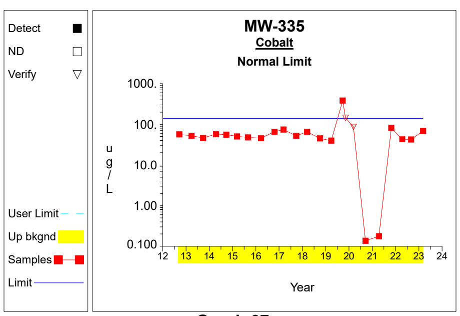
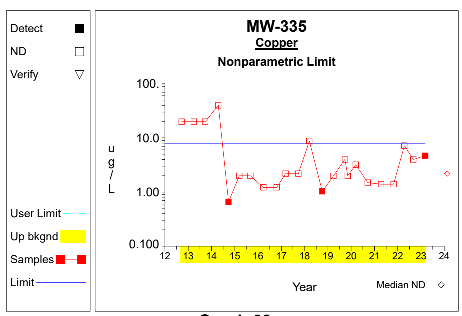
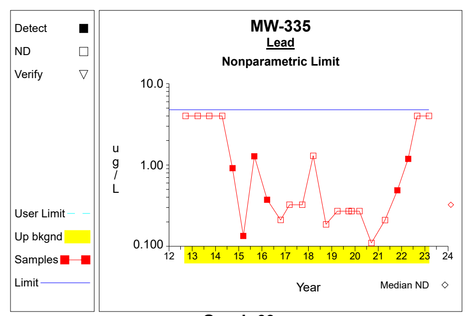


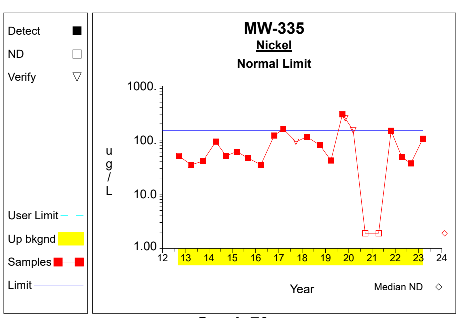
Graph 67



Graph 68



Graph 69



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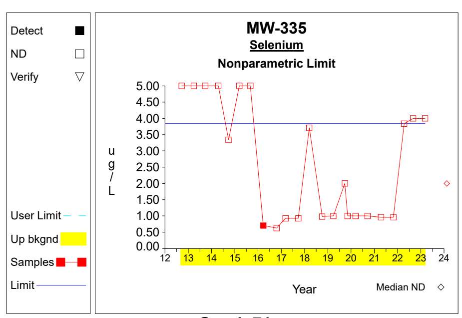
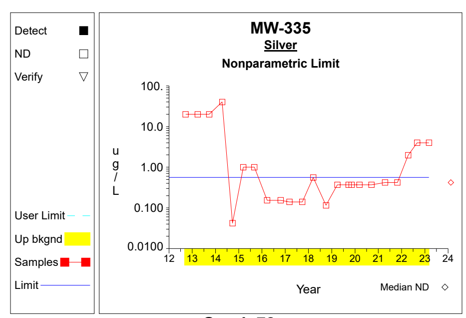


Graph 71



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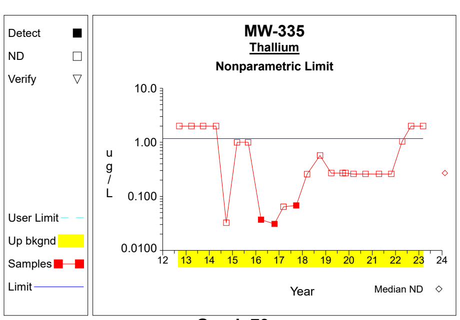
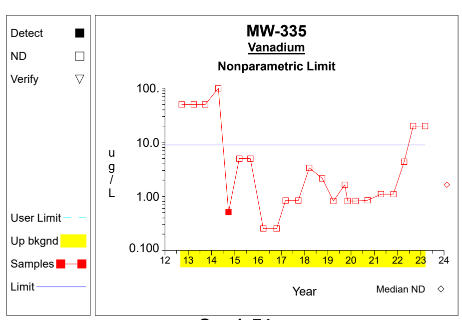


Graph 73



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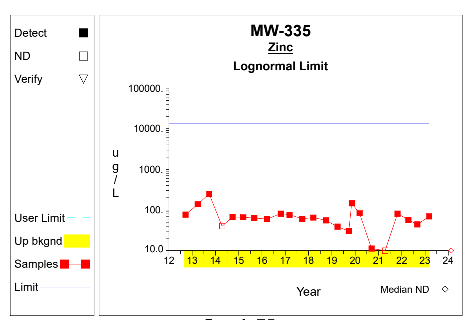
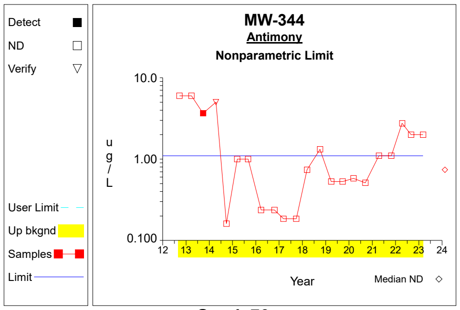


Graph 75

Up vs. Down Prediction Limits



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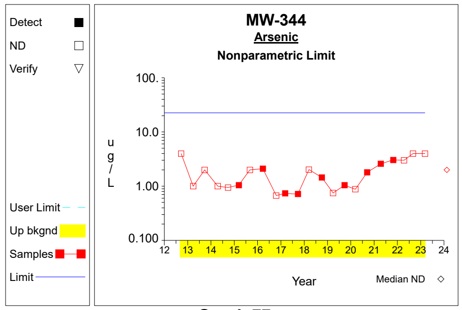
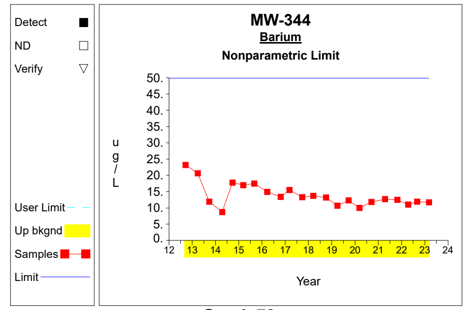
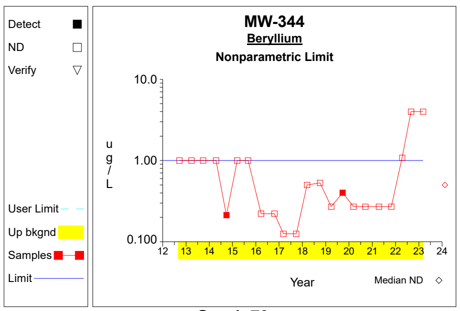


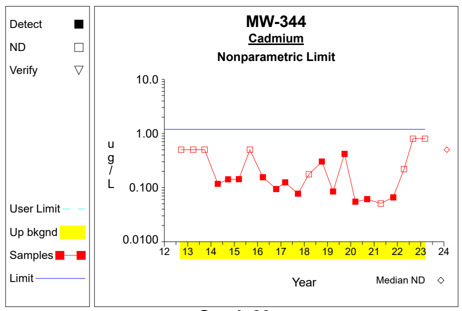
Graph 77



Graph 78



Graph 79



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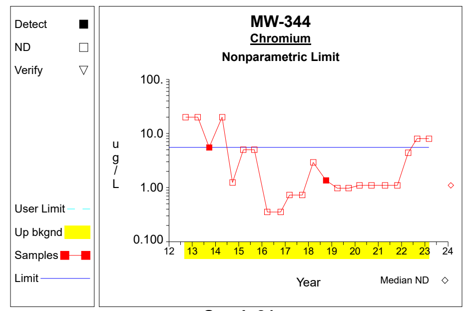
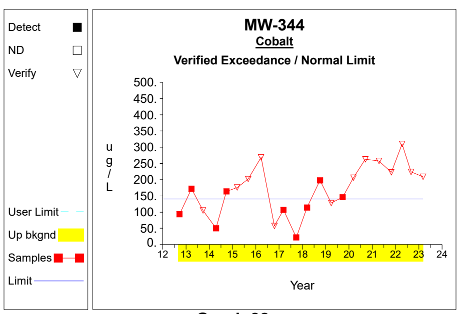
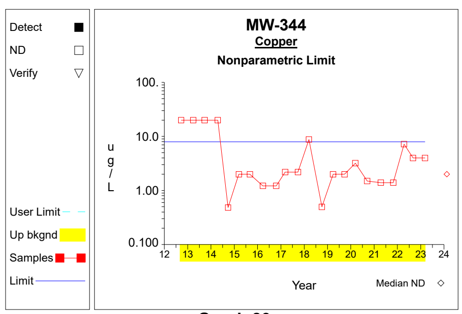


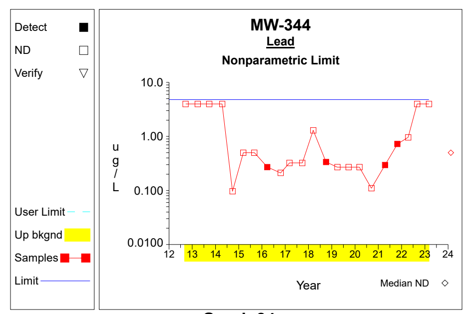
Graph 81



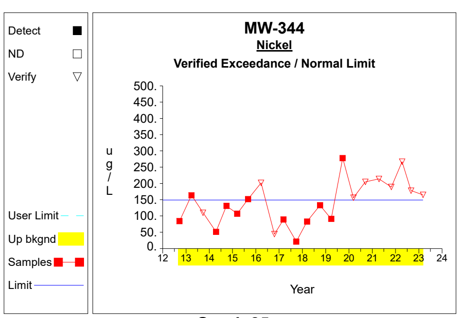
Graph 82



Graph 83



Graph 84



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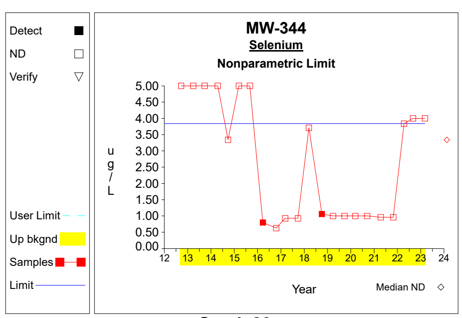

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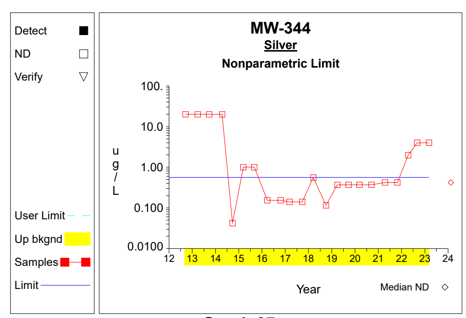

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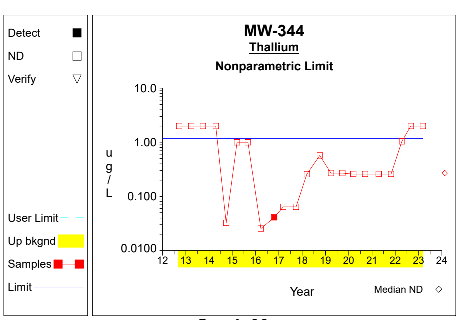
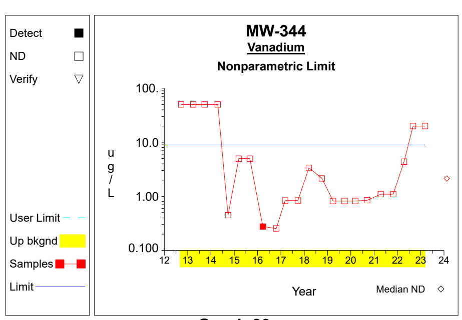
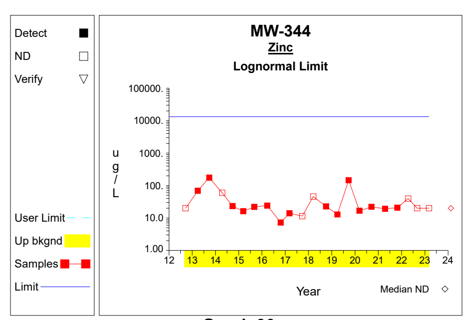


Graph 88



Graph 89



Graph 90

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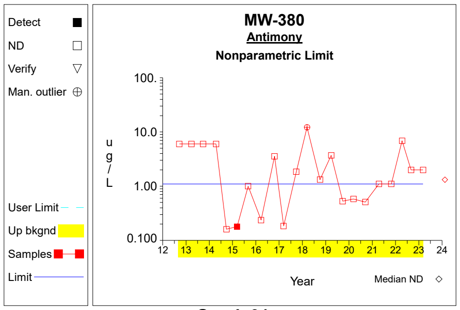
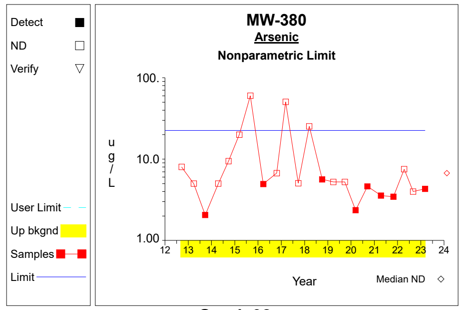
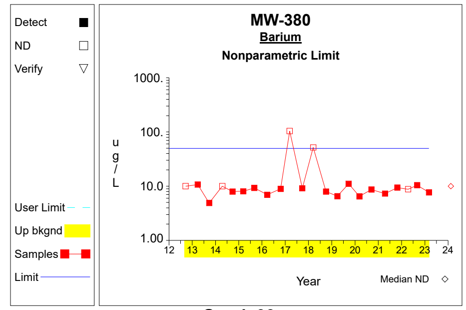
Up vs. Down Prediction Limits



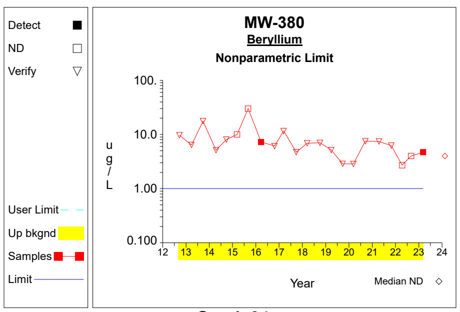
Graph 91



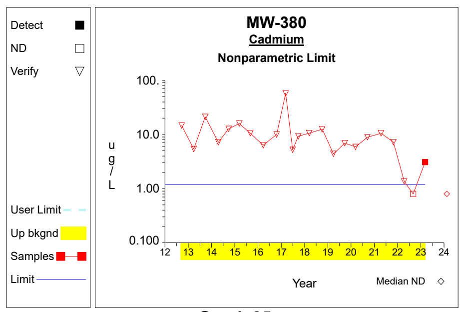
Graph 92



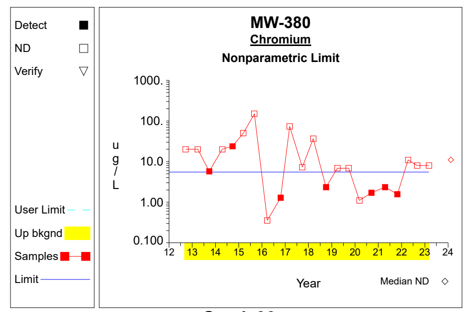
Graph 93



Graph 94



Graph 95



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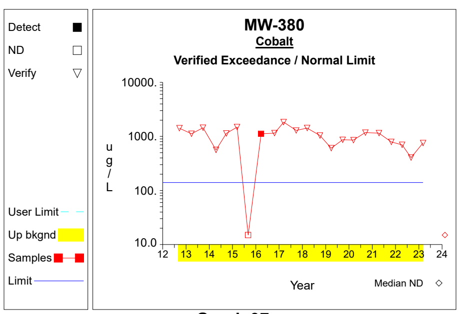
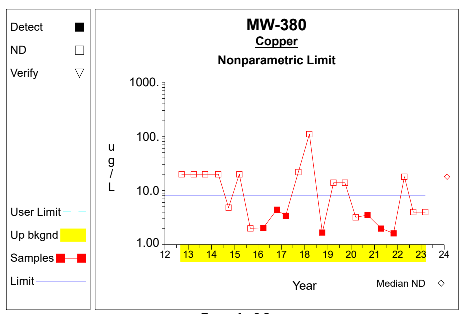
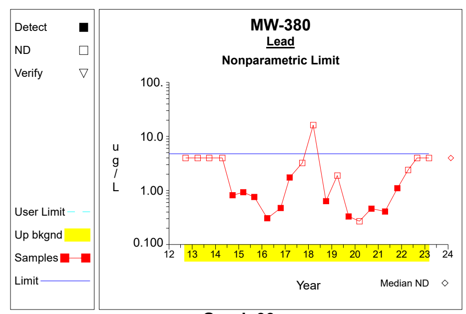


Graph 97



Graph 98



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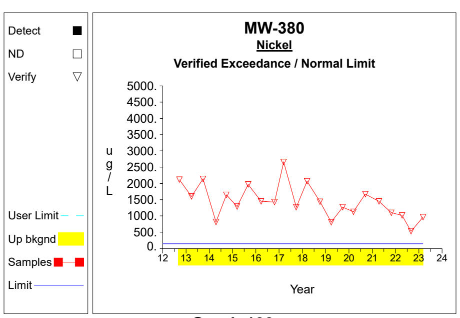

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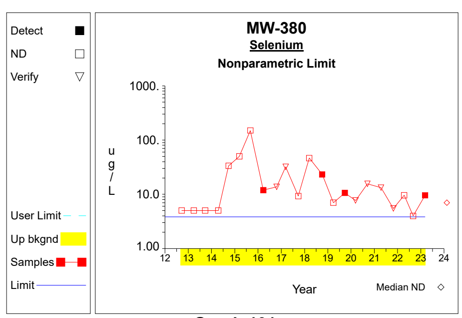

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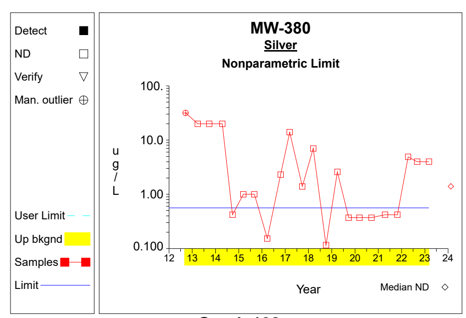
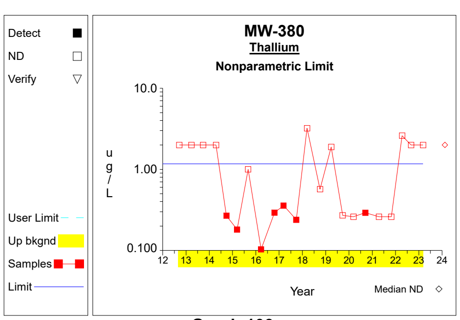
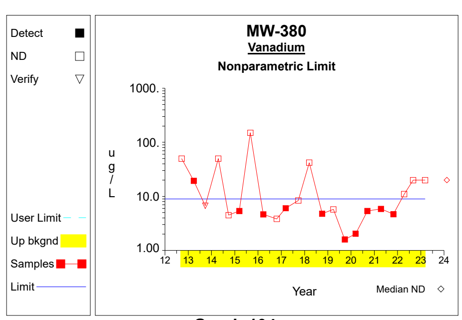


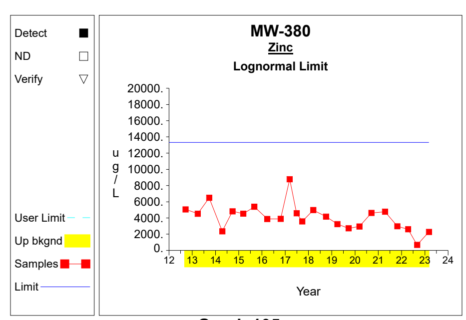
Graph 102



Graph 103



Graph 104



Graph 105

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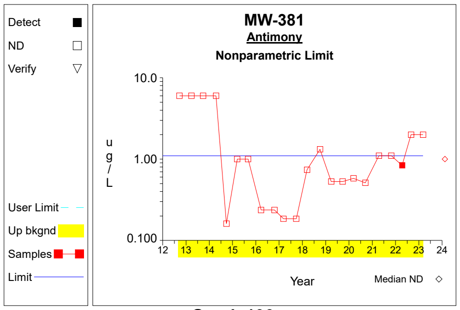
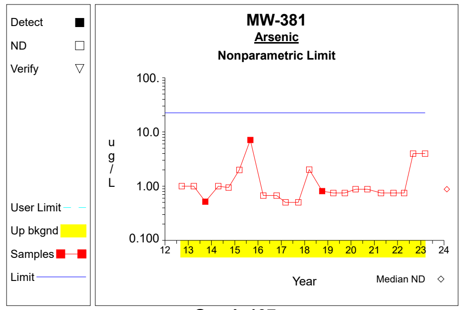
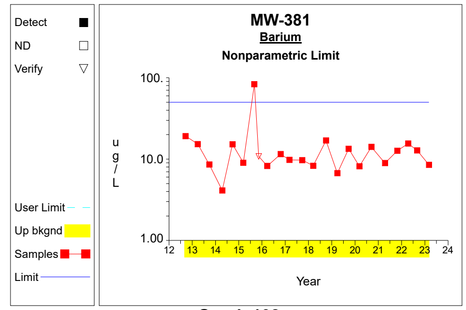
Up vs. Down Prediction Limits



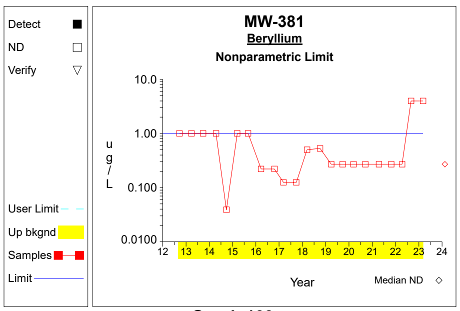
Graph 106



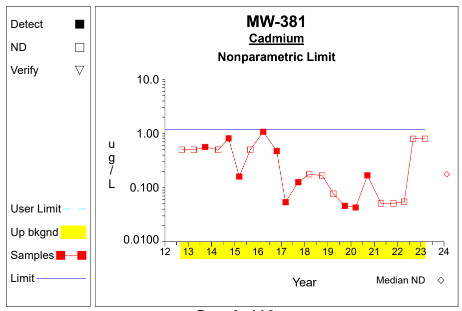
Graph 107



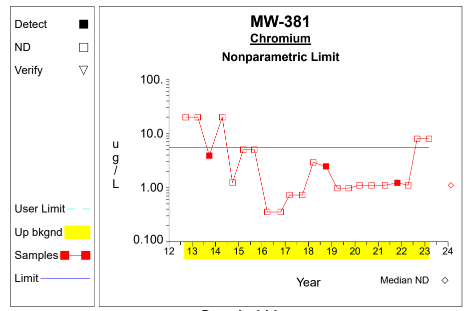
Graph 108



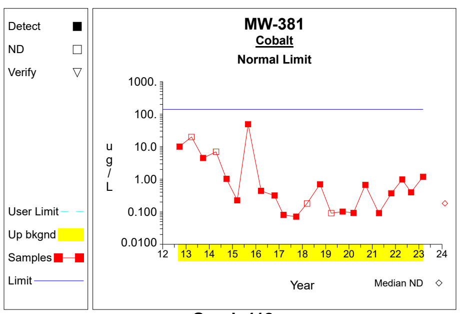
Graph 109



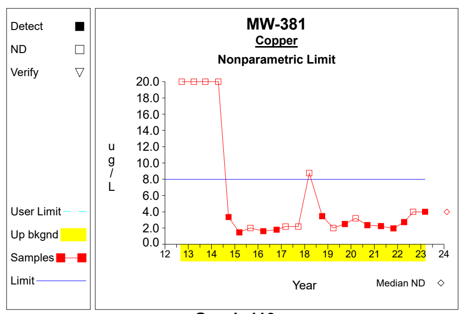
Graph 110



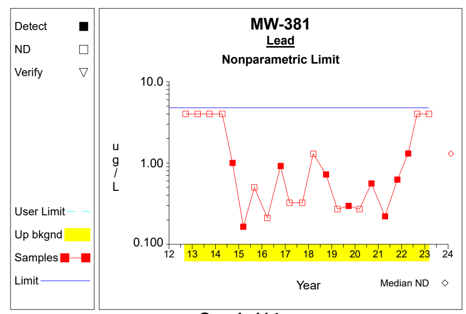
Graph 111



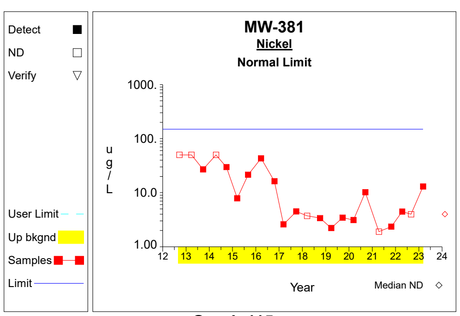
Graph 112



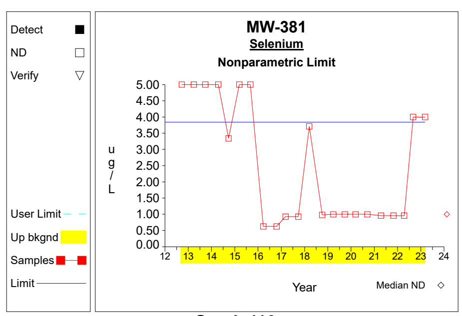
Graph 113



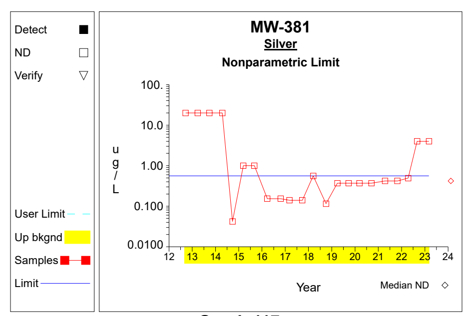
Graph 114



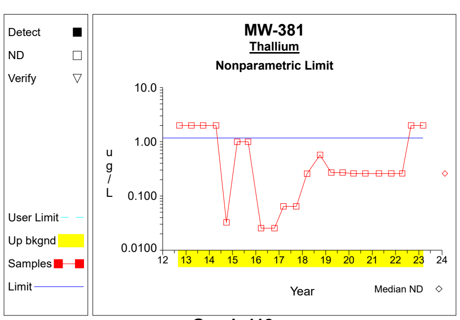
Graph 115



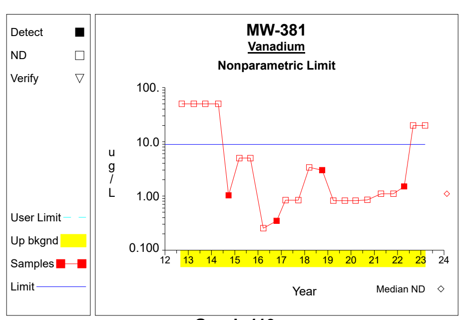
Graph 116



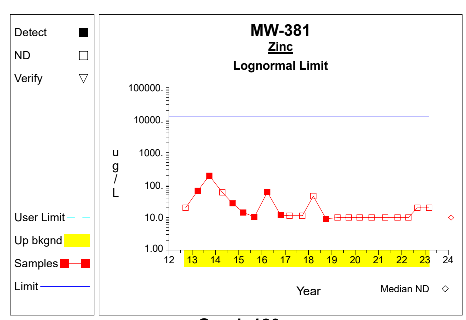
Graph 117



Graph 118

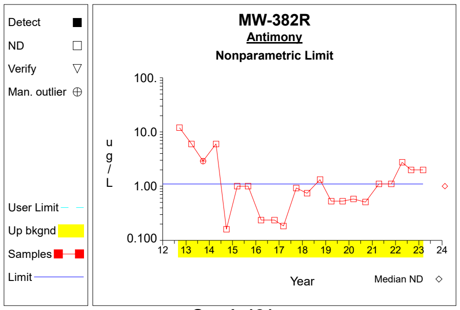


Graph 119

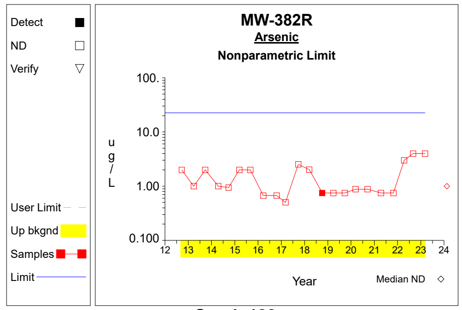


Graph 120

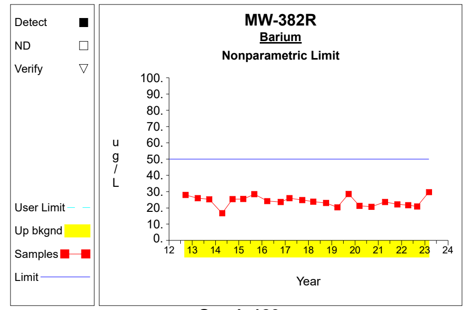
Up vs. Down Prediction Limits



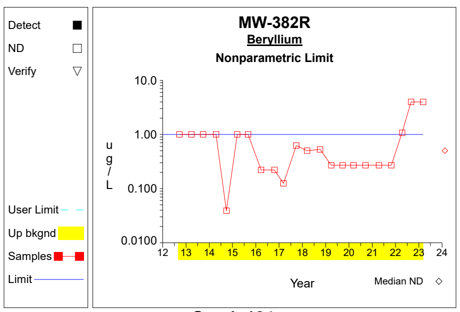
Graph 121



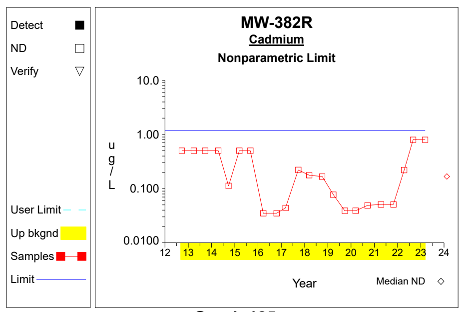
Graph 122



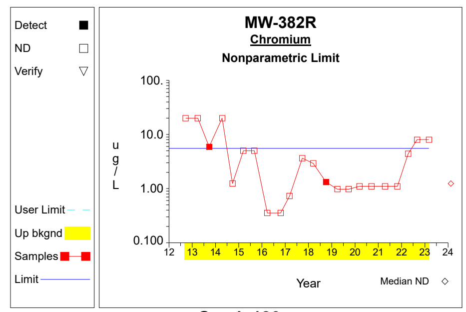
Graph 123



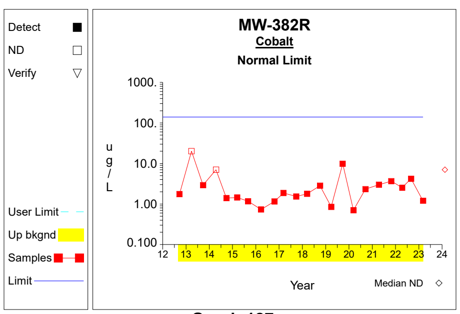
Graph 124



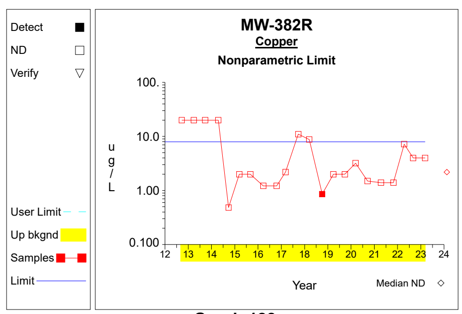
Graph 125



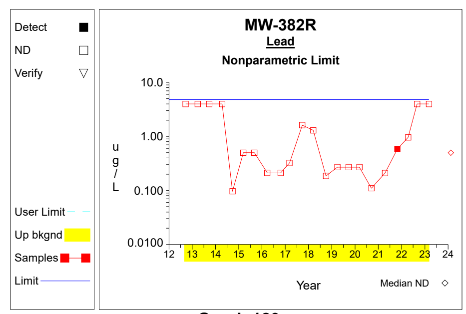
Graph 126



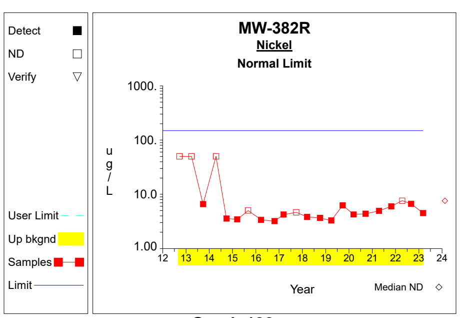
Graph 127



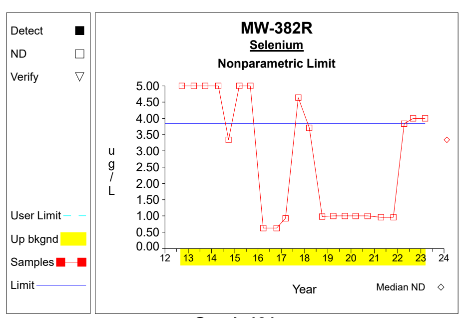
Graph 128



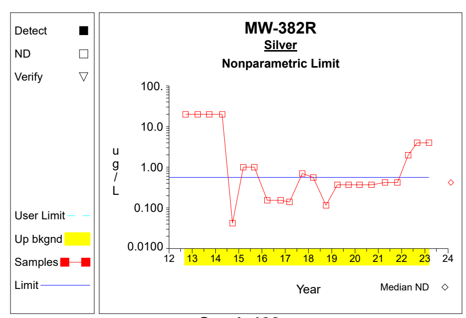
Graph 129



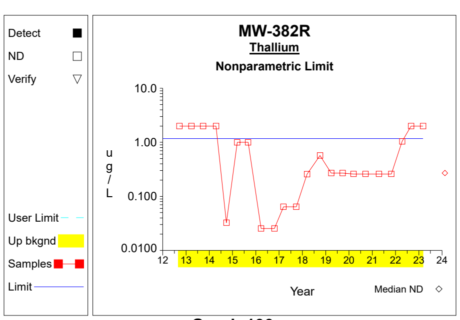
Graph 130



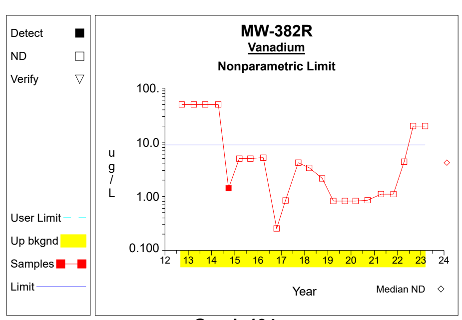
Graph 131



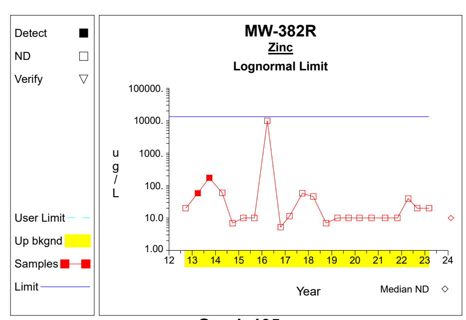
Graph 132



Graph 133



Graph 134



Graph 135

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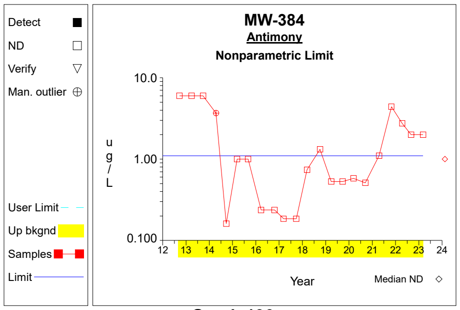
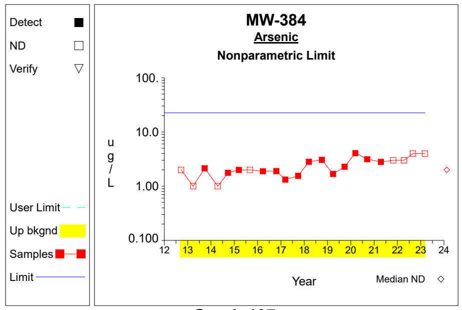
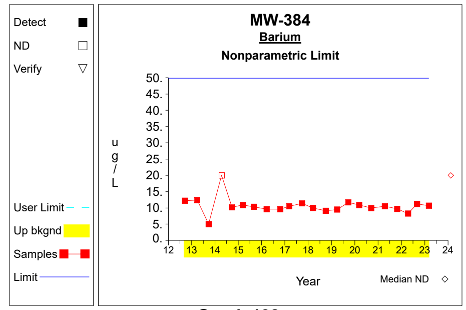
Up vs. Down Prediction Limits



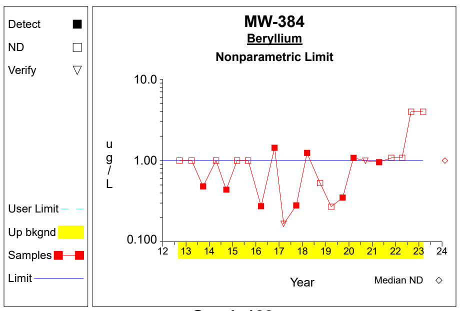
Graph 136



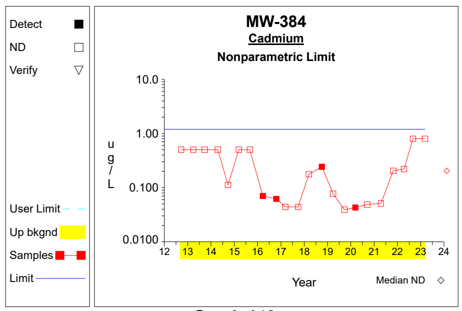
Graph 137



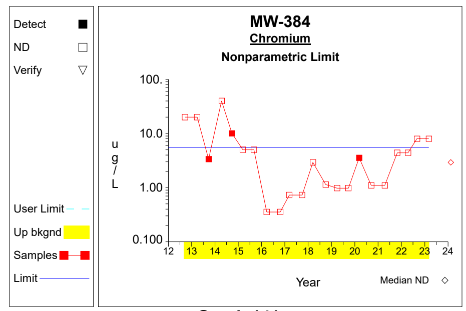
Graph 138



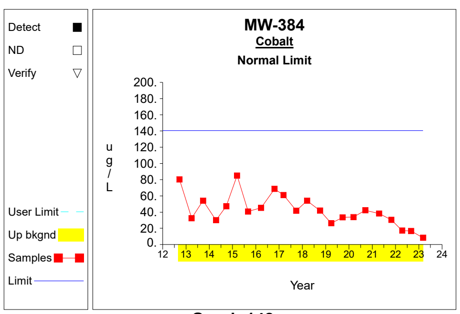
Graph 139



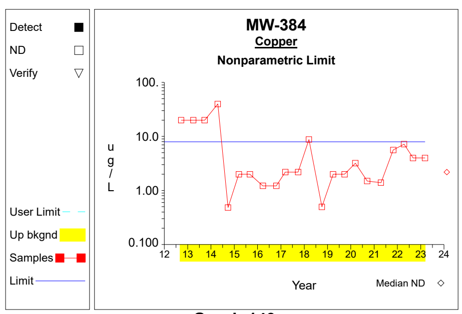
Graph 140



Graph 141



Graph 142



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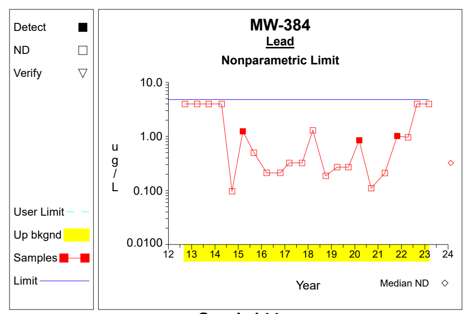

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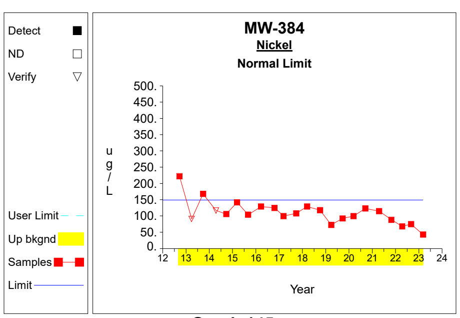

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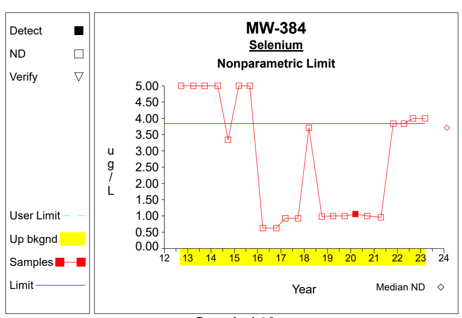

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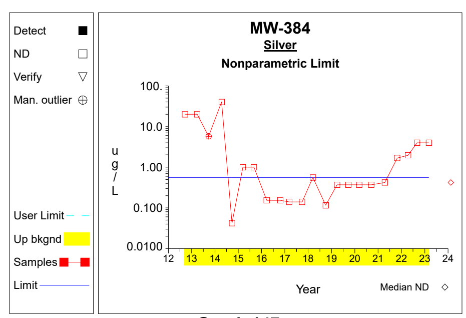

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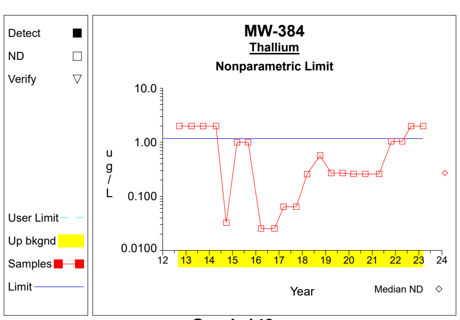
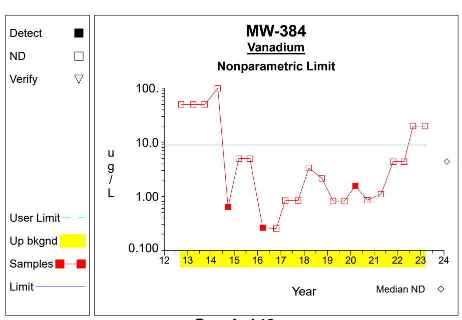
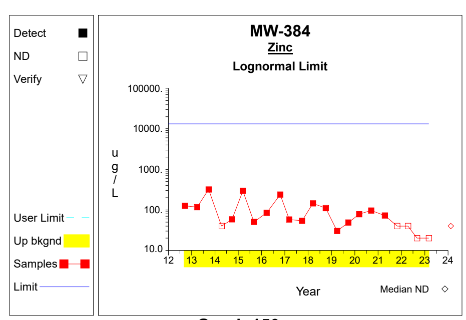


Graph 148

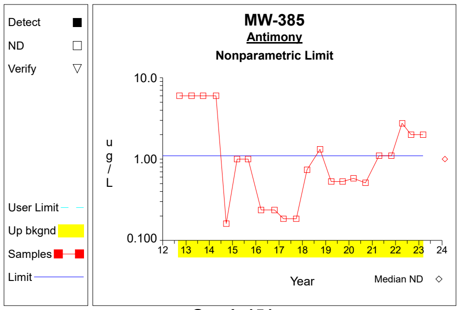


Graph 149

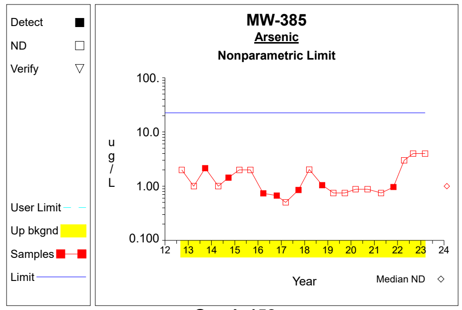


Graph 150

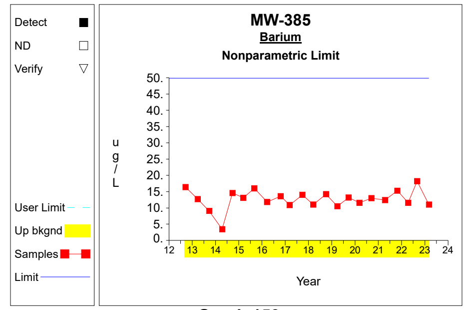
Up vs. Down Prediction Limits



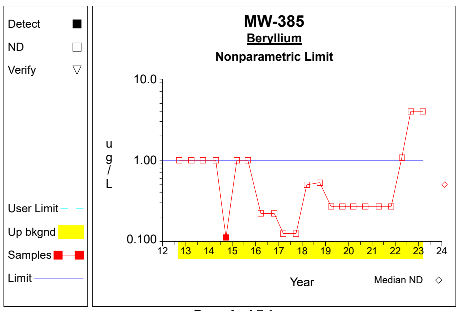
Graph 151



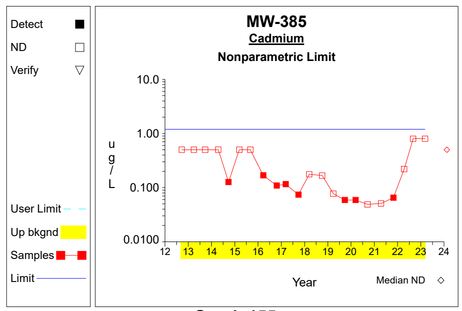
Graph 152



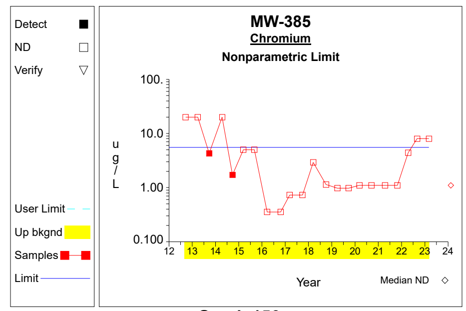
Graph 153



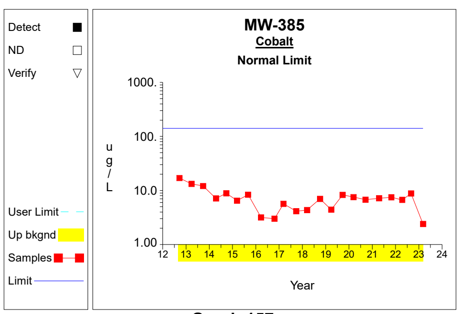
Graph 154



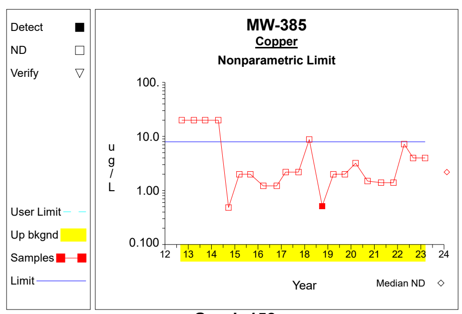
Graph 155



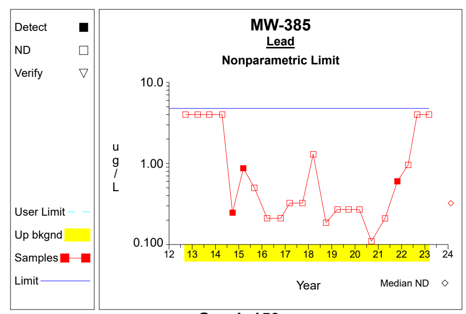
Graph 156



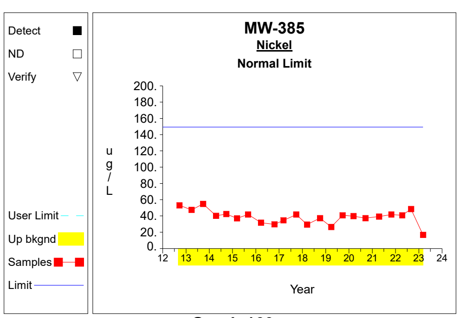
Graph 157



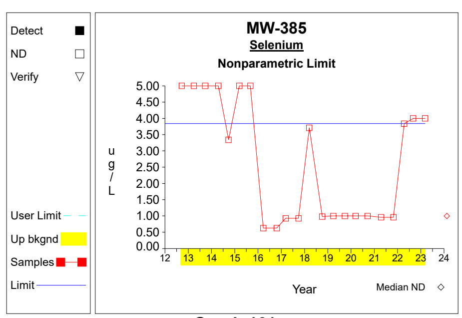
Graph 158



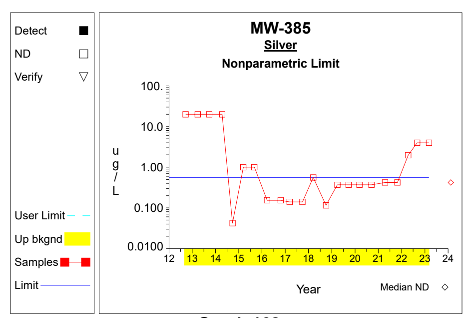
Graph 159



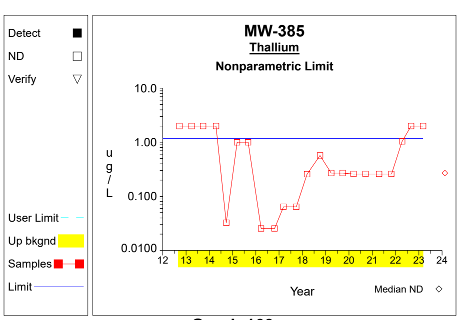
Graph 160



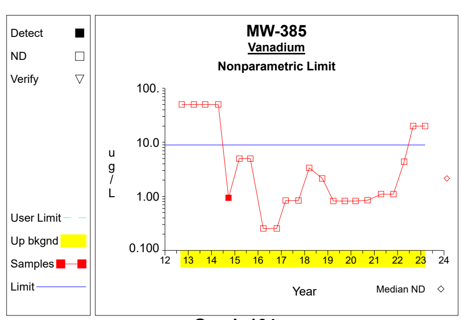
Graph 161



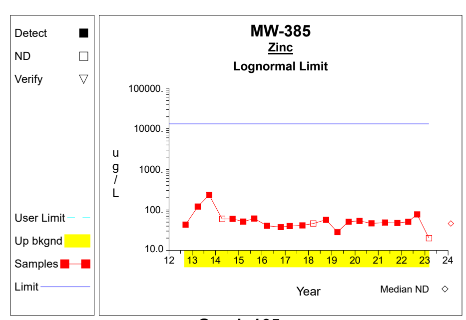
Graph 162



Graph 163



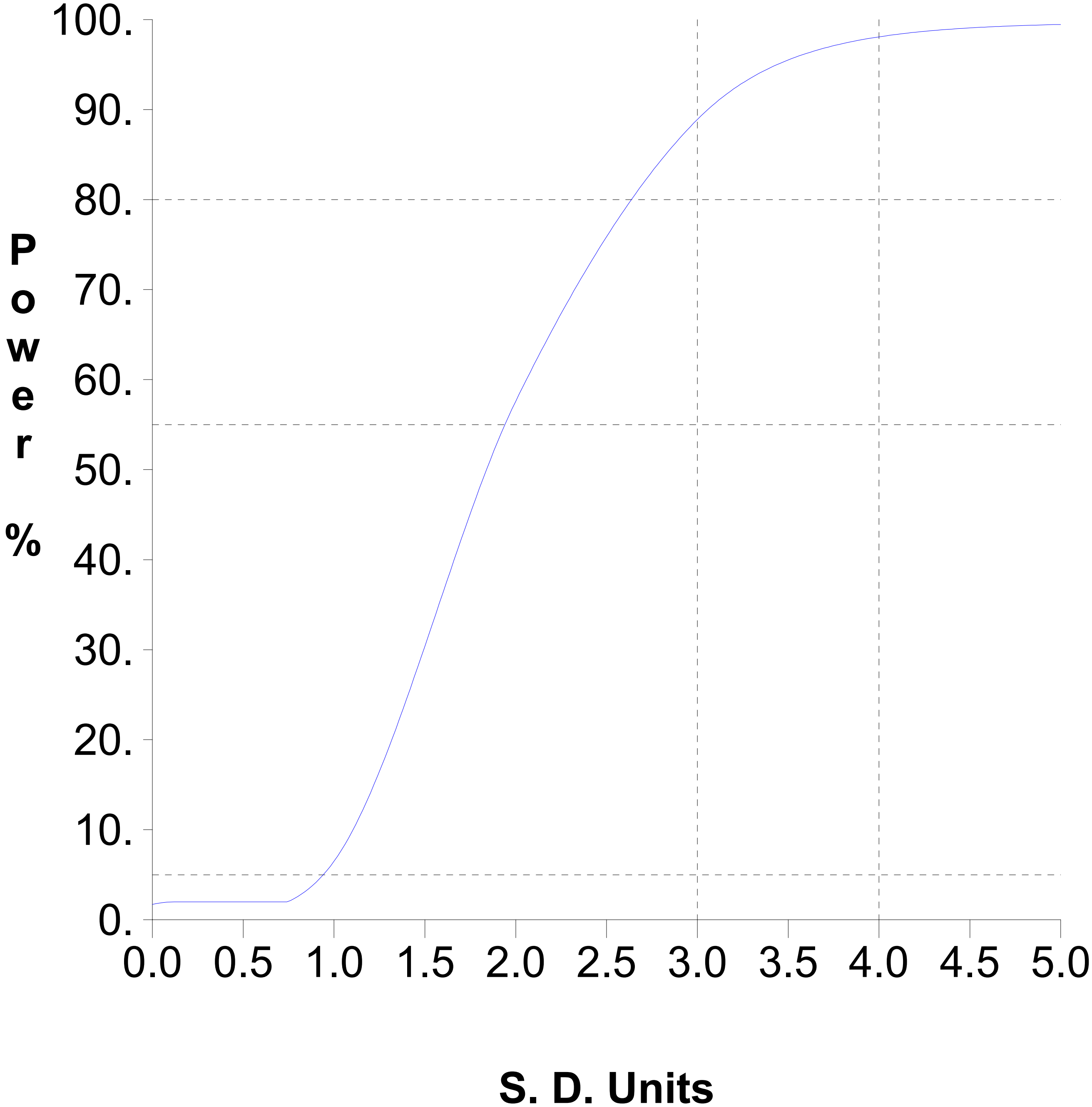
Graph 164



Graph 165

Prepared by: Otter Creek Environmental

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



Attachment D

Summary Tables and Graphs for the LCL Comparisons – Trace Metals

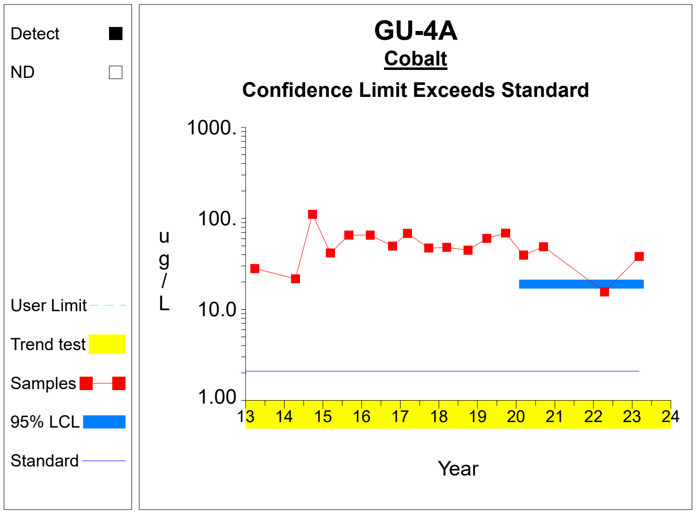
Table 1

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

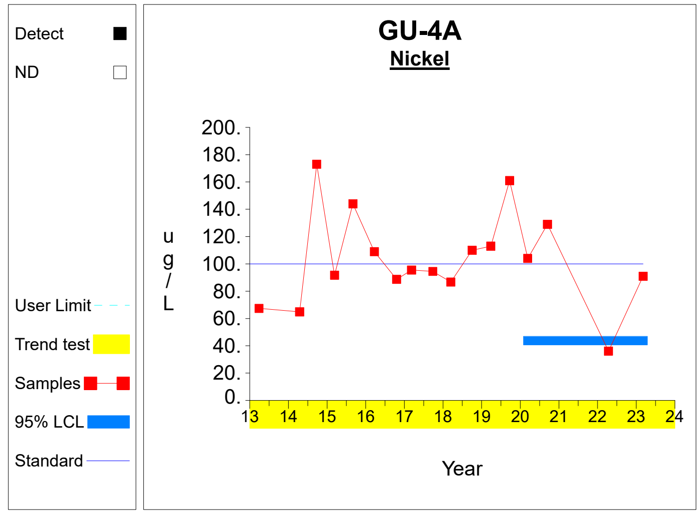
Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend	
Cobalt	ug/L	GU-4A	4	35.550	14.129	1.176	18.931	52.169	2.100		**
Nickel	ug/L	GU-4A	4	90.000	39.256	1.176	43.824	136.176	100.000		
Cobalt	ug/L	MW-300	4	565.750	537.142	1.176	0.000	1197.584	2.100		
Nickel	ug/L	MW-300	4	666.250	704.719	1.176	0.000	1495.203	100.000		
Cobalt	ug/L	MW-303	4	17.350	7.616	1.176	8.391	26.309	2.100		**
Nickel	ug/L	MW-303	4	29.025	1.323	1.176	27.469	30.581	100.000		
Cobalt	ug/L	MW-304	4	14.825	11.068	1.176	1.805	27.845	2.100		
Nickel	ug/L	MW-304	4	11.375	7.696	1.176	2.322	20.428	100.000		
Cobalt	ug/L	MW-307	4	39.175	17.193	1.176	18.951	59.399	2.100		**
Nickel	ug/L	MW-307	4	68.500	25.913	1.176	38.019	98.981	100.000		
Cobalt	ug/L	MW-312	4	41.200	6.055	1.176	34.077	48.323	2.100		**
Nickel	ug/L	MW-312	4	99.575	40.676	1.176	51.728	147.422	100.000		
Cobalt	ug/L	MW-313	4	5.273	5.795	1.176	0.000	12.089	2.100		
Nickel	ug/L	MW-313	4	17.713	15.491	1.176	0.000	35.934	100.000		
Cobalt	ug/L	MW-335	4	58.850	19.460	1.176	35.959	81.741	2.100		**
Nickel	ug/L	MW-335	4	85.200	52.126	1.176	23.885	146.515	100.000		
Cobalt	ug/L	MW-344	4	241.500	46.177	1.176	187.182	295.818	2.100	inc	**
Nickel	ug/L	MW-344	4	199.750	45.894	1.176	145.766	253.734	100.000		**
Cobalt	ug/L	MW-381	4	0.737	0.417	1.176	0.246	1.227	2.100		
Nickel	ug/L	MW-381	4	5.455	5.147	1.176	0.000	11.509	100.000		
Cobalt	ug/L	MW-382R	4	2.895	1.327	1.176	1.335	4.455	2.100		
Nickel	ug/L	MW-382R	4	5.252	1.335	1.176	3.682	6.823	100.000		
Cobalt	ug/L	MW-384	4	18.225	9.086	1.176	7.538	28.912	2.100	dec	**
Nickel	ug/L	MW-384	4	68.600	18.938	1.176	46.323	90.877	100.000	dec	
Cobalt	ug/L	MW-385	4	6.350	2.772	1.176	3.089	9.611	2.100		**
Nickel	ug/L	MW-385	4	37.000	13.887	1.176	20.665	53.335	100.000		
Cobalt	ug/L	MW-390	4	108.750	5.058	1.176	102.800	114.700	2.100		**
Nickel	ug/L	MW-390	4	56.325	3.944	1.176	51.686	60.964	100.000		

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

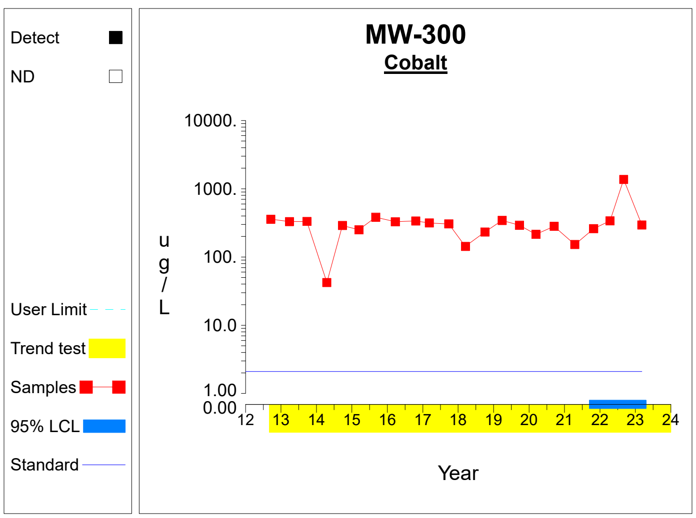
Confidence Limits (Assessment)



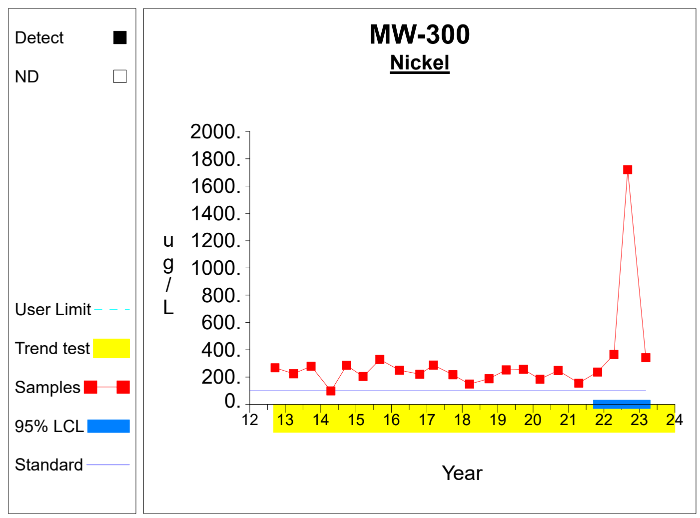
Graph 1



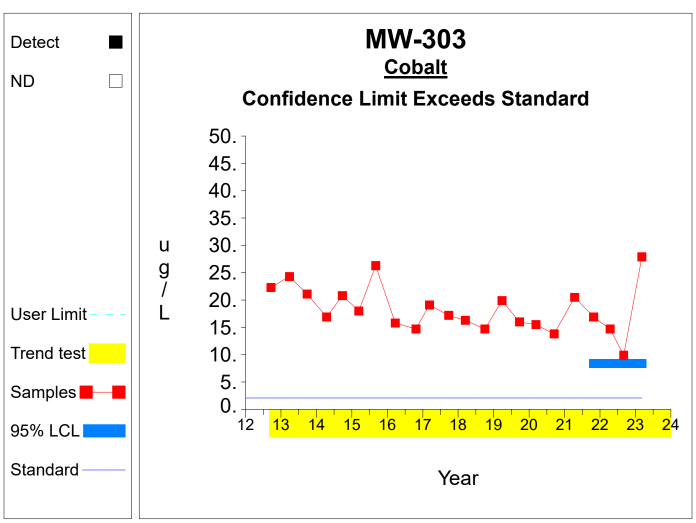
Graph 2



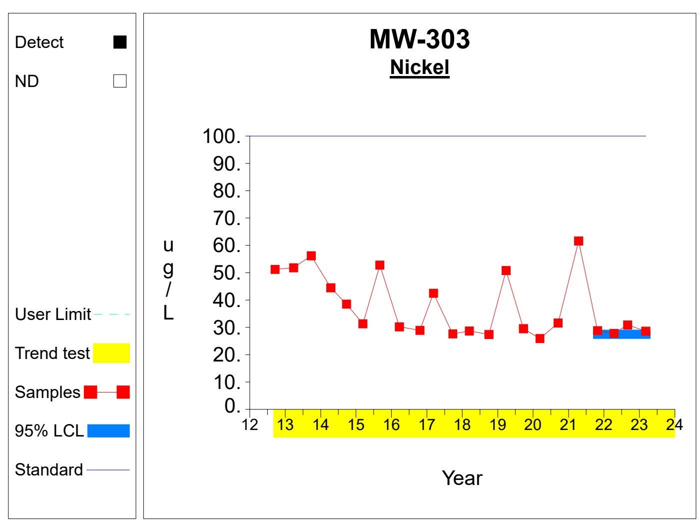
Graph 3



Graph 4

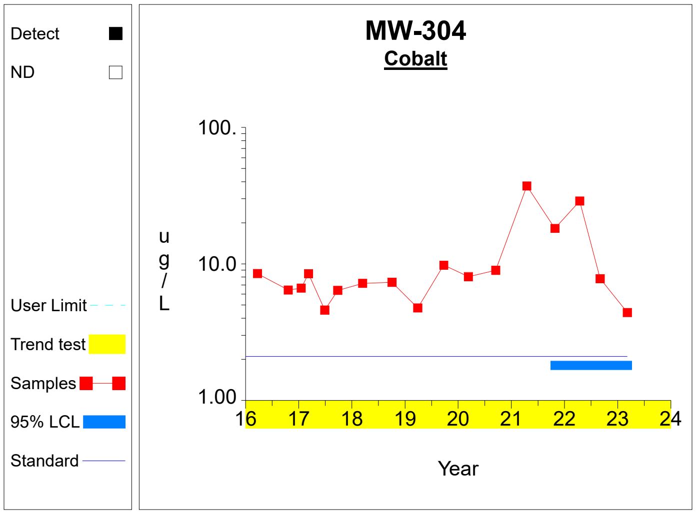


Graph 5

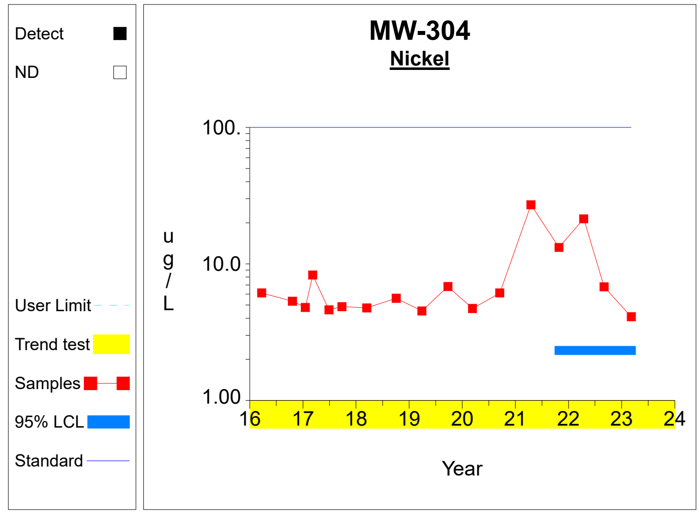


Graph 6

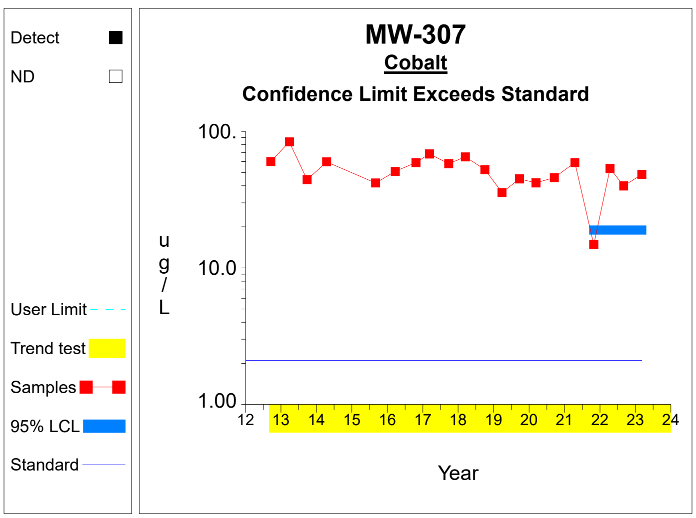
Confidence Limits (Assessment)



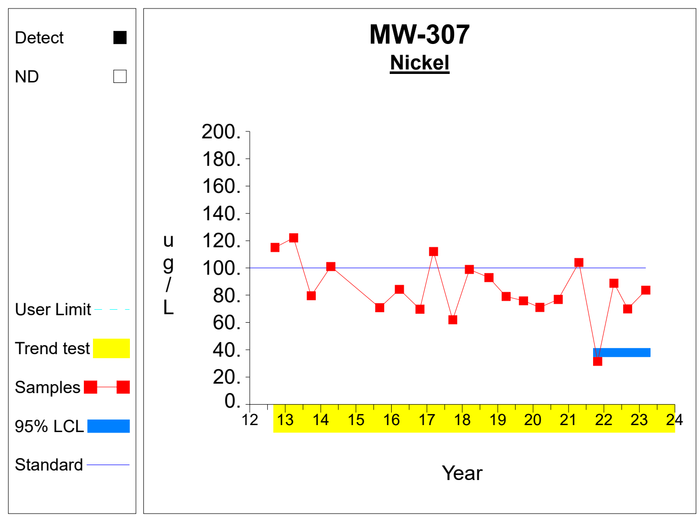
Graph 7



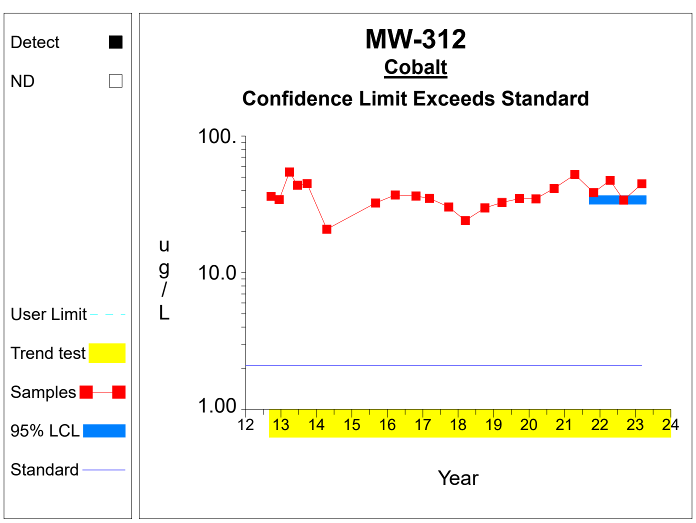
Graph 8



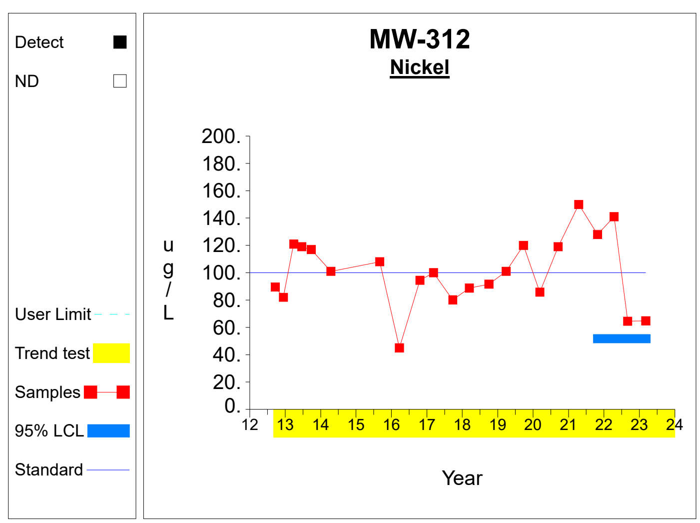
Graph 9



Graph 10



Graph 11



Graph 12

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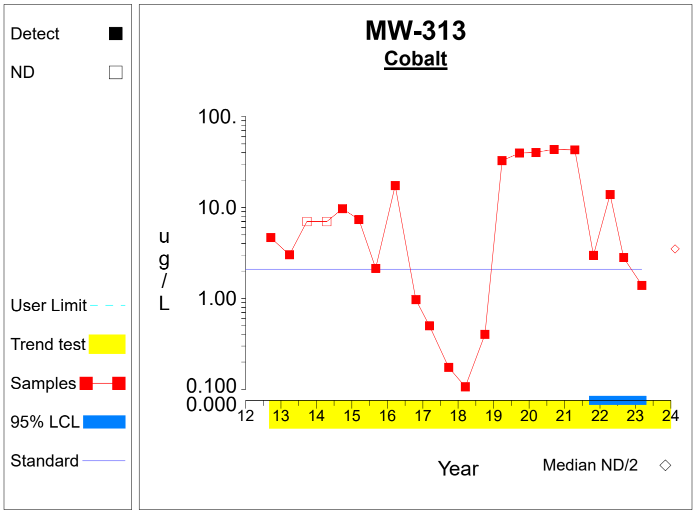
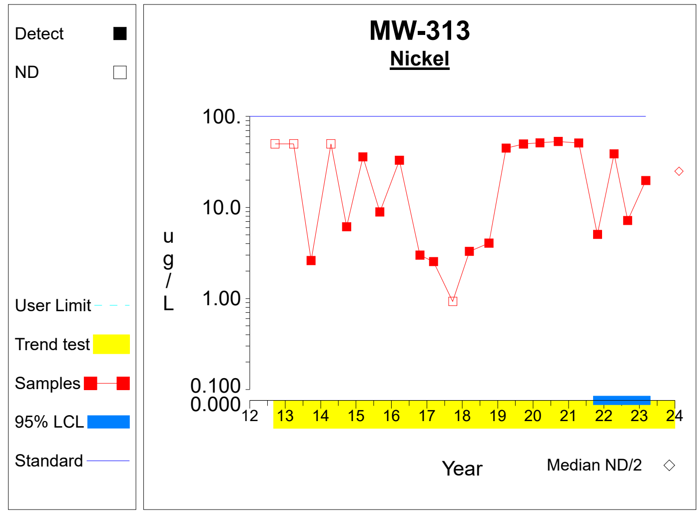
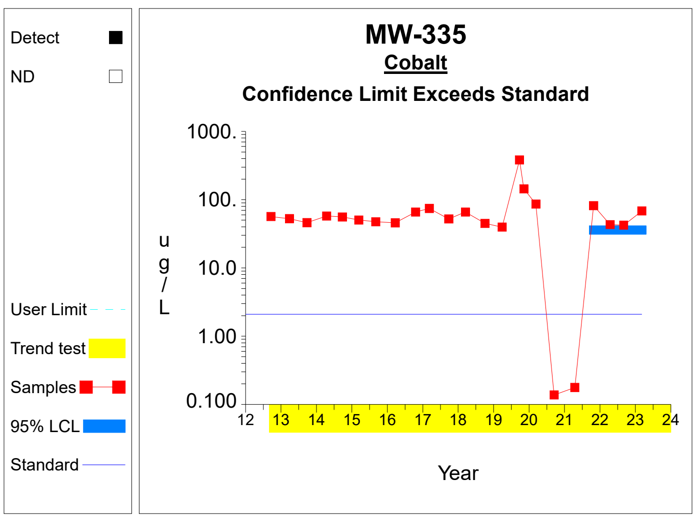
Confidence Limits (Assessment)



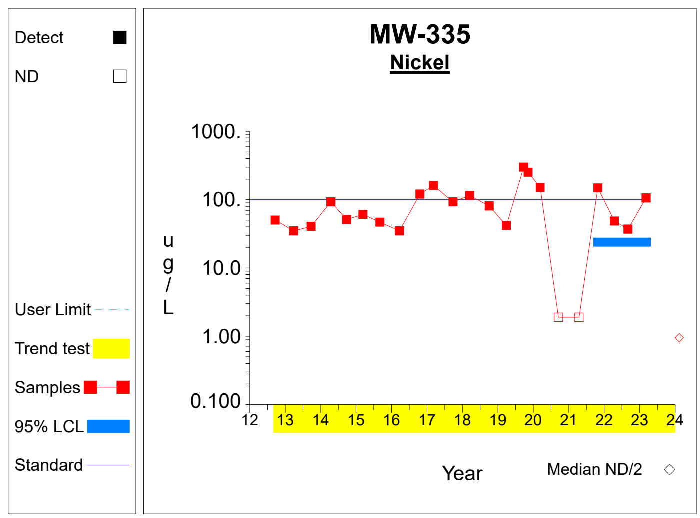
Graph 13



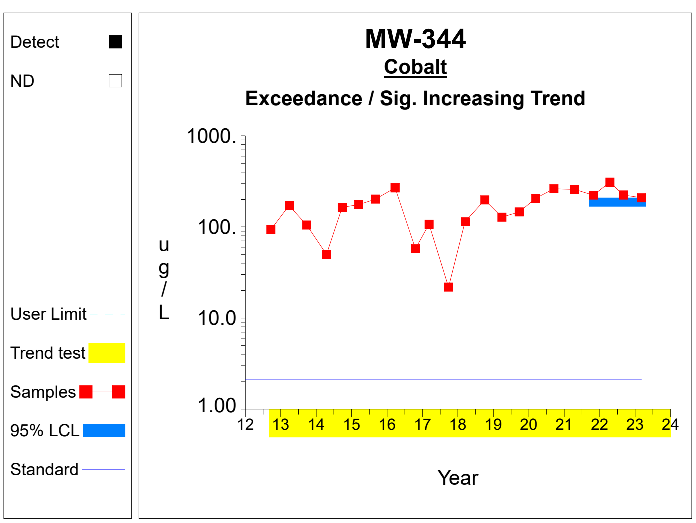
Graph 14



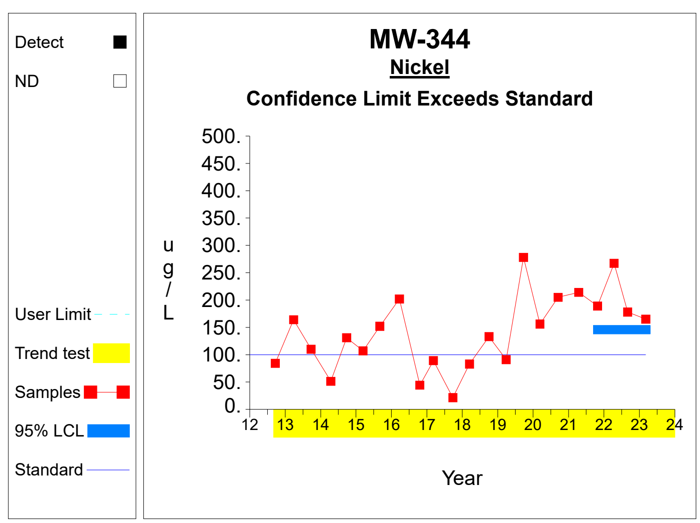
Graph 15



Graph 16

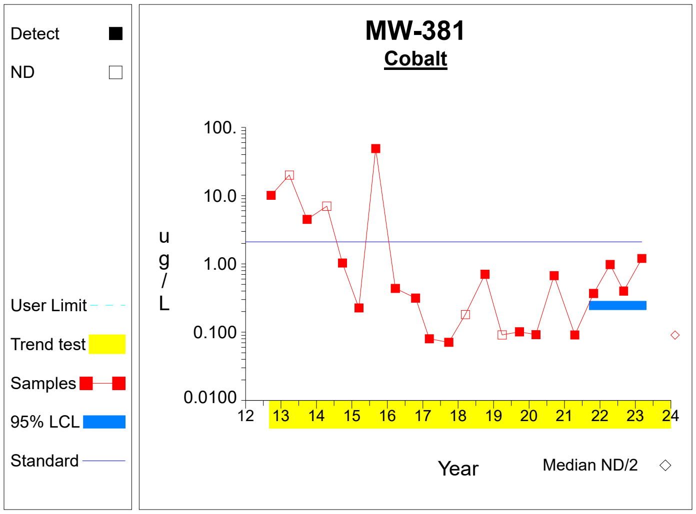


Graph 17

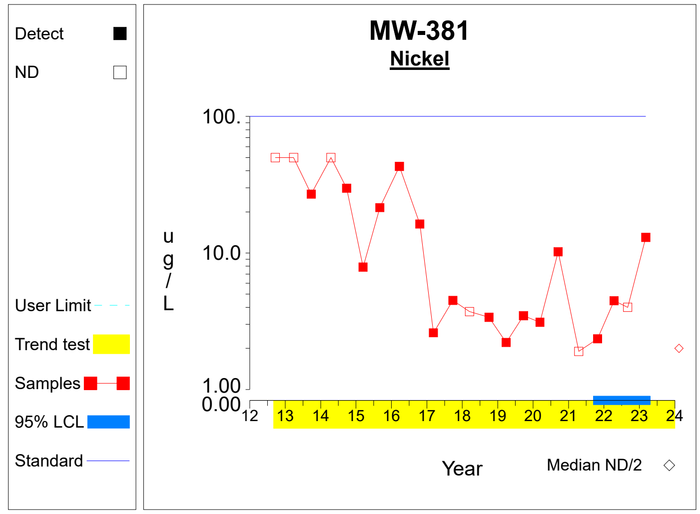


Graph 18

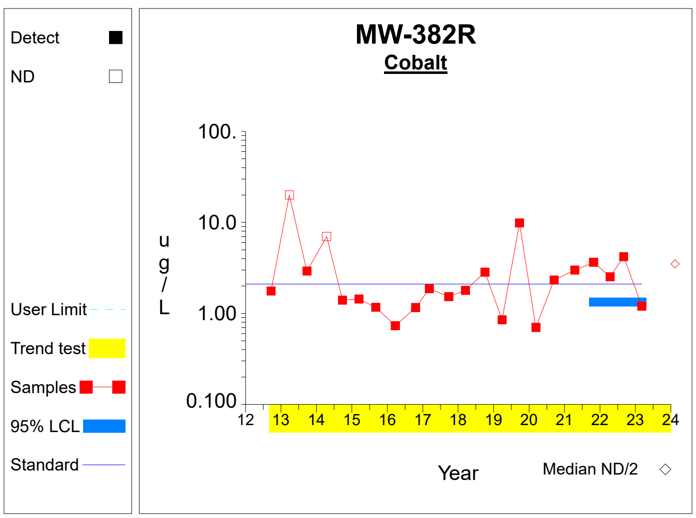
Confidence Limits (Assessment)



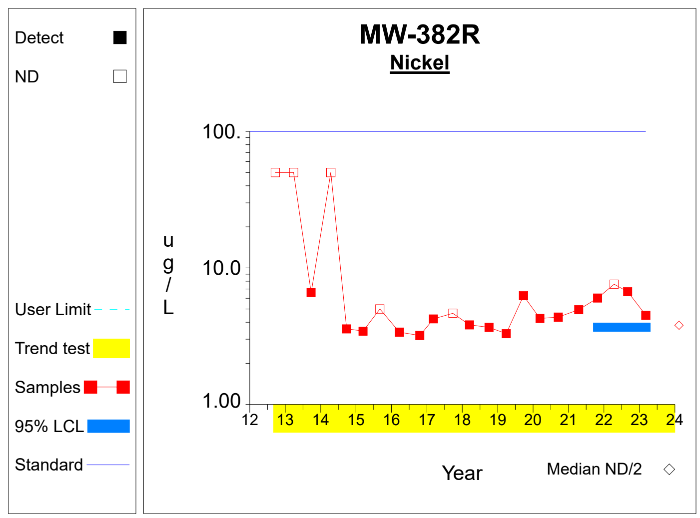
Graph 19



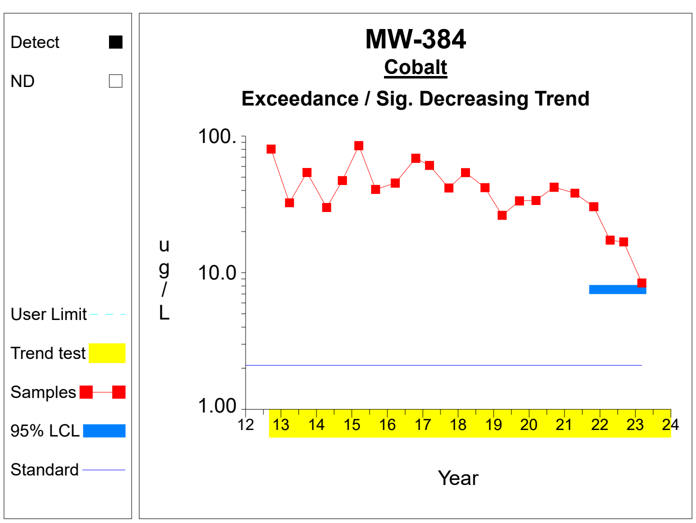
Graph 20



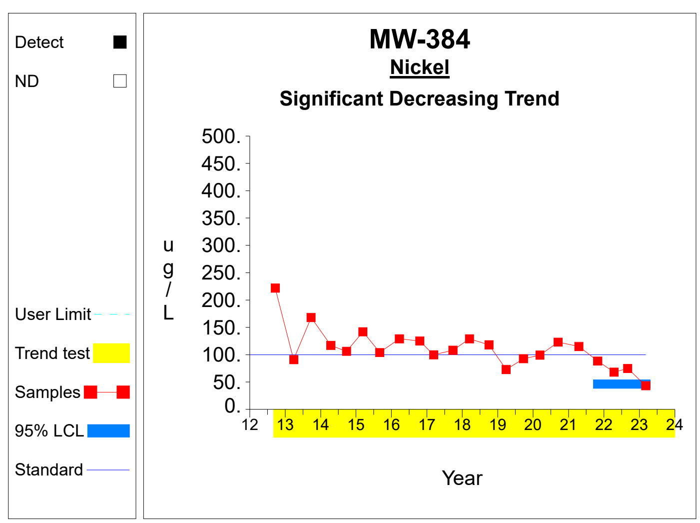
Graph 21



Graph 22

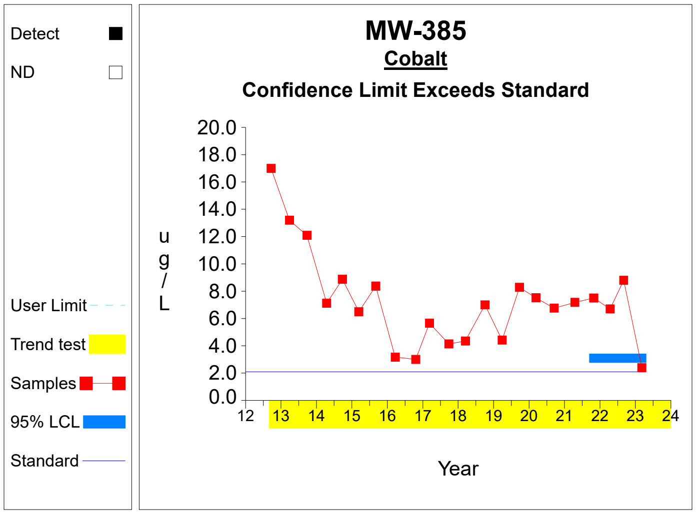


Graph 23

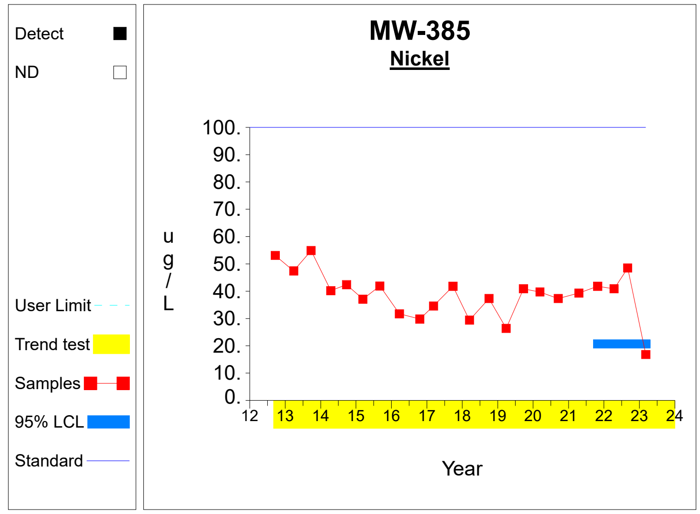


Graph 24

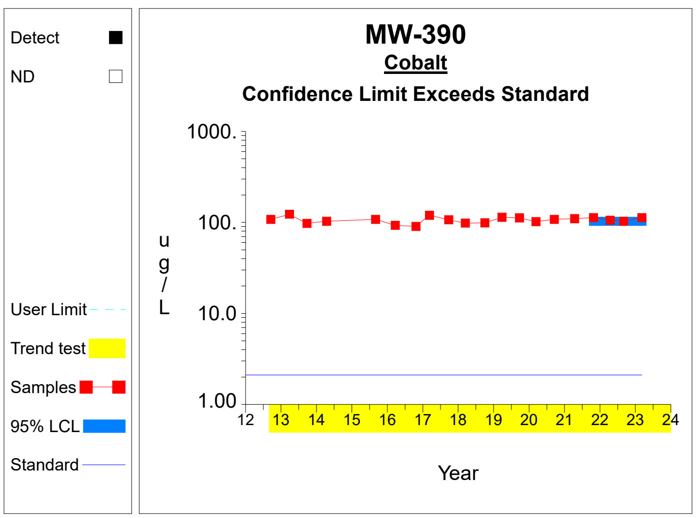
Confidence Limits (Assessment)



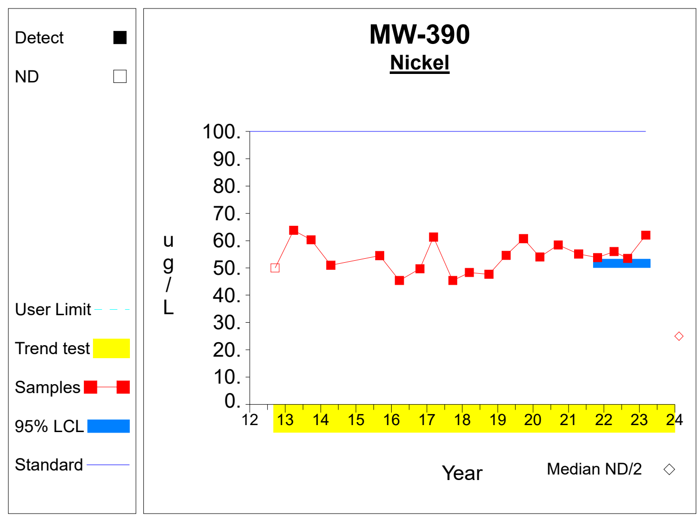
Graph 25



Graph 26



Graph 27



Graph 28

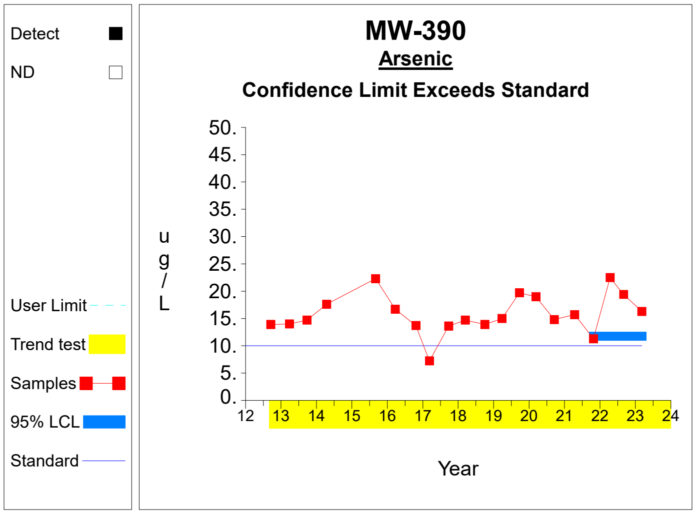
Table 1

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	ug/L	MW-390	4	17.375	4.776	1.176	11.757	22.993	10.000		**

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

Confidence Limits (Assessment)



Graph 1

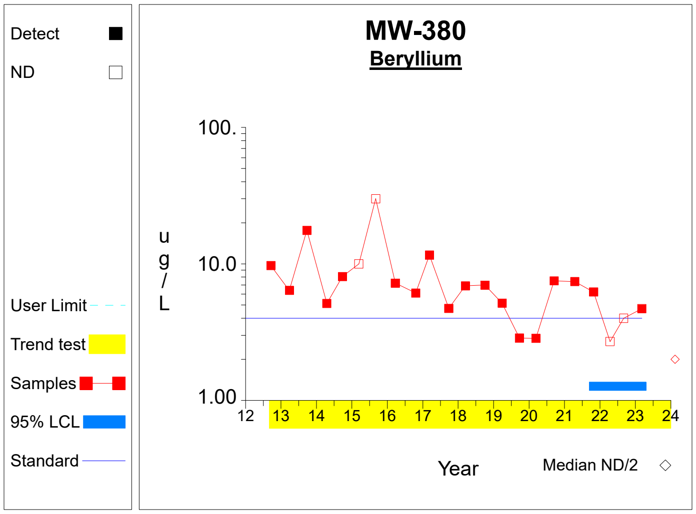
Table 1

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

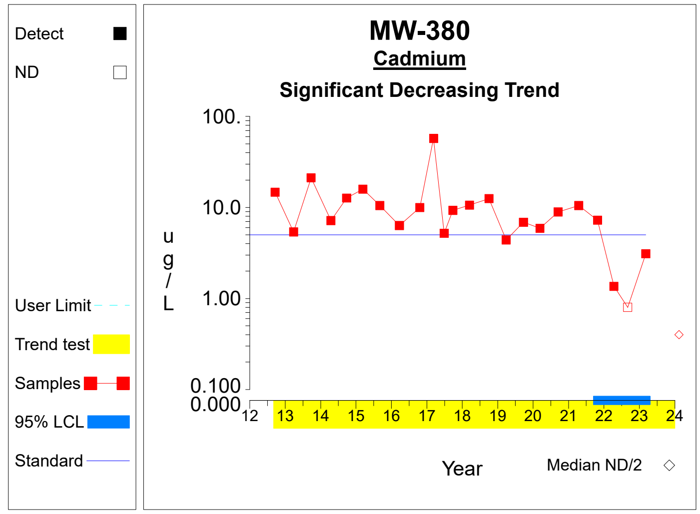
Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend	
Beryllium	ug/L	MW-380	4	3.730	2.092	1.176	1.269	6.191	4.000		
Cadmium	ug/L	MW-380	4	3.028	3.029	1.176	0.000	6.590	5.000	dec	
Cobalt	ug/L	MW-380	4	665.250	176.455	1.176	457.688	872.812	2.100		**
Nickel	ug/L	MW-380	4	904.000	254.769	1.176	604.318	1203.682	100.000	dec	**
Selenium	ug/L	MW-380	4	5.520	2.876	1.176	2.137	8.903	50.000		
Zinc	ug/L	MW-380	4	2137.250	1018.628	1.176	939.049	3335.451	2000.000	dec	

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

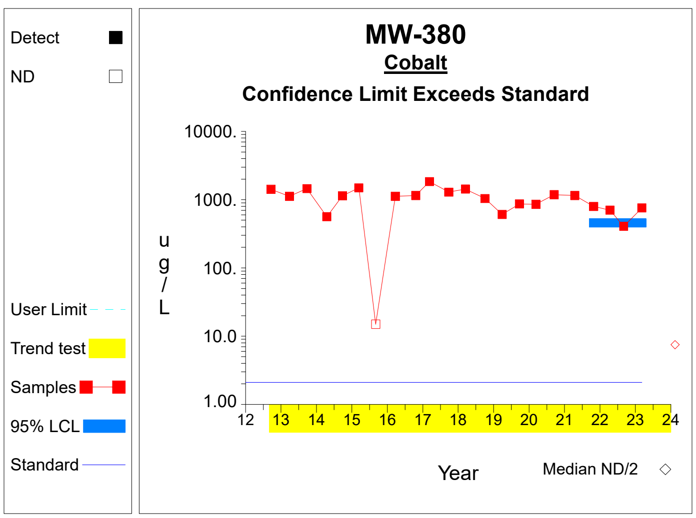
Confidence Limits (Assessment)



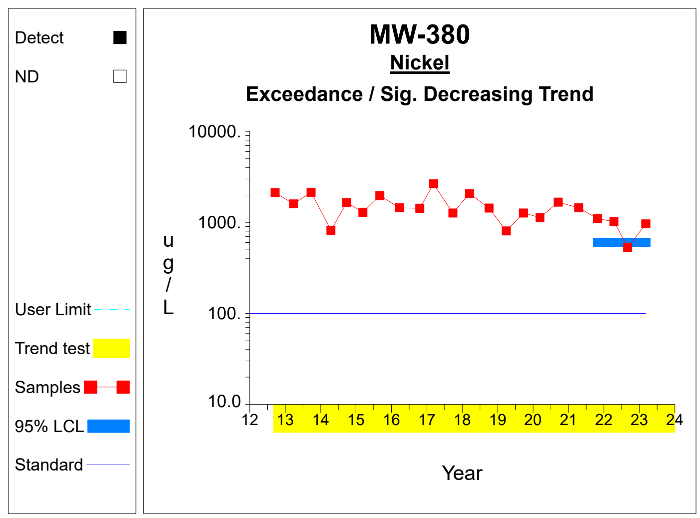
Graph 1



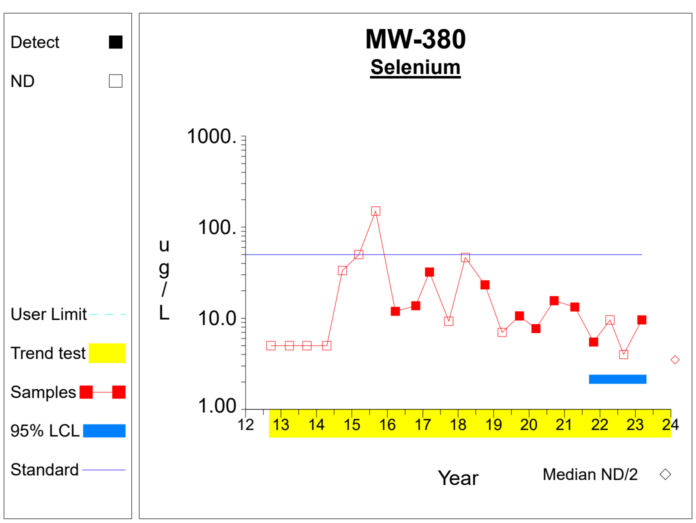
Graph 2



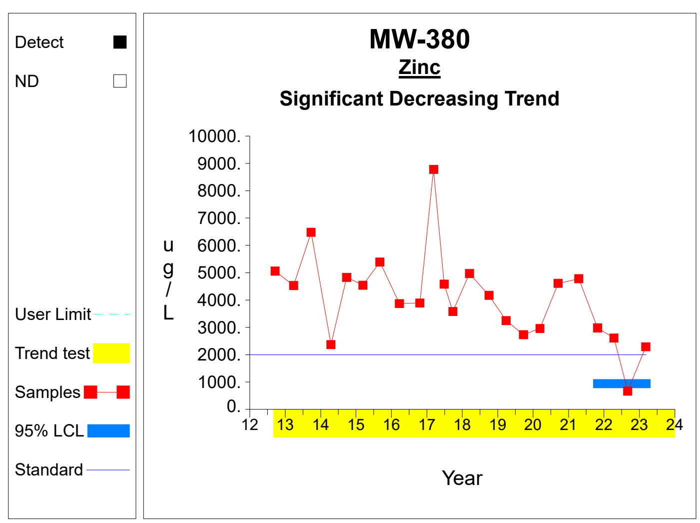
Graph 3



Graph 4



Graph 5



Graph 6

Attachment E

Historical VOC Detections

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Acetone	GU-4A	9/27/2017		3.19	1.79	ug/L
Acetone	GU-4A	3/14/2018		2.79	1.79	ug/L
Bromomethane	GU-4A	10/20/2016		.433	.220	ug/L
Methylene Chloride	GU-4A	9/25/2014		.802	.170	ug/L
Methylene Chloride	GU-4A	10/20/2016		.303	.170	ug/L
Methylene Chloride	GU-4A	9/27/2017		.335	.170	ug/L
Vinyl Chloride	GU-4A	3/14/2018		.103	.100	ug/L
Acetone	MW-300	3/17/2009		16.40	4.62	ug/L
Acetone	MW-300	3/25/2010		12.50	.00	ug/L
Acetone	MW-300	9/23/2010		12.90	.00	ug/L
Acetone	MW-300	4/16/2014		47.80	1.79	ug/L
Acetone	MW-300	9/26/2017		4.29	1.79	ug/L
Acetone	MW-300	3/14/2018		48.60	1.79	ug/L
Acetone	MW-300	3/28/2019		3.10	3.10	ug/L
Acetone	MW-300	4/15/2021		5.12	3.10	ug/L
Acetone	MW-300	10/27/2021		5.67	3.10	ug/L
Methylene Chloride	MW-300	10/20/2016		.264	.170	ug/L
Methylene Chloride	MW-300	3/07/2017		.214	.170	ug/L
Styrene	MW-300	10/27/2021		.383	.370	ug/L
Xylenes, Total	MW-300	9/25/2013		1.11	.13	ug/L
Acetone	MW-303	9/25/2017		2.21	1.79	ug/L
Carbon Disulfide	MW-303	10/21/2016		.231	.150	ug/L
Methylene Chloride	MW-303	9/25/2014		.573	.170	ug/L
Methylene Chloride	MW-303	10/21/2016		.308	.170	ug/L
Methylene Chloride	MW-303	3/13/2018		.226	.170	ug/L
Xylenes, Total	MW-303	9/26/2013		.232	.130	ug/L
Xylenes, Total	MW-303	10/21/2016		.390	.130	ug/L
Xylenes, Total	MW-303	3/08/2017		.459	.130	ug/L
Acetone	MW-304	6/28/2017		3.74	1.79	ug/L
Acetone	MW-304	9/26/2017		2.99	1.79	ug/L
Bromomethane	MW-304	9/26/2017		.372	.220	ug/L
Bromomethane	MW-304	3/14/2018		.448	.220	ug/L
Methylene Chloride	MW-304	1/18/2017		.264	.170	ug/L
Acetone	MW-307	3/08/2017		2.61	1.79	ug/L
Acetone	MW-307	9/25/2017		2.41	1.79	ug/L
Acetonitrile	MW-307	9/26/2013		739	126	ug/L
Methylene Chloride	MW-307	10/21/2016		.231	.170	ug/L
Xylenes, Total	MW-307	10/21/2016		.324	.130	ug/L
Xylenes, Total	MW-307	3/08/2017		.362	.130	ug/L
Xylenes, Total	MW-307	3/27/2019		.481	.400	ug/L
Acetone	MW-310	3/08/2017		2.61	1.79	ug/L
Acetone	MW-310	9/27/2017		3.78	1.79	ug/L
Acetone	MW-310	3/14/2018		1.96	1.79	ug/L
Acetonitrile	MW-310	9/26/2013		841	126	ug/L
Methylene Chloride	MW-310	9/25/2014		.756	.170	ug/L
Methylene Chloride	MW-310	10/20/2016		.186	.170	ug/L
Xylenes, Total	MW-310	10/20/2016		.351	.130	ug/L
Xylenes, Total	MW-310	3/08/2017		1.090	.130	ug/L
Xylenes, Total	MW-310	9/27/2017		.363	.130	ug/L
Acetone	MW-312	3/08/2017		2.39	1.79	ug/L
Bromomethane	MW-312	9/25/2017		.233	.220	ug/L
Methylene Chloride	MW-312	10/21/2016		.295	.170	ug/L
Methylene Chloride	MW-312	3/13/2018		.334	.170	ug/L
Xylenes, Total	MW-312	3/08/2017		.654	.130	ug/L
Xylenes, Total	MW-312	10/27/2021		1.050	.400	ug/L
4,4`-DDD	MW-313	9/25/2013		.00214	.00188	ug/L
4,4`-DDE	MW-313	9/25/2013		.00320	.00219	ug/L
Acetone	MW-313	9/26/2014		1.88	1.79	ug/L
Acetone	MW-313	3/08/2017		1.87	1.79	ug/L
Acetone	MW-313	9/25/2017		2.76	1.79	ug/L
Acetone	MW-313	3/27/2019		3.82	3.10	ug/L
alpha-BHC	MW-313	9/25/2013		.00451	.00177	ug/L
beta-BHC	MW-313	9/25/2013		.00598	.00500	ug/L
Bromomethane	MW-313	10/21/2016		2.660	.220	ug/L
Bromomethane	MW-313	9/25/2017		.344	.220	ug/L
Bromomethane	MW-313	10/26/2021		1.280	1.100	ug/L
Chloromethane	MW-313	10/21/2016		.701	.310	ug/L
delta-BHC	MW-313	9/25/2013		.00444	.00240	ug/L
Iodomethane	MW-313	10/21/2016		1.41	.80	ug/L
Methylene Chloride	MW-313	10/21/2016		.277	.170	ug/L
Methylene Chloride	MW-313	3/13/2018		.207	.170	ug/L
Xylenes, Total	MW-313	9/25/2013		.321	.130	ug/L
Xylenes, Total	MW-313	10/21/2016		1.890	.130	ug/L
Xylenes, Total	MW-313	3/08/2017		.786	.130	ug/L
Acetonitrile	MW-333	9/26/2013		964	126	ug/L
Acetone	MW-335	9/26/2017		2.49	1.79	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Acetone	MW-335	3/14/2018		2.33	1.79	ug/L
Bromomethane	MW-335	9/26/2017		.402	.220	ug/L
Chloromethane	MW-335	10/19/2016		.336	.310	ug/L
Methylene Chloride	MW-335	9/25/2014		.617	.170	ug/L
Methylene Chloride	MW-335	10/19/2016		.260	.170	ug/L
Xylenes, Total	MW-335	3/07/2017		.173	.130	ug/L
1,1-Dichloroethane	MW-344	3/07/2017		.290	.210	ug/L
1,1-Dichloroethane	MW-344	9/26/2017		.475	.210	ug/L
1,1-Dichloroethane	MW-344	3/14/2018		.474	.210	ug/L
1,1-Dichloroethane	MW-344	9/15/2020		.408	.220	ug/L
1,1-Dichloroethane	MW-344	4/15/2021		.345	.220	ug/L
1,2-Dichloroethane	MW-344	9/26/2017		.207	.180	ug/L
Acetone	MW-344	3/14/2018		3.22	1.79	ug/L
Acetone	MW-344	3/28/2019		3.61	3.10	ug/L
Benzene	MW-344	9/25/2013		.215	.110	ug/L
Benzene	MW-344	4/15/2014		.268	.110	ug/L
Benzene	MW-344	9/26/2014		.198	.110	ug/L
Benzene	MW-344	3/12/2015		.281	.500	ug/L
Benzene	MW-344	10/19/2016		.594	.110	ug/L
Benzene	MW-344	3/07/2017		.543	.110	ug/L
Benzene	MW-344	9/26/2017		.894	.110	ug/L
Benzene	MW-344	3/14/2018		.715	.110	ug/L
Benzene	MW-344	10/02/2018		.732	.220	ug/L
Benzene	MW-344	9/24/2019		.541	.220	ug/L
Benzene	MW-344	9/15/2020		.836	.220	ug/L
Benzene	MW-344	4/15/2021		.722	.220	ug/L
Benzene	MW-344	10/27/2021		.918	.220	ug/L
Benzene	MW-344	4/14/2022		.390	.220	ug/L
Chloroethane	MW-344	9/25/2013		.514	.150	ug/L
Chloroethane	MW-344	9/26/2017		.462	.150	ug/L
cis-1,2-Dichloroethene	MW-344	3/27/2013		.301	.130	ug/L
cis-1,2-Dichloroethene	MW-344	9/25/2013		.976	.130	ug/L
cis-1,2-Dichloroethene	MW-344	4/15/2014		1.300	.130	ug/L
cis-1,2-Dichloroethene	MW-344	9/26/2014		.819	.130	ug/L
cis-1,2-Dichloroethene	MW-344	9/02/2015		1.140	1.000	ug/L
cis-1,2-Dichloroethene	MW-344	3/23/2016		1.120	.010	ug/L
cis-1,2-Dichloroethene	MW-344	10/19/2016		2.040	.130	ug/L
cis-1,2-Dichloroethene	MW-344	3/07/2017		1.820	.130	ug/L
cis-1,2-Dichloroethene	MW-344	9/26/2017		2.480	.130	ug/L
cis-1,2-Dichloroethene	MW-344	3/14/2018		2.240	.130	ug/L
cis-1,2-Dichloroethene	MW-344	10/02/2018		1.900	.210	ug/L
cis-1,2-Dichloroethene	MW-344	3/28/2019		1.180	.210	ug/L
cis-1,2-Dichloroethene	MW-344	9/24/2019		1.820	.210	ug/L
cis-1,2-Dichloroethene	MW-344	3/10/2020		1.360	.210	ug/L
cis-1,2-Dichloroethene	MW-344	9/15/2020		2.440	.210	ug/L
cis-1,2-Dichloroethene	MW-344	4/15/2021		2.020	.210	ug/L
cis-1,2-Dichloroethene	MW-344	10/27/2021		2.180	.210	ug/L
cis-1,2-Dichloroethene	MW-344	4/14/2022		1.270	.210	ug/L
cis-1,2-Dichloroethene	MW-344	9/01/2022		1.900	1.000	ug/L
delta-BHC	MW-344	10/02/2018		.0029	.0025	ug/L
Endosulfan I	MW-344	10/02/2018		.00217	.00217	ug/L
Endrin	MW-344	10/02/2018		.00264	.00207	ug/L
gamma-BHC (Lindane)	MW-344	10/02/2018		.00220	.00207	ug/L
Methylene Chloride	MW-344	10/19/2016		.251	.170	ug/L
Vinyl Chloride	MW-344	9/24/2009		1.110	.000	ug/L
Vinyl Chloride	MW-344	3/25/2010		1.030	.000	ug/L
Vinyl Chloride	MW-344	9/22/2011		1.070	.000	ug/L
Vinyl Chloride	MW-344	3/16/2012		1.270	.000	ug/L
Vinyl Chloride	MW-344	9/20/2012		1.500	.000	ug/L
Vinyl Chloride	MW-344	3/27/2013		1.320	.100	ug/L
Vinyl Chloride	MW-344	9/25/2013		.858	.100	ug/L
Vinyl Chloride	MW-344	4/15/2014		.884	.100	ug/L
Vinyl Chloride	MW-344	9/26/2014		.484	.100	ug/L
Vinyl Chloride	MW-344	3/12/2015		.428	1.000	ug/L
Vinyl Chloride	MW-344	10/19/2016		.587	.100	ug/L
Vinyl Chloride	MW-344	3/07/2017		1.050	.100	ug/L
Vinyl Chloride	MW-344	9/26/2017		.705	.100	ug/L
Vinyl Chloride	MW-344	3/14/2018		.569	.100	ug/L
Vinyl Chloride	MW-344	9/24/2019		.513	.180	ug/L
Vinyl Chloride	MW-344	9/15/2020		.903	.180	ug/L
Vinyl Chloride	MW-344	4/15/2021		.840	.180	ug/L
Vinyl Chloride	MW-344	10/27/2021		.986	.180	ug/L
Vinyl Chloride	MW-344	4/14/2022		.383	.180	ug/L
Dichlorodifluoromethane	MW-345	9/25/2013		1.49	.20	ug/L
Methylene Chloride	MW-345	9/25/2014		.596	.170	ug/L
Acetone	MW-380	3/09/2017		12.20	1.79	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Acetone	MW-380	6/28/2017		4.52	1.79	ug/L
Acetone	MW-380	3/14/2018		2.46	1.79	ug/L
Bromomethane	MW-380	3/14/2018		.31	.22	ug/L
Methylene Chloride	MW-380	10/20/2016		.30	.17	ug/L
Xylenes, Total	MW-380	3/09/2017		.672	.130	ug/L
Acetone	MW-381	9/26/2017		2.94	1.79	ug/L
Acetone	MW-381	3/14/2018		2.87	1.79	ug/L
Bromomethane	MW-381	9/26/2017		.322	.220	ug/L
Bromomethane	MW-381	3/14/2018		.240	.220	ug/L
Methylene Chloride	MW-381	10/19/2016		.283	.170	ug/L
Xylenes, Total	MW-381	10/19/2016		.242	.130	ug/L
Xylenes, Total	MW-381	3/07/2017		.435	.130	ug/L
1,1-Dichloroethane	MW-382R	3/29/2011		2.90	.00	ug/L
1,1-Dichloroethane	MW-382R	6/25/2011		2.87	.00	ug/L
1,1-Dichloroethane	MW-382R	8/08/2011		2.74	.00	ug/L
1,1-Dichloroethane	MW-382R	9/22/2011		2.15	.00	ug/L
1,1-Dichloroethane	MW-382R	12/05/2011		2.98	.00	ug/L
1,1-Dichloroethane	MW-382R	3/16/2012		2.77	.00	ug/L
1,1-Dichloroethane	MW-382R	9/20/2012		2.10	.00	ug/L
1,1-Dichloroethane	MW-382R	3/27/2013		2.43	.21	ug/L
1,1-Dichloroethane	MW-382R	9/25/2013		2.00	.21	ug/L
1,1-Dichloroethane	MW-382R	4/15/2014		3.54	.21	ug/L
1,1-Dichloroethane	MW-382R	9/26/2014		2.00	.21	ug/L
1,1-Dichloroethane	MW-382R	3/12/2015		2.23	1.00	ug/L
1,1-Dichloroethane	MW-382R	9/02/2015		1.62	1.00	ug/L
1,1-Dichloroethane	MW-382R	3/23/2016		1.65	1.00	ug/L
1,1-Dichloroethane	MW-382R	10/19/2016		2.31	.21	ug/L
1,1-Dichloroethane	MW-382R	3/07/2017		1.81	.21	ug/L
1,1-Dichloroethane	MW-382R	9/26/2017		1.93	.21	ug/L
1,1-Dichloroethane	MW-382R	3/14/2018		2.60	.21	ug/L
1,1-Dichloroethane	MW-382R	10/02/2018		1.51	.22	ug/L
1,1-Dichloroethane	MW-382R	3/28/2019		1.60	.22	ug/L
1,1-Dichloroethane	MW-382R	9/24/2019		1.71	.22	ug/L
1,1-Dichloroethane	MW-382R	3/10/2020		1.74	.22	ug/L
1,1-Dichloroethane	MW-382R	9/16/2020		2.00	.22	ug/L
1,1-Dichloroethane	MW-382R	4/15/2021		1.41	.22	ug/L
1,1-Dichloroethane	MW-382R	10/27/2021		1.69	.22	ug/L
1,1-Dichloroethane	MW-382R	4/14/2022		1.09	.22	ug/L
1,1-Dichloroethane	MW-382R	3/06/2023		1.40	1.00	ug/L
Acetone	MW-382R	3/14/2018		2.06	1.79	ug/L
Bromomethane	MW-382R	3/14/2018		.253	.220	ug/L
Chloroethane	MW-382R	9/25/2013		.433	.150	ug/L
cis-1,2-Dichloroethene	MW-382R	3/27/2013		.383	.130	ug/L
cis-1,2-Dichloroethene	MW-382R	9/25/2013		.320	.130	ug/L
cis-1,2-Dichloroethene	MW-382R	4/15/2014		.267	.130	ug/L
cis-1,2-Dichloroethene	MW-382R	9/26/2014		.270	.130	ug/L
cis-1,2-Dichloroethene	MW-382R	10/19/2016		.414	.130	ug/L
cis-1,2-Dichloroethene	MW-382R	3/07/2017		.385	.130	ug/L
cis-1,2-Dichloroethene	MW-382R	9/26/2017		.484	.130	ug/L
cis-1,2-Dichloroethene	MW-382R	3/14/2018		.449	.130	ug/L
cis-1,2-Dichloroethene	MW-382R	10/02/2018		.401	.210	ug/L
cis-1,2-Dichloroethene	MW-382R	3/28/2019		.439	.210	ug/L
cis-1,2-Dichloroethene	MW-382R	9/24/2019		.345	.210	ug/L
cis-1,2-Dichloroethene	MW-382R	9/16/2020		.487	.210	ug/L
cis-1,2-Dichloroethene	MW-382R	4/15/2021		.289	.210	ug/L
cis-1,2-Dichloroethene	MW-382R	10/27/2021		.406	.210	ug/L
cis-1,2-Dichloroethene	MW-382R	4/14/2022		.307	.210	ug/L
Dichlorodifluoromethane	MW-382R	3/16/2012		3.110	.000	ug/L
Dichlorodifluoromethane	MW-382R	3/27/2013		2.400	.200	ug/L
Dichlorodifluoromethane	MW-382R	9/25/2013		2.730	.200	ug/L
Dichlorodifluoromethane	MW-382R	4/15/2014		2.140	.200	ug/L
Dichlorodifluoromethane	MW-382R	9/26/2014		2.700	.200	ug/L
Dichlorodifluoromethane	MW-382R	3/12/2015		1.590	.200	ug/L
Dichlorodifluoromethane	MW-382R	10/19/2016		1.770	.200	ug/L
Dichlorodifluoromethane	MW-382R	3/07/2017		1.860	.200	ug/L
Dichlorodifluoromethane	MW-382R	9/26/2017		.898	.200	ug/L
Dichlorodifluoromethane	MW-382R	3/14/2018		1.110	.200	ug/L
Dichlorodifluoromethane	MW-382R	10/02/2018		.962	.250	ug/L
Methylene Chloride	MW-382R	3/27/2013		.193	.170	ug/L
Methylene Chloride	MW-382R	10/19/2016		.394	.170	ug/L
Methylene Chloride	MW-382R	3/07/2017		.312	.170	ug/L
Vinyl Chloride	MW-382R	9/25/2013		.345	.100	ug/L
Vinyl Chloride	MW-382R	3/14/2018		.296	.100	ug/L
Vinyl Chloride	MW-382R	4/15/2021		.206	.180	ug/L
Vinyl Chloride	MW-382R	10/27/2021		.241	.180	ug/L
Xylenes, Total	MW-382R	9/25/2013		.134	.130	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
Acetonitrile	MW-383	9/26/2013		1170	126	ug/L
Methylene Chloride	MW-383	3/27/2013		.238	.170	ug/L
Methylene Chloride	MW-383	9/25/2014		.424	.170	ug/L
1,2-Dichloroethane	MW-384	3/14/2018		.195	.180	ug/L
Acetone	MW-384	3/09/2017		2.77	1.79	ug/L
Acetone	MW-384	9/27/2017		2.49	1.79	ug/L
Bromomethane	MW-384	10/20/2016		.313	.220	ug/L
Methylene Chloride	MW-384	9/25/2014		.520	.170	ug/L
Methylene Chloride	MW-384	9/27/2017		.292	.170	ug/L
Xylenes, Total	MW-384	9/01/2015		3.000	3.000	ug/L
Xylenes, Total	MW-384	10/20/2016		.707	.130	ug/L
Xylenes, Total	MW-384	3/09/2017		.949	.130	ug/L
Acetone	MW-385	3/08/2017		3.51	1.79	ug/L
Acetone	MW-385	9/27/2017		3.14	1.79	ug/L
Bromomethane	MW-385	10/20/2016		.599	.220	ug/L
Methylene Chloride	MW-385	3/28/2013		.343	.170	ug/L
Methylene Chloride	MW-385	9/25/2014		.448	.170	ug/L
Methylene Chloride	MW-385	10/20/2016		.224	.170	ug/L
Methylene Chloride	MW-385	3/08/2017		.501	.170	ug/L
Methylene Chloride	MW-385	9/27/2017		.380	.170	ug/L
Xylenes, Total	MW-385	10/20/2016		.387	.130	ug/L
Xylenes, Total	MW-385	3/08/2017		.898	.130	ug/L
Xylenes, Total	MW-385	9/27/2017		.164	.130	ug/L
Acetone	MW-390	3/08/2017		7.42	1.79	ug/L
Acetone	MW-390	9/25/2017		2.90	1.79	ug/L
Acetone	MW-390	3/27/2019		3.35	3.10	ug/L
Acetone	MW-390	3/09/2020		5.37	3.10	ug/L
Carbon Disulfide	MW-390	9/25/2017		.177	.150	ug/L
Methylene Chloride	MW-390	10/21/2016		.397	.170	ug/L
Methylene Chloride	MW-390	3/13/2018		.209	.170	ug/L
Xylenes, Total	MW-390	10/21/2016		.464	.130	ug/L
Xylenes, Total	MW-390	3/08/2017		.566	.130	ug/L
Xylenes, Total	MW-390	3/27/2019		1.050	.400	ug/L
Benzene	MW-603	3/10/2020		.312	.220	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 F

Summary Tables and Graphs for the LCL Comparisons – VOCs

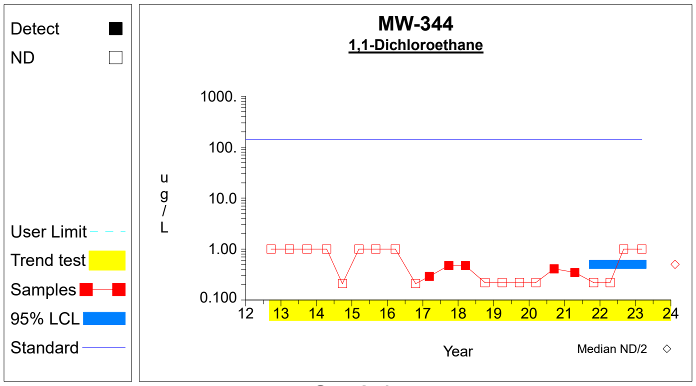
Table 1

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

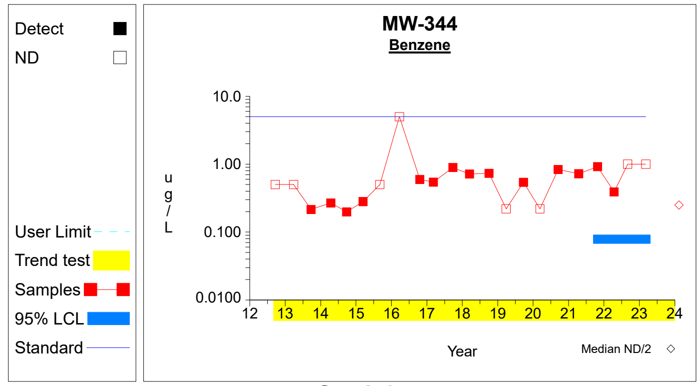
Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend
1,1-Dichloroethane	ug/L	MW-344	4	0.500	0.000	1.176	0.500	0.500	140.000	
Benzene	ug/L	MW-344	4	0.452	0.318	1.176	0.078	0.826	5.000	
cis-1,2-Dichloroethene	ug/L	MW-344	4	1.463	0.746	1.176	0.585	2.340	70.000	
Vinyl Chloride	ug/L	MW-344	4	0.592	0.268	1.176	0.277	0.908	2.000	
1,1-Dichloroethane	ug/L	MW-382R	4	1.170	0.509	1.176	0.571	1.769	140.000	dec
Benzene	ug/L	MW-382R	4	0.110	0.000	1.176	0.110	0.110	5.000	
cis-1,2-Dichloroethene	ug/L	MW-382R	4	0.428	0.092	1.176	0.320	0.537	70.000	
Vinyl Chloride	ug/L	MW-382R	4	0.285	0.029	1.176	0.251	0.320	2.000	

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

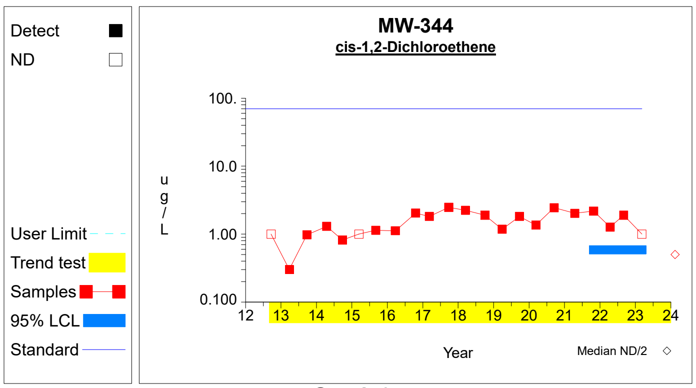
Confidence Limits (Assessment)



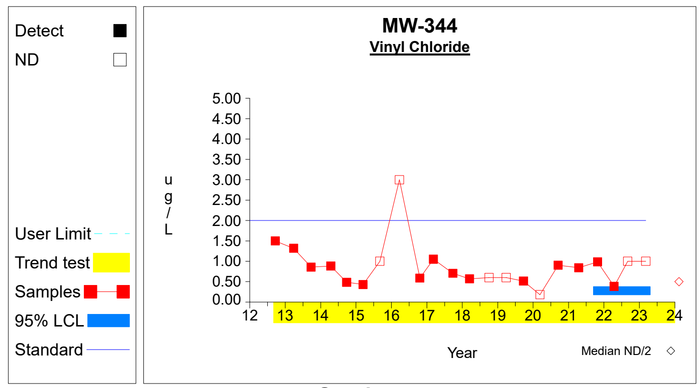
Graph 1



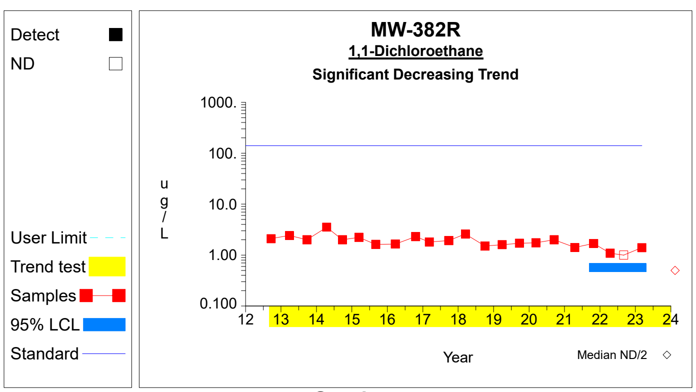
Graph 2



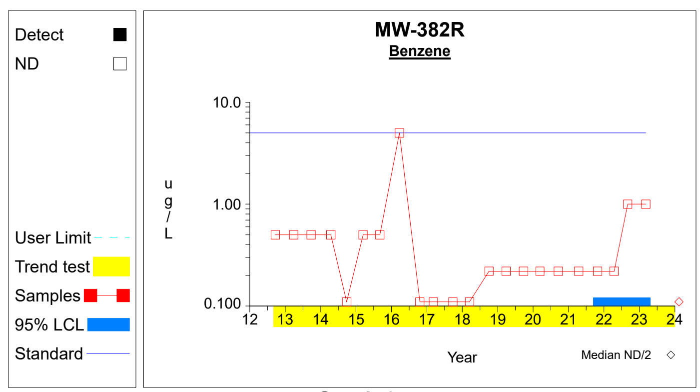
Graph 3



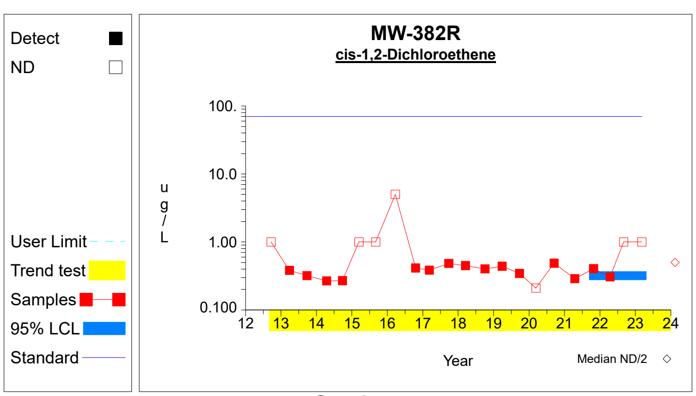
Graph 4



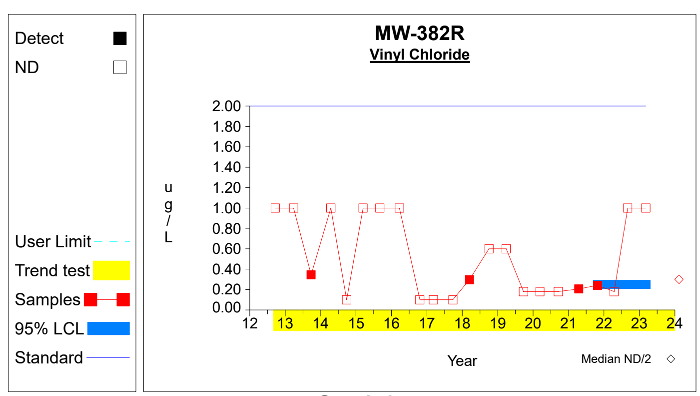
Graph 5



Graph 6



Graph 7



Graph 8

Appendix C.2 – Fall - Otter Creek Statistical Report

Results of the Ground Water Statistics

for South Central Iowa Solid Waste Agency Landfill

Second Semi-Annual Monitoring Events in 2023

Prepared for:
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December 2023

INTRODUCTION

This report contains the results of the statistical analyses used to evaluate the ground water data obtained during the second semi-annual monitoring event in 2023 at the South Central Iowa Solid Waste Agency (SCISWA) Landfill. The ground water monitoring wells were sampled on September 29, 2023 and analyzed for the parameters required by permit. 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. Both intrawell and interwell methodologies are described and then applied to the SCISWA Landfill data. The statistical plan conforms with IAC 567, Chapter 113.10, USEPA Guidance document ("*Statistical Analysis of Ground-Water Monitoring Data at RCRA Facilities, Unified Guidance*", March 2009), and the American Society for Testing and Materials (ASTM) standard D6312-98, *Developing Appropriate Statistical Approaches for Ground-Water Detection Monitoring Programs*.

Ground Water Monitoring Program

The groundwater monitoring network for SCISWA Landfill includes wells MW-300, MW-303, MW-304, MW-307 (upgradient), MW-312 (upgradient), MW-313, MW-335, MW-344, MW-380, MW-381, MW-382R, MW-384, MW-385, MW-390 (upgradient), MW-601, MW-602, and MW-603. An underdrain (GU-4A) and surface water sample point (SW-1) are also available. Each of the groundwater monitoring wells is to be sampled at least semiannually and analyzed for the detection monitoring parameters listed below.

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 events in 2023 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. Both of these methods were applied to the SCISWA Landfill data using the DUMPStat® statistical program. DUMPStat® is a program for the statistical analysis of groundwater monitoring data using methods described in "Statistical Methods for Groundwater Monitoring" by Dr. Robert D. Gibbons. The DUMPStat program is consistent with all USEPA regulations and guidance and the ASTM D6312-98 guidance. Ground water statistics are to be done on the constituents listed.

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 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 detection monitoring constituents were evaluated using the combined Shewhart-CUSUM control chart method. The background used to determine control limits includes the data obtained from September 2012 through 2021. A summary of the intrawell statistics is included in Attachment B, 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 most current data, the control limit exceedances detected are summarized in the table below.

Control Limit Exceedances at SCISWA Landfill during the Second Semi-Annual Monitoring Event in 2023

Well	Parameter	Result	CUSUM Value	Control Limit	Prediction Limit Type	Verified/ Awaiting verification
MW-300	Cobalt, µg/L	881	830.9205	653.2496	Normal	Awaiting verification
	Nickel, µg/L	955	1080.3264	535.6816	Normal	Awaiting verification
	Selenium, µg/L	4.5	--	3.3400	Nonparametric	Awaiting verification
MW-307	Antimony, µg/L	4.4	--	1.0000	Nonparametric	Awaiting verification
	Arsenic, µg/L	31.9	30.9224	10.7959	Normal	Awaiting verification
	Copper, µg/L	4.2	--	2.1900	Nonparametric	Awaiting verification
MW-312	Barium, µg/L	22.9	35.4942	33.6507	Normal	Awaiting verification

An increasing trend was detected in the background data for nickel at MW-335.

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. The site-wide false positive rate is 19% and the test becomes sensitive to 3 standard deviation units over background.

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.

<u>Results of the Interwell Statistics</u>

The background data used in this statistical analysis includes the ground water data collected from ground water wells MW-307, MW-312, and MW-390 during the period from September 2012 through the current data. A summary of the background data from monitoring wells MW-307, MW-312, and MW-390 is listed in Attachment C, 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-300, MW-303, MW-304, MW-313, MW-335, MW-344, MW-380, MW-381, MW-382R, MW-384, and MW-385, compared to the site prediction limits. Prediction limit exceedances are flagged with asterisks. For the most current data, the site prediction limit exceedances detected are summarized in the table below.

Prediction Limit Exceedances during the Second Semi-Annual Monitoring Event in 2023

Well	Parameter	Result	Prediction Limit	Prediction Limit Type	Verified/ Awaiting verification
MW-300	Cobalt, µg/L	881	139.7010	Normal	Verified
	Nickel, µg/L	955	147.4121	Normal	Verified
MW-304	Barium, µg/L	61.0	49.9000	Nonparametric	Verified
MW-344	Cobalt, µg/L	151	139.7010	Normal	Verified
MW-380	Beryllium, µg/L	5.0	1.0000	Nonparametric	Verified
	Cadmium, µg/L	9.2	1.1900	Nonparametric	Verified
	Cobalt, µg/L	1130	139.7010	Normal	Verified
	Nickel, µg/L	1410	147.4121	Normal	Verified
	Selenium, µg/L	9.6	6.4000	Nonparametric	Verified

The detection frequencies of the parameters in the up and down gradient monitoring wells are summarized in Table 3. Table 4 summarizes the results of the Shapiro-Wilk test. Table 5 is a summary of the statistics and prediction limits determined. 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 2% and the test becomes sensitive to 4 standard deviation unit increases over background.

The trace metals which have exceeded ground water protection standards (GWPS) or verified statistical exceedances were evaluated against the GWPS using confidence limits (Attachment D). The 95% lower confidence limit (LCL) for the mean of the historical data was used to evaluate whether the regulated unit is in compliance with the GWPS 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-303 (8.548 µg/L) exceeded the GWPS of 2.1 µg/L.
The 95% LCL for cobalt at MW-307 (35.501 µg/L) exceeded the GWPS of 2.1 µg/L.
The 95% LCL for cobalt at MW-312 (35.433 µg/L) exceeded the GWPS of 2.1 µg/L.
The 95% LCL for cobalt at MW-335 (32.646 µg/L) exceeded the GWPS of 2.1 µg/L.
The 95% LCL for cobalt at MW-344 (146.219 µg/L) exceeded the GWPS of 2.1 µg/L.
The 95% LCL for nickel at MW-344 (112.645 µg/L) exceeded the GWPS of 100 µg/L.
The 95% LCL for cobalt at MW-380 (399.720 µg/L) exceeded the GWPS of 2.1 µg/L.
The 95% LCL for nickel at MW-380 (558.299 µg/L) exceeded the GWPS of 100 µg/L.
The 95% LCL for cobalt at MW-384 (9.466 µg/L) exceeded the GWPS of 2.1 µg/L.
The 95% LCL for cobalt at MW-385 (2.987 µg/L) exceeded the GWPS of 2.1 µg/L.

The 95% LCL for cobalt at MW-390 (96.854 μg/L) exceeded the GWPS of 2.1 μg/L.
The 95% LCL for cobalt at MW-300 (123.113 μg/L) exceeded the GWPS of 2.1 μg/L.

The calculated 95% LCL for the remainder of the verified exceedances did not exceed GWPS.

Volatile Organic Compounds

Volatile Organic Compounds (VOCs) are generally man-made compounds not present in ambient ground water. If VOCs are detected above their statistical limit (i.e., the laboratory PQL or reporting limit), a verification resample will be conducted at the next scheduled sampling event. A statistical exceedance will be indicated if the VOC detection is confirmed by the subsequent monitoring. VOCs detected in the ground water at SCISWA Landfill during the second semi-annual monitoring event in 2023 are summarized below. Historical VOC detections are summarized in Attachment E.

Organic compounds detected during the second semi-annual monitoring event in 2023

Well	VOC Detected	Result, μg/L	Reporting Limit, μg/L	Verified/ Awaiting Verification	Groundwater Standard, μg/L
MW-344	Benzene	1.1	1	Awaiting Verification	5
	cis-1,2-Dichloroethene	2.4	1	Awaiting Verification	70
MW-382R	Bis(2-ethylhexyl)phthalate	16.0	6	Awaiting Verification	6

The VOCs detections did not exceed GWPS. The verified VOC detections were evaluated against the GWPS using confidence limits (Attachment F). The analysis was conducted to evaluate whether verified concentrations are significantly above the water quality standard. The calculated LCLs for historically detected VOCs are below the respective GWPS.

Attachment A

Ground Water Data

Table 1

Analytical Data Summary for 9/29/2023

Constituents	Units	MW-300	MW-303	MW-304	MW-307	MW-312	MW-313	MW-335	MW-344	MW-380
(3 4)-Methylphenol	ug/L								<8	
1,1,1,2-Tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloropropene	ug/L								<1	
1,2,3-Trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-Tetrachlorobenzene	ug/L								<8	
1,2,4-Trichlorobenzene	ug/L								<1	
1,2-Dibromo-3-chloropropane	ug/L	<5	<5	<5	<5	<5	<5	<5	<1	<5
1,2-Dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-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
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	ug/L	<10	<10	<10	<10	<10	<10	<10	<5	<10
2-Chloronaphthalene	ug/L								<8	
2-Chlorophenol	ug/L								<8	
2-Hexanone	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-Methylnaphthalene	ug/L								<8	
2-Methylphenol	ug/L								<8	
2-Naphthylamine	ug/L								<8	
2-Nitroaniline	ug/L								<8	
2-Nitrophenol	ug/L								<8	
3,3'-Dichlorobenzidine	ug/L								<8	
3,3-Dimethylbenzidine	ug/L								<8	
3-Methylcholanthrene	ug/L								<8	
3-Nitroaniline	ug/L								<8	
4,4`-DDD	ug/L								<.05	
4,4`-DDE	ug/L								<.05	
4,4`-DDT	ug/L								<.05	
4,6-Dinitro-2-methylphenol	ug/L								<8	
4-Aminobiphenyl	ug/L								<8	
4-Bromophenyl phenyl ether	ug/L								<8	
4-Chloro-3-methylphenol	ug/L								<8	
4-Chloroaniline	ug/L								<8	
4-Chlorophenyl phenyl ether	ug/L								<8	
4-Methyl-2-pentanone	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-Nitroaniline	ug/L								<8	
4-Nitrophenol	ug/L								<8	
5-Nitro-o-toluidine	ug/L								<8	
7,12-Dimethylbenz(a)anthracene	ug/L								<8	
Acenaphthene	ug/L								<8	
Acenaphthylene	ug/L								<8	
Acetone	ug/L	<10	<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	<5
Aldrin	ug/L								<.05	
Alkalinity as CaCO3	mg/L	172	536	343	84	312	478	558	219	<10
Allyl Chloride	ug/L								<1	
alpha-BHC	ug/L								<.05	

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

Table 1

Analytical Data Summary for 9/29/2023

Constituents	MW-381	MW-382R	MW-384	MW-385	MW-390	MW-601	MW-602	MW-603
(3 4)-Methylphenol		<8						
1,1,1,2-Tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-Trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-Tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-Trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1
1,1-Dichloropropene		<1						
1,2,3-Trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-Tetrachlorobenzene		<8						
1,2,4-Trichlorobenzene		<1						
1,2-Dibromo-3-chloropropane	<5	<1	<5	<5	<5	<5	<5	<5
1,2-Dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1
1,2-Dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1
1,2-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	<10	<5	<10	<10	<10	<10	<10	<10
2-Chloronaphthalene		<8						
2-Chlorophenol		<8						
2-Hexanone	<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	<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	263	379	125	515	250	155	94	410
Allyl Chloride		<1						
alpha-BHC		<.05						

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

Table 1

Analytical Data Summary for 9/29/2023

Constituents	Units	MW-300	MW-303	MW-304	MW-307	MW-312	MW-313	MW-335	MW-344	MW-380
Aluminum	ug/L	663	76	<50	695	53	115	342	110	14500
Anthracene	ug/L								<8	
Antimony	ug/L	<2.0	<2.0	<2.0	4.4	<2.0	<2.0	<2.0	<2.0	<2.0
Arsenic	ug/L	<4.0	<4.0	<4.0	31.9	<4.0	12.2	5.1	<4.0	4.6
Azobenzene	ug/L								<8	
Barium	ug/L	11.3	35.5	61.0	21.8	22.9	26.8	11.6	12.2	9.7
Benzene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.1	<1.0
Benzo[a]anthracene	ug/L								<8	
Benzo[a]pyrene	ug/L								<8	
Benzo[b]fluoranthene	ug/L								<8	
Benzo[ghi]perylene	ug/L								<8	
Benzo[k]fluoranthene	ug/L								<8	
Benzyl alcohol	ug/L								<8	
Beryllium	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	5
beta-BHC	ug/L								<.05	
Bis(2-chloroethoxy)methane	ug/L								<8	
Bis(2-chloroethyl)ether	ug/L								<8	
Bis(2-ethylhexyl)phthalate	ug/L								<6	
Bis[2-Chloroisopropyl]ether	ug/L								<8	
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<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
Butylbenzylphthalate	ug/L								<8	
Cadmium	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	9.2
Carbon Disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon Tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane	ug/L								<.1	
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate	ug/L								<8	
Chlorodibromomethane	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
Chloroprene	ug/L								<1	
Chromium	ug/L	<8	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene	ug/L								<8	
cis-1,2-Dichloroethene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.4	<1.0
cis-1,3-Dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt	ug/L	881.0	17.5	7.1	36.6	42.9	.8	39.7	151.0	1130.0
Copper	ug/L	<4.0	<4.0	<4.0	4.2	<4.0	<4.0	<4.0	<4.0	<4.0
Cyanide	mg/L								<.005	
delta-BHC	ug/L								<.05	
Diallate	ug/L								<8	
Dibenzo(a,h)anthracene	ug/L								<8	
Dibenzofuran	ug/L								<8	
Dibromomethane	ug/L	<1	<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	
Dimethyl phthalate	ug/L								<8	
Di-n-butyl phthalate	ug/L								<8	
Di-n-octyl phthalate	ug/L								<8	
Dinoseb	ug/L								<.5	
Diphenylamine	ug/L								<8	
Disulfoton	ug/L								<.4	
Endosulfan I	ug/L								<.05	
Endosulfan II	ug/L								<.05	
Endosulfan Sulfate	ug/L								<.05	
Endrin	ug/L								<.05	
Endrin Aldehyde	ug/L								<.05	
Ethyl Methacrylate	ug/L								<10	
Ethyl Methanesulfonate	ug/L								<8	
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Famphur	ug/L								<.4	
Fluoranthene	ug/L								<8	
Fluorene	ug/L								<8	
gamma-BHC (Lindane)	ug/L								<.05	
Heptachlor	ug/L								<.05	
Heptachlor Epoxide	ug/L								<.05	
Hexachlorobenzene	ug/L								<.05	
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	

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

Table 1

Analytical Data Summary for 9/29/2023

Constituents	MW-381	MW-382R	MW-384	MW-385	MW-390	MW-601	MW-602	MW-603
Aluminum	351	135	117	269	232	116	182	128
Anthracene		<8						
Antimony	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Arsenic	<4.0	<4.0	<4.0	<4.0	16.0	<4.0	<4.0	4.9
Azobenzene		<8						
Barium	16.8	28.0	10.0	15.1	12.9	18.1	12.4	22.5
Benzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo[a]anthracene		<8						
Benzo[a]pyrene		<8						
Benzo[b]fluoranthene		<8						
Benzo[ghi]perylene		<8						
Benzo[k]fluoranthene		<8						
Benzyl alcohol		<8						
Beryllium	<4	<4	<4	<4	<4	<4	<4	<4
beta-BHC		<.05						
Bis(2-chloroethoxy)methane		<8						
Bis(2-chloroethyl)ether		<8						
Bis(2-ethylhexyl)phthalate		16						
Bis[2-Chloroisopropyl]ether		<8						
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1
Butylbenzylphthalate		<8						
Cadmium	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon Disulfide	<1	<1	<1	<1	<1	<1	<1	<1
Carbon Tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane		<.1						
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate		<8						
Chlorodibromomethane	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene		<1						
Chromium	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene		<8						
cis-1,2-Dichloroethene	<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	2.1	1.5	14.6	6.7	96.9	183.0	203.0	12.5
Copper	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Cyanide		<.005						
delta-BHC		<.05						
Diallate		<8						
Dibenzo(a,h)anthracene		<8						
Dibenzofuran		<8						
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane		<1						
Dieldrin		<.05						
Diethyl phthalate		<8						
Dimethoate		<.4						
Dimethyl phthalate		<8						
Di-n-butyl phthalate		<8						
Di-n-octyl phthalate		<8						
Dinoseb		<.5						
Diphenylamine		<8						
Disulfoton		<.4						
Endosulfan I		<.05						
Endosulfan II		<.05						
Endosulfan Sulfate		<.05						
Endrin		<.05						
Endrin Aldehyde		<.05						
Ethyl Methacrylate		<10						
Ethyl Methanesulfonate		<8						
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1
Famphur		<.4						
Fluoranthene		<8						
Fluorene		<8						
gamma-BHC (Lindane)		<.05						
Heptachlor		<.05						
Heptachlor Epoxide		<.05						
Hexachlorobenzene		<.05						
Hexachlorobutadiene		<8						
Hexachlorocyclopentadiene		<8						
Hexachloroethane		<8						
Hexachloropropene		<8						
Indeno[1,2,3-cd]pyrene		<8						

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

Table 1

Analytical Data Summary for 9/29/2023

Constituents	Units	MW-300	MW-303	MW-304	MW-307	MW-312	MW-313	MW-335	MW-344	MW-380
Iodomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<2	<1
Iron	ug/L	116000	1360	3780	266000	800	39400	11000	8330	435000
Isobutanol	ug/L								<1000	
Isodrin	ug/L								<8	
Isophorone	ug/L								<8	
Isosafrole	ug/L								<8	
Kepone	ug/L								<8	
Lead	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Mercury	ug/L								<.5	
Methacrylonitrile	ug/L								<1	
Methapyrilene	ug/L								<8	
Methoxychlor	ug/L								<.05	
Methyl Methacrylate	ug/L								<1	
Methyl Methanesulfonate	ug/L								<8	
Methyl Parathion	ug/L								<.4	
Methylene Chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene	ug/L								<8	
Nickel	ug/L	955.0	41.5	5.5	68.1	72.1	4.0	38.9	124.0	1410.0
Nitrobenzene	ug/L								<8	
N-Nitrosodiethylamine	ug/L								<8	
N-Nitrosodimethylamine	ug/L								<8	
N-Nitrosodi-n-butylamine	ug/L								<8	
N-Nitrosodi-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-Triethylphosphorothioate	ug/L								<.4	
o-Toluidine	ug/L								<8	
p-[Dimethylamino]azobenzene	ug/L								<8	
Parathion	ug/L								<.4	
PCB-1016	ug/L								<.2	
PCB-1221	ug/L								<.2	
PCB-1232	ug/L								<.2	
PCB-1242	ug/L								<.2	
PCB-1248	ug/L								<.2	
PCB-1254	ug/L								<.2	
PCB-1260	ug/L								<.2	
Pentachlorobenzene	ug/L								<8	
Pentachloronitrobenzene	ug/L								<8	
Pentachlorophenol	ug/L								<8	
pH	SU	5.8	6.4	6.8	5.6	6.1	6.9	6.2	5.8	4.8
Phenacetin	ug/L								<8	
Phenanthrene	ug/L								<8	
Phenol	ug/L								<8	
Phorate	ug/L								<.4	
Pronamide	ug/L								<8	
Propionitrile	ug/L								<10	
Pyrene	ug/L								<8	
Safrole	ug/L								<8	
Selenium	ug/L	4.5	<4.0	<4.0	6.4	<4.0	<4.0	<4.0	<4.0	9.6
Silver	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate	mg/L	3280.0	272.0	92.6	1980.0	422.0	387.0	2650.0	2160.0	3450.0
Tetrachloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Thionazin	ug/L								<.4	
Tin	ug/L								<20	
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene	ug/L								<.2	
trans-1,2-Dichloroethene	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
Trichloroethene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium	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	ug/L	925.0	<20.0	<20.0	383.0	<20.0	<20.0	41.6	<20.0	4800.0

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

Table 1

Analytical Data Summary for 9/29/2023

Constituents	MW-381	MW-382R	MW-384	MW-385	MW-390	MW-601	MW-602	MW-603
Iodomethane	<1	<2	<1	<1	<1	<1	<1	<1
Iron	287	<100	103000	67600	132000	60000	51800	49800
Isobutanol		<1000						
Isodrin		<8						
Isophorone		<8						
Isosafrole		<8						
Kepone		<8						
Lead	<4	<4	<4	<4	<4	<4	<4	<4
Mercury		<.5						
Methacrylonitrile		<1						
Methapyrilene		<8						
Methoxychlor		<.05						
Methyl Methacrylate		<1						
Methyl Methanesulfonate		<8						
Methyl Parathion		<.4						
Methylene Chloride	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene		<8						
Nickel	5.3	6.1	54.4	43.6	50.0	243.0	289.0	5.2
Nitrobenzene		<8						
N-Nitrosodiethylamine		<8						
N-Nitrosodimethylamine		<8						
N-Nitrosodi-n-butylamine		<8						
N-Nitrosodi-n-propylamine		<8						
N-Nitrosodiphenylamine		<8						
N-Nitrosomethylethylamine		<8						
N-Nitrosopiperidine		<8						
N-Nitrosopyrrolidine		<8						
o,o,o-Triethylphosphorothioate		<.4						
o-Toluidine		<8						
p-[Dimethylamino]azobenzene		<8						
Parathion		<.4						
PCB-1016		<.2						
PCB-1221		<.2						
PCB-1232		<.2						
PCB-1242		<.2						
PCB-1248		<.2						
PCB-1254		<.2						
PCB-1260		<.2						
Pentachlorobenzene		<8						
Pentachloronitrobenzene		<8						
Pentachlorophenol		<8						
pH	6.6	6.5	5.8	6.6	5.9	6.2	5.6	6.4
Phenacetin		<8						
Phenanthrene		<8						
Phenol		<8						
Phorate		<.4						
Pronamide		<8						
Propionitrile		<10						
Pyrene		<8						
Safrole		<8						
Selenium	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Silver	<4	<4	<4	<4	<4	<4	<4	<4
Styrene	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate	777.0	1090.0	2450.0	2140.0	1940.0	2260.0	1870.0	2300.0
Tetrachloroethene	<1	<1	<1	<1	<1	<1	<1	<1
Thallium	<2	<2	<2	<2	<2	<2	<2	<2
Thionazin		<.4						
Tin		<20						
Toluene	<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene		<.2						
trans-1,2-Dichloroethene	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,3-Dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1
trans-1,4-Dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethene	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium	<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	32.4	<20.0	20.3	44.2	122.0	70.4	120.0	<20.0

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

Attachment B

Summary Tables and Graphs for the Intrawell Comparisons

Table 1

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

Constituent	Units	Well	N(back)	N(mon)	N(tot)	Mean	SD	R(i-1)	R(i)	S(i-1)	S(i)	Limit	Type	Conf	
Antimony	ug/L	MW-300	19	4	35			2.0000	2.0000			1.0000	nonpar	.99	**
Arsenic	ug/L	MW-300	19	4	35	2.0375	0.4972	4.0000	4.0000	2.0375	2.0375	4.7721	normal		
Barium	ug/L	MW-300	18	4	35	13.0861	1.9733	13.4000	11.3000	13.0861	13.0861	23.9395	normal		
Beryllium	ug/L	MW-300	19	4	35			4.0000	4.0000			0.5300	nonpar	.99	**
Cadmium	ug/L	MW-300	19	4	35	0.7042	1.8006	0.8000	0.8000	0.7042	0.7042	10.6077	normal		
Chromium	ug/L	MW-300	19	4	35			8.0000	8.0000			3.6900	nonpar	.99	**
Cobalt	ug/L	MW-300	18	4	35	286.0000	66.7727	294.0000	881.0000	286.0000	830.9205	653.2496	normal		
Copper	ug/L	MW-300	19	4	35			4.0000	4.0000			32.0000	nonpar	.99	**
Lead	ug/L	MW-300	19	4	35	0.6372	0.3297	4.0000	4.0000	0.6372	0.6372	2.4507	normal		
Nickel	ug/L	MW-300	19	4	35	228.5053	55.8503	343.0000	955.0000	395.7194	1080.3264	535.6816	normal		
Selenium	ug/L	MW-300	19	4	35			4.0000	4.5000			3.3400	nonpar	.99	**
Silver	ug/L	MW-300	19	4	35			4.0000	4.0000			0.5600	nonpar	.99	**
Thallium	ug/L	MW-300	19	4	35	0.2528	0.0475	2.0000	2.0000	0.2528	0.2528	0.5139	normal		
Vanadium	ug/L	MW-300	19	4	35			20.0000	20.0000			2.1500	nonpar	.99	**
Zinc	ug/L	MW-300	19	4	35	244.3421	255.4130	122.0000	925.0000	724.5384	1213.6366	1649.1135	normal		
Antimony	ug/L	MW-303	18	4	35			2.0000	2.0000			0.5300	nonpar	.99	**
Arsenic	ug/L	MW-303	19	4	35	1.0109	0.4638	4.0000	4.0000	1.0109	1.0109	3.5619	normal		
Barium	ug/L	MW-303	19	4	35	48.5000	23.8902	73.9000	35.5000	55.9824	48.5000	179.8960	normal		
Beryllium	ug/L	MW-303	19	4	35			4.0000	4.0000			0.2700	nonpar	.99	**
Cadmium	ug/L	MW-303	19	4	35			0.8000	0.8000			0.1000	nonpar	.99	**
Chromium	ug/L	MW-303	18	4	35			8.0000	8.0000			4.7600	nonpar	.99	**
Cobalt	ug/L	MW-303	19	4	35	18.4263	3.4367	27.9000	17.5000	25.3225	21.8186	37.3282	normal		
Copper	ug/L	MW-303	18	4	35			4.0000	4.0000			2.0000	nonpar	.99	**
Lead	ug/L	MW-303	19	4	35	0.4141	0.6266	4.0000	4.0000	0.4141	0.4141	3.8603	normal		
Nickel	ug/L	MW-303	19	4	35	38.9368	11.8360	28.6000	41.5000	38.9368	38.9368	104.0349	normal		
Selenium	ug/L	MW-303	19	4	35			4.0000	4.0000			1.0000	nonpar	.99	**
Silver	ug/L	MW-303	19	4	35			4.0000	4.0000			0.3700	nonpar	.99	**
Thallium	ug/L	MW-303	19	4	35			2.0000	2.0000			0.9040	nonpar	.99	**
Vanadium	ug/L	MW-303	19	4	35			20.0000	20.0000			8.7300	nonpar	.99	**
Zinc	ug/L	MW-303	19	4	35	24.8742	44.8621	20.0000	20.0000	24.8742	24.8742	271.6156	normal		
Antimony	ug/L	MW-304	14	4	18			2.0000	2.0000			0.8160	nonpar	.99	**
Arsenic	ug/L	MW-304	14	4	18	2.2164	2.2660	4.0000	4.0000	2.2164	2.2164	14.6794	normal		
Barium	ug/L	MW-304	14	4	18	66.5214	19.1409	66.5000	61.0000	66.5214	66.5214	171.7966	normal		
Beryllium	ug/L	MW-304	14	4	18			4.0000	4.0000			0.2210	nonpar	.99	**
Cadmium	ug/L	MW-304	14	4	18			0.8000	0.8000			0.3710	nonpar	.99	**
Chromium	ug/L	MW-304	14	4	18			8.0000	8.0000			1.2800	nonpar	.99	**
Cobalt	ug/L	MW-304	13	4	18	8.1031	3.3997	4.4000	7.1000	17.2445	13.6917	26.8014	normal		
Copper	ug/L	MW-304	14	4	18			4.0000	4.0000			2.8700	nonpar	.99	**
Lead	ug/L	MW-304	14	4	18			4.0000	4.0000			0.7370	nonpar	.99	**
Nickel	ug/L	MW-304	13	4	18	6.1354	2.3844	4.1000	5.5000	6.1354	6.1354	19.2496	normal		
Selenium	ug/L	MW-304	14	4	18			4.0000	4.0000			1.2400	nonpar	.99	**
Silver	ug/L	MW-304	14	4	18			4.0000	4.0000			0.1800	nonpar	.99	**
Thallium	ug/L	MW-304	14	4	18			2.0000	2.0000			0.2600	nonpar	.99	**
Vanadium	ug/L	MW-304	14	4	18			20.0000	20.0000			0.8400	nonpar	.99	**
Zinc	ug/L	MW-304	12	4	18	9.8533	1.6475	20.0000	20.0000	9.8533	9.8533	18.9147	normal		
Antimony	ug/L	MW-307	17	4	32			2.0000	4.4000			1.0000	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.

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	
Arsenic	ug/L	MW-307	17	4	32	3.2082	1.3796	4.3000	31.9000	3.2653	30.9224	10.7959	normal		
Barium	ug/L	MW-307	16	4	32	9.4050	2.3782	8.9000	21.8000	9.4050	20.0164	22.4849	normal		
Beryllium	ug/L	MW-307	17	4	32	0.6852	0.2854	4.0000	4.0000	0.6852	0.6852	2.2551	normal		
Cadmium	ug/L	MW-307	17	4	32	0.2898	0.2332	0.8000	0.8000	0.2898	0.2898	1.5724	normal		
Chromium	ug/L	MW-307	17	4	32			8.0000	8.0000			1.6000	nonpar	.99	**
Cobalt	ug/L	MW-307	16	4	32	54.4500	12.2189	48.5000	36.6000	54.4500	54.4500	121.6539	normal		
Copper	ug/L	MW-307	17	4	32			4.0000	4.2000			2.1900	nonpar	.99	**
Lead	ug/L	MW-307	17	4	32			4.0000	4.0000			0.7700	nonpar	.99	**
Nickel	ug/L	MW-307	17	4	32	85.1118	22.4967	83.7000	68.1000	85.1118	85.1118	208.8434	normal		
Selenium	ug/L	MW-307	17	4	32	2.8825	1.4130	4.0000	6.4000	2.8825	5.3403	10.6538	normal		
Silver	ug/L	MW-307	15	4	32			4.0000	4.0000			0.4200	nonpar	.99	**
Thallium	ug/L	MW-307	17	4	32			2.0000	2.0000			0.2700	nonpar	.99	**
Vanadium	ug/L	MW-307	16	4	32			20.0000	20.0000			1.1000	nonpar	.99	**
Zinc	ug/L	MW-307	16	4	32	421.3125	117.2108	324.0000	383.0000	421.3125	421.3125	1065.9717	normal		
Antimony	ug/L	MW-312	19	4	23			2.0000	2.0000			1.0000	nonpar	.99	**
Arsenic	ug/L	MW-312	19	4	23	1.2584	0.4060	4.0000	4.0000	1.2584	1.2584	3.4916	normal		
Barium	ug/L	MW-312	19	4	23	14.3563	3.5081	25.3000	22.9000	29.5816	35.4942	33.6507	normal		
Beryllium	ug/L	MW-312	19	4	23	0.4429	0.1366	4.0000	4.0000	0.4429	0.4429	1.1944	normal		
Cadmium	ug/L	MW-312	19	4	23			0.8000	0.8000			0.2460	nonpar	.99	**
Chromium	ug/L	MW-312	19	4	23			8.0000	8.0000			3.9000	nonpar	.99	**
Cobalt	ug/L	MW-312	19	4	23	36.5316	8.3421	44.8000	42.9000	38.5435	38.6553	82.4129	normal		
Copper	ug/L	MW-312	19	4	23			4.0000	4.0000			2.1900	nonpar	.99	**
Lead	ug/L	MW-312	19	4	23			4.0000	4.0000			1.6700	nonpar	.99	**
Nickel	ug/L	MW-312	19	4	23	102.1684	22.8484	64.8000	72.1000	102.1684	102.1684	227.8348	normal		
Selenium	ug/L	MW-312	19	4	23			4.0000	4.0000			1.0000	nonpar	.99	**
Silver	ug/L	MW-312	19	4	23			4.0000	4.0000			0.4200	nonpar	.99	**
Thallium	ug/L	MW-312	19	4	23			2.0000	2.0000			0.2700	nonpar	.99	**
Vanadium	ug/L	MW-312	19	4	23			20.0000	20.0000			1.1000	nonpar	.99	**
Zinc	ug/L	MW-312	19	4	23	32.0316	50.1704	20.0000	20.0000	32.0316	32.0316	307.9690	normal		
Antimony	ug/L	MW-313	18	4	35			2.0000	2.0000			1.0000	nonpar	.99	**
Arsenic	ug/L	MW-313	19	4	35	5.6137	6.0073	4.9000	12.2000	5.6137	7.6945	38.6537	normal		
Barium	ug/L	MW-313	19	4	35	25.9579	12.4960	22.6000	26.8000	25.9579	25.9579	94.6857	normal		
Beryllium	ug/L	MW-313	19	4	35			4.0000	4.0000			0.2700	nonpar	.99	**
Cadmium	ug/L	MW-313	19	4	35	0.1401	0.0446	0.8000	0.8000	0.1401	0.1401	0.3855	normal		
Chromium	ug/L	MW-313	19	4	35			8.0000	8.0000			2.9800	nonpar	.99	**
Cobalt	ug/L	MW-313	19	4	35	13.8165	16.6174	1.4000	0.8000	13.8165	13.8165	105.2120	normal		
Copper	ug/L	MW-313	19	4	35			4.0000	4.0000			2.9900	nonpar	.99	**
Lead	ug/L	MW-313	19	4	35	0.4094	0.2358	4.0000	4.0000	0.4094	0.4094	1.7062	normal		
Nickel	ug/L	MW-313	19	4	35	29.2011	22.2832	19.8000	4.0000	29.2011	29.2011	151.7589	normal		
Selenium	ug/L	MW-313	19	4	35			4.0000	4.0000			1.0000	nonpar	.99	**
Silver	ug/L	MW-313	19	4	35			4.0000	4.0000			0.3700	nonpar	.99	**
Thallium	ug/L	MW-313	19	4	35			2.0000	2.0000			0.2600	nonpar	.99	**
Vanadium	ug/L	MW-313	19	4	35	16.3084	20.8998	20.0000	20.0000	16.3084	16.3084	131.2575	normal		
Zinc	ug/L	MW-313	19	4	35	21.4774	25.4503	20.0000	20.0000	21.4774	21.4774	161.4540	normal		
Antimony	ug/L	MW-335	20	4	36			2.0000	2.0000			0.7400	nonpar	.99	**
Arsenic	ug/L	MW-335	20	4	36	2.1758	1.7303	16.9000	5.1000	21.6552	9.8552	11.6924	normal		

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

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	
Barium	ug/L	MW-335	20	4	36	13.0605	3.6877	17.0000	11.6000	14.2342	13.0605	33.3427	normal		
Beryllium	ug/L	MW-335	20	4	36	0.4493	0.1047	4.0000	4.0000	0.4493	0.4493	1.0249	normal		
Cadmium	ug/L	MW-335	20	4	36	0.2887	0.1722	0.8000	0.8000	0.2887	0.2887	1.2355	normal		
Chromium	ug/L	MW-335	19	4	36			8.0000	8.0000			2.9300	nonpar	.99	**
Cobalt	ug/L	MW-335	17	4	36	62.7588	24.7589	68.2000	39.7000	62.7588	62.7588	198.9330	normal		
Copper	ug/L	MW-335	20	4	36			4.7000	4.0000			2.0000	nonpar	.99	**
Lead	ug/L	MW-335	20	4	36	0.3620	0.2657	4.0000	4.0000	0.3620	0.3620	1.8237	normal		
Nickel	ug/L	MW-335	18	4	36	104.3333	75.5987	106.0000	38.9000	104.3333	104.3333	520.1264	normal		
Selenium	ug/L	MW-335	20	4	36			4.0000	4.0000			1.0000	nonpar	.99	**
Silver	ug/L	MW-335	20	4	36			4.0000	4.0000			0.3700	nonpar	.99	**
Thallium	ug/L	MW-335	20	4	36			2.0000	2.0000			0.2700	nonpar	.99	**
Vanadium	ug/L	MW-335	20	4	36			20.0000	20.0000			1.1000	nonpar	.99	**
Zinc	ug/L	MW-335	20	4	36	73.6000	54.9016	69.2000	41.6000	73.6000	73.6000	375.5586	normal		
Antimony	ug/L	MW-344	19	4	35			2.0000	2.0000			5.0200	nonpar	.99	**
Arsenic	ug/L	MW-344	19	4	35	1.2918	0.6384	4.0000	4.0000	1.2918	1.2918	4.8027	normal		
Barium	ug/L	MW-344	19	4	35	14.2484	3.6378	11.7000	12.2000	14.2484	14.2484	34.2564	normal		
Beryllium	ug/L	MW-344	19	4	35			4.0000	4.0000			0.4010	nonpar	.99	**
Cadmium	ug/L	MW-344	19	4	35	0.2549	0.1916	0.8000	0.8000	0.2549	0.2549	1.3088	normal		
Chromium	ug/L	MW-344	19	4	35			8.0000	8.0000			5.5200	nonpar	.99	**
Cobalt	ug/L	MW-344	19	4	35	155.4526	73.3058	209.0000	151.0000	267.1567	207.7247	558.6346	normal		
Copper	ug/L	MW-344	19	4	35			4.0000	4.0000			2.0000	nonpar	.99	**
Lead	ug/L	MW-344	19	4	35			4.0000	4.0000			0.7260	nonpar	.99	**
Nickel	ug/L	MW-344	19	4	35	131.8526	66.3648	165.0000	124.0000	196.9739	139.3476	496.8592	normal		
Selenium	ug/L	MW-344	19	4	35			4.0000	4.0000			1.0600	nonpar	.99	**
Silver	ug/L	MW-344	19	4	35			4.0000	4.0000			0.3700	nonpar	.99	**
Thallium	ug/L	MW-344	19	4	35			2.0000	2.0000			0.2600	nonpar	.99	**
Vanadium	ug/L	MW-344	19	4	35			20.0000	20.0000			1.1000	nonpar	.99	**
Zinc	ug/L	MW-344	19	4	35	36.4368	45.8120	20.0000	20.0000	36.4368	36.4368	288.4030	normal		
Antimony	ug/L	MW-380	18	4	35			2.0000	2.0000			1.1000	nonpar	.99	**
Arsenic	ug/L	MW-380	19	4	35	5.6442	1.6391	4.3000	4.6000	5.6442	5.6442	14.6594	normal		
Barium	ug/L	MW-380	17	4	35	8.4441	1.6486	7.7000	9.7000	8.4441	8.4635	17.5116	normal		
Beryllium	ug/L	MW-380	19	4	35	7.4989	3.3671	4.7000	5.0000	7.4989	7.4989	26.0180	normal		
Cadmium	ug/L	MW-380	19	4	36	9.7553	4.2708	3.1000	9.2000	9.7553	9.7553	33.2446	normal		
Chromium	ug/L	MW-380	19	4	35	14.6711	8.5880	8.0000	8.0000	14.6711	14.6711	61.9049	normal		
Cobalt	ug/L	MW-380	18	4	35	1139.3333	325.1624	758.0000	1130.0000	1139.3333	1139.3333	2927.7265	normal		
Copper	ug/L	MW-380	19	4	35	13.6163	8.6109	4.0000	4.0000	13.6163	13.6163	60.9762	normal		
Lead	ug/L	MW-380	19	4	35	2.1032	1.6916	4.0000	4.0000	2.1032	2.1032	11.4069	normal		
Nickel	ug/L	MW-380	19	4	35	1543.9474	478.1781	965.0000	1410.0000	1543.9474	1543.9474	4173.9268	normal		
Selenium	ug/L	MW-380	19	4	35	10.7253	6.8124	9.6000	9.6000	10.7253	10.7253	48.1936	normal		
Silver	ug/L	MW-380	18	4	35			4.0000	4.0000			1.0000	nonpar	.99	**
Thallium	ug/L	MW-380	19	4	35	0.7228	0.3760	2.0000	2.0000	0.7228	0.7228	2.7908	normal		
Vanadium	ug/L	MW-380	19	4	35	7.0337	3.7039	20.0000	20.0000	7.0337	7.0337	27.4053	normal		
Zinc	ug/L	MW-380	20	4	36	4417.5000	1437.7646	2290.0000	4800.0000	4417.5000	4417.5000	12325.2054	normal		
Antimony	ug/L	MW-381	19	4	35			2.0000	2.0000			0.7400	nonpar	.99	**
Arsenic	ug/L	MW-381	19	4	35			4.0000	4.0000			7.1400	nonpar	.99	**
Barium	ug/L	MW-381	19	4	36	11.0842	3.8217	8.5000	16.8000	11.0842	13.9337	32.1037	normal		

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

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	
Beryllium	ug/L	MW-381	19	4	35			4.0000	4.0000			0.2700	nonpar	.99	**
Cadmium	ug/L	MW-381	19	4	35	0.2688	0.2736	0.8000	0.8000	0.2688	0.2688	1.7735	normal		
Chromium	ug/L	MW-381	19	4	35			8.0000	8.0000			3.9000	nonpar	.99	**
Cobalt	ug/L	MW-381	19	4	35	3.6049	11.2517	1.2000	2.1000	3.6049	3.6049	65.4894	normal		
Copper	ug/L	MW-381	19	4	35	2.7779	0.6573	4.0000	4.0000	3.5070	2.7779	6.3932	normal		
Lead	ug/L	MW-381	19	4	35	0.5266	0.1986	4.0000	4.0000	0.5266	0.5266	1.6188	normal		
Nickel	ug/L	MW-381	19	4	35	22.4942	20.1734	13.0000	5.3000	22.4942	22.4942	133.4479	normal		
Selenium	ug/L	MW-381	19	4	35			4.0000	4.0000			1.0000	nonpar	.99	**
Silver	ug/L	MW-381	19	4	35			4.0000	4.0000			0.3700	nonpar	.99	**
Thallium	ug/L	MW-381	19	4	35			2.0000	2.0000			0.2600	nonpar	.99	**
Vanadium	ug/L	MW-381	19	4	35			20.0000	20.0000			2.9800	nonpar	.99	**
Zinc	ug/L	MW-381	19	4	35	26.6526	44.1854	20.0000	32.4000	26.6526	26.6526	269.6723	normal		
Antimony	ug/L	MW-382R	18	4	29			2.0000	2.0000			0.7400	nonpar	.99	**
Arsenic	ug/L	MW-382R	19	4	29			4.0000	4.0000			0.8800	nonpar	.99	**
Barium	ug/L	MW-382R	19	4	29	24.0789	2.9735	29.7000	28.0000	27.4699	29.1608	40.4332	normal		
Beryllium	ug/L	MW-382R	19	4	29			4.0000	4.0000			0.2700	nonpar	.99	**
Cadmium	ug/L	MW-382R	19	4	29			0.8000	0.8000			0.1120	nonpar	.99	**
Chromium	ug/L	MW-382R	19	4	29			8.0000	8.0000			5.9100	nonpar	.99	**
Cobalt	ug/L	MW-382R	19	4	29	2.7904	2.5011	1.2000	1.5000	2.7904	2.7904	16.5465	normal		
Copper	ug/L	MW-382R	19	4	29			4.0000	4.0000			2.0000	nonpar	.99	**
Lead	ug/L	MW-382R	19	4	29			4.0000	4.0000			0.5860	nonpar	.99	**
Nickel	ug/L	MW-382R	16	4	29	4.3969	1.0788	4.5000	6.1000	5.1850	6.0790	10.3302	normal		
Selenium	ug/L	MW-382R	19	4	29			4.0000	4.0000			1.0000	nonpar	.99	**
Silver	ug/L	MW-382R	19	4	29			4.0000	4.0000			0.4200	nonpar	.99	**
Thallium	ug/L	MW-382R	19	4	29			2.0000	2.0000			0.2600	nonpar	.99	**
Vanadium	ug/L	MW-382R	19	4	29			20.0000	20.0000			2.1500	nonpar	.99	**
Zinc	ug/L	MW-382R	19	4	29			20.0000	20.0000			175.0000	nonpar	.99	**
Antimony	ug/L	MW-384	18	4	31			2.0000	2.0000			0.5800	nonpar	.99	**
Arsenic	ug/L	MW-384	19	4	31	2.2342	0.6672	4.0000	4.0000	2.2342	2.2342	5.9036	normal		
Barium	ug/L	MW-384	19	4	31	10.7121	2.7304	10.7000	10.0000	10.7121	10.7121	25.7294	normal		
Beryllium	ug/L	MW-384	19	4	31	0.8261	0.3678	4.0000	4.0000	0.8261	0.8261	2.8490	normal		
Cadmium	ug/L	MW-384	19	4	31			0.8000	0.8000			0.2420	nonpar	.99	**
Chromium	ug/L	MW-384	19	4	31			8.0000	8.0000			10.0000	nonpar	.99	**
Cobalt	ug/L	MW-384	19	4	31	46.6947	16.8008	8.4000	14.6000	46.6947	46.6947	139.0992	normal		
Copper	ug/L	MW-384	19	4	31			4.0000	4.0000			2.0000	nonpar	.99	**
Lead	ug/L	MW-384	19	4	31			4.0000	4.0000			1.2400	nonpar	.99	**
Nickel	ug/L	MW-384	19	4	31	118.4053	33.0305	43.2000	54.4000	118.4053	118.4053	300.0729	normal		
Selenium	ug/L	MW-384	19	4	31			4.0000	4.0000			1.0600	nonpar	.99	**
Silver	ug/L	MW-384	18	4	31			4.0000	4.0000			0.3700	nonpar	.99	**
Thallium	ug/L	MW-384	19	4	31			2.0000	2.0000			0.2700	nonpar	.99	**
Vanadium	ug/L	MW-384	19	4	31			20.0000	20.0000			2.1500	nonpar	.99	**
Zinc	ug/L	MW-384	19	4	31	108.6474	85.5335	20.0000	20.3000	108.6474	108.6474	579.0818	normal		
Antimony	ug/L	MW-385	19	4	31			2.0000	2.0000			0.7400	nonpar	.99	**
Arsenic	ug/L	MW-385	19	4	31	0.9698	0.3226	4.0000	4.0000	0.9698	0.9698	2.7441	normal		
Barium	ug/L	MW-385	18	4	31	12.9644	1.9595	11.0000	15.1000	13.2964	13.9623	23.7414	normal		
Beryllium	ug/L	MW-385	19	4	31			4.0000	4.0000			0.2700	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.

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	
Cadmium	ug/L	MW-385	19	4	31	0.3304	0.2058	0.8000	0.8000	0.3304	0.3304	1.4623	normal		
Chromium	ug/L	MW-385	19	4	31			8.0000	8.0000			4.3100	nonpar	.99	**
Cobalt	ug/L	MW-385	19	4	31	7.4816	3.5142	2.4000	6.7000	7.4816	7.4816	26.8096	normal		
Copper	ug/L	MW-385	19	4	31			4.0000	4.0000			2.0000	nonpar	.99	**
Lead	ug/L	MW-385	19	4	31			4.0000	4.0000			0.8720	nonpar	.99	**
Nickel	ug/L	MW-385	19	4	31	39.3158	7.3755	16.8000	43.6000	39.3158	39.3158	79.8811	normal		
Selenium	ug/L	MW-385	19	4	31			4.0000	4.0000			1.0000	nonpar	.99	**
Silver	ug/L	MW-385	19	4	31			4.0000	4.0000			0.3700	nonpar	.99	**
Thallium	ug/L	MW-385	19	4	31			2.0000	2.0000			0.2600	nonpar	.99	**
Vanadium	ug/L	MW-385	19	4	31			20.0000	20.0000			1.1000	nonpar	.99	**
Zinc	ug/L	MW-385	18	4	31	51.1111	19.0098	20.0000	44.2000	51.1111	51.1111	155.6649	normal		
Antimony	ug/L	MW-390	17	4	29			2.0000	2.0000			1.0000	nonpar	.99	**
Arsenic	ug/L	MW-390	17	4	29	15.1676	3.3735	16.3000	16.0000	20.2744	18.5767	33.7217	normal		
Barium	ug/L	MW-390	17	4	29	27.6118	7.7772	17.3000	12.9000	27.6118	27.6118	70.3864	normal		
Beryllium	ug/L	MW-390	17	4	29			4.0000	4.0000			0.2700	nonpar	.99	**
Cadmium	ug/L	MW-390	17	4	29	0.3144	0.2610	0.8000	0.8000	0.3144	0.3144	1.7499	normal		
Chromium	ug/L	MW-390	17	4	29			8.0000	8.0000			5.5100	nonpar	.99	**
Cobalt	ug/L	MW-390	17	4	29	106.2412	8.9517	113.0000	96.9000	106.2862	106.2412	155.4754	normal		
Copper	ug/L	MW-390	17	4	29			4.0000	4.0000			2.1900	nonpar	.99	**
Lead	ug/L	MW-390	17	4	29	1.5224	0.7021	4.0000	4.0000	1.5224	1.5224	5.3839	normal		
Nickel	ug/L	MW-390	17	4	29	53.7647	5.6887	62.0000	50.0000	57.7335	53.7647	85.0525	normal		
Selenium	ug/L	MW-390	17	4	29			4.0000	4.0000			1.0000	nonpar	.99	**
Silver	ug/L	MW-390	17	4	29			4.0000	4.0000			0.4200	nonpar	.99	**
Thallium	ug/L	MW-390	17	4	29			2.0000	2.0000			1.1700	nonpar	.99	**
Vanadium	ug/L	MW-390	17	4	29			20.0000	20.0000			8.9100	nonpar	.99	**
Zinc	ug/L	MW-390	16	4	29	129.1187	85.2843	115.0000	122.0000	258.8729	187.7910	598.1822	normal		

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

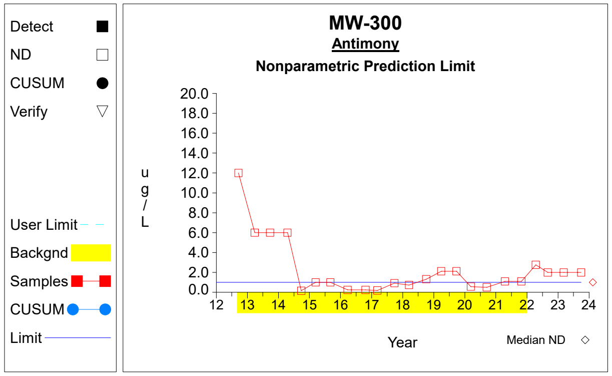
Table 4

Dixon's Test Outliers
1% Significance Level

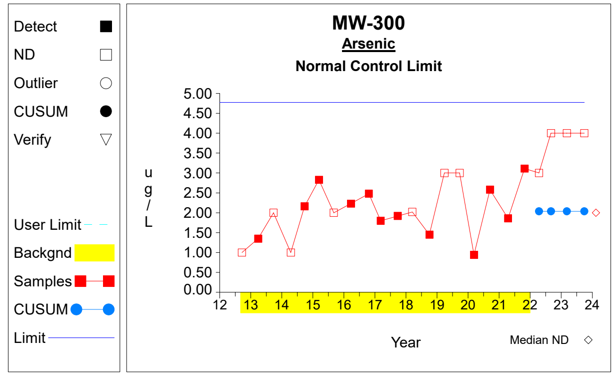
Constituent	Units	Well	Date	Result	ND Qualifier	Date Range	N	Critical Value
Barium	ug/L	MW-300	04/16/2014	3.4400		09/18/2012-10/27/2021	19	0.5503
Cobalt	ug/L	MW-300	04/16/2014	42.3000		09/18/2012-10/27/2021	19	0.5503
Cobalt	ug/L	MW-304	04/16/2021	37.2000		03/22/2016-10/27/2021	14	0.6403
Nickel	ug/L	MW-304	04/16/2021	27.1000		03/22/2016-10/27/2021	14	0.6403
Zinc	ug/L	MW-304	04/16/2021	66.3000		03/22/2016-10/27/2021	14	0.6174
Zinc	ug/L	MW-304	10/27/2021	31.1000		03/22/2016-10/27/2021	14	0.6174
Barium	ug/L	MW-307	09/26/2013	30.0000	< 30.0000	09/18/2012-10/28/2021	17	0.5798
Cobalt	ug/L	MW-307	10/28/2021	14.8000		09/18/2012-10/28/2021	17	0.5798
Zinc	ug/L	MW-307	10/28/2021	10.6000		09/18/2012-10/28/2021	17	0.5798
Cobalt	ug/L	MW-335	09/24/2019	382.0000		09/19/2012-10/27/2021	20	0.5381
Cobalt	ug/L	MW-335	09/16/2020	0.1380		09/19/2012-10/27/2021	20	0.5503
Cobalt	ug/L	MW-335	04/15/2021	0.1770		09/19/2012-10/27/2021	20	0.5503
Nickel	ug/L	MW-335	09/16/2020	1.9000	< 1.9000	09/19/2012-10/27/2021	20	0.5503
Nickel	ug/L	MW-335	04/15/2021	1.9000	< 1.9000	09/19/2012-10/27/2021	20	0.5503
Barium	ug/L	MW-380	03/09/2017	104.0000	< 104.0000	09/19/2012-10/27/2021	19	0.5643
Barium	ug/L	MW-380	03/14/2018	52.0000	< 52.0000	09/19/2012-10/27/2021	19	0.5643
Cadmium	ug/L	MW-380	03/09/2017	57.4000		09/19/2012-10/27/2021	20	0.5381
Cobalt	ug/L	MW-380	09/02/2015	15.0000	< 15.0000	09/19/2012-10/27/2021	19	0.5503
Barium	ug/L	MW-381	09/02/2015	83.3000		09/20/2012-10/27/2021	20	0.5381
Nickel	ug/L	MW-382R	09/20/2012	50.0000	< 50.0000	09/20/2012-10/27/2021	19	0.5643
Nickel	ug/L	MW-382R	03/27/2013	50.0000	< 50.0000	09/20/2012-10/27/2021	19	0.5643
Nickel	ug/L	MW-382R	04/15/2014	50.0000	< 50.0000	09/20/2012-10/27/2021	19	0.5643
Barium	ug/L	MW-385	04/15/2014	3.4700		09/20/2012-10/28/2021	19	0.5503
Zinc	ug/L	MW-385	09/25/2013	233.0000		09/20/2012-10/28/2021	19	0.5503
Zinc	ug/L	MW-390	03/22/2016	5.2100	< 5.2100	09/18/2012-10/26/2021	17	0.5798

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

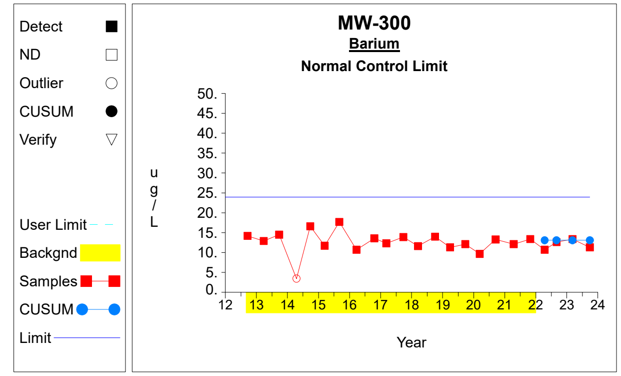
Intra-Well Control Charts / Prediction Limits



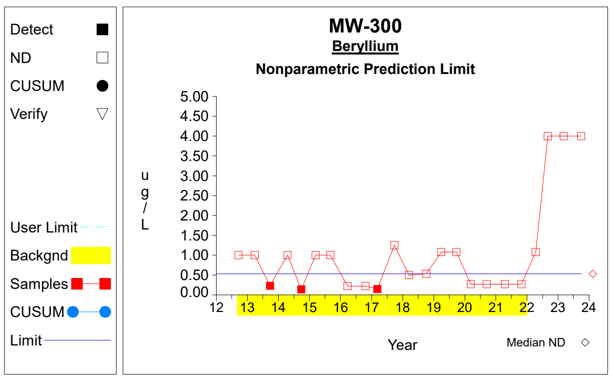
Graph 1



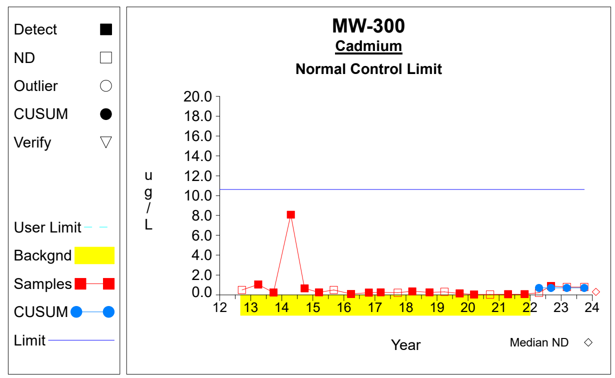
Graph 2



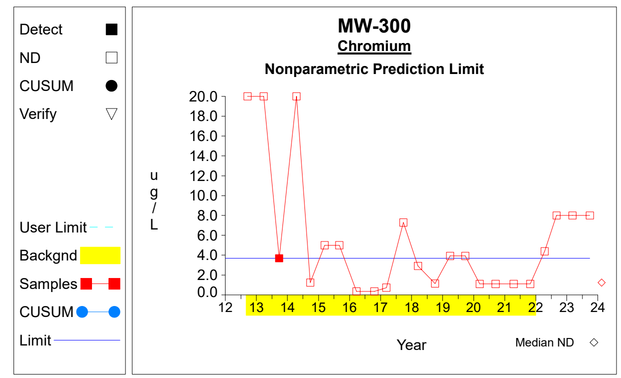
Graph 3



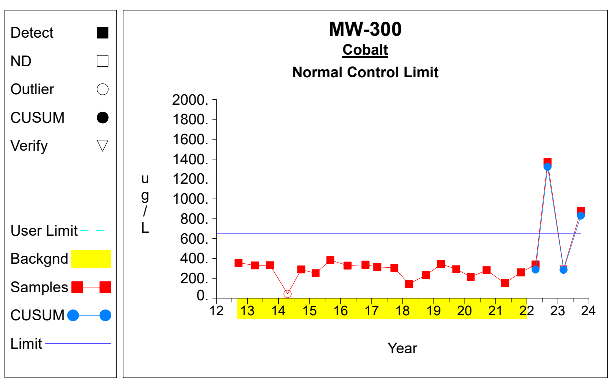
Graph 4



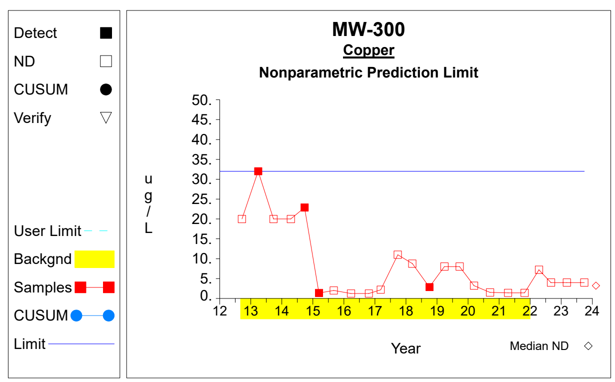
Graph 5



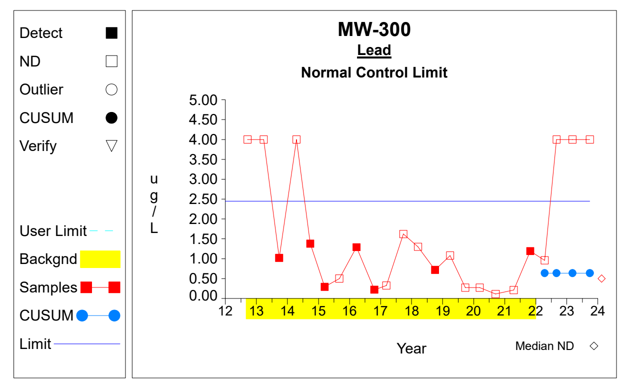
Graph 6



Graph 7



Graph 8



Graph 9

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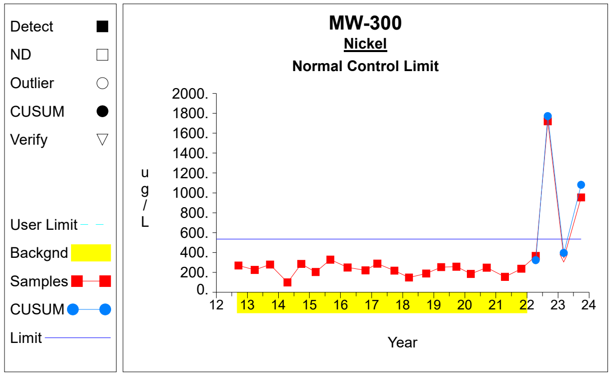
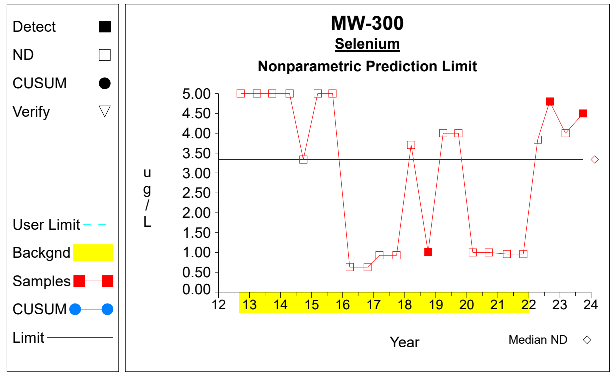
South Central Iowa SWA [GW] December 2023

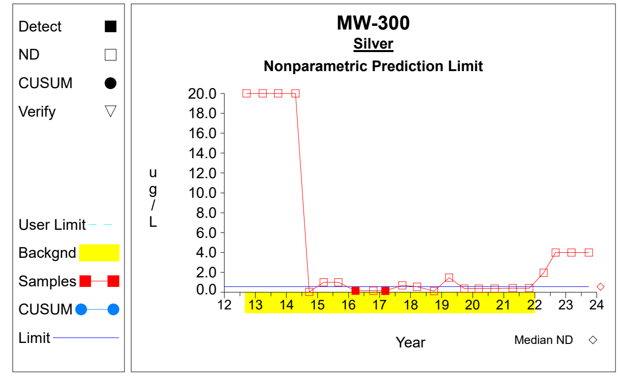
Intra-Well Control Charts / Prediction Limits



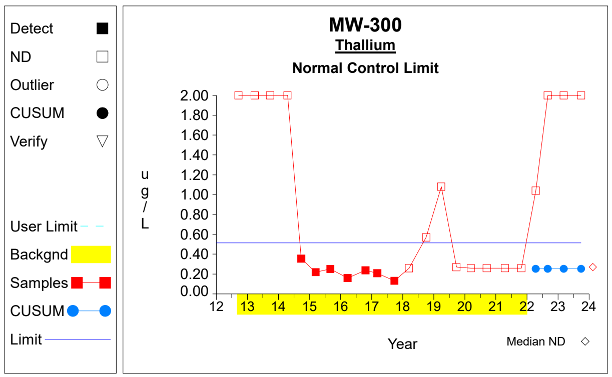
Graph 10



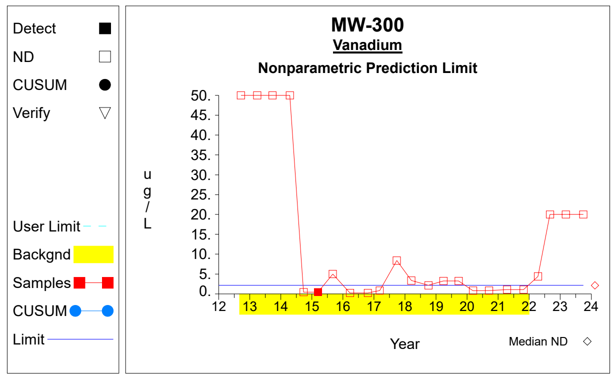
Graph 11



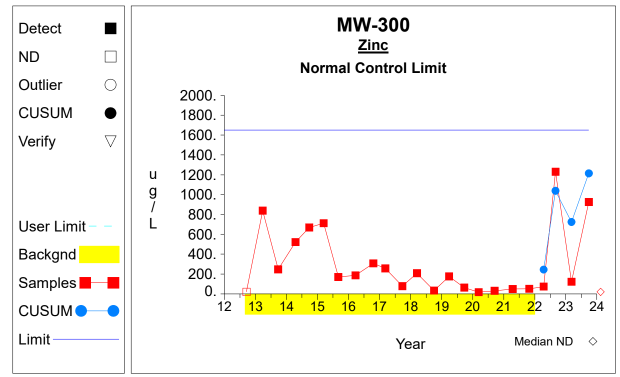
Graph 12



Graph 13



Graph 14



Graph 15

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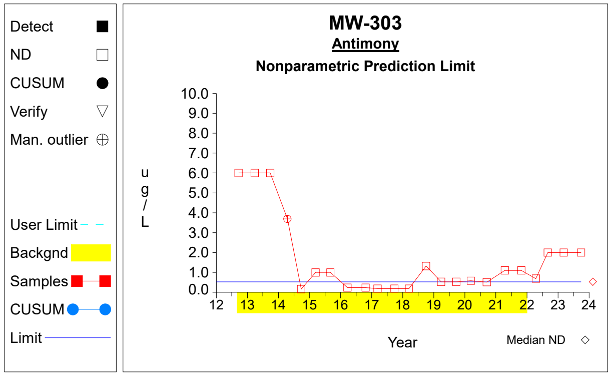
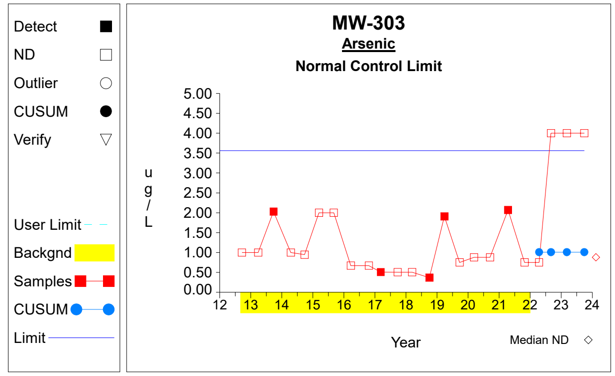
South Central Iowa SWA [GW] December 2023

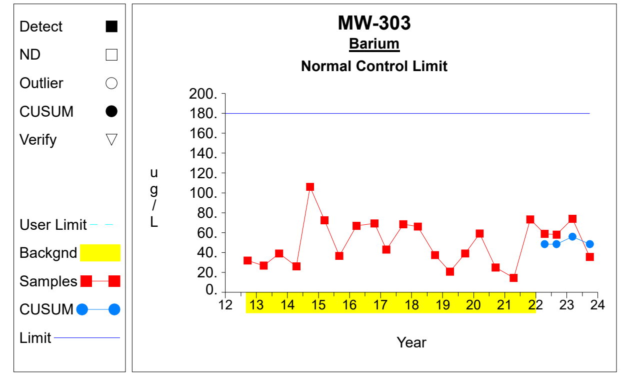
Intra-Well Control Charts / Prediction Limits



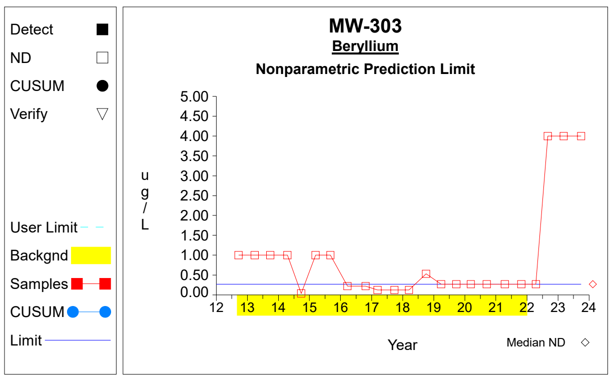
Graph 16



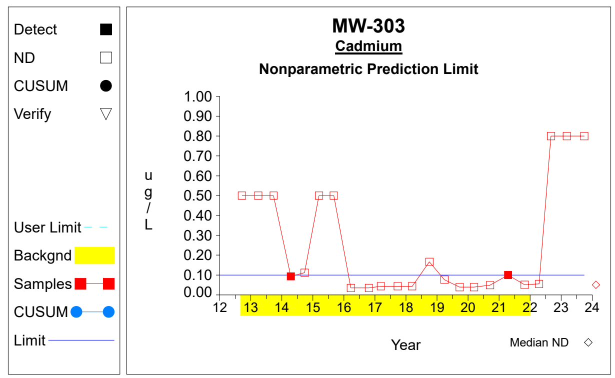
Graph 17



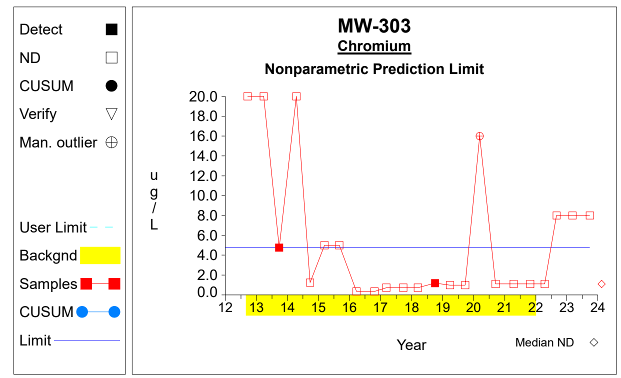
Graph 18



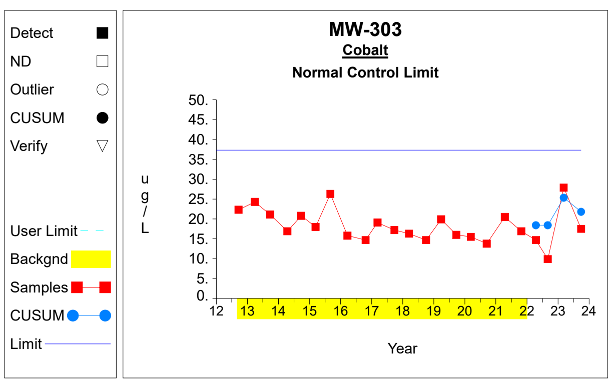
Graph 19



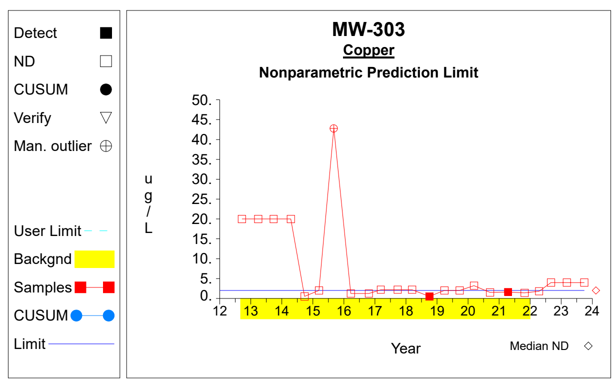
Graph 20



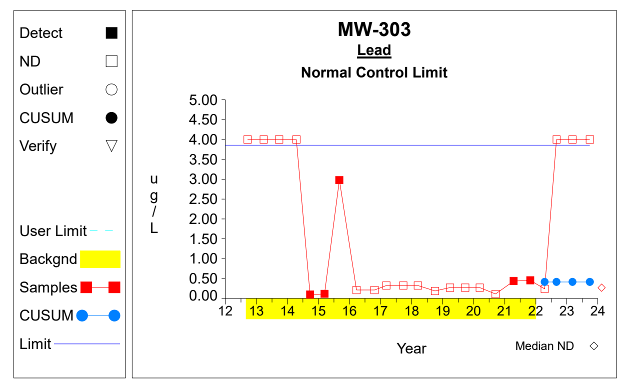
Graph 21



Graph 22



Graph 23



Graph 24

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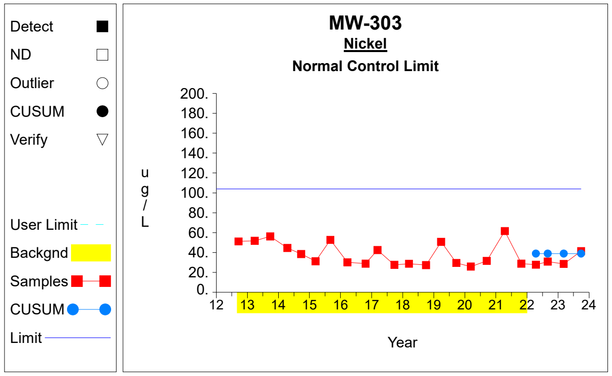
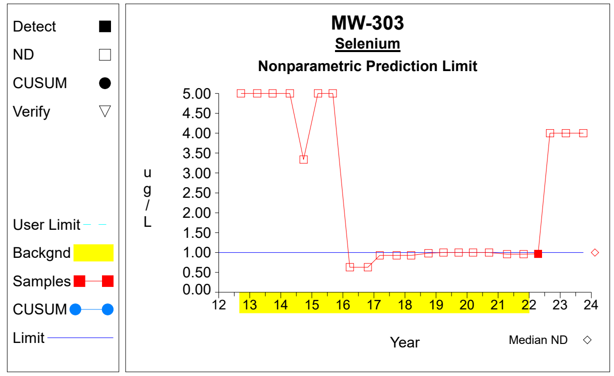
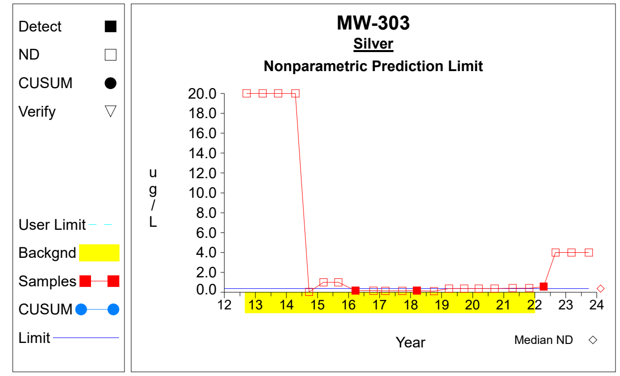
Intra-Well Control Charts / Prediction Limits



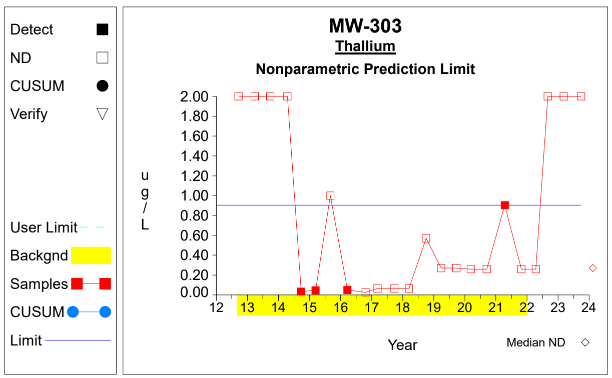
Graph 25



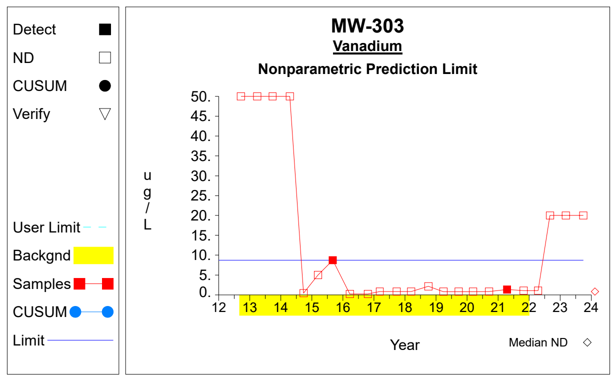
Graph 26



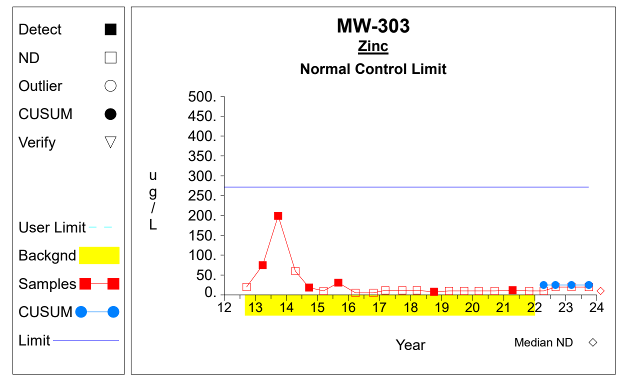
Graph 27



Graph 28



Graph 29



Graph 30

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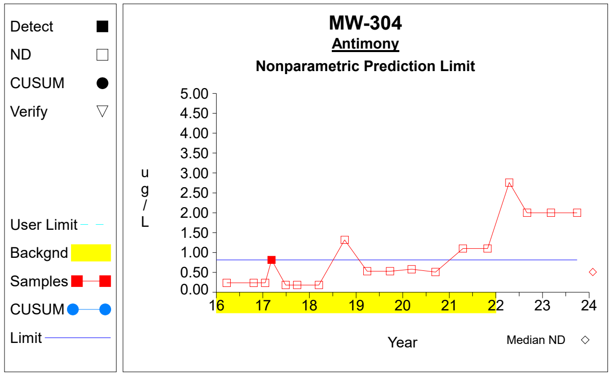
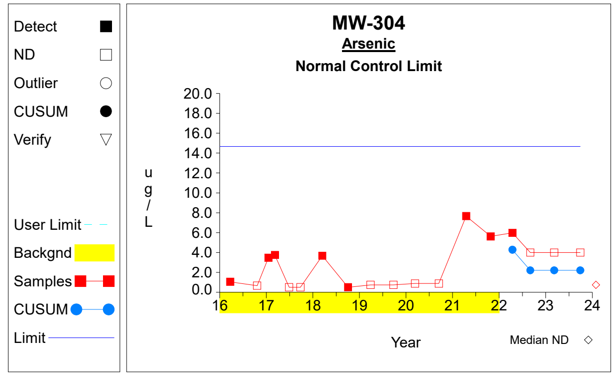
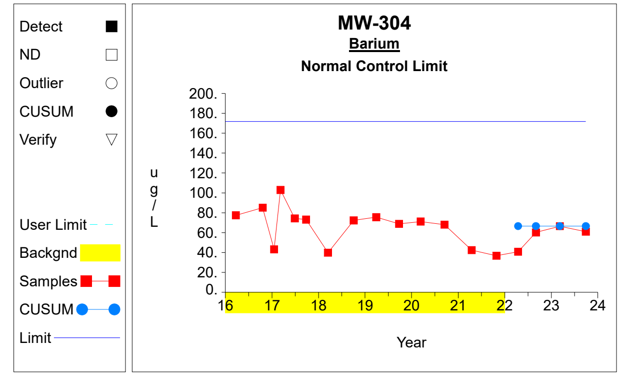
Intra-Well Control Charts / Prediction Limits



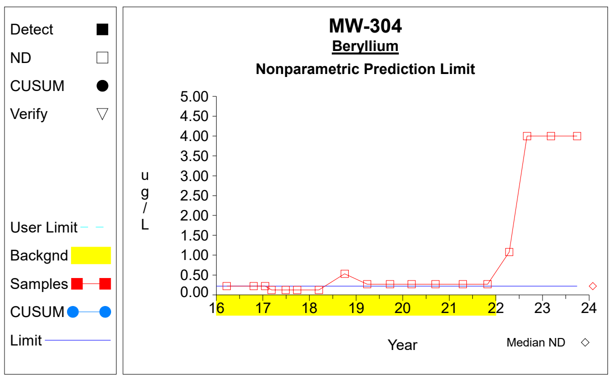
Graph 31



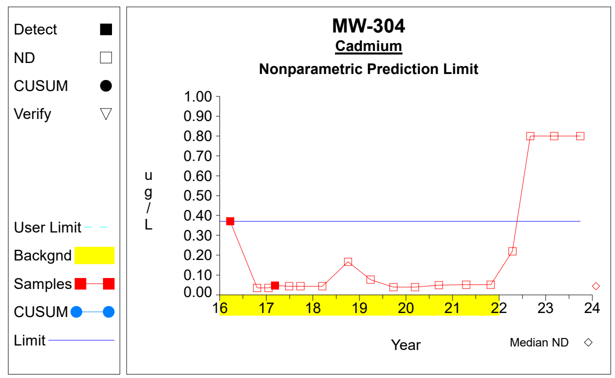
Graph 32



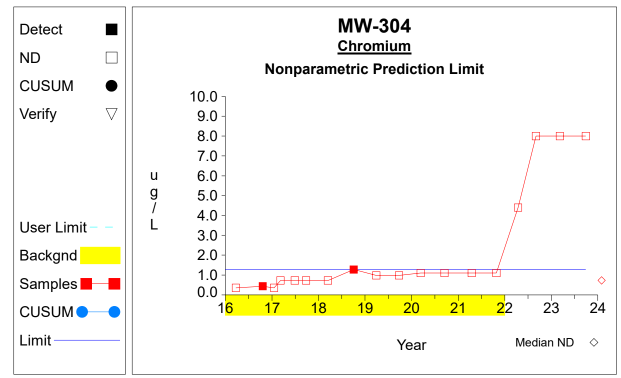
Graph 33



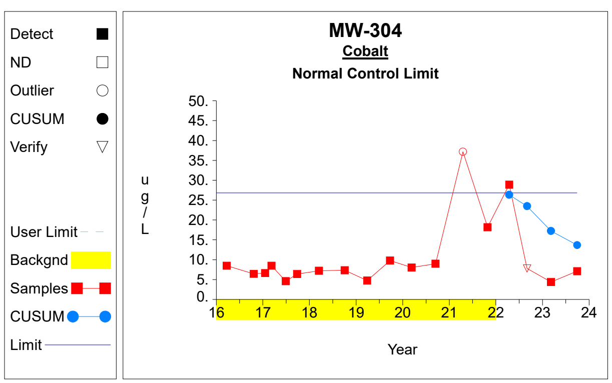
Graph 34



Graph 35



Graph 36



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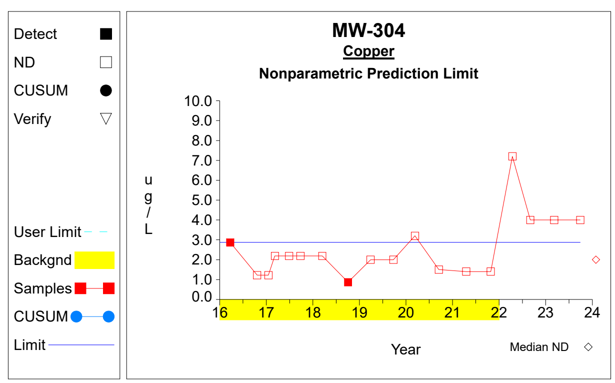
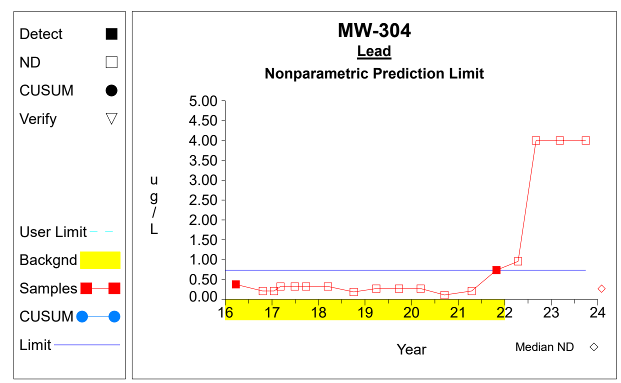


Graph 38



Graph 39

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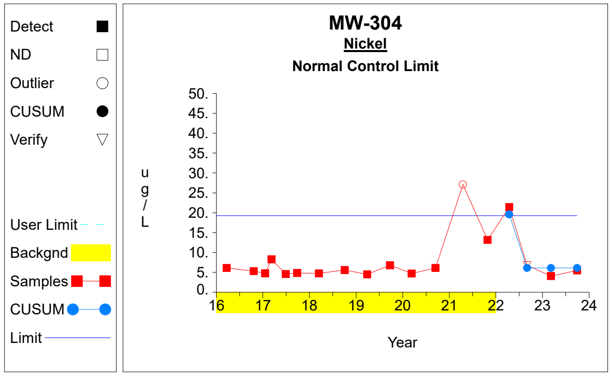
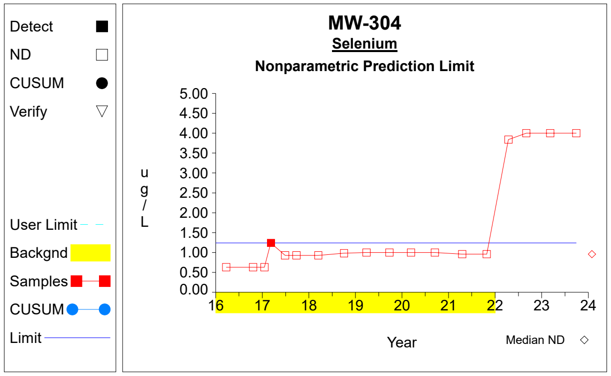
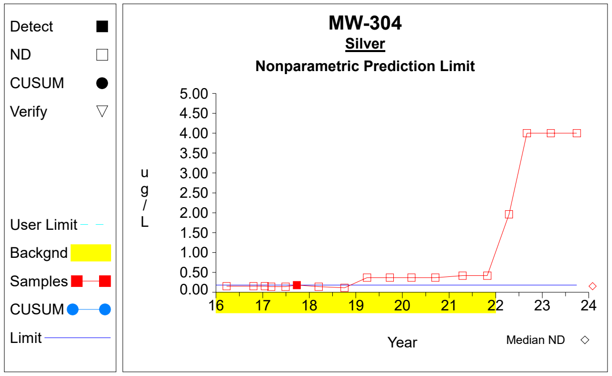
Intra-Well Control Charts / Prediction Limits



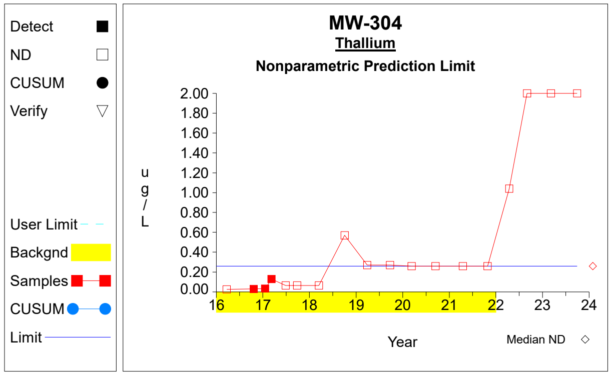
Graph 40



Graph 41



Graph 42



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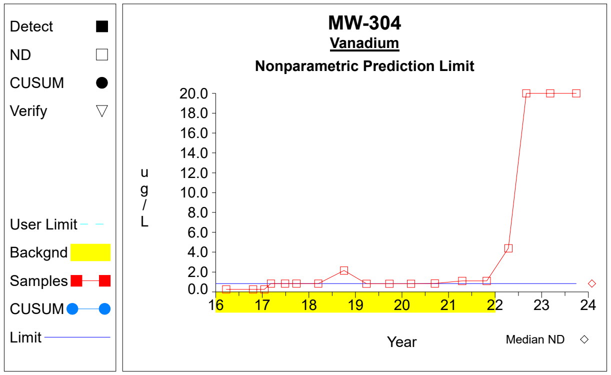
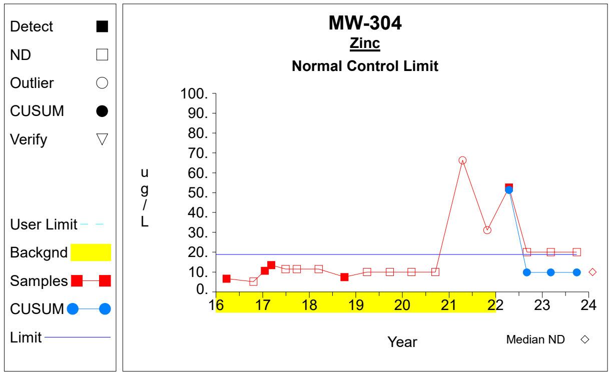


Graph 44



Graph 45

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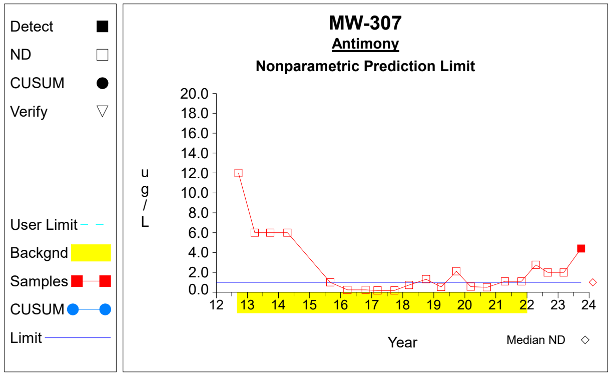
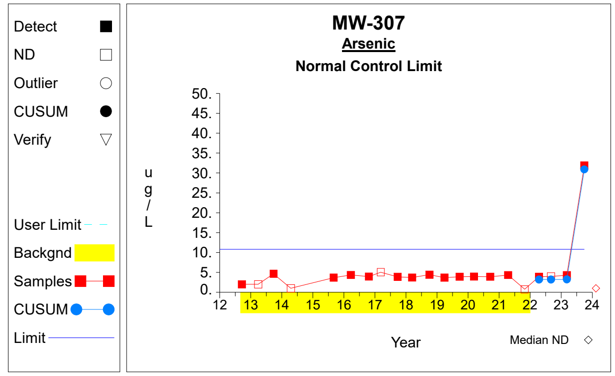
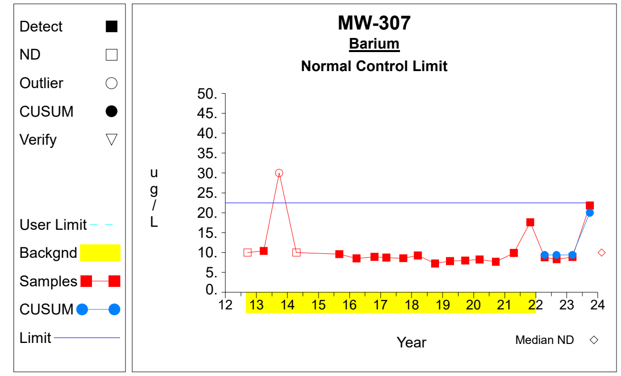
Intra-Well Control Charts / Prediction Limits



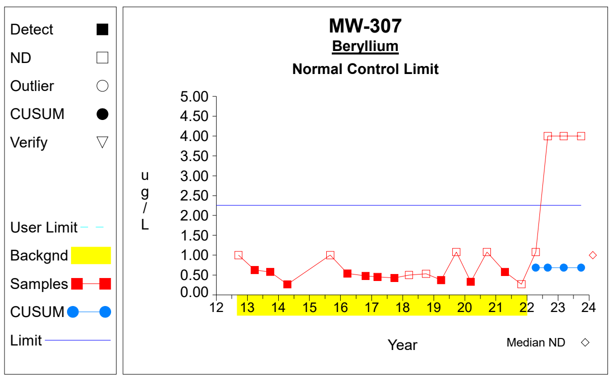
Graph 46



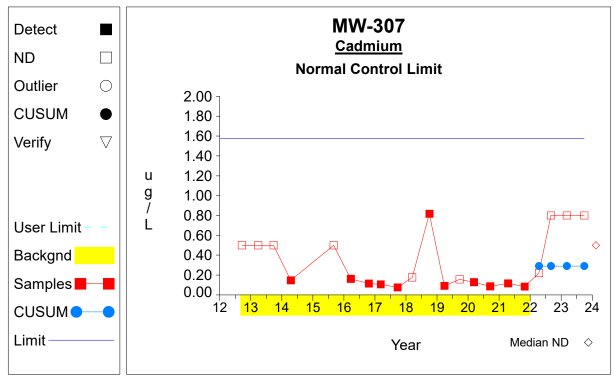
Graph 47



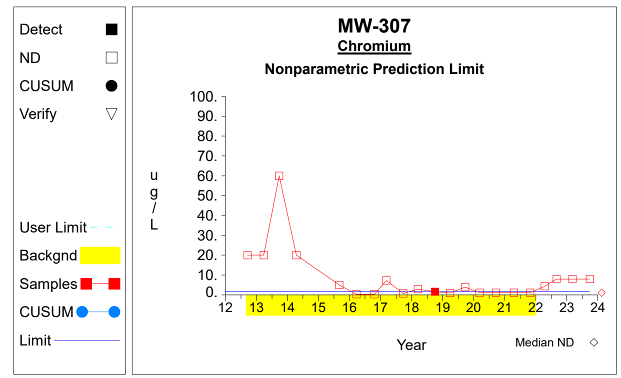
Graph 48



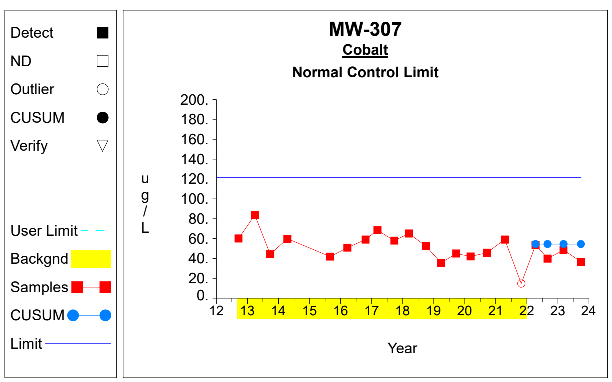
Graph 49



Graph 50



Graph 51



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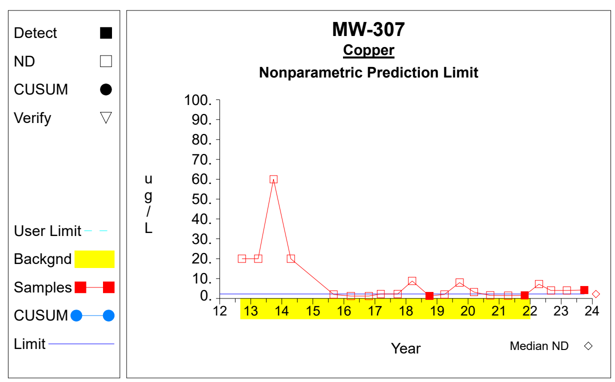

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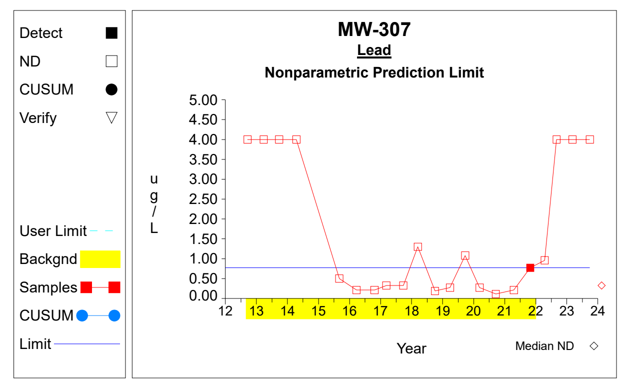

Graph 54

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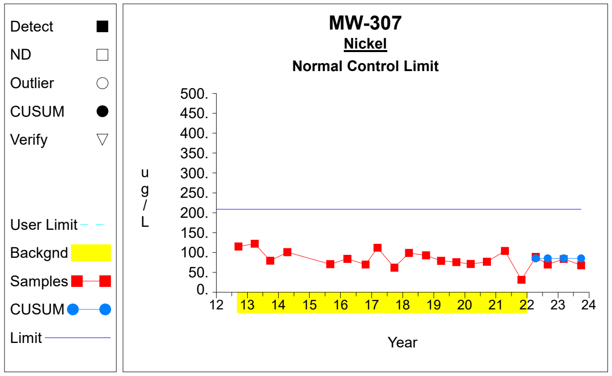
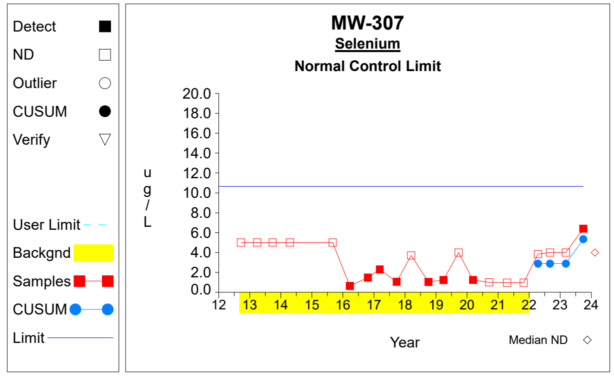
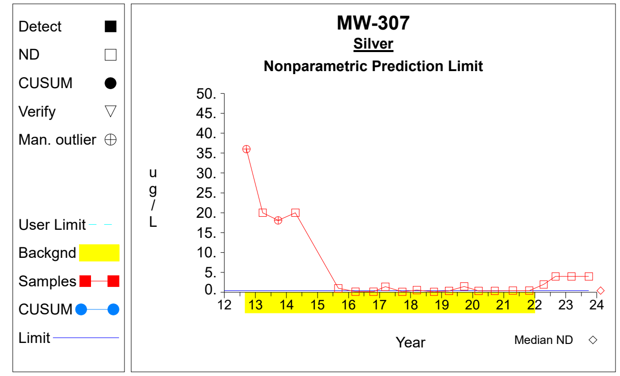
Intra-Well Control Charts / Prediction Limits



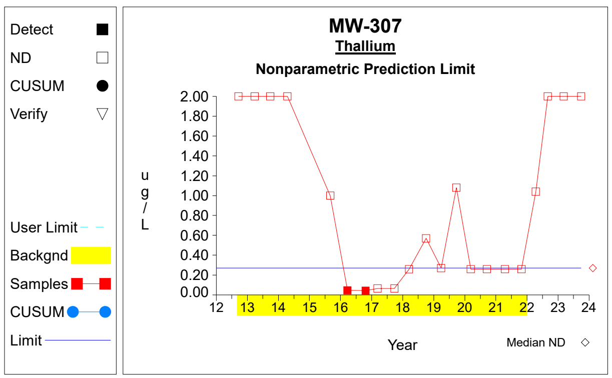
Graph 55



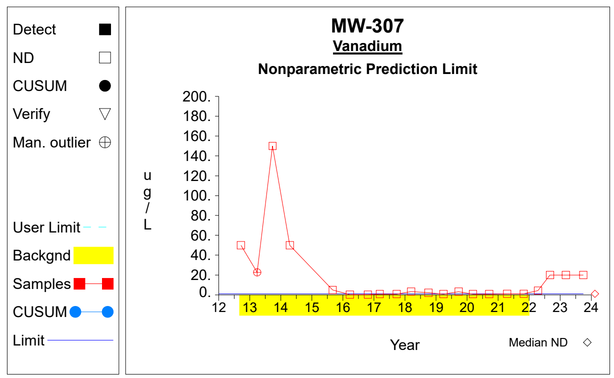
Graph 56



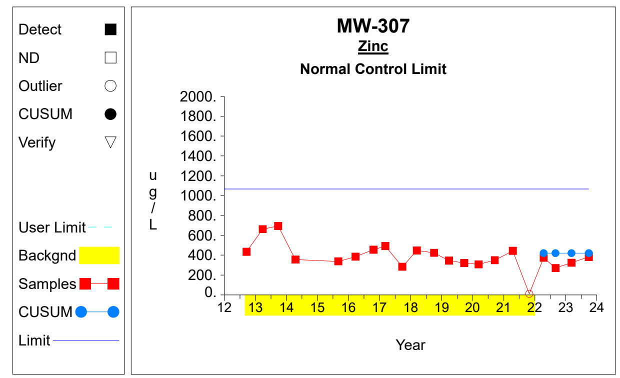
Graph 57



Graph 58



Graph 59



Graph 60

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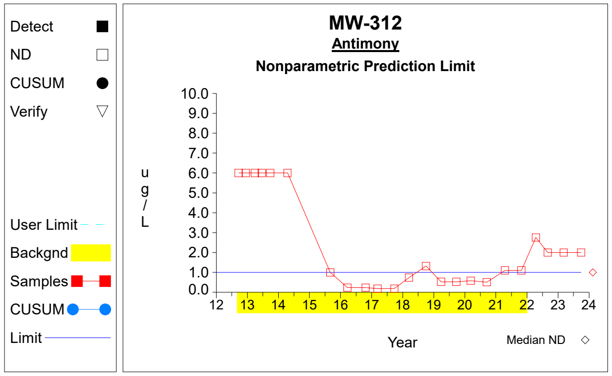
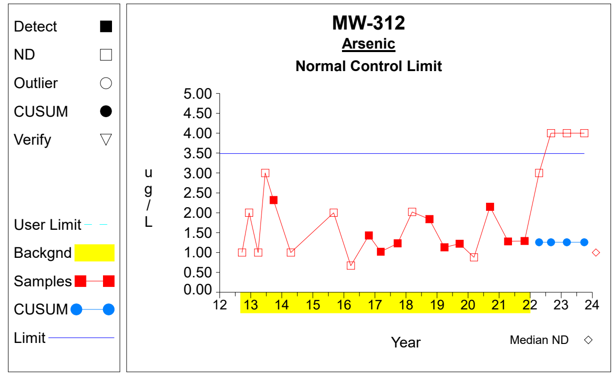
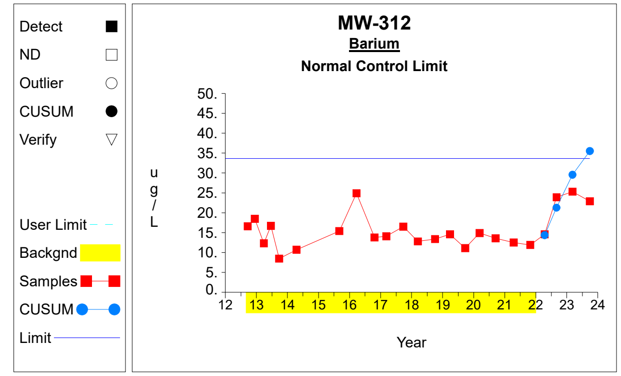
Intra-Well Control Charts / Prediction Limits



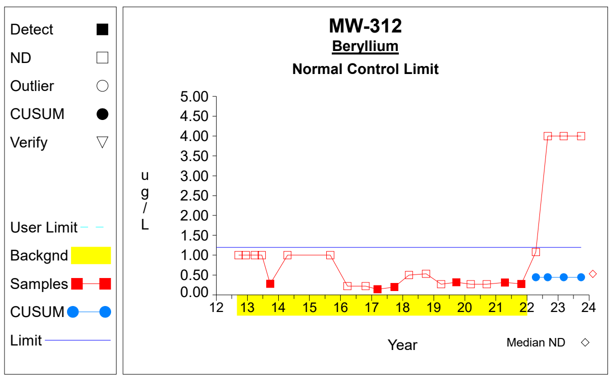
Graph 61



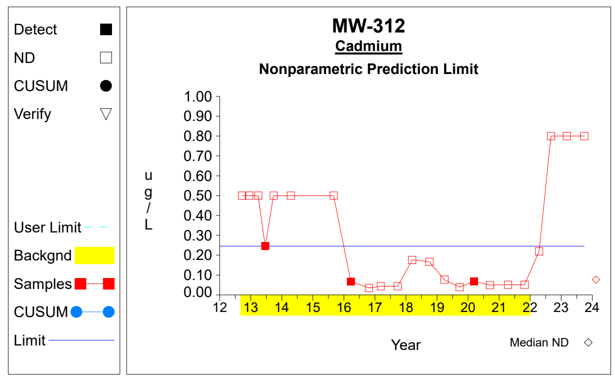
Graph 62



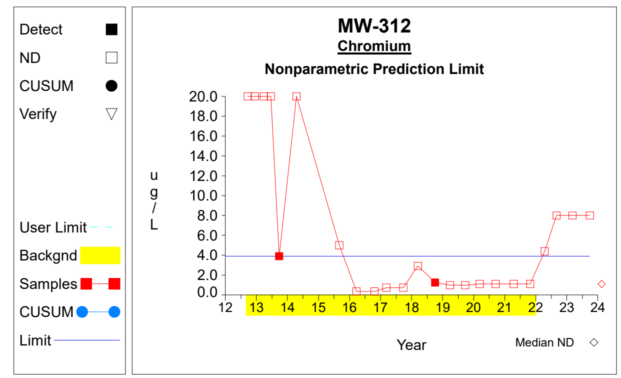
Graph 63



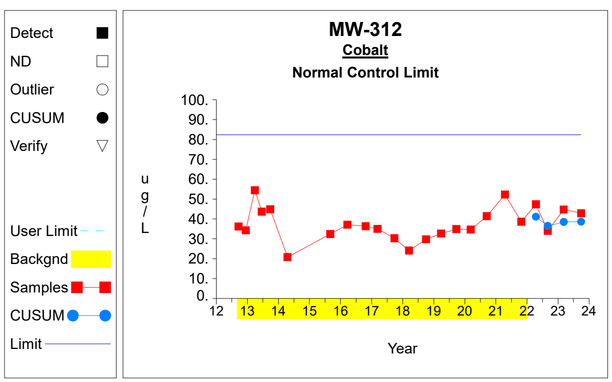
Graph 64



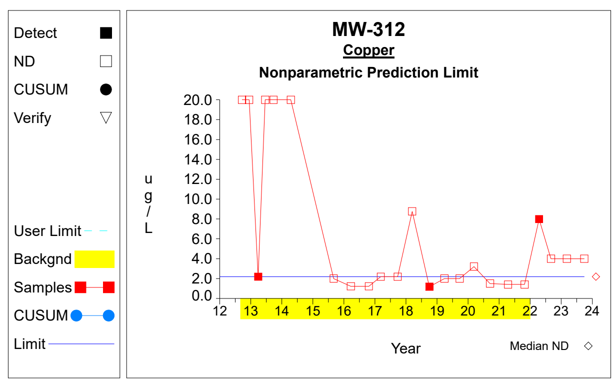
Graph 65



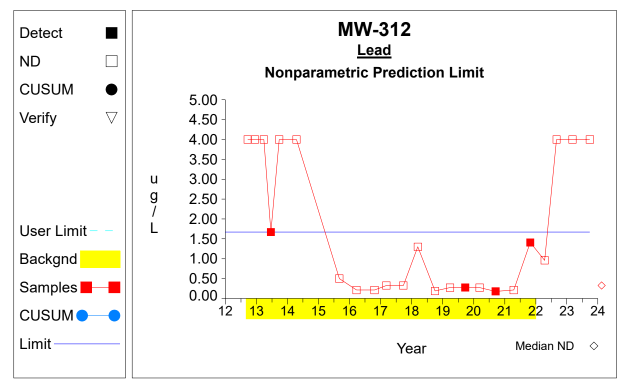
Graph 66



Graph 67



Graph 68



Graph 69

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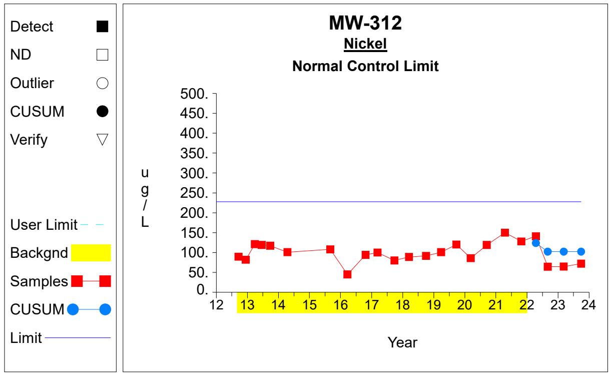
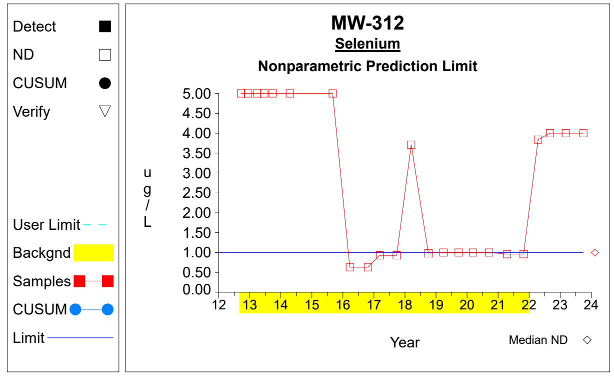
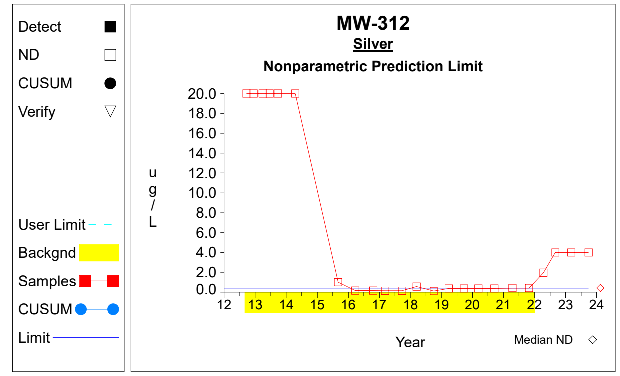
Intra-Well Control Charts / Prediction Limits



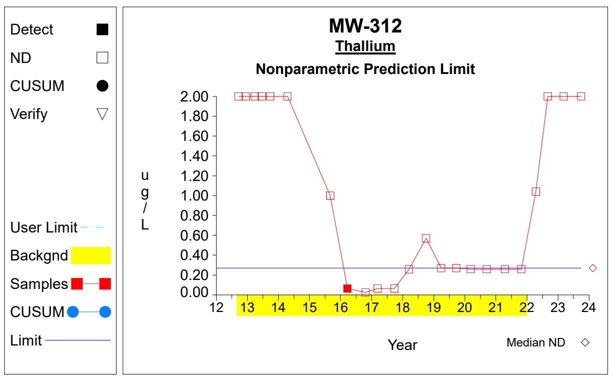
Graph 70



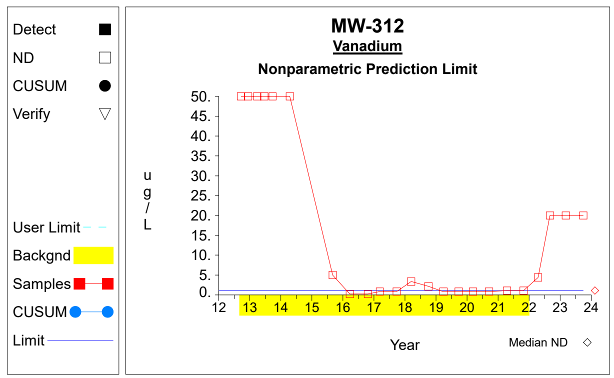
Graph 71



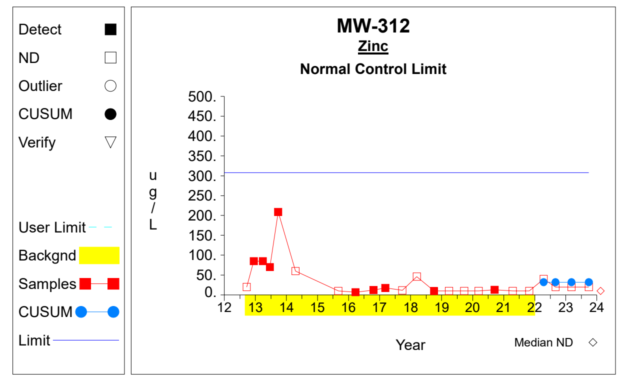
Graph 72



Graph 73



Graph 74



Graph 75

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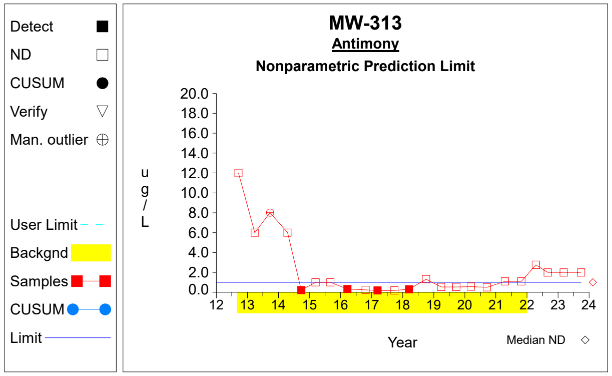
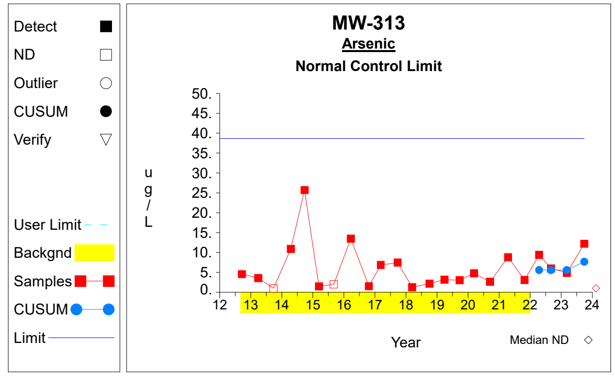
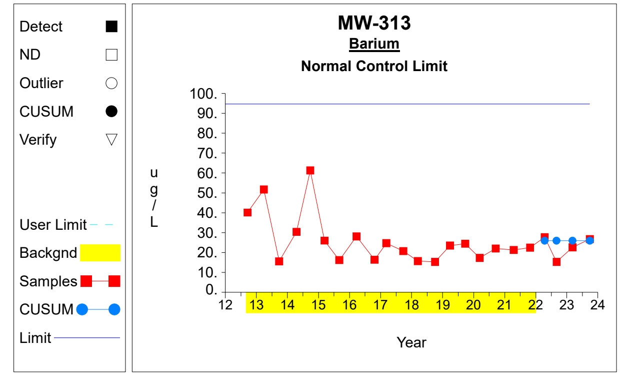
Intra-Well Control Charts / Prediction Limits



Graph 76



Graph 77



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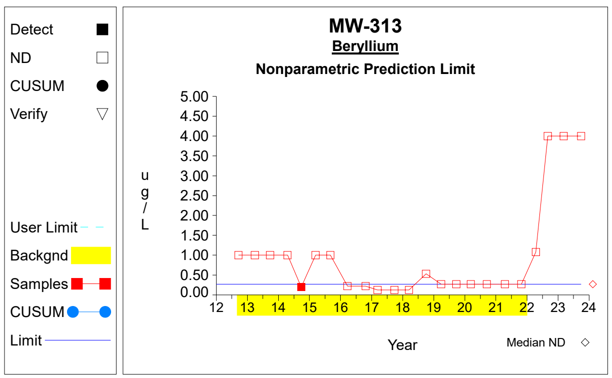
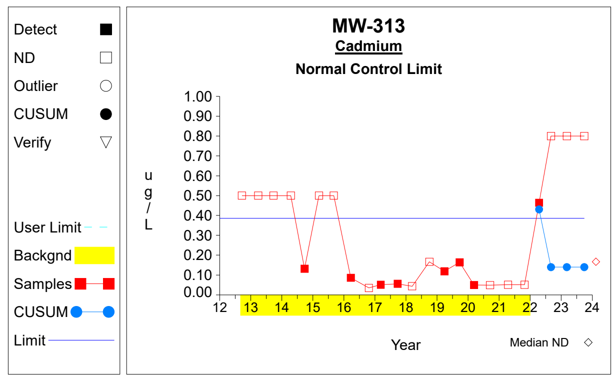
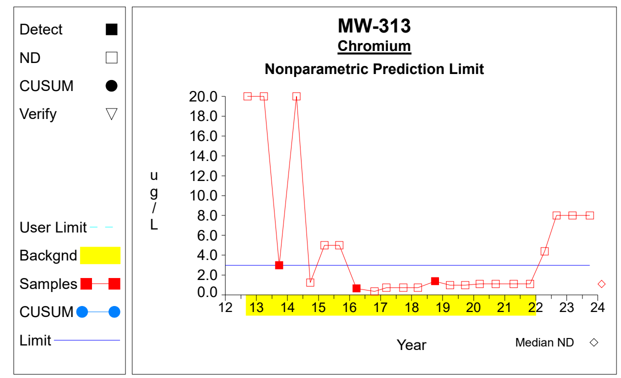


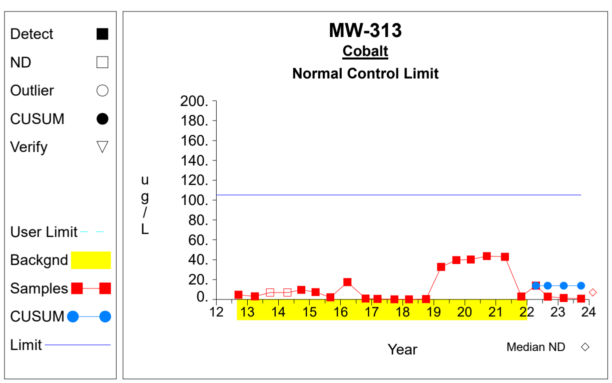
Graph 79



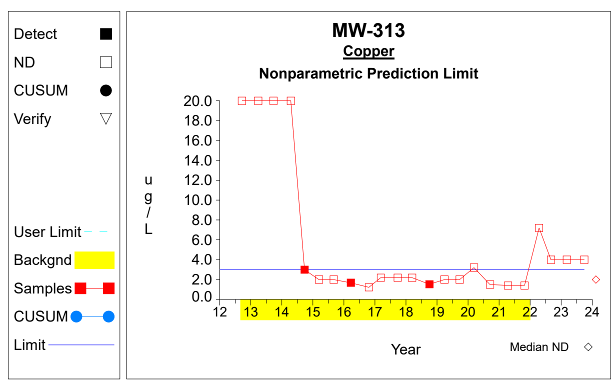
Graph 80



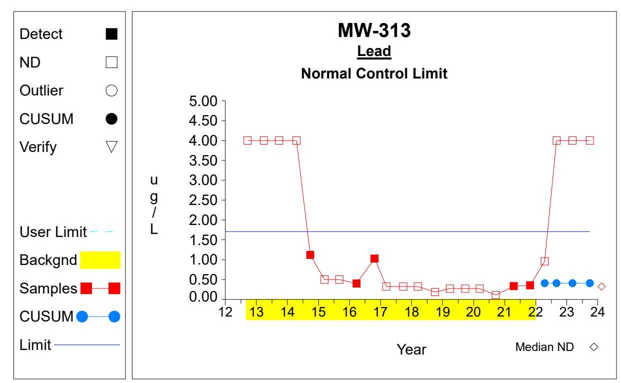
Graph 81



Graph 82



Graph 83



Graph 84

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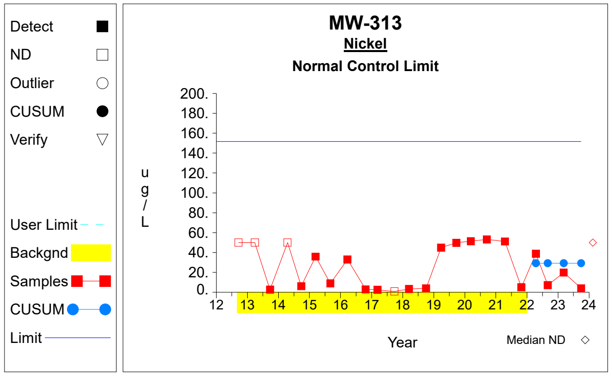
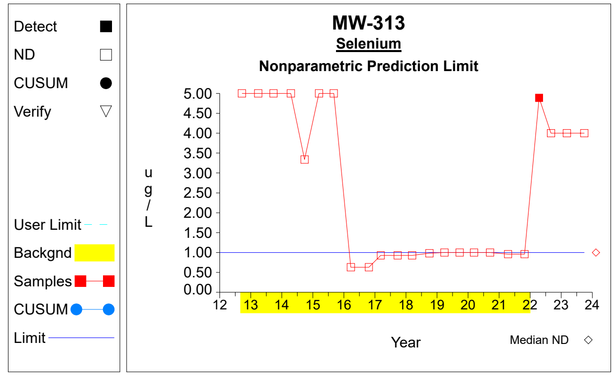
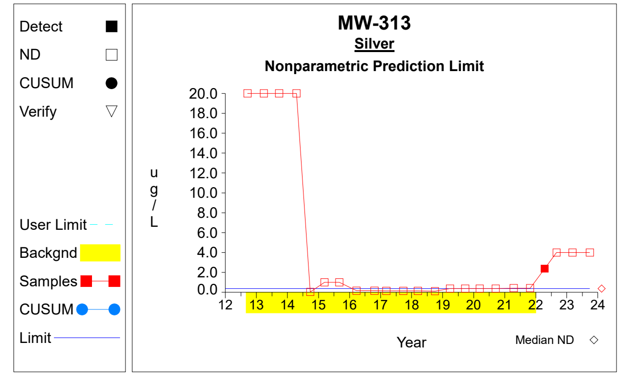
Intra-Well Control Charts / Prediction Limits



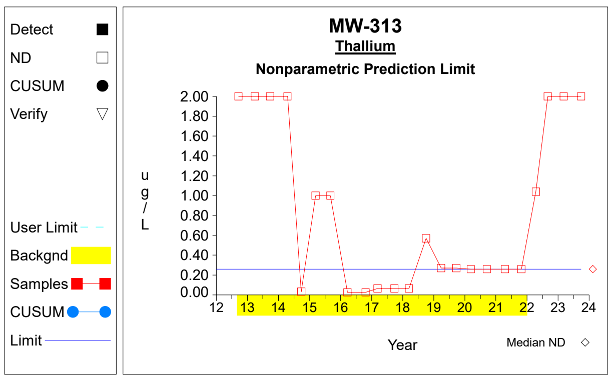
Graph 85



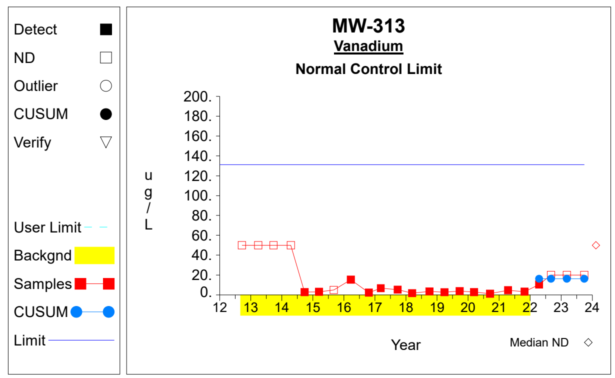
Graph 86



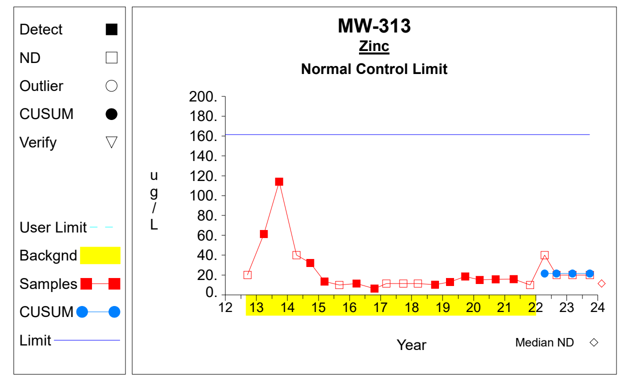
Graph 87



Graph 88



Graph 89



Graph 90

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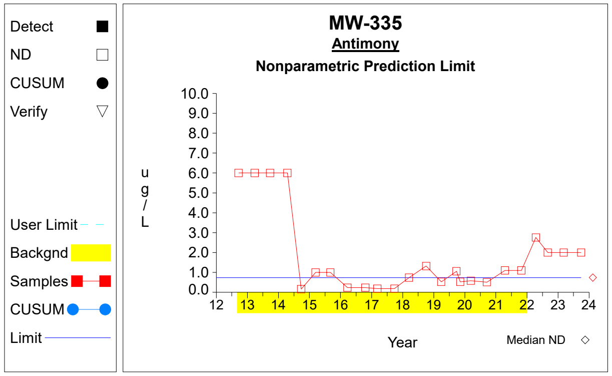
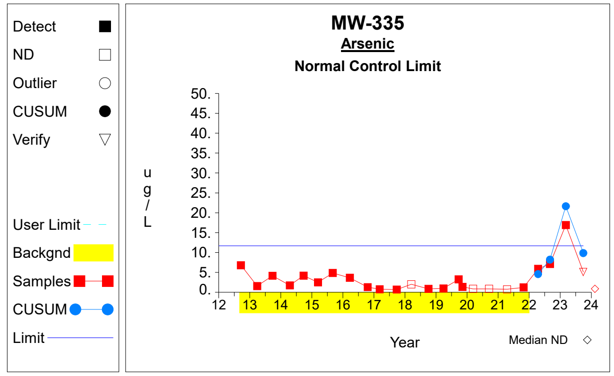
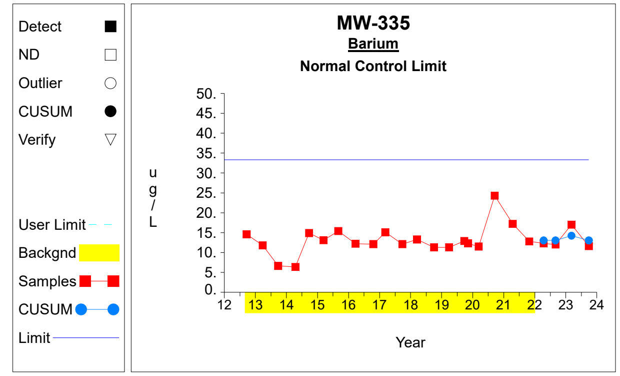
Intra-Well Control Charts / Prediction Limits



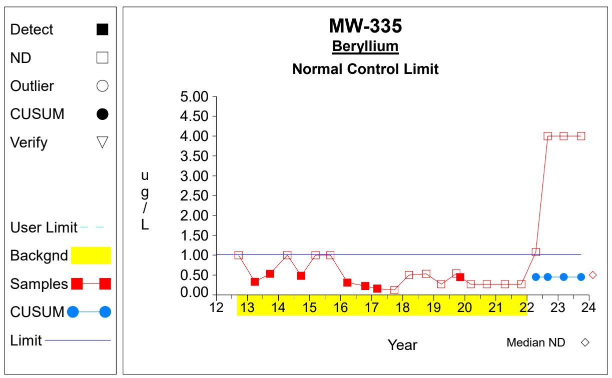
Graph 91



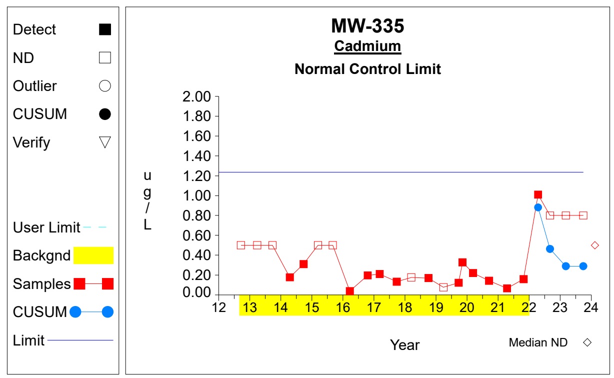
Graph 92



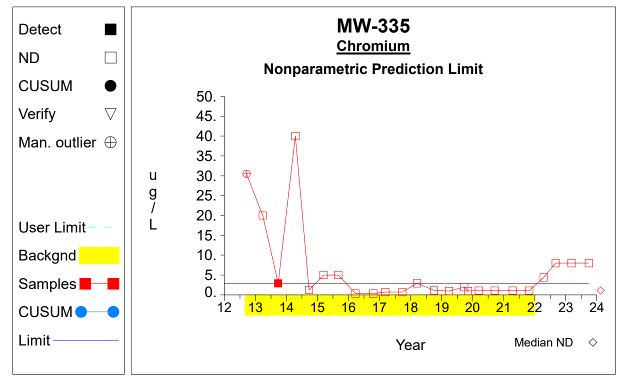
Graph 93



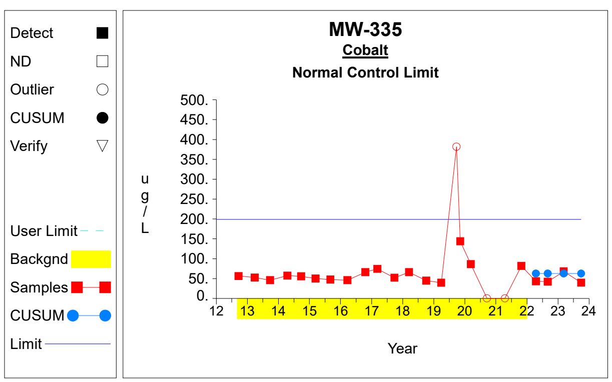
Graph 94



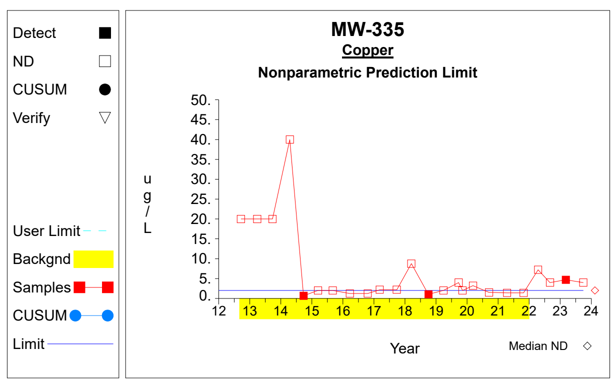
Graph 95



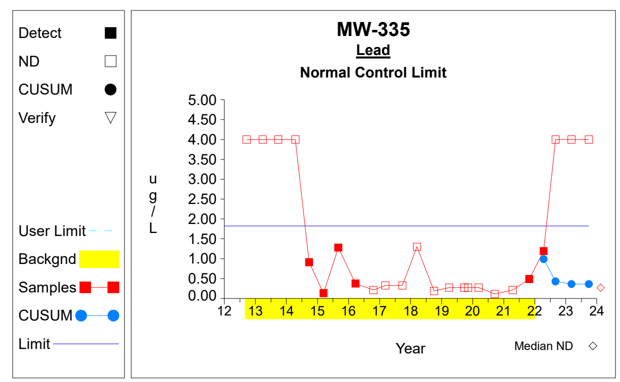
Graph 96



Graph 97



Graph 98



Graph 99

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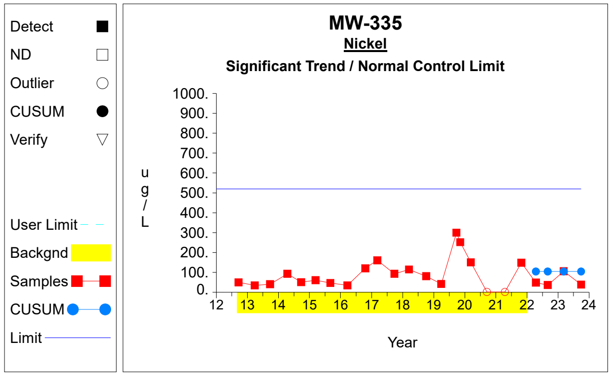
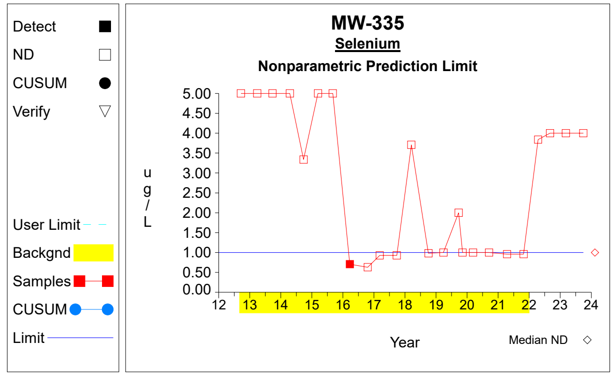
Intra-Well Control Charts / Prediction Limits



Graph 100



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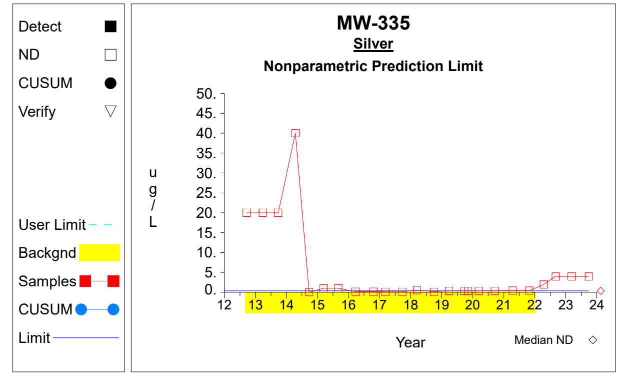

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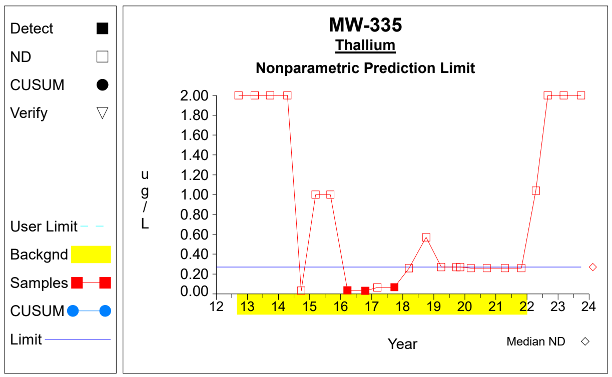

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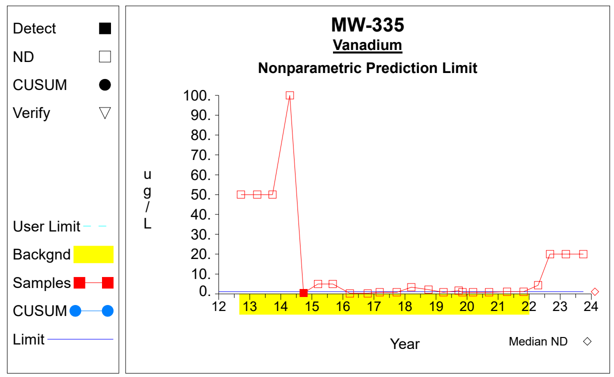

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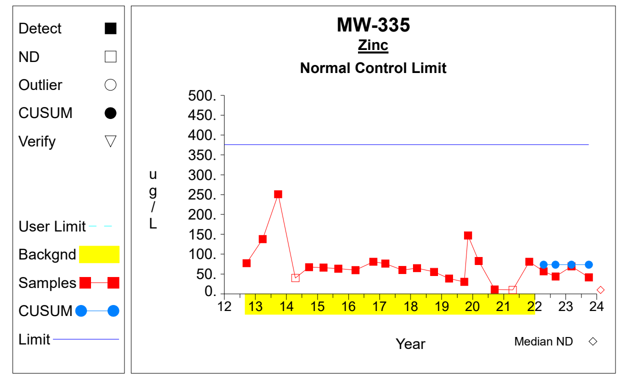

Graph 105

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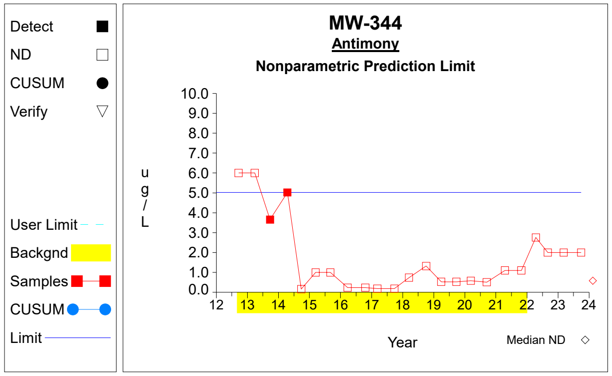
Intra-Well Control Charts / Prediction Limits



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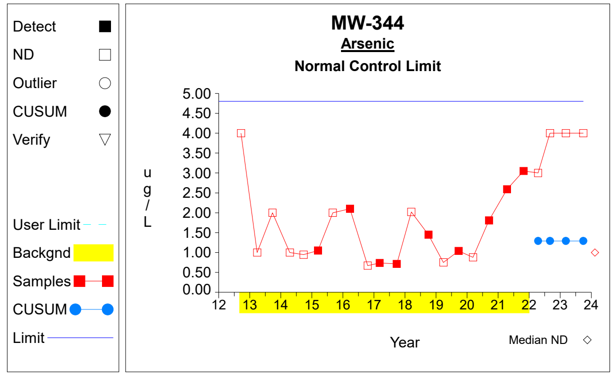

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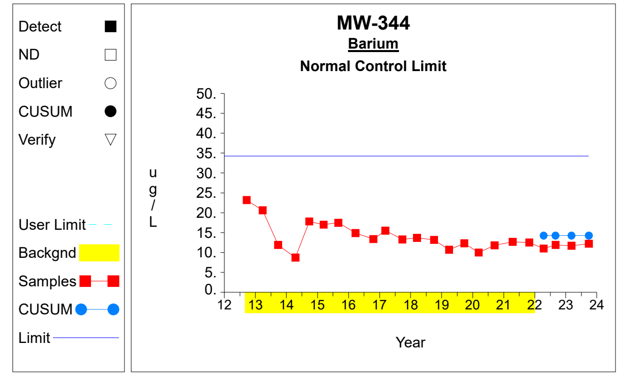

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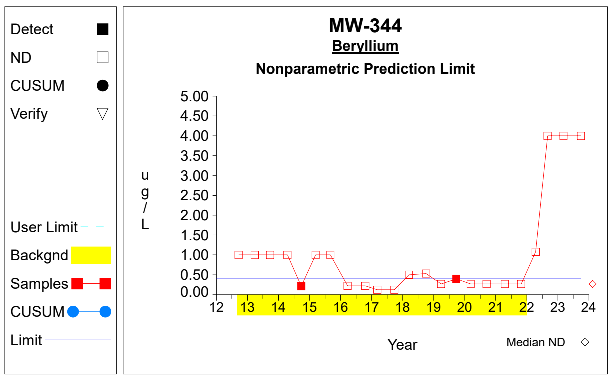

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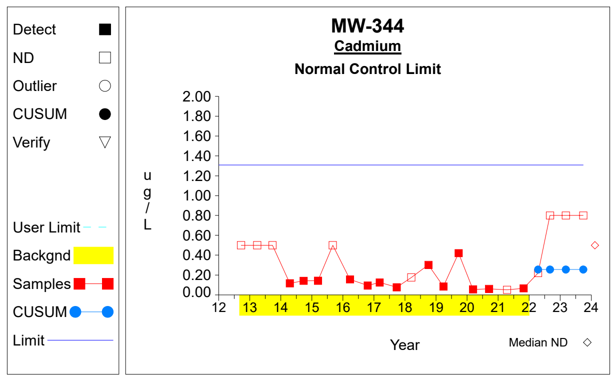

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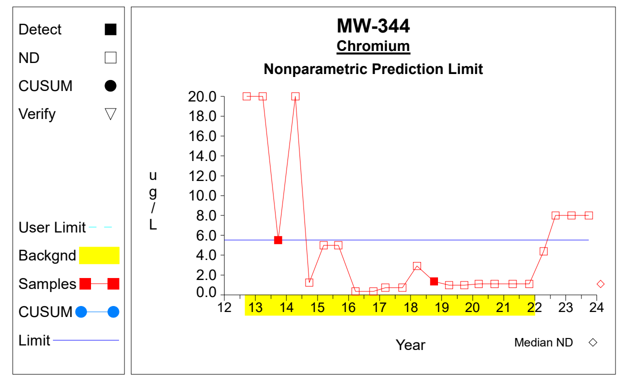

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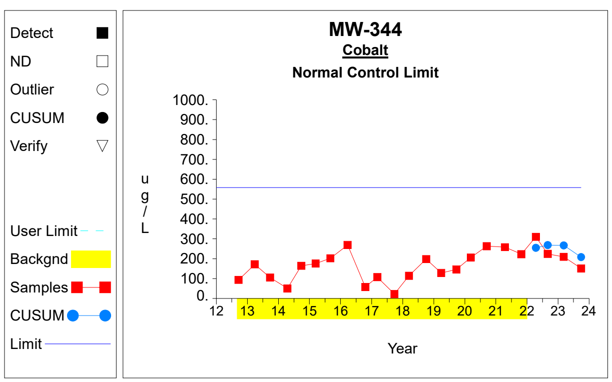

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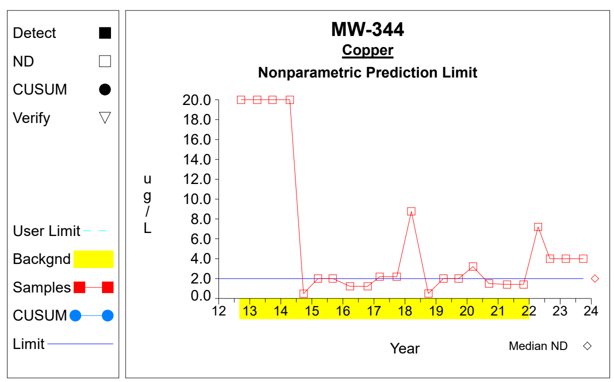

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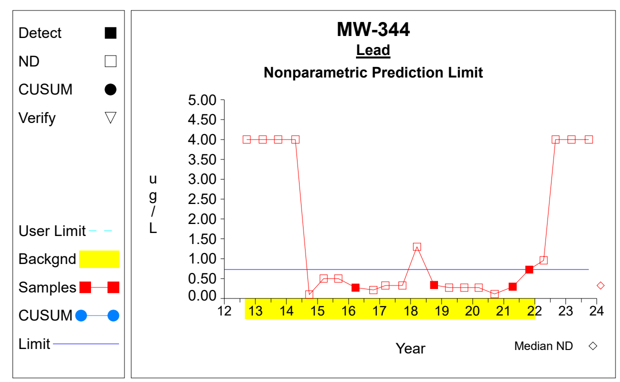

Graph 114

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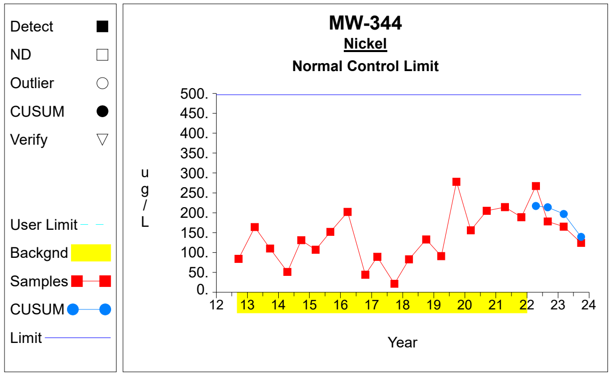
Intra-Well Control Charts / Prediction Limits



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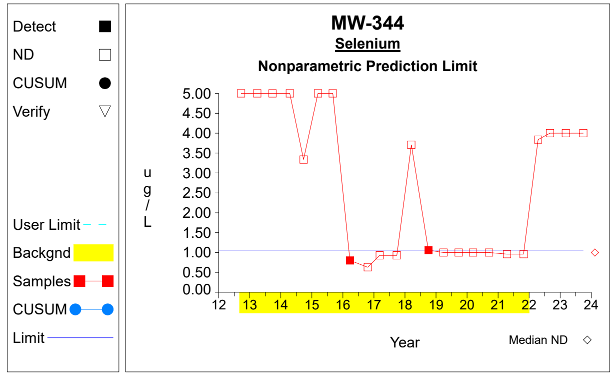

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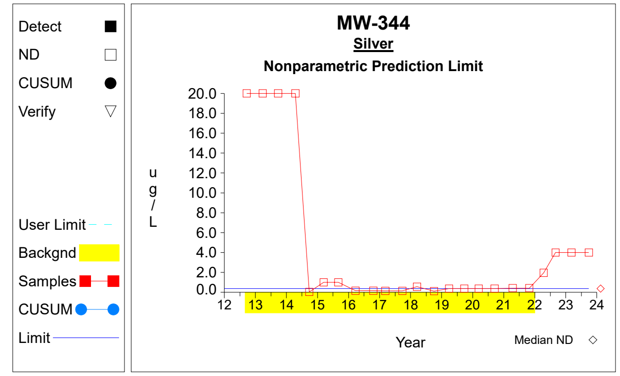
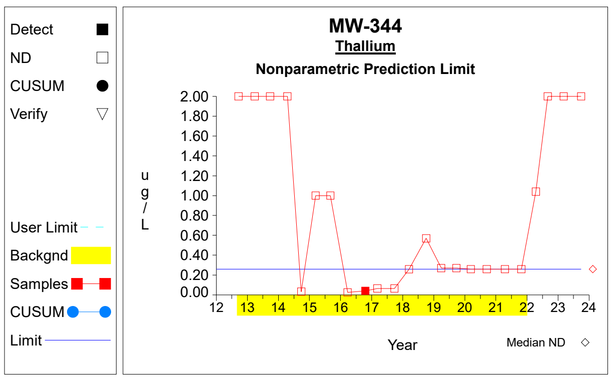


Graph 117



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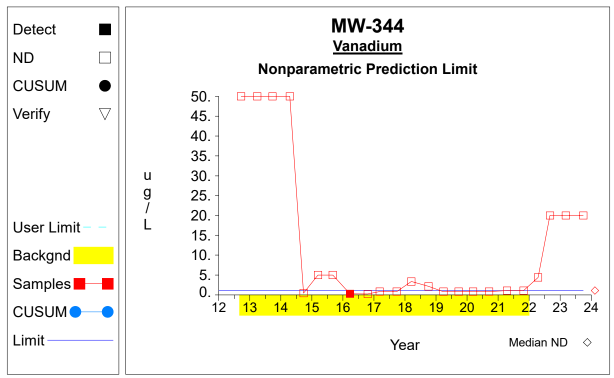

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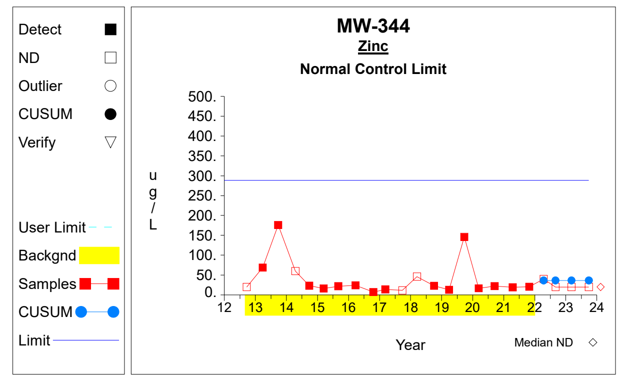

Graph 120

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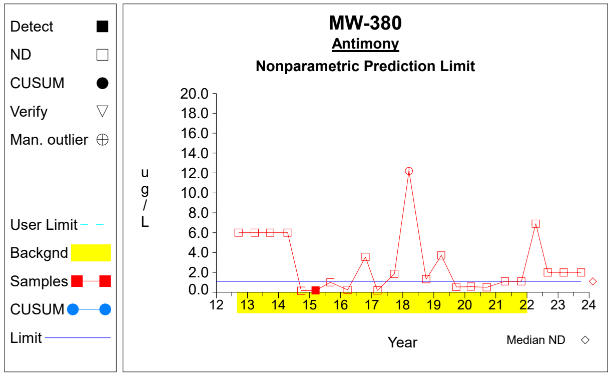

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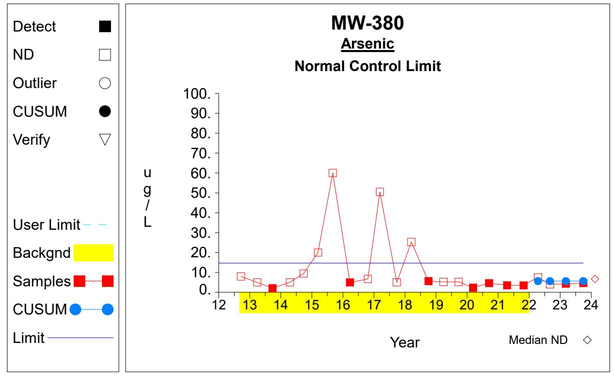

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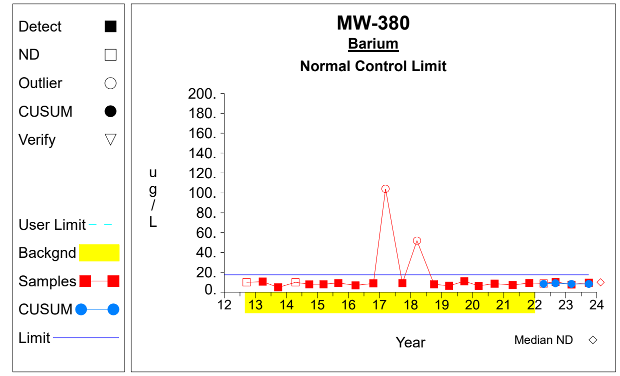

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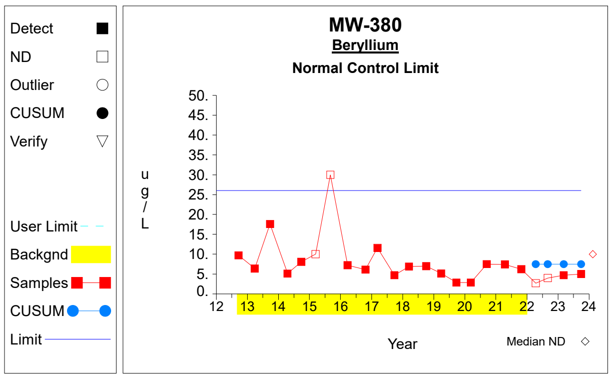

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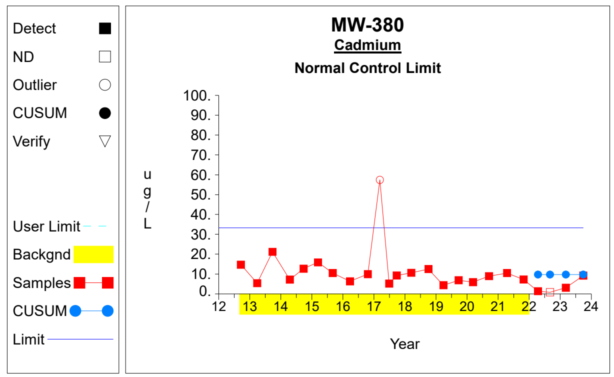

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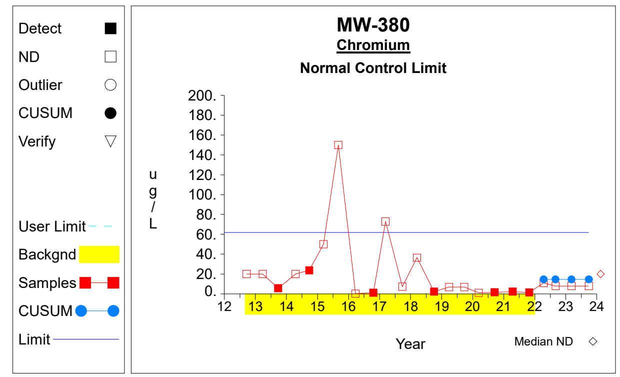

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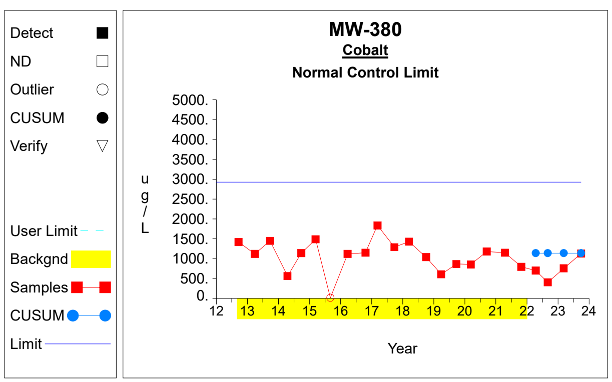

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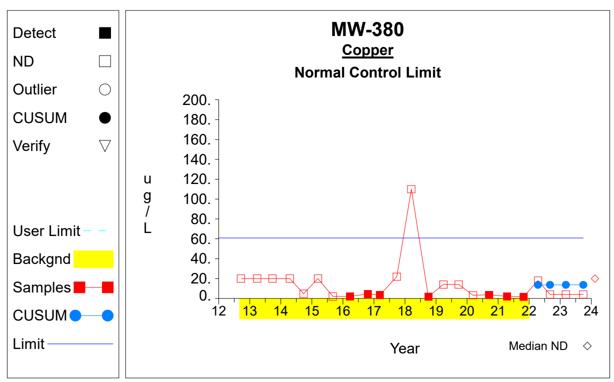

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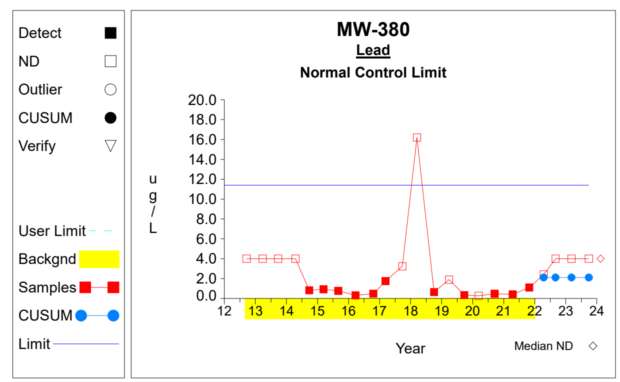

Graph 129

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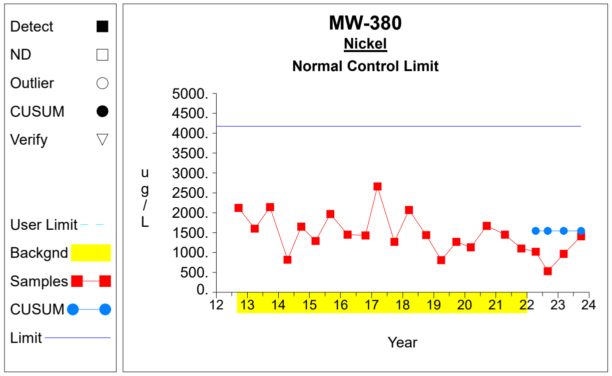
Intra-Well Control Charts / Prediction Limits



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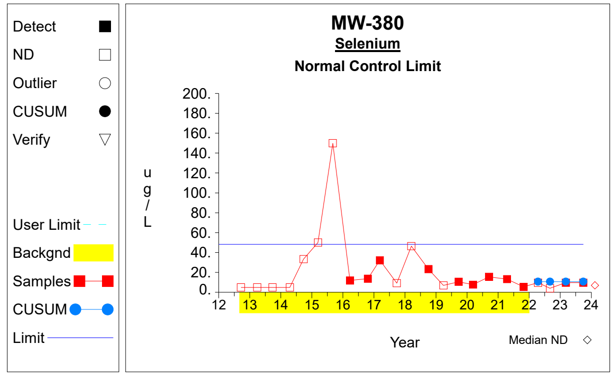

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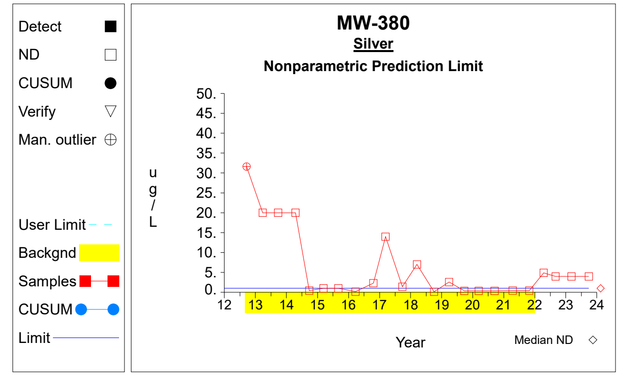

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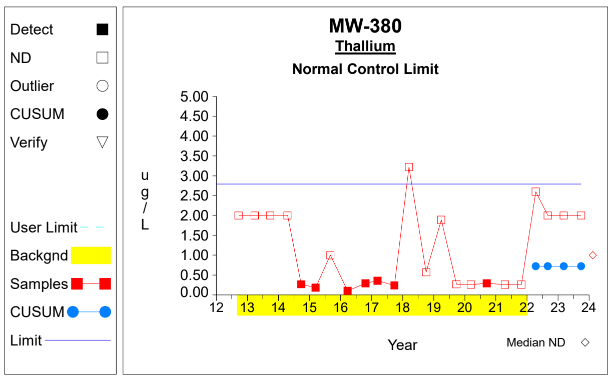

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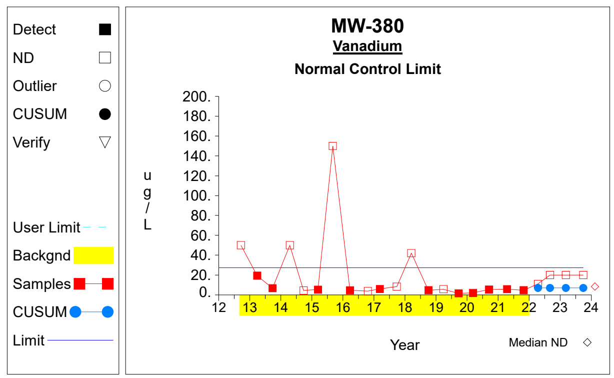

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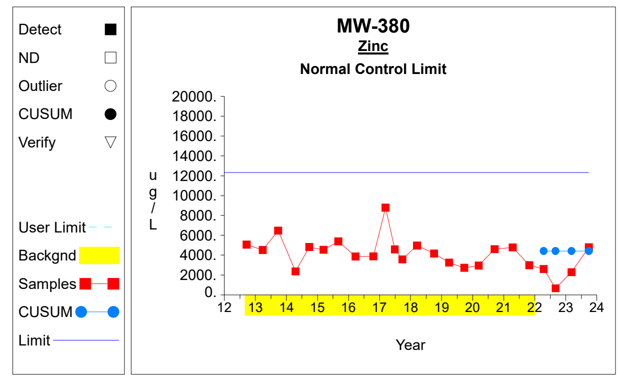

Graph 135

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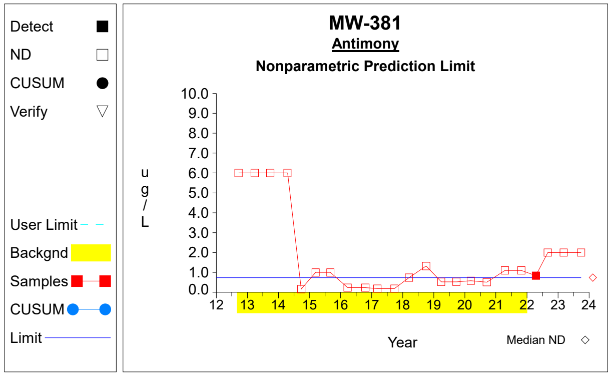
Intra-Well Control Charts / Prediction Limits



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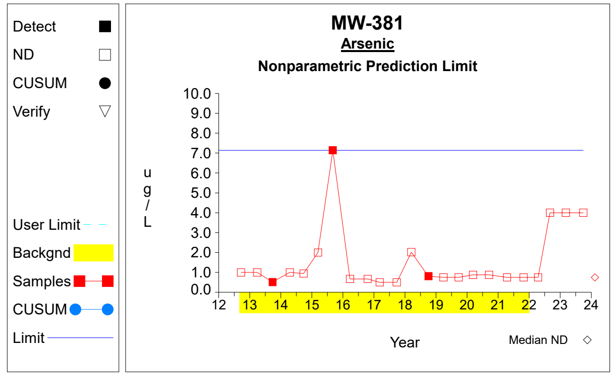

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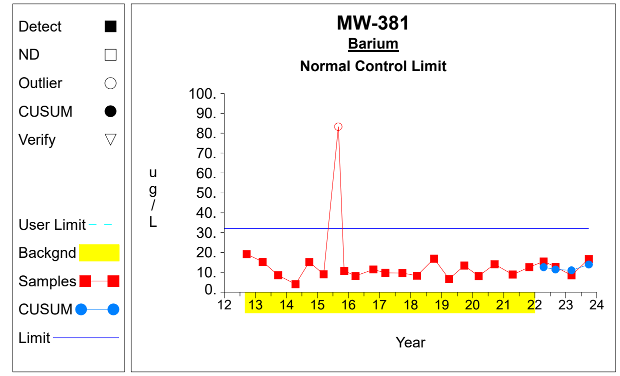

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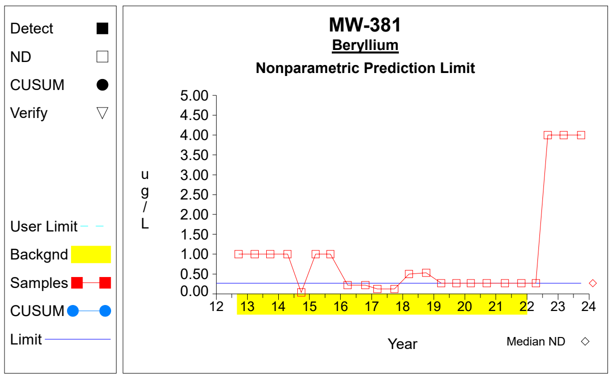

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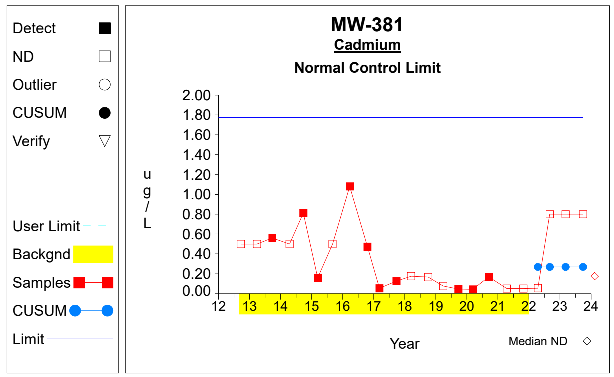

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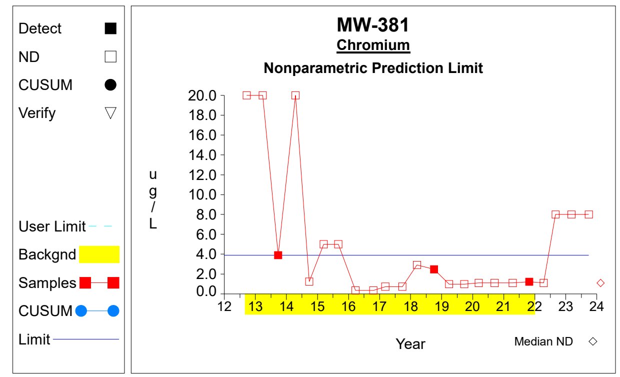

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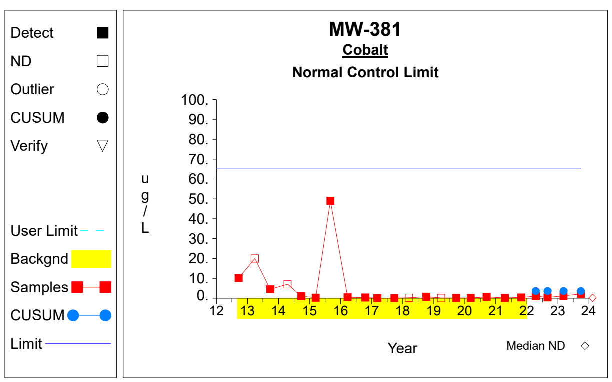

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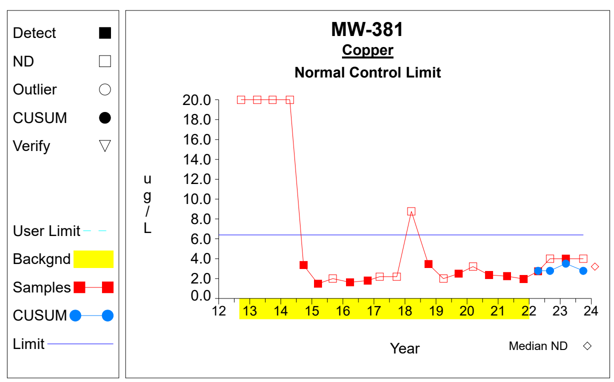

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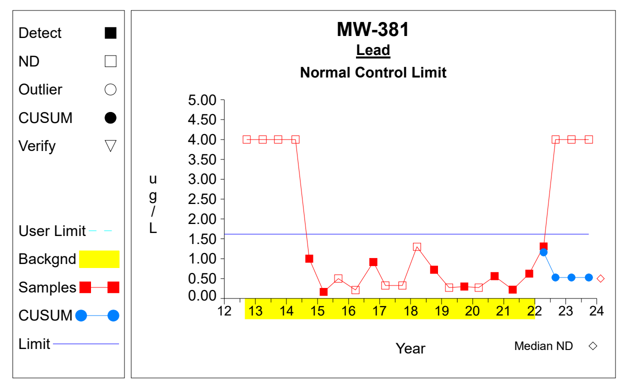

Graph 144

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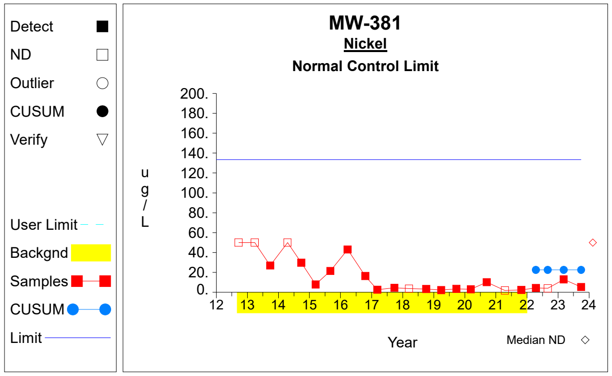
Intra-Well Control Charts / Prediction Limits



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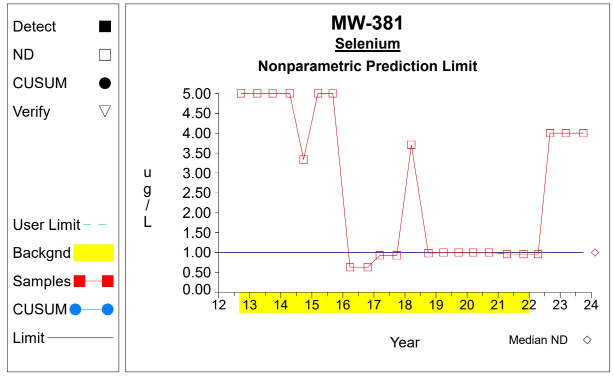
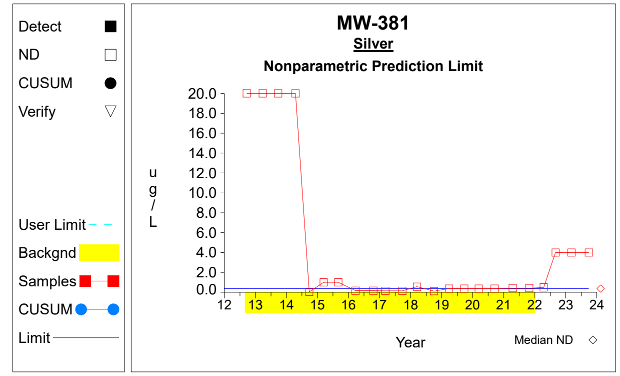


Graph 146



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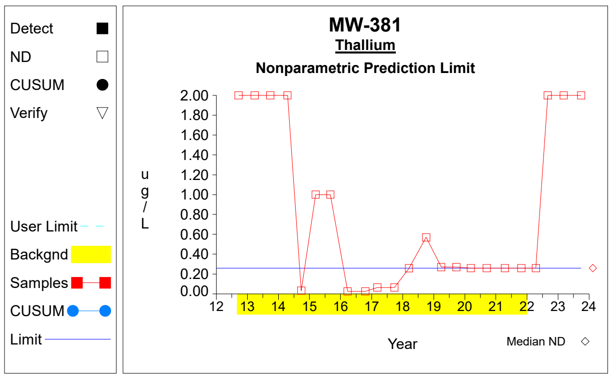

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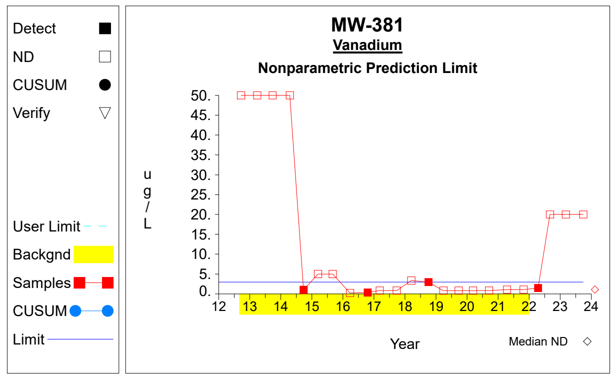

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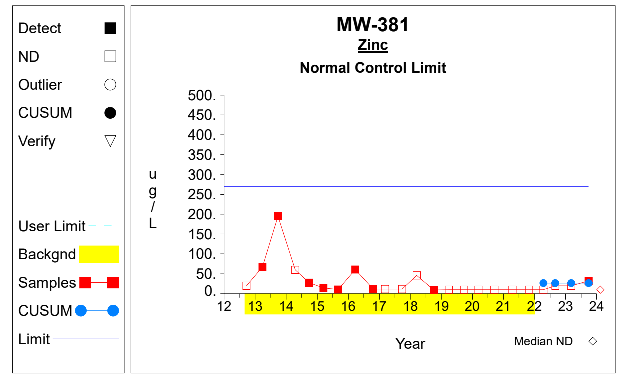
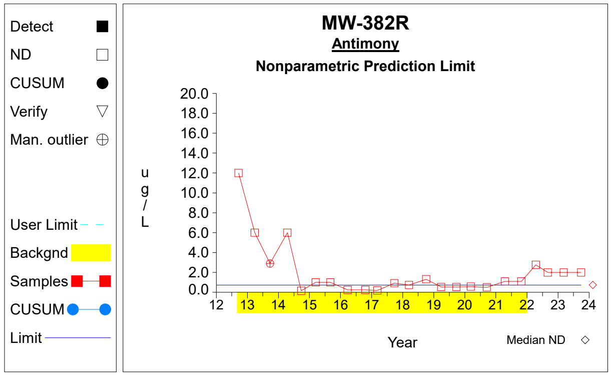


Graph 150

Intra-Well Control Charts / Prediction Limits



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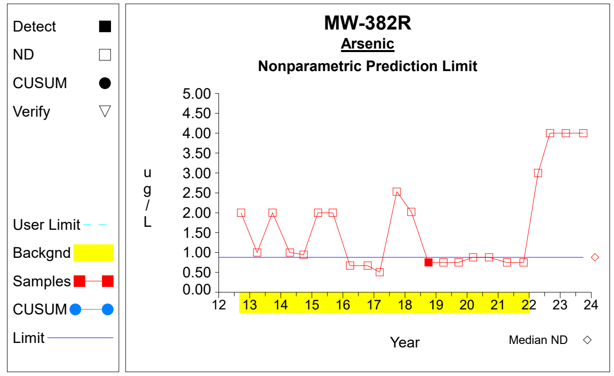

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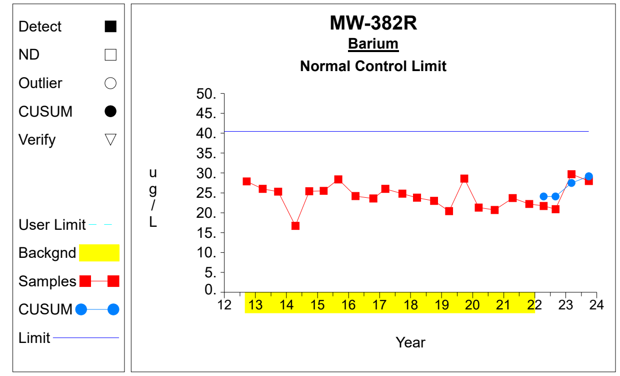

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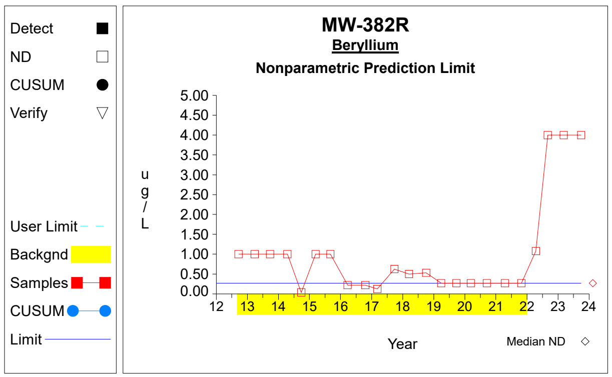

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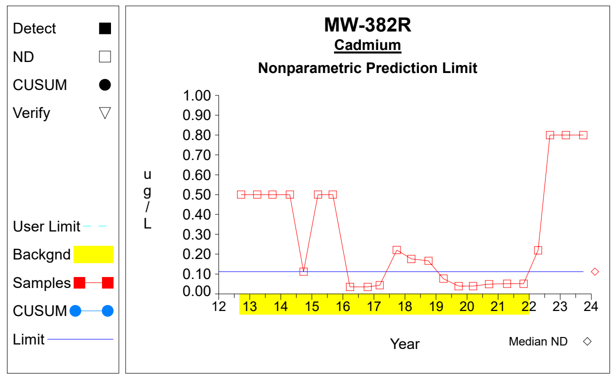

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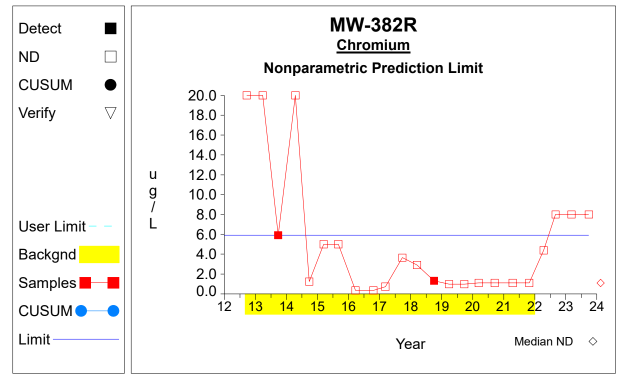

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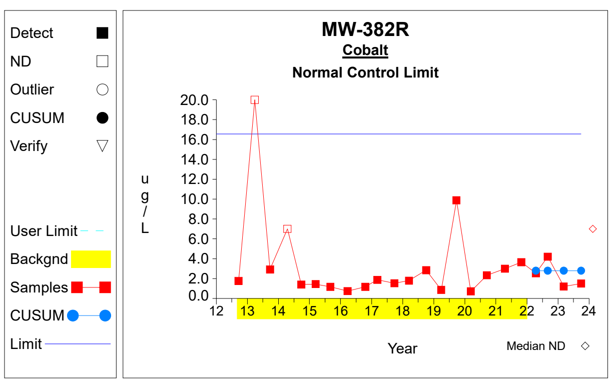

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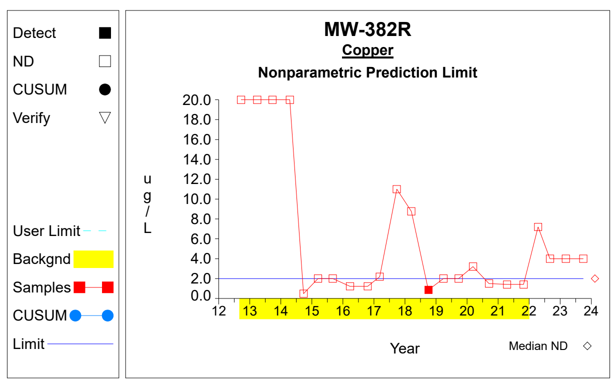

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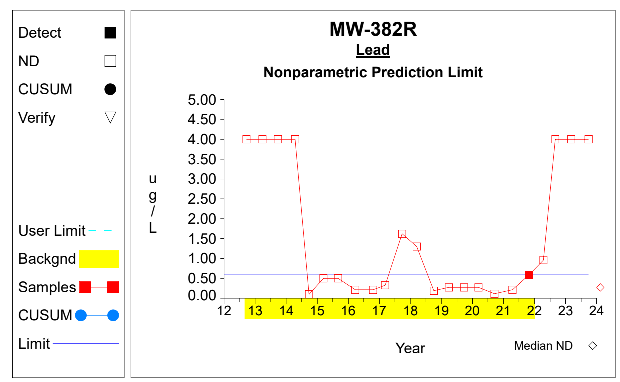

Graph 159

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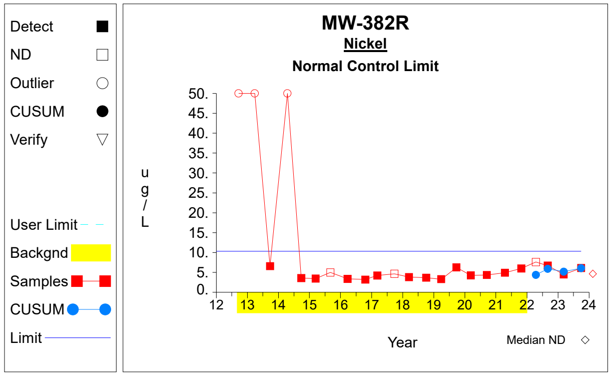
Intra-Well Control Charts / Prediction Limits



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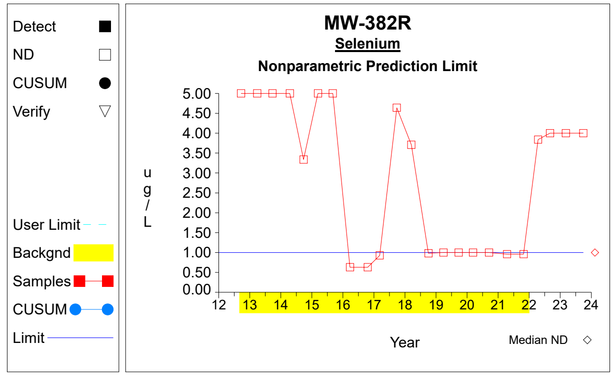

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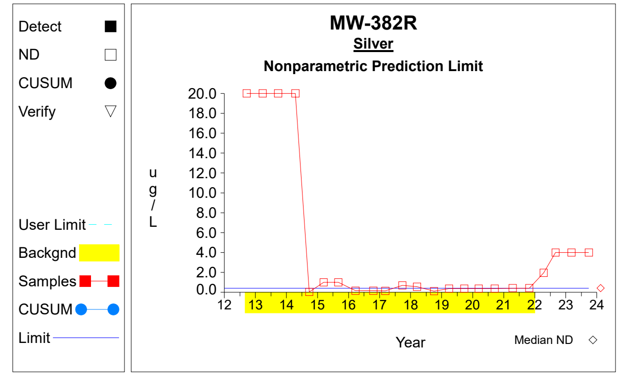
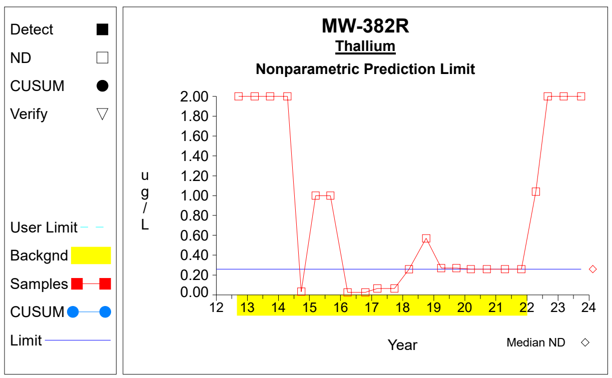
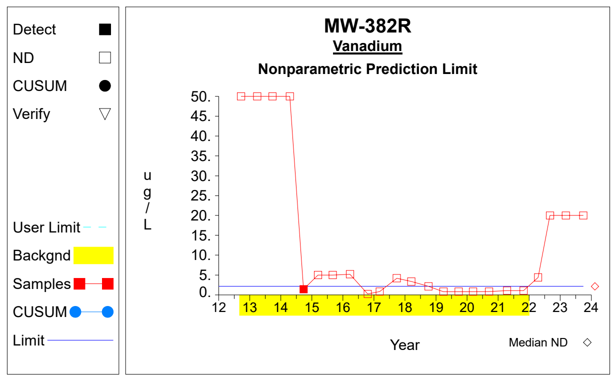


Graph 162



Graph 163



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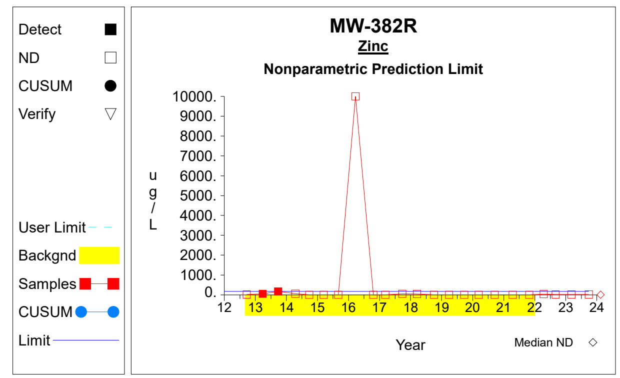
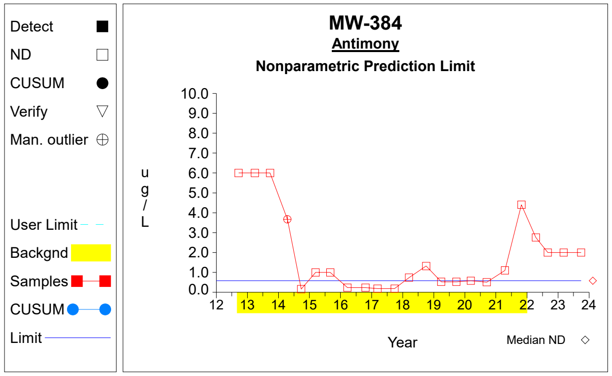
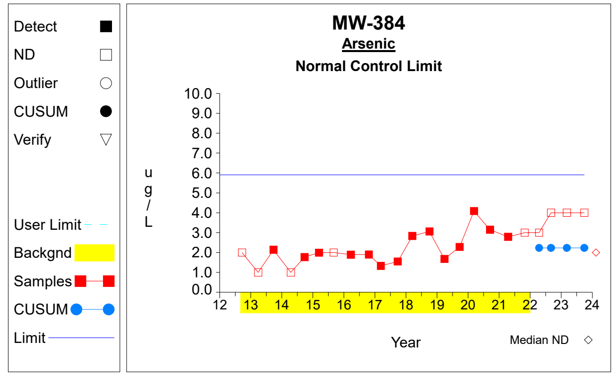


Graph 165

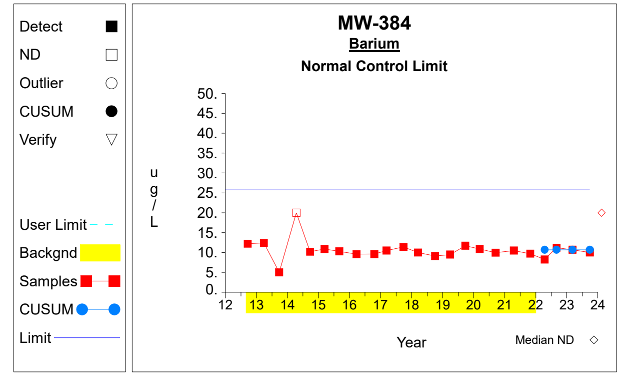
Intra-Well Control Charts / Prediction Limits



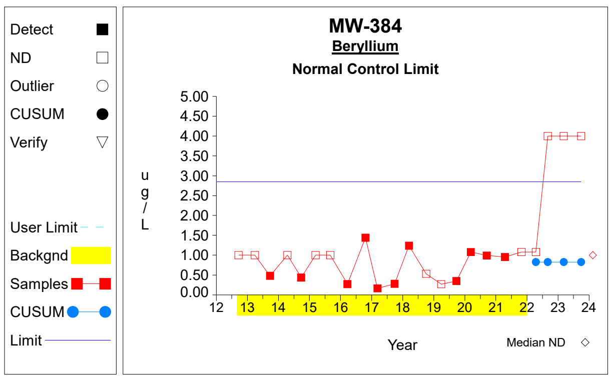
Graph 166



Graph 167



Graph 168



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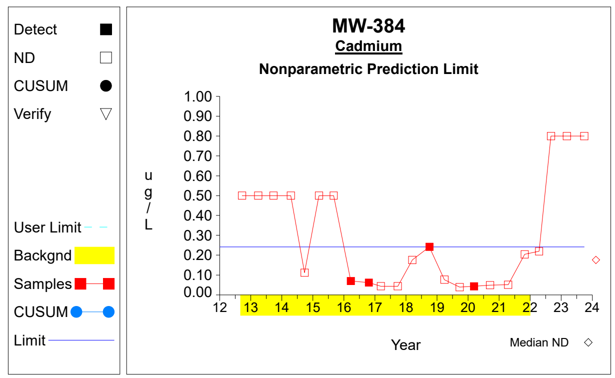
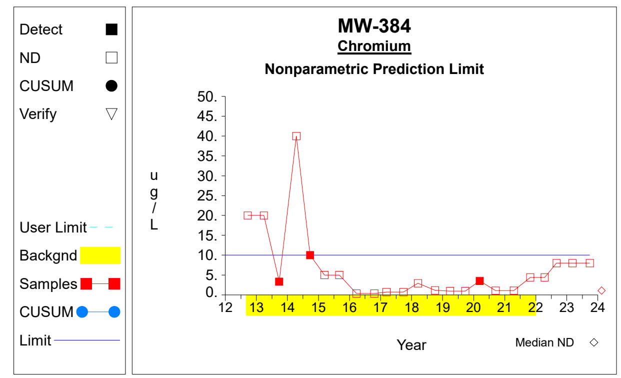
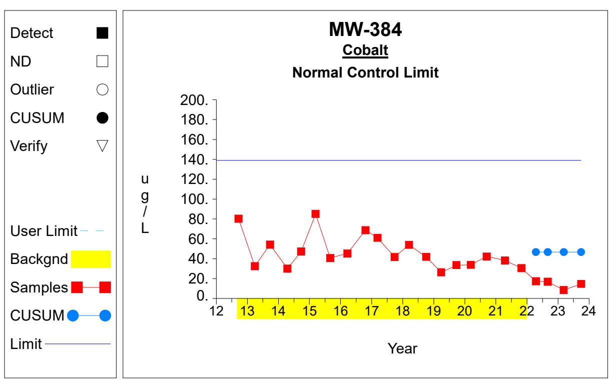


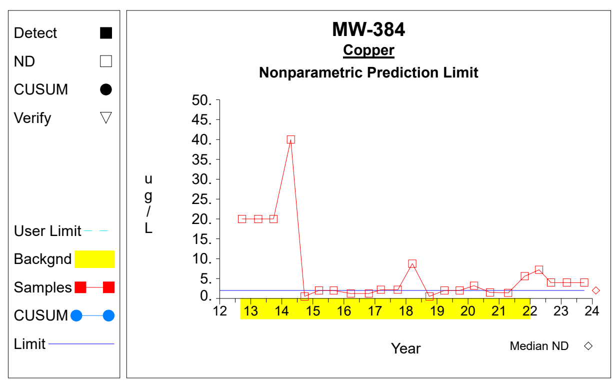
Graph 170



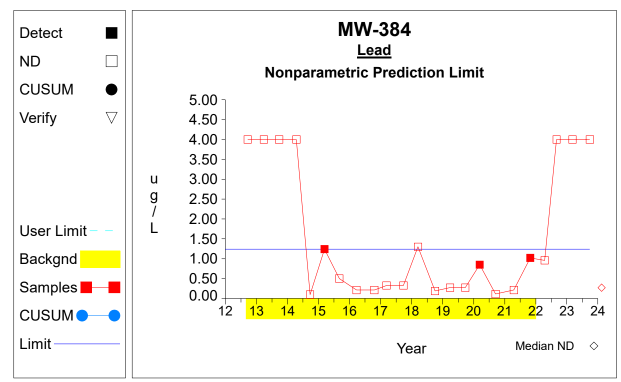
Graph 171



Graph 172



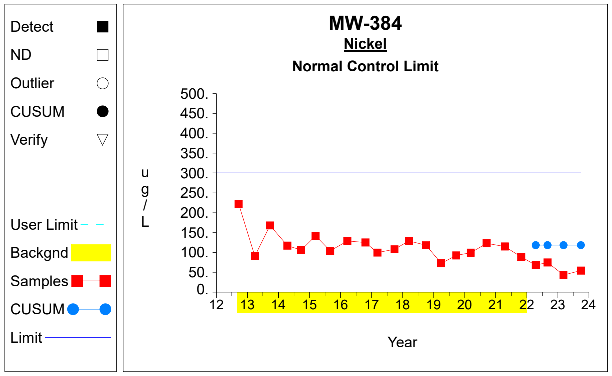
Graph 173



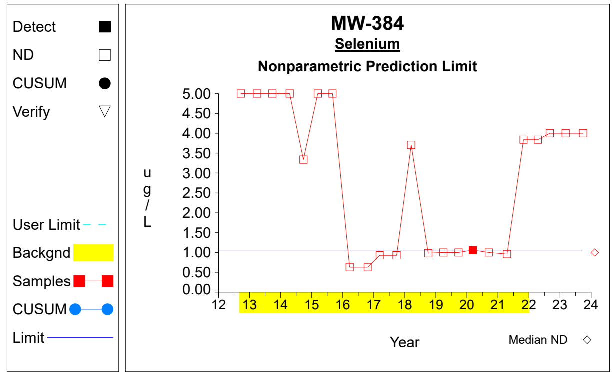
Graph 174

Prepared by: Otter Creek Environmental

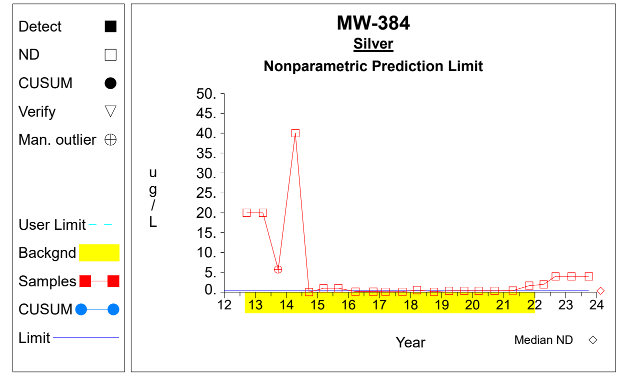
Intra-Well Control Charts / Prediction Limits



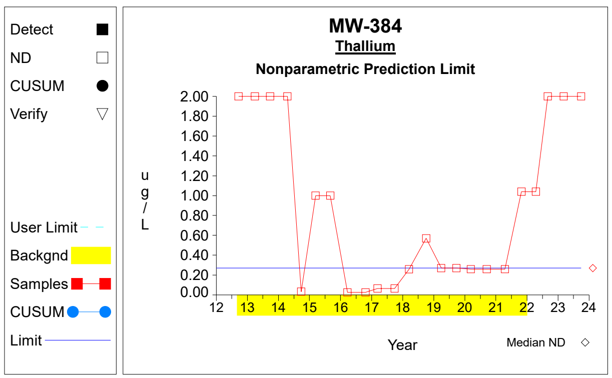
Graph 175



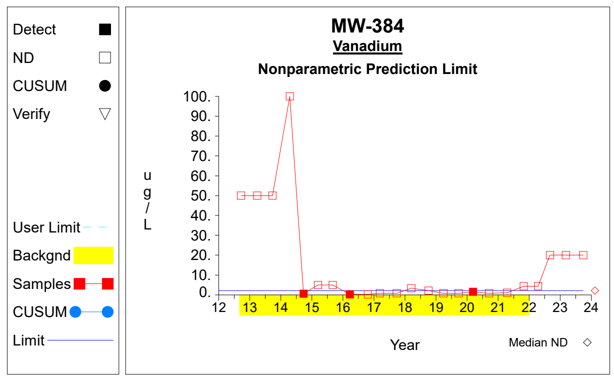
Graph 176



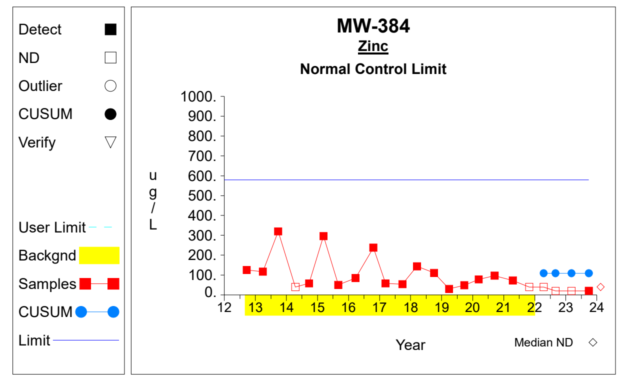
Graph 177



Graph 178



Graph 179

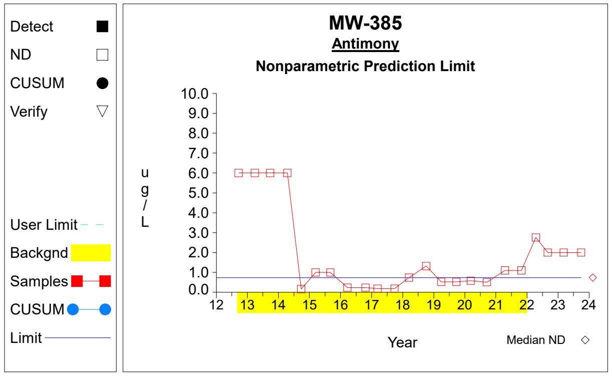


Graph 180

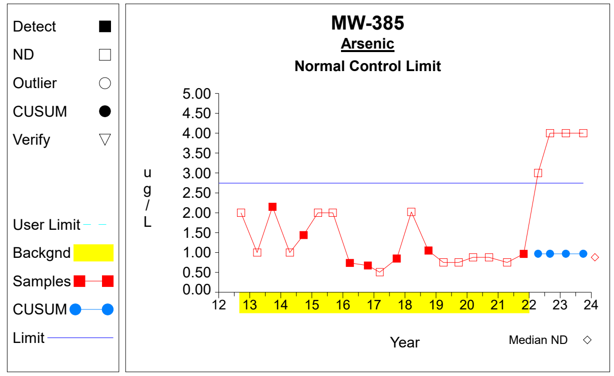
Prepared by: Otter Creek Environmental

South Central Iowa SWA [GW] December 2023

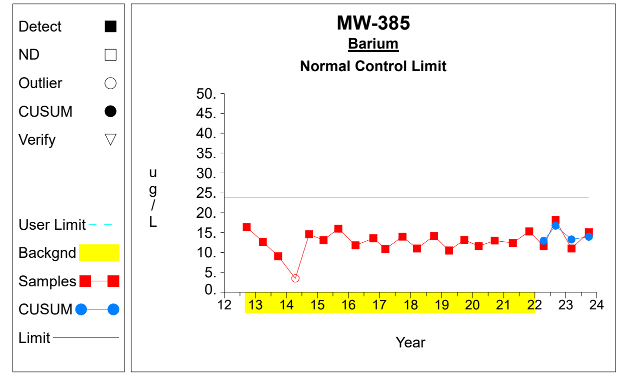
Intra-Well Control Charts / Prediction Limits



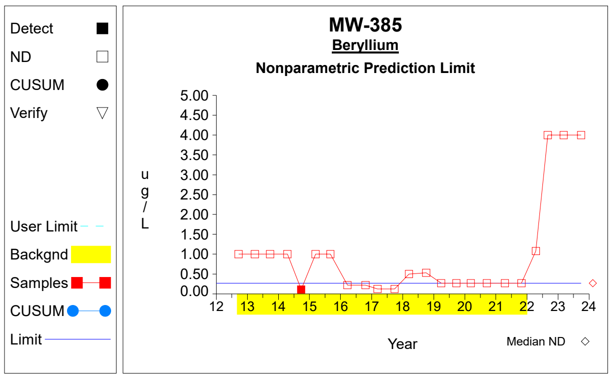
Graph 181



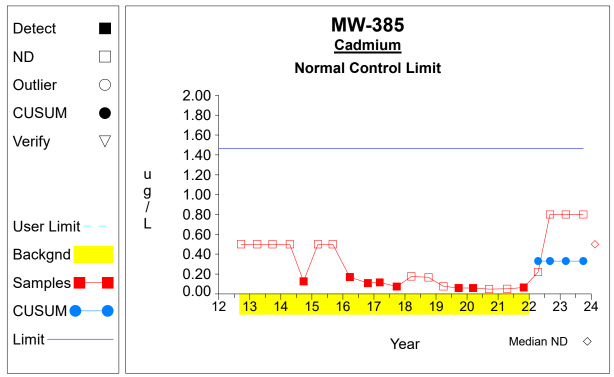
Graph 182



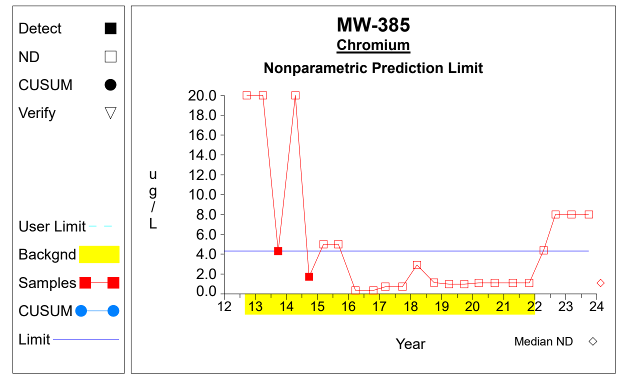
Graph 183



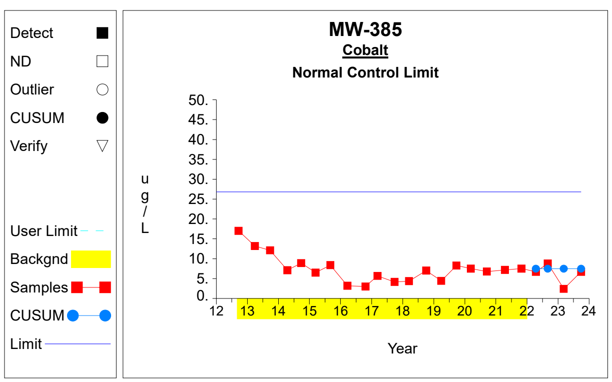
Graph 184



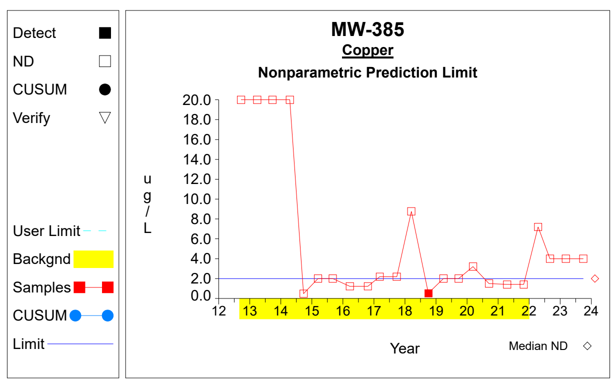
Graph 185



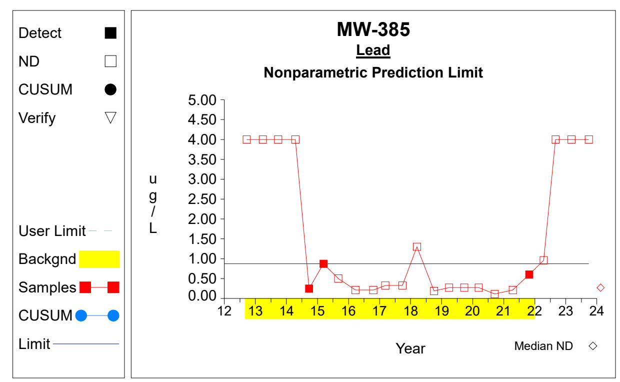
Graph 186



Graph 187



Graph 188

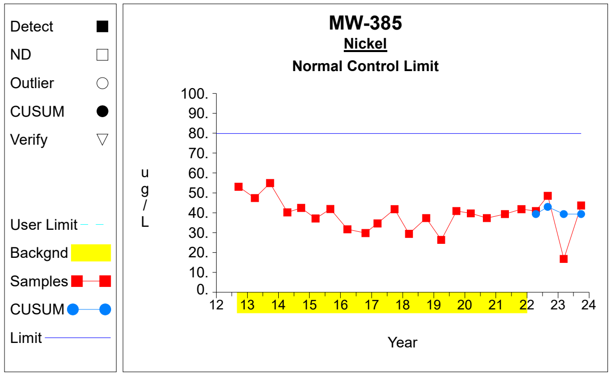


Graph 189

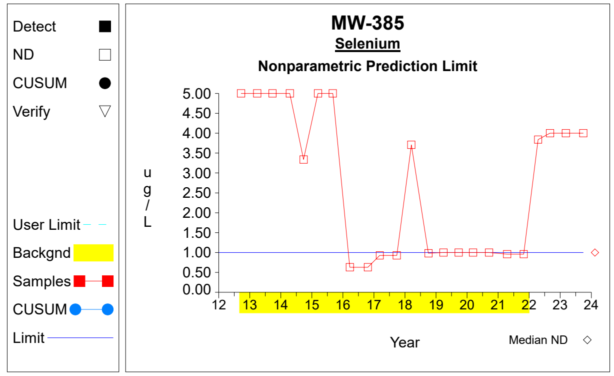
Prepared by: Otter Creek Environmental

South Central Iowa SWA [GW] December 2023

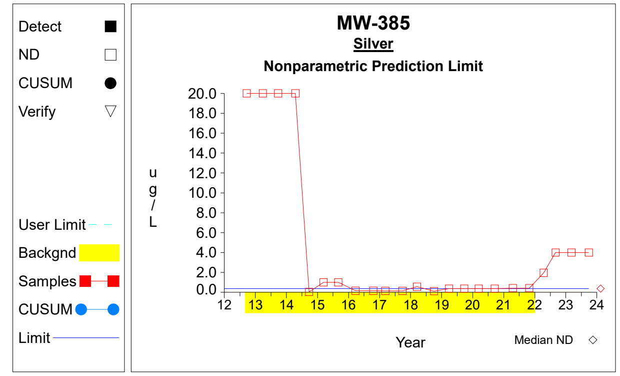
Intra-Well Control Charts / Prediction Limits



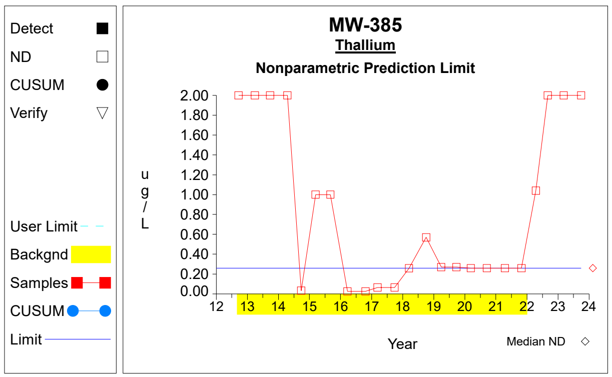
Graph 190



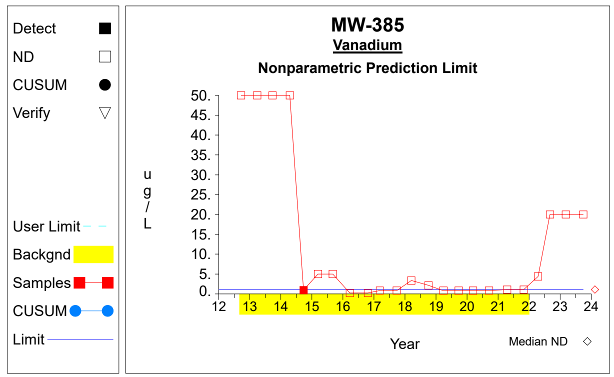
Graph 191



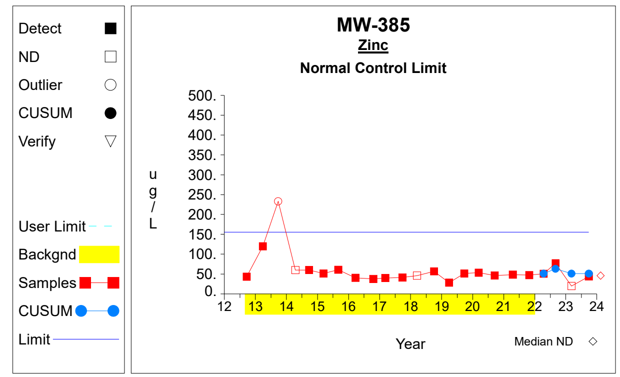
Graph 192



Graph 193



Graph 194

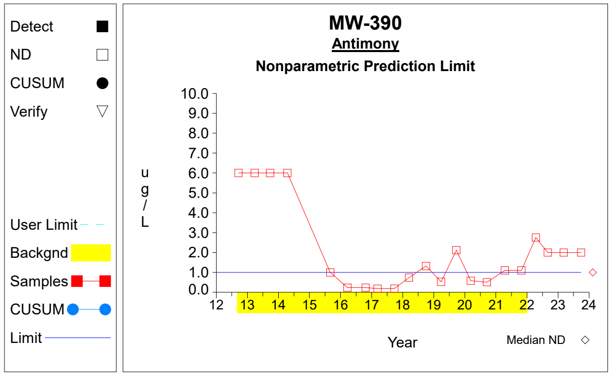


Graph 195

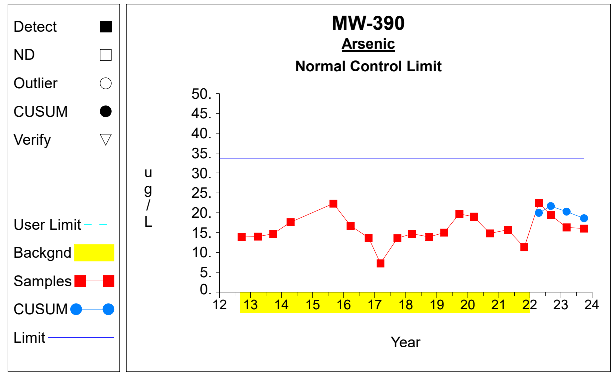
Prepared by: Otter Creek Environmental

South Central Iowa SWA [GW] December 2023

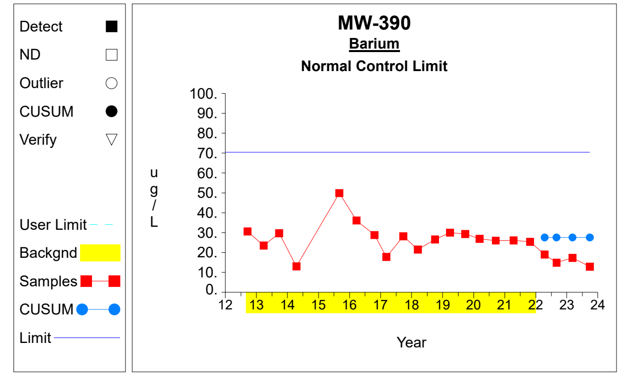
Intra-Well Control Charts / Prediction Limits



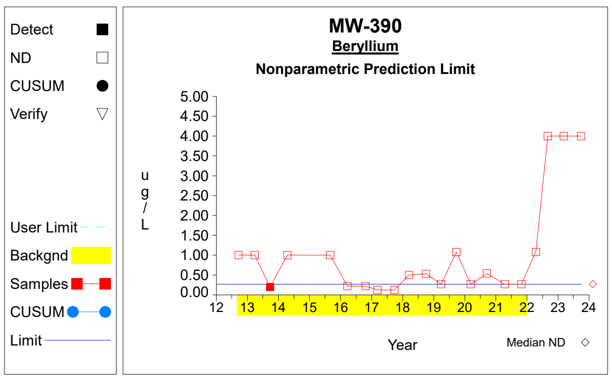
Graph 196



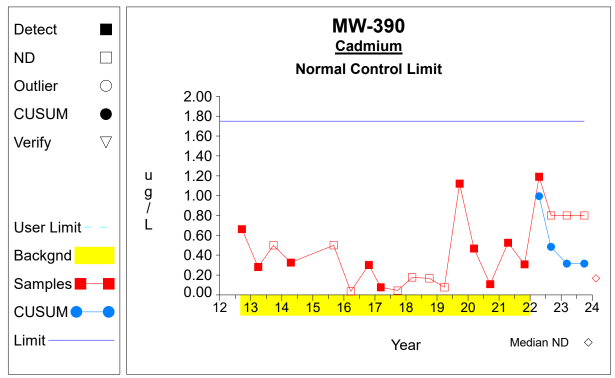
Graph 197



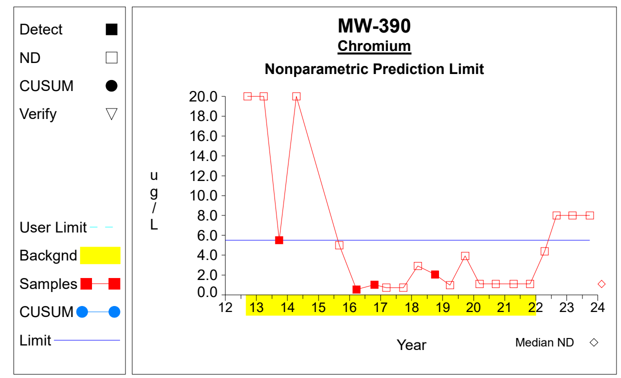
Graph 198



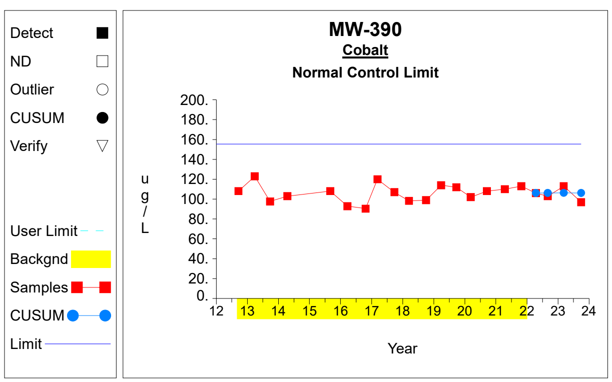
Graph 199



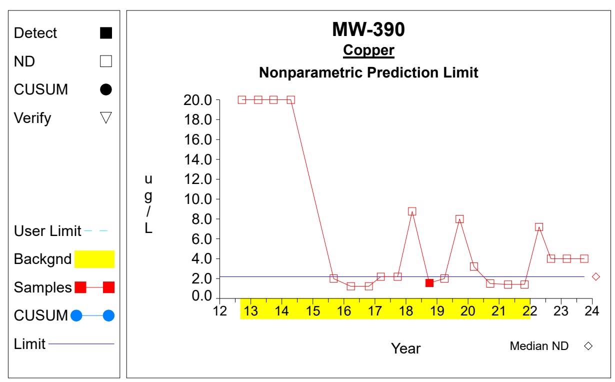
Graph 200



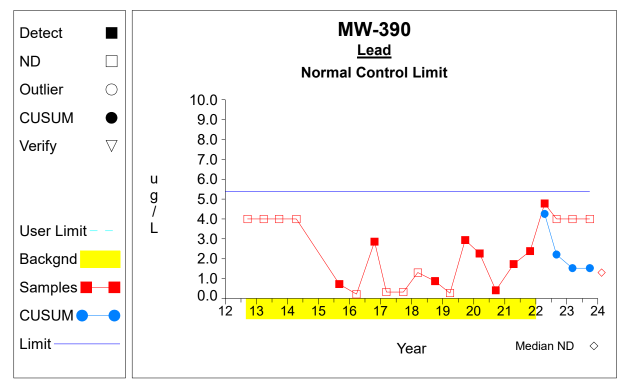
Graph 201



Graph 202



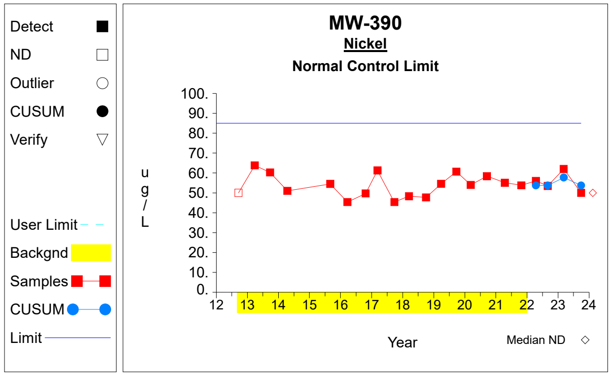
Graph 203



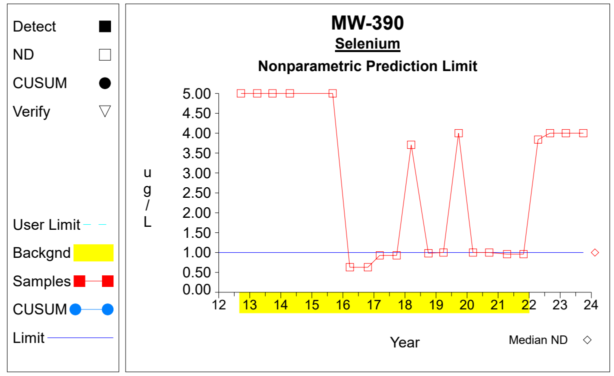
Graph 204

Prepared by: Otter Creek Environmental

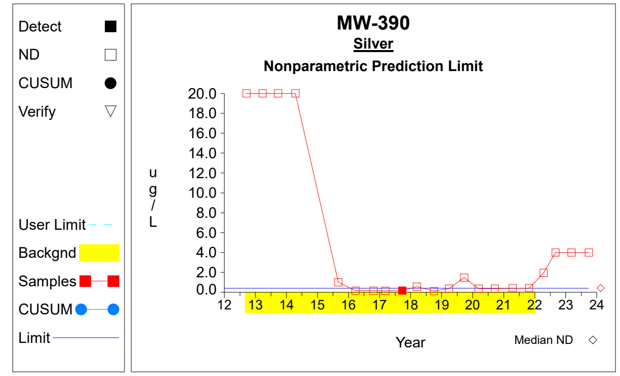
Intra-Well Control Charts / Prediction Limits



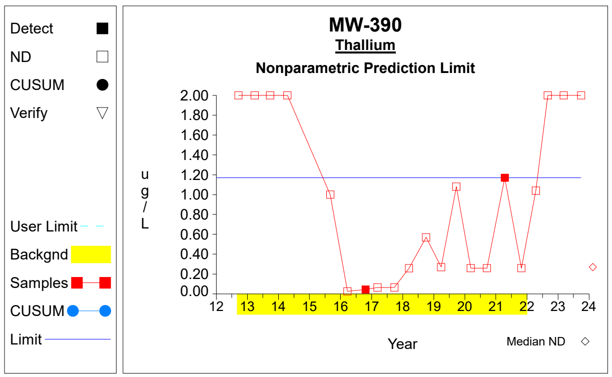
Graph 205



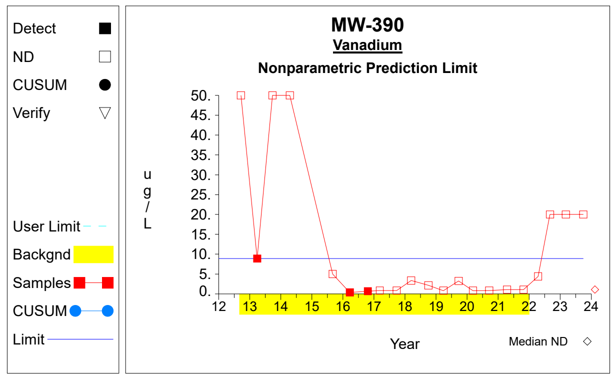
Graph 206



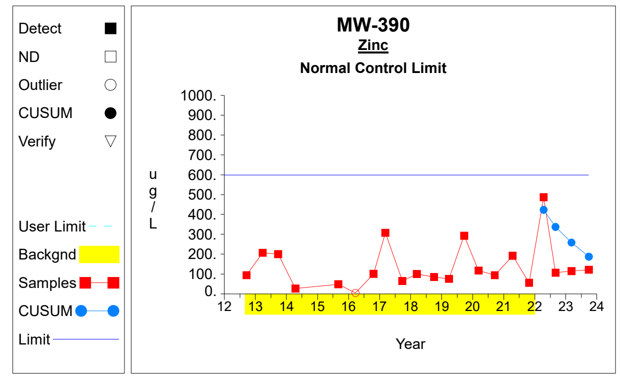
Graph 207



Graph 208

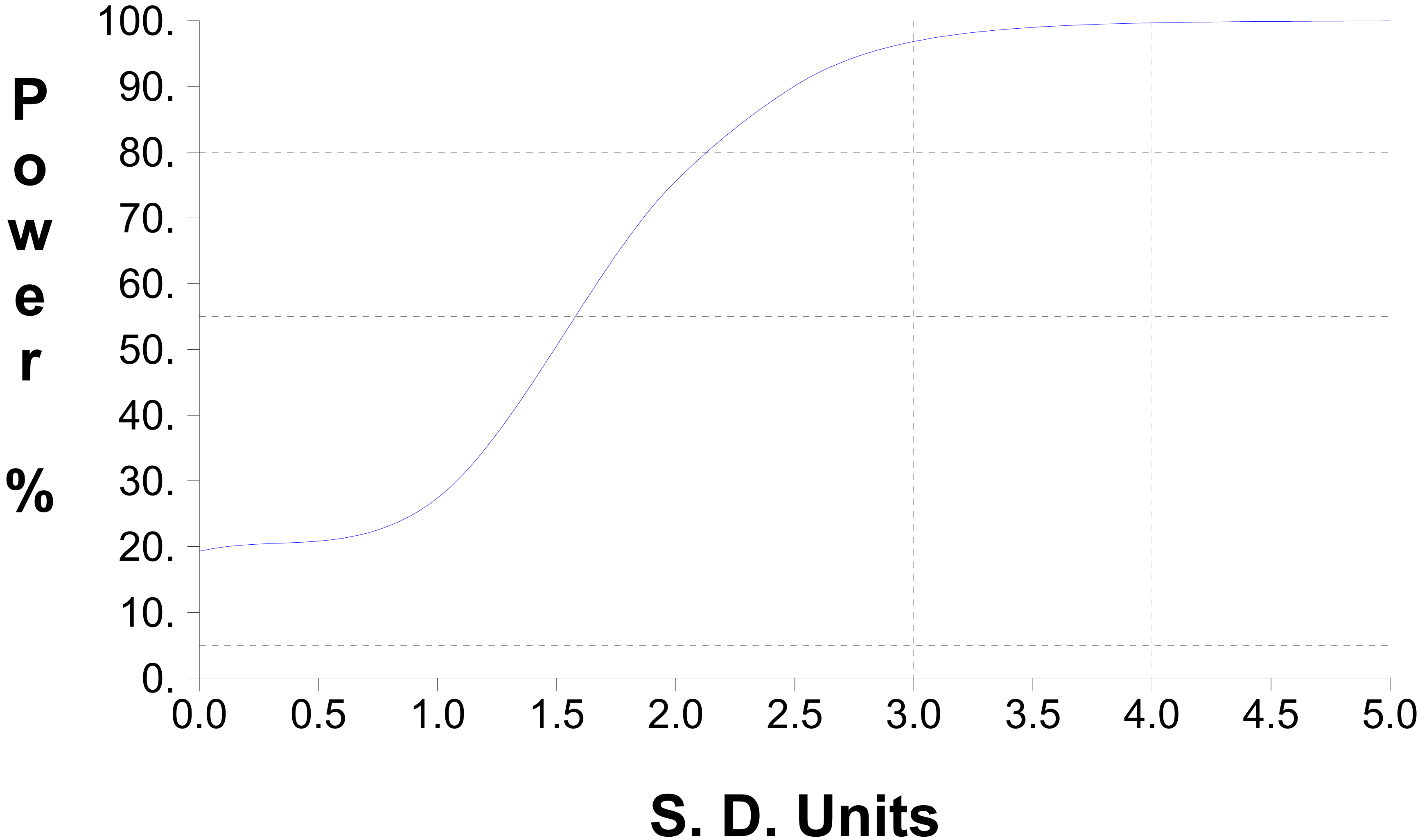


Graph 209



Graph 210

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



Attachment C

Summary Tables and Graphs for the Interwell Comparisons

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Antimony	ug/L	MW-307	09/18/2012	ND	12.0000	1.1000	**
Antimony	ug/L	MW-307	03/27/2013	ND	6.0000	1.1000	**
Antimony	ug/L	MW-307	09/26/2013	ND	6.0000	1.1000	**
Antimony	ug/L	MW-307	04/15/2014	ND	6.0000	1.1000	**
Antimony	ug/L	MW-307	09/01/2015	ND	1.0000	1.1000	**
Antimony	ug/L	MW-307	03/22/2016	ND	0.2370	1.1000	**
Antimony	ug/L	MW-307	10/21/2016	ND	0.2370	1.1000	**
Antimony	ug/L	MW-307	03/08/2017	ND	0.1850	1.1000	**
Antimony	ug/L	MW-307	09/25/2017	ND	0.1850	1.1000	**
Antimony	ug/L	MW-307	03/13/2018	ND	0.7400	1.1000	**
Antimony	ug/L	MW-307	10/01/2018	ND	1.3200	1.1000	**
Antimony	ug/L	MW-307	03/27/2019	ND	0.5300	1.1000	**
Antimony	ug/L	MW-307	09/23/2019	ND	2.1200	1.1000	**
Antimony	ug/L	MW-307	03/09/2020	ND	0.5800	1.1000	**
Antimony	ug/L	MW-307	09/17/2020	ND	0.5100	1.1000	**
Antimony	ug/L	MW-307	04/16/2021	ND	1.1000		
Antimony	ug/L	MW-307	10/28/2021	ND	1.1000		
Antimony	ug/L	MW-307	04/13/2022	ND	2.7600	1.1000	**
Antimony	ug/L	MW-307	09/01/2022	ND	2.0000	1.1000	**
Antimony	ug/L	MW-307	03/06/2023	ND	2.0000	1.1000	**
Antimony	ug/L	MW-307	09/29/2023		4.4000		
Arsenic	ug/L	MW-307	09/18/2012		2.0100		
Arsenic	ug/L	MW-307	03/27/2013	ND	2.0000		
Arsenic	ug/L	MW-307	09/26/2013		4.6700		
Arsenic	ug/L	MW-307	04/15/2014	ND	1.0000	2.0000	**
Arsenic	ug/L	MW-307	09/01/2015		3.7000		
Arsenic	ug/L	MW-307	03/22/2016		4.3500		
Arsenic	ug/L	MW-307	10/21/2016		3.9600		
Arsenic	ug/L	MW-307	03/08/2017	ND	5.0500	2.0000	**
Arsenic	ug/L	MW-307	09/25/2017		3.8900		
Arsenic	ug/L	MW-307	03/13/2018		3.7200		
Arsenic	ug/L	MW-307	10/01/2018		4.4100		
Arsenic	ug/L	MW-307	03/27/2019		3.6900		
Arsenic	ug/L	MW-307	09/23/2019		3.9100		
Arsenic	ug/L	MW-307	03/09/2020		3.9700		
Arsenic	ug/L	MW-307	09/17/2020		3.9200		
Arsenic	ug/L	MW-307	04/16/2021		4.3400		
Arsenic	ug/L	MW-307	10/28/2021	ND	0.7500		*
Arsenic	ug/L	MW-307	04/13/2022		3.9200		
Arsenic	ug/L	MW-307	09/01/2022	ND	4.0000	2.0000	**
Arsenic	ug/L	MW-307	03/06/2023		4.3000		
Arsenic	ug/L	MW-307	09/29/2023		31.9000		*
Barium	ug/L	MW-307	09/18/2012	ND	10.0000		
Barium	ug/L	MW-307	03/27/2013		10.4000		
Barium	ug/L	MW-307	09/26/2013	ND	30.0000	10.0000	**
Barium	ug/L	MW-307	04/15/2014	ND	10.0000		
Barium	ug/L	MW-307	09/01/2015		9.5900		
Barium	ug/L	MW-307	03/22/2016		8.5100		
Barium	ug/L	MW-307	10/21/2016		8.9200		
Barium	ug/L	MW-307	03/08/2017		8.7100		
Barium	ug/L	MW-307	09/25/2017		8.5700		
Barium	ug/L	MW-307	03/13/2018		9.2700		
Barium	ug/L	MW-307	10/01/2018		7.2400		
Barium	ug/L	MW-307	03/27/2019		7.8600		
Barium	ug/L	MW-307	09/23/2019		7.9700		
Barium	ug/L	MW-307	03/09/2020		8.2600		
Barium	ug/L	MW-307	09/17/2020		7.6700		
Barium	ug/L	MW-307	04/16/2021		9.9100		
Barium	ug/L	MW-307	10/28/2021		17.6000		
Barium	ug/L	MW-307	04/13/2022		8.8200		
Barium	ug/L	MW-307	09/01/2022		8.3000		
Barium	ug/L	MW-307	03/06/2023		8.9000		
Barium	ug/L	MW-307	09/29/2023		21.8000		
Beryllium	ug/L	MW-307	09/18/2012	ND	1.0000		
Beryllium	ug/L	MW-307	03/27/2013		0.6240		
Beryllium	ug/L	MW-307	09/26/2013		0.5800		
Beryllium	ug/L	MW-307	04/15/2014		0.2650		
Beryllium	ug/L	MW-307	09/01/2015	ND	1.0000		
Beryllium	ug/L	MW-307	03/22/2016		0.5390		
Beryllium	ug/L	MW-307	10/21/2016		0.4770		
Beryllium	ug/L	MW-307	03/08/2017		0.4550		
Beryllium	ug/L	MW-307	09/25/2017		0.4270		
Beryllium	ug/L	MW-307	03/13/2018	ND	0.5000	1.0000	**
Beryllium	ug/L	MW-307	10/01/2018	ND	0.5300	1.0000	**

* - 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	ug/L	MW-307	03/27/2019		0.3750		
Beryllium	ug/L	MW-307	09/23/2019	ND	1.0800	1.0000	**
Beryllium	ug/L	MW-307	03/09/2020		0.3300		
Beryllium	ug/L	MW-307	09/17/2020	ND	1.0800	1.0000	**
Beryllium	ug/L	MW-307	04/16/2021		0.5770		
Beryllium	ug/L	MW-307	10/28/2021	ND	0.2700	1.0000	**
Beryllium	ug/L	MW-307	04/13/2022	ND	1.0800	1.0000	**
Beryllium	ug/L	MW-307	09/01/2022	ND	4.0000	1.0000	**
Beryllium	ug/L	MW-307	03/06/2023	ND	4.0000	1.0000	**
Beryllium	ug/L	MW-307	09/29/2023	ND	4.0000	1.0000	**
Cadmium	ug/L	MW-307	09/18/2012	ND	0.5000		
Cadmium	ug/L	MW-307	03/27/2013	ND	0.5000		
Cadmium	ug/L	MW-307	09/26/2013	ND	0.5000		
Cadmium	ug/L	MW-307	04/15/2014		0.1470		
Cadmium	ug/L	MW-307	09/01/2015	ND	0.5000		
Cadmium	ug/L	MW-307	03/22/2016		0.1620		
Cadmium	ug/L	MW-307	10/21/2016		0.1150		
Cadmium	ug/L	MW-307	03/08/2017		0.1060		
Cadmium	ug/L	MW-307	09/25/2017		0.0750		
Cadmium	ug/L	MW-307	03/13/2018	ND	0.1760	0.5000	**
Cadmium	ug/L	MW-307	10/01/2018		0.8170		
Cadmium	ug/L	MW-307	03/27/2019		0.0910		
Cadmium	ug/L	MW-307	09/23/2019	ND	0.1560	0.5000	**
Cadmium	ug/L	MW-307	03/09/2020		0.1280		
Cadmium	ug/L	MW-307	09/17/2020		0.0860		
Cadmium	ug/L	MW-307	04/16/2021		0.1160		
Cadmium	ug/L	MW-307	10/28/2021		0.0840		
Cadmium	ug/L	MW-307	04/13/2022	ND	0.2200	0.5000	**
Cadmium	ug/L	MW-307	09/01/2022	ND	0.8000	0.5000	**
Cadmium	ug/L	MW-307	03/06/2023	ND	0.8000	0.5000	**
Cadmium	ug/L	MW-307	09/29/2023	ND	0.8000	0.5000	**
Chromium	ug/L	MW-307	09/18/2012	ND	20.0000	3.9200	**
Chromium	ug/L	MW-307	03/27/2013	ND	20.0000	3.9200	**
Chromium	ug/L	MW-307	09/26/2013	ND	60.0000	3.9200	**
Chromium	ug/L	MW-307	04/15/2014	ND	20.0000	3.9200	**
Chromium	ug/L	MW-307	09/01/2015	ND	5.0000	3.9200	**
Chromium	ug/L	MW-307	03/22/2016	ND	0.3550	3.9200	**
Chromium	ug/L	MW-307	10/21/2016	ND	0.3550	3.9200	**
Chromium	ug/L	MW-307	03/08/2017	ND	7.2900	3.9200	**
Chromium	ug/L	MW-307	09/25/2017	ND	0.7290	3.9200	**
Chromium	ug/L	MW-307	03/13/2018	ND	2.9200	3.9200	**
Chromium	ug/L	MW-307	10/01/2018		1.6000		
Chromium	ug/L	MW-307	03/27/2019	ND	0.9800	3.9200	**
Chromium	ug/L	MW-307	09/23/2019	ND	3.9200		
Chromium	ug/L	MW-307	03/09/2020	ND	1.1000	3.9200	**
Chromium	ug/L	MW-307	09/17/2020	ND	1.1000	3.9200	**
Chromium	ug/L	MW-307	04/16/2021	ND	1.1000	3.9200	**
Chromium	ug/L	MW-307	10/28/2021	ND	1.1000	3.9200	**
Chromium	ug/L	MW-307	04/13/2022	ND	4.4000	3.9200	**
Chromium	ug/L	MW-307	09/01/2022	ND	8.0000	3.9200	**
Chromium	ug/L	MW-307	03/06/2023	ND	8.0000	3.9200	**
Chromium	ug/L	MW-307	09/29/2023	ND	8.0000	3.9200	**
Cobalt	ug/L	MW-307	09/18/2012		60.1000		
Cobalt	ug/L	MW-307	03/27/2013		83.8000		
Cobalt	ug/L	MW-307	09/26/2013		44.3000		
Cobalt	ug/L	MW-307	04/15/2014		59.8000		
Cobalt	ug/L	MW-307	09/01/2015		41.9000		
Cobalt	ug/L	MW-307	03/22/2016		50.9000		
Cobalt	ug/L	MW-307	10/21/2016		59.1000		
Cobalt	ug/L	MW-307	03/08/2017		68.4000		
Cobalt	ug/L	MW-307	09/25/2017		58.0000		
Cobalt	ug/L	MW-307	03/13/2018		65.1000		
Cobalt	ug/L	MW-307	10/01/2018		52.4000		
Cobalt	ug/L	MW-307	03/27/2019		35.6000		
Cobalt	ug/L	MW-307	09/23/2019		44.9000		
Cobalt	ug/L	MW-307	03/09/2020		42.0000		
Cobalt	ug/L	MW-307	09/17/2020		45.8000		
Cobalt	ug/L	MW-307	04/16/2021		59.1000		
Cobalt	ug/L	MW-307	10/28/2021		14.8000		*
Cobalt	ug/L	MW-307	04/13/2022		53.5000		
Cobalt	ug/L	MW-307	09/01/2022		39.9000		
Cobalt	ug/L	MW-307	03/06/2023		48.5000		
Cobalt	ug/L	MW-307	09/29/2023		36.6000		
Copper	ug/L	MW-307	09/18/2012	ND	20.0000	3.2000	**

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Copper	ug/L	MW-307	03/27/2013	ND	20.0000	3.2000	**
Copper	ug/L	MW-307	09/26/2013	ND	60.0000	3.2000	**
Copper	ug/L	MW-307	04/15/2014	ND	20.0000	3.2000	**
Copper	ug/L	MW-307	09/01/2015	ND	2.0000	3.2000	**
Copper	ug/L	MW-307	03/22/2016	ND	1.2200	3.2000	**
Copper	ug/L	MW-307	10/21/2016	ND	1.2200	3.2000	**
Copper	ug/L	MW-307	03/08/2017	ND	2.1900	3.2000	**
Copper	ug/L	MW-307	09/25/2017	ND	2.1900	3.2000	**
Copper	ug/L	MW-307	03/13/2018	ND	8.7600	3.2000	**
Copper	ug/L	MW-307	10/01/2018		1.2400		
Copper	ug/L	MW-307	03/27/2019	ND	2.0000	3.2000	**
Copper	ug/L	MW-307	09/23/2019	ND	8.0000	3.2000	**
Copper	ug/L	MW-307	03/09/2020	ND	3.2000		
Copper	ug/L	MW-307	09/17/2020	ND	1.5000	3.2000	**
Copper	ug/L	MW-307	04/16/2021	ND	1.4000	3.2000	**
Copper	ug/L	MW-307	10/28/2021		1.5400		
Copper	ug/L	MW-307	04/13/2022	ND	7.2000	3.2000	**
Copper	ug/L	MW-307	09/01/2022	ND	4.0000	3.2000	**
Copper	ug/L	MW-307	03/06/2023	ND	4.0000	3.2000	**
Copper	ug/L	MW-307	09/29/2023		4.2000		
Lead	ug/L	MW-307	09/18/2012	ND	4.0000	1.0800	**
Lead	ug/L	MW-307	03/27/2013	ND	4.0000	1.0800	**
Lead	ug/L	MW-307	09/26/2013	ND	4.0000	1.0800	**
Lead	ug/L	MW-307	04/15/2014	ND	4.0000	1.0800	**
Lead	ug/L	MW-307	09/01/2015	ND	0.5000	1.0800	**
Lead	ug/L	MW-307	03/22/2016	ND	0.2110	1.0800	**
Lead	ug/L	MW-307	10/21/2016	ND	0.2110	1.0800	**
Lead	ug/L	MW-307	03/08/2017	ND	0.3240	1.0800	**
Lead	ug/L	MW-307	09/25/2017	ND	0.3240	1.0800	**
Lead	ug/L	MW-307	03/13/2018	ND	1.3000	1.0800	**
Lead	ug/L	MW-307	10/01/2018	ND	0.1860	1.0800	**
Lead	ug/L	MW-307	03/27/2019	ND	0.2700	1.0800	**
Lead	ug/L	MW-307	09/23/2019	ND	1.0800		
Lead	ug/L	MW-307	03/09/2020	ND	0.2700	1.0800	**
Lead	ug/L	MW-307	09/17/2020	ND	0.1100	1.0800	**
Lead	ug/L	MW-307	04/16/2021	ND	0.2100	1.0800	**
Lead	ug/L	MW-307	10/28/2021		0.7700		
Lead	ug/L	MW-307	04/13/2022	ND	0.9600	1.0800	**
Lead	ug/L	MW-307	09/01/2022	ND	4.0000	1.0800	**
Lead	ug/L	MW-307	03/06/2023	ND	4.0000	1.0800	**
Lead	ug/L	MW-307	09/29/2023	ND	4.0000	1.0800	**
Nickel	ug/L	MW-307	09/18/2012		115.0000		
Nickel	ug/L	MW-307	03/27/2013		122.0000		
Nickel	ug/L	MW-307	09/26/2013		79.6000		
Nickel	ug/L	MW-307	04/15/2014		101.0000		
Nickel	ug/L	MW-307	09/01/2015		70.9000		
Nickel	ug/L	MW-307	03/22/2016		84.3000		
Nickel	ug/L	MW-307	10/21/2016		69.8000		
Nickel	ug/L	MW-307	03/08/2017		112.0000		
Nickel	ug/L	MW-307	09/25/2017		62.0000		
Nickel	ug/L	MW-307	03/13/2018		98.9000		
Nickel	ug/L	MW-307	10/01/2018		92.9000		
Nickel	ug/L	MW-307	03/27/2019		79.1000		
Nickel	ug/L	MW-307	09/23/2019		75.9000		
Nickel	ug/L	MW-307	03/09/2020		71.1000		
Nickel	ug/L	MW-307	09/17/2020		76.9000		
Nickel	ug/L	MW-307	04/16/2021		104.0000		
Nickel	ug/L	MW-307	10/28/2021		31.5000		
Nickel	ug/L	MW-307	04/13/2022		88.8000		
Nickel	ug/L	MW-307	09/01/2022		70.0000		
Nickel	ug/L	MW-307	03/06/2023		83.7000		
Nickel	ug/L	MW-307	09/29/2023		68.1000		
Selenium	ug/L	MW-307	09/18/2012	ND	5.0000	3.8400	**
Selenium	ug/L	MW-307	03/27/2013	ND	5.0000	3.8400	**
Selenium	ug/L	MW-307	09/26/2013	ND	5.0000	3.8400	**
Selenium	ug/L	MW-307	04/15/2014	ND	5.0000	3.8400	**
Selenium	ug/L	MW-307	09/01/2015	ND	5.0000	3.8400	**
Selenium	ug/L	MW-307	03/22/2016		0.6430		
Selenium	ug/L	MW-307	10/21/2016		1.4800		
Selenium	ug/L	MW-307	03/08/2017		2.3100		
Selenium	ug/L	MW-307	09/25/2017		1.0600		
Selenium	ug/L	MW-307	03/13/2018	ND	3.7100	3.8400	**
Selenium	ug/L	MW-307	10/01/2018		1.0400		
Selenium	ug/L	MW-307	03/27/2019		1.2300		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Selenium	ug/L	MW-307	09/23/2019	ND	4.0000	3.8400	**
Selenium	ug/L	MW-307	03/09/2020		1.2400		
Selenium	ug/L	MW-307	09/17/2020	ND	1.0000	3.8400	**
Selenium	ug/L	MW-307	04/16/2021	ND	0.9600	3.8400	**
Selenium	ug/L	MW-307	10/28/2021	ND	0.9600	3.8400	**
Selenium	ug/L	MW-307	04/13/2022	ND	3.8400		
Selenium	ug/L	MW-307	09/01/2022	ND	4.0000	3.8400	**
Selenium	ug/L	MW-307	03/06/2023	ND	4.0000	3.8400	**
Selenium	ug/L	MW-307	09/29/2023		6.4000		
Silver	ug/L	MW-307	09/18/2012		36.0000		*
Silver	ug/L	MW-307	03/27/2013	ND	20.0000	0.5600	**
Silver	ug/L	MW-307	09/26/2013		18.1000		*
Silver	ug/L	MW-307	04/15/2014	ND	20.0000	0.5600	**
Silver	ug/L	MW-307	09/01/2015	ND	1.0000	0.5600	**
Silver	ug/L	MW-307	03/22/2016	ND	0.1530	0.5600	**
Silver	ug/L	MW-307	10/21/2016	ND	0.1530	0.5600	**
Silver	ug/L	MW-307	03/08/2017	ND	1.4000	0.5600	**
Silver	ug/L	MW-307	09/25/2017	ND	0.1400	0.5600	**
Silver	ug/L	MW-307	03/13/2018	ND	0.5600		
Silver	ug/L	MW-307	10/01/2018	ND	0.1150	0.5600	**
Silver	ug/L	MW-307	03/27/2019	ND	0.3700	0.5600	**
Silver	ug/L	MW-307	09/23/2019	ND	1.4800	0.5600	**
Silver	ug/L	MW-307	03/09/2020	ND	0.3700	0.5600	**
Silver	ug/L	MW-307	09/17/2020	ND	0.3700	0.5600	**
Silver	ug/L	MW-307	04/16/2021	ND	0.4200	0.5600	**
Silver	ug/L	MW-307	10/28/2021	ND	0.4200	0.5600	**
Silver	ug/L	MW-307	04/13/2022	ND	1.9600	0.5600	**
Silver	ug/L	MW-307	09/01/2022	ND	4.0000	0.5600	**
Silver	ug/L	MW-307	03/06/2023	ND	4.0000	0.5600	**
Silver	ug/L	MW-307	09/29/2023	ND	4.0000	0.5600	**
Thallium	ug/L	MW-307	09/18/2012	ND	2.0000	1.0000	**
Thallium	ug/L	MW-307	03/27/2013	ND	2.0000	1.0000	**
Thallium	ug/L	MW-307	09/26/2013	ND	2.0000	1.0000	**
Thallium	ug/L	MW-307	04/15/2014	ND	2.0000	1.0000	**
Thallium	ug/L	MW-307	09/01/2015	ND	1.0000		
Thallium	ug/L	MW-307	03/22/2016		0.0460		
Thallium	ug/L	MW-307	10/21/2016		0.0440		
Thallium	ug/L	MW-307	03/08/2017	ND	0.0644	1.0000	**
Thallium	ug/L	MW-307	09/25/2017	ND	0.0644	1.0000	**
Thallium	ug/L	MW-307	03/13/2018	ND	0.2580	1.0000	**
Thallium	ug/L	MW-307	10/01/2018	ND	0.5700	1.0000	**
Thallium	ug/L	MW-307	03/27/2019	ND	0.2700	1.0000	**
Thallium	ug/L	MW-307	09/23/2019	ND	1.0800	1.0000	**
Thallium	ug/L	MW-307	03/09/2020	ND	0.2600	1.0000	**
Thallium	ug/L	MW-307	09/17/2020	ND	0.2600	1.0000	**
Thallium	ug/L	MW-307	04/16/2021	ND	0.2600	1.0000	**
Thallium	ug/L	MW-307	10/28/2021	ND	0.2600	1.0000	**
Thallium	ug/L	MW-307	04/13/2022	ND	1.0400	1.0000	**
Thallium	ug/L	MW-307	09/01/2022	ND	2.0000	1.0000	**
Thallium	ug/L	MW-307	03/06/2023	ND	2.0000	1.0000	**
Thallium	ug/L	MW-307	09/29/2023	ND	2.0000	1.0000	**
Vanadium	ug/L	MW-307	09/18/2012	ND	50.0000	3.2800	**
Vanadium	ug/L	MW-307	03/27/2013		22.7000		*
Vanadium	ug/L	MW-307	09/26/2013	ND	150.0000	3.2800	**
Vanadium	ug/L	MW-307	04/15/2014	ND	50.0000	3.2800	**
Vanadium	ug/L	MW-307	09/01/2015	ND	5.0000	3.2800	**
Vanadium	ug/L	MW-307	03/22/2016	ND	0.2550	3.2800	**
Vanadium	ug/L	MW-307	10/21/2016	ND	0.2550	3.2800	**
Vanadium	ug/L	MW-307	03/08/2017	ND	0.8400	3.2800	**
Vanadium	ug/L	MW-307	09/25/2017	ND	0.8400	3.2800	**
Vanadium	ug/L	MW-307	03/13/2018	ND	3.3600	3.2800	**
Vanadium	ug/L	MW-307	10/01/2018	ND	2.1500	3.2800	**
Vanadium	ug/L	MW-307	03/27/2019	ND	0.8200	3.2800	**
Vanadium	ug/L	MW-307	09/23/2019	ND	3.2800		
Vanadium	ug/L	MW-307	03/09/2020	ND	0.8200	3.2800	**
Vanadium	ug/L	MW-307	09/17/2020	ND	0.8500	3.2800	**
Vanadium	ug/L	MW-307	04/16/2021	ND	1.1000	3.2800	**
Vanadium	ug/L	MW-307	10/28/2021	ND	1.1000	3.2800	**
Vanadium	ug/L	MW-307	04/13/2022	ND	4.4000	3.2800	**
Vanadium	ug/L	MW-307	09/01/2022	ND	20.0000	3.2800	**
Vanadium	ug/L	MW-307	03/06/2023	ND	20.0000	3.2800	**
Vanadium	ug/L	MW-307	09/29/2023	ND	20.0000	3.2800	**
Zinc	ug/L	MW-307	09/18/2012		434.0000		
Zinc	ug/L	MW-307	03/27/2013		663.0000		

* - Outlier for that well and constituent.
** - ND value replaced with median RL.
*** - ND value replaced with manual RL.
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Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Zinc	ug/L	MW-307	09/26/2013		695.0000		
Zinc	ug/L	MW-307	04/15/2014		356.0000		
Zinc	ug/L	MW-307	09/01/2015		338.0000		
Zinc	ug/L	MW-307	03/22/2016		385.0000		
Zinc	ug/L	MW-307	10/21/2016		456.0000		
Zinc	ug/L	MW-307	03/08/2017		492.0000		
Zinc	ug/L	MW-307	09/25/2017		283.0000		
Zinc	ug/L	MW-307	03/13/2018		447.0000		
Zinc	ug/L	MW-307	10/01/2018		424.0000		
Zinc	ug/L	MW-307	03/27/2019		346.0000		
Zinc	ug/L	MW-307	09/23/2019		322.0000		
Zinc	ug/L	MW-307	03/09/2020		308.0000		
Zinc	ug/L	MW-307	09/17/2020		349.0000		
Zinc	ug/L	MW-307	04/16/2021		443.0000		
Zinc	ug/L	MW-307	10/28/2021		10.6000		*
Zinc	ug/L	MW-307	04/13/2022		374.0000		
Zinc	ug/L	MW-307	09/01/2022		271.0000		
Zinc	ug/L	MW-307	03/06/2023		324.0000		
Zinc	ug/L	MW-307	09/29/2023		383.0000		
Antimony	ug/L	MW-312	09/20/2012	ND	6.0000	1.1000	**
Antimony	ug/L	MW-312	12/12/2012	ND	6.0000	1.1000	**
Antimony	ug/L	MW-312	03/28/2013	ND	6.0000	1.1000	**
Antimony	ug/L	MW-312	06/19/2013	ND	6.0000	1.1000	**
Antimony	ug/L	MW-312	09/26/2013	ND	6.0000	1.1000	**
Antimony	ug/L	MW-312	04/16/2014	ND	6.0000	1.1000	**
Antimony	ug/L	MW-312	09/01/2015	ND	1.0000	1.1000	**
Antimony	ug/L	MW-312	03/22/2016	ND	0.2370	1.1000	**
Antimony	ug/L	MW-312	10/21/2016	ND	0.2370	1.1000	**
Antimony	ug/L	MW-312	03/08/2017	ND	0.1850	1.1000	**
Antimony	ug/L	MW-312	09/25/2017	ND	0.1850	1.1000	**
Antimony	ug/L	MW-312	03/13/2018	ND	0.7400	1.1000	**
Antimony	ug/L	MW-312	10/01/2018	ND	1.3200	1.1000	**
Antimony	ug/L	MW-312	03/27/2019	ND	0.5300	1.1000	**
Antimony	ug/L	MW-312	09/23/2019	ND	0.5300	1.1000	**
Antimony	ug/L	MW-312	03/09/2020	ND	0.5800	1.1000	**
Antimony	ug/L	MW-312	09/15/2020	ND	0.5100	1.1000	**
Antimony	ug/L	MW-312	04/15/2021	ND	1.1000		
Antimony	ug/L	MW-312	10/27/2021	ND	1.1000		
Antimony	ug/L	MW-312	04/14/2022	ND	2.7600	1.1000	**
Antimony	ug/L	MW-312	09/01/2022	ND	2.0000	1.1000	**
Antimony	ug/L	MW-312	03/06/2023	ND	2.0000	1.1000	**
Antimony	ug/L	MW-312	09/29/2023	ND	2.0000	1.1000	**
Arsenic	ug/L	MW-312	09/20/2012	ND	1.0000	2.0000	**
Arsenic	ug/L	MW-312	12/12/2012	ND	2.0000		
Arsenic	ug/L	MW-312	03/28/2013	ND	1.0000	2.0000	**
Arsenic	ug/L	MW-312	06/19/2013	ND	3.0000	2.0000	**
Arsenic	ug/L	MW-312	09/26/2013		2.3200		
Arsenic	ug/L	MW-312	04/16/2014	ND	1.0000	2.0000	**
Arsenic	ug/L	MW-312	09/01/2015	ND	2.0000		
Arsenic	ug/L	MW-312	03/22/2016	ND	0.6720	2.0000	**
Arsenic	ug/L	MW-312	10/21/2016		1.4300		
Arsenic	ug/L	MW-312	03/08/2017		1.0200		
Arsenic	ug/L	MW-312	09/25/2017		1.2300		
Arsenic	ug/L	MW-312	03/13/2018	ND	2.0200	2.0000	**
Arsenic	ug/L	MW-312	10/01/2018		1.8400		
Arsenic	ug/L	MW-312	03/27/2019		1.1300		
Arsenic	ug/L	MW-312	09/23/2019		1.2200		
Arsenic	ug/L	MW-312	03/09/2020	ND	0.8800	2.0000	**
Arsenic	ug/L	MW-312	09/15/2020		2.1500		
Arsenic	ug/L	MW-312	04/15/2021		1.2800		
Arsenic	ug/L	MW-312	10/27/2021		1.2900		
Arsenic	ug/L	MW-312	04/14/2022	ND	3.0000	2.0000	**
Arsenic	ug/L	MW-312	09/01/2022	ND	4.0000	2.0000	**
Arsenic	ug/L	MW-312	03/06/2023	ND	4.0000	2.0000	**
Arsenic	ug/L	MW-312	09/29/2023	ND	4.0000	2.0000	**
Barium	ug/L	MW-312	09/20/2012		16.6000		
Barium	ug/L	MW-312	12/12/2012		18.5000		
Barium	ug/L	MW-312	03/28/2013		12.3000		
Barium	ug/L	MW-312	06/19/2013		16.7000		
Barium	ug/L	MW-312	09/26/2013		8.4700		
Barium	ug/L	MW-312	04/16/2014		10.7000		
Barium	ug/L	MW-312	09/01/2015		15.4000		
Barium	ug/L	MW-312	03/22/2016		24.9000		
Barium	ug/L	MW-312	10/21/2016		13.8000		

* - 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	
Barium	ug/L	MW-312	03/08/2017		14.1000		
Barium	ug/L	MW-312	09/25/2017		16.5000		
Barium	ug/L	MW-312	03/13/2018		12.8000		
Barium	ug/L	MW-312	10/01/2018		13.4000		
Barium	ug/L	MW-312	03/27/2019		14.6000		
Barium	ug/L	MW-312	09/23/2019		11.1000		
Barium	ug/L	MW-312	03/09/2020		14.9000		
Barium	ug/L	MW-312	09/15/2020		13.6000		
Barium	ug/L	MW-312	04/15/2021		12.5000		
Barium	ug/L	MW-312	10/27/2021		11.9000		
Barium	ug/L	MW-312	04/14/2022		14.6000		
Barium	ug/L	MW-312	09/01/2022		23.9000		
Barium	ug/L	MW-312	03/06/2023		25.3000		
Barium	ug/L	MW-312	09/29/2023		22.9000		
Beryllium	ug/L	MW-312	09/20/2012	ND	1.0000		
Beryllium	ug/L	MW-312	12/12/2012	ND	1.0000		
Beryllium	ug/L	MW-312	03/28/2013	ND	1.0000		
Beryllium	ug/L	MW-312	06/19/2013	ND	1.0000		
Beryllium	ug/L	MW-312	09/26/2013		0.2800		
Beryllium	ug/L	MW-312	04/16/2014	ND	1.0000		
Beryllium	ug/L	MW-312	09/01/2015	ND	1.0000		
Beryllium	ug/L	MW-312	03/22/2016	ND	0.2210	1.0000	**
Beryllium	ug/L	MW-312	10/21/2016	ND	0.2210	1.0000	**
Beryllium	ug/L	MW-312	03/08/2017		0.1430		
Beryllium	ug/L	MW-312	09/25/2017		0.1980		
Beryllium	ug/L	MW-312	03/13/2018	ND	0.5000	1.0000	**
Beryllium	ug/L	MW-312	10/01/2018	ND	0.5300	1.0000	**
Beryllium	ug/L	MW-312	03/27/2019	ND	0.2700	1.0000	**
Beryllium	ug/L	MW-312	09/23/2019		0.3180		
Beryllium	ug/L	MW-312	03/09/2020	ND	0.2700	1.0000	**
Beryllium	ug/L	MW-312	09/15/2020	ND	0.2700	1.0000	**
Beryllium	ug/L	MW-312	04/15/2021		0.3120		
Beryllium	ug/L	MW-312	10/27/2021		0.2750		
Beryllium	ug/L	MW-312	04/14/2022	ND	1.0800	1.0000	**
Beryllium	ug/L	MW-312	09/01/2022	ND	4.0000	1.0000	**
Beryllium	ug/L	MW-312	03/06/2023	ND	4.0000	1.0000	**
Beryllium	ug/L	MW-312	09/29/2023	ND	4.0000	1.0000	**
Cadmium	ug/L	MW-312	09/20/2012	ND	0.5000		
Cadmium	ug/L	MW-312	12/12/2012	ND	0.5000		
Cadmium	ug/L	MW-312	03/28/2013	ND	0.5000		
Cadmium	ug/L	MW-312	06/19/2013		0.2460		
Cadmium	ug/L	MW-312	09/26/2013	ND	0.5000		
Cadmium	ug/L	MW-312	04/16/2014	ND	0.5000		
Cadmium	ug/L	MW-312	09/01/2015	ND	0.5000		
Cadmium	ug/L	MW-312	03/22/2016		0.0670		
Cadmium	ug/L	MW-312	10/21/2016	ND	0.0351	0.5000	**
Cadmium	ug/L	MW-312	03/08/2017	ND	0.0441	0.5000	**
Cadmium	ug/L	MW-312	09/25/2017	ND	0.0441	0.5000	**
Cadmium	ug/L	MW-312	03/13/2018	ND	0.1760	0.5000	**
Cadmium	ug/L	MW-312	10/01/2018	ND	0.1670	0.5000	**
Cadmium	ug/L	MW-312	03/27/2019	ND	0.0770	0.5000	**
Cadmium	ug/L	MW-312	09/23/2019	ND	0.0390	0.5000	**
Cadmium	ug/L	MW-312	03/09/2020		0.0680		
Cadmium	ug/L	MW-312	09/15/2020	ND	0.0490	0.5000	**
Cadmium	ug/L	MW-312	04/15/2021	ND	0.0510	0.5000	**
Cadmium	ug/L	MW-312	10/27/2021	ND	0.0510	0.5000	**
Cadmium	ug/L	MW-312	04/14/2022	ND	0.2200	0.5000	**
Cadmium	ug/L	MW-312	09/01/2022	ND	0.8000	0.5000	**
Cadmium	ug/L	MW-312	03/06/2023	ND	0.8000	0.5000	**
Cadmium	ug/L	MW-312	09/29/2023	ND	0.8000	0.5000	**
Chromium	ug/L	MW-312	09/20/2012	ND	20.0000	3.9200	**
Chromium	ug/L	MW-312	12/12/2012	ND	20.0000	3.9200	**
Chromium	ug/L	MW-312	03/28/2013	ND	20.0000	3.9200	**
Chromium	ug/L	MW-312	06/19/2013	ND	20.0000	3.9200	**
Chromium	ug/L	MW-312	09/26/2013		3.9000		
Chromium	ug/L	MW-312	04/16/2014	ND	20.0000	3.9200	**
Chromium	ug/L	MW-312	09/01/2015	ND	5.0000	3.9200	**
Chromium	ug/L	MW-312	03/22/2016	ND	0.3550	3.9200	**
Chromium	ug/L	MW-312	10/21/2016	ND	0.3550	3.9200	**
Chromium	ug/L	MW-312	03/08/2017	ND	0.7290	3.9200	**
Chromium	ug/L	MW-312	09/25/2017	ND	0.7290	3.9200	**
Chromium	ug/L	MW-312	03/13/2018	ND	2.9200	3.9200	**
Chromium	ug/L	MW-312	10/01/2018		1.2600		
Chromium	ug/L	MW-312	03/27/2019	ND	0.9800	3.9200	**

* - 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	ug/L	MW-312	09/23/2019	ND	0.9800	3.9200	**
Chromium	ug/L	MW-312	03/09/2020	ND	1.1000	3.9200	**
Chromium	ug/L	MW-312	09/15/2020	ND	1.1000	3.9200	**
Chromium	ug/L	MW-312	04/15/2021	ND	1.1000	3.9200	**
Chromium	ug/L	MW-312	10/27/2021	ND	1.1000	3.9200	**
Chromium	ug/L	MW-312	04/14/2022	ND	4.4000	3.9200	**
Chromium	ug/L	MW-312	09/01/2022	ND	8.0000	3.9200	**
Chromium	ug/L	MW-312	03/06/2023	ND	8.0000	3.9200	**
Chromium	ug/L	MW-312	09/29/2023	ND	8.0000	3.9200	**
Cobalt	ug/L	MW-312	09/20/2012		36.2000		
Cobalt	ug/L	MW-312	12/12/2012		34.3000		
Cobalt	ug/L	MW-312	03/28/2013		54.5000		
Cobalt	ug/L	MW-312	06/19/2013		43.7000		
Cobalt	ug/L	MW-312	09/26/2013		44.9000		
Cobalt	ug/L	MW-312	04/16/2014		20.8000		
Cobalt	ug/L	MW-312	09/01/2015		32.4000		
Cobalt	ug/L	MW-312	03/22/2016		37.1000		
Cobalt	ug/L	MW-312	10/21/2016		36.4000		
Cobalt	ug/L	MW-312	03/08/2017		35.0000		
Cobalt	ug/L	MW-312	09/25/2017		30.3000		
Cobalt	ug/L	MW-312	03/13/2018		24.1000		
Cobalt	ug/L	MW-312	10/01/2018		29.8000		
Cobalt	ug/L	MW-312	03/27/2019		32.7000		
Cobalt	ug/L	MW-312	09/23/2019		34.9000		
Cobalt	ug/L	MW-312	03/09/2020		34.7000		
Cobalt	ug/L	MW-312	09/15/2020		41.4000		
Cobalt	ug/L	MW-312	04/15/2021		52.3000		
Cobalt	ug/L	MW-312	10/27/2021		38.6000		
Cobalt	ug/L	MW-312	04/14/2022		47.4000		
Cobalt	ug/L	MW-312	09/01/2022		34.0000		
Cobalt	ug/L	MW-312	03/06/2023		44.8000		
Cobalt	ug/L	MW-312	09/29/2023		42.9000		
Copper	ug/L	MW-312	09/20/2012	ND	20.0000	3.2000	**
Copper	ug/L	MW-312	12/12/2012	ND	20.0000	3.2000	**
Copper	ug/L	MW-312	03/28/2013		2.1900		
Copper	ug/L	MW-312	06/19/2013	ND	20.0000	3.2000	**
Copper	ug/L	MW-312	09/26/2013	ND	20.0000	3.2000	**
Copper	ug/L	MW-312	04/16/2014	ND	20.0000	3.2000	**
Copper	ug/L	MW-312	09/01/2015	ND	2.0000	3.2000	**
Copper	ug/L	MW-312	03/22/2016	ND	1.2200	3.2000	**
Copper	ug/L	MW-312	10/21/2016	ND	1.2200	3.2000	**
Copper	ug/L	MW-312	03/08/2017	ND	2.1900	3.2000	**
Copper	ug/L	MW-312	09/25/2017	ND	2.1900	3.2000	**
Copper	ug/L	MW-312	03/13/2018	ND	8.7600	3.2000	**
Copper	ug/L	MW-312	10/01/2018		1.1800		
Copper	ug/L	MW-312	03/27/2019	ND	2.0000	3.2000	**
Copper	ug/L	MW-312	09/23/2019	ND	2.0000	3.2000	**
Copper	ug/L	MW-312	03/09/2020	ND	3.2000		
Copper	ug/L	MW-312	09/15/2020	ND	1.5000	3.2000	**
Copper	ug/L	MW-312	04/15/2021	ND	1.4000	3.2000	**
Copper	ug/L	MW-312	10/27/2021	ND	1.4000	3.2000	**
Copper	ug/L	MW-312	04/14/2022		7.9900		
Copper	ug/L	MW-312	09/01/2022	ND	4.0000	3.2000	**
Copper	ug/L	MW-312	03/06/2023	ND	4.0000	3.2000	**
Copper	ug/L	MW-312	09/29/2023	ND	4.0000	3.2000	**
Lead	ug/L	MW-312	09/20/2012	ND	4.0000	1.0800	**
Lead	ug/L	MW-312	12/12/2012	ND	4.0000	1.0800	**
Lead	ug/L	MW-312	03/28/2013	ND	4.0000	1.0800	**
Lead	ug/L	MW-312	06/19/2013		1.6700		
Lead	ug/L	MW-312	09/26/2013	ND	4.0000	1.0800	**
Lead	ug/L	MW-312	04/16/2014	ND	4.0000	1.0800	**
Lead	ug/L	MW-312	09/01/2015	ND	0.5000	1.0800	**
Lead	ug/L	MW-312	03/22/2016	ND	0.2110	1.0800	**
Lead	ug/L	MW-312	10/21/2016	ND	0.2110	1.0800	**
Lead	ug/L	MW-312	03/08/2017	ND	0.3240	1.0800	**
Lead	ug/L	MW-312	09/25/2017	ND	0.3240	1.0800	**
Lead	ug/L	MW-312	03/13/2018	ND	1.3000	1.0800	**
Lead	ug/L	MW-312	10/01/2018	ND	0.1860	1.0800	**
Lead	ug/L	MW-312	03/27/2019	ND	0.2700	1.0800	**
Lead	ug/L	MW-312	09/23/2019		0.2740		
Lead	ug/L	MW-312	03/09/2020	ND	0.2700	1.0800	**
Lead	ug/L	MW-312	09/15/2020		0.1770		
Lead	ug/L	MW-312	04/15/2021	ND	0.2100	1.0800	**
Lead	ug/L	MW-312	10/27/2021		1.4100		

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ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Lead	ug/L	MW-312	04/14/2022	ND	0.9600	1.0800	**
Lead	ug/L	MW-312	09/01/2022	ND	4.0000	1.0800	**
Lead	ug/L	MW-312	03/06/2023	ND	4.0000	1.0800	**
Lead	ug/L	MW-312	09/29/2023	ND	4.0000	1.0800	**
Nickel	ug/L	MW-312	09/20/2012		89.5000		
Nickel	ug/L	MW-312	12/12/2012		82.0000		
Nickel	ug/L	MW-312	03/28/2013		121.0000		
Nickel	ug/L	MW-312	06/19/2013		119.0000		
Nickel	ug/L	MW-312	09/26/2013		117.0000		
Nickel	ug/L	MW-312	04/16/2014		101.0000		
Nickel	ug/L	MW-312	09/01/2015		108.0000		
Nickel	ug/L	MW-312	03/22/2016		45.0000		
Nickel	ug/L	MW-312	10/21/2016		94.4000		
Nickel	ug/L	MW-312	03/08/2017		100.0000		
Nickel	ug/L	MW-312	09/25/2017		80.1000		
Nickel	ug/L	MW-312	03/13/2018		88.8000		
Nickel	ug/L	MW-312	10/01/2018		91.6000		
Nickel	ug/L	MW-312	03/27/2019		101.0000		
Nickel	ug/L	MW-312	09/23/2019		120.0000		
Nickel	ug/L	MW-312	03/09/2020		85.8000		
Nickel	ug/L	MW-312	09/15/2020		119.0000		
Nickel	ug/L	MW-312	04/15/2021		150.0000		
Nickel	ug/L	MW-312	10/27/2021		128.0000		
Nickel	ug/L	MW-312	04/14/2022		141.0000		
Nickel	ug/L	MW-312	09/01/2022		64.5000		
Nickel	ug/L	MW-312	03/06/2023		64.8000		
Nickel	ug/L	MW-312	09/29/2023		72.1000		
Selenium	ug/L	MW-312	09/20/2012	ND	5.0000	3.8400	**
Selenium	ug/L	MW-312	12/12/2012	ND	5.0000	3.8400	**
Selenium	ug/L	MW-312	03/28/2013	ND	5.0000	3.8400	**
Selenium	ug/L	MW-312	06/19/2013	ND	5.0000	3.8400	**
Selenium	ug/L	MW-312	09/26/2013	ND	5.0000	3.8400	**
Selenium	ug/L	MW-312	04/16/2014	ND	5.0000	3.8400	**
Selenium	ug/L	MW-312	09/01/2015	ND	5.0000	3.8400	**
Selenium	ug/L	MW-312	03/22/2016	ND	0.6300	3.8400	**
Selenium	ug/L	MW-312	10/21/2016	ND	0.6300	3.8400	**
Selenium	ug/L	MW-312	03/08/2017	ND	0.9280	3.8400	**
Selenium	ug/L	MW-312	09/25/2017	ND	0.9280	3.8400	**
Selenium	ug/L	MW-312	03/13/2018	ND	3.7100	3.8400	**
Selenium	ug/L	MW-312	10/01/2018	ND	0.9820	3.8400	**
Selenium	ug/L	MW-312	03/27/2019	ND	1.0000	3.8400	**
Selenium	ug/L	MW-312	09/23/2019	ND	1.0000	3.8400	**
Selenium	ug/L	MW-312	03/09/2020	ND	1.0000	3.8400	**
Selenium	ug/L	MW-312	09/15/2020	ND	1.0000	3.8400	**
Selenium	ug/L	MW-312	04/15/2021	ND	0.9600	3.8400	**
Selenium	ug/L	MW-312	10/27/2021	ND	0.9600	3.8400	**
Selenium	ug/L	MW-312	04/14/2022	ND	3.8400		
Selenium	ug/L	MW-312	09/01/2022	ND	4.0000	3.8400	**
Selenium	ug/L	MW-312	03/06/2023	ND	4.0000	3.8400	**
Selenium	ug/L	MW-312	09/29/2023	ND	4.0000	3.8400	**
Silver	ug/L	MW-312	09/20/2012	ND	20.0000	0.5600	**
Silver	ug/L	MW-312	12/12/2012	ND	20.0000	0.5600	**
Silver	ug/L	MW-312	03/28/2013	ND	20.0000	0.5600	**
Silver	ug/L	MW-312	06/19/2013	ND	20.0000	0.5600	**
Silver	ug/L	MW-312	09/26/2013	ND	20.0000	0.5600	**
Silver	ug/L	MW-312	04/16/2014	ND	20.0000	0.5600	**
Silver	ug/L	MW-312	09/01/2015	ND	1.0000	0.5600	**
Silver	ug/L	MW-312	03/22/2016	ND	0.1530	0.5600	**
Silver	ug/L	MW-312	10/21/2016	ND	0.1530	0.5600	**
Silver	ug/L	MW-312	03/08/2017	ND	0.1400	0.5600	**
Silver	ug/L	MW-312	09/25/2017	ND	0.1400	0.5600	**
Silver	ug/L	MW-312	03/13/2018	ND	0.5600		
Silver	ug/L	MW-312	10/01/2018	ND	0.1150	0.5600	**
Silver	ug/L	MW-312	03/27/2019	ND	0.3700	0.5600	**
Silver	ug/L	MW-312	09/23/2019	ND	0.3700	0.5600	**
Silver	ug/L	MW-312	03/09/2020	ND	0.3700	0.5600	**
Silver	ug/L	MW-312	09/15/2020	ND	0.3700	0.5600	**
Silver	ug/L	MW-312	04/15/2021	ND	0.4200	0.5600	**
Silver	ug/L	MW-312	10/27/2021	ND	0.4200	0.5600	**
Silver	ug/L	MW-312	04/14/2022	ND	1.9600	0.5600	**
Silver	ug/L	MW-312	09/01/2022	ND	4.0000	0.5600	**
Silver	ug/L	MW-312	03/06/2023	ND	4.0000	0.5600	**
Silver	ug/L	MW-312	09/29/2023	ND	4.0000	0.5600	**
Thallium	ug/L	MW-312	09/20/2012	ND	2.0000	1.0000	**

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Thallium	ug/L	MW-312	12/12/2012	ND	2.0000	1.0000	**
Thallium	ug/L	MW-312	03/28/2013	ND	2.0000	1.0000	**
Thallium	ug/L	MW-312	06/19/2013	ND	2.0000	1.0000	**
Thallium	ug/L	MW-312	09/26/2013	ND	2.0000	1.0000	**
Thallium	ug/L	MW-312	04/16/2014	ND	2.0000	1.0000	**
Thallium	ug/L	MW-312	09/01/2015	ND	1.0000		
Thallium	ug/L	MW-312	03/22/2016		0.0650		
Thallium	ug/L	MW-312	10/21/2016	ND	0.0255	1.0000	**
Thallium	ug/L	MW-312	03/08/2017	ND	0.0644	1.0000	**
Thallium	ug/L	MW-312	09/25/2017	ND	0.0644	1.0000	**
Thallium	ug/L	MW-312	03/13/2018	ND	0.2580	1.0000	**
Thallium	ug/L	MW-312	10/01/2018	ND	0.5700	1.0000	**
Thallium	ug/L	MW-312	03/27/2019	ND	0.2700	1.0000	**
Thallium	ug/L	MW-312	09/23/2019	ND	0.2700	1.0000	**
Thallium	ug/L	MW-312	03/09/2020	ND	0.2600	1.0000	**
Thallium	ug/L	MW-312	09/15/2020	ND	0.2600	1.0000	**
Thallium	ug/L	MW-312	04/15/2021	ND	0.2600	1.0000	**
Thallium	ug/L	MW-312	10/27/2021	ND	0.2600	1.0000	**
Thallium	ug/L	MW-312	04/14/2022	ND	1.0400	1.0000	**
Thallium	ug/L	MW-312	09/01/2022	ND	2.0000	1.0000	**
Thallium	ug/L	MW-312	03/06/2023	ND	2.0000	1.0000	**
Thallium	ug/L	MW-312	09/29/2023	ND	2.0000	1.0000	**
Vanadium	ug/L	MW-312	09/20/2012	ND	50.0000	3.2800	**
Vanadium	ug/L	MW-312	12/12/2012	ND	50.0000	3.2800	**
Vanadium	ug/L	MW-312	03/28/2013	ND	50.0000	3.2800	**
Vanadium	ug/L	MW-312	06/19/2013	ND	50.0000	3.2800	**
Vanadium	ug/L	MW-312	09/26/2013	ND	50.0000	3.2800	**
Vanadium	ug/L	MW-312	04/16/2014	ND	50.0000	3.2800	**
Vanadium	ug/L	MW-312	09/01/2015	ND	5.0000	3.2800	**
Vanadium	ug/L	MW-312	03/22/2016	ND	0.2550	3.2800	**
Vanadium	ug/L	MW-312	10/21/2016	ND	0.2550	3.2800	**
Vanadium	ug/L	MW-312	03/08/2017	ND	0.8400	3.2800	**
Vanadium	ug/L	MW-312	09/25/2017	ND	0.8400	3.2800	**
Vanadium	ug/L	MW-312	03/13/2018	ND	3.3600	3.2800	**
Vanadium	ug/L	MW-312	10/01/2018	ND	2.1500	3.2800	**
Vanadium	ug/L	MW-312	03/27/2019	ND	0.8200	3.2800	**
Vanadium	ug/L	MW-312	09/23/2019	ND	0.8200	3.2800	**
Vanadium	ug/L	MW-312	03/09/2020	ND	0.8200	3.2800	**
Vanadium	ug/L	MW-312	09/15/2020	ND	0.8500	3.2800	**
Vanadium	ug/L	MW-312	04/15/2021	ND	1.1000	3.2800	**
Vanadium	ug/L	MW-312	10/27/2021	ND	1.1000	3.2800	**
Vanadium	ug/L	MW-312	04/14/2022	ND	4.4000	3.2800	**
Vanadium	ug/L	MW-312	09/01/2022	ND	20.0000	3.2800	**
Vanadium	ug/L	MW-312	03/06/2023	ND	20.0000	3.2800	**
Vanadium	ug/L	MW-312	09/29/2023	ND	20.0000	3.2800	**
Zinc	ug/L	MW-312	09/20/2012	ND	20.0000	11.5000	**
Zinc	ug/L	MW-312	12/12/2012		85.0000		
Zinc	ug/L	MW-312	03/28/2013		84.9000		
Zinc	ug/L	MW-312	06/19/2013		70.1000		
Zinc	ug/L	MW-312	09/26/2013		209.0000		
Zinc	ug/L	MW-312	04/16/2014	ND	60.0000	11.5000	**
Zinc	ug/L	MW-312	09/01/2015	ND	10.0000	11.5000	**
Zinc	ug/L	MW-312	03/22/2016		6.8000		
Zinc	ug/L	MW-312	10/21/2016		12.3000		
Zinc	ug/L	MW-312	03/08/2017		17.6000		
Zinc	ug/L	MW-312	09/25/2017	ND	11.5000		
Zinc	ug/L	MW-312	03/13/2018	ND	46.0000	11.5000	**
Zinc	ug/L	MW-312	10/01/2018		10.0000		
Zinc	ug/L	MW-312	03/27/2019	ND	10.0000	11.5000	**
Zinc	ug/L	MW-312	09/23/2019	ND	10.0000	11.5000	**
Zinc	ug/L	MW-312	03/09/2020	ND	10.0000	11.5000	**
Zinc	ug/L	MW-312	09/15/2020		12.9000		
Zinc	ug/L	MW-312	04/15/2021	ND	10.0000	11.5000	**
Zinc	ug/L	MW-312	10/27/2021	ND	10.0000	11.5000	**
Zinc	ug/L	MW-312	04/14/2022	ND	40.0000	11.5000	**
Zinc	ug/L	MW-312	09/01/2022	ND	20.0000	11.5000	**
Zinc	ug/L	MW-312	03/06/2023	ND	20.0000	11.5000	**
Zinc	ug/L	MW-312	09/29/2023	ND	20.0000	11.5000	**
Antimony	ug/L	MW-390	09/18/2012	ND	6.0000	1.1000	**
Antimony	ug/L	MW-390	03/27/2013	ND	6.0000	1.1000	**
Antimony	ug/L	MW-390	09/25/2013	ND	6.0000	1.1000	**
Antimony	ug/L	MW-390	04/15/2014	ND	6.0000	1.1000	**
Antimony	ug/L	MW-390	09/01/2015	ND	1.0000	1.1000	**
Antimony	ug/L	MW-390	03/22/2016	ND	0.2370	1.1000	**

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Antimony	ug/L	MW-390	10/21/2016	ND	0.2370	1.1000	**
Antimony	ug/L	MW-390	03/08/2017	ND	0.1850	1.1000	**
Antimony	ug/L	MW-390	09/25/2017	ND	0.1850	1.1000	**
Antimony	ug/L	MW-390	03/13/2018	ND	0.7400	1.1000	**
Antimony	ug/L	MW-390	10/01/2018	ND	1.3200	1.1000	**
Antimony	ug/L	MW-390	03/27/2019	ND	0.5300	1.1000	**
Antimony	ug/L	MW-390	09/23/2019	ND	2.1200	1.1000	**
Antimony	ug/L	MW-390	03/09/2020	ND	0.5800	1.1000	**
Antimony	ug/L	MW-390	09/17/2020	ND	0.5100	1.1000	**
Antimony	ug/L	MW-390	04/14/2021	ND	1.1000		
Antimony	ug/L	MW-390	10/26/2021	ND	1.1000		
Antimony	ug/L	MW-390	04/14/2022	ND	2.7600	1.1000	**
Antimony	ug/L	MW-390	09/01/2022	ND	2.0000	1.1000	**
Antimony	ug/L	MW-390	03/06/2023	ND	2.0000	1.1000	**
Antimony	ug/L	MW-390	09/29/2023	ND	2.0000	1.1000	**
Arsenic	ug/L	MW-390	09/18/2012		13.9000		
Arsenic	ug/L	MW-390	03/27/2013		14.0000		
Arsenic	ug/L	MW-390	09/25/2013		14.7000		
Arsenic	ug/L	MW-390	04/15/2014		17.6000		
Arsenic	ug/L	MW-390	09/01/2015		22.3000		
Arsenic	ug/L	MW-390	03/22/2016		16.7000		
Arsenic	ug/L	MW-390	10/21/2016		13.7000		
Arsenic	ug/L	MW-390	03/08/2017		7.2500		
Arsenic	ug/L	MW-390	09/25/2017		13.6000		
Arsenic	ug/L	MW-390	03/13/2018		14.7000		
Arsenic	ug/L	MW-390	10/01/2018		13.9000		
Arsenic	ug/L	MW-390	03/27/2019		15.0000		
Arsenic	ug/L	MW-390	09/23/2019		19.7000		
Arsenic	ug/L	MW-390	03/09/2020		19.0000		
Arsenic	ug/L	MW-390	09/17/2020		14.8000		
Arsenic	ug/L	MW-390	04/14/2021		15.7000		
Arsenic	ug/L	MW-390	10/26/2021		11.3000		
Arsenic	ug/L	MW-390	04/14/2022		22.5000		
Arsenic	ug/L	MW-390	09/01/2022		19.4000		
Arsenic	ug/L	MW-390	03/06/2023		16.3000		
Arsenic	ug/L	MW-390	09/29/2023		16.0000		
Barium	ug/L	MW-390	09/18/2012		30.6000		
Barium	ug/L	MW-390	03/27/2013		23.5000		
Barium	ug/L	MW-390	09/25/2013		29.7000		
Barium	ug/L	MW-390	04/15/2014		13.0000		
Barium	ug/L	MW-390	09/01/2015		49.9000		
Barium	ug/L	MW-390	03/22/2016		36.1000		
Barium	ug/L	MW-390	10/21/2016		28.8000		
Barium	ug/L	MW-390	03/08/2017		17.8000		
Barium	ug/L	MW-390	09/25/2017		28.2000		
Barium	ug/L	MW-390	03/13/2018		21.5000		
Barium	ug/L	MW-390	10/01/2018		26.6000		
Barium	ug/L	MW-390	03/27/2019		30.0000		
Barium	ug/L	MW-390	09/23/2019		29.3000		
Barium	ug/L	MW-390	03/09/2020		26.9000		
Barium	ug/L	MW-390	09/17/2020		26.0000		
Barium	ug/L	MW-390	04/14/2021		26.1000		
Barium	ug/L	MW-390	10/26/2021		25.4000		
Barium	ug/L	MW-390	04/14/2022		19.0000		
Barium	ug/L	MW-390	09/01/2022		14.9000		
Barium	ug/L	MW-390	03/06/2023		17.3000		
Barium	ug/L	MW-390	09/29/2023		12.9000		
Beryllium	ug/L	MW-390	09/18/2012	ND	1.0000		
Beryllium	ug/L	MW-390	03/27/2013	ND	1.0000		
Beryllium	ug/L	MW-390	09/25/2013		0.2000		
Beryllium	ug/L	MW-390	04/15/2014	ND	1.0000		
Beryllium	ug/L	MW-390	09/01/2015	ND	1.0000		
Beryllium	ug/L	MW-390	03/22/2016	ND	0.2210	1.0000	**
Beryllium	ug/L	MW-390	10/21/2016	ND	0.2210	1.0000	**
Beryllium	ug/L	MW-390	03/08/2017	ND	0.1250	1.0000	**
Beryllium	ug/L	MW-390	09/25/2017	ND	0.1250	1.0000	**
Beryllium	ug/L	MW-390	03/13/2018	ND	0.5000	1.0000	**
Beryllium	ug/L	MW-390	10/01/2018	ND	0.5300	1.0000	**
Beryllium	ug/L	MW-390	03/27/2019	ND	0.2700	1.0000	**
Beryllium	ug/L	MW-390	09/23/2019	ND	1.0800	1.0000	**
Beryllium	ug/L	MW-390	03/09/2020	ND	0.2700	1.0000	**
Beryllium	ug/L	MW-390	09/17/2020	ND	0.5400	1.0000	**
Beryllium	ug/L	MW-390	04/14/2021	ND	0.2700	1.0000	**
Beryllium	ug/L	MW-390	10/26/2021	ND	0.2700	1.0000	**

* - 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	ug/L	MW-390	04/14/2022	ND	1.0800	1.0000	**
Beryllium	ug/L	MW-390	09/01/2022	ND	4.0000	1.0000	**
Beryllium	ug/L	MW-390	03/06/2023	ND	4.0000	1.0000	**
Beryllium	ug/L	MW-390	09/29/2023	ND	4.0000	1.0000	**
Cadmium	ug/L	MW-390	09/18/2012		0.6620		
Cadmium	ug/L	MW-390	03/27/2013		0.2810		
Cadmium	ug/L	MW-390	09/25/2013	ND	0.5000		
Cadmium	ug/L	MW-390	04/15/2014		0.3260		
Cadmium	ug/L	MW-390	09/01/2015	ND	0.5000		
Cadmium	ug/L	MW-390	03/22/2016	ND	0.0351	0.5000	**
Cadmium	ug/L	MW-390	10/21/2016		0.3020		
Cadmium	ug/L	MW-390	03/08/2017		0.0770		
Cadmium	ug/L	MW-390	09/25/2017	ND	0.0441	0.5000	**
Cadmium	ug/L	MW-390	03/13/2018	ND	0.1760	0.5000	**
Cadmium	ug/L	MW-390	10/01/2018	ND	0.1670	0.5000	**
Cadmium	ug/L	MW-390	03/27/2019	ND	0.0770	0.5000	**
Cadmium	ug/L	MW-390	09/23/2019		1.1200		
Cadmium	ug/L	MW-390	03/09/2020		0.4670		
Cadmium	ug/L	MW-390	09/17/2020		0.1080		
Cadmium	ug/L	MW-390	04/14/2021		0.5250		
Cadmium	ug/L	MW-390	10/26/2021		0.3080		
Cadmium	ug/L	MW-390	04/14/2022		1.1900		
Cadmium	ug/L	MW-390	09/01/2022	ND	0.8000	0.5000	**
Cadmium	ug/L	MW-390	03/06/2023	ND	0.8000	0.5000	**
Cadmium	ug/L	MW-390	09/29/2023	ND	0.8000	0.5000	**
Chromium	ug/L	MW-390	09/18/2012	ND	20.0000	3.9200	**
Chromium	ug/L	MW-390	03/27/2013	ND	20.0000	3.9200	**
Chromium	ug/L	MW-390	09/25/2013		5.5100		
Chromium	ug/L	MW-390	04/15/2014	ND	20.0000	3.9200	**
Chromium	ug/L	MW-390	09/01/2015	ND	5.0000	3.9200	**
Chromium	ug/L	MW-390	03/22/2016		0.5420		
Chromium	ug/L	MW-390	10/21/2016		1.0200		
Chromium	ug/L	MW-390	03/08/2017	ND	0.7290	3.9200	**
Chromium	ug/L	MW-390	09/25/2017	ND	0.7290	3.9200	**
Chromium	ug/L	MW-390	03/13/2018	ND	2.9200	3.9200	**
Chromium	ug/L	MW-390	10/01/2018		2.0600		
Chromium	ug/L	MW-390	03/27/2019	ND	0.9800	3.9200	**
Chromium	ug/L	MW-390	09/23/2019	ND	3.9200		
Chromium	ug/L	MW-390	03/09/2020	ND	1.1000	3.9200	**
Chromium	ug/L	MW-390	09/17/2020	ND	1.1000	3.9200	**
Chromium	ug/L	MW-390	04/14/2021	ND	1.1000	3.9200	**
Chromium	ug/L	MW-390	10/26/2021	ND	1.1000	3.9200	**
Chromium	ug/L	MW-390	04/14/2022	ND	4.4000	3.9200	**
Chromium	ug/L	MW-390	09/01/2022	ND	8.0000	3.9200	**
Chromium	ug/L	MW-390	03/06/2023	ND	8.0000	3.9200	**
Chromium	ug/L	MW-390	09/29/2023	ND	8.0000	3.9200	**
Cobalt	ug/L	MW-390	09/18/2012		108.0000		
Cobalt	ug/L	MW-390	03/27/2013		123.0000		
Cobalt	ug/L	MW-390	09/25/2013		97.7000		
Cobalt	ug/L	MW-390	04/15/2014		103.0000		
Cobalt	ug/L	MW-390	09/01/2015		108.0000		
Cobalt	ug/L	MW-390	03/22/2016		92.9000		
Cobalt	ug/L	MW-390	10/21/2016		90.4000		
Cobalt	ug/L	MW-390	03/08/2017		120.0000		
Cobalt	ug/L	MW-390	09/25/2017		107.0000		
Cobalt	ug/L	MW-390	03/13/2018		98.2000		
Cobalt	ug/L	MW-390	10/01/2018		98.9000		
Cobalt	ug/L	MW-390	03/27/2019		114.0000		
Cobalt	ug/L	MW-390	09/23/2019		112.0000		
Cobalt	ug/L	MW-390	03/09/2020		102.0000		
Cobalt	ug/L	MW-390	09/17/2020		108.0000		
Cobalt	ug/L	MW-390	04/14/2021		110.0000		
Cobalt	ug/L	MW-390	10/26/2021		113.0000		
Cobalt	ug/L	MW-390	04/14/2022		106.0000		
Cobalt	ug/L	MW-390	09/01/2022		103.0000		
Cobalt	ug/L	MW-390	03/06/2023		113.0000		
Cobalt	ug/L	MW-390	09/29/2023		96.9000		
Copper	ug/L	MW-390	09/18/2012	ND	20.0000	3.2000	**
Copper	ug/L	MW-390	03/27/2013	ND	20.0000	3.2000	**
Copper	ug/L	MW-390	09/25/2013	ND	20.0000	3.2000	**
Copper	ug/L	MW-390	04/15/2014	ND	20.0000	3.2000	**
Copper	ug/L	MW-390	09/01/2015	ND	2.0000	3.2000	**
Copper	ug/L	MW-390	03/22/2016	ND	1.2200	3.2000	**
Copper	ug/L	MW-390	10/21/2016	ND	1.2200	3.2000	**

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Copper	ug/L	MW-390	03/08/2017	ND	2.1900	3.2000	**
Copper	ug/L	MW-390	09/25/2017	ND	2.1900	3.2000	**
Copper	ug/L	MW-390	03/13/2018	ND	8.7600	3.2000	**
Copper	ug/L	MW-390	10/01/2018		1.5500		
Copper	ug/L	MW-390	03/27/2019	ND	2.0000	3.2000	**
Copper	ug/L	MW-390	09/23/2019	ND	8.0000	3.2000	**
Copper	ug/L	MW-390	03/09/2020	ND	3.2000		
Copper	ug/L	MW-390	09/17/2020	ND	1.5000	3.2000	**
Copper	ug/L	MW-390	04/14/2021	ND	1.4000	3.2000	**
Copper	ug/L	MW-390	10/26/2021	ND	1.4000	3.2000	**
Copper	ug/L	MW-390	04/14/2022	ND	7.2000	3.2000	**
Copper	ug/L	MW-390	09/01/2022	ND	4.0000	3.2000	**
Copper	ug/L	MW-390	03/06/2023	ND	4.0000	3.2000	**
Copper	ug/L	MW-390	09/29/2023	ND	4.0000	3.2000	**
Lead	ug/L	MW-390	09/18/2012	ND	4.0000	1.0800	**
Lead	ug/L	MW-390	03/27/2013	ND	4.0000	1.0800	**
Lead	ug/L	MW-390	09/25/2013	ND	4.0000	1.0800	**
Lead	ug/L	MW-390	04/15/2014	ND	4.0000	1.0800	**
Lead	ug/L	MW-390	09/01/2015		0.7200		
Lead	ug/L	MW-390	03/22/2016	ND	0.2110	1.0800	**
Lead	ug/L	MW-390	10/21/2016		2.8600		
Lead	ug/L	MW-390	03/08/2017	ND	0.3240	1.0800	**
Lead	ug/L	MW-390	09/25/2017	ND	0.3240	1.0800	**
Lead	ug/L	MW-390	03/13/2018	ND	1.3000	1.0800	**
Lead	ug/L	MW-390	10/01/2018		0.8710		
Lead	ug/L	MW-390	03/27/2019	ND	0.2700	1.0800	**
Lead	ug/L	MW-390	09/23/2019		2.9400		
Lead	ug/L	MW-390	03/09/2020		2.2700		
Lead	ug/L	MW-390	09/17/2020		0.4100		
Lead	ug/L	MW-390	04/14/2021		1.7300		
Lead	ug/L	MW-390	10/26/2021		2.3800		
Lead	ug/L	MW-390	04/14/2022		4.7800		
Lead	ug/L	MW-390	09/01/2022	ND	4.0000	1.0800	**
Lead	ug/L	MW-390	03/06/2023	ND	4.0000	1.0800	**
Lead	ug/L	MW-390	09/29/2023	ND	4.0000	1.0800	**
Nickel	ug/L	MW-390	09/18/2012	ND	50.0000		
Nickel	ug/L	MW-390	03/27/2013		63.8000		
Nickel	ug/L	MW-390	09/25/2013		60.3000		
Nickel	ug/L	MW-390	04/15/2014		51.0000		
Nickel	ug/L	MW-390	09/01/2015		54.5000		
Nickel	ug/L	MW-390	03/22/2016		45.4000		
Nickel	ug/L	MW-390	10/21/2016		49.7000		
Nickel	ug/L	MW-390	03/08/2017		61.3000		
Nickel	ug/L	MW-390	09/25/2017		45.4000		
Nickel	ug/L	MW-390	03/13/2018		48.3000		
Nickel	ug/L	MW-390	10/01/2018		47.7000		
Nickel	ug/L	MW-390	03/27/2019		54.6000		
Nickel	ug/L	MW-390	09/23/2019		60.7000		
Nickel	ug/L	MW-390	03/09/2020		54.0000		
Nickel	ug/L	MW-390	09/17/2020		58.4000		
Nickel	ug/L	MW-390	04/14/2021		55.1000		
Nickel	ug/L	MW-390	10/26/2021		53.8000		
Nickel	ug/L	MW-390	04/14/2022		56.0000		
Nickel	ug/L	MW-390	09/01/2022		53.5000		
Nickel	ug/L	MW-390	03/06/2023		62.0000		
Nickel	ug/L	MW-390	09/29/2023		50.0000		
Selenium	ug/L	MW-390	09/18/2012	ND	5.0000	3.8400	**
Selenium	ug/L	MW-390	03/27/2013	ND	5.0000	3.8400	**
Selenium	ug/L	MW-390	09/25/2013	ND	5.0000	3.8400	**
Selenium	ug/L	MW-390	04/15/2014	ND	5.0000	3.8400	**
Selenium	ug/L	MW-390	09/01/2015	ND	5.0000	3.8400	**
Selenium	ug/L	MW-390	03/22/2016	ND	0.6300	3.8400	**
Selenium	ug/L	MW-390	10/21/2016	ND	0.6300	3.8400	**
Selenium	ug/L	MW-390	03/08/2017	ND	0.9280	3.8400	**
Selenium	ug/L	MW-390	09/25/2017	ND	0.9280	3.8400	**
Selenium	ug/L	MW-390	03/13/2018	ND	3.7100	3.8400	**
Selenium	ug/L	MW-390	10/01/2018	ND	0.9820	3.8400	**
Selenium	ug/L	MW-390	03/27/2019	ND	1.0000	3.8400	**
Selenium	ug/L	MW-390	09/23/2019	ND	4.0000	3.8400	**
Selenium	ug/L	MW-390	03/09/2020	ND	1.0000	3.8400	**
Selenium	ug/L	MW-390	09/17/2020	ND	1.0000	3.8400	**
Selenium	ug/L	MW-390	04/14/2021	ND	0.9600	3.8400	**
Selenium	ug/L	MW-390	10/26/2021	ND	0.9600	3.8400	**
Selenium	ug/L	MW-390	04/14/2022	ND	3.8400		

* - 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	ug/L	MW-390	09/01/2022	ND	4.0000	3.8400	**
Selenium	ug/L	MW-390	03/06/2023	ND	4.0000	3.8400	**
Selenium	ug/L	MW-390	09/29/2023	ND	4.0000	3.8400	**
Silver	ug/L	MW-390	09/18/2012	ND	20.0000	0.5600	**
Silver	ug/L	MW-390	03/27/2013	ND	20.0000	0.5600	**
Silver	ug/L	MW-390	09/25/2013	ND	20.0000	0.5600	**
Silver	ug/L	MW-390	04/15/2014	ND	20.0000	0.5600	**
Silver	ug/L	MW-390	09/01/2015	ND	1.0000	0.5600	**
Silver	ug/L	MW-390	03/22/2016	ND	0.1530	0.5600	**
Silver	ug/L	MW-390	10/21/2016	ND	0.1530	0.5600	**
Silver	ug/L	MW-390	03/08/2017	ND	0.1400	0.5600	**
Silver	ug/L	MW-390	09/25/2017		0.1730		
Silver	ug/L	MW-390	03/13/2018	ND	0.5600		
Silver	ug/L	MW-390	10/01/2018	ND	0.1150	0.5600	**
Silver	ug/L	MW-390	03/27/2019	ND	0.3700	0.5600	**
Silver	ug/L	MW-390	09/23/2019	ND	1.4800	0.5600	**
Silver	ug/L	MW-390	03/09/2020	ND	0.3700	0.5600	**
Silver	ug/L	MW-390	09/17/2020	ND	0.3700	0.5600	**
Silver	ug/L	MW-390	04/14/2021	ND	0.4200	0.5600	**
Silver	ug/L	MW-390	10/26/2021	ND	0.4200	0.5600	**
Silver	ug/L	MW-390	04/14/2022	ND	1.9600	0.5600	**
Silver	ug/L	MW-390	09/01/2022	ND	4.0000	0.5600	**
Silver	ug/L	MW-390	03/06/2023	ND	4.0000	0.5600	**
Silver	ug/L	MW-390	09/29/2023	ND	4.0000	0.5600	**
Thallium	ug/L	MW-390	09/18/2012	ND	2.0000	1.0000	**
Thallium	ug/L	MW-390	03/27/2013	ND	2.0000	1.0000	**
Thallium	ug/L	MW-390	09/25/2013	ND	2.0000	1.0000	**
Thallium	ug/L	MW-390	04/15/2014	ND	2.0000	1.0000	**
Thallium	ug/L	MW-390	09/01/2015	ND	1.0000		
Thallium	ug/L	MW-390	03/22/2016	ND	0.0255	1.0000	**
Thallium	ug/L	MW-390	10/21/2016		0.0450		
Thallium	ug/L	MW-390	03/08/2017	ND	0.0644	1.0000	**
Thallium	ug/L	MW-390	09/25/2017	ND	0.0644	1.0000	**
Thallium	ug/L	MW-390	03/13/2018	ND	0.2580	1.0000	**
Thallium	ug/L	MW-390	10/01/2018	ND	0.5700	1.0000	**
Thallium	ug/L	MW-390	03/27/2019	ND	0.2700	1.0000	**
Thallium	ug/L	MW-390	09/23/2019	ND	1.0800	1.0000	**
Thallium	ug/L	MW-390	03/09/2020	ND	0.2600	1.0000	**
Thallium	ug/L	MW-390	09/17/2020	ND	0.2600	1.0000	**
Thallium	ug/L	MW-390	04/14/2021		1.1700		
Thallium	ug/L	MW-390	10/26/2021	ND	0.2600	1.0000	**
Thallium	ug/L	MW-390	04/14/2022	ND	1.0400	1.0000	**
Thallium	ug/L	MW-390	09/01/2022	ND	2.0000	1.0000	**
Thallium	ug/L	MW-390	03/06/2023	ND	2.0000	1.0000	**
Thallium	ug/L	MW-390	09/29/2023	ND	2.0000	1.0000	**
Vanadium	ug/L	MW-390	09/18/2012	ND	50.0000	3.2800	**
Vanadium	ug/L	MW-390	03/27/2013		8.9100		
Vanadium	ug/L	MW-390	09/25/2013	ND	50.0000	3.2800	**
Vanadium	ug/L	MW-390	04/15/2014	ND	50.0000	3.2800	**
Vanadium	ug/L	MW-390	09/01/2015	ND	5.0000	3.2800	**
Vanadium	ug/L	MW-390	03/22/2016		0.3780		
Vanadium	ug/L	MW-390	10/21/2016		0.6690		
Vanadium	ug/L	MW-390	03/08/2017	ND	0.8400	3.2800	**
Vanadium	ug/L	MW-390	09/25/2017	ND	0.8400	3.2800	**
Vanadium	ug/L	MW-390	03/13/2018	ND	3.3600	3.2800	**
Vanadium	ug/L	MW-390	10/01/2018	ND	2.1500	3.2800	**
Vanadium	ug/L	MW-390	03/27/2019	ND	0.8200	3.2800	**
Vanadium	ug/L	MW-390	09/23/2019	ND	3.2800		
Vanadium	ug/L	MW-390	03/09/2020	ND	0.8200	3.2800	**
Vanadium	ug/L	MW-390	09/17/2020	ND	0.8500	3.2800	**
Vanadium	ug/L	MW-390	04/14/2021	ND	1.1000	3.2800	**
Vanadium	ug/L	MW-390	10/26/2021	ND	1.1000	3.2800	**
Vanadium	ug/L	MW-390	04/14/2022	ND	4.4000	3.2800	**
Vanadium	ug/L	MW-390	09/01/2022	ND	20.0000	3.2800	**
Vanadium	ug/L	MW-390	03/06/2023	ND	20.0000	3.2800	**
Vanadium	ug/L	MW-390	09/29/2023	ND	20.0000	3.2800	**
Zinc	ug/L	MW-390	09/18/2012		94.0000		
Zinc	ug/L	MW-390	03/27/2013		207.0000		
Zinc	ug/L	MW-390	09/25/2013		200.0000		
Zinc	ug/L	MW-390	04/15/2014		27.3000		
Zinc	ug/L	MW-390	09/01/2015		48.8000		
Zinc	ug/L	MW-390	03/22/2016	ND	5.2100		*
Zinc	ug/L	MW-390	10/21/2016		101.0000		
Zinc	ug/L	MW-390	03/08/2017		308.0000		

* - 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	ug/L	MW-390	09/25/2017		65.0000		
Zinc	ug/L	MW-390	03/13/2018		100.0000		
Zinc	ug/L	MW-390	10/01/2018		85.6000		
Zinc	ug/L	MW-390	03/27/2019		75.7000		
Zinc	ug/L	MW-390	09/23/2019		293.0000		
Zinc	ug/L	MW-390	03/09/2020		118.0000		
Zinc	ug/L	MW-390	09/17/2020		94.3000		
Zinc	ug/L	MW-390	04/14/2021		192.0000		
Zinc	ug/L	MW-390	10/26/2021		56.2000		
Zinc	ug/L	MW-390	04/14/2022		487.0000		
Zinc	ug/L	MW-390	09/01/2022		107.0000		
Zinc	ug/L	MW-390	03/06/2023		115.0000		
Zinc	ug/L	MW-390	09/29/2023		122.0000		

* - 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	ug/L	MW-300	09/29/2023	ND	2.0000		4.4000
Arsenic	ug/L	MW-300	09/29/2023	ND	4.0000		22.5000
Barium	ug/L	MW-300	09/29/2023		11.3000		49.9000
Beryllium	ug/L	MW-300	09/29/2023	ND	4.0000		1.0000
Cadmium	ug/L	MW-300	09/29/2023	ND	0.8000		1.1900
Chromium	ug/L	MW-300	09/29/2023	ND	8.0000		5.5100
Cobalt	ug/L	MW-300	09/29/2023		881.0000	***	139.7010
Copper	ug/L	MW-300	09/29/2023	ND	4.0000		7.9900
Lead	ug/L	MW-300	09/29/2023	ND	4.0000		4.7800
Nickel	ug/L	MW-300	09/29/2023		955.0000	***	147.4121
Selenium	ug/L	MW-300	09/29/2023		4.5000		6.4000
Silver	ug/L	MW-300	09/29/2023	ND	4.0000		0.5600
Thallium	ug/L	MW-300	09/29/2023	ND	2.0000		1.1700
Vanadium	ug/L	MW-300	09/29/2023	ND	20.0000		8.9100
Zinc	ug/L	MW-300	09/29/2023		925.0000		13436.6853
Antimony	ug/L	MW-303	09/29/2023	ND	2.0000		4.4000
Arsenic	ug/L	MW-303	09/29/2023	ND	4.0000		22.5000
Barium	ug/L	MW-303	09/29/2023		35.5000	**	49.9000
Beryllium	ug/L	MW-303	09/29/2023	ND	4.0000		1.0000
Cadmium	ug/L	MW-303	09/29/2023	ND	0.8000		1.1900
Chromium	ug/L	MW-303	09/29/2023	ND	8.0000		5.5100
Cobalt	ug/L	MW-303	09/29/2023		17.5000		139.7010
Copper	ug/L	MW-303	09/29/2023	ND	4.0000		7.9900
Lead	ug/L	MW-303	09/29/2023	ND	4.0000		4.7800
Nickel	ug/L	MW-303	09/29/2023		41.5000		147.4121
Selenium	ug/L	MW-303	09/29/2023	ND	4.0000		6.4000
Silver	ug/L	MW-303	09/29/2023	ND	4.0000		0.5600
Thallium	ug/L	MW-303	09/29/2023	ND	2.0000		1.1700
Vanadium	ug/L	MW-303	09/29/2023	ND	20.0000		8.9100
Zinc	ug/L	MW-303	09/29/2023	ND	20.0000		13436.6853
Antimony	ug/L	MW-304	09/29/2023	ND	2.0000		4.4000
Arsenic	ug/L	MW-304	09/29/2023	ND	4.0000		22.5000
Barium	ug/L	MW-304	09/29/2023		61.0000	***	49.9000
Beryllium	ug/L	MW-304	09/29/2023	ND	4.0000		1.0000
Cadmium	ug/L	MW-304	09/29/2023	ND	0.8000		1.1900
Chromium	ug/L	MW-304	09/29/2023	ND	8.0000		5.5100
Cobalt	ug/L	MW-304	09/29/2023		7.1000		139.7010
Copper	ug/L	MW-304	09/29/2023	ND	4.0000		7.9900
Lead	ug/L	MW-304	09/29/2023	ND	4.0000		4.7800
Nickel	ug/L	MW-304	09/29/2023		5.5000		147.4121
Selenium	ug/L	MW-304	09/29/2023	ND	4.0000		6.4000
Silver	ug/L	MW-304	09/29/2023	ND	4.0000		0.5600
Thallium	ug/L	MW-304	09/29/2023	ND	2.0000		1.1700
Vanadium	ug/L	MW-304	09/29/2023	ND	20.0000		8.9100
Zinc	ug/L	MW-304	09/29/2023	ND	20.0000		13436.6853
Antimony	ug/L	MW-313	09/29/2023	ND	2.0000		4.4000
Arsenic	ug/L	MW-313	09/29/2023		12.2000		22.5000
Barium	ug/L	MW-313	09/29/2023		26.8000		49.9000
Beryllium	ug/L	MW-313	09/29/2023	ND	4.0000		1.0000
Cadmium	ug/L	MW-313	09/29/2023	ND	0.8000		1.1900
Chromium	ug/L	MW-313	09/29/2023	ND	8.0000		5.5100
Cobalt	ug/L	MW-313	09/29/2023		0.8000		139.7010
Copper	ug/L	MW-313	09/29/2023	ND	4.0000		7.9900
Lead	ug/L	MW-313	09/29/2023	ND	4.0000		4.7800
Nickel	ug/L	MW-313	09/29/2023		4.0000		147.4121
Selenium	ug/L	MW-313	09/29/2023	ND	4.0000		6.4000
Silver	ug/L	MW-313	09/29/2023	ND	4.0000		0.5600
Thallium	ug/L	MW-313	09/29/2023	ND	2.0000		1.1700
Vanadium	ug/L	MW-313	09/29/2023	ND	20.0000		8.9100
Zinc	ug/L	MW-313	09/29/2023	ND	20.0000		13436.6853
Antimony	ug/L	MW-335	09/29/2023	ND	2.0000		4.4000
Arsenic	ug/L	MW-335	09/29/2023		5.1000		22.5000
Barium	ug/L	MW-335	09/29/2023		11.6000		49.9000
Beryllium	ug/L	MW-335	09/29/2023	ND	4.0000		1.0000
Cadmium	ug/L	MW-335	09/29/2023	ND	0.8000		1.1900
Chromium	ug/L	MW-335	09/29/2023	ND	8.0000		5.5100
Cobalt	ug/L	MW-335	09/29/2023		39.7000		139.7010
Copper	ug/L	MW-335	09/29/2023	ND	4.0000		7.9900
Lead	ug/L	MW-335	09/29/2023	ND	4.0000		4.7800
Nickel	ug/L	MW-335	09/29/2023		38.9000		147.4121
Selenium	ug/L	MW-335	09/29/2023	ND	4.0000		6.4000
Silver	ug/L	MW-335	09/29/2023	ND	4.0000		0.5600

* - 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	ug/L	MW-335	09/29/2023	ND	2.0000		1.1700
Vanadium	ug/L	MW-335	09/29/2023	ND	20.0000		8.9100
Zinc	ug/L	MW-335	09/29/2023		41.6000		13436.6853
Antimony	ug/L	MW-344	09/29/2023	ND	2.0000		4.4000
Arsenic	ug/L	MW-344	09/29/2023	ND	4.0000		22.5000
Barium	ug/L	MW-344	09/29/2023		12.2000		49.9000
Beryllium	ug/L	MW-344	09/29/2023	ND	4.0000		1.0000
Cadmium	ug/L	MW-344	09/29/2023	ND	0.8000		1.1900
Chromium	ug/L	MW-344	09/29/2023	ND	8.0000		5.5100
Cobalt	ug/L	MW-344	09/29/2023		151.0000	***	139.7010
Copper	ug/L	MW-344	09/29/2023	ND	4.0000		7.9900
Lead	ug/L	MW-344	09/29/2023	ND	4.0000		4.7800
Nickel	ug/L	MW-344	09/29/2023		124.0000	**	147.4121
Selenium	ug/L	MW-344	09/29/2023	ND	4.0000		6.4000
Silver	ug/L	MW-344	09/29/2023	ND	4.0000		0.5600
Thallium	ug/L	MW-344	09/29/2023	ND	2.0000		1.1700
Vanadium	ug/L	MW-344	09/29/2023	ND	20.0000		8.9100
Zinc	ug/L	MW-344	09/29/2023	ND	20.0000		13436.6853
Antimony	ug/L	MW-380	09/29/2023	ND	2.0000		4.4000
Arsenic	ug/L	MW-380	09/29/2023		4.6000		22.5000
Barium	ug/L	MW-380	09/29/2023		9.7000		49.9000
Beryllium	ug/L	MW-380	09/29/2023		5.0000	***	1.0000
Cadmium	ug/L	MW-380	09/29/2023		9.2000	***	1.1900
Chromium	ug/L	MW-380	09/29/2023	ND	8.0000		5.5100
Cobalt	ug/L	MW-380	09/29/2023		1130.0000	***	139.7010
Copper	ug/L	MW-380	09/29/2023	ND	4.0000		7.9900
Lead	ug/L	MW-380	09/29/2023	ND	4.0000		4.7800
Nickel	ug/L	MW-380	09/29/2023		1410.0000	***	147.4121
Selenium	ug/L	MW-380	09/29/2023		9.6000	***	6.4000
Silver	ug/L	MW-380	09/29/2023	ND	4.0000		0.5600
Thallium	ug/L	MW-380	09/29/2023	ND	2.0000		1.1700
Vanadium	ug/L	MW-380	09/29/2023	ND	20.0000		8.9100
Zinc	ug/L	MW-380	09/29/2023		4800.0000		13436.6853
Antimony	ug/L	MW-381	09/29/2023	ND	2.0000		4.4000
Arsenic	ug/L	MW-381	09/29/2023	ND	4.0000		22.5000
Barium	ug/L	MW-381	09/29/2023		16.8000		49.9000
Beryllium	ug/L	MW-381	09/29/2023	ND	4.0000		1.0000
Cadmium	ug/L	MW-381	09/29/2023	ND	0.8000		1.1900
Chromium	ug/L	MW-381	09/29/2023	ND	8.0000		5.5100
Cobalt	ug/L	MW-381	09/29/2023		2.1000		139.7010
Copper	ug/L	MW-381	09/29/2023	ND	4.0000		7.9900
Lead	ug/L	MW-381	09/29/2023	ND	4.0000		4.7800
Nickel	ug/L	MW-381	09/29/2023		5.3000		147.4121
Selenium	ug/L	MW-381	09/29/2023	ND	4.0000		6.4000
Silver	ug/L	MW-381	09/29/2023	ND	4.0000		0.5600
Thallium	ug/L	MW-381	09/29/2023	ND	2.0000		1.1700
Vanadium	ug/L	MW-381	09/29/2023	ND	20.0000		8.9100
Zinc	ug/L	MW-381	09/29/2023		32.4000		13436.6853
Antimony	ug/L	MW-382R	09/29/2023	ND	2.0000		4.4000
Arsenic	ug/L	MW-382R	09/29/2023	ND	4.0000		22.5000
Barium	ug/L	MW-382R	09/29/2023		28.0000		49.9000
Beryllium	ug/L	MW-382R	09/29/2023	ND	4.0000		1.0000
Cadmium	ug/L	MW-382R	09/29/2023	ND	0.8000		1.1900
Chromium	ug/L	MW-382R	09/29/2023	ND	8.0000		5.5100
Cobalt	ug/L	MW-382R	09/29/2023		1.5000		139.7010
Copper	ug/L	MW-382R	09/29/2023	ND	4.0000		7.9900
Lead	ug/L	MW-382R	09/29/2023	ND	4.0000		4.7800
Nickel	ug/L	MW-382R	09/29/2023		6.1000		147.4121
Selenium	ug/L	MW-382R	09/29/2023	ND	4.0000		6.4000
Silver	ug/L	MW-382R	09/29/2023	ND	4.0000		0.5600
Thallium	ug/L	MW-382R	09/29/2023	ND	2.0000		1.1700
Vanadium	ug/L	MW-382R	09/29/2023	ND	20.0000		8.9100
Zinc	ug/L	MW-382R	09/29/2023	ND	20.0000		13436.6853
Antimony	ug/L	MW-384	09/29/2023	ND	2.0000		4.4000
Arsenic	ug/L	MW-384	09/29/2023	ND	4.0000		22.5000
Barium	ug/L	MW-384	09/29/2023		10.0000		49.9000
Beryllium	ug/L	MW-384	09/29/2023	ND	4.0000		1.0000
Cadmium	ug/L	MW-384	09/29/2023	ND	0.8000		1.1900
Chromium	ug/L	MW-384	09/29/2023	ND	8.0000		5.5100
Cobalt	ug/L	MW-384	09/29/2023		14.6000		139.7010
Copper	ug/L	MW-384	09/29/2023	ND	4.0000		7.9900
Lead	ug/L	MW-384	09/29/2023	ND	4.0000		4.7800

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

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Nickel	ug/L	MW-384	09/29/2023		54.4000		147.4121
Selenium	ug/L	MW-384	09/29/2023	ND	4.0000		6.4000
Silver	ug/L	MW-384	09/29/2023	ND	4.0000		0.5600
Thallium	ug/L	MW-384	09/29/2023	ND	2.0000		1.1700
Vanadium	ug/L	MW-384	09/29/2023	ND	20.0000		8.9100
Zinc	ug/L	MW-384	09/29/2023		20.3000		13436.6853
Antimony	ug/L	MW-385	09/29/2023	ND	2.0000		4.4000
Arsenic	ug/L	MW-385	09/29/2023	ND	4.0000		22.5000
Barium	ug/L	MW-385	09/29/2023		15.1000		49.9000
Beryllium	ug/L	MW-385	09/29/2023	ND	4.0000		1.0000
Cadmium	ug/L	MW-385	09/29/2023	ND	0.8000		1.1900
Chromium	ug/L	MW-385	09/29/2023	ND	8.0000		5.5100
Cobalt	ug/L	MW-385	09/29/2023		6.7000		139.7010
Copper	ug/L	MW-385	09/29/2023	ND	4.0000		7.9900
Lead	ug/L	MW-385	09/29/2023	ND	4.0000		4.7800
Nickel	ug/L	MW-385	09/29/2023		43.6000		147.4121
Selenium	ug/L	MW-385	09/29/2023	ND	4.0000		6.4000
Silver	ug/L	MW-385	09/29/2023	ND	4.0000		0.5600
Thallium	ug/L	MW-385	09/29/2023	ND	2.0000		1.1700
Vanadium	ug/L	MW-385	09/29/2023	ND	20.0000		8.9100
Zinc	ug/L	MW-385	09/29/2023		44.2000		13436.6853

* - 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	1	65	0.015	16	350	0.046
Arsenic	46	63	0.730	155	355	0.437
Barium	62	65	0.954	339	356	0.952
Beryllium	17	65	0.262	62	355	0.175
Cadmium	25	65	0.385	130	356	0.365
Chromium	7	65	0.108	31	353	0.088
Cobalt	64	64	1.000	322	355	0.907
Copper	7	65	0.108	41	354	0.116
Lead	14	65	0.215	63	355	0.177
Nickel	64	65	0.985	296	355	0.834
Selenium	8	65	0.123	22	355	0.062
Silver	1	63	0.016	7	353	0.020
Thallium	5	65	0.077	28	355	0.079
Vanadium	3	64	0.047	41	355	0.115
Zinc	49	63	0.778	246	356	0.691

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	1	65	0.015									nonpar
Arsenic	46	63	0.730	3.245	4.330					2.326	non-norm	nonpar
Barium	62	65	0.954	5.191	3.196					2.326	non-norm	nonpar
Beryllium	17	65	0.262	0.057	0.817					2.326	normal	nonpar
Cadmium	25	65	0.385	5.567	3.091					2.326	non-norm	nonpar
Chromium	7	65	0.108	0.735	1.408					2.326	normal	nonpar
Cobalt	64	64	1.000	1.030	1.466					2.326	normal	normal
Copper	7	65	0.108	1.104	0.126					2.326	normal	nonpar
Lead	14	65	0.215	0.581	0.573					2.326	normal	nonpar
Nickel	64	65	0.985	1.133	1.652					2.326	normal	normal
Selenium	8	65	0.123	3.344	1.069					2.326	lognor	nonpar
Silver	1	63	0.016									nonpar
Thallium	5	65	0.077									nonpar
Vanadium	3	64	0.047	1.578	0.451					2.326	normal	nonpar
Zinc	49	63	0.778	4.775	0.463					2.326	lognor	lognor

* - 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	ug/L	1	65					4.4000	nonpar		0.99
Arsenic	ug/L	46	63					22.5000	nonpar		0.99
Barium	ug/L	62	65					49.9000	nonpar		0.99
Beryllium	ug/L	17	65					1.0000	nonpar	***	0.99
Cadmium	ug/L	25	65					1.1900	nonpar		0.99
Chromium	ug/L	7	65					5.5100	nonpar		0.99
Cobalt	ug/L	64	64	64.6547	31.1970	0.0100	2.4056	139.7010	normal		
Copper	ug/L	7	65					7.9900	nonpar		0.99
Lead	ug/L	14	65					4.7800	nonpar		0.99
Nickel	ug/L	64	65	78.8708	28.5079	0.0100	2.4043	147.4121	normal		
Selenium	ug/L	8	65					6.4000	nonpar		0.99
Silver	ug/L	1	63					0.5600	nonpar	***	0.99
Thallium	ug/L	5	65					1.1700	nonpar		0.99
Vanadium	ug/L	3	64					8.9100	nonpar		0.99
Zinc	ug/L	49	63	3.8894	2.3335	0.0100	2.4069	13436.6853	lognor		

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	ug/L	MW-307	10/28/2021	0.7500	< 0.7500	09/18/2012-09/29/2023	21	0.5263
Arsenic	ug/L	MW-307	09/29/2023	31.9000		09/18/2012-09/29/2023	21	0.5263
Cobalt	ug/L	MW-307	10/28/2021	14.8000		09/18/2012-09/29/2023	21	0.5263
Zinc	ug/L	MW-307	10/28/2021	10.6000		09/18/2012-09/29/2023	21	0.5263
Zinc	ug/L	MW-390	03/22/2016	5.2100	< 5.2100	09/18/2012-09/29/2023	21	0.5263

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

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Cobalt	ug/L	MW-300	03/25/2008		630.0000	*	139.7010
Cobalt	ug/L	MW-300	04/22/2008		458.0000	*	139.7010
Cobalt	ug/L	MW-300	07/26/2008		413.0000	*	139.7010
Cobalt	ug/L	MW-300	08/27/2008		493.0000	*	139.7010
Cobalt	ug/L	MW-300	09/24/2008		555.0000	*	139.7010
Cobalt	ug/L	MW-300	03/17/2009		325.0000	*	139.7010
Cobalt	ug/L	MW-300	09/24/2009		350.0000	*	139.7010
Cobalt	ug/L	MW-300	03/25/2010		370.0000	*	139.7010
Cobalt	ug/L	MW-300	09/23/2010		437.0000	*	139.7010
Cobalt	ug/L	MW-300	03/29/2011		357.0000	*	139.7010
Cobalt	ug/L	MW-300	09/22/2011		304.0000	*	139.7010
Cobalt	ug/L	MW-300	03/15/2012		225.0000	*	139.7010
Cobalt	ug/L	MW-300	09/18/2012		357.0000	*	139.7010
Cobalt	ug/L	MW-300	03/27/2013		330.0000	*	139.7010
Cobalt	ug/L	MW-300	09/25/2013		332.0000	*	139.7010
Cobalt	ug/L	MW-300	04/16/2014		42.3000		139.7010
Cobalt	ug/L	MW-300	09/26/2014		289.0000	*	139.7010
Cobalt	ug/L	MW-300	03/12/2015		251.0000	*	139.7010
Cobalt	ug/L	MW-300	09/02/2015		383.0000	*	139.7010
Cobalt	ug/L	MW-300	03/23/2016		328.0000	*	139.7010
Cobalt	ug/L	MW-300	10/20/2016		337.0000	*	139.7010
Cobalt	ug/L	MW-300	03/07/2017		315.0000	*	139.7010
Cobalt	ug/L	MW-300	09/26/2017		306.0000	*	139.7010
Cobalt	ug/L	MW-300	03/14/2018		143.0000	*	139.7010
Cobalt	ug/L	MW-300	10/02/2018		232.0000	*	139.7010
Cobalt	ug/L	MW-300	03/28/2019		344.0000	*	139.7010
Cobalt	ug/L	MW-300	09/24/2019		292.0000	*	139.7010
Cobalt	ug/L	MW-300	03/10/2020		215.0000	*	139.7010
Cobalt	ug/L	MW-300	09/15/2020		282.0000	*	139.7010
Cobalt	ug/L	MW-300	04/15/2021		152.0000	*	139.7010
Cobalt	ug/L	MW-300	10/27/2021		260.0000	*	139.7010
Cobalt	ug/L	MW-300	04/13/2022		339.0000	*	139.7010
Cobalt	ug/L	MW-300	09/01/2022		1370.0000	*	139.7010
Cobalt	ug/L	MW-300	03/06/2023		294.0000	*	139.7010
Cobalt	ug/L	MW-300	09/29/2023		881.0000	*	139.7010
Nickel	ug/L	MW-300	03/25/2008		544.0000	*	147.4121
Nickel	ug/L	MW-300	04/22/2008		580.0000	*	147.4121
Nickel	ug/L	MW-300	07/26/2008		404.0000	*	147.4121
Nickel	ug/L	MW-300	08/27/2008		500.0000	*	147.4121
Nickel	ug/L	MW-300	09/24/2008		579.0000	*	147.4121
Nickel	ug/L	MW-300	03/17/2009		274.0000	*	147.4121
Nickel	ug/L	MW-300	09/24/2009		348.0000	*	147.4121
Nickel	ug/L	MW-300	03/25/2010		576.0000	*	147.4121
Nickel	ug/L	MW-300	09/23/2010		484.0000	*	147.4121
Nickel	ug/L	MW-300	03/29/2011		337.0000	*	147.4121
Nickel	ug/L	MW-300	09/22/2011		262.0000	*	147.4121
Nickel	ug/L	MW-300	03/15/2012		247.0000	*	147.4121
Nickel	ug/L	MW-300	09/18/2012		269.0000	*	147.4121
Nickel	ug/L	MW-300	03/27/2013		225.0000	*	147.4121
Nickel	ug/L	MW-300	09/25/2013		279.0000	*	147.4121
Nickel	ug/L	MW-300	04/16/2014		98.6000		147.4121
Nickel	ug/L	MW-300	09/26/2014		286.0000	*	147.4121
Nickel	ug/L	MW-300	03/12/2015		204.0000	*	147.4121
Nickel	ug/L	MW-300	09/02/2015		329.0000	*	147.4121
Nickel	ug/L	MW-300	03/23/2016		250.0000	*	147.4121
Nickel	ug/L	MW-300	10/20/2016		221.0000	*	147.4121
Nickel	ug/L	MW-300	03/07/2017		288.0000	*	147.4121
Nickel	ug/L	MW-300	09/26/2017		218.0000	*	147.4121
Nickel	ug/L	MW-300	03/14/2018		149.0000	*	147.4121
Nickel	ug/L	MW-300	10/02/2018		189.0000	*	147.4121
Nickel	ug/L	MW-300	03/28/2019		253.0000	*	147.4121
Nickel	ug/L	MW-300	09/24/2019		257.0000	*	147.4121
Nickel	ug/L	MW-300	03/10/2020		185.0000	*	147.4121
Nickel	ug/L	MW-300	09/15/2020		248.0000	*	147.4121
Nickel	ug/L	MW-300	04/15/2021		156.0000	*	147.4121
Nickel	ug/L	MW-300	10/27/2021		237.0000	*	147.4121
Nickel	ug/L	MW-300	04/13/2022		365.0000	*	147.4121
Nickel	ug/L	MW-300	09/01/2022		1720.0000	*	147.4121
Nickel	ug/L	MW-300	03/06/2023		343.0000	*	147.4121
Nickel	ug/L	MW-300	09/29/2023		955.0000	*	147.4121
Barium	ug/L	MW-303	03/24/2008		26.6000		49.9000

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

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Barium	ug/L	MW-303	04/21/2008	ND	10.0000		49.9000
Barium	ug/L	MW-303	07/23/2008		14.1000		49.9000
Barium	ug/L	MW-303	08/26/2008		30.8000		49.9000
Barium	ug/L	MW-303	09/23/2008	ND	10.0000		49.9000
Barium	ug/L	MW-303	03/17/2009		12.3000		49.9000
Barium	ug/L	MW-303	09/24/2009		23.4000		49.9000
Barium	ug/L	MW-303	03/24/2010		17.7000		49.9000
Barium	ug/L	MW-303	09/22/2010		23.9000		49.9000
Barium	ug/L	MW-303	03/28/2011		14.5000		49.9000
Barium	ug/L	MW-303	09/22/2011		20.4000		49.9000
Barium	ug/L	MW-303	03/16/2012		30.1000		49.9000
Barium	ug/L	MW-303	09/19/2012		31.9000		49.9000
Barium	ug/L	MW-303	03/27/2013		26.8000		49.9000
Barium	ug/L	MW-303	09/26/2013		39.1000		49.9000
Barium	ug/L	MW-303	04/15/2014		26.1000		49.9000
Barium	ug/L	MW-303	09/25/2014		106.0000	*	49.9000
Barium	ug/L	MW-303	03/11/2015		72.5000	*	49.9000
Barium	ug/L	MW-303	09/02/2015		36.6000		49.9000
Barium	ug/L	MW-303	03/22/2016		66.8000	*	49.9000
Barium	ug/L	MW-303	10/21/2016		69.2000	*	49.9000
Barium	ug/L	MW-303	03/08/2017		42.9000		49.9000
Barium	ug/L	MW-303	09/25/2017		68.4000	*	49.9000
Barium	ug/L	MW-303	03/13/2018		66.1000	*	49.9000
Barium	ug/L	MW-303	10/01/2018		37.4000		49.9000
Barium	ug/L	MW-303	03/27/2019		20.8000		49.9000
Barium	ug/L	MW-303	09/23/2019		39.1000		49.9000
Barium	ug/L	MW-303	03/10/2020		59.0000	*	49.9000
Barium	ug/L	MW-303	09/15/2020		25.0000		49.9000
Barium	ug/L	MW-303	04/14/2021		14.5000		49.9000
Barium	ug/L	MW-303	10/27/2021		73.3000	*	49.9000
Barium	ug/L	MW-303	04/14/2022		58.8000	*	49.9000
Barium	ug/L	MW-303	09/01/2022		58.0000	*	49.9000
Barium	ug/L	MW-303	03/06/2023		73.9000	*	49.9000
Barium	ug/L	MW-303	09/29/2023		35.5000		49.9000
Barium	ug/L	MW-304	03/22/2016		77.5000	*	49.9000
Barium	ug/L	MW-304	10/20/2016		85.1000	*	49.9000
Barium	ug/L	MW-304	01/18/2017		43.2000		49.9000
Barium	ug/L	MW-304	03/07/2017		103.0000	*	49.9000
Barium	ug/L	MW-304	06/28/2017		74.3000	*	49.9000
Barium	ug/L	MW-304	09/26/2017		73.1000	*	49.9000
Barium	ug/L	MW-304	03/14/2018		39.9000		49.9000
Barium	ug/L	MW-304	10/02/2018		72.3000	*	49.9000
Barium	ug/L	MW-304	03/28/2019		75.6000	*	49.9000
Barium	ug/L	MW-304	09/24/2019		68.9000	*	49.9000
Barium	ug/L	MW-304	03/10/2020		71.1000	*	49.9000
Barium	ug/L	MW-304	09/15/2020		68.1000	*	49.9000
Barium	ug/L	MW-304	04/16/2021		42.4000		49.9000
Barium	ug/L	MW-304	10/27/2021		36.8000		49.9000
Barium	ug/L	MW-304	04/14/2022		40.8000		49.9000
Barium	ug/L	MW-304	09/01/2022		60.2000	*	49.9000
Barium	ug/L	MW-304	03/06/2023		66.5000	*	49.9000
Barium	ug/L	MW-304	09/29/2023		61.0000	*	49.9000
Cobalt	ug/L	MW-344	03/25/2008	ND	20.0000		139.7010
Cobalt	ug/L	MW-344	04/22/2008	ND	20.0000		139.7010
Cobalt	ug/L	MW-344	07/26/2008	ND	20.0000		139.7010
Cobalt	ug/L	MW-344	08/27/2008	ND	20.0000		139.7010
Cobalt	ug/L	MW-344	09/24/2008	ND	20.0000		139.7010
Cobalt	ug/L	MW-344	03/18/2009	ND	20.0000		139.7010
Cobalt	ug/L	MW-344	09/24/2009		23.3000		139.7010
Cobalt	ug/L	MW-344	03/25/2010		34.7000		139.7010
Cobalt	ug/L	MW-344	09/22/2010		45.0000		139.7010
Cobalt	ug/L	MW-344	03/28/2011		33.2000		139.7010
Cobalt	ug/L	MW-344	09/22/2011		47.9000		139.7010
Cobalt	ug/L	MW-344	03/16/2012		86.5000		139.7010
Cobalt	ug/L	MW-344	09/20/2012		93.2000		139.7010
Cobalt	ug/L	MW-344	03/27/2013		172.0000	*	139.7010
Cobalt	ug/L	MW-344	09/25/2013		105.0000		139.7010
Cobalt	ug/L	MW-344	04/15/2014		50.0000		139.7010
Cobalt	ug/L	MW-344	09/26/2014		164.0000	*	139.7010
Cobalt	ug/L	MW-344	03/12/2015		176.0000	*	139.7010
Cobalt	ug/L	MW-344	09/02/2015		202.0000	*	139.7010

* - 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	ug/L	MW-344	03/23/2016		269.0000	*	139.7010
Cobalt	ug/L	MW-344	10/19/2016		57.6000		139.7010
Cobalt	ug/L	MW-344	03/07/2017		107.0000		139.7010
Cobalt	ug/L	MW-344	09/26/2017		21.8000		139.7010
Cobalt	ug/L	MW-344	03/14/2018		114.0000		139.7010
Cobalt	ug/L	MW-344	10/02/2018		198.0000	*	139.7010
Cobalt	ug/L	MW-344	03/28/2019		128.0000		139.7010
Cobalt	ug/L	MW-344	09/24/2019		146.0000	*	139.7010
Cobalt	ug/L	MW-344	03/10/2020		206.0000	*	139.7010
Cobalt	ug/L	MW-344	09/15/2020		263.0000	*	139.7010
Cobalt	ug/L	MW-344	04/15/2021		258.0000	*	139.7010
Cobalt	ug/L	MW-344	10/27/2021		223.0000	*	139.7010
Cobalt	ug/L	MW-344	04/14/2022		310.0000	*	139.7010
Cobalt	ug/L	MW-344	09/01/2022		224.0000	*	139.7010
Cobalt	ug/L	MW-344	03/06/2023		209.0000	*	139.7010
Cobalt	ug/L	MW-344	09/29/2023		151.0000	*	139.7010
Nickel	ug/L	MW-344	03/25/2008	ND	50.0000		147.4121
Nickel	ug/L	MW-344	04/22/2008	ND	50.0000		147.4121
Nickel	ug/L	MW-344	07/26/2008	ND	50.0000		147.4121
Nickel	ug/L	MW-344	08/27/2008	ND	50.0000		147.4121
Nickel	ug/L	MW-344	09/24/2008	ND	50.0000		147.4121
Nickel	ug/L	MW-344	03/18/2009	ND	50.0000		147.4121
Nickel	ug/L	MW-344	09/24/2009	ND	50.0000		147.4121
Nickel	ug/L	MW-344	03/25/2010		57.0000		147.4121
Nickel	ug/L	MW-344	09/22/2010		70.1000		147.4121
Nickel	ug/L	MW-344	03/28/2011	ND	50.0000		147.4121
Nickel	ug/L	MW-344	09/22/2011		60.9000		147.4121
Nickel	ug/L	MW-344	03/16/2012		98.3000		147.4121
Nickel	ug/L	MW-344	09/20/2012		84.2000		147.4121
Nickel	ug/L	MW-344	03/27/2013		164.0000	*	147.4121
Nickel	ug/L	MW-344	09/25/2013		110.0000		147.4121
Nickel	ug/L	MW-344	04/15/2014		51.3000		147.4121
Nickel	ug/L	MW-344	09/26/2014		131.0000		147.4121
Nickel	ug/L	MW-344	03/12/2015		107.0000		147.4121
Nickel	ug/L	MW-344	09/02/2015		152.0000	*	147.4121
Nickel	ug/L	MW-344	03/23/2016		202.0000	*	147.4121
Nickel	ug/L	MW-344	10/19/2016		44.2000		147.4121
Nickel	ug/L	MW-344	03/07/2017		89.1000		147.4121
Nickel	ug/L	MW-344	09/26/2017		21.5000		147.4121
Nickel	ug/L	MW-344	03/14/2018		82.9000		147.4121
Nickel	ug/L	MW-344	10/02/2018		133.0000		147.4121
Nickel	ug/L	MW-344	03/28/2019		91.0000		147.4121
Nickel	ug/L	MW-344	09/24/2019		278.0000	*	147.4121
Nickel	ug/L	MW-344	03/10/2020		156.0000	*	147.4121
Nickel	ug/L	MW-344	09/15/2020		205.0000	*	147.4121
Nickel	ug/L	MW-344	04/15/2021		214.0000	*	147.4121
Nickel	ug/L	MW-344	10/27/2021		189.0000	*	147.4121
Nickel	ug/L	MW-344	04/14/2022		267.0000	*	147.4121
Nickel	ug/L	MW-344	09/01/2022		178.0000	*	147.4121
Nickel	ug/L	MW-344	03/06/2023		165.0000	*	147.4121
Nickel	ug/L	MW-344	09/29/2023		124.0000		147.4121
Beryllium	ug/L	MW-380	03/25/2008		136.0000	*	1.0000
Beryllium	ug/L	MW-380	04/21/2008		12.6000	*	1.0000
Beryllium	ug/L	MW-380	07/26/2008		17.9000	*	1.0000
Beryllium	ug/L	MW-380	08/26/2008		22.3000	*	1.0000
Beryllium	ug/L	MW-380	09/24/2008		28.5000	*	1.0000
Beryllium	ug/L	MW-380	03/17/2009		16.0000	*	1.0000
Beryllium	ug/L	MW-380	09/24/2009		22.6000	*	1.0000
Beryllium	ug/L	MW-380	03/25/2010		12.9000	*	1.0000
Beryllium	ug/L	MW-380	09/22/2010		21.6000	*	1.0000
Beryllium	ug/L	MW-380	03/28/2011		16.6000	*	1.0000
Beryllium	ug/L	MW-380	09/22/2011		19.6000	*	1.0000
Beryllium	ug/L	MW-380	03/15/2012		8.5400	*	1.0000
Beryllium	ug/L	MW-380	09/19/2012		9.7200	*	1.0000
Beryllium	ug/L	MW-380	03/27/2013		6.4000	*	1.0000
Beryllium	ug/L	MW-380	09/25/2013		17.6000	*	1.0000
Beryllium	ug/L	MW-380	04/16/2014		5.1300	*	1.0000
Beryllium	ug/L	MW-380	09/26/2014		8.0700	*	1.0000
Beryllium	ug/L	MW-380	03/11/2015	ND	10.0000		1.0000
Beryllium	ug/L	MW-380	09/02/2015	ND	30.0000		1.0000
Beryllium	ug/L	MW-380	03/23/2016		7.2300	*	1.0000

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

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Beryllium	ug/L	MW-380	10/20/2016		6.1100	*	1.0000
Beryllium	ug/L	MW-380	03/09/2017		11.6000	*	1.0000
Beryllium	ug/L	MW-380	09/26/2017		4.7200	*	1.0000
Beryllium	ug/L	MW-380	03/14/2018		6.9000	*	1.0000
Beryllium	ug/L	MW-380	10/02/2018		6.9900	*	1.0000
Beryllium	ug/L	MW-380	03/28/2019		5.1500	*	1.0000
Beryllium	ug/L	MW-380	09/24/2019		2.8600	*	1.0000
Beryllium	ug/L	MW-380	03/10/2020		2.8500	*	1.0000
Beryllium	ug/L	MW-380	09/15/2020		7.5100	*	1.0000
Beryllium	ug/L	MW-380	04/15/2021		7.4200	*	1.0000
Beryllium	ug/L	MW-380	10/27/2021		6.2200	*	1.0000
Beryllium	ug/L	MW-380	04/13/2022	ND	2.7000		1.0000
Beryllium	ug/L	MW-380	09/01/2022	ND	4.0000		1.0000
Beryllium	ug/L	MW-380	03/06/2023		4.7000	*	1.0000
Beryllium	ug/L	MW-380	09/29/2023		5.0000	*	1.0000
Cadmium	ug/L	MW-380	03/25/2008		12.2000	*	1.1900
Cadmium	ug/L	MW-380	04/21/2008		14.8000	*	1.1900
Cadmium	ug/L	MW-380	07/26/2008		20.1000	*	1.1900
Cadmium	ug/L	MW-380	08/26/2008		18.8000	*	1.1900
Cadmium	ug/L	MW-380	09/24/2008		27.0000	*	1.1900
Cadmium	ug/L	MW-380	03/17/2009		17.5000	*	1.1900
Cadmium	ug/L	MW-380	09/24/2009		18.0000	*	1.1900
Cadmium	ug/L	MW-380	03/25/2010		16.2000	*	1.1900
Cadmium	ug/L	MW-380	09/22/2010		17.1000	*	1.1900
Cadmium	ug/L	MW-380	03/28/2011		15.0000	*	1.1900
Cadmium	ug/L	MW-380	09/22/2011		16.1000	*	1.1900
Cadmium	ug/L	MW-380	03/15/2012		9.0000	*	1.1900
Cadmium	ug/L	MW-380	09/19/2012		14.7000	*	1.1900
Cadmium	ug/L	MW-380	03/27/2013		5.3900	*	1.1900
Cadmium	ug/L	MW-380	09/25/2013		21.2000	*	1.1900
Cadmium	ug/L	MW-380	04/16/2014		7.1800	*	1.1900
Cadmium	ug/L	MW-380	09/26/2014		12.7000	*	1.1900
Cadmium	ug/L	MW-380	03/11/2015		15.9000	*	1.1900
Cadmium	ug/L	MW-380	09/02/2015		10.5000	*	1.1900
Cadmium	ug/L	MW-380	03/23/2016		6.3300	*	1.1900
Cadmium	ug/L	MW-380	10/20/2016		9.9800	*	1.1900
Cadmium	ug/L	MW-380	03/09/2017		57.4000	*	1.1900
Cadmium	ug/L	MW-380	06/28/2017		5.2100	*	1.1900
Cadmium	ug/L	MW-380	09/26/2017		9.2900	*	1.1900
Cadmium	ug/L	MW-380	03/14/2018		10.6000	*	1.1900
Cadmium	ug/L	MW-380	10/02/2018		12.5000	*	1.1900
Cadmium	ug/L	MW-380	03/28/2019		4.4000	*	1.1900
Cadmium	ug/L	MW-380	09/24/2019		6.8800	*	1.1900
Cadmium	ug/L	MW-380	03/10/2020		5.9000	*	1.1900
Cadmium	ug/L	MW-380	09/15/2020		8.9400	*	1.1900
Cadmium	ug/L	MW-380	04/15/2021		10.5000	*	1.1900
Cadmium	ug/L	MW-380	10/27/2021		7.2500	*	1.1900
Cadmium	ug/L	MW-380	04/13/2022		1.3600	*	1.1900
Cadmium	ug/L	MW-380	09/01/2022	ND	0.8000		1.1900
Cadmium	ug/L	MW-380	03/06/2023		3.1000	*	1.1900
Cadmium	ug/L	MW-380	09/29/2023		9.2000	*	1.1900
Cobalt	ug/L	MW-380	03/25/2008		1180.0000	*	139.7010
Cobalt	ug/L	MW-380	04/21/2008		1250.0000	*	139.7010
Cobalt	ug/L	MW-380	07/26/2008		1510.0000	*	139.7010
Cobalt	ug/L	MW-380	08/26/2008		1310.0000	*	139.7010
Cobalt	ug/L	MW-380	09/24/2008		1480.0000	*	139.7010
Cobalt	ug/L	MW-380	03/17/2009		1400.0000	*	139.7010
Cobalt	ug/L	MW-380	09/24/2009		1490.0000	*	139.7010
Cobalt	ug/L	MW-380	03/25/2010		1250.0000	*	139.7010
Cobalt	ug/L	MW-380	09/22/2010		1390.0000	*	139.7010
Cobalt	ug/L	MW-380	03/28/2011		1410.0000	*	139.7010
Cobalt	ug/L	MW-380	09/22/2011		1270.0000	*	139.7010
Cobalt	ug/L	MW-380	03/15/2012		1500.0000	*	139.7010
Cobalt	ug/L	MW-380	09/19/2012		1420.0000	*	139.7010
Cobalt	ug/L	MW-380	03/27/2013		1120.0000	*	139.7010
Cobalt	ug/L	MW-380	09/25/2013		1450.0000	*	139.7010
Cobalt	ug/L	MW-380	04/16/2014		563.0000	*	139.7010
Cobalt	ug/L	MW-380	09/26/2014		1140.0000	*	139.7010
Cobalt	ug/L	MW-380	03/11/2015		1490.0000	*	139.7010
Cobalt	ug/L	MW-380	09/02/2015	ND	15.0000		139.7010
Cobalt	ug/L	MW-380	03/23/2016		1120.0000	*	139.7010

* - 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	ug/L	MW-380	10/20/2016		1150.0000	*	139.7010
Cobalt	ug/L	MW-380	03/09/2017		1840.0000	*	139.7010
Cobalt	ug/L	MW-380	09/26/2017		1290.0000	*	139.7010
Cobalt	ug/L	MW-380	03/14/2018		1430.0000	*	139.7010
Cobalt	ug/L	MW-380	10/02/2018		1040.0000	*	139.7010
Cobalt	ug/L	MW-380	03/28/2019		607.0000	*	139.7010
Cobalt	ug/L	MW-380	09/24/2019		867.0000	*	139.7010
Cobalt	ug/L	MW-380	03/10/2020		856.0000	*	139.7010
Cobalt	ug/L	MW-380	09/15/2020		1180.0000	*	139.7010
Cobalt	ug/L	MW-380	04/15/2021		1150.0000	*	139.7010
Cobalt	ug/L	MW-380	10/27/2021		795.0000	*	139.7010
Cobalt	ug/L	MW-380	04/13/2022		701.0000	*	139.7010
Cobalt	ug/L	MW-380	09/01/2022		407.0000	*	139.7010
Cobalt	ug/L	MW-380	03/06/2023		758.0000	*	139.7010
Cobalt	ug/L	MW-380	09/29/2023		1130.0000	*	139.7010
Nickel	ug/L	MW-380	03/25/2008		1750.0000	*	147.4121
Nickel	ug/L	MW-380	04/21/2008		1930.0000	*	147.4121
Nickel	ug/L	MW-380	07/26/2008		2260.0000	*	147.4121
Nickel	ug/L	MW-380	08/26/2008		1940.0000	*	147.4121
Nickel	ug/L	MW-380	09/24/2008		2230.0000	*	147.4121
Nickel	ug/L	MW-380	03/17/2009		1990.0000	*	147.4121
Nickel	ug/L	MW-380	09/24/2009		2220.0000	*	147.4121
Nickel	ug/L	MW-380	03/25/2010		1810.0000	*	147.4121
Nickel	ug/L	MW-380	09/22/2010		2010.0000	*	147.4121
Nickel	ug/L	MW-380	03/28/2011		2090.0000	*	147.4121
Nickel	ug/L	MW-380	09/22/2011		1870.0000	*	147.4121
Nickel	ug/L	MW-380	03/15/2012		2130.0000	*	147.4121
Nickel	ug/L	MW-380	09/19/2012		2120.0000	*	147.4121
Nickel	ug/L	MW-380	03/27/2013		1600.0000	*	147.4121
Nickel	ug/L	MW-380	09/25/2013		2140.0000	*	147.4121
Nickel	ug/L	MW-380	04/16/2014		818.0000	*	147.4121
Nickel	ug/L	MW-380	09/26/2014		1650.0000	*	147.4121
Nickel	ug/L	MW-380	03/11/2015		1290.0000	*	147.4121
Nickel	ug/L	MW-380	09/02/2015		1970.0000	*	147.4121
Nickel	ug/L	MW-380	03/23/2016		1450.0000	*	147.4121
Nickel	ug/L	MW-380	10/20/2016		1430.0000	*	147.4121
Nickel	ug/L	MW-380	03/09/2017		2660.0000	*	147.4121
Nickel	ug/L	MW-380	09/26/2017		1270.0000	*	147.4121
Nickel	ug/L	MW-380	03/14/2018		2070.0000	*	147.4121
Nickel	ug/L	MW-380	10/02/2018		1440.0000	*	147.4121
Nickel	ug/L	MW-380	03/28/2019		807.0000	*	147.4121
Nickel	ug/L	MW-380	09/24/2019		1270.0000	*	147.4121
Nickel	ug/L	MW-380	03/10/2020		1130.0000	*	147.4121
Nickel	ug/L	MW-380	09/15/2020		1670.0000	*	147.4121
Nickel	ug/L	MW-380	04/15/2021		1450.0000	*	147.4121
Nickel	ug/L	MW-380	10/27/2021		1100.0000	*	147.4121
Nickel	ug/L	MW-380	04/13/2022		1020.0000	*	147.4121
Nickel	ug/L	MW-380	09/01/2022		531.0000	*	147.4121
Nickel	ug/L	MW-380	03/06/2023		965.0000	*	147.4121
Nickel	ug/L	MW-380	09/29/2023		1410.0000	*	147.4121
Selenium	ug/L	MW-380	03/25/2008	ND	5.0000		6.4000
Selenium	ug/L	MW-380	04/21/2008	ND	5.0000		6.4000
Selenium	ug/L	MW-380	07/26/2008	ND	5.0000		6.4000
Selenium	ug/L	MW-380	08/26/2008	ND	5.0000		6.4000
Selenium	ug/L	MW-380	09/24/2008	ND	15.0000		6.4000
Selenium	ug/L	MW-380	03/17/2009		5.2600		6.4000
Selenium	ug/L	MW-380	09/24/2009	ND	5.0000		6.4000
Selenium	ug/L	MW-380	03/25/2010	ND	5.0000		6.4000
Selenium	ug/L	MW-380	09/22/2010	ND	5.0000		6.4000
Selenium	ug/L	MW-380	03/28/2011	ND	5.0000		6.4000
Selenium	ug/L	MW-380	09/22/2011	ND	40.0000		6.4000
Selenium	ug/L	MW-380	03/15/2012	ND	5.0000		6.4000
Selenium	ug/L	MW-380	09/19/2012	ND	5.0000		6.4000
Selenium	ug/L	MW-380	03/27/2013	ND	5.0000		6.4000
Selenium	ug/L	MW-380	09/25/2013	ND	5.0000		6.4000
Selenium	ug/L	MW-380	04/16/2014	ND	5.0000		6.4000
Selenium	ug/L	MW-380	09/26/2014	ND	33.4000		6.4000
Selenium	ug/L	MW-380	03/11/2015	ND	50.0000		6.4000
Selenium	ug/L	MW-380	09/02/2015	ND	150.0000		6.4000
Selenium	ug/L	MW-380	03/23/2016		11.9000	*	6.4000
Selenium	ug/L	MW-380	10/20/2016		13.7000	*	6.4000

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

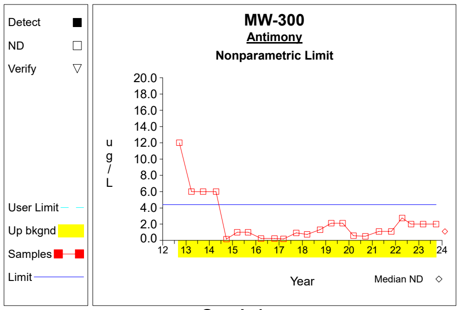
Table 8

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

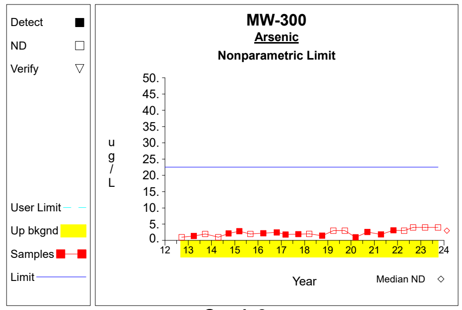
Constituent	Units	Well	Date		Result		Pred. Limit
Selenium	ug/L	MW-380	03/09/2017		32.2000	*	6.4000
Selenium	ug/L	MW-380	09/26/2017	ND	9.2800		6.4000
Selenium	ug/L	MW-380	03/14/2018	ND	46.4000		6.4000
Selenium	ug/L	MW-380	10/02/2018		23.3000	*	6.4000
Selenium	ug/L	MW-380	03/28/2019	ND	7.0000		6.4000
Selenium	ug/L	MW-380	09/24/2019		10.6000	*	6.4000
Selenium	ug/L	MW-380	03/10/2020		7.7000	*	6.4000
Selenium	ug/L	MW-380	09/15/2020		15.6000	*	6.4000
Selenium	ug/L	MW-380	04/15/2021		13.3000	*	6.4000
Selenium	ug/L	MW-380	10/27/2021		5.4800		6.4000
Selenium	ug/L	MW-380	04/13/2022	ND	9.6000		6.4000
Selenium	ug/L	MW-380	09/01/2022	ND	4.0000		6.4000
Selenium	ug/L	MW-380	03/06/2023		9.6000	*	6.4000
Selenium	ug/L	MW-380	09/29/2023		9.6000	*	6.4000

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

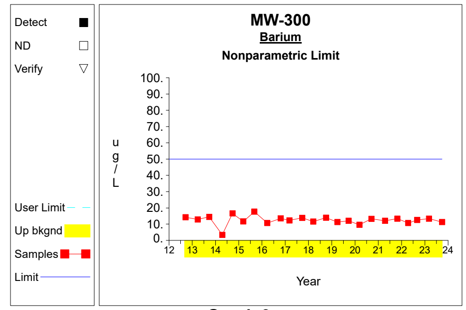
Up vs. Down Prediction Limits



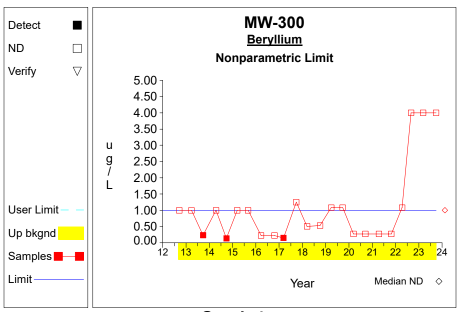
Graph 1



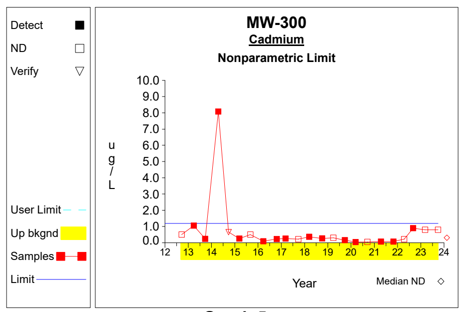
Graph 2



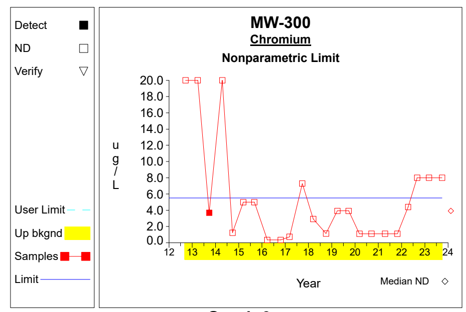
Graph 3



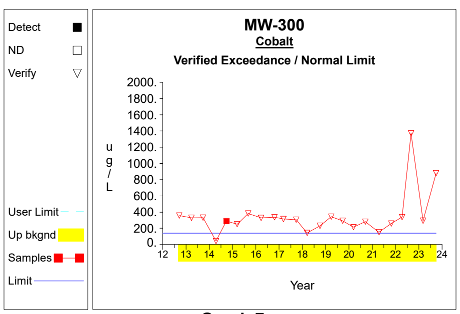
Graph 4



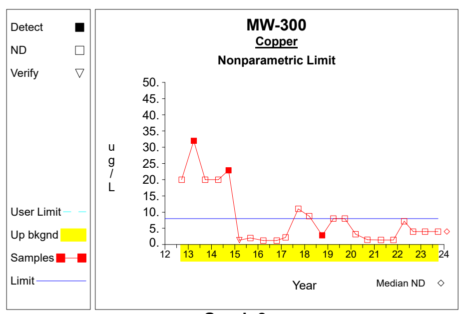
Graph 5



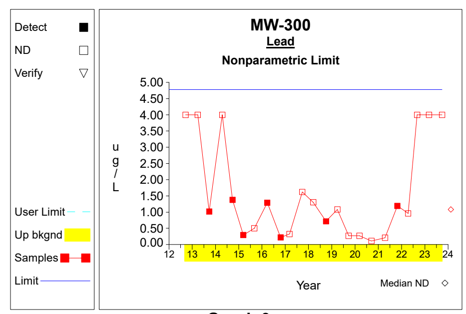
Graph 6



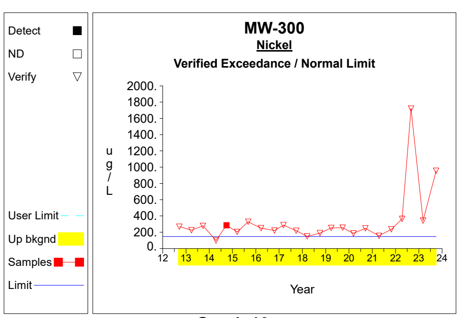
Graph 7



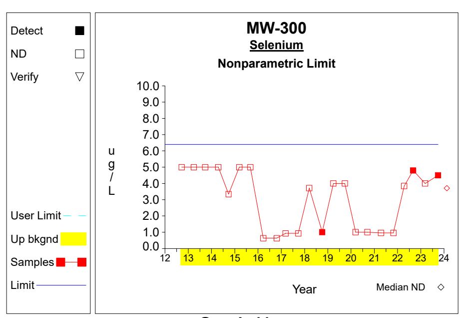
Graph 8



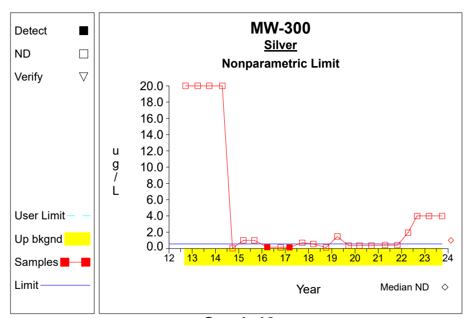
Graph 9



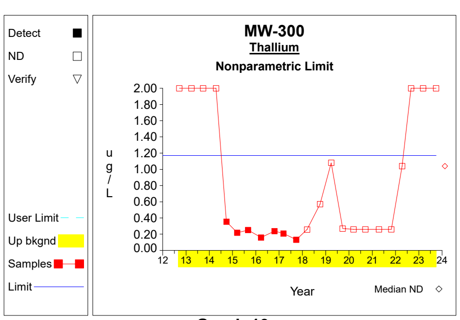
Graph 10



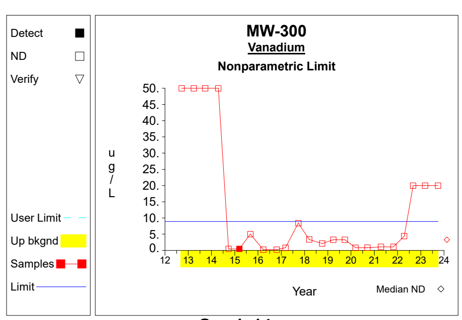
Graph 11



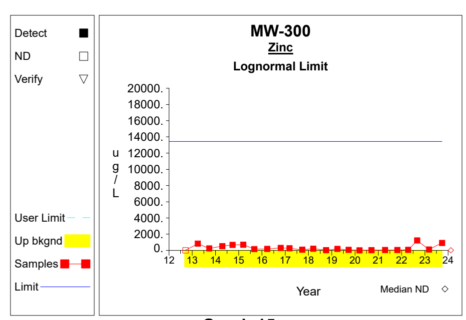
Graph 12



Graph 13



Graph 14



Graph 15

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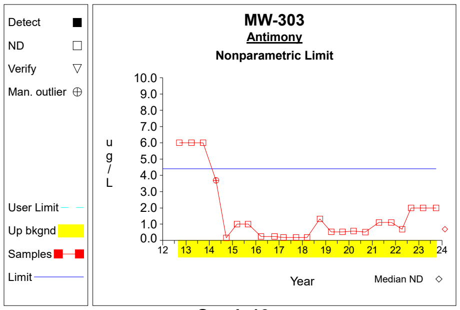
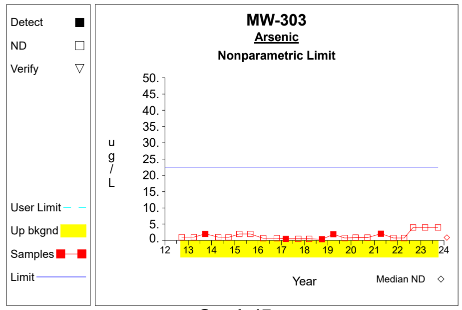
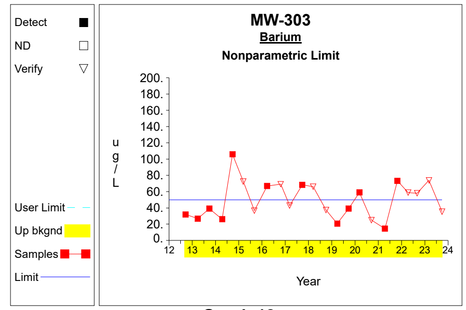
Up vs. Down Prediction Limits



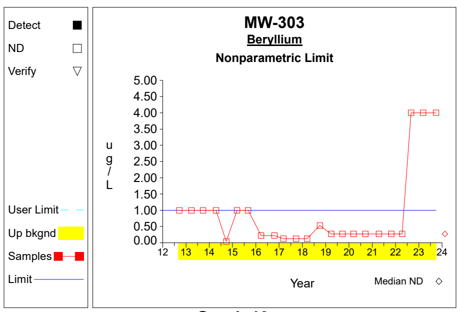
Graph 16



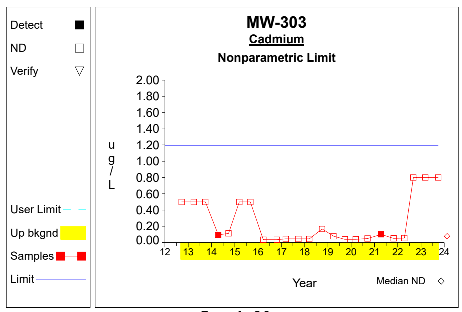
Graph 17



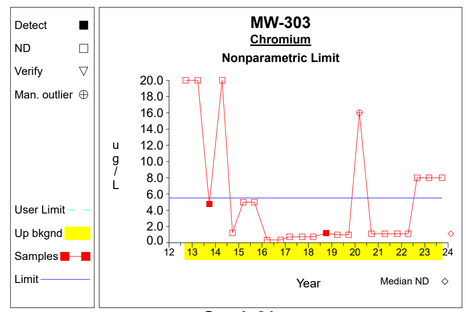
Graph 18



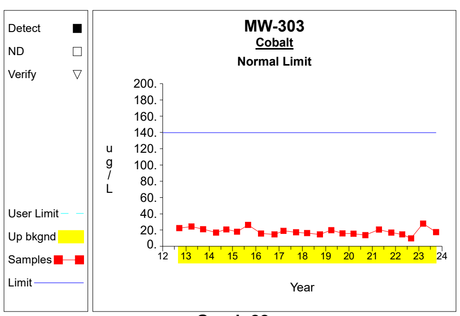
Graph 19



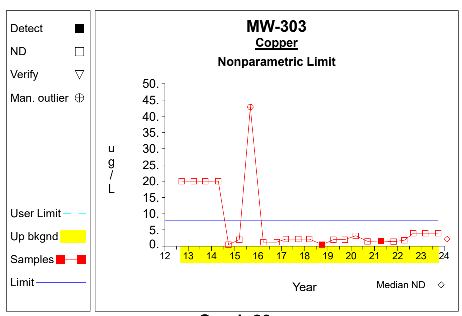
Graph 20



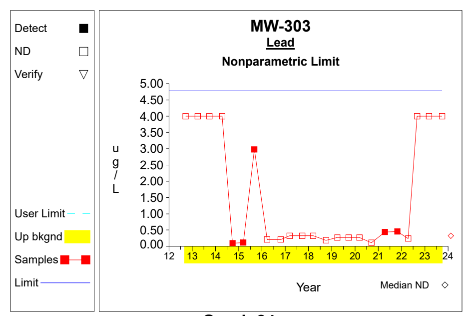
Graph 21



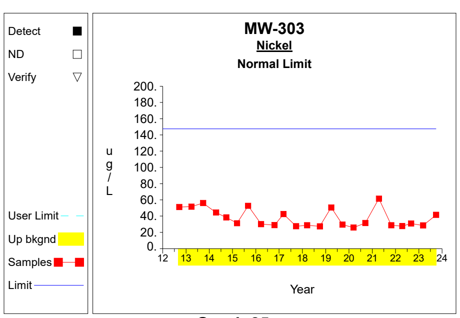
Graph 22



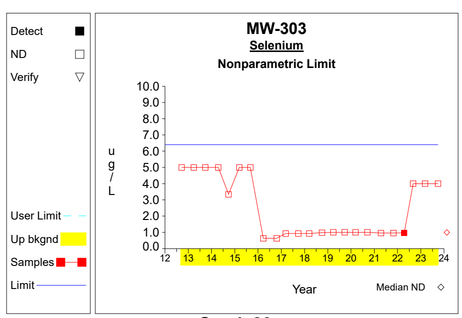
Graph 23



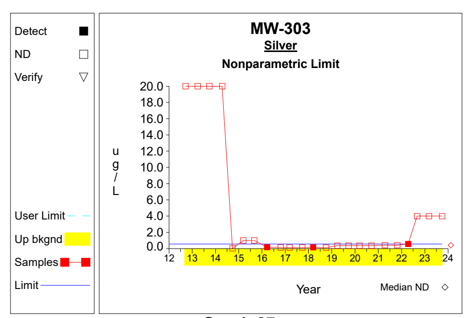
Graph 24



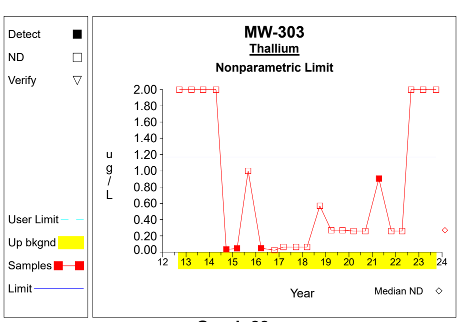
Graph 25



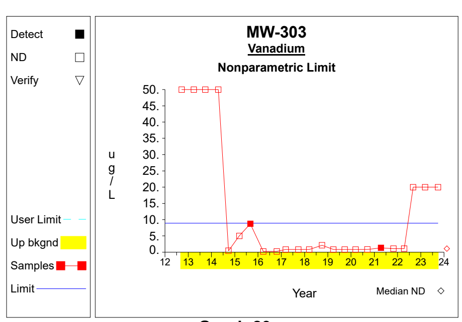
Graph 26



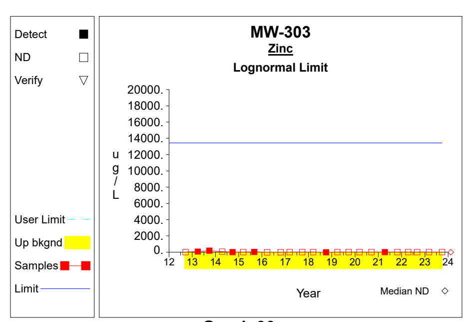
Graph 27



Graph 28



Graph 29



Graph 30

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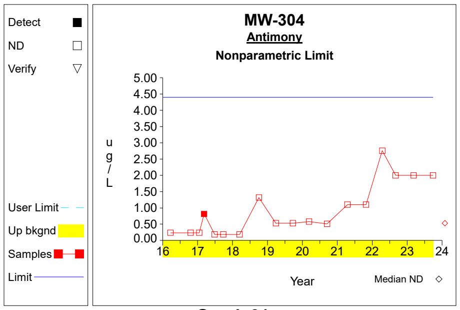
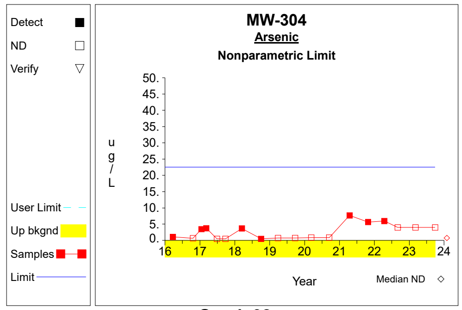
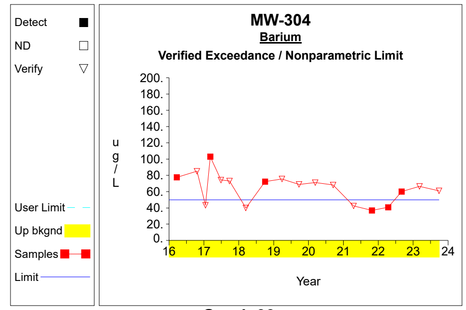
Up vs. Down Prediction Limits



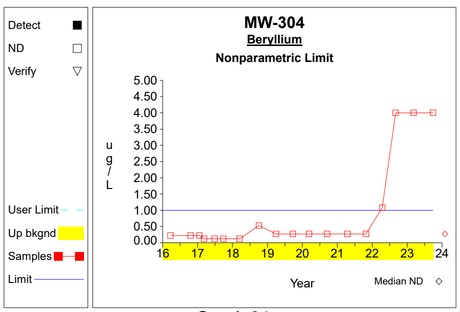
Graph 31



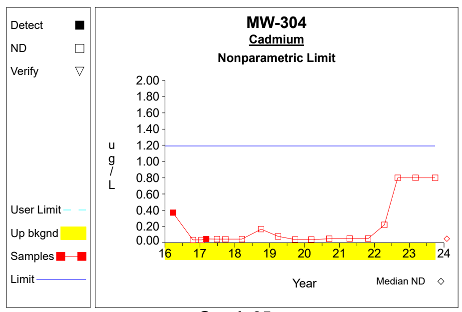
Graph 32



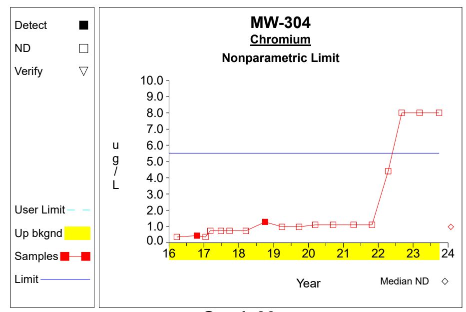
Graph 33



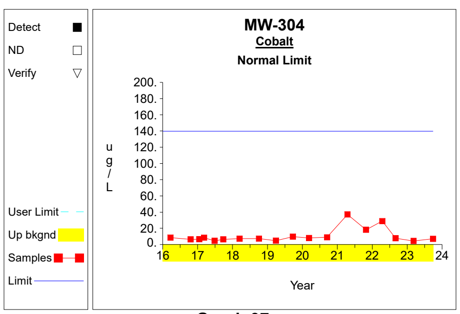
Graph 34



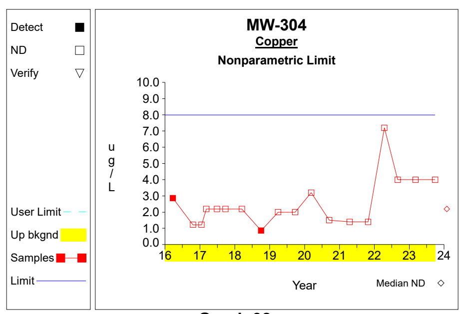
Graph 35



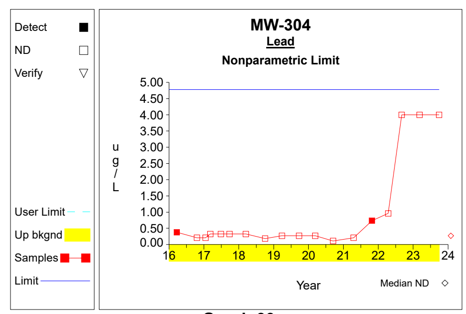
Graph 36



Graph 37



Graph 38



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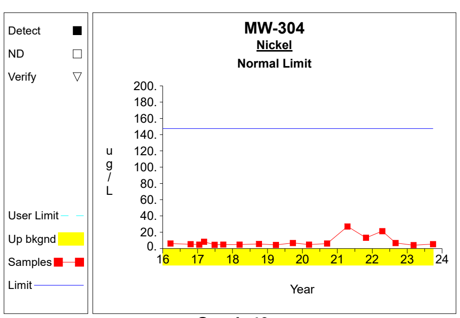

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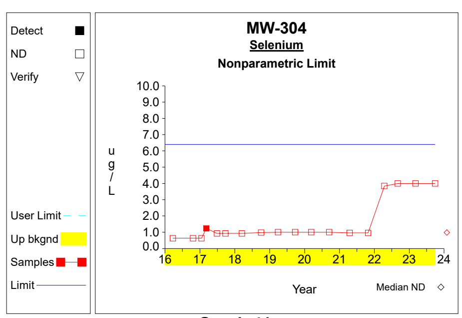

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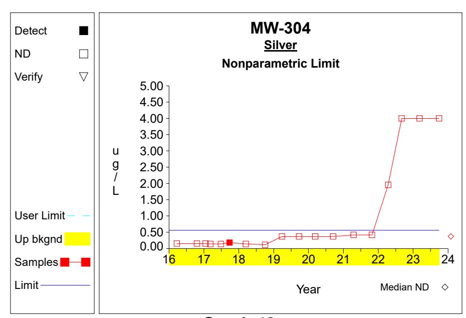

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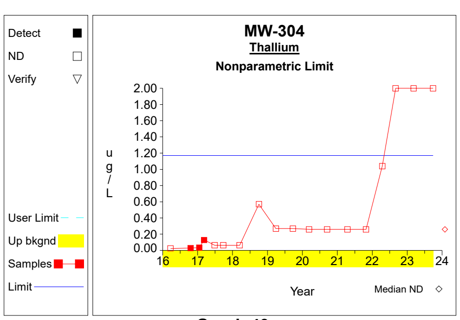

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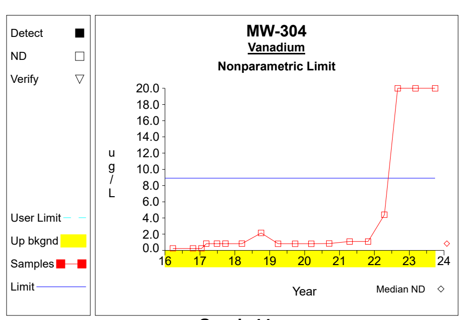

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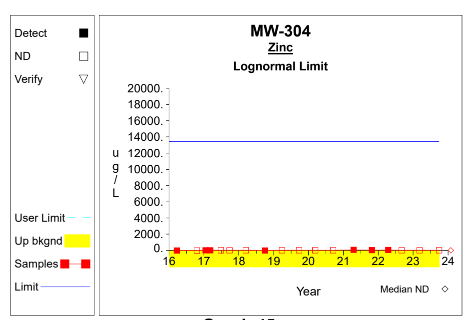
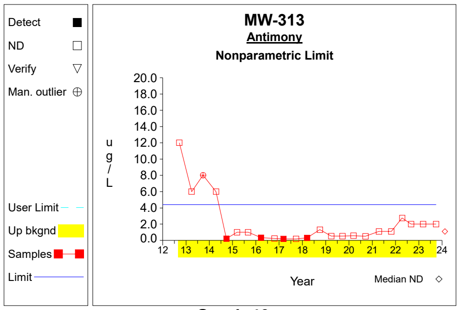


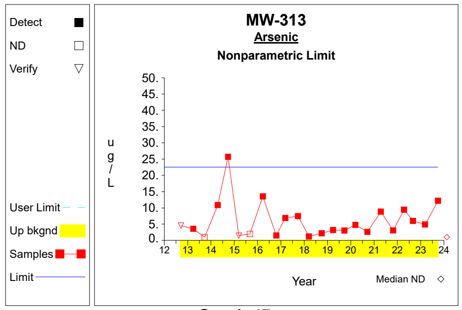
Graph 45

South Central Iowa SWA [GW] December 2023

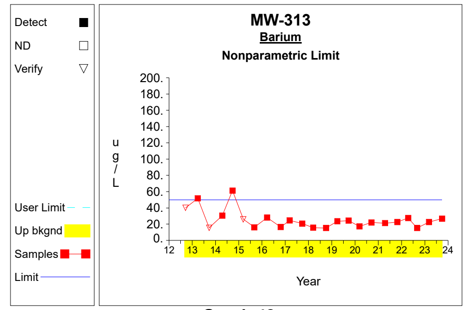
Up vs. Down Prediction Limits



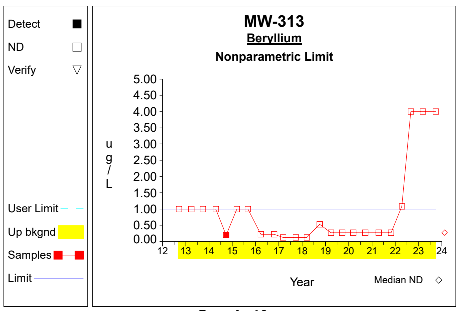
Graph 46



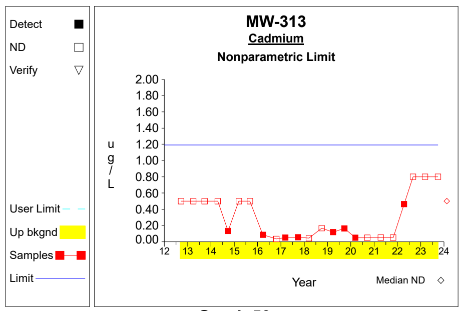
Graph 47



Graph 48



Graph 49



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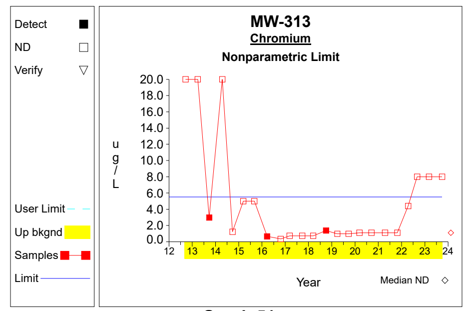

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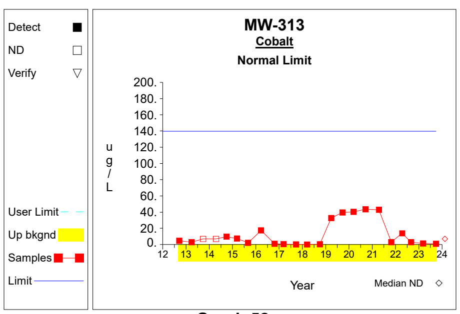

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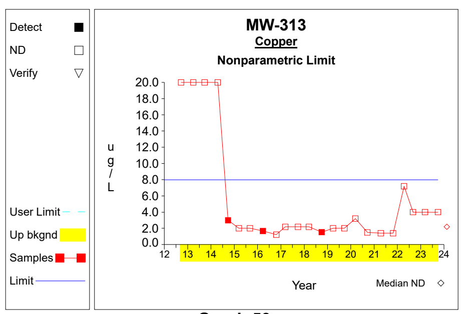

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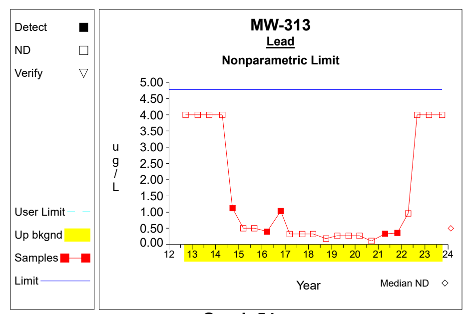

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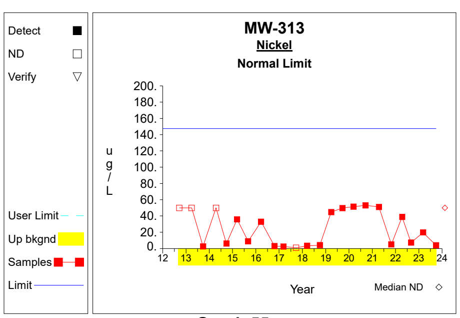

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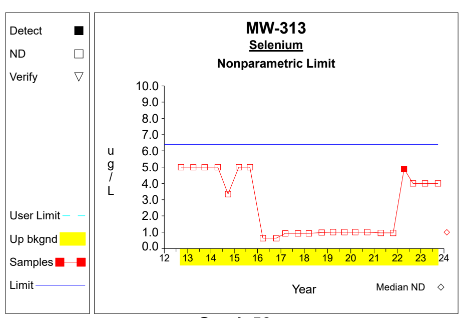

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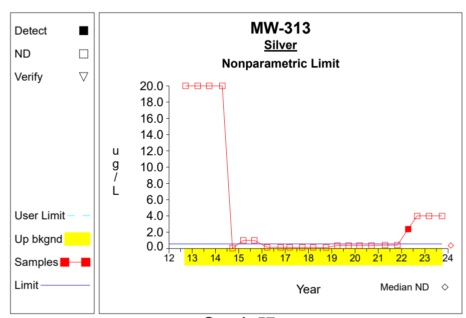

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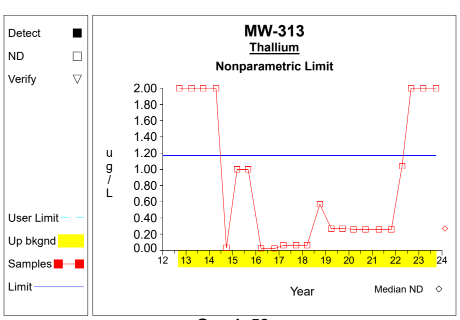

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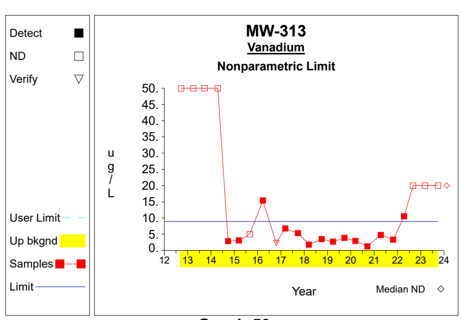

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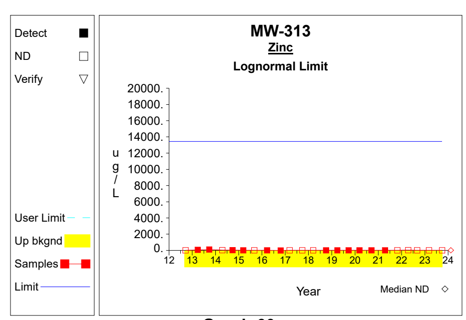

Graph 60

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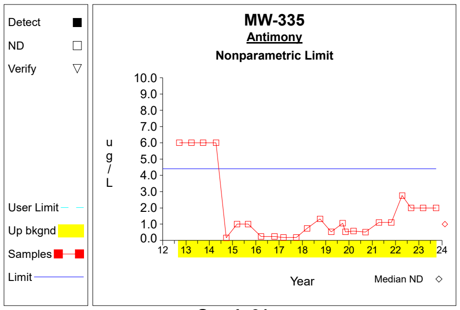
Up vs. Down Prediction Limits



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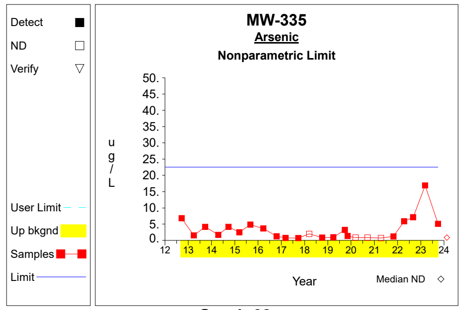
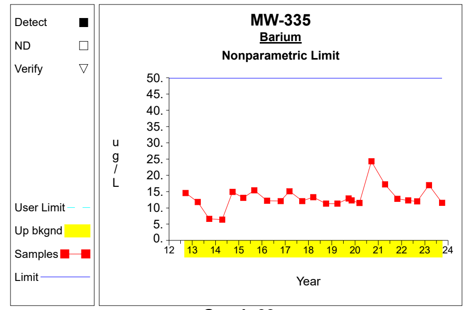
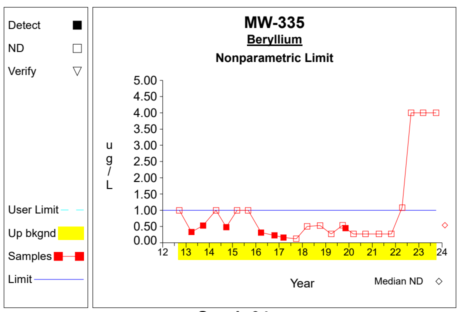


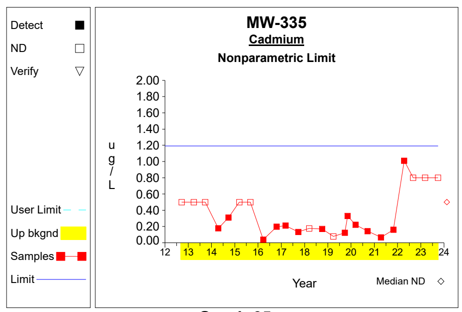
Graph 62



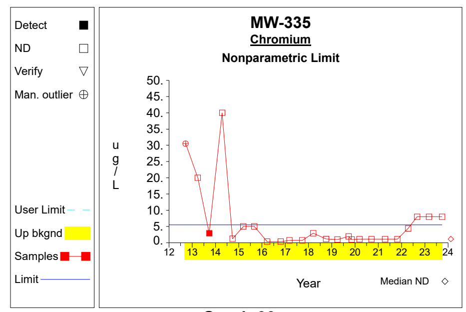
Graph 63



Graph 64



Graph 65



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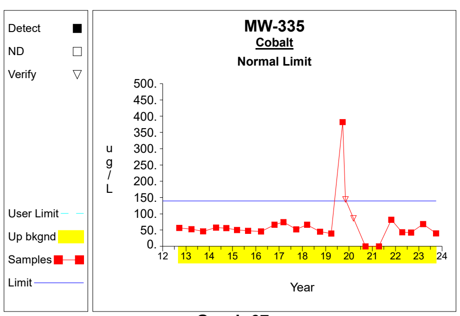
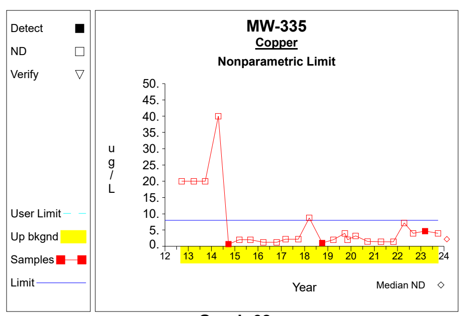
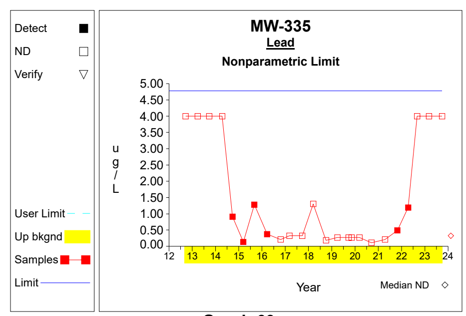


Graph 67



Graph 68



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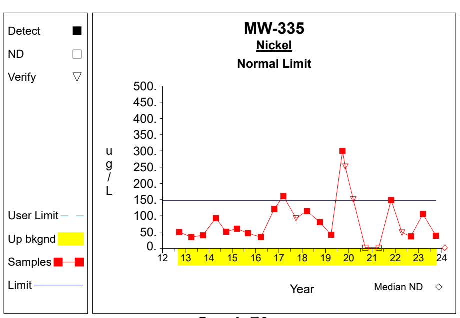

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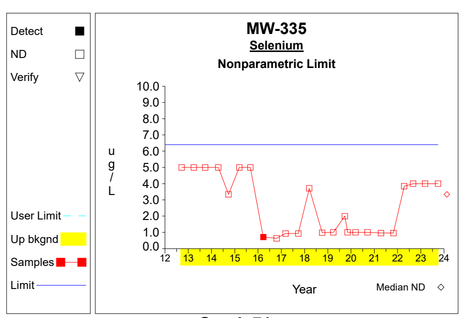

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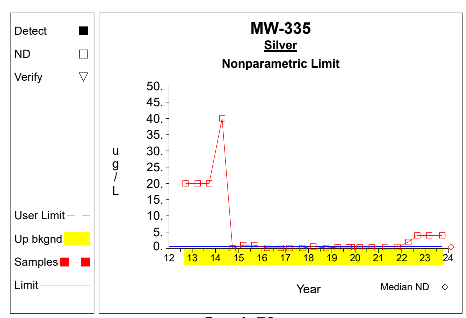

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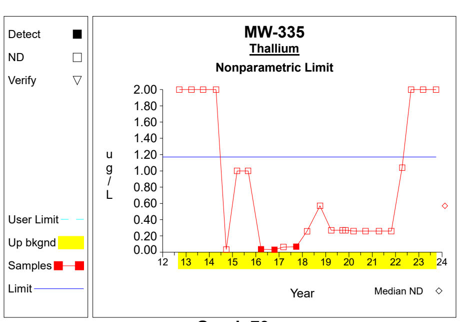

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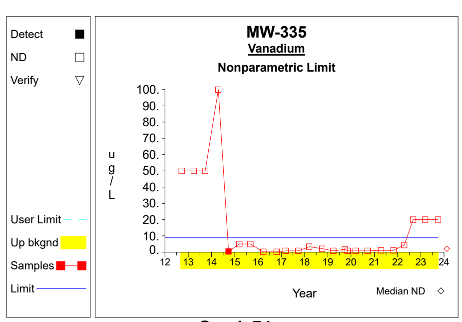

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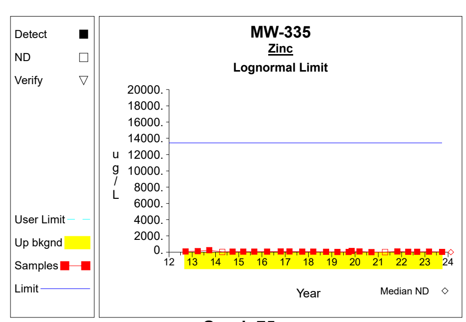
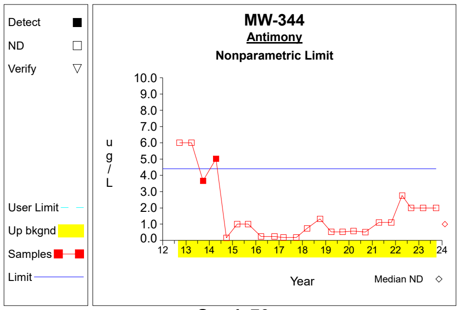


Graph 75

South Central Iowa SWA [GW] December 2023

Up vs. Down Prediction Limits



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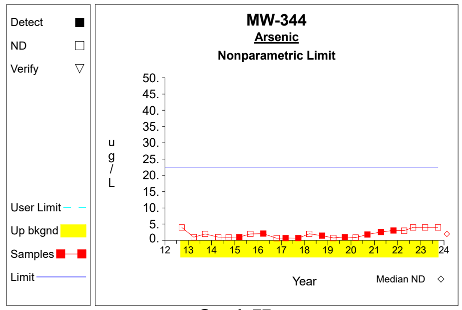
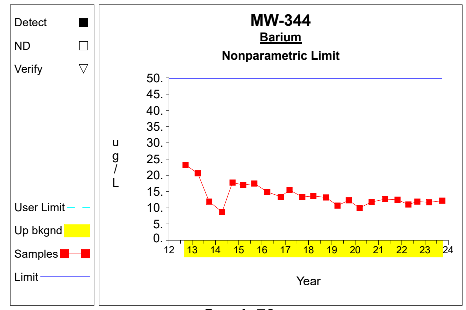
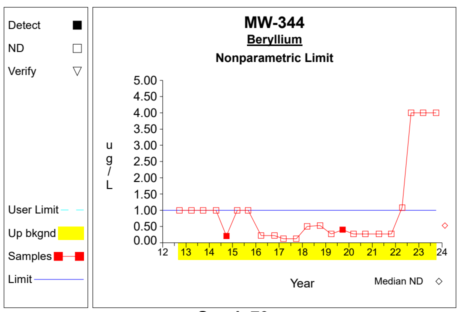


Graph 77



Graph 78



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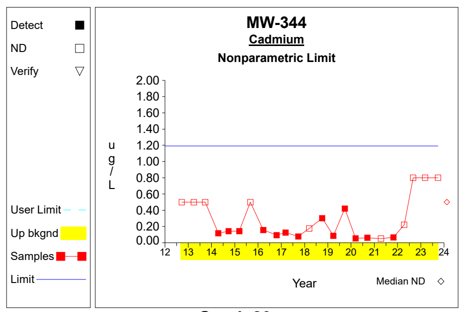
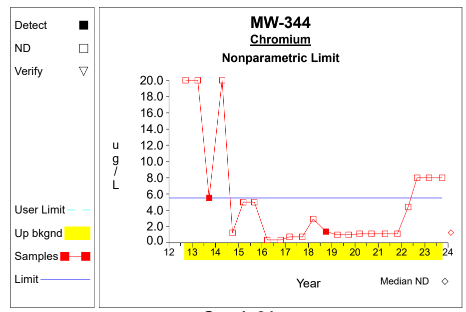


Graph 80



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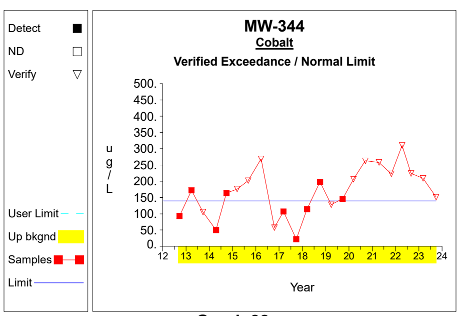
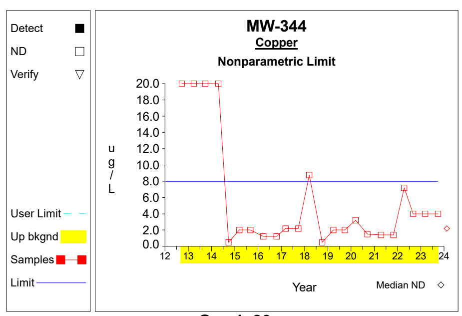


Graph 82



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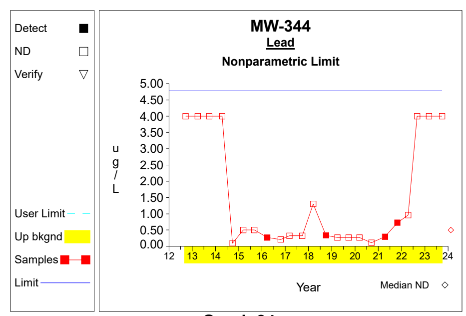

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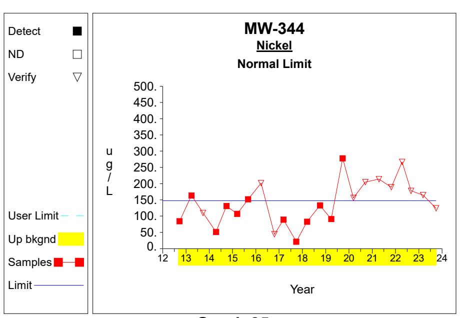

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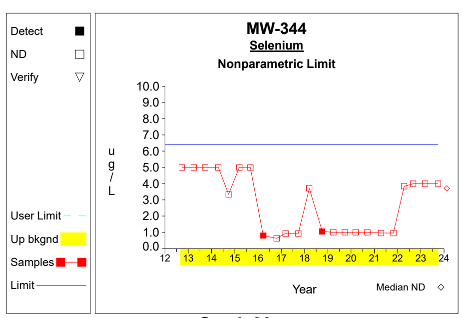

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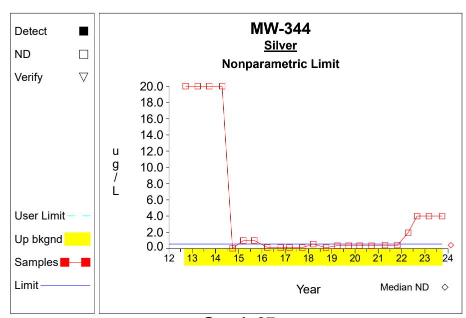

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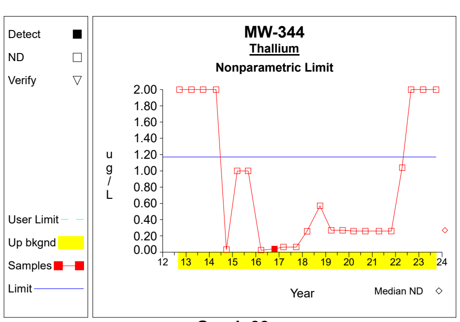
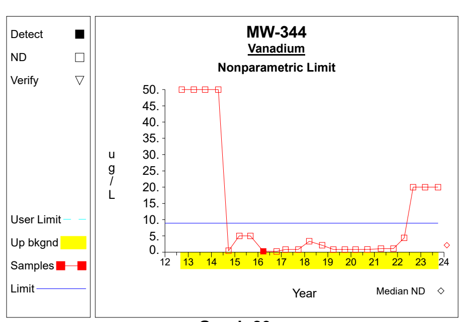


Graph 88



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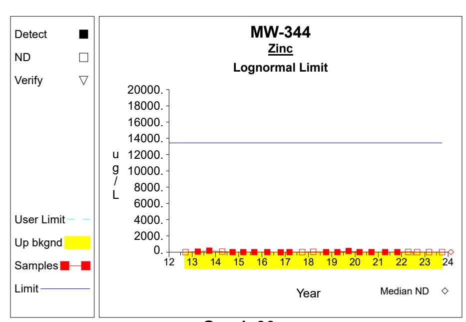

Graph 90

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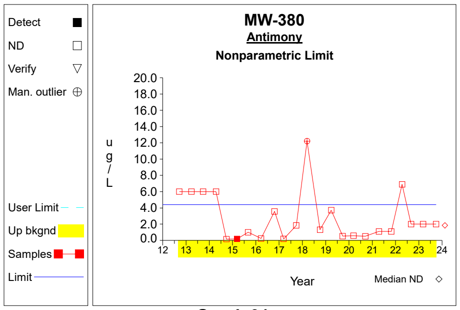
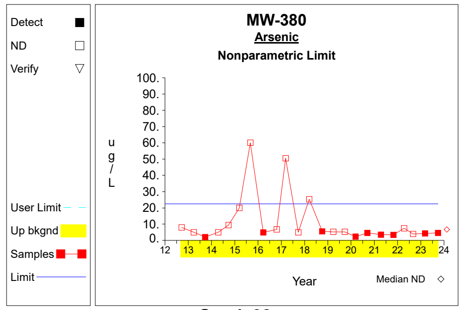
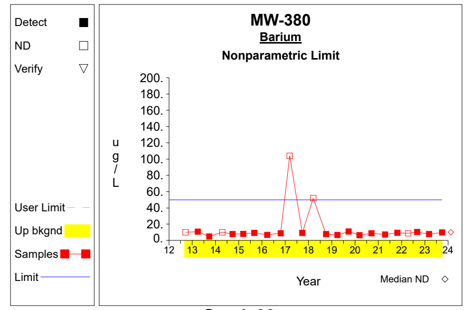
Up vs. Down Prediction Limits



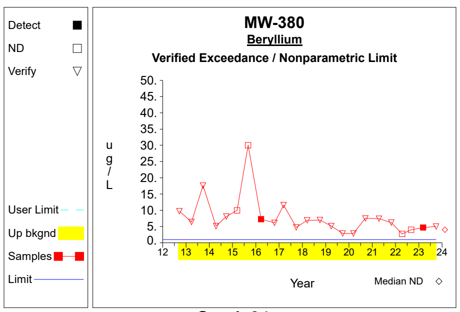
Graph 91



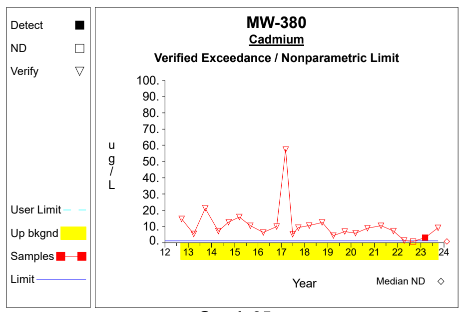
Graph 92



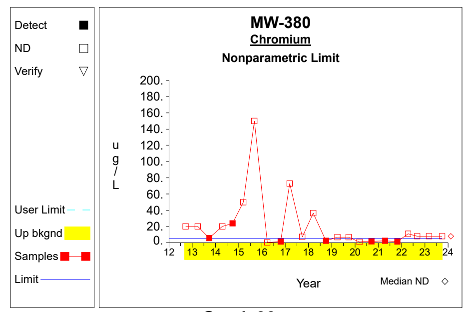
Graph 93



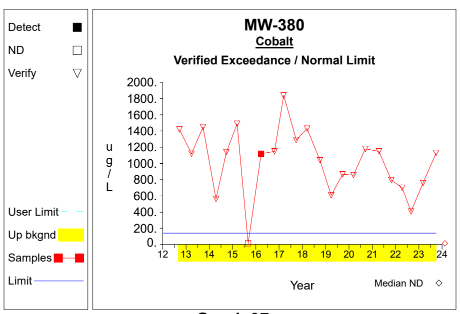
Graph 94



Graph 95



Graph 96



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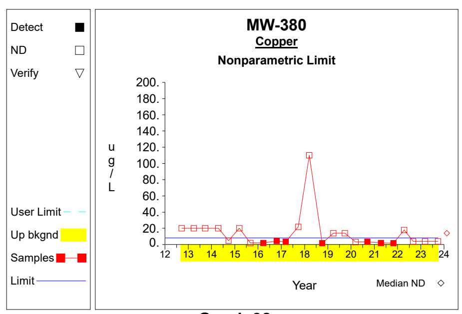

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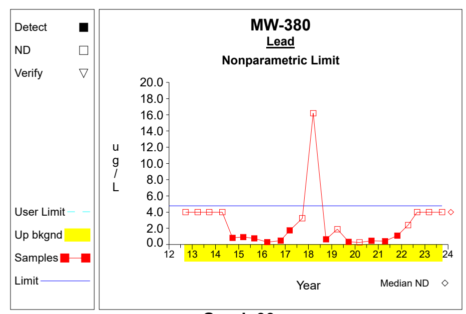

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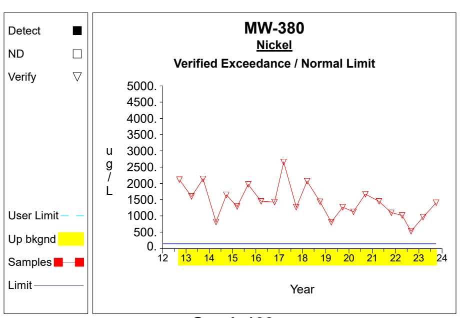
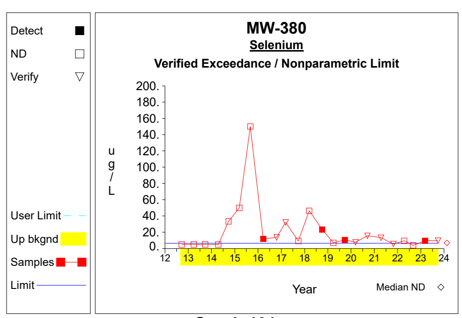


Graph 100



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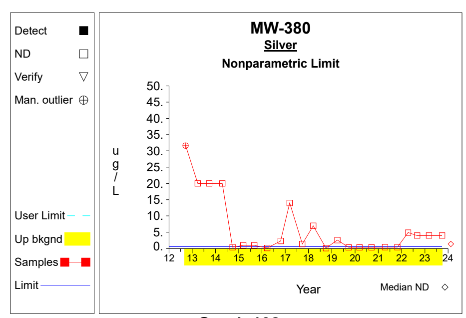
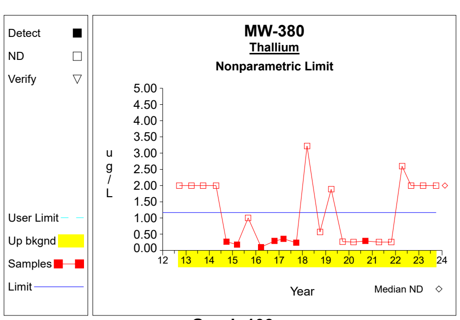
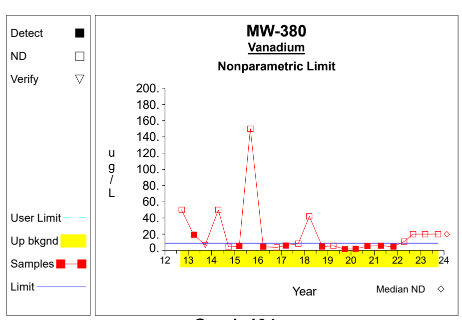


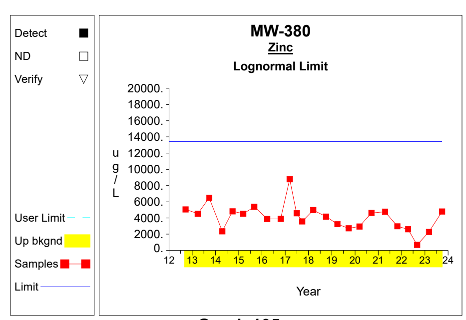
Graph 102



Graph 103



Graph 104



Graph 105

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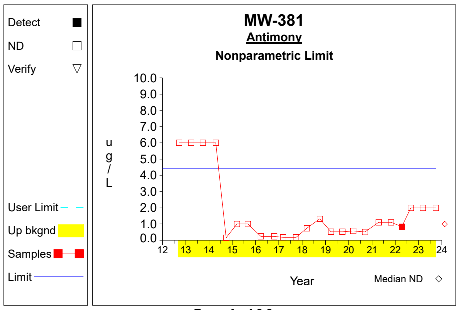
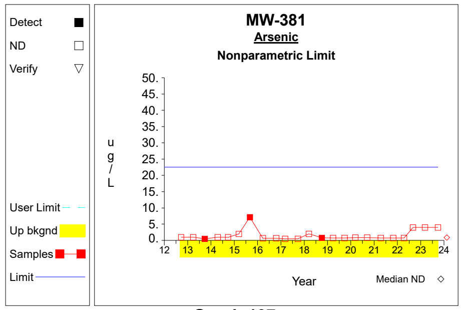
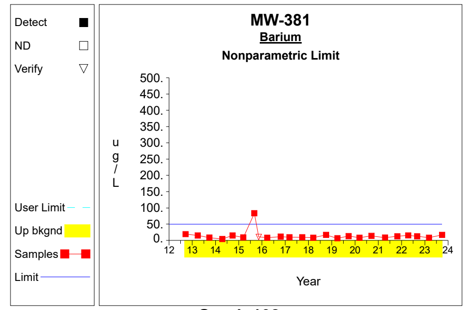
Up vs. Down Prediction Limits



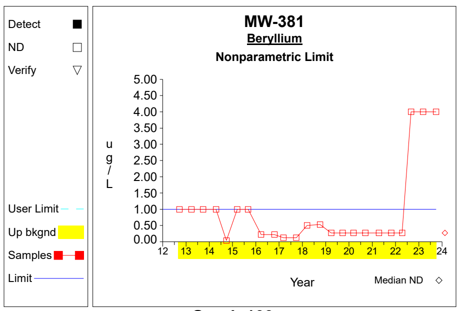
Graph 106



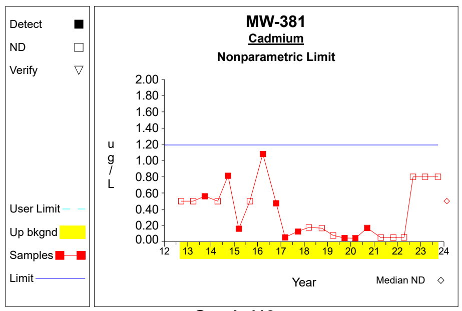
Graph 107



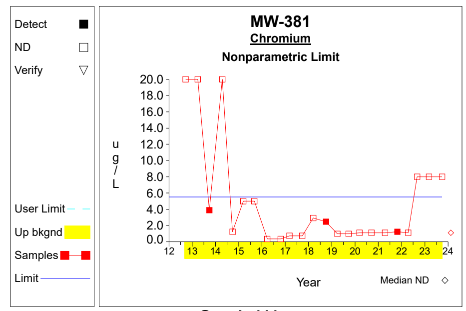
Graph 108



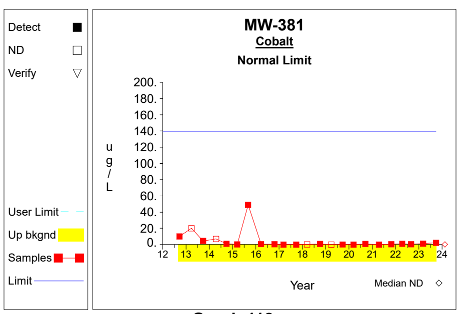
Graph 109



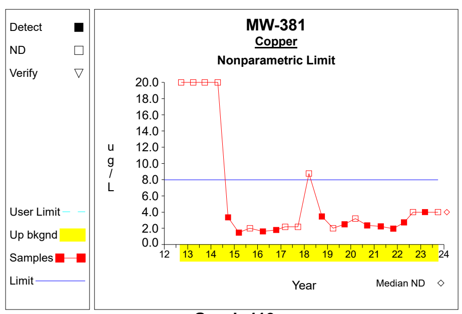
Graph 110



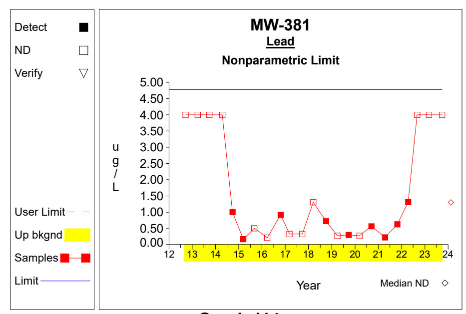
Graph 111



Graph 112



Graph 113



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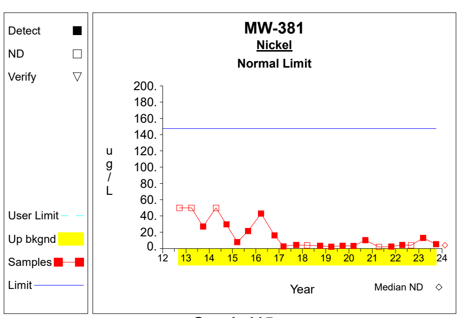
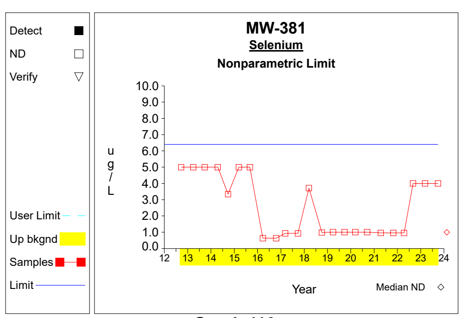
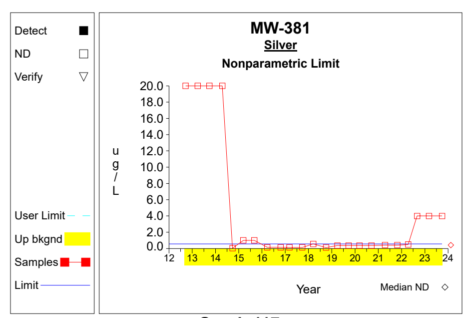


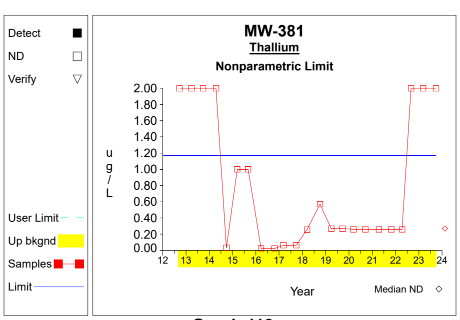
Graph 115



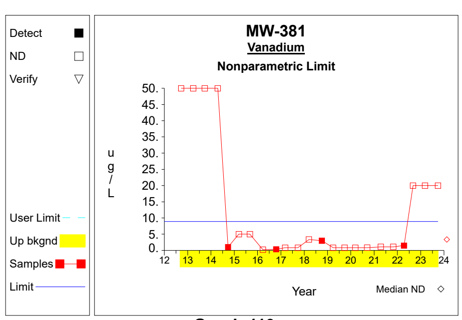
Graph 116



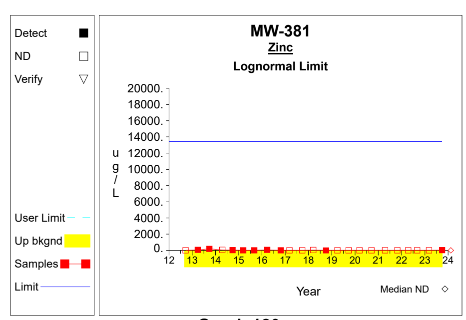
Graph 117



Graph 118



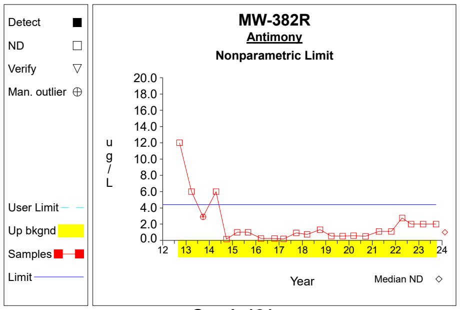
Graph 119



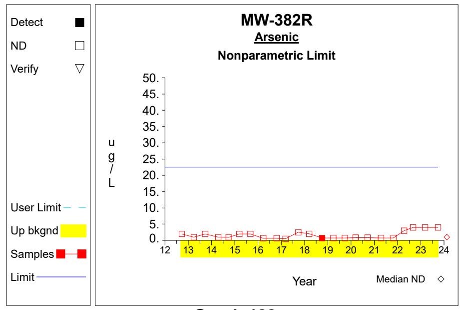
Graph 120

South Central Iowa SWA [GW] December 2023

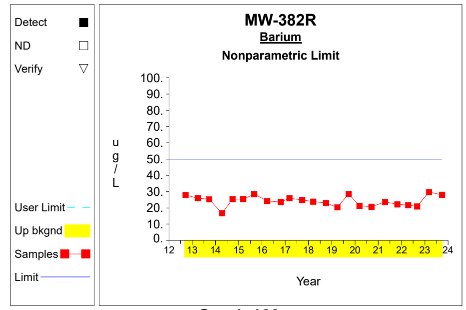
Up vs. Down Prediction Limits



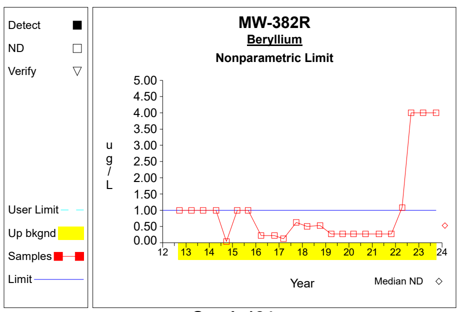
Graph 121



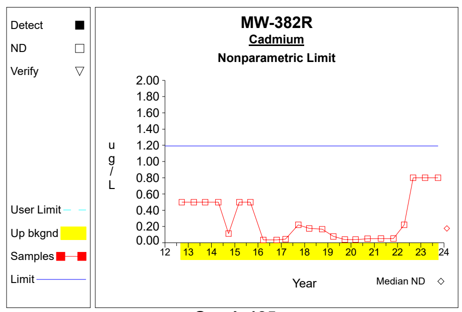
Graph 122



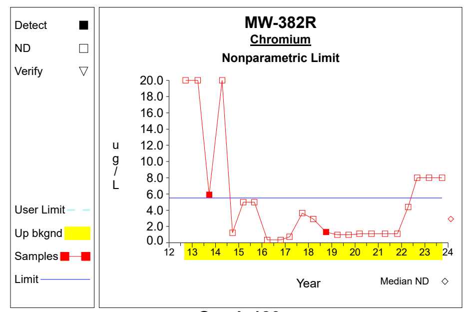
Graph 123



Graph 124



Graph 125



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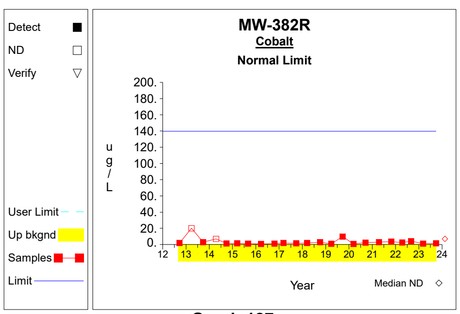
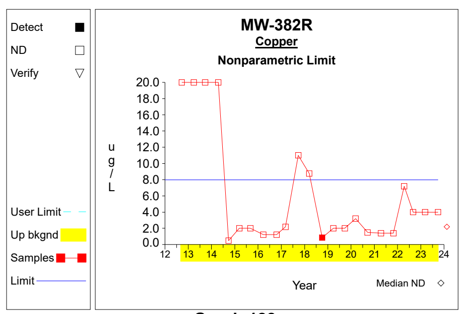
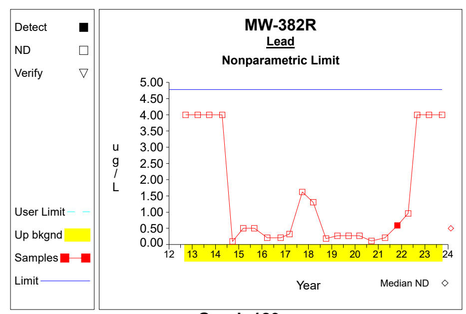


Graph 127



Graph 128



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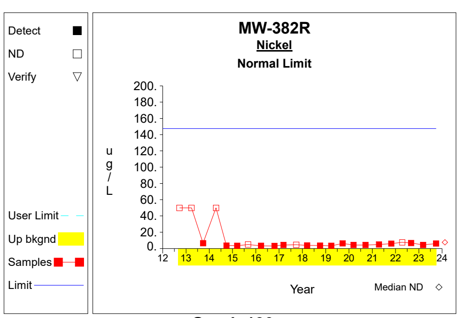
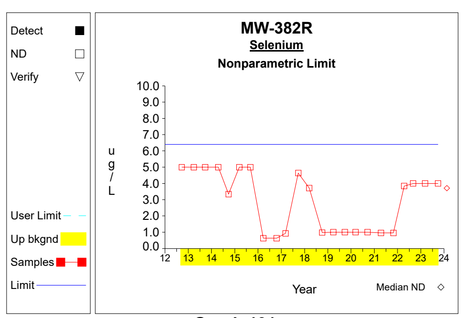
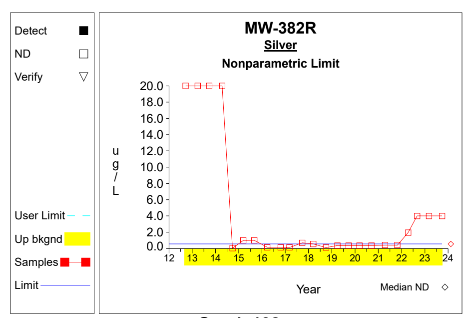


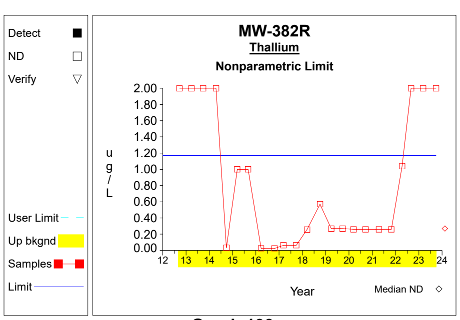
Graph 130



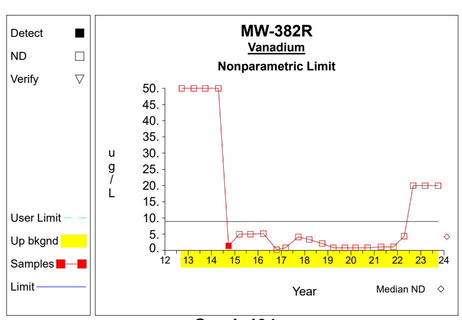
Graph 131



Graph 132



Graph 133



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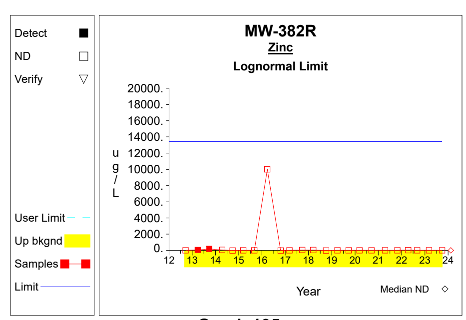
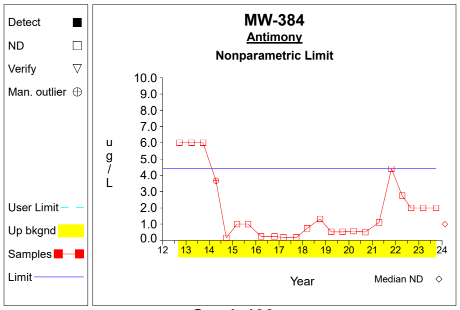


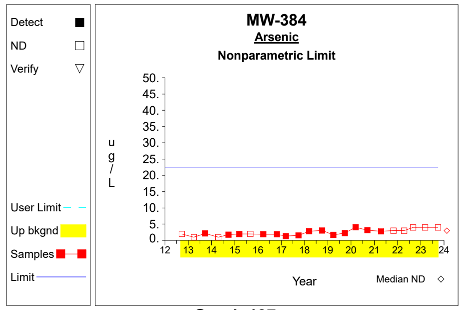
Graph 135

Prepared by: Otter Creek Environmental

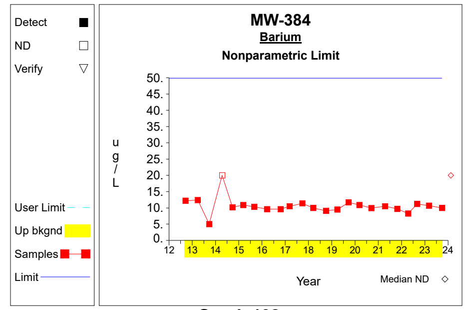
Up vs. Down Prediction Limits



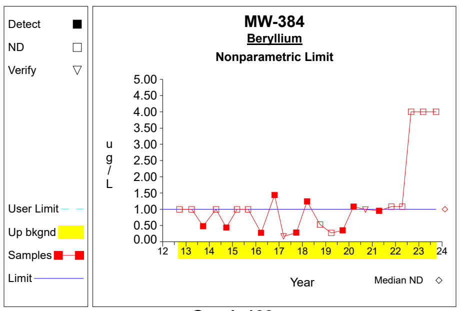
Graph 136



Graph 137



Graph 138



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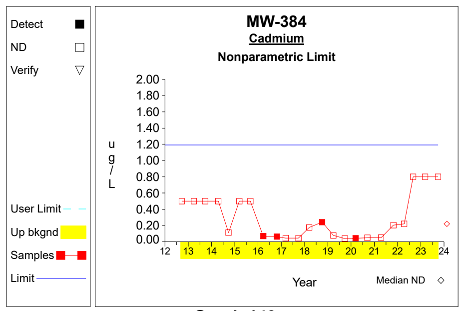
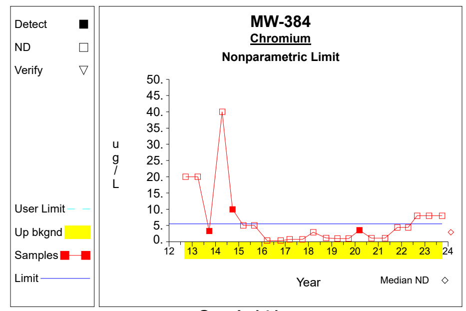


Graph 140



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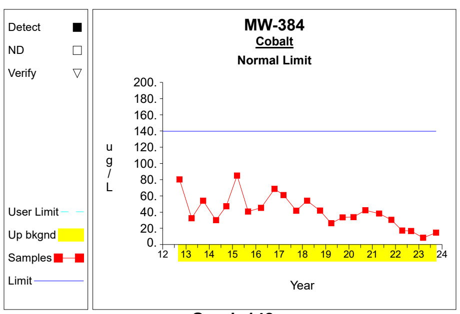

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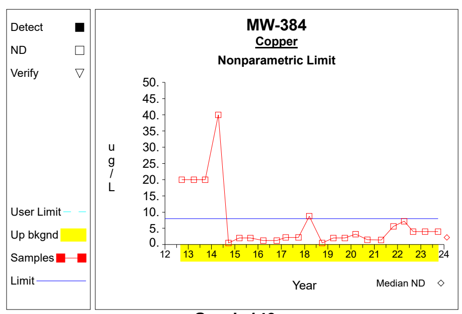

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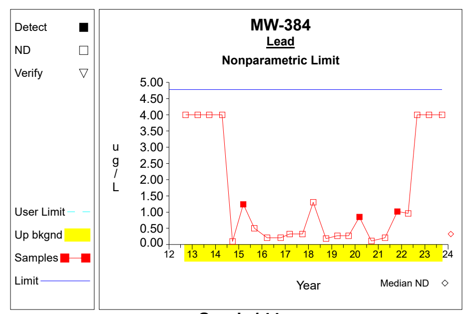
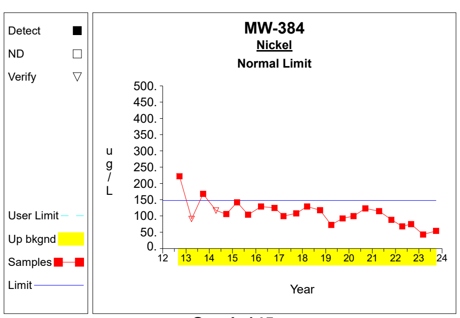


Graph 144



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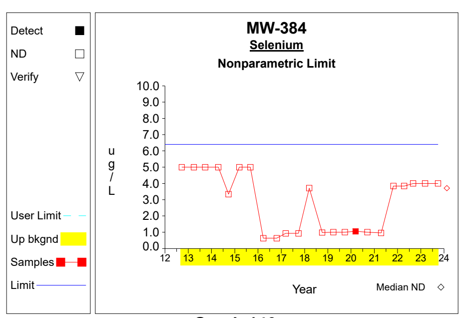

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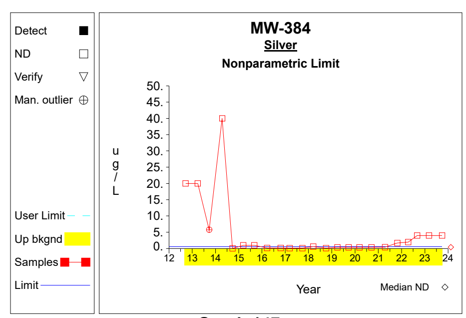
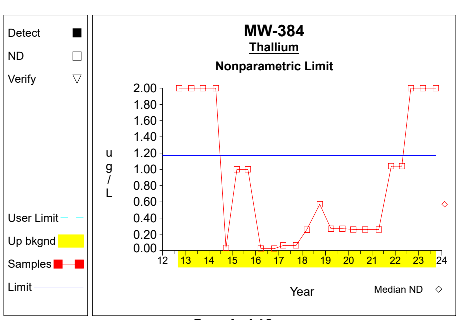


Graph 147



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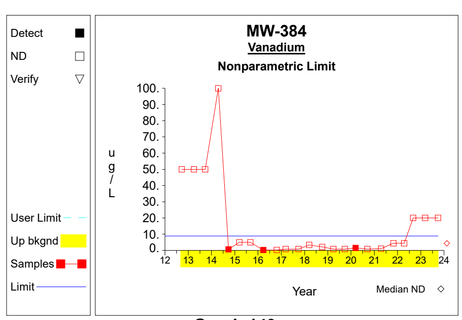

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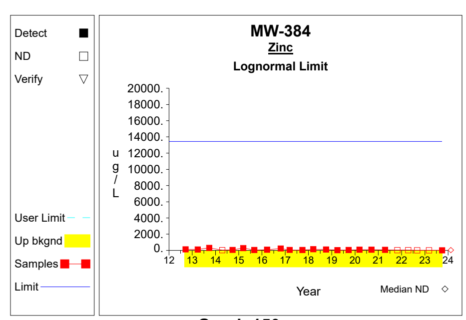
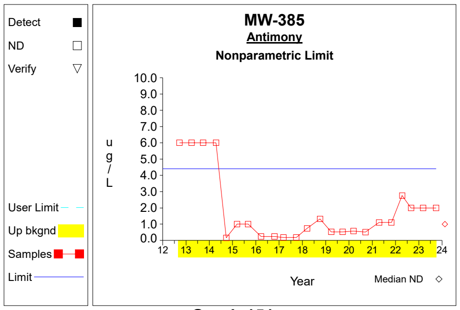
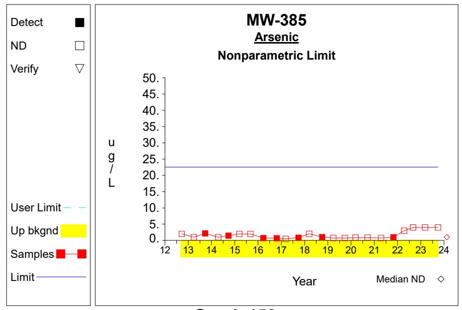


Graph 150

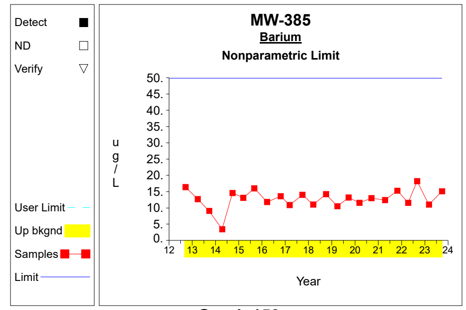
Up vs. Down Prediction Limits



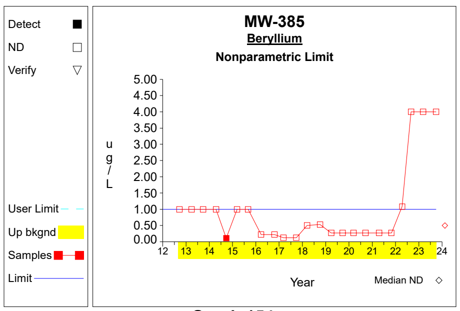
Graph 151



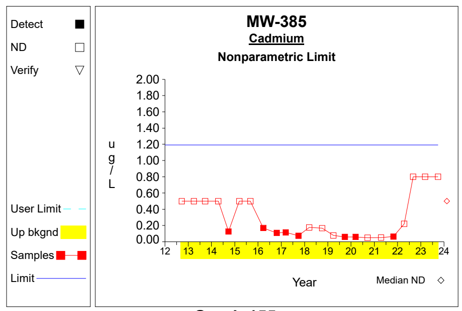
Graph 152



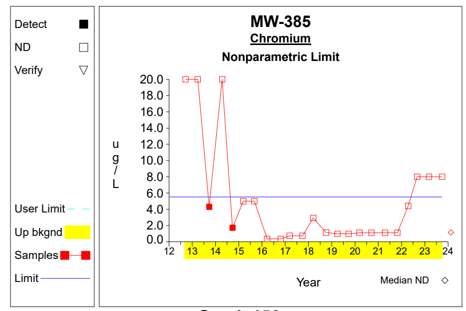
Graph 153



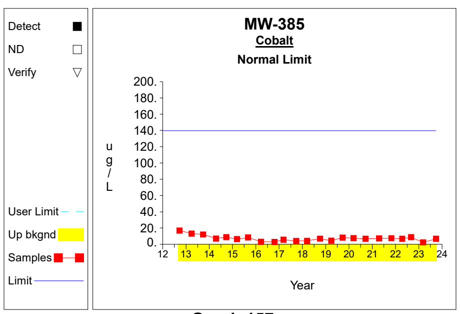
Graph 154



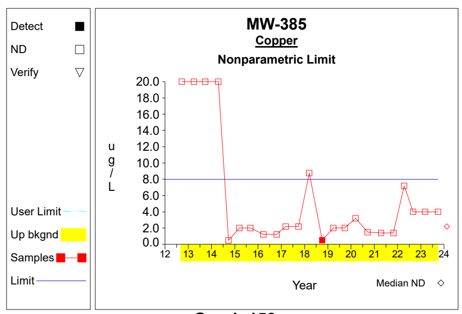
Graph 155



Graph 156



Graph 157



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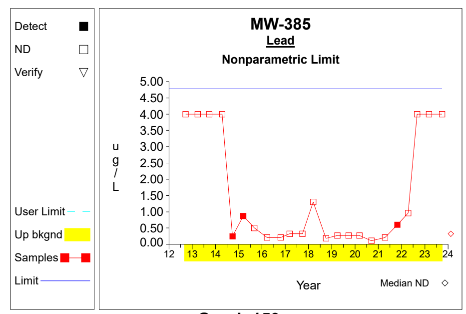
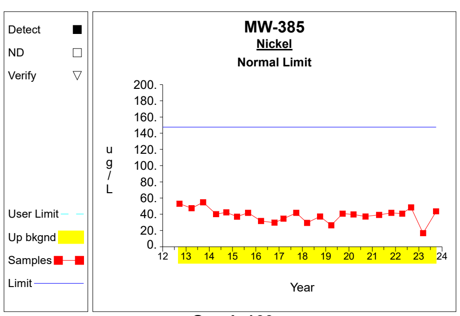
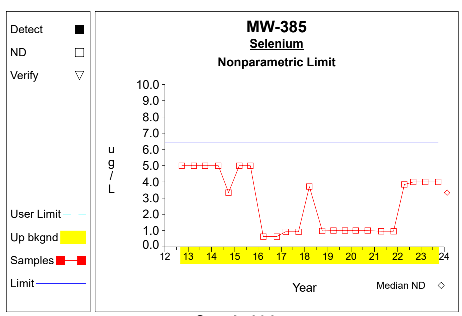


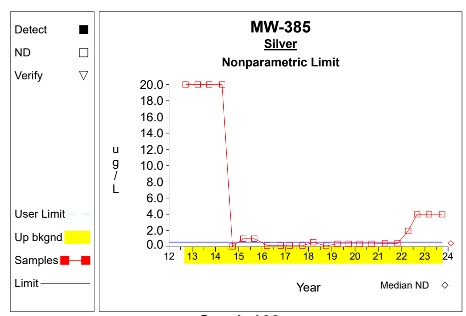
Graph 159



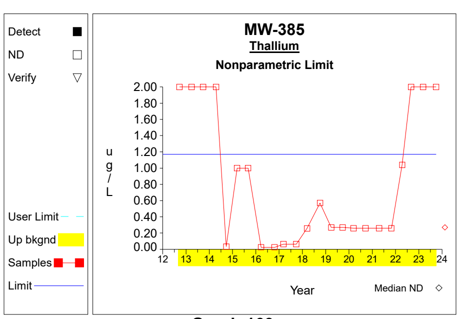
Graph 160



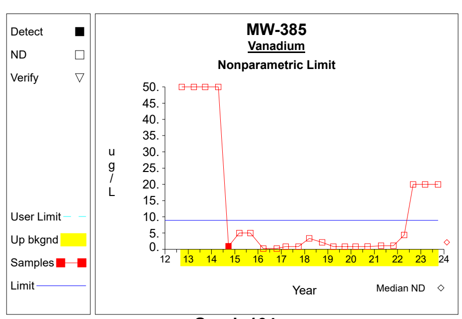
Graph 161



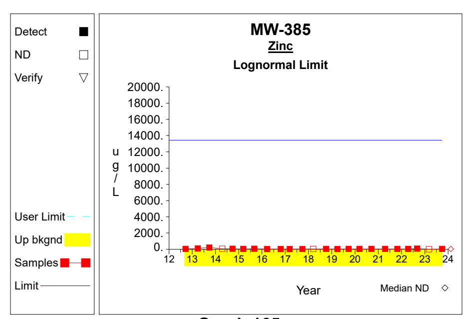
Graph 162



Graph 163

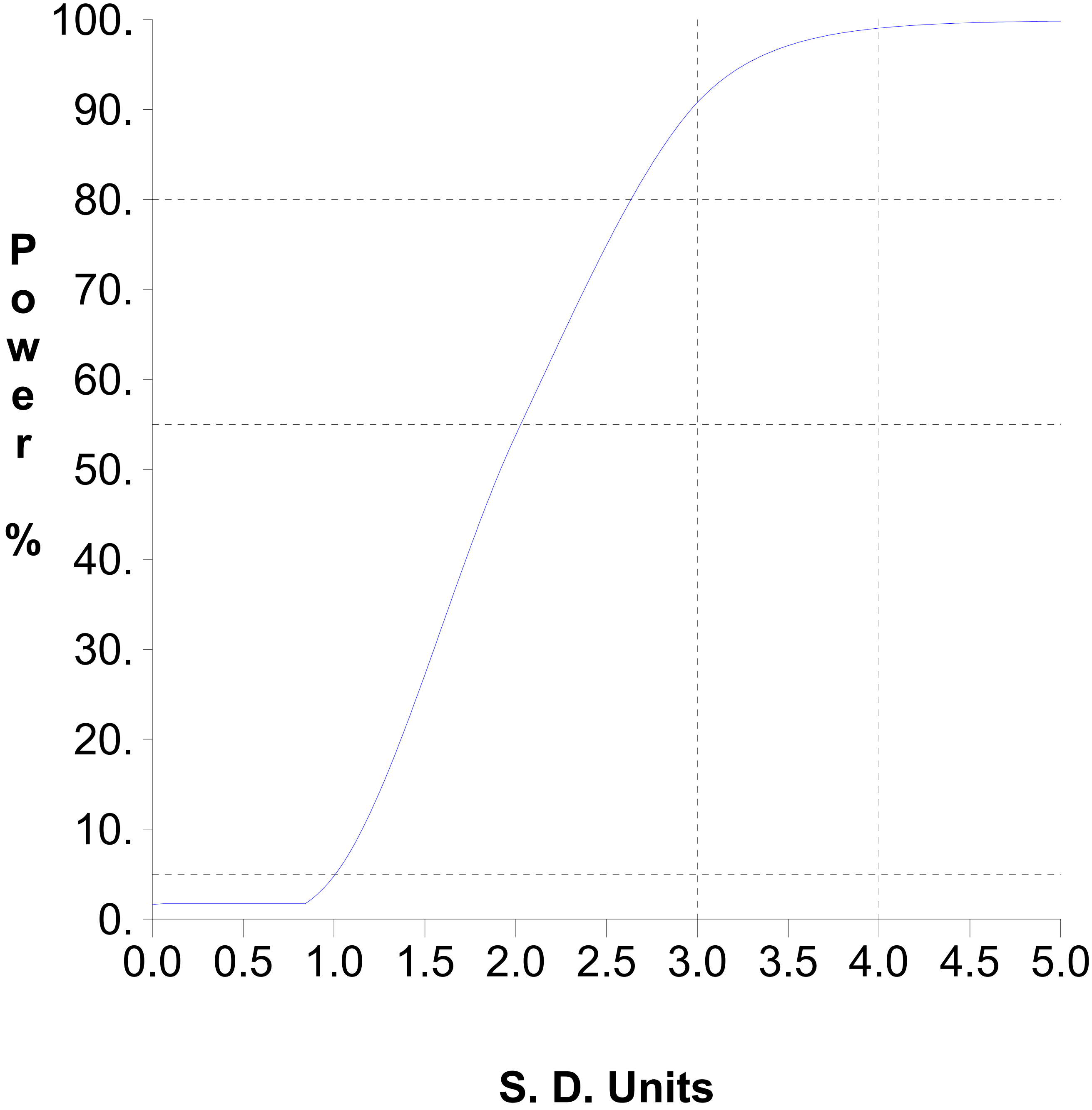


Graph 164



Graph 165

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



Attachment D

Summary Tables and Graphs for the LCL Comparisons – Trace Metals

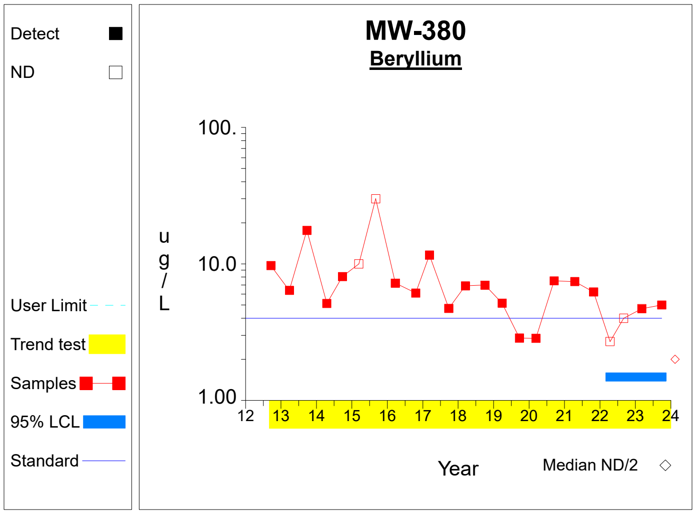
Table 1

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

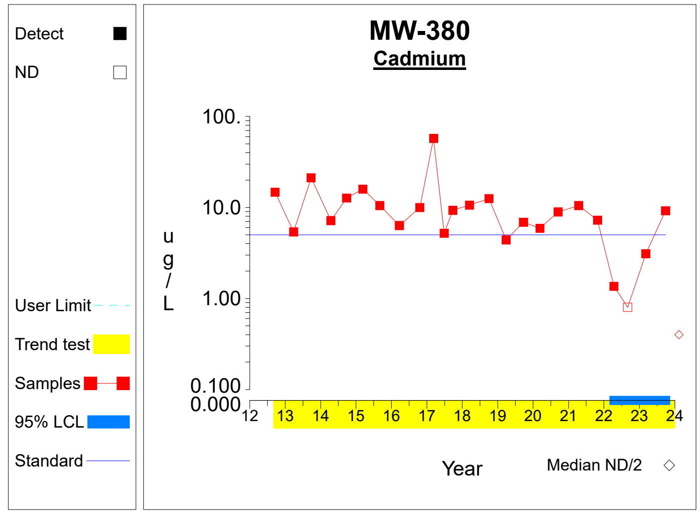
Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend	
Beryllium	ug/L	MW-380	4	3.425	1.650	1.176	1.484	5.366	4.000		
Cadmium	ug/L	MW-380	4	3.515	3.951	1.176	0.000	8.163	5.000		
Cobalt	ug/L	MW-380	4	749.000	296.934	1.176	399.720	1098.280	2.100		**
Nickel	ug/L	MW-380	4	981.500	359.776	1.176	558.299	1404.701	100.000	dec	**
Selenium	ug/L	MW-380	4	6.550	3.522	1.176	2.407	10.693	50.000		

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

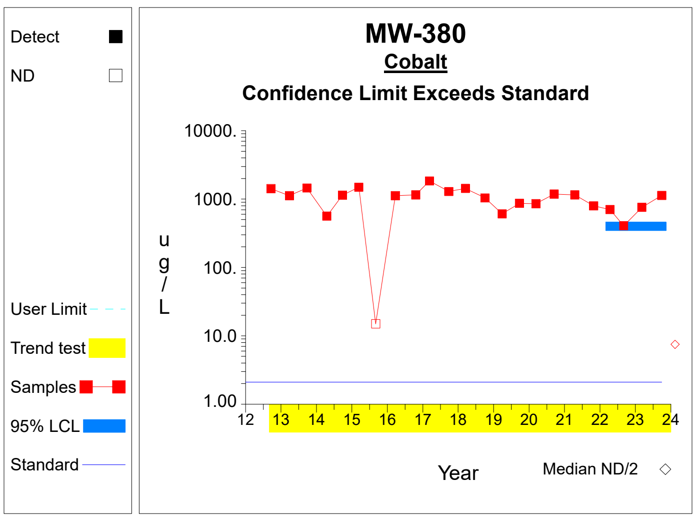
Confidence Limits (Assessment)



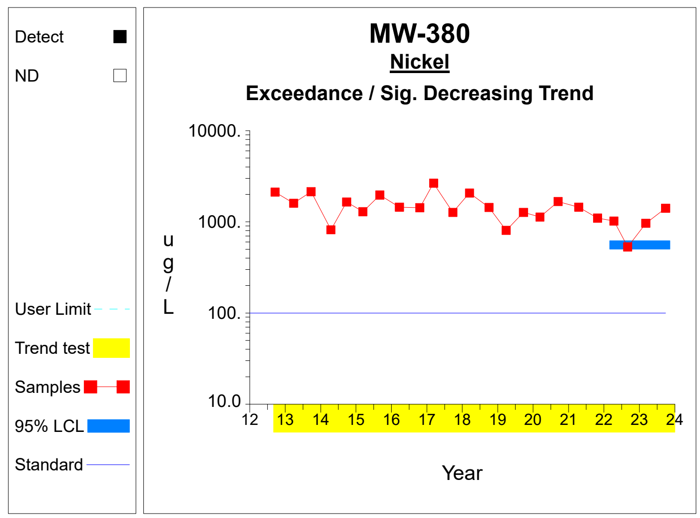
Graph 1



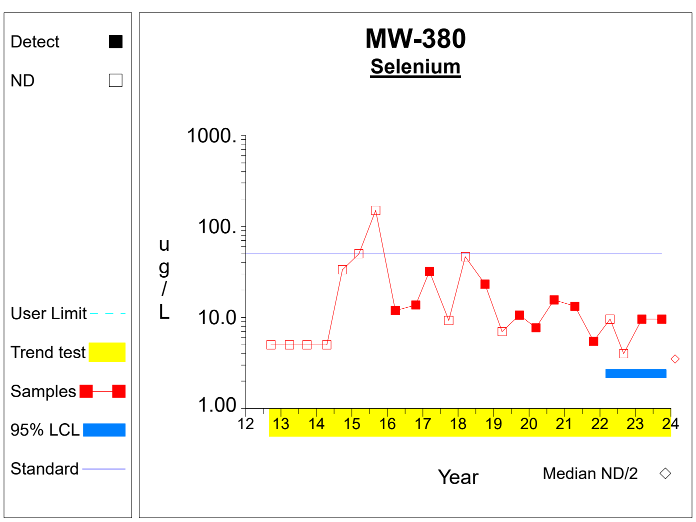
Graph 2



Graph 3



Graph 4



Graph 5

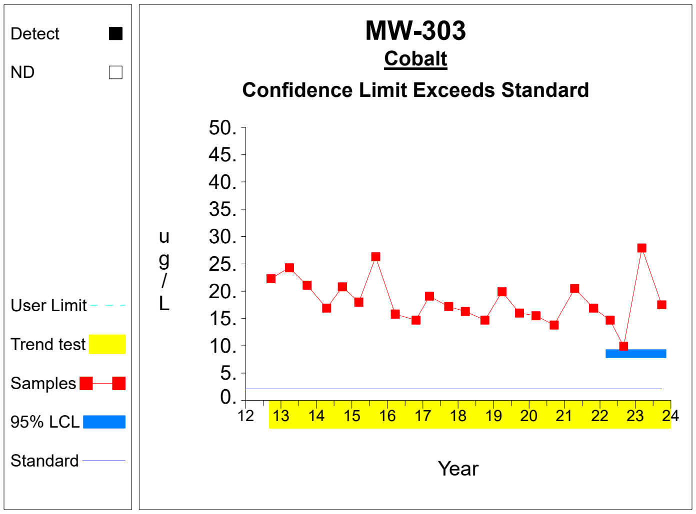
Table 1

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

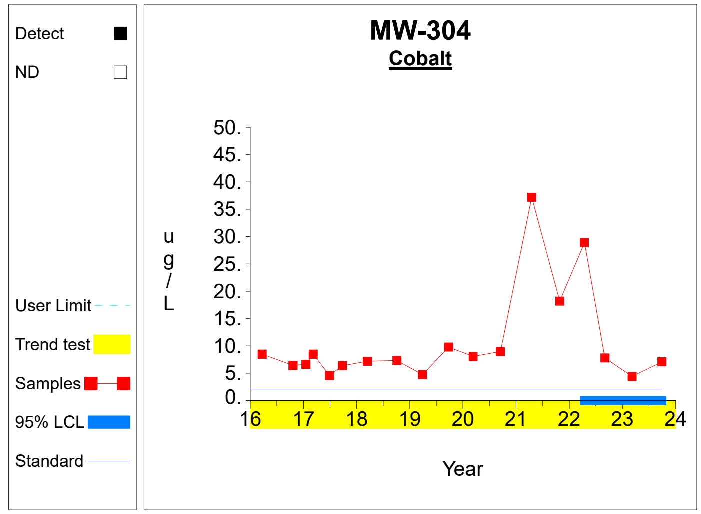
Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend	
Cobalt	ug/L	MW-303	4	17.500	7.611	1.176	8.548	26.452	2.100		**
Cobalt	ug/L	MW-304	4	12.050	11.329	1.176	0.000	25.376	2.100		
Cobalt	ug/L	MW-307	4	44.625	7.757	1.176	35.501	53.749	2.100		**
Cobalt	ug/L	MW-312	4	42.275	5.817	1.176	35.433	49.117	2.100		**
Cobalt	ug/L	MW-313	4	4.725	6.174	1.176	0.000	11.987	2.100		
Cobalt	ug/L	MW-335	4	48.325	13.329	1.176	32.646	64.004	2.100		**
Cobalt	ug/L	MW-344	4	223.500	65.699	1.176	146.219	300.781	2.100	inc	**
Cobalt	ug/L	MW-381	4	1.170	0.706	1.176	0.339	2.000	2.100		
Cobalt	ug/L	MW-382R	4	2.358	1.354	1.176	0.765	3.950	2.100		
Cobalt	ug/L	MW-384	4	14.275	4.089	1.176	9.466	19.084	2.100	dec	**
Cobalt	ug/L	MW-385	4	6.150	2.689	1.176	2.987	9.313	2.100		**
Cobalt	ug/L	MW-390	4	104.725	6.691	1.176	96.854	112.596	2.100		**

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

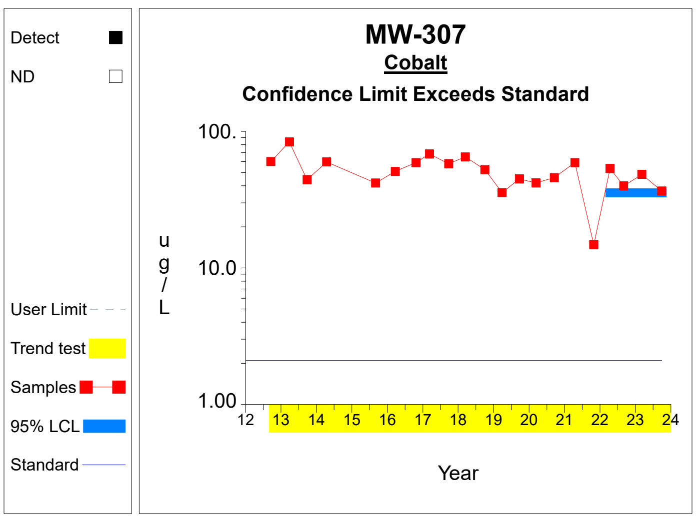
Confidence Limits (Assessment)



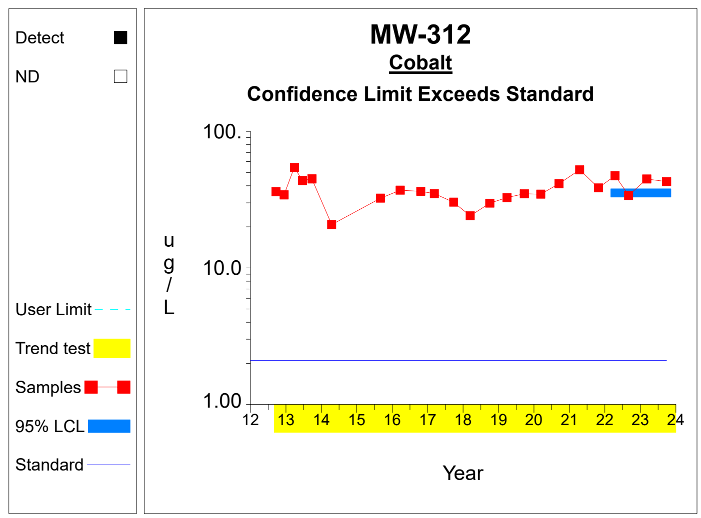
Graph 1



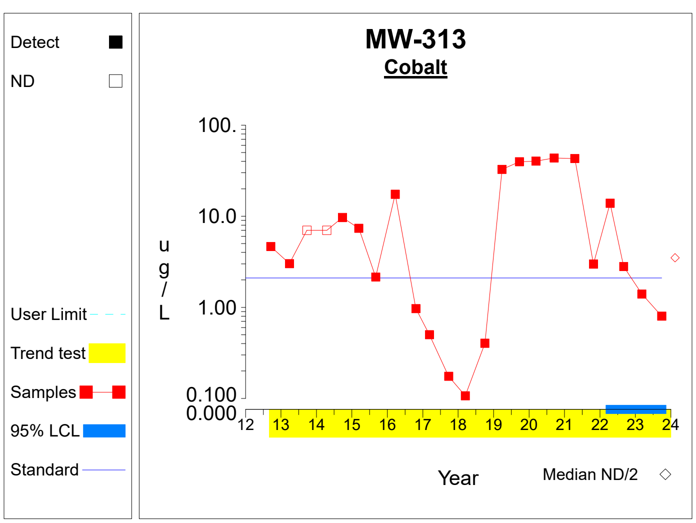
Graph 2



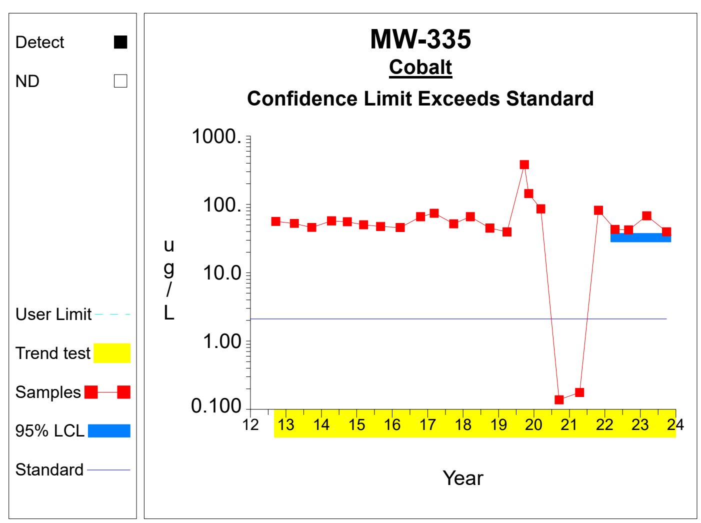
Graph 3



Graph 4

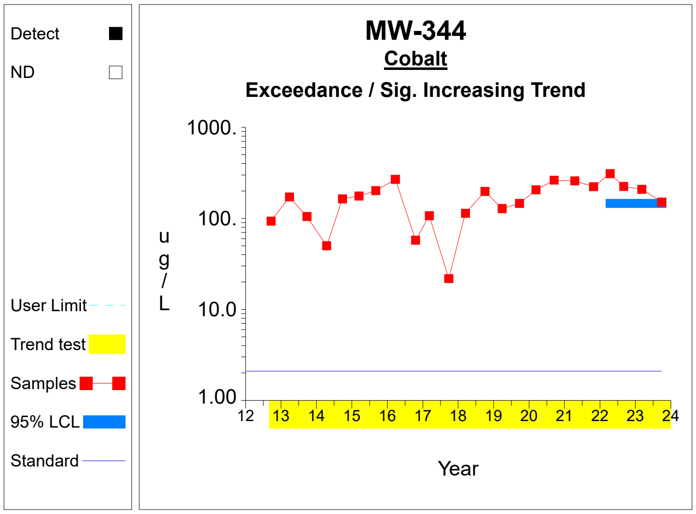


Graph 5

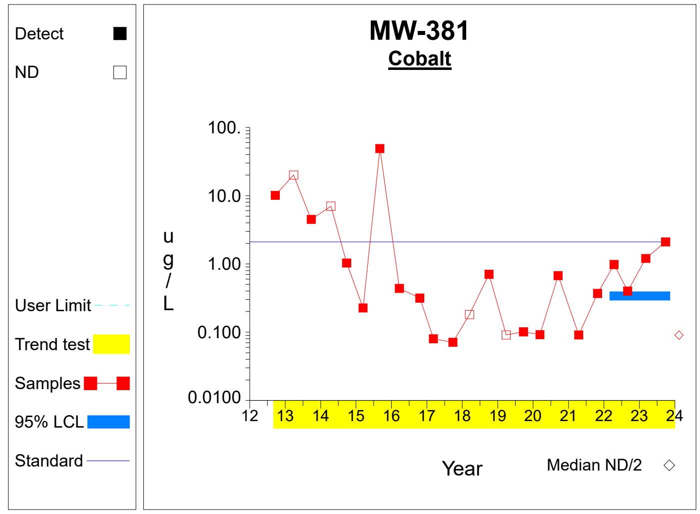


Graph 6

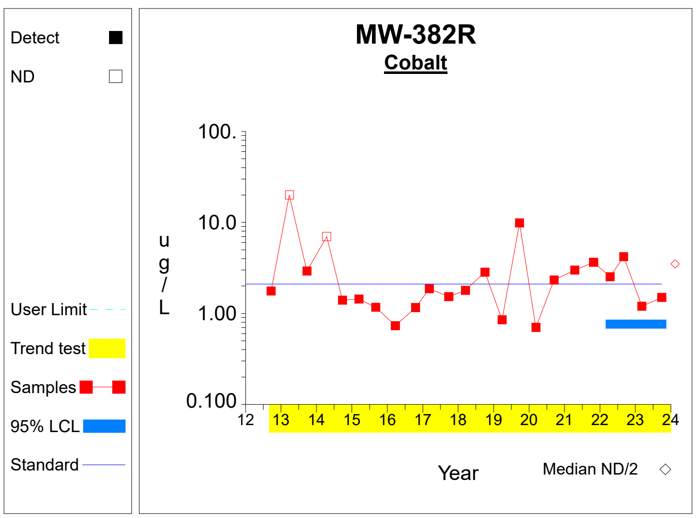
Confidence Limits (Assessment)



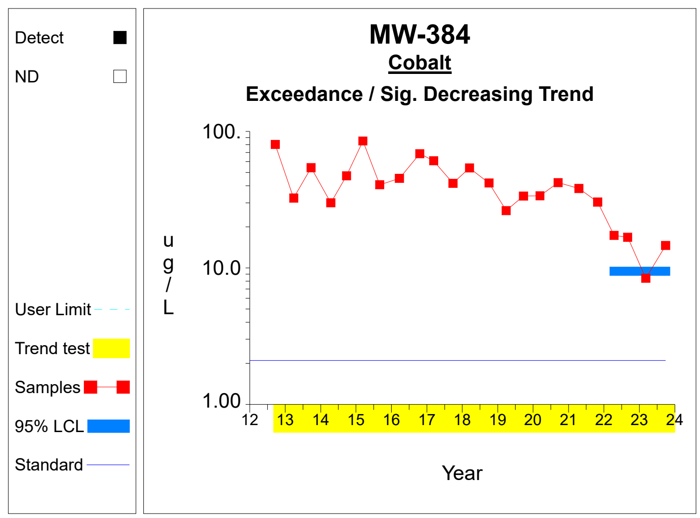
Graph 7



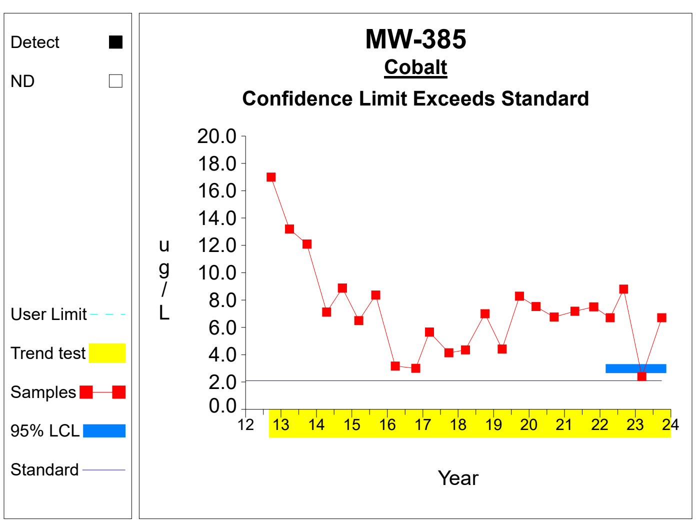
Graph 8



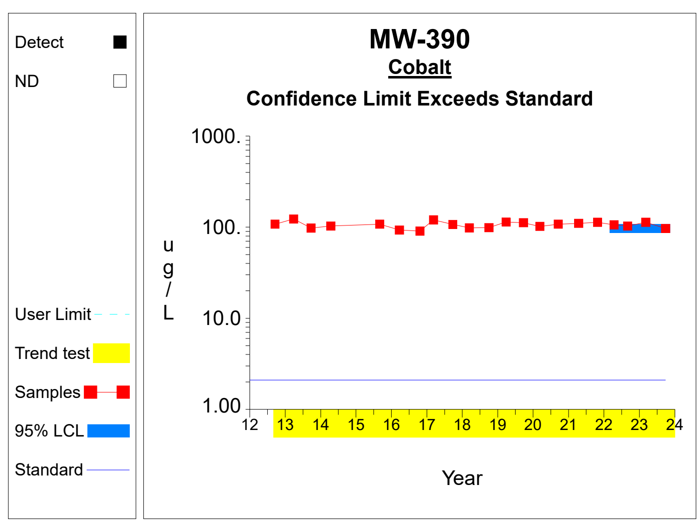
Graph 9



Graph 10



Graph 11



Graph 12

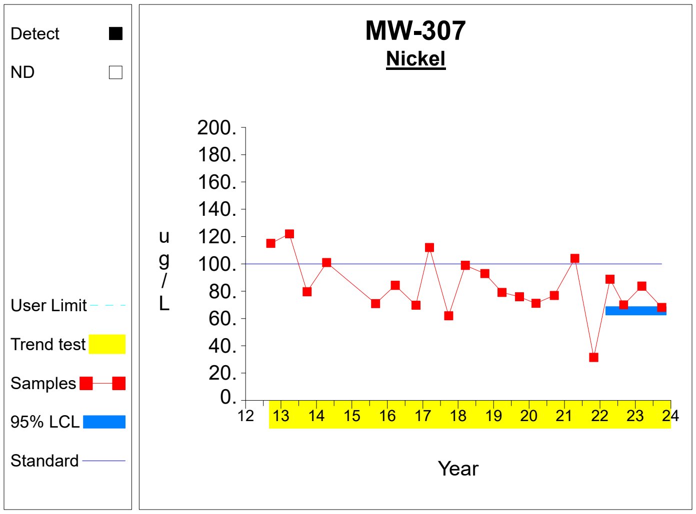
Table 1

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

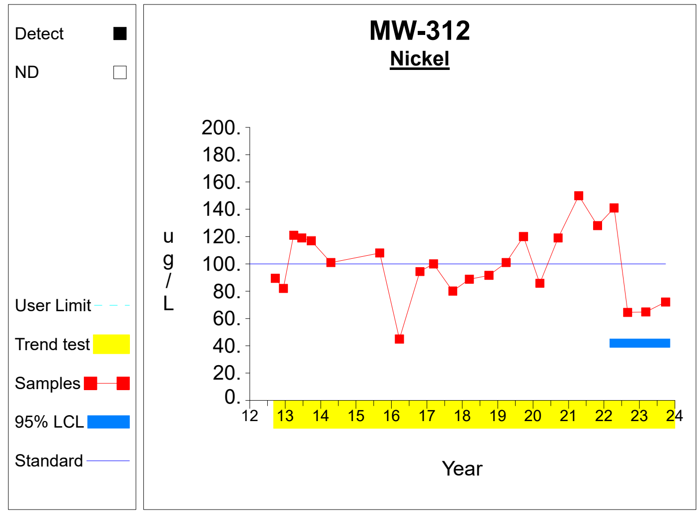
Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend	
Nickel	ug/L	MW-307	4	77.650	10.176	1.176	65.680	89.620	100.000		
Nickel	ug/L	MW-312	4	85.600	37.100	1.176	41.960	129.240	100.000		
Nickel	ug/L	MW-335	4	57.675	32.629	1.176	19.293	96.057	100.000		
Nickel	ug/L	MW-344	4	183.500	60.236	1.176	112.645	254.355	100.000		**
Nickel	ug/L	MW-384	4	60.100	14.102	1.176	43.512	76.688	100.000	dec	

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

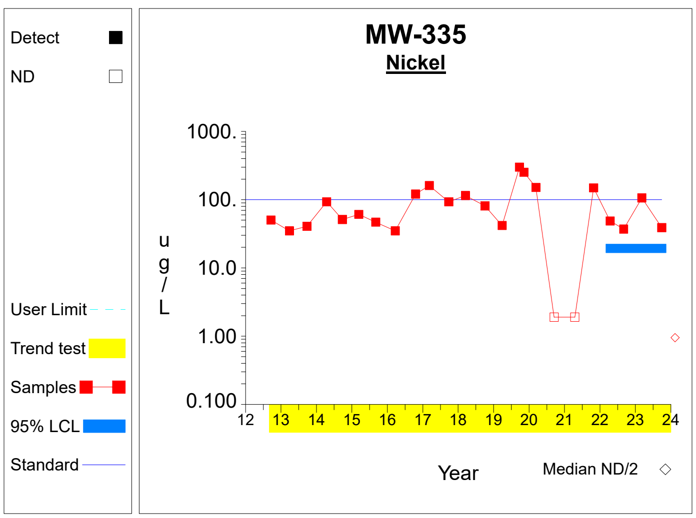
Confidence Limits (Assessment)



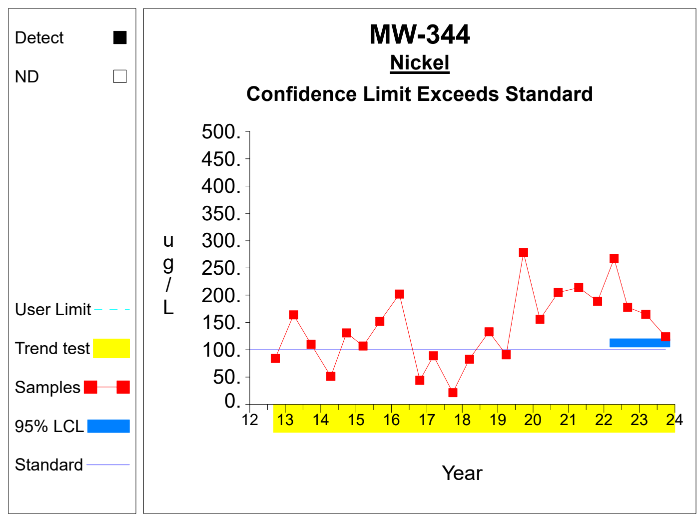
Graph 1



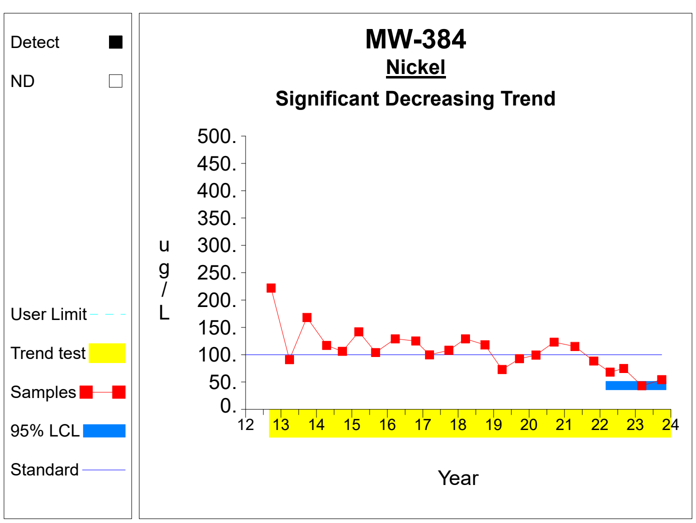
Graph 2



Graph 3



Graph 4



Graph 5

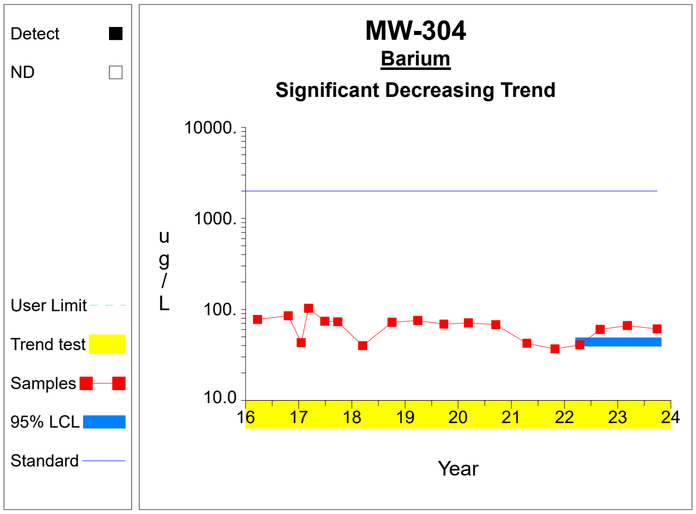
Table 1

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
Barium	ug/L	MW-304	4	57.125	11.238	1.176	43.906	70.344	2000.000	dec

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

Confidence Limits (Assessment)



Graph 1

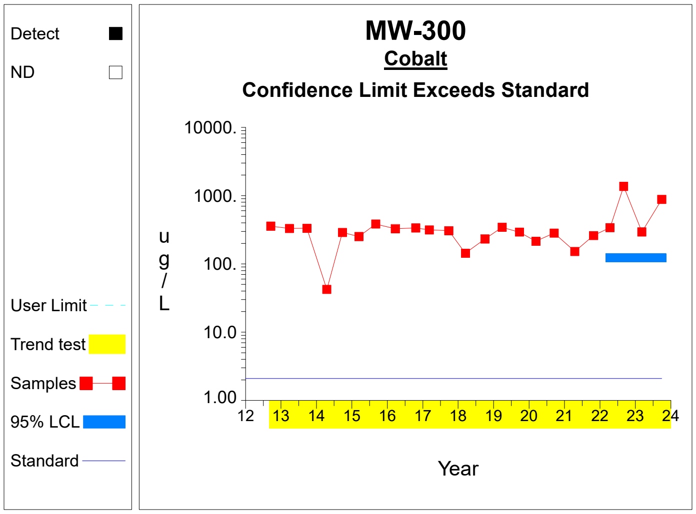
Table 1

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

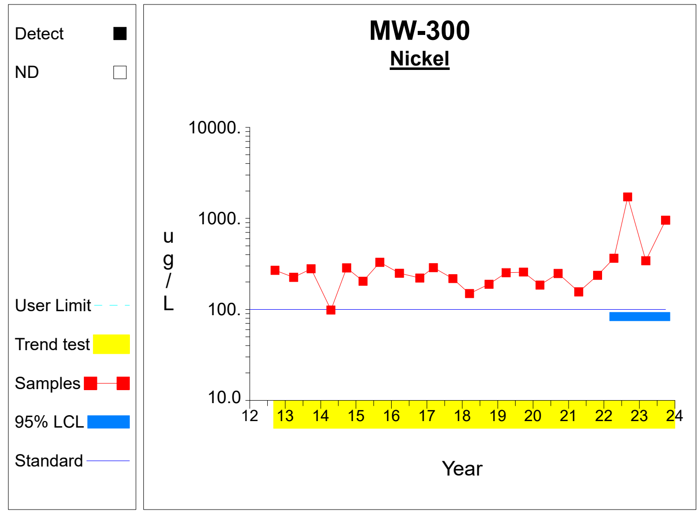
Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend	
Cobalt	ug/L	MW-300	4	721.000	508.283	1.176	123.113	1318.887	2.100		**
Nickel	ug/L	MW-300	4	845.750	648.107	1.176	83.390	1608.110	100.000		

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

Confidence Limits (Assessment)



Graph 1



Graph 2

Attachment E

Historical VOC Detections

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Acetone	GU-4A	9/27/2017		3.19	1.79	ug/L
Acetone	GU-4A	3/14/2018		2.79	1.79	ug/L
Bromomethane	GU-4A	10/20/2016		.433	.220	ug/L
Methylene Chloride	GU-4A	9/25/2014		.802	.170	ug/L
Methylene Chloride	GU-4A	10/20/2016		.303	.170	ug/L
Methylene Chloride	GU-4A	9/27/2017		.335	.170	ug/L
Vinyl Chloride	GU-4A	3/14/2018		.103	.100	ug/L
Acetone	MW-300	3/17/2009		16.40	4.62	ug/L
Acetone	MW-300	3/25/2010		12.50	.00	ug/L
Acetone	MW-300	9/23/2010		12.90	.00	ug/L
Acetone	MW-300	4/16/2014		47.80	1.79	ug/L
Acetone	MW-300	9/26/2017		4.29	1.79	ug/L
Acetone	MW-300	3/14/2018		48.60	1.79	ug/L
Acetone	MW-300	3/28/2019		3.10	3.10	ug/L
Acetone	MW-300	4/15/2021		5.12	3.10	ug/L
Acetone	MW-300	10/27/2021		5.67	3.10	ug/L
Methylene Chloride	MW-300	10/20/2016		.264	.170	ug/L
Methylene Chloride	MW-300	3/07/2017		.214	.170	ug/L
Styrene	MW-300	10/27/2021		.383	.370	ug/L
Xylenes, Total	MW-300	9/25/2013		1.11	.13	ug/L
Acetone	MW-303	9/25/2017		2.21	1.79	ug/L
Carbon Disulfide	MW-303	10/21/2016		.231	.150	ug/L
Methylene Chloride	MW-303	9/25/2014		.573	.170	ug/L
Methylene Chloride	MW-303	10/21/2016		.308	.170	ug/L
Methylene Chloride	MW-303	3/13/2018		.226	.170	ug/L
Xylenes, Total	MW-303	9/26/2013		.232	.130	ug/L
Xylenes, Total	MW-303	10/21/2016		.390	.130	ug/L
Xylenes, Total	MW-303	3/08/2017		.459	.130	ug/L
Acetone	MW-304	6/28/2017		3.74	1.79	ug/L
Acetone	MW-304	9/26/2017		2.99	1.79	ug/L
Bromomethane	MW-304	9/26/2017		.372	.220	ug/L
Bromomethane	MW-304	3/14/2018		.448	.220	ug/L
Methylene Chloride	MW-304	1/18/2017		.264	.170	ug/L
Acetone	MW-307	3/08/2017		2.61	1.79	ug/L
Acetone	MW-307	9/25/2017		2.41	1.79	ug/L
Acetonitrile	MW-307	9/26/2013		739	126	ug/L
Methylene Chloride	MW-307	10/21/2016		.231	.170	ug/L
Xylenes, Total	MW-307	10/21/2016		.324	.130	ug/L
Xylenes, Total	MW-307	3/08/2017		.362	.130	ug/L
Xylenes, Total	MW-307	3/27/2019		.481	.400	ug/L
Acetone	MW-310	3/08/2017		2.61	1.79	ug/L
Acetone	MW-310	9/27/2017		3.78	1.79	ug/L
Acetone	MW-310	3/14/2018		1.96	1.79	ug/L
Acetonitrile	MW-310	9/26/2013		841	126	ug/L
Methylene Chloride	MW-310	9/25/2014		.756	.170	ug/L
Methylene Chloride	MW-310	10/20/2016		.186	.170	ug/L
Xylenes, Total	MW-310	10/20/2016		.351	.130	ug/L
Xylenes, Total	MW-310	3/08/2017		1.090	.130	ug/L
Xylenes, Total	MW-310	9/27/2017		.363	.130	ug/L
Acetone	MW-312	3/08/2017		2.39	1.79	ug/L
Bromomethane	MW-312	9/25/2017		.233	.220	ug/L
Methylene Chloride	MW-312	10/21/2016		.295	.170	ug/L
Methylene Chloride	MW-312	3/13/2018		.334	.170	ug/L
Xylenes, Total	MW-312	3/08/2017		.654	.130	ug/L
Xylenes, Total	MW-312	10/27/2021		1.050	.400	ug/L
4,4`-DDD	MW-313	9/25/2013		.00214	.00188	ug/L
4,4`-DDE	MW-313	9/25/2013		.00320	.00219	ug/L
Acetone	MW-313	9/26/2014		1.88	1.79	ug/L
Acetone	MW-313	3/08/2017		1.87	1.79	ug/L
Acetone	MW-313	9/25/2017		2.76	1.79	ug/L
Acetone	MW-313	3/27/2019		3.82	3.10	ug/L
alpha-BHC	MW-313	9/25/2013		.00451	.00177	ug/L
beta-BHC	MW-313	9/25/2013		.00598	.00500	ug/L
Bromomethane	MW-313	10/21/2016		2.660	.220	ug/L
Bromomethane	MW-313	9/25/2017		.344	.220	ug/L
Bromomethane	MW-313	10/26/2021		1.280	1.100	ug/L
Chloromethane	MW-313	10/21/2016		.701	.310	ug/L
delta-BHC	MW-313	9/25/2013		.00444	.00240	ug/L
Iodomethane	MW-313	10/21/2016		1.41	.80	ug/L
Methylene Chloride	MW-313	10/21/2016		.277	.170	ug/L
Methylene Chloride	MW-313	3/13/2018		.207	.170	ug/L
Xylenes, Total	MW-313	9/25/2013		.321	.130	ug/L
Xylenes, Total	MW-313	10/21/2016		1.890	.130	ug/L
Xylenes, Total	MW-313	3/08/2017		.786	.130	ug/L
Acetonitrile	MW-333	9/26/2013		964	126	ug/L
Acetone	MW-335	9/26/2017		2.49	1.79	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Acetone	MW-335	3/14/2018		2.33	1.79	ug/L
Bromomethane	MW-335	9/26/2017		.402	.220	ug/L
Chloromethane	MW-335	10/19/2016		.336	.310	ug/L
Methylene Chloride	MW-335	9/25/2014		.617	.170	ug/L
Methylene Chloride	MW-335	10/19/2016		.260	.170	ug/L
Xylenes, Total	MW-335	3/07/2017		.173	.130	ug/L
1,1-Dichloroethane	MW-344	3/07/2017		.290	.210	ug/L
1,1-Dichloroethane	MW-344	9/26/2017		.475	.210	ug/L
1,1-Dichloroethane	MW-344	3/14/2018		.474	.210	ug/L
1,1-Dichloroethane	MW-344	9/15/2020		.408	.220	ug/L
1,1-Dichloroethane	MW-344	4/15/2021		.345	.220	ug/L
1,2-Dichloroethane	MW-344	9/26/2017		.207	.180	ug/L
Acetone	MW-344	3/14/2018		3.22	1.79	ug/L
Acetone	MW-344	3/28/2019		3.61	3.10	ug/L
Benzene	MW-344	9/25/2013		.215	.110	ug/L
Benzene	MW-344	4/15/2014		.268	.110	ug/L
Benzene	MW-344	9/26/2014		.198	.110	ug/L
Benzene	MW-344	3/12/2015		.281	.500	ug/L
Benzene	MW-344	10/19/2016		.594	.110	ug/L
Benzene	MW-344	3/07/2017		.543	.110	ug/L
Benzene	MW-344	9/26/2017		.894	.110	ug/L
Benzene	MW-344	3/14/2018		.715	.110	ug/L
Benzene	MW-344	10/02/2018		.732	.220	ug/L
Benzene	MW-344	9/24/2019		.541	.220	ug/L
Benzene	MW-344	9/15/2020		.836	.220	ug/L
Benzene	MW-344	4/15/2021		.722	.220	ug/L
Benzene	MW-344	10/27/2021		.918	.220	ug/L
Benzene	MW-344	4/14/2022		.390	.220	ug/L
Benzene	MW-344	9/29/2023		1.100	1.000	ug/L
Chloroethane	MW-344	9/25/2013		.514	.150	ug/L
Chloroethane	MW-344	9/26/2017		.462	.150	ug/L
cis-1,2-Dichloroethene	MW-344	3/27/2013		.301	.130	ug/L
cis-1,2-Dichloroethene	MW-344	9/25/2013		.976	.130	ug/L
cis-1,2-Dichloroethene	MW-344	4/15/2014		1.300	.130	ug/L
cis-1,2-Dichloroethene	MW-344	9/26/2014		.819	.130	ug/L
cis-1,2-Dichloroethene	MW-344	9/02/2015		1.140	1.000	ug/L
cis-1,2-Dichloroethene	MW-344	3/23/2016		1.120	.010	ug/L
cis-1,2-Dichloroethene	MW-344	10/19/2016		2.040	.130	ug/L
cis-1,2-Dichloroethene	MW-344	3/07/2017		1.820	.130	ug/L
cis-1,2-Dichloroethene	MW-344	9/26/2017		2.480	.130	ug/L
cis-1,2-Dichloroethene	MW-344	3/14/2018		2.240	.130	ug/L
cis-1,2-Dichloroethene	MW-344	10/02/2018		1.900	.210	ug/L
cis-1,2-Dichloroethene	MW-344	3/28/2019		1.180	.210	ug/L
cis-1,2-Dichloroethene	MW-344	9/24/2019		1.820	.210	ug/L
cis-1,2-Dichloroethene	MW-344	3/10/2020		1.360	.210	ug/L
cis-1,2-Dichloroethene	MW-344	9/15/2020		2.440	.210	ug/L
cis-1,2-Dichloroethene	MW-344	4/15/2021		2.020	.210	ug/L
cis-1,2-Dichloroethene	MW-344	10/27/2021		2.180	.210	ug/L
cis-1,2-Dichloroethene	MW-344	4/14/2022		1.270	.210	ug/L
cis-1,2-Dichloroethene	MW-344	9/01/2022		1.900	1.000	ug/L
cis-1,2-Dichloroethene	MW-344	9/29/2023		2.400	1.000	ug/L
delta-BHC	MW-344	10/02/2018		.0029	.0025	ug/L
Endosulfan I	MW-344	10/02/2018		.00217	.00217	ug/L
Endrin	MW-344	10/02/2018		.00264	.00207	ug/L
gamma-BHC (Lindane)	MW-344	10/02/2018		.00220	.00207	ug/L
Methylene Chloride	MW-344	10/19/2016		.251	.170	ug/L
Vinyl Chloride	MW-344	9/24/2009		1.110	.000	ug/L
Vinyl Chloride	MW-344	3/25/2010		1.030	.000	ug/L
Vinyl Chloride	MW-344	9/22/2011		1.070	.000	ug/L
Vinyl Chloride	MW-344	3/16/2012		1.270	.000	ug/L
Vinyl Chloride	MW-344	9/20/2012		1.500	.000	ug/L
Vinyl Chloride	MW-344	3/27/2013		1.320	.100	ug/L
Vinyl Chloride	MW-344	9/25/2013		.858	.100	ug/L
Vinyl Chloride	MW-344	4/15/2014		.884	.100	ug/L
Vinyl Chloride	MW-344	9/26/2014		.484	.100	ug/L
Vinyl Chloride	MW-344	3/12/2015		.428	1.000	ug/L
Vinyl Chloride	MW-344	10/19/2016		.587	.100	ug/L
Vinyl Chloride	MW-344	3/07/2017		1.050	.100	ug/L
Vinyl Chloride	MW-344	9/26/2017		.705	.100	ug/L
Vinyl Chloride	MW-344	3/14/2018		.569	.100	ug/L
Vinyl Chloride	MW-344	9/24/2019		.513	.180	ug/L
Vinyl Chloride	MW-344	9/15/2020		.903	.180	ug/L
Vinyl Chloride	MW-344	4/15/2021		.840	.180	ug/L
Vinyl Chloride	MW-344	10/27/2021		.986	.180	ug/L
Vinyl Chloride	MW-344	4/14/2022		.383	.180	ug/L
Dichlorodifluoromethane	MW-345	9/25/2013		1.49	.20	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
Methylene Chloride	MW-345	9/25/2014		.596	.170	ug/L
Acetone	MW-380	3/09/2017		12.20	1.79	ug/L
Acetone	MW-380	6/28/2017		4.52	1.79	ug/L
Acetone	MW-380	3/14/2018		2.46	1.79	ug/L
Bromomethane	MW-380	3/14/2018		.31	.22	ug/L
Methylene Chloride	MW-380	10/20/2016		.30	.17	ug/L
Xylenes, Total	MW-380	3/09/2017		.672	.130	ug/L
Acetone	MW-381	9/26/2017		2.94	1.79	ug/L
Acetone	MW-381	3/14/2018		2.87	1.79	ug/L
Bromomethane	MW-381	9/26/2017		.322	.220	ug/L
Bromomethane	MW-381	3/14/2018		.240	.220	ug/L
Methylene Chloride	MW-381	10/19/2016		.283	.170	ug/L
Xylenes, Total	MW-381	10/19/2016		.242	.130	ug/L
Xylenes, Total	MW-381	3/07/2017		.435	.130	ug/L
1,1-Dichloroethane	MW-382R	3/29/2011		2.90	.00	ug/L
1,1-Dichloroethane	MW-382R	6/25/2011		2.87	.00	ug/L
1,1-Dichloroethane	MW-382R	8/08/2011		2.74	.00	ug/L
1,1-Dichloroethane	MW-382R	9/22/2011		2.15	.00	ug/L
1,1-Dichloroethane	MW-382R	12/05/2011		2.98	.00	ug/L
1,1-Dichloroethane	MW-382R	3/16/2012		2.77	.00	ug/L
1,1-Dichloroethane	MW-382R	9/20/2012		2.10	.00	ug/L
1,1-Dichloroethane	MW-382R	3/27/2013		2.43	.21	ug/L
1,1-Dichloroethane	MW-382R	9/25/2013		2.00	.21	ug/L
1,1-Dichloroethane	MW-382R	4/15/2014		3.54	.21	ug/L
1,1-Dichloroethane	MW-382R	9/26/2014		2.00	.21	ug/L
1,1-Dichloroethane	MW-382R	3/12/2015		2.23	1.00	ug/L
1,1-Dichloroethane	MW-382R	9/02/2015		1.62	1.00	ug/L
1,1-Dichloroethane	MW-382R	3/23/2016		1.65	1.00	ug/L
1,1-Dichloroethane	MW-382R	10/19/2016		2.31	.21	ug/L
1,1-Dichloroethane	MW-382R	3/07/2017		1.81	.21	ug/L
1,1-Dichloroethane	MW-382R	9/26/2017		1.93	.21	ug/L
1,1-Dichloroethane	MW-382R	3/14/2018		2.60	.21	ug/L
1,1-Dichloroethane	MW-382R	10/02/2018		1.51	.22	ug/L
1,1-Dichloroethane	MW-382R	3/28/2019		1.60	.22	ug/L
1,1-Dichloroethane	MW-382R	9/24/2019		1.71	.22	ug/L
1,1-Dichloroethane	MW-382R	3/10/2020		1.74	.22	ug/L
1,1-Dichloroethane	MW-382R	9/16/2020		2.00	.22	ug/L
1,1-Dichloroethane	MW-382R	4/15/2021		1.41	.22	ug/L
1,1-Dichloroethane	MW-382R	10/27/2021		1.69	.22	ug/L
1,1-Dichloroethane	MW-382R	4/14/2022		1.09	.22	ug/L
1,1-Dichloroethane	MW-382R	3/06/2023		1.40	1.00	ug/L
Acetone	MW-382R	3/14/2018		2.06	1.79	ug/L
Bis(2-ethylhexyl)phthalate	MW-382R	9/29/2023		16	6	ug/L
Bromomethane	MW-382R	3/14/2018		.253	.220	ug/L
Chloroethane	MW-382R	9/25/2013		.433	.150	ug/L
cis-1,2-Dichloroethene	MW-382R	3/27/2013		.383	.130	ug/L
cis-1,2-Dichloroethene	MW-382R	9/25/2013		.320	.130	ug/L
cis-1,2-Dichloroethene	MW-382R	4/15/2014		.267	.130	ug/L
cis-1,2-Dichloroethene	MW-382R	9/26/2014		.270	.130	ug/L
cis-1,2-Dichloroethene	MW-382R	10/19/2016		.414	.130	ug/L
cis-1,2-Dichloroethene	MW-382R	3/07/2017		.385	.130	ug/L
cis-1,2-Dichloroethene	MW-382R	9/26/2017		.484	.130	ug/L
cis-1,2-Dichloroethene	MW-382R	3/14/2018		.449	.130	ug/L
cis-1,2-Dichloroethene	MW-382R	10/02/2018		.401	.210	ug/L
cis-1,2-Dichloroethene	MW-382R	3/28/2019		.439	.210	ug/L
cis-1,2-Dichloroethene	MW-382R	9/24/2019		.345	.210	ug/L
cis-1,2-Dichloroethene	MW-382R	9/16/2020		.487	.210	ug/L
cis-1,2-Dichloroethene	MW-382R	4/15/2021		.289	.210	ug/L
cis-1,2-Dichloroethene	MW-382R	10/27/2021		.406	.210	ug/L
cis-1,2-Dichloroethene	MW-382R	4/14/2022		.307	.210	ug/L
Dichlorodifluoromethane	MW-382R	3/16/2012		3.110	.000	ug/L
Dichlorodifluoromethane	MW-382R	3/27/2013		2.400	.200	ug/L
Dichlorodifluoromethane	MW-382R	9/25/2013		2.730	.200	ug/L
Dichlorodifluoromethane	MW-382R	4/15/2014		2.140	.200	ug/L
Dichlorodifluoromethane	MW-382R	9/26/2014		2.700	.200	ug/L
Dichlorodifluoromethane	MW-382R	3/12/2015		1.590	.200	ug/L
Dichlorodifluoromethane	MW-382R	10/19/2016		1.770	.200	ug/L
Dichlorodifluoromethane	MW-382R	3/07/2017		1.860	.200	ug/L
Dichlorodifluoromethane	MW-382R	9/26/2017		.898	.200	ug/L
Dichlorodifluoromethane	MW-382R	3/14/2018		1.110	.200	ug/L
Dichlorodifluoromethane	MW-382R	10/02/2018		.962	.250	ug/L
Methylene Chloride	MW-382R	3/27/2013		.193	.170	ug/L
Methylene Chloride	MW-382R	10/19/2016		.394	.170	ug/L
Methylene Chloride	MW-382R	3/07/2017		.312	.170	ug/L
Vinyl Chloride	MW-382R	9/25/2013		.345	.100	ug/L
Vinyl Chloride	MW-382R	3/14/2018		.296	.100	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-382R	4/15/2021		.206	.180	ug/L
Vinyl Chloride	MW-382R	10/27/2021		.241	.180	ug/L
Xylenes, Total	MW-382R	9/25/2013		.134	.130	ug/L
Acetonitrile	MW-383	9/26/2013		1170	126	ug/L
Methylene Chloride	MW-383	3/27/2013		.238	.170	ug/L
Methylene Chloride	MW-383	9/25/2014		.424	.170	ug/L
1,2-Dichloroethane	MW-384	3/14/2018		.195	.180	ug/L
Acetone	MW-384	3/09/2017		2.77	1.79	ug/L
Acetone	MW-384	9/27/2017		2.49	1.79	ug/L
Bromomethane	MW-384	10/20/2016		.313	.220	ug/L
Methylene Chloride	MW-384	9/25/2014		.520	.170	ug/L
Methylene Chloride	MW-384	9/27/2017		.292	.170	ug/L
Xylenes, Total	MW-384	9/01/2015		3.000	3.000	ug/L
Xylenes, Total	MW-384	10/20/2016		.707	.130	ug/L
Xylenes, Total	MW-384	3/09/2017		.949	.130	ug/L
Acetone	MW-385	3/08/2017		3.51	1.79	ug/L
Acetone	MW-385	9/27/2017		3.14	1.79	ug/L
Bromomethane	MW-385	10/20/2016		.599	.220	ug/L
Methylene Chloride	MW-385	3/28/2013		.343	.170	ug/L
Methylene Chloride	MW-385	9/25/2014		.448	.170	ug/L
Methylene Chloride	MW-385	10/20/2016		.224	.170	ug/L
Methylene Chloride	MW-385	3/08/2017		.501	.170	ug/L
Methylene Chloride	MW-385	9/27/2017		.380	.170	ug/L
Xylenes, Total	MW-385	10/20/2016		.387	.130	ug/L
Xylenes, Total	MW-385	3/08/2017		.898	.130	ug/L
Xylenes, Total	MW-385	9/27/2017		.164	.130	ug/L
Acetone	MW-390	3/08/2017		7.42	1.79	ug/L
Acetone	MW-390	9/25/2017		2.90	1.79	ug/L
Acetone	MW-390	3/27/2019		3.35	3.10	ug/L
Acetone	MW-390	3/09/2020		5.37	3.10	ug/L
Carbon Disulfide	MW-390	9/25/2017		.177	.150	ug/L
Methylene Chloride	MW-390	10/21/2016		.397	.170	ug/L
Methylene Chloride	MW-390	3/13/2018		.209	.170	ug/L
Xylenes, Total	MW-390	10/21/2016		.464	.130	ug/L
Xylenes, Total	MW-390	3/08/2017		.566	.130	ug/L
Xylenes, Total	MW-390	3/27/2019		1.050	.400	ug/L
Benzene	MW-603	3/10/2020		.312	.220	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 F

Summary Tables and Graphs for the LCL Comparisons – VOCs

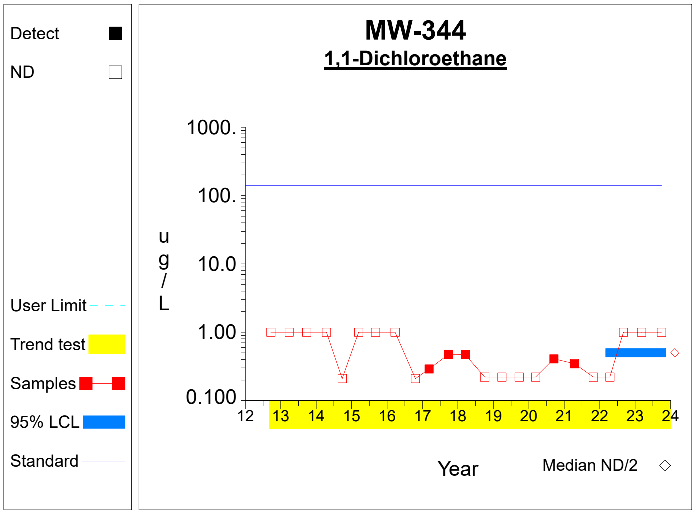
Table 1

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

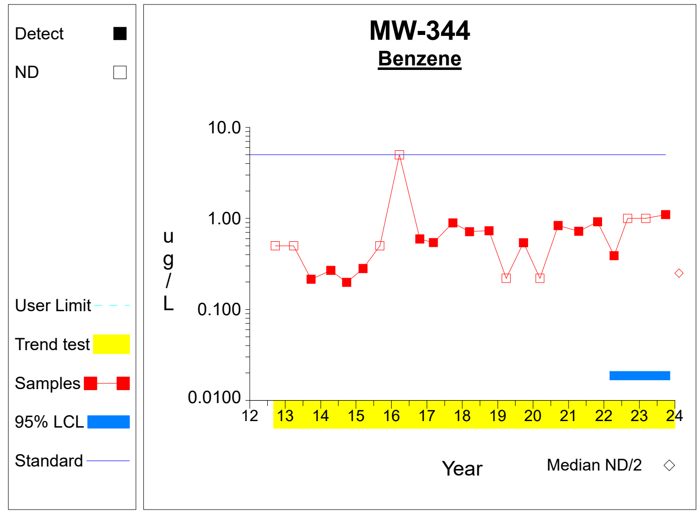
Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend
1,1-Dichloroethane	ug/L	MW-344	4	0.500	0.000	1.176	0.500	0.500	140.000	
Benzene	ug/L	MW-344	4	0.498	0.407	1.176	0.019	0.976	5.000	
Bis(2-ethylhexyl)phthalate	ug/L	MW-344	4	3.000	0.000	1.176	3.000	3.000	6.000	
cis-1,2-Dichloroethene	ug/L	MW-344	4	1.518	0.821	1.176	0.552	2.483	70.000	
Vinyl Chloride	ug/L	MW-344	4	0.471	0.059	1.176	0.402	0.540	2.000	
1,1-Dichloroethane	ug/L	MW-382R	4	0.873	0.448	1.176	0.345	1.400	140.000	dec
Benzene	ug/L	MW-382R	4	0.110	0.000	1.176	0.110	0.110	5.000	
Bis(2-ethylhexyl)phthalate	ug/L	MW-382R	4	7.750	5.500	1.176	1.280	14.220	6.000	
cis-1,2-Dichloroethene	ug/L	MW-382R	4	0.452	0.097	1.176	0.338	0.565	70.000	
Vinyl Chloride	ug/L	MW-382R	4	0.300	0.000	1.176	0.300	0.300	2.000	

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

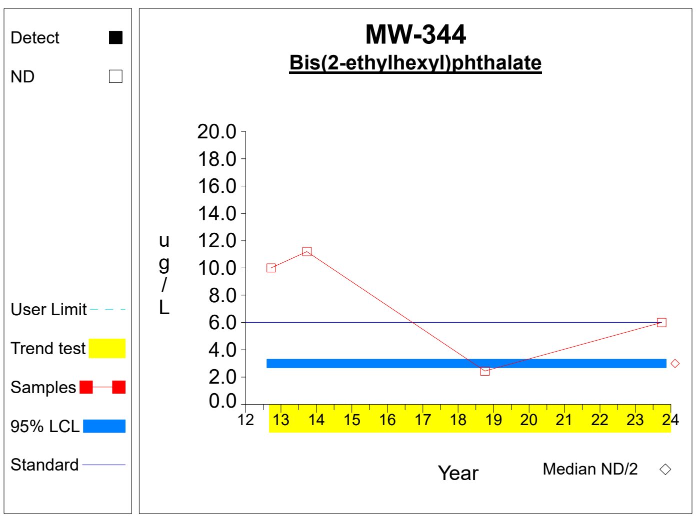
Confidence Limits (Assessment)



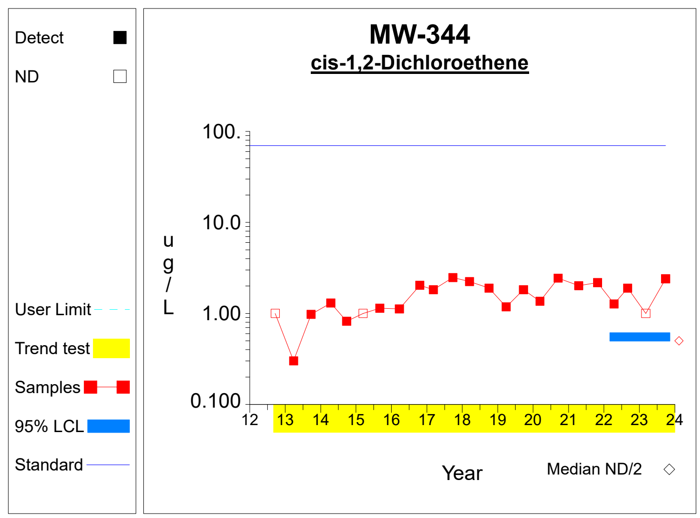
Graph 1



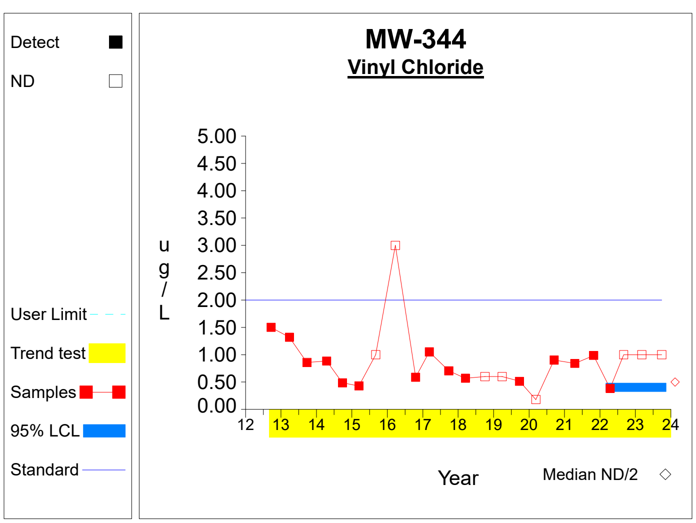
Graph 2



Graph 3

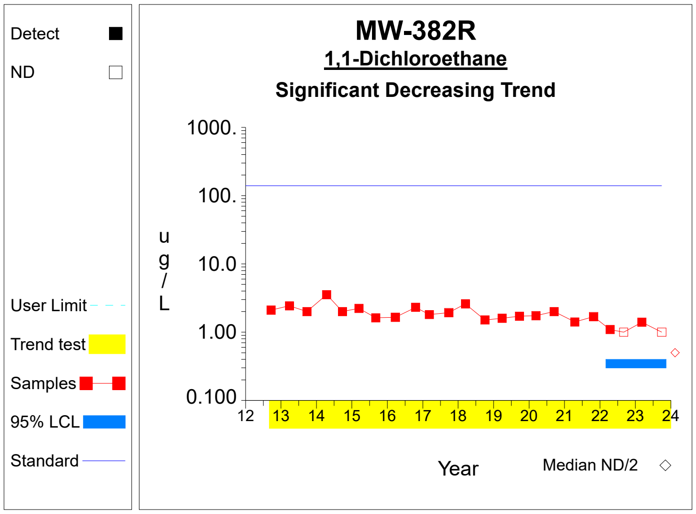


Graph 4

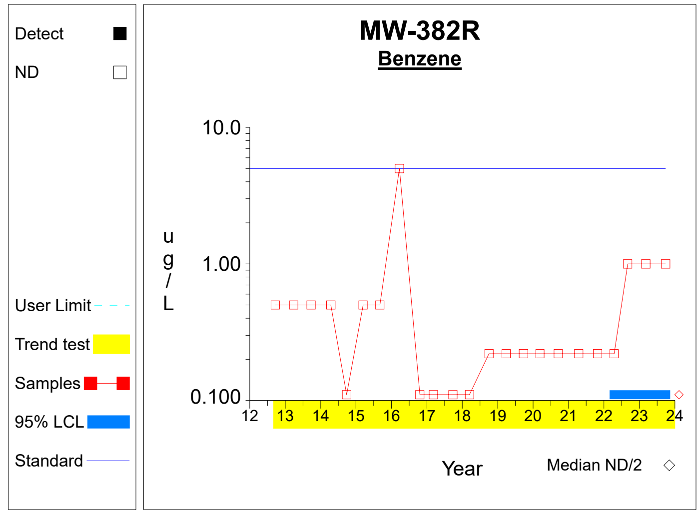


Graph 5

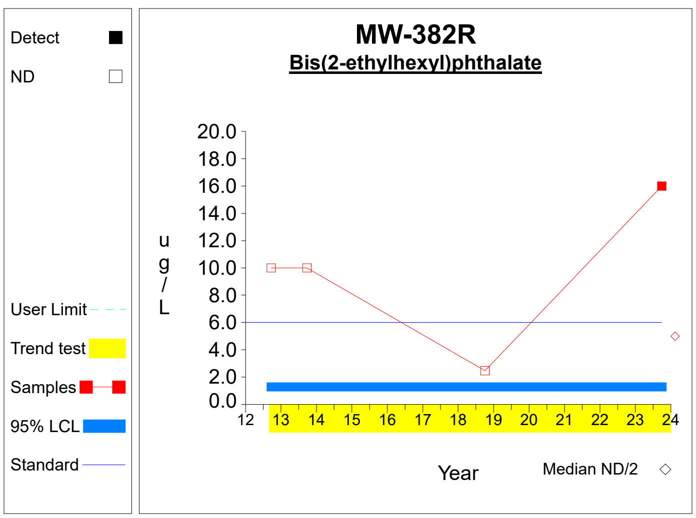
Confidence Limits (Assessment)



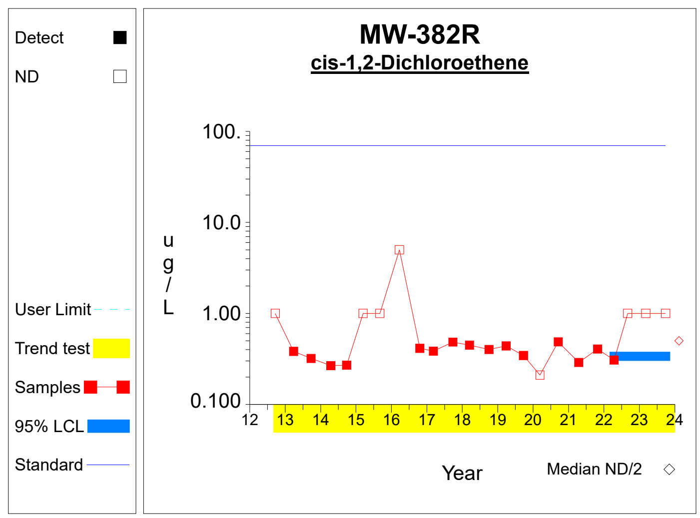
Graph 6



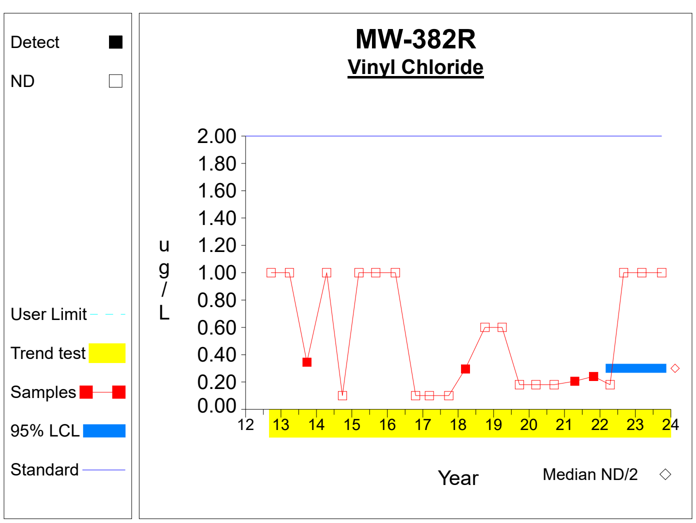
Graph 7



Graph 8



Graph 9

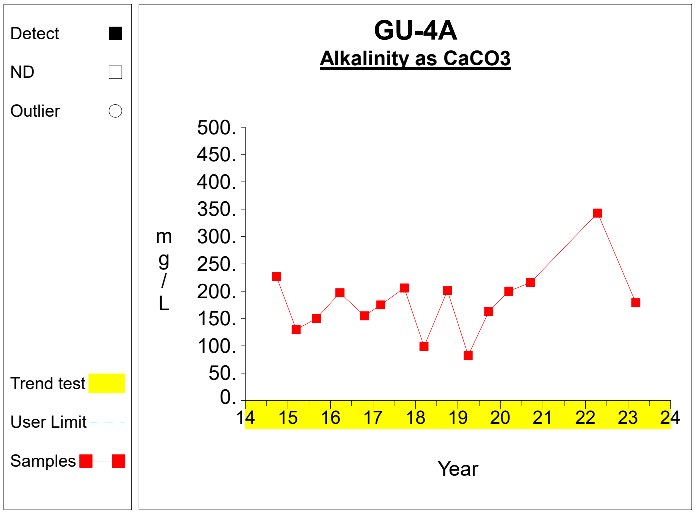


Graph 10

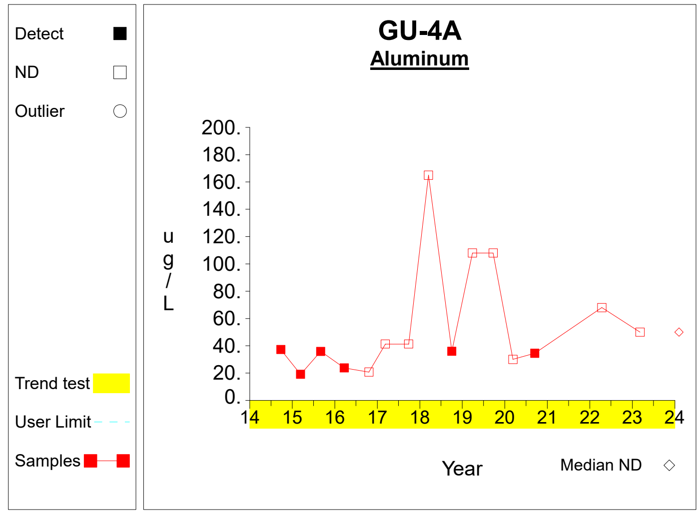
Attachment G

Time Series Plots of Inorganics

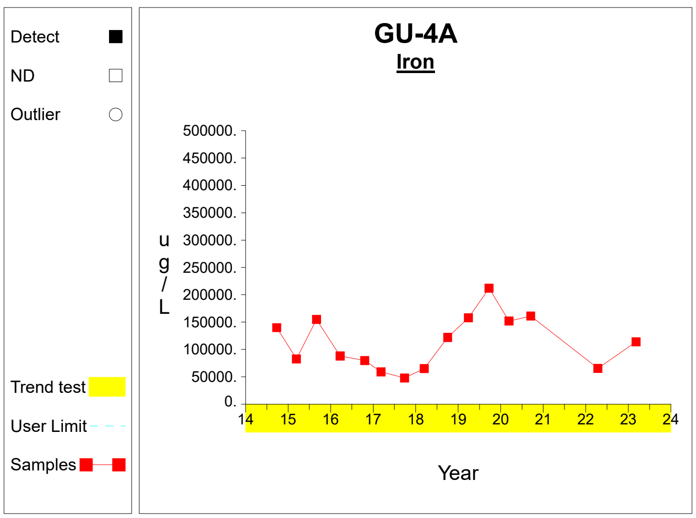
Time Series



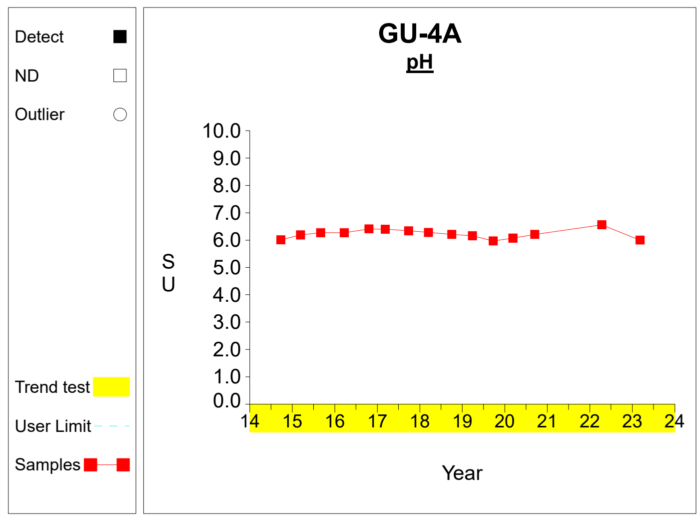
Graph 1



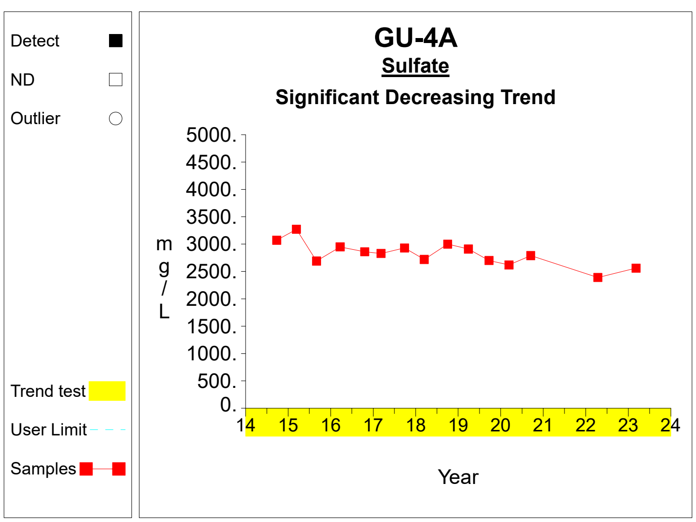
Graph 2



Graph 3



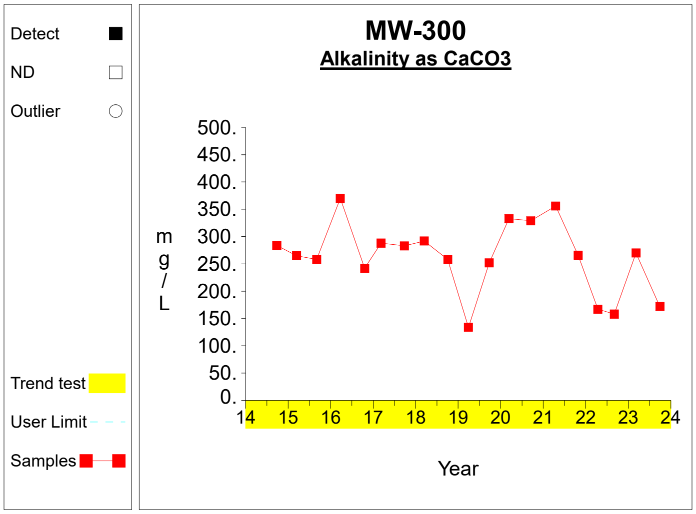
Graph 4



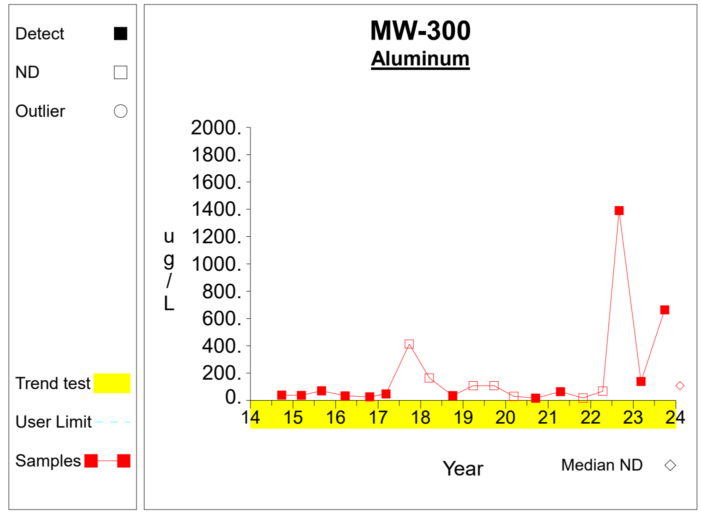
Graph 5

Prepared by: Otter Creek Environmental

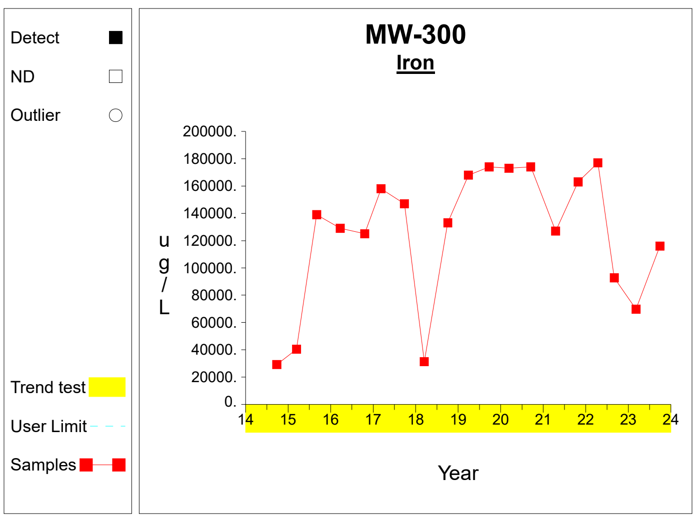
Time Series



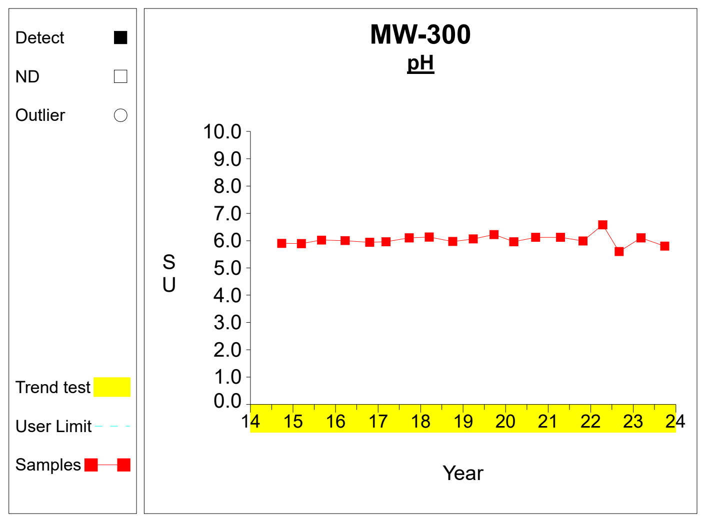
Graph 6



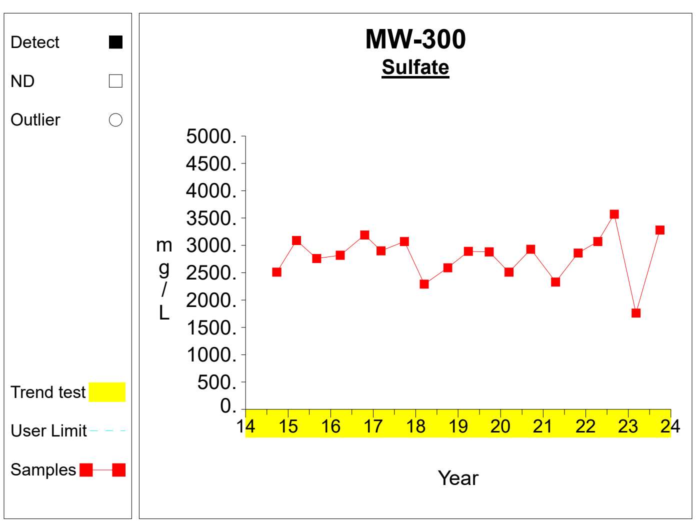
Graph 7



Graph 8

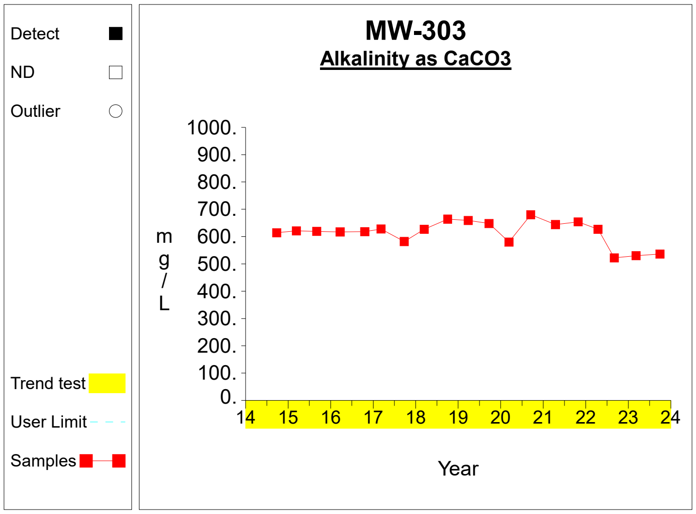


Graph 9

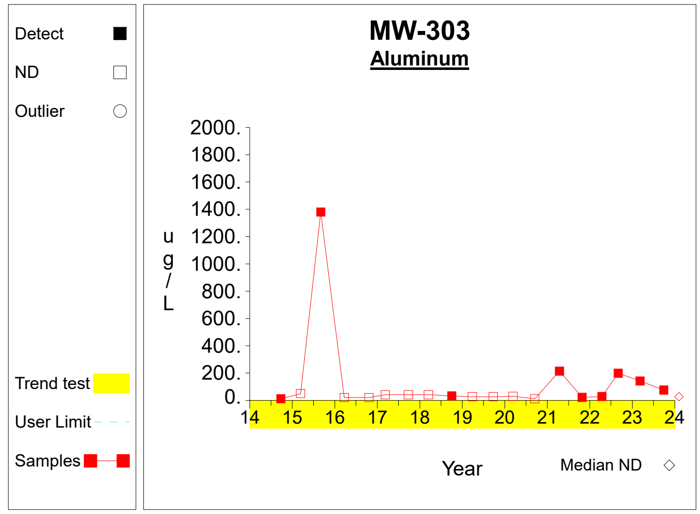


Graph 10

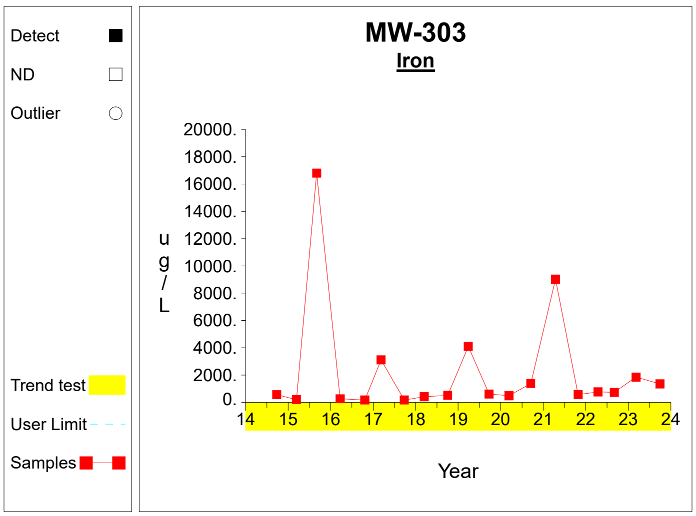
Time Series



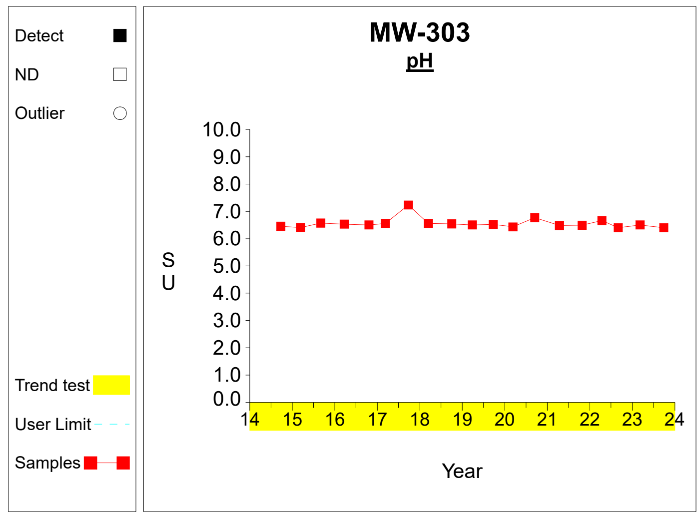
Graph 11



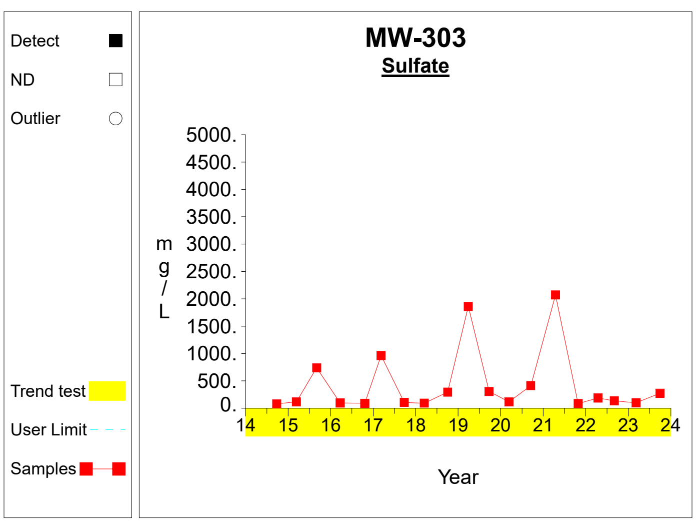
Graph 12



Graph 13

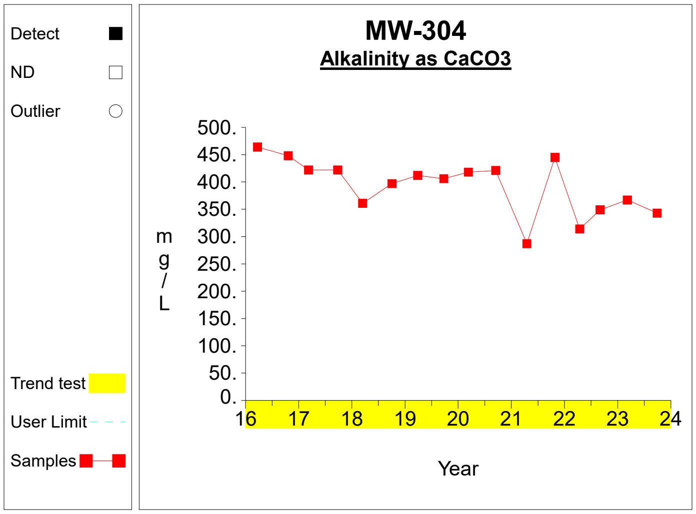


Graph 14

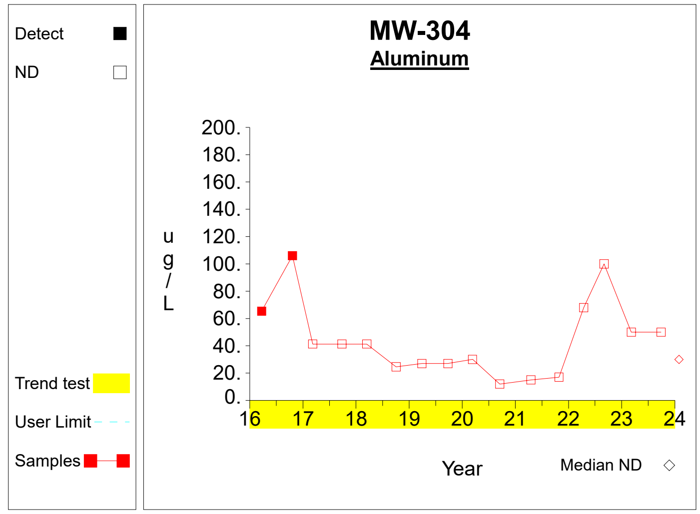


Graph 15

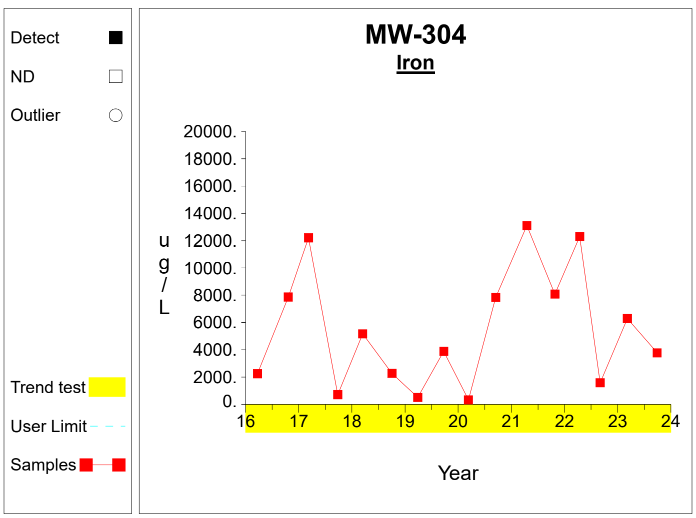
Time Series



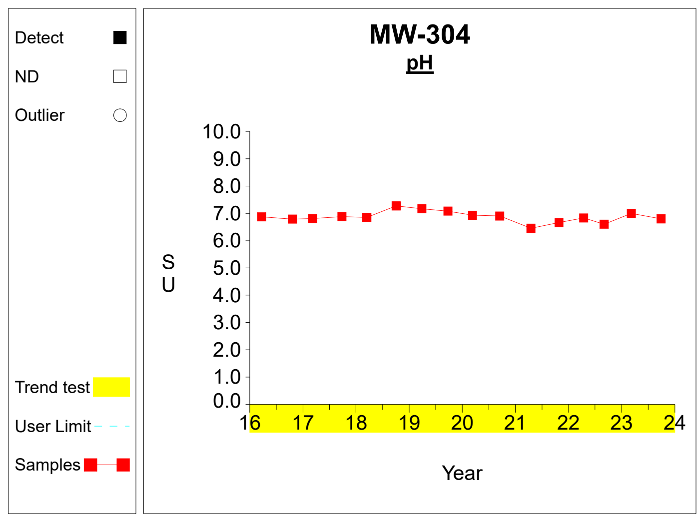
Graph 16



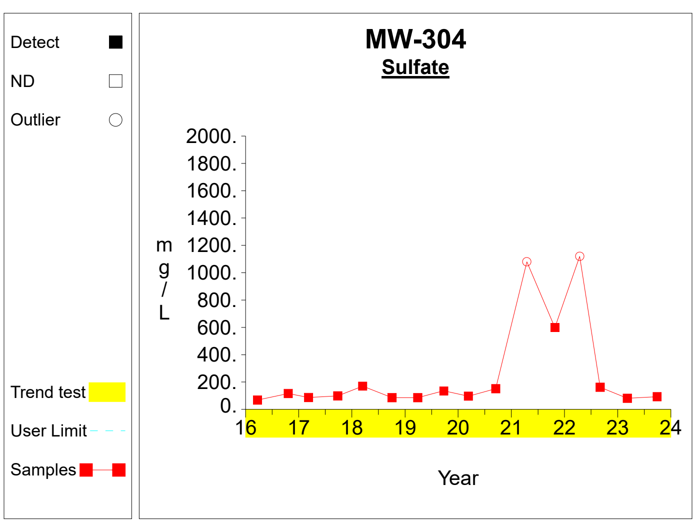
Graph 17



Graph 18

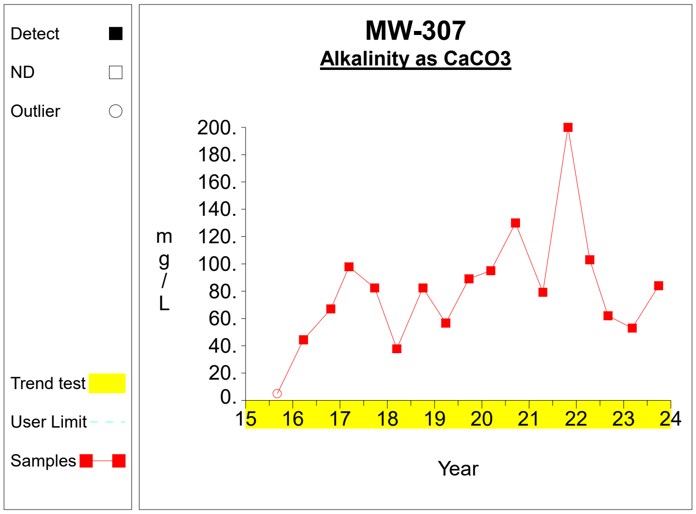


Graph 19

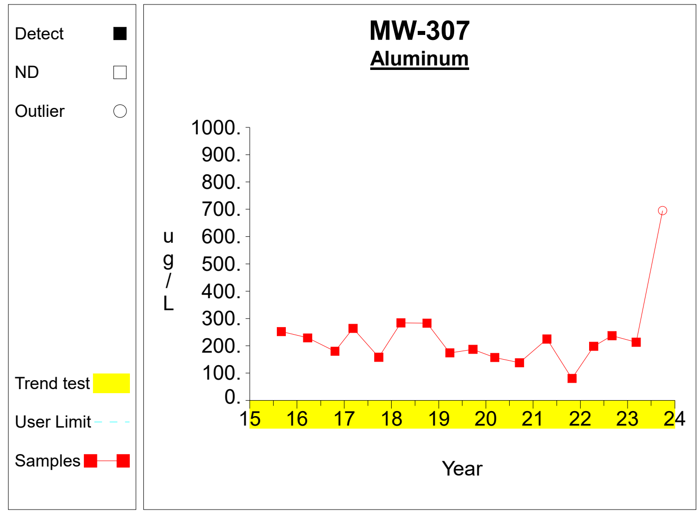


Graph 20

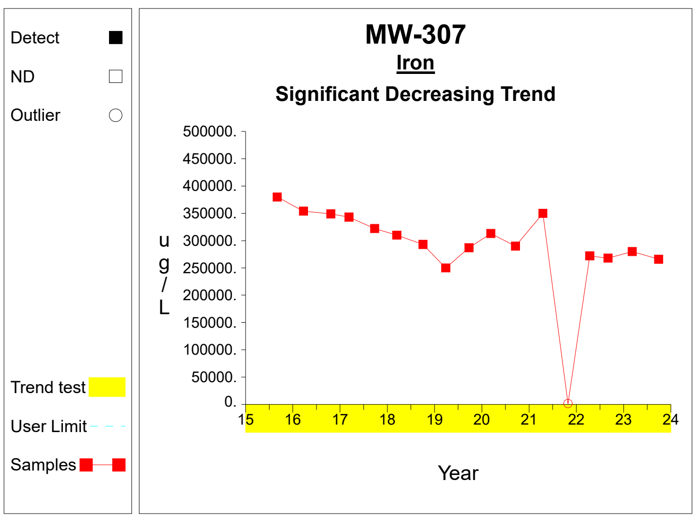
Time Series



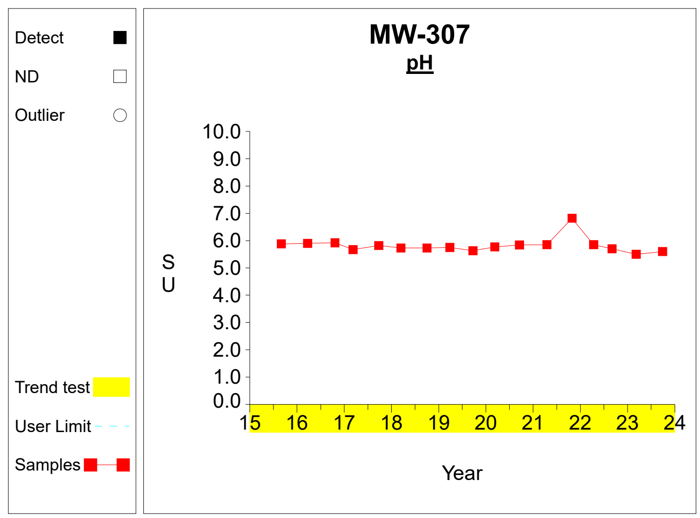
Graph 21



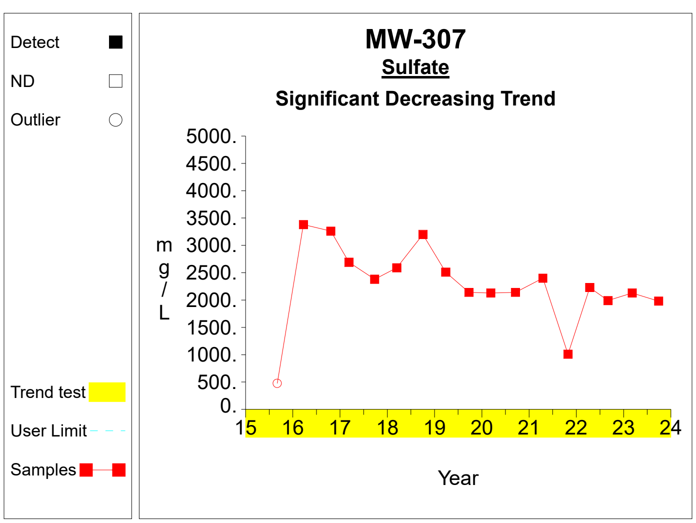
Graph 22



Graph 23

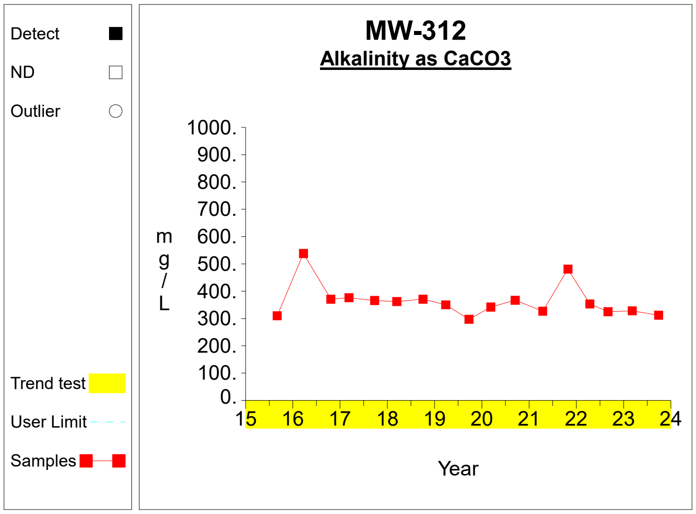


Graph 24

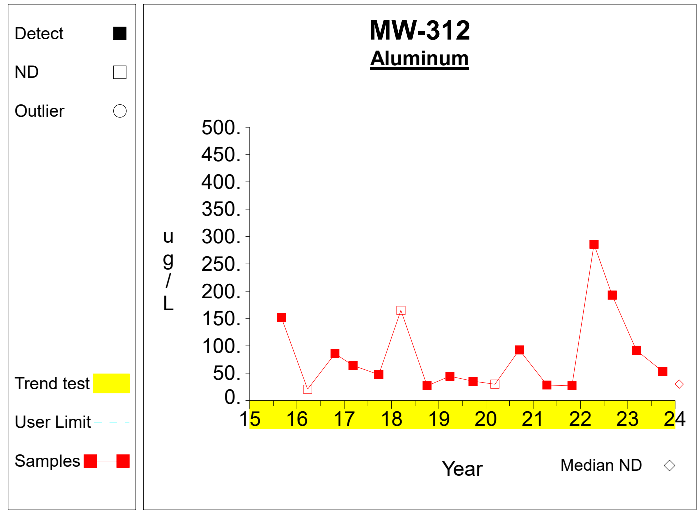


Graph 25

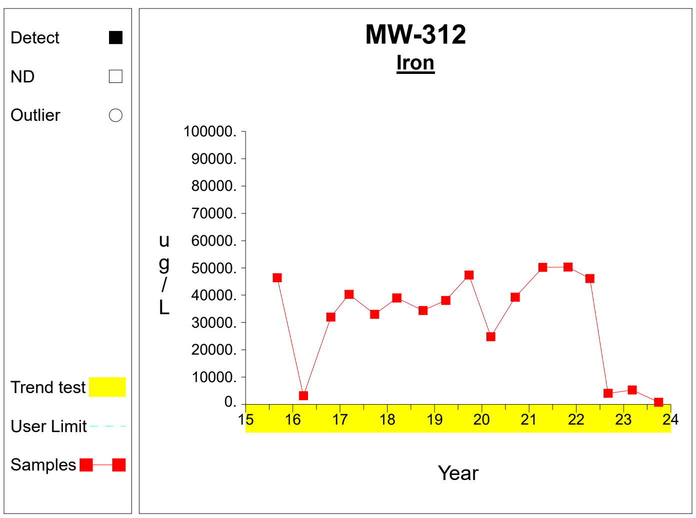
Time Series



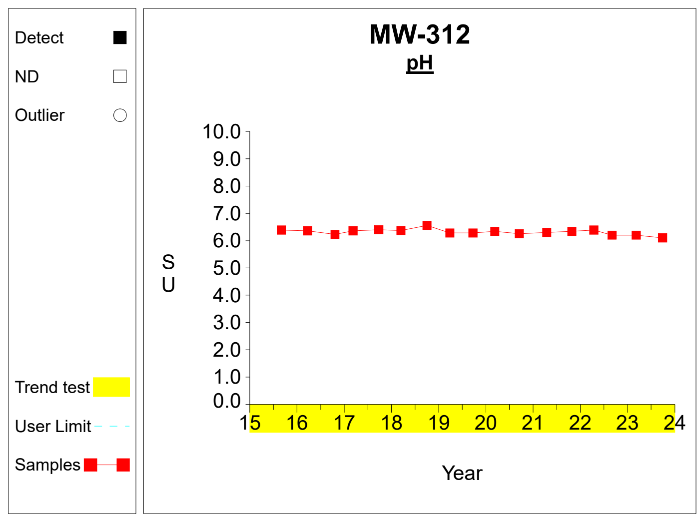
Graph 26



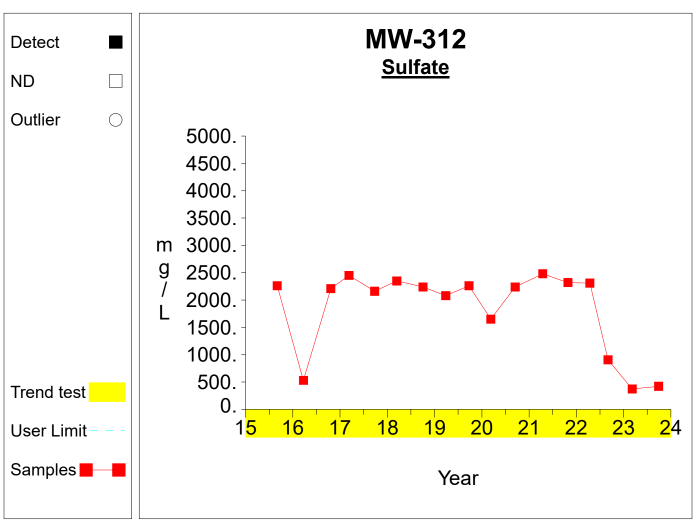
Graph 27



Graph 28

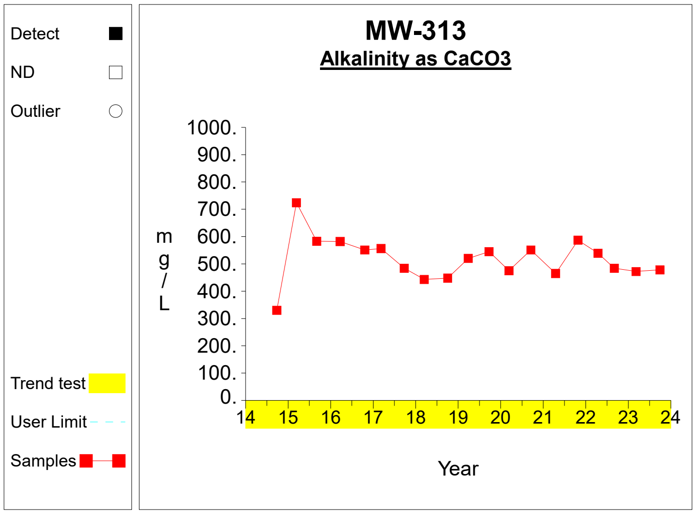


Graph 29

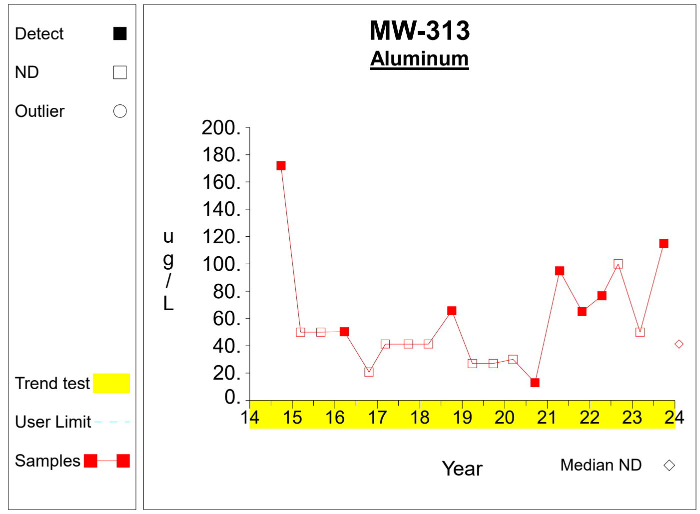


Graph 30

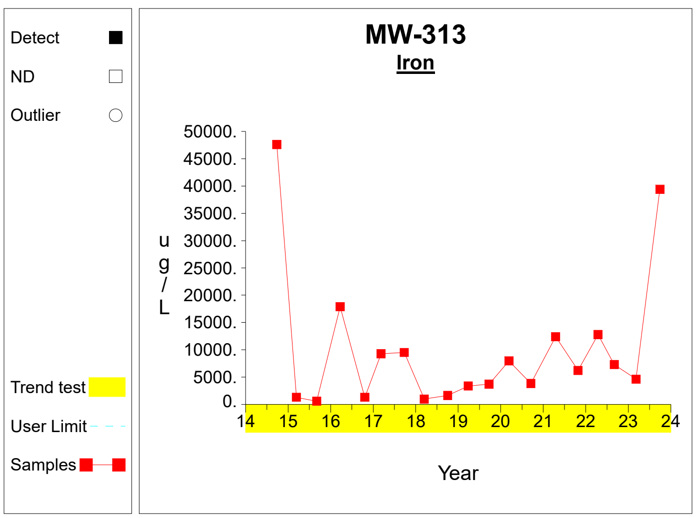
Time Series



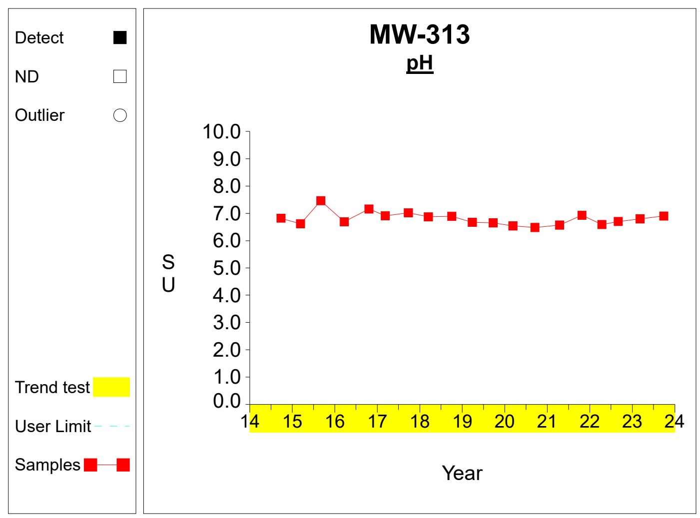
Graph 31



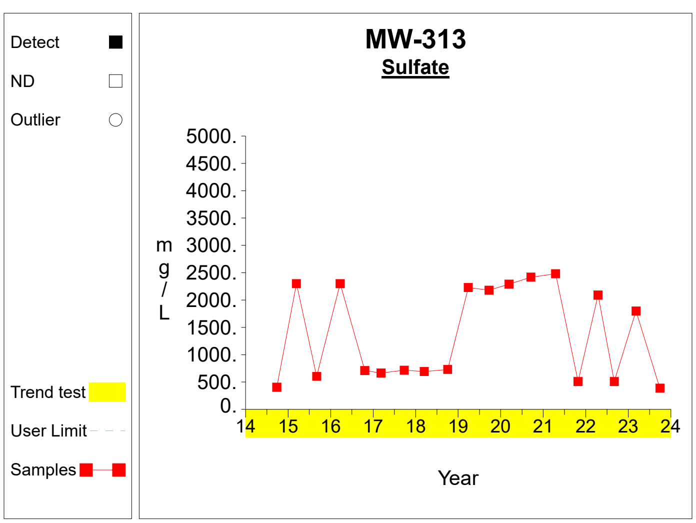
Graph 32



Graph 33

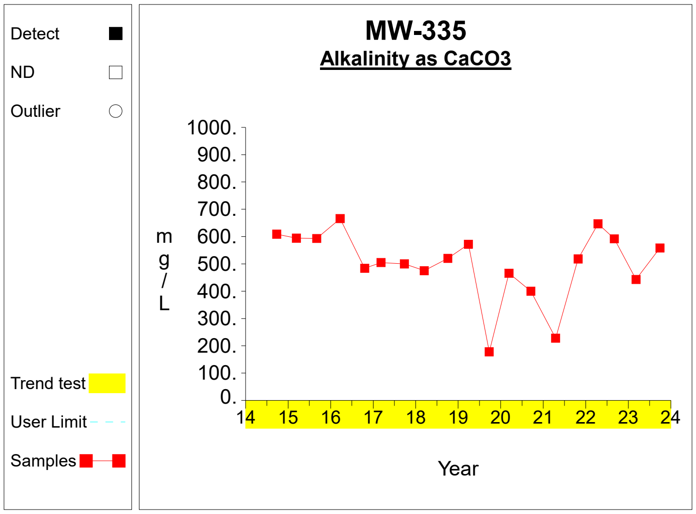


Graph 34

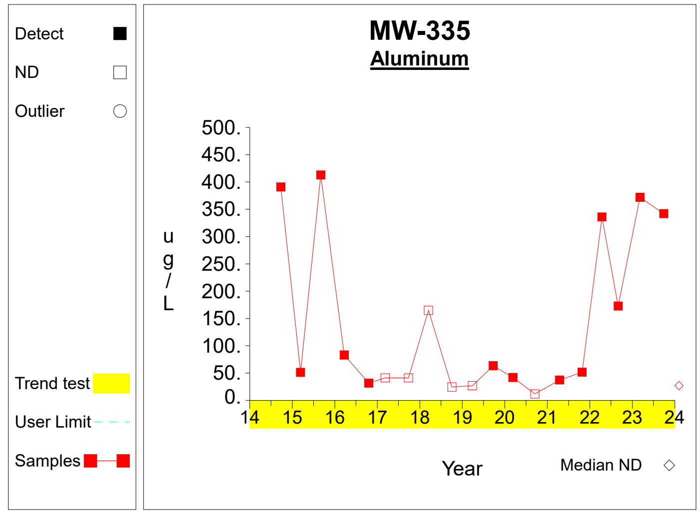


Graph 35

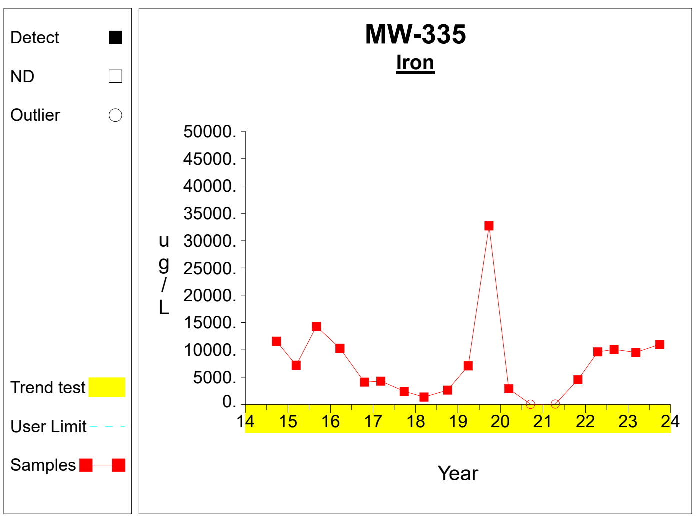
Time Series



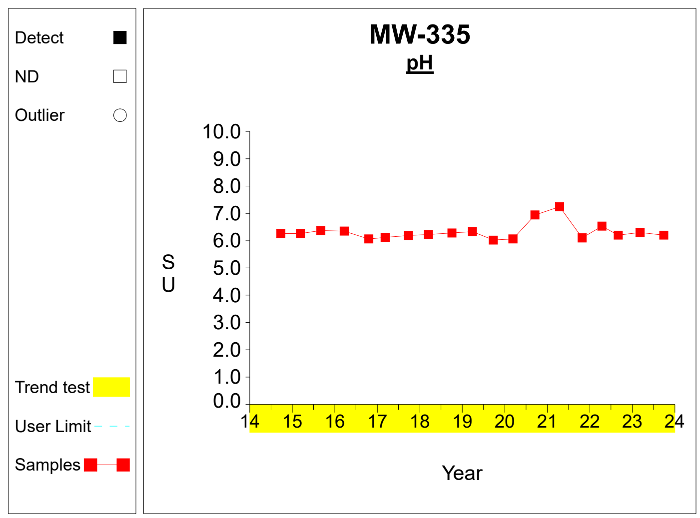
Graph 36



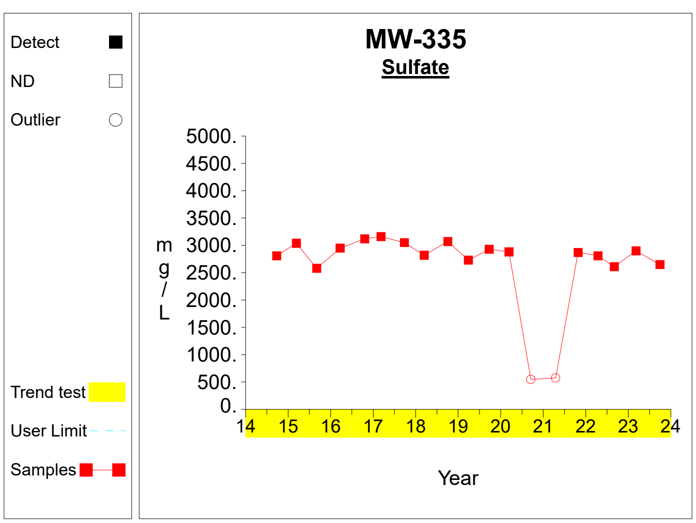
Graph 37



Graph 38

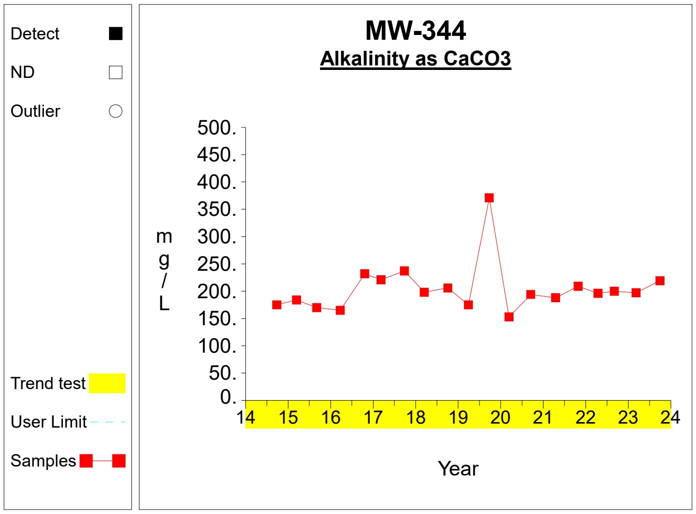


Graph 39



Graph 40

Time Series



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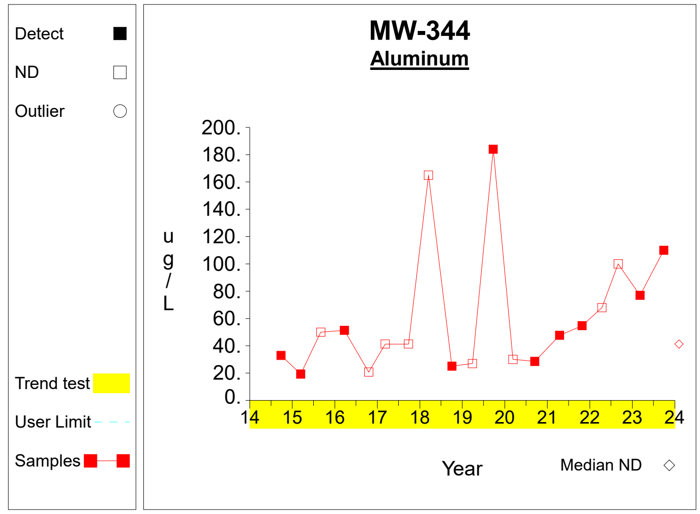
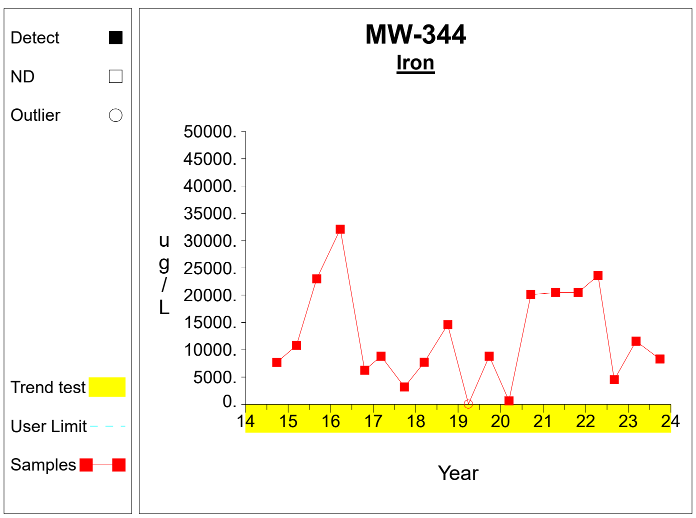
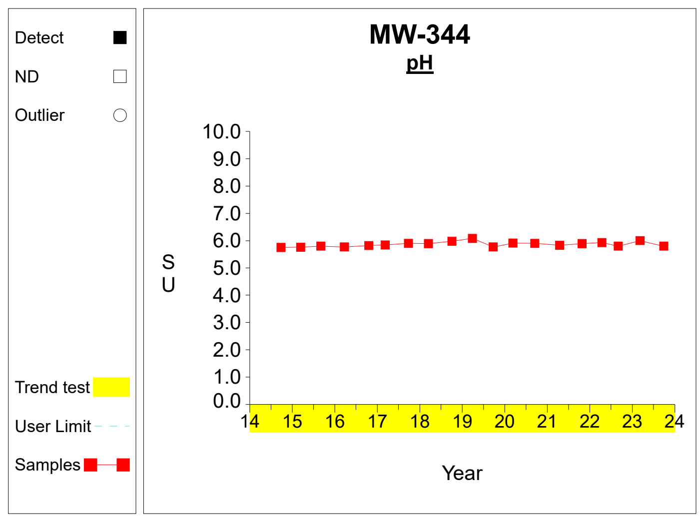


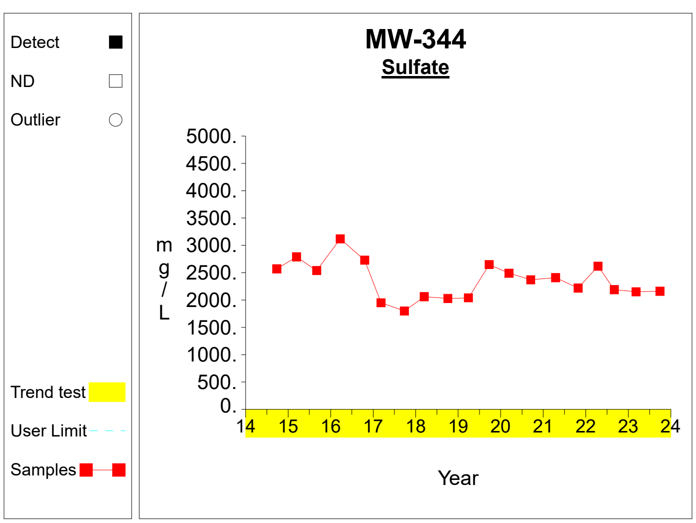
Graph 42



Graph 43

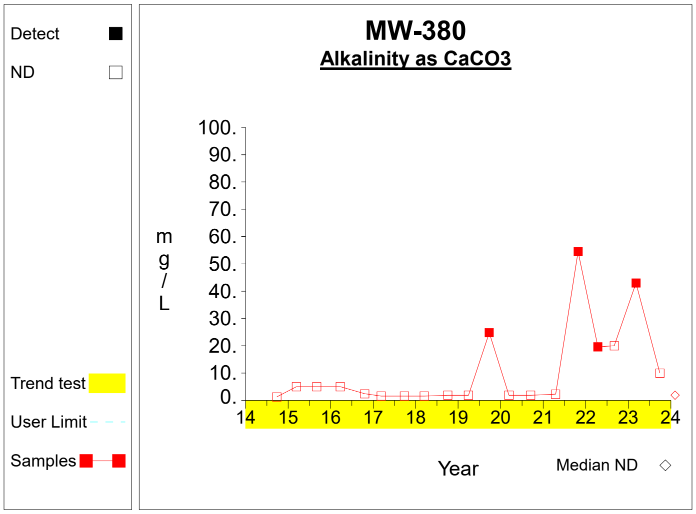


Graph 44

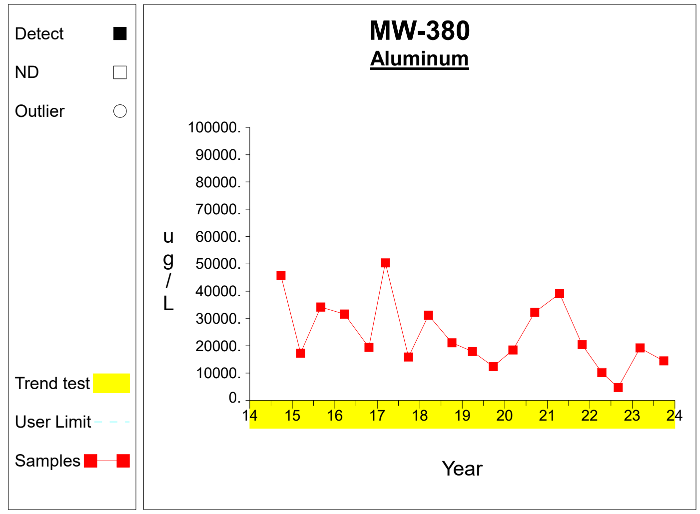


Graph 45

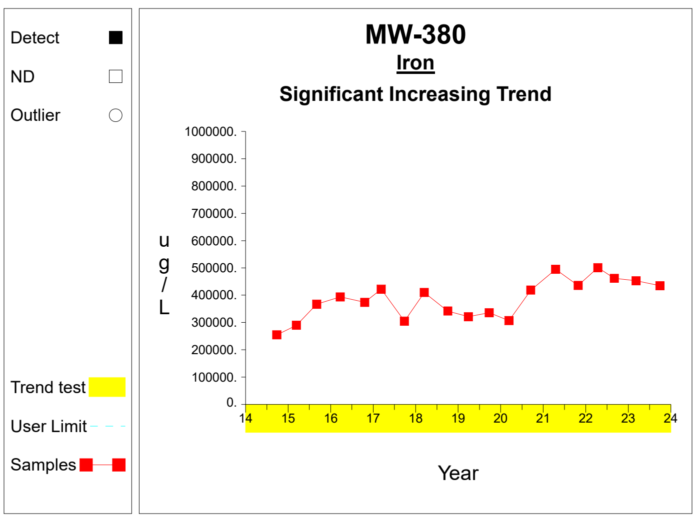
Time Series



Graph 46



Graph 47



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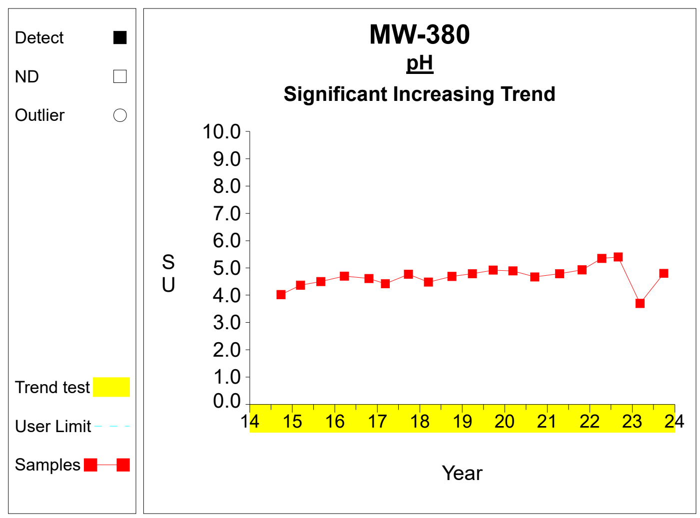
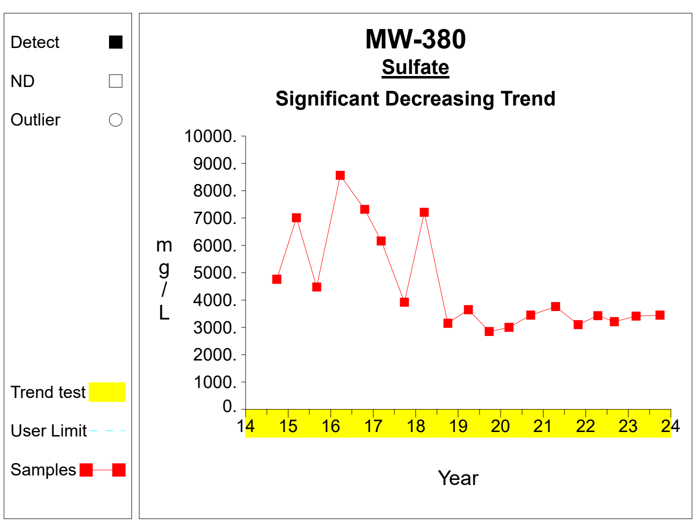
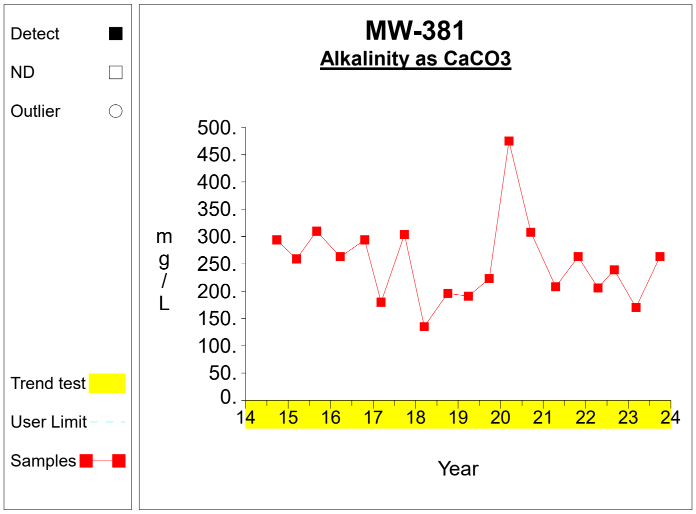


Graph 49



Graph 50

Time Series



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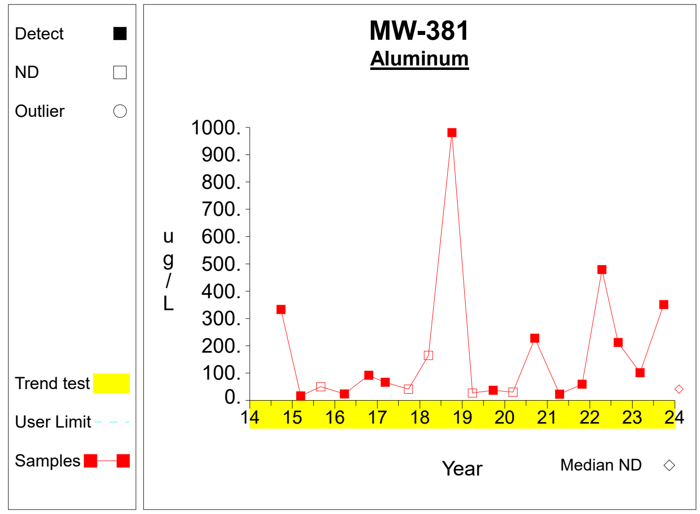
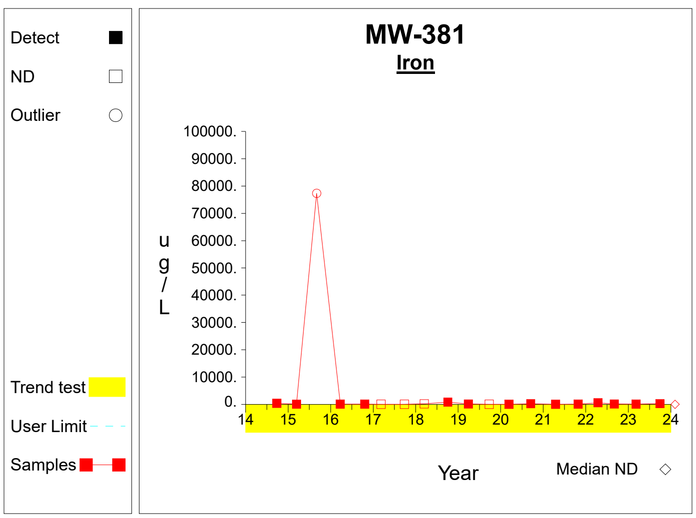
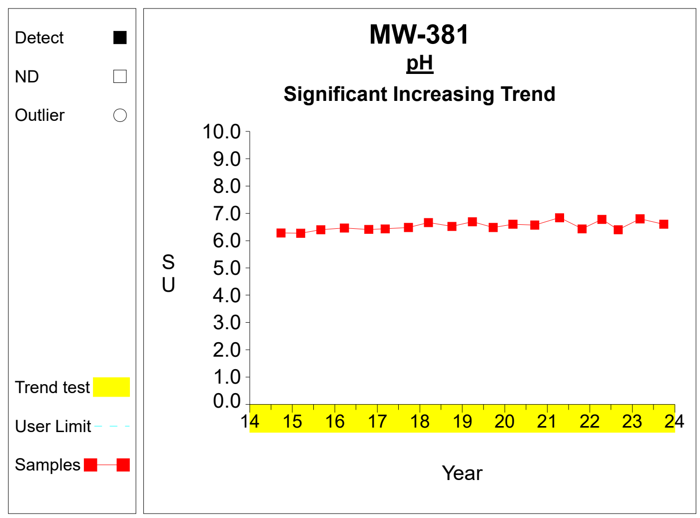


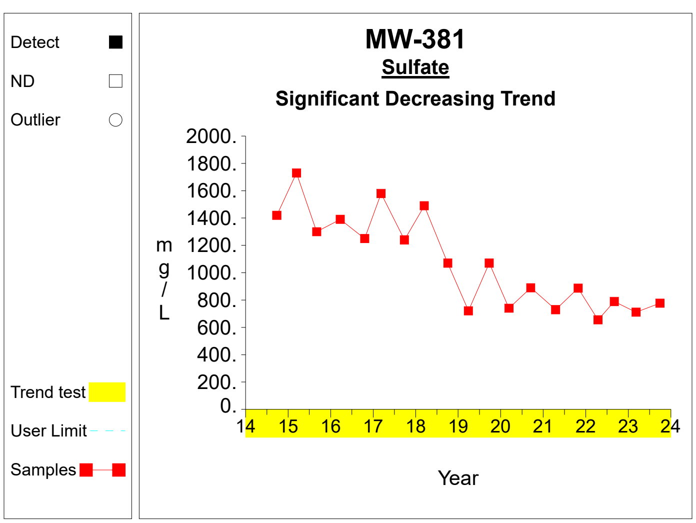
Graph 52



Graph 53

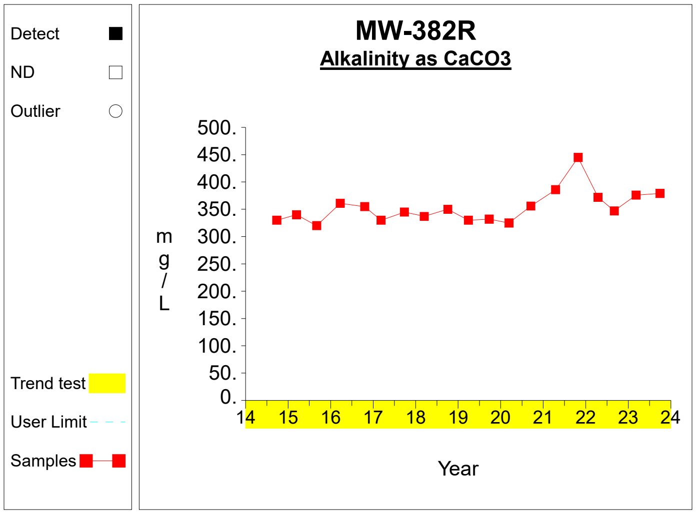


Graph 54



Graph 55

Time Series



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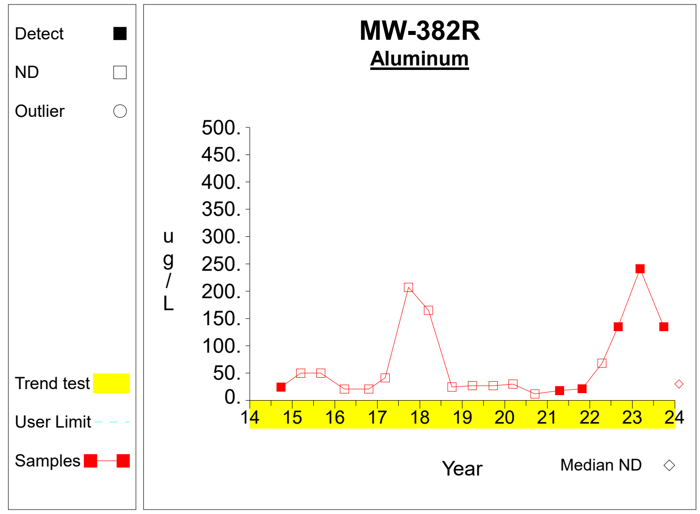

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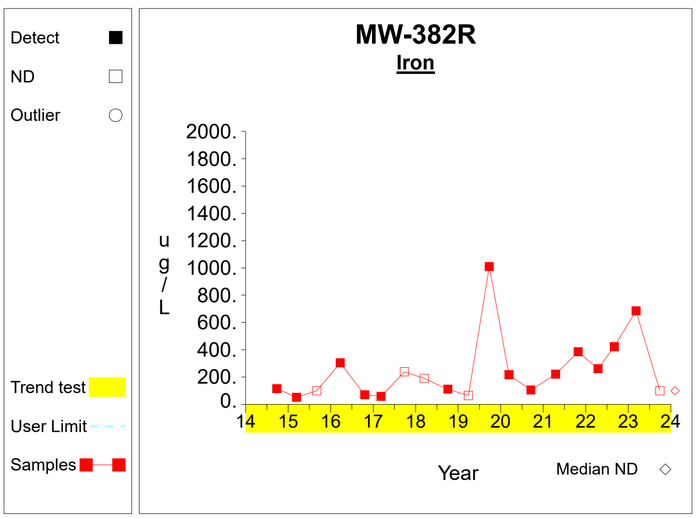

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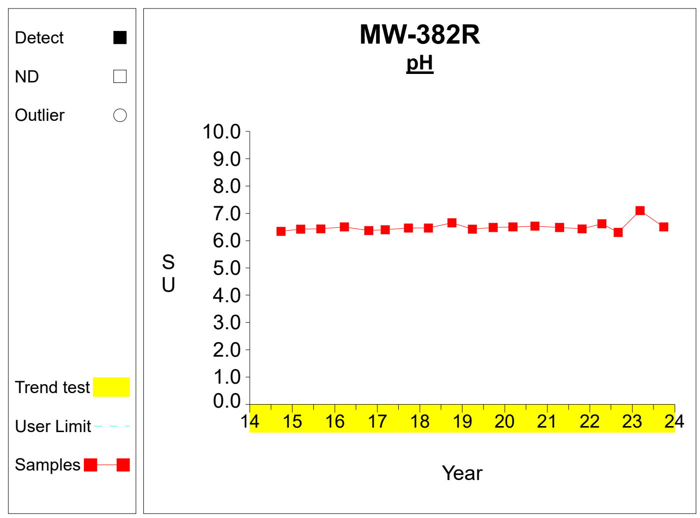
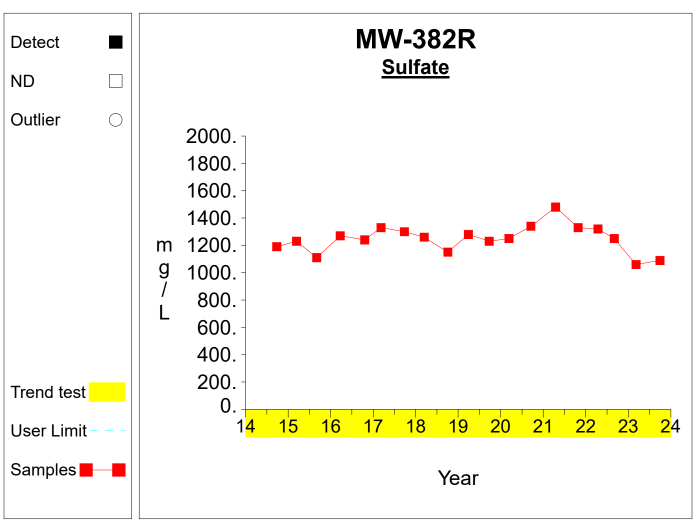
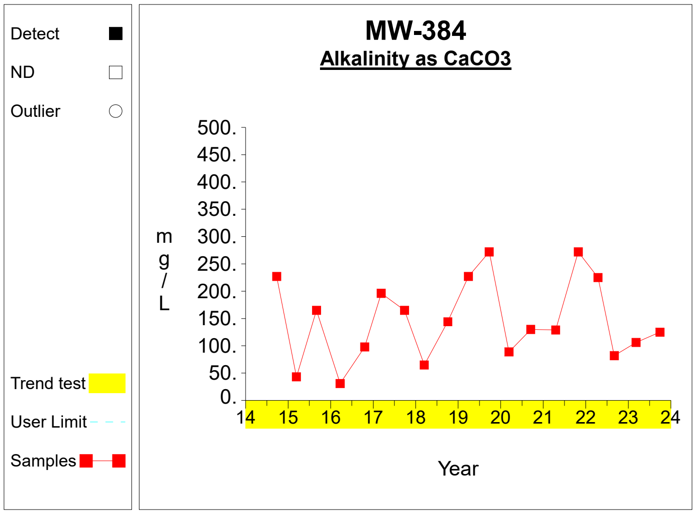


Graph 59



Graph 60

Time Series



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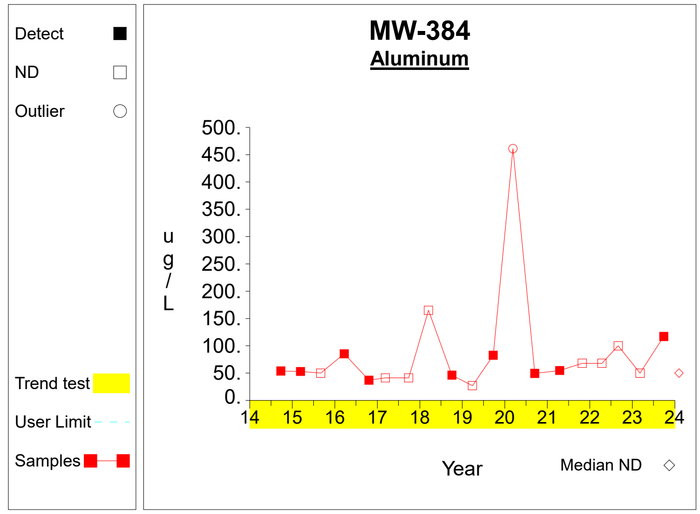
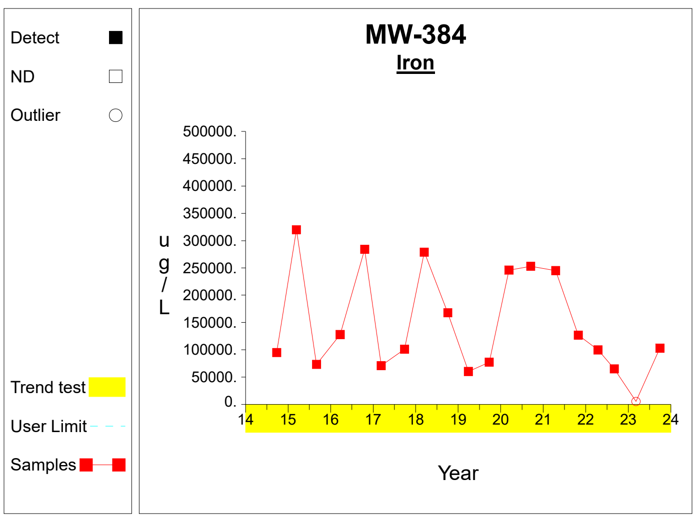


Graph 62



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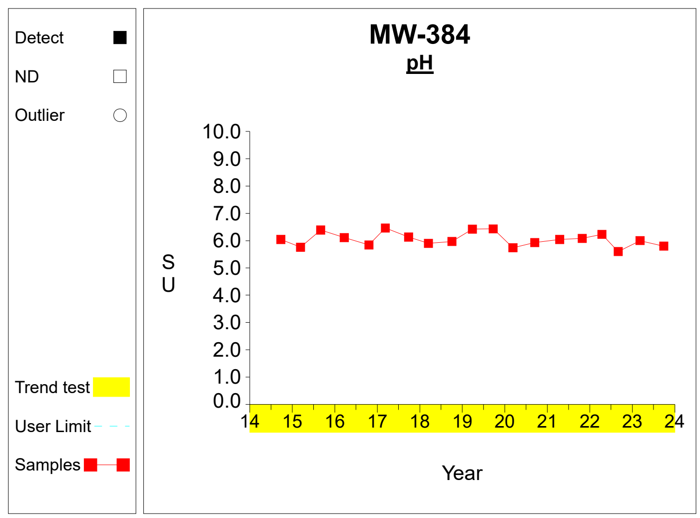

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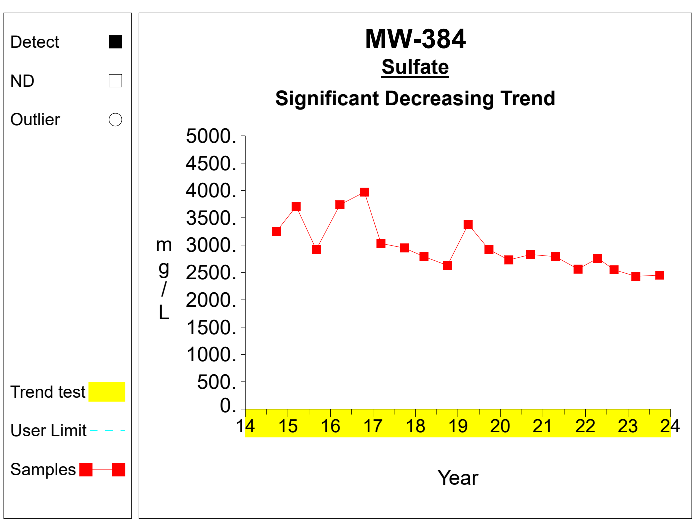
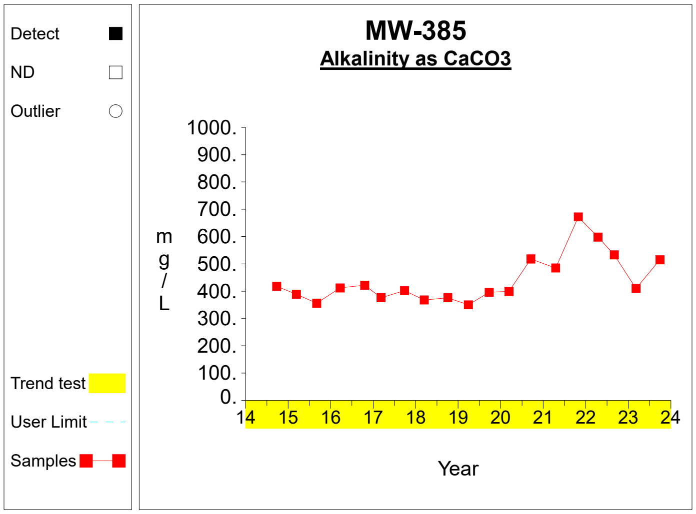


Graph 65

Time Series



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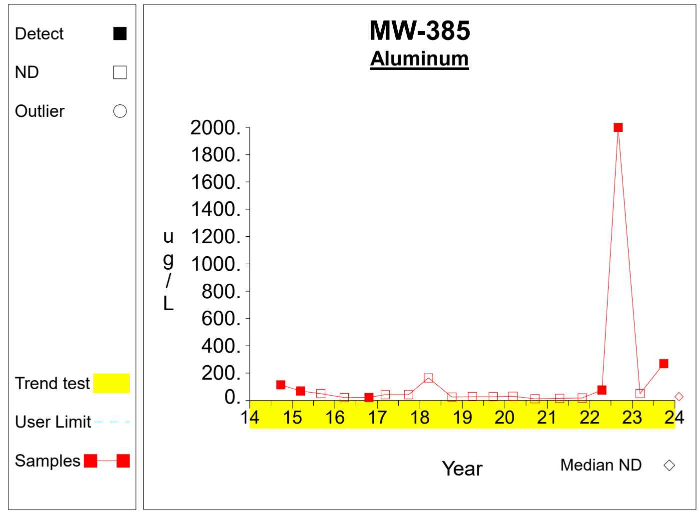

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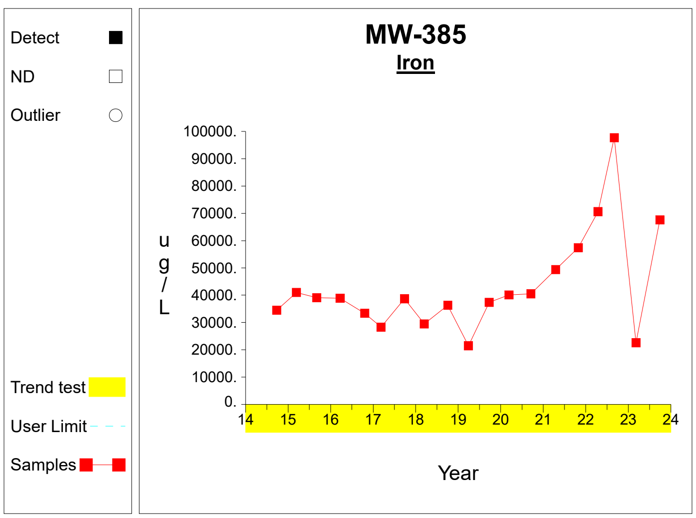

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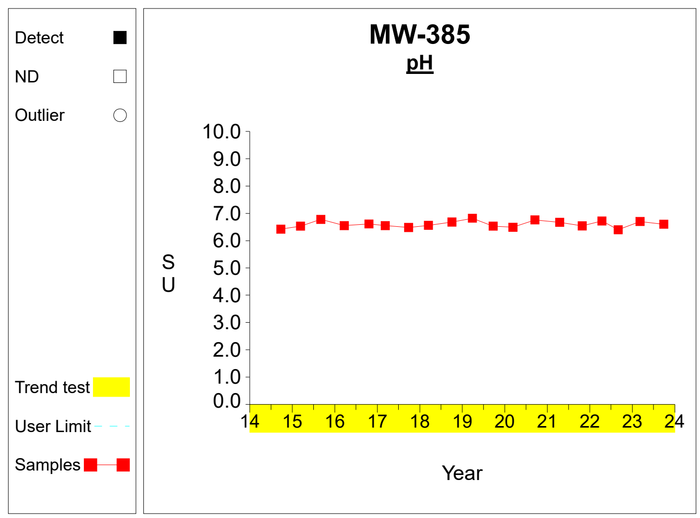
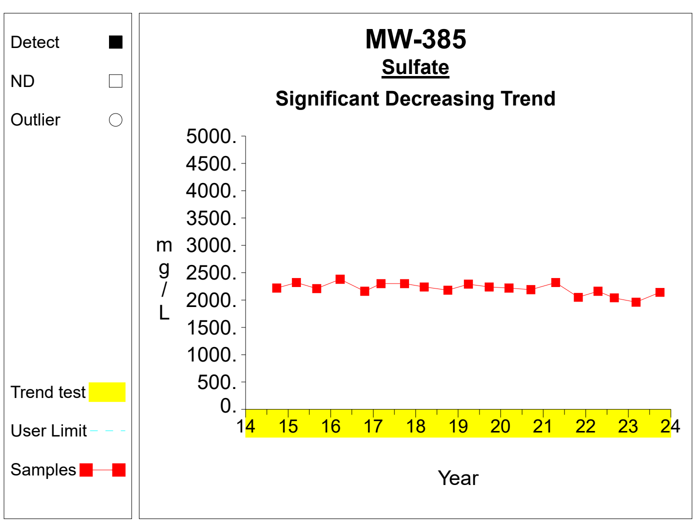
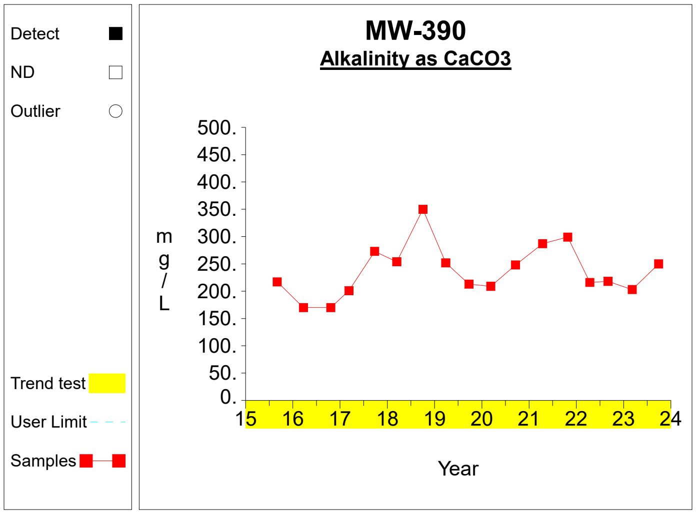


Graph 69



Graph 70

Time Series



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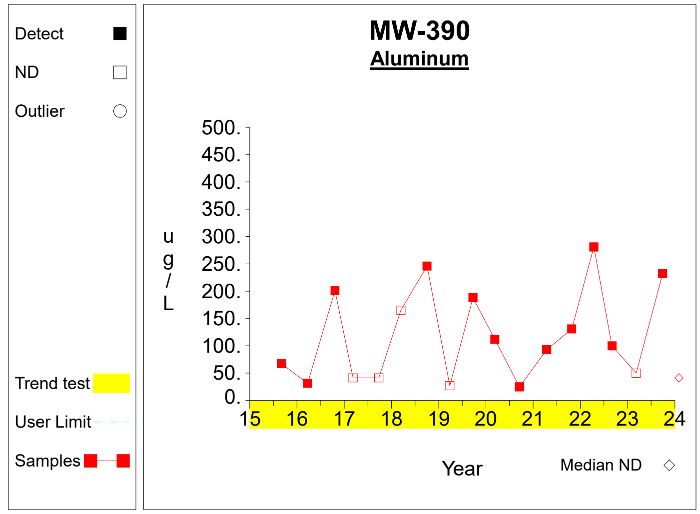

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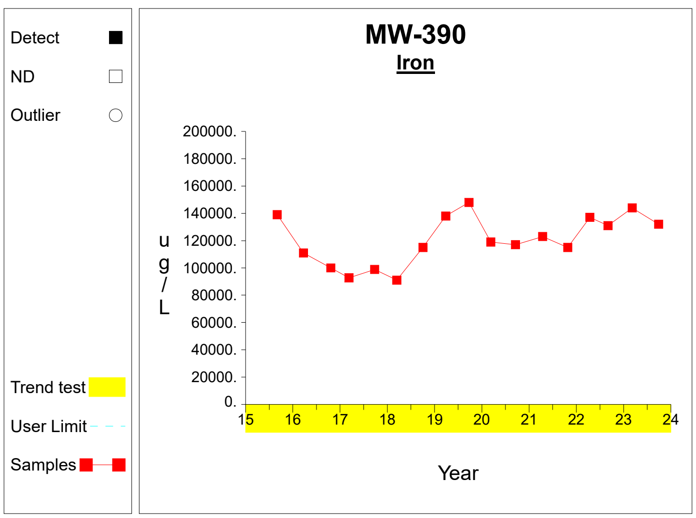

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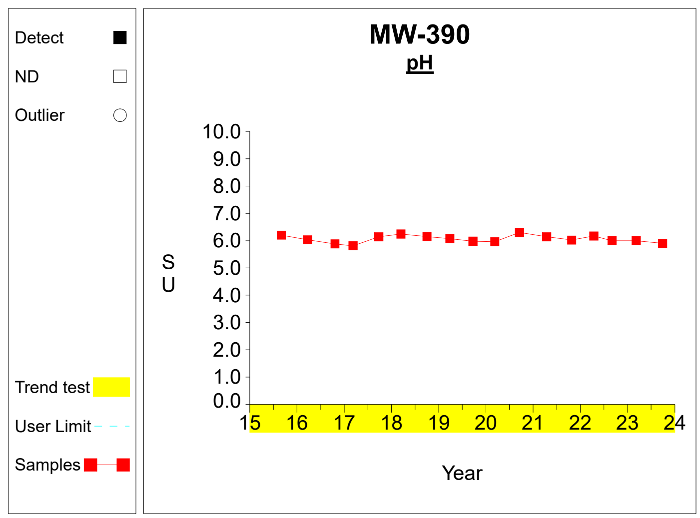

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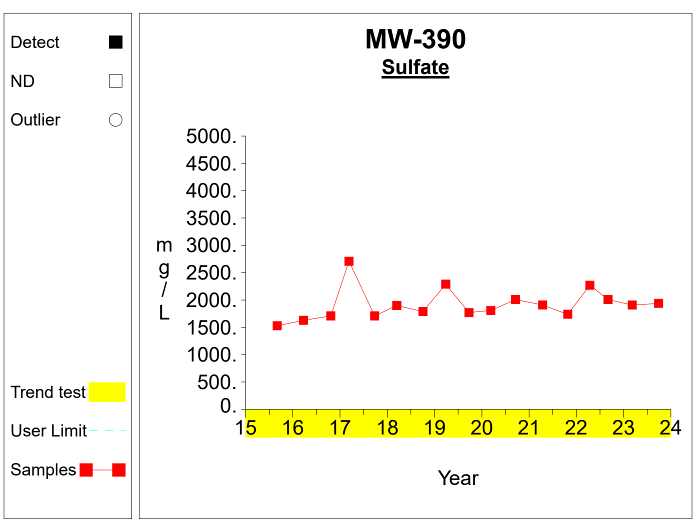
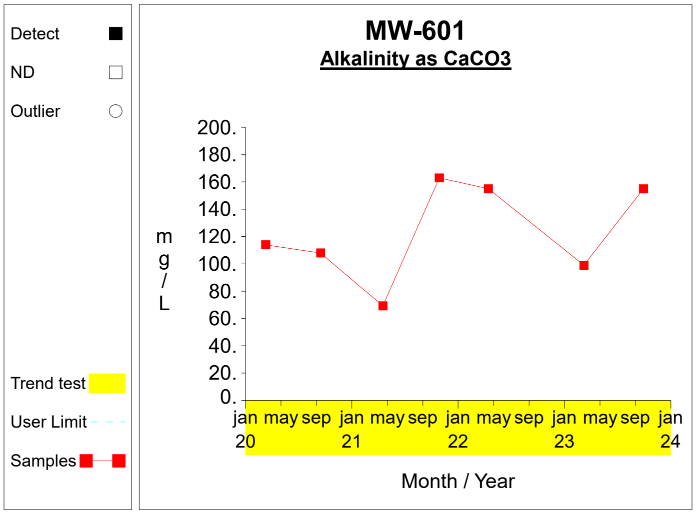


Graph 75

Time Series



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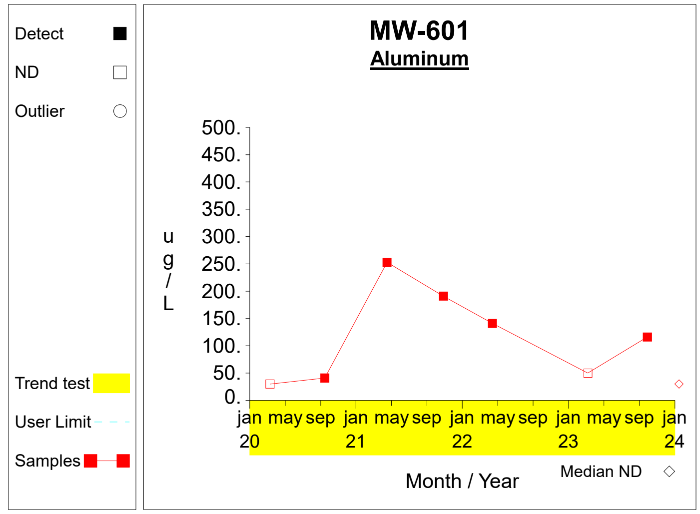

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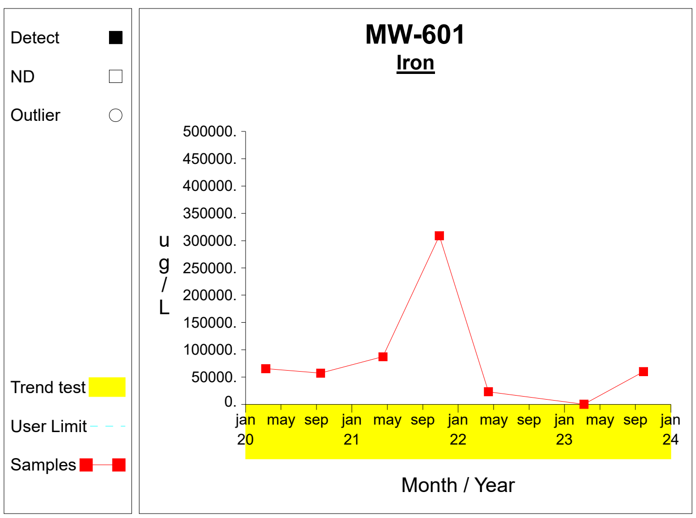

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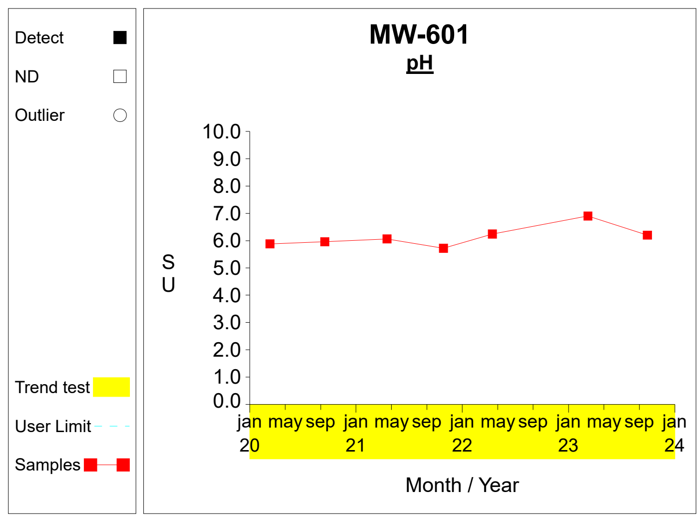

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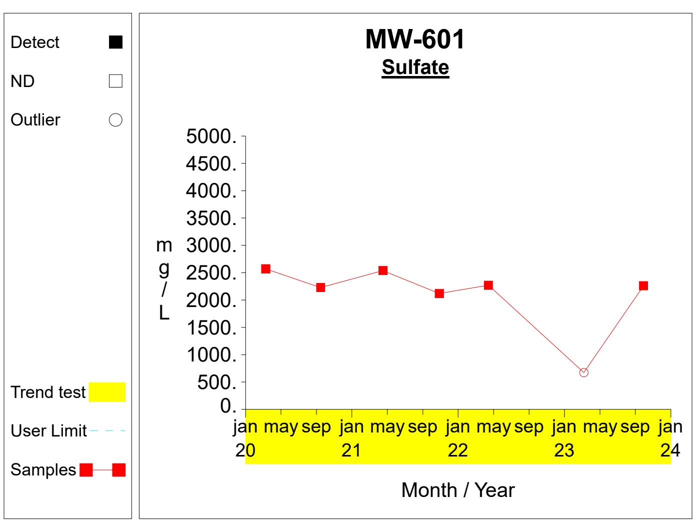
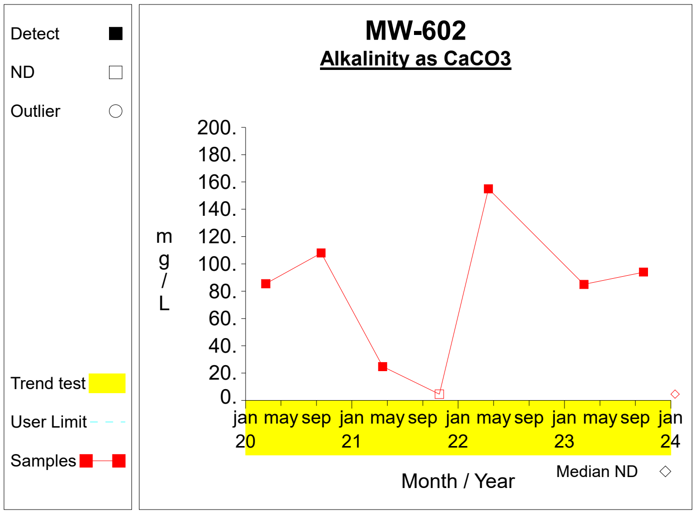


Graph 80

Time Series



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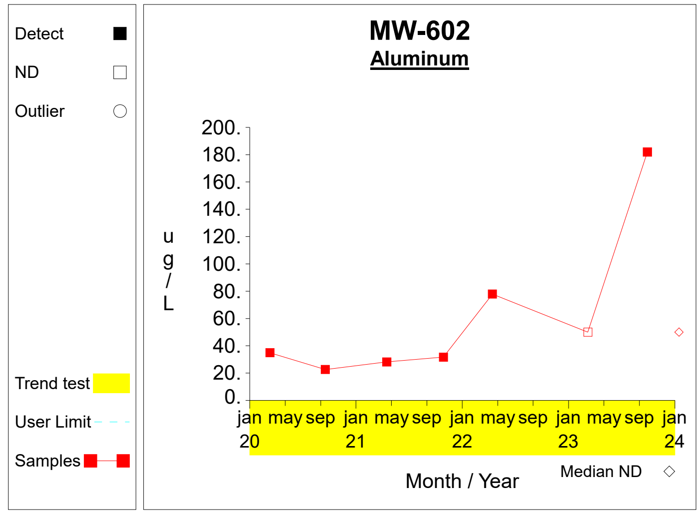

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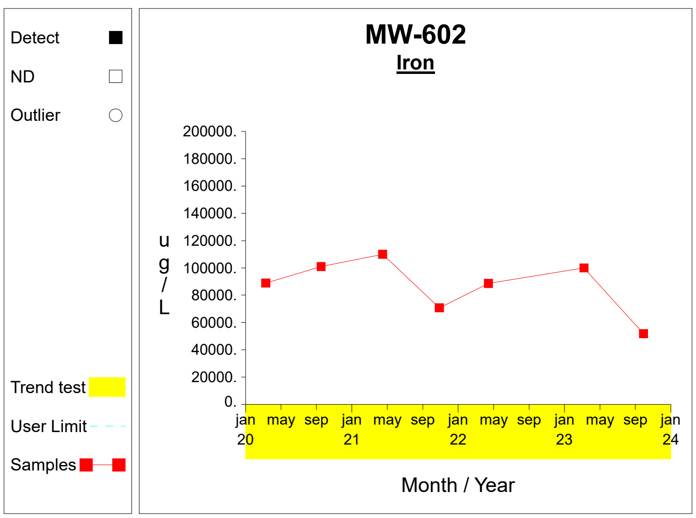
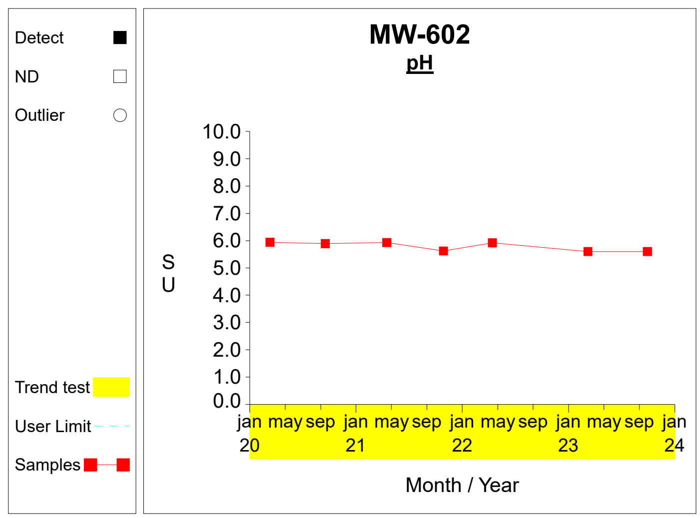


Graph 83



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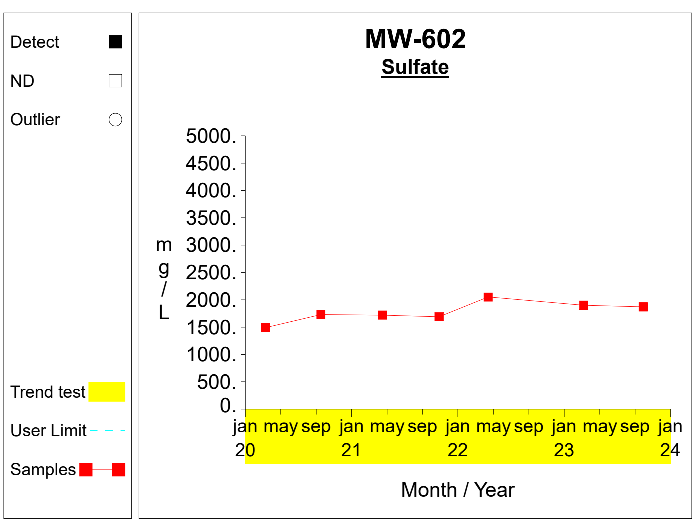
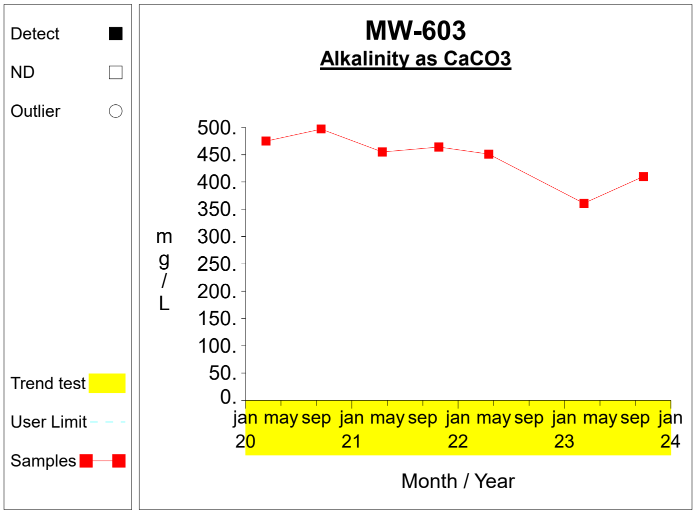
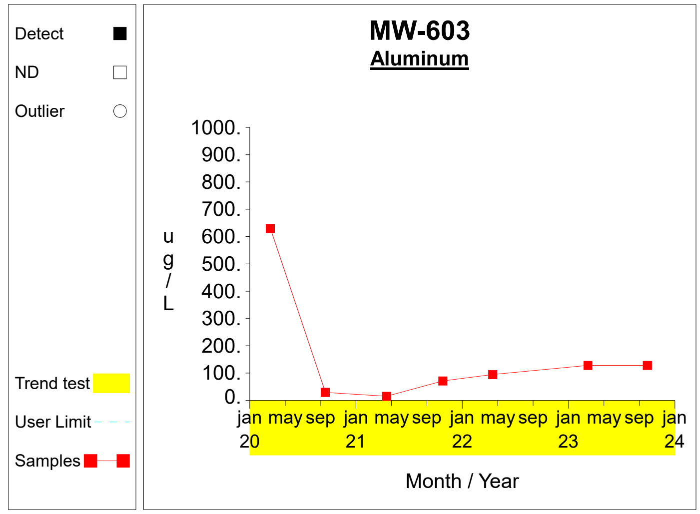


Graph 85

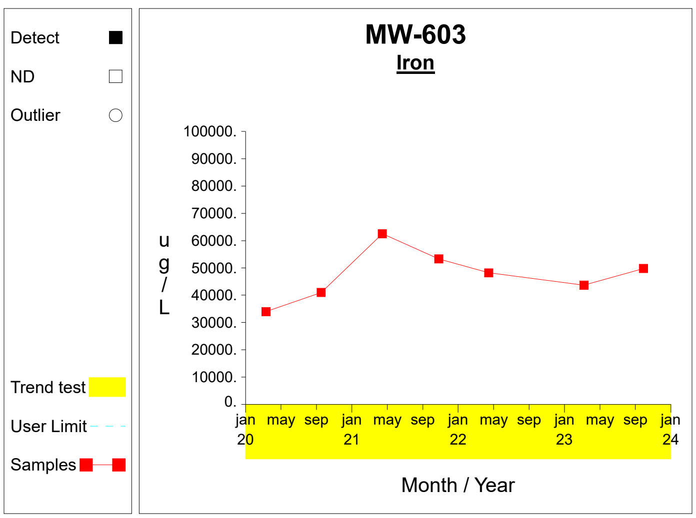
Time Series



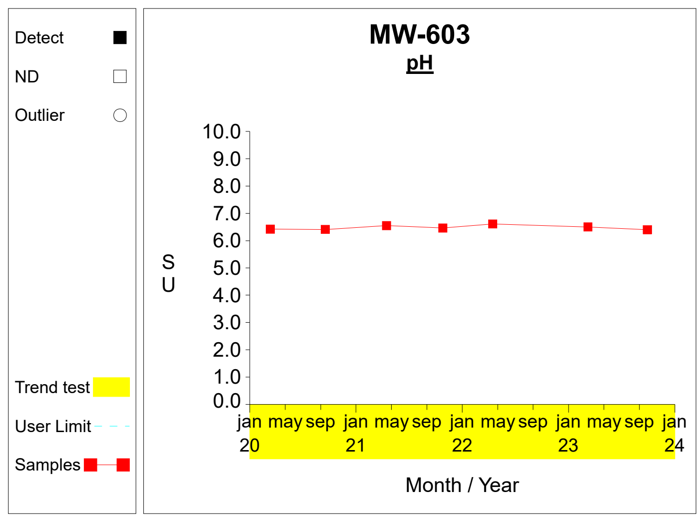
Graph 86



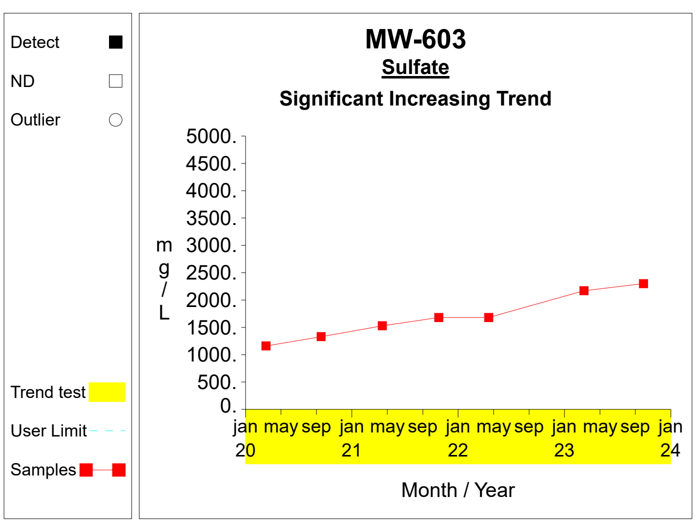
Graph 87



Graph 88



Graph 89



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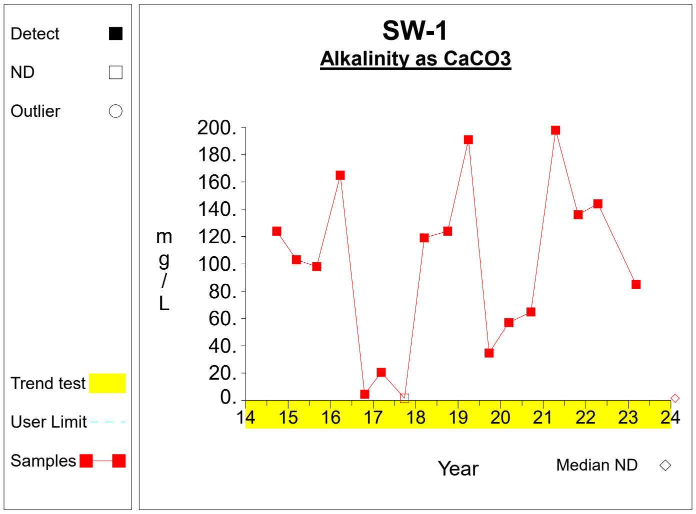
Time Series



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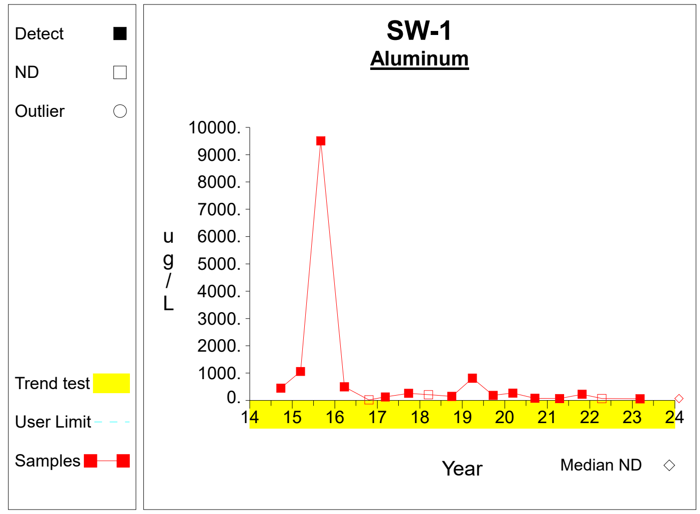

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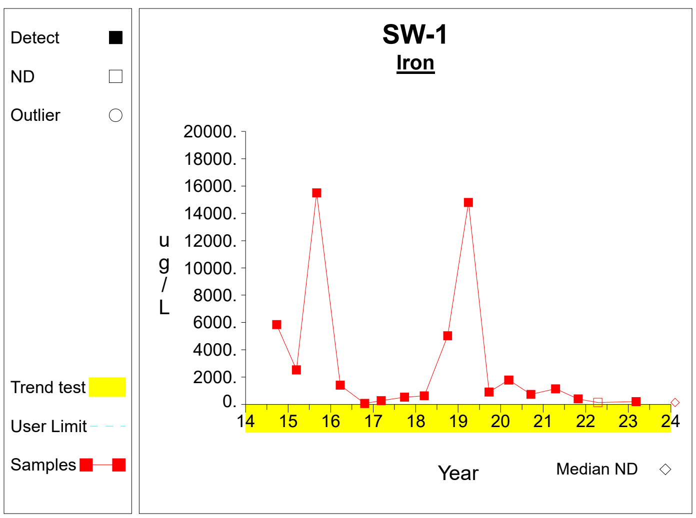

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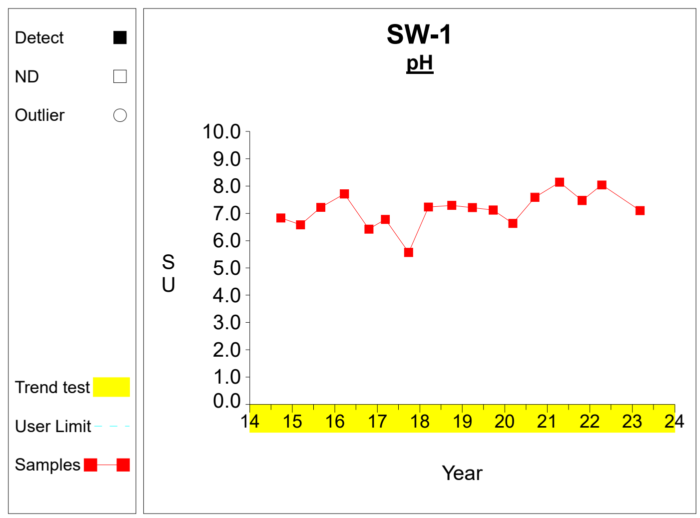
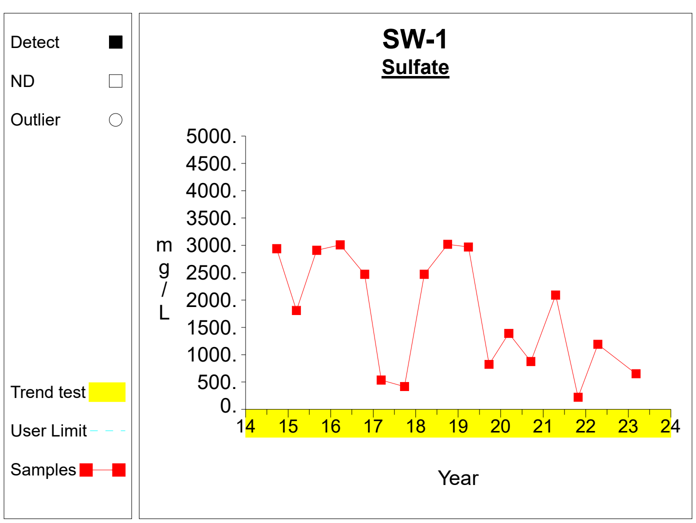
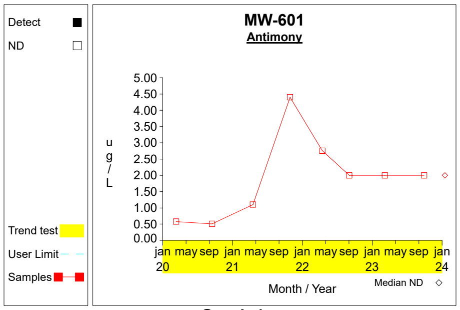


Graph 94

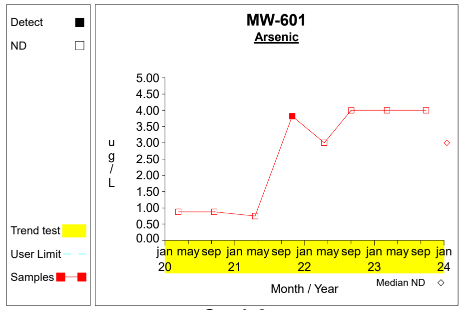


Graph 95

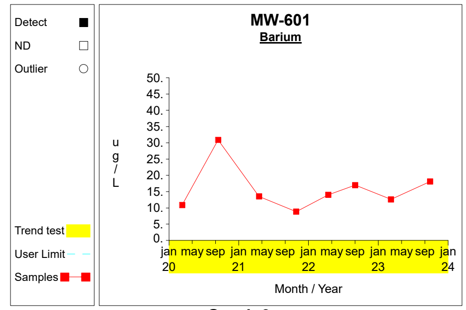
Time Series



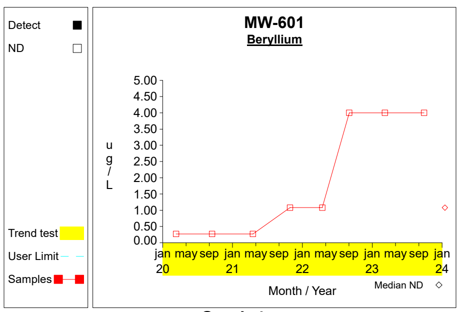
Graph 1



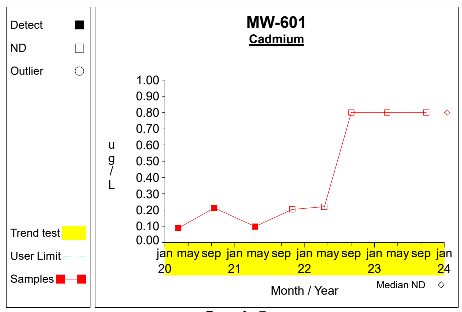
Graph 2



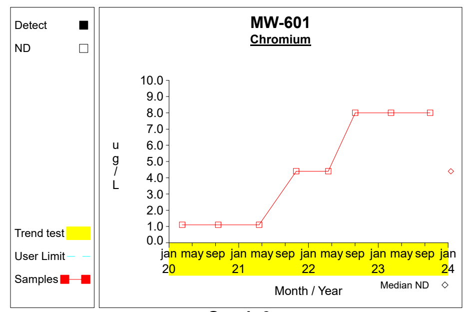
Graph 3



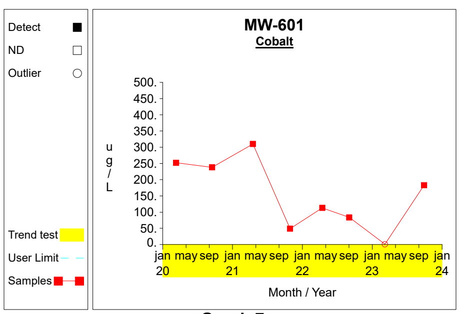
Graph 4



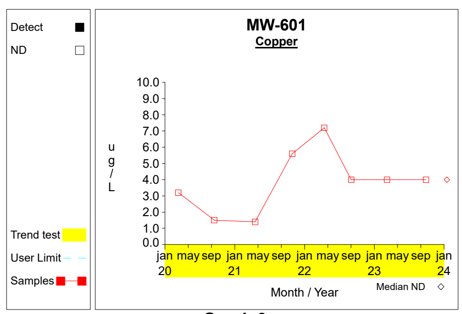
Graph 5



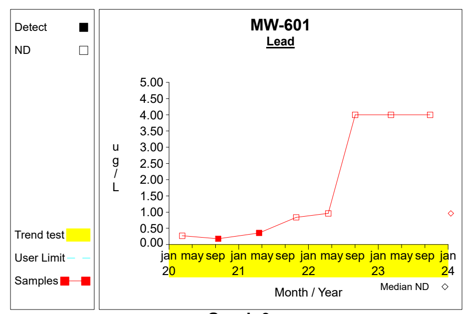
Graph 6



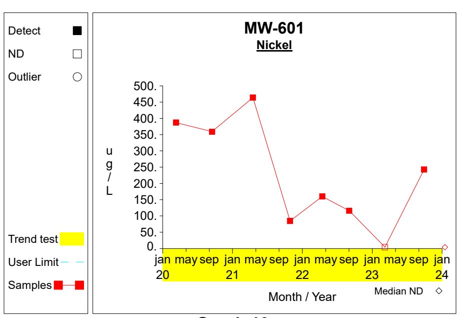
Graph 7



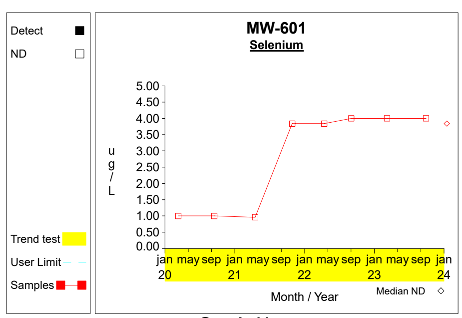
Graph 8



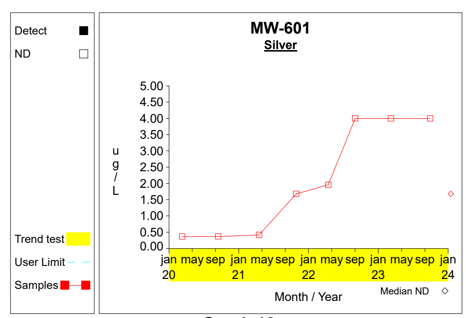
Graph 9



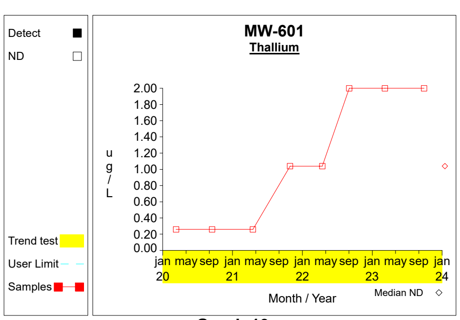
Graph 10



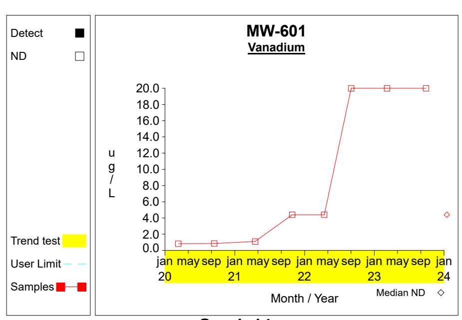
Graph 11



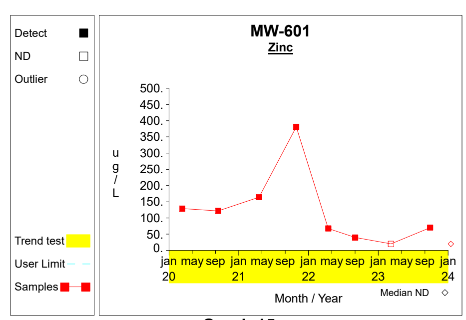
Graph 12



Graph 13

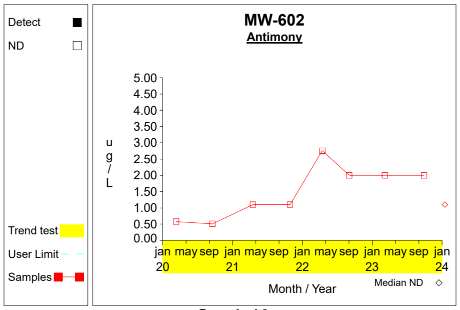


Graph 14

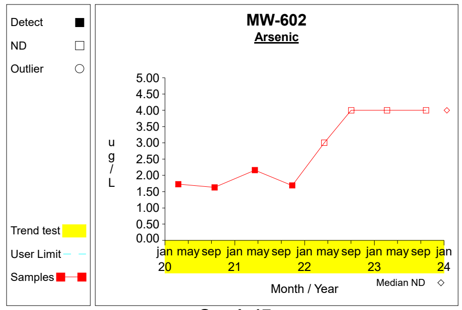


Graph 15

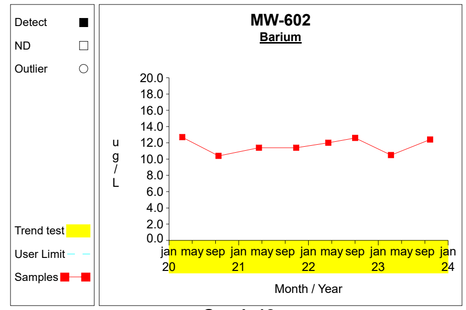
Time Series



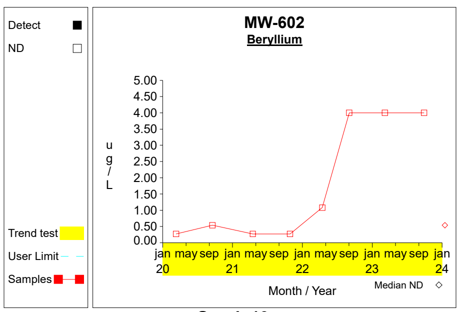
Graph 16



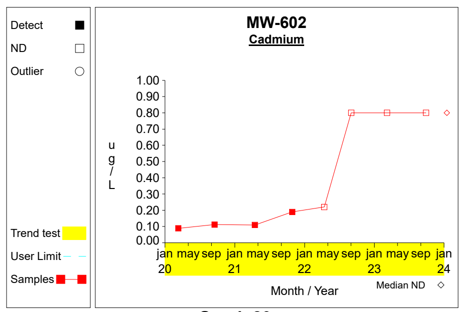
Graph 17



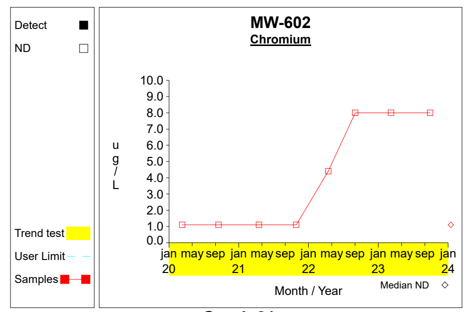
Graph 18



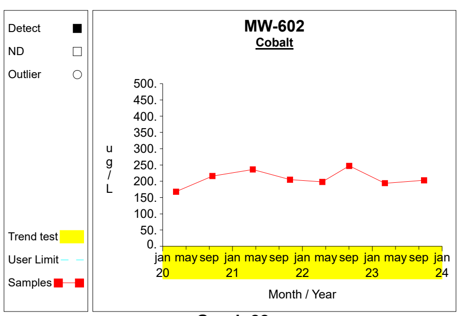
Graph 19



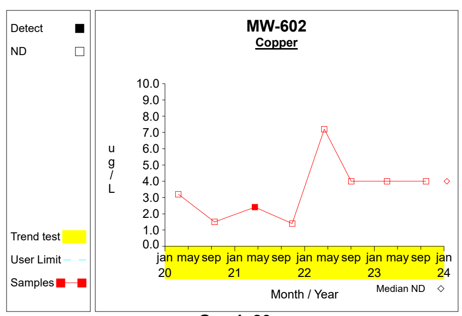
Graph 20



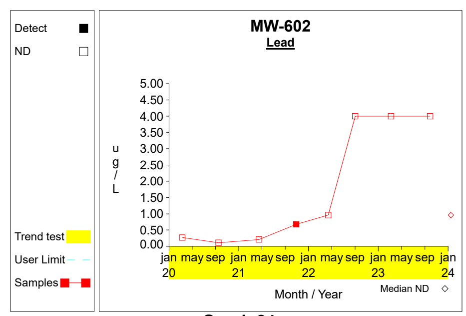
Graph 21



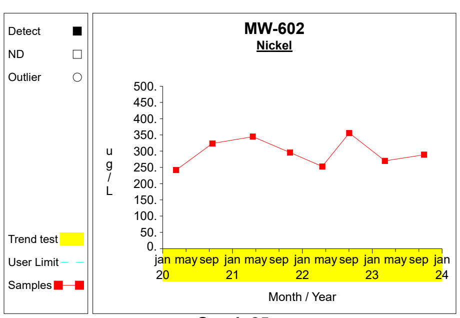
Graph 22



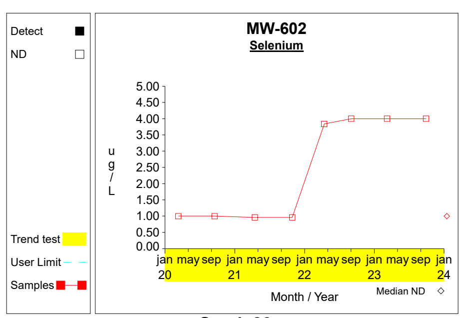
Graph 23



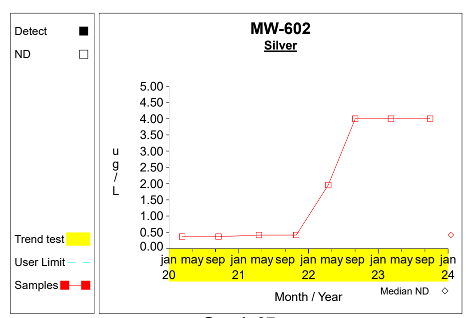
Graph 24



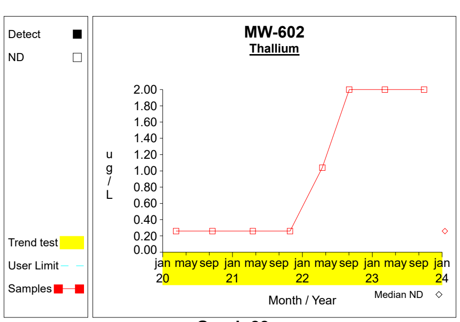
Graph 25



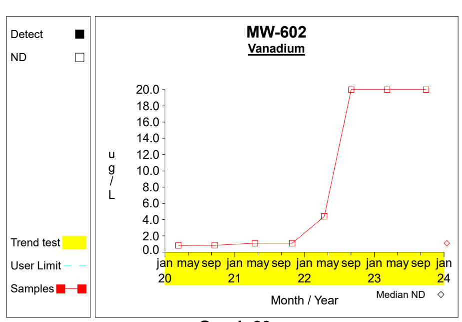
Graph 26



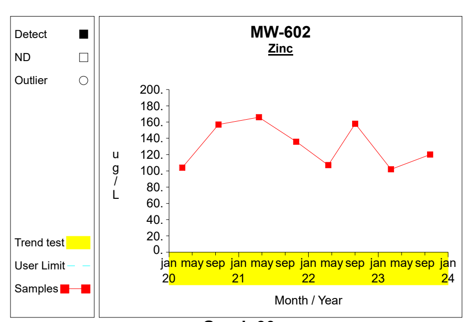
Graph 27



Graph 28



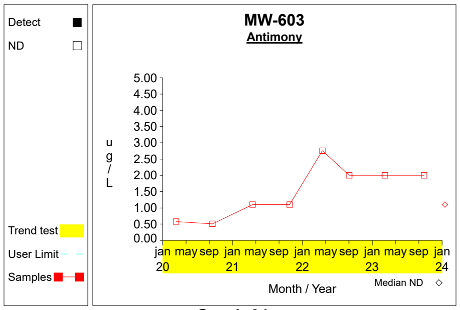
Graph 29



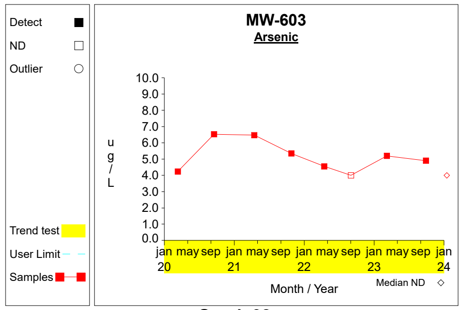
Graph 30

Prepared by: Otter Creek Environmental

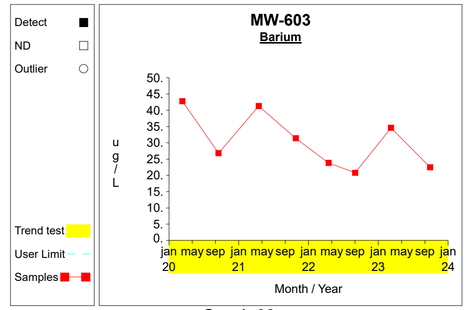
Time Series



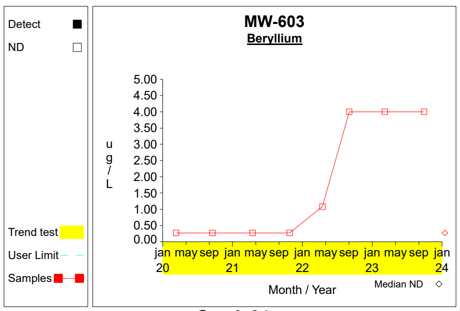
Graph 31



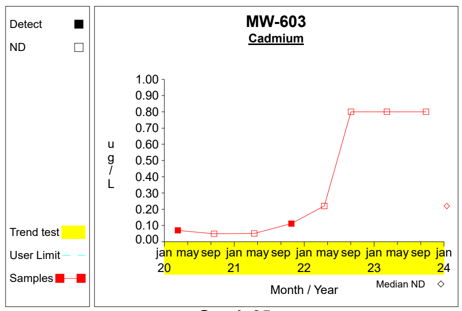
Graph 32



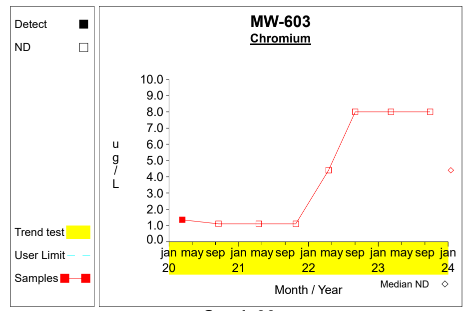
Graph 33



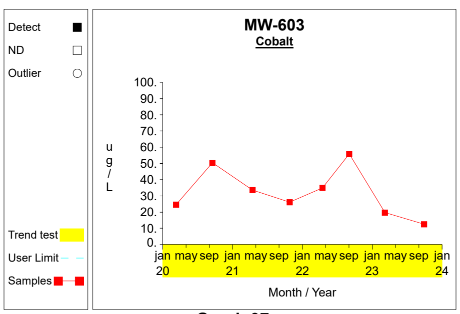
Graph 34



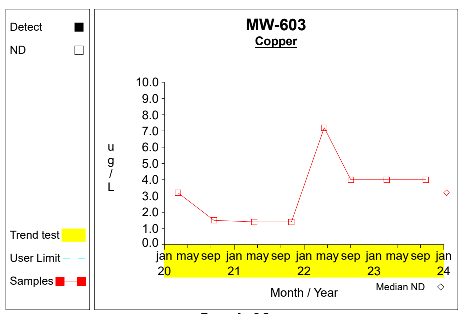
Graph 35



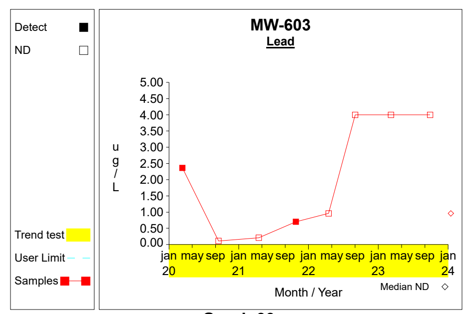
Graph 36



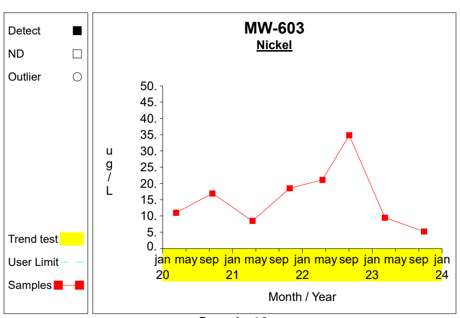
Graph 37



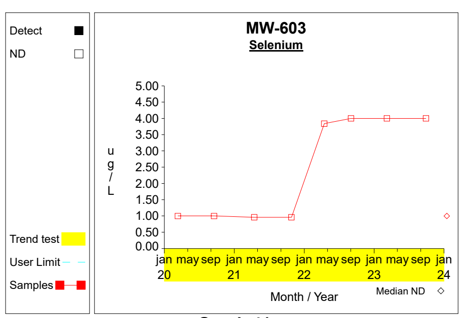
Graph 38



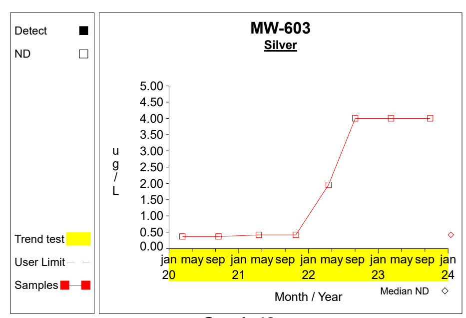
Graph 39



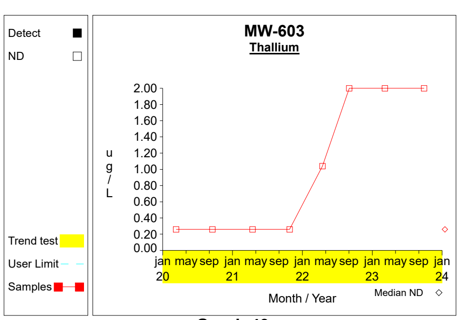
Graph 40



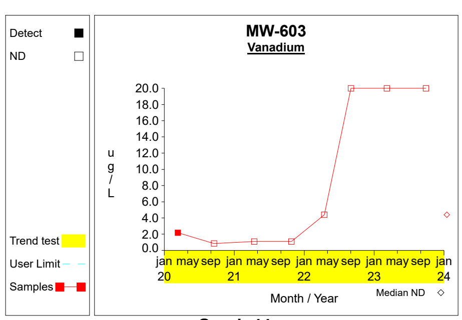
Graph 41



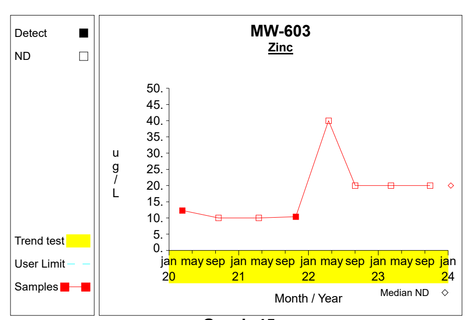
Graph 42



Graph 43



Graph 44



Graph 45

Appendix D

Laboratory Reports for Reporting Period

With Chain of Custody

Keystone LABORATORIES A Microbac Company

ANALYTICAL REPORT

March 19, 2023

Work Order: 1GC0672

Report To	Work Order Information
Todd Whipple HLW Engineering PO Box 314 Story City, IA 50248	Date Received: 3/7/2023 10:00:00AM Collector: Whipple, Todd Phone: (515) 733-4144 PO Number: Spring 2023

Project: SCISWA - New Regs

Project Number: 6009

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0672-01 MW-307				Matrix: Water	Collected: 03/06/23 08:13		
Acrylonitrile	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
Surrogate: Dibromofluoromethane	*111 %*			*80-126*	LNH	03/10/23 1:23	
Surrogate: 1,2-Dichloroethane-d4	*133 %*			*63-138*	LNH	03/10/23 1:23	
Surrogate: Toluene-d8	*97.5 %*			*87-116*	LNH	03/10/23 1:23	
Surrogate: 4-Bromofluorobenzene	*109 %*			*85-111*	LNH	03/10/23 1:23	
Chloromethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
Vinyl Chloride	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
Bromomethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
Chloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
Trichlorofluoromethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
1,1-Dichloroethylene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
Acetone	<10.0 ug/L	10.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
Methyl Iodide	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
Carbon Disulfide	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
Methylene Chloride	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
trans-1,2-Dichloroethylene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
1,1-Dichloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
Vinyl Acetate	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
cis-1,2-Dichloroethylene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
2-Butanone (MEK)	<10.0 ug/L	10.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
Bromochloromethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
Chloroform	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
1,1,1-Trichloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
Carbon Tetrachloride	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
Benzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
1,2-Dichloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
Trichloroethylene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
1,2-Dichloropropane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

HLW Engineering
PO Box 314
Story City, IA 50248

Work Order: 1GC0672

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0672-01 MW-307				Matrix: Water		Collected: 03/06/23 08:13	
Dibromomethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
Bromodichloromethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
cis-1,3-Dichloropropene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
4-Methyl-2-pentanone (MIBK)	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
Toluene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
trans-1,3-Dichloropropene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
1,1,2-Trichloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
2-Hexanone (MBK)	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
Dibromochloromethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
1,2-Dibromoethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
Chlorobenzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
1,1,1,2-Tetrachloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
Ethylbenzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
Xylenes, total	<2.0 ug/L	2.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
Styrene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
Bromoform	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
1,2,3-Trichloropropane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
trans-1,4-Dichloro-2-butene	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
1,1,2,2-Tetrachloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
1,4-Dichlorobenzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
1,2-Dichlorobenzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
1,2-Dibromo-3-chloropropane	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 1:23	
Surrogate: Dibromofluoromethane	*111 %*			*75-136*	LNH	03/10/23 1:23	
Surrogate: 1,2-Dichloroethane-d4	*133 %*			*61-142*	LNH	03/10/23 1:23	
Surrogate: Toluene-d8	*97.5 %*			*82-121*	LNH	03/10/23 1:23	
Surrogate: 4-Bromofluorobenzene	*109 %*			*80-116*	LNH	03/10/23 1:23	
Silver, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/14/23 23:03	
Arsenic, total	**0.0043 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/14/23 23:03	
Barium, total	**0.0089 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/14/23 23:03	
Beryllium, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/14/23 23:03	
Cadmium, total	<0.0008 mg/L	0.0008	1GC0648	EPA 6020A	RVV	03/14/23 23:03	
Cobalt, total	**0.0485 mg/L**	**0.0004**	1GC0648	EPA 6020A	RVV	03/14/23 23:03	
Chromium, total	<0.0080 mg/L	0.0080	1GC0648	EPA 6020A	RVV	03/14/23 23:03	
Copper, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/14/23 23:03	
Nickel, total	**0.0837 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/14/23 23:03	
Lead, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/14/23 23:03	
Antimony, total	<0.0020 mg/L	0.0020	1GC0648	EPA 6020A	RVV	03/14/23 23:03	
Selenium, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/14/23 23:03	

Keystone LABORATORIES
A Microbac Company

HLW Engineering
PO Box 314
Story City, IA 50248

Work Order: 1GC0672

Analyte		Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0672-01	MW-307				Matrix: Water	Collected:	03/06/23 08:13	
Thallium, total		<0.0020 mg/L	0.0020	1GC0648	EPA 6020A	RVV	03/14/23 23:03	
Vanadium, total		<0.0200 mg/L	0.0200	1GC0648	EPA 6020A	RVV	03/14/23 23:03	
Zinc, total		**0.324 mg/L**	**0.0200**	1GC0648	EPA 6020A	RVV	03/14/23 23:03	
1GC0672-01RE1	MW-307				Matrix: Water	Collected:	03/06/23 08:13	
Tetrachloroethylene		<1.0 ug/L	1.0	1GC0576	EPA 8260B	BDF	03/11/23 23:46	
Surrogate: Dibromofluoromethane		*100 %*			*75-136*	BDF	03/11/23 23:46	
Surrogate: 1,2-Dichloroethane-d4		*101 %*			*61-142*	BDF	03/11/23 23:46	
Surrogate: Toluene-d8		*106 %*			*82-121*	BDF	03/11/23 23:46	
Surrogate: 4-Bromofluorobenzene		*97.1 %*			*80-116*	BDF	03/11/23 23:46	
1GC0672-02	MW-312				Matrix: Water	Collected:	03/06/23 11:03	
Acrylonitrile		<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
Surrogate: Dibromofluoromethane		*109 %*			*80-126*	LNH	03/10/23 1:50	
Surrogate: 1,2-Dichloroethane-d4		*134 %*			*63-138*	LNH	03/10/23 1:50	
Surrogate: Toluene-d8		*102 %*			*87-116*	LNH	03/10/23 1:50	
Surrogate: 4-Bromofluorobenzene		*110 %*			*85-111*	LNH	03/10/23 1:50	
Chloromethane		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
Vinyl Chloride		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
Bromomethane		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
Chloroethane		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
Trichlorofluoromethane		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
1,1-Dichloroethylene		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
Acetone		<10.0 ug/L	10.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
Methyl Iodide		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
Carbon Disulfide		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
Methylene Chloride		<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
trans-1,2-Dichloroethylene		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
1,1-Dichloroethane		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
Vinyl Acetate		<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
cis-1,2-Dichloroethylene		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
2-Butanone (MEK)		<10.0 ug/L	10.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
Bromochloromethane		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
Chloroform		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
1,1,1-Trichloroethane		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
Carbon Tetrachloride		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
Benzene		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
1,2-Dichloroethane		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
Trichloroethylene		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	

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PO Box 314
Story City, IA 50248

Work Order: 1GC0672

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0672-02 MW-312				Matrix: Water		Collected: 03/06/23 11:03	
1,2-Dichloropropane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
Dibromomethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
Bromodichloromethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
cis-1,3-Dichloropropene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
4-Methyl-2-pentanone (MIBK)	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
Toluene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
trans-1,3-Dichloropropene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
1,1,2-Trichloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
2-Hexanone (MBK)	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
Dibromochloromethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
1,2-Dibromoethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
Chlorobenzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
1,1,1,2-Tetrachloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
Ethylbenzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
Xylenes, total	<2.0 ug/L	2.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
Styrene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
Bromoform	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
1,2,3-Trichloropropane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
trans-1,4-Dichloro-2-butene	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
1,1,2,2-Tetrachloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
1,4-Dichlorobenzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
1,2-Dichlorobenzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
1,2-Dibromo-3-chloropropane	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 1:50	
Surrogate: Dibromofluoromethane	*109 %*			*75-136*	LNH	03/10/23 1:50	
Surrogate: 1,2-Dichloroethane-d4	*134 %*			*61-142*	LNH	03/10/23 1:50	
Surrogate: Toluene-d8	*102 %*			*82-121*	LNH	03/10/23 1:50	
Surrogate: 4-Bromofluorobenzene	*110 %*			*80-116*	LNH	03/10/23 1:50	
Silver, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/14/23 23:26	
Arsenic, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/14/23 23:26	
Barium, total	**0.0253 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/14/23 23:26	
Beryllium, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/14/23 23:26	
Cadmium, total	<0.0008 mg/L	0.0008	1GC0648	EPA 6020A	RVV	03/14/23 23:26	
Cobalt, total	**0.0448 mg/L**	**0.0004**	1GC0648	EPA 6020A	RVV	03/14/23 23:26	
Chromium, total	<0.0080 mg/L	0.0080	1GC0648	EPA 6020A	RVV	03/14/23 23:26	
Copper, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/14/23 23:26	
Nickel, total	**0.0648 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/14/23 23:26	
Lead, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/14/23 23:26	
Antimony, total	<0.0020 mg/L	0.0020	1GC0648	EPA 6020A	RVV	03/14/23 23:26	

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HLW Engineering
PO Box 314
Story City, IA 50248

Work Order: 1GC0672

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0672-02 MW-312				Matrix: Water	Collected: 03/06/23 11:03		
Selenium, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/14/23 23:26	
Thallium, total	<0.0020 mg/L	0.0020	1GC0648	EPA 6020A	RVV	03/14/23 23:26	
Vanadium, total	<0.0200 mg/L	0.0200	1GC0648	EPA 6020A	RVV	03/14/23 23:26	
Zinc, total	<0.0200 mg/L	0.0200	1GC0648	EPA 6020A	RVV	03/14/23 23:26	
1GC0672-02RE1 MW-312				Matrix: Water	Collected: 03/06/23 11:03		
Tetrachloroethylene	<1.0 ug/L	1.0	1GC0632	EPA 8260B	BDF	03/12/23 13:02	
Surrogate: Dibromofluoromethane	*104 %*			*75-136*	BDF	03/12/23 13:02	
Surrogate: 1,2-Dichloroethane-d4	*96.9 %*			*61-142*	BDF	03/12/23 13:02	
Surrogate: Toluene-d8	*106 %*			*82-121*	BDF	03/12/23 13:02	
Surrogate: 4-Bromofluorobenzene	*102 %*			*80-116*	BDF	03/12/23 13:02	
1GC0672-03 MW-390				Matrix: Water	Collected: 03/06/23 07:52		
Acrylonitrile	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
Surrogate: Dibromofluoromethane	*107 %*			*80-126*	LNH	03/10/23 2:17	
Surrogate: 1,2-Dichloroethane-d4	*131 %*			*63-138*	LNH	03/10/23 2:17	
Surrogate: Toluene-d8	*102 %*			*87-116*	LNH	03/10/23 2:17	
Surrogate: 4-Bromofluorobenzene	*110 %*			*85-111*	LNH	03/10/23 2:17	
Chloromethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
Vinyl Chloride	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
Bromomethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
Chloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
Trichlorofluoromethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
1,1-Dichloroethylene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
Acetone	<10.0 ug/L	10.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
Methyl Iodide	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
Carbon Disulfide	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
Methylene Chloride	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
trans-1,2-Dichloroethylene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
1,1-Dichloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
Vinyl Acetate	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
cis-1,2-Dichloroethylene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
2-Butanone (MEK)	<10.0 ug/L	10.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
Bromochloromethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
Chloroform	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
1,1,1-Trichloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
Carbon Tetrachloride	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
Benzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
1,2-Dichloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	

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HLW Engineering
PO Box 314
Story City, IA 50248

Work Order: 1GC0672

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0672-03 MW-390				Matrix: Water		Collected: 03/06/23 07:52	
Trichloroethylene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
1,2-Dichloropropane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
Dibromomethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
Bromodichloromethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
cis-1,3-Dichloropropene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
4-Methyl-2-pentanone (MIBK)	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
Toluene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
trans-1,3-Dichloropropene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
1,1,2-Trichloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
2-Hexanone (MBK)	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
Dibromochloromethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
1,2-Dibromoethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
Chlorobenzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
1,1,1,2-Tetrachloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
Ethylbenzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
Xylenes, total	<2.0 ug/L	2.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
Styrene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
Bromoform	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
1,2,3-Trichloropropane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
trans-1,4-Dichloro-2-butene	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
1,1,2,2-Tetrachloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
1,4-Dichlorobenzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
1,2-Dichlorobenzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
1,2-Dibromo-3-chloropropane	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 2:17	
Surrogate: Dibromofluoromethane	*107 %*			*75-136*	LNH	03/10/23 2:17	
Surrogate: 1,2-Dichloroethane-d4	*131 %*			*61-142*	LNH	03/10/23 2:17	
Surrogate: Toluene-d8	*102 %*			*82-121*	LNH	03/10/23 2:17	
Surrogate: 4-Bromofluorobenzene	*110 %*			*80-116*	LNH	03/10/23 2:17	
Silver, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/14/23 23:32	
Arsenic, total	**0.0163 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/14/23 23:32	
Barium, total	**0.0173 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/14/23 23:32	
Beryllium, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/14/23 23:32	
Cadmium, total	<0.0008 mg/L	0.0008	1GC0648	EPA 6020A	RVV	03/14/23 23:32	
Cobalt, total	**0.113 mg/L**	**0.0004**	1GC0648	EPA 6020A	RVV	03/14/23 23:32	
Chromium, total	<0.0080 mg/L	0.0080	1GC0648	EPA 6020A	RVV	03/14/23 23:32	
Copper, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/14/23 23:32	
Nickel, total	**0.0620 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/14/23 23:32	
Lead, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/14/23 23:32	

HLW Engineering
PO Box 314
Story City, IA 50248

Work Order: 1GC0672

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0672-03 MW-390				Matrix: Water	Collected: 03/06/23 07:52		
Antimony, total	<0.0020 mg/L	0.0020	1GC0648	EPA 6020A	RVV	03/14/23 23:32	
Selenium, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/14/23 23:32	
Thallium, total	<0.0020 mg/L	0.0020	1GC0648	EPA 6020A	RVV	03/14/23 23:32	
Vanadium, total	<0.0200 mg/L	0.0200	1GC0648	EPA 6020A	RVV	03/14/23 23:32	
Zinc, total	**0.115 mg/L**	**0.0200**	1GC0648	EPA 6020A	RVV	03/14/23 23:32	
1GC0672-03RE1 MW-390				Matrix: Water	Collected: 03/06/23 07:52		
Tetrachloroethylene	<1.0 ug/L	1.0	1GC0632	EPA 8260B	BDF	03/12/23 13:42	
Surrogate: Dibromofluoromethane	*103 %*			*75-136*	BDF	03/12/23 13:42	
Surrogate: 1,2-Dichloroethane-d4	*96.8 %*			*61-142*	BDF	03/12/23 13:42	
Surrogate: Toluene-d8	*106 %*			*82-121*	BDF	03/12/23 13:42	
Surrogate: 4-Bromofluorobenzene	*99.7 %*			*80-116*	BDF	03/12/23 13:42	
1GC0672-04 MW-300				Matrix: Water	Collected: 03/06/23 11:52		
Acrylonitrile	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
Surrogate: Dibromofluoromethane	*110 %*			*80-126*	LNH	03/10/23 2:44	
Surrogate: 1,2-Dichloroethane-d4	*133 %*			*63-138*	LNH	03/10/23 2:44	
Surrogate: Toluene-d8	*104 %*			*87-116*	LNH	03/10/23 2:44	
Surrogate: 4-Bromofluorobenzene	*109 %*			*85-111*	LNH	03/10/23 2:44	
Chloromethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
Vinyl Chloride	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
Bromomethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
Chloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
Trichlorofluoromethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
1,1-Dichloroethylene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
Acetone	<10.0 ug/L	10.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
Methyl Iodide	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
Carbon Disulfide	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
Methylene Chloride	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
trans-1,2-Dichloroethylene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
1,1-Dichloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
Vinyl Acetate	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
cis-1,2-Dichloroethylene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
2-Butanone (MEK)	<10.0 ug/L	10.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
Bromochloromethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
Chloroform	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
1,1,1-Trichloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
Carbon Tetrachloride	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
Benzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	

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HLW Engineering
PO Box 314
Story City, IA 50248

Work Order: 1GC0672

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0672-04 MW-300				Matrix: Water		Collected: 03/06/23 11:52	
1,2-Dichloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
Trichloroethylene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
1,2-Dichloropropane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
Dibromomethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
Bromodichloromethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
cis-1,3-Dichloropropene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
4-Methyl-2-pentanone (MIBK)	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
Toluene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
trans-1,3-Dichloropropene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
1,1,2-Trichloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
2-Hexanone (MBK)	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
Dibromochloromethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
1,2-Dibromoethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
Chlorobenzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
1,1,1,2-Tetrachloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
Ethylbenzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
Xylenes, total	<2.0 ug/L	2.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
Styrene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
Bromoform	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
1,2,3-Trichloropropane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
trans-1,4-Dichloro-2-butene	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
1,1,2,2-Tetrachloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
1,4-Dichlorobenzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
1,2-Dichlorobenzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
1,2-Dibromo-3-chloropropane	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 2:44	
Surrogate: Dibromofluoromethane	*110 %*			*75-136*	LNH	03/10/23 2:44	
Surrogate: 1,2-Dichloroethane-d4	*133 %*			*61-142*	LNH	03/10/23 2:44	
Surrogate: Toluene-d8	*104 %*			*82-121*	LNH	03/10/23 2:44	
Surrogate: 4-Bromofluorobenzene	*109 %*			*80-116*	LNH	03/10/23 2:44	
Silver, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/14/23 23:38	
Arsenic, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/14/23 23:38	
Barium, total	**0.0134 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/14/23 23:38	
Beryllium, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/14/23 23:38	
Cadmium, total	<0.0008 mg/L	0.0008	1GC0648	EPA 6020A	RVV	03/14/23 23:38	
Cobalt, total	**0.294 mg/L**	**0.0004**	1GC0648	EPA 6020A	RVV	03/14/23 23:38	
Chromium, total	<0.0080 mg/L	0.0080	1GC0648	EPA 6020A	RVV	03/14/23 23:38	
Copper, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/14/23 23:38	
Nickel, total	**0.343 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/14/23 23:38	

HLW Engineering
PO Box 314
Story City, IA 50248

Work Order: 1GC0672

Analyte		Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0672-04	MW-300				Matrix: Water	Collected:	03/06/23 11:52	
Lead, total		<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/14/23 23:38	
Antimony, total		<0.0020 mg/L	0.0020	1GC0648	EPA 6020A	RVV	03/14/23 23:38	
Selenium, total		<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/14/23 23:38	
Thallium, total		<0.0020 mg/L	0.0020	1GC0648	EPA 6020A	RVV	03/14/23 23:38	
Vanadium, total		<0.0200 mg/L	0.0200	1GC0648	EPA 6020A	RVV	03/14/23 23:38	
Zinc, total		**0.122 mg/L**	**0.0200**	1GC0648	EPA 6020A	RVV	03/14/23 23:38	
1GC0672-04RE1	MW-300				Matrix: Water	Collected:	03/06/23 11:52	
Tetrachloroethylene		<1.0 ug/L	1.0	1GC0632	EPA 8260B	BDF	03/12/23 14:22	
Surrogate: Dibromofluoromethane		*105 %*			*75-136*	BDF	03/12/23 14:22	
Surrogate: 1,2-Dichloroethane-d4		*97.4 %*			*61-142*	BDF	03/12/23 14:22	
Surrogate: Toluene-d8		*106 %*			*82-121*	BDF	03/12/23 14:22	
Surrogate: 4-Bromofluorobenzene		*101 %*			*80-116*	BDF	03/12/23 14:22	
1GC0672-05	MW-303				Matrix: Water	Collected:	03/06/23 14:52	
Acrylonitrile		<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
Surrogate: Dibromofluoromethane		*108 %*			*80-126*	LNH	03/10/23 3:11	
Surrogate: 1,2-Dichloroethane-d4		*136 %*			*63-138*	LNH	03/10/23 3:11	
Surrogate: Toluene-d8		*103 %*			*87-116*	LNH	03/10/23 3:11	
Surrogate: 4-Bromofluorobenzene		*112 %*			*85-111*	LNH	03/10/23 3:11	S-GC
Chloromethane		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
Vinyl Chloride		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
Bromomethane		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
Chloroethane		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
Trichlorofluoromethane		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
1,1-Dichloroethylene		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
Acetone		<10.0 ug/L	10.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
Methyl Iodide		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
Carbon Disulfide		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
Methylene Chloride		<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
trans-1,2-Dichloroethylene		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
1,1-Dichloroethane		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
Vinyl Acetate		<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
cis-1,2-Dichloroethylene		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
2-Butanone (MEK)		<10.0 ug/L	10.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
Bromochloromethane		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
Chloroform		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
1,1,1-Trichloroethane		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
Carbon Tetrachloride		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	

Keystone LABORATORIES A Microbac Company

HLW Engineering
PO Box 314
Story City, IA 50248

Work Order: 1GC0672

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0672-05 MW-303				Matrix: Water		Collected: 03/06/23 14:52	
Benzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
1,2-Dichloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
Trichloroethylene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
1,2-Dichloropropane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
Dibromomethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
Bromodichloromethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
cis-1,3-Dichloropropene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
4-Methyl-2-pentanone (MIBK)	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
Toluene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
trans-1,3-Dichloropropene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
1,1,2-Trichloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
2-Hexanone (MBK)	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
Dibromochloromethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
1,2-Dibromoethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
Chlorobenzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
1,1,1,2-Tetrachloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
Ethylbenzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
Xylenes, total	<2.0 ug/L	2.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
Styrene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
Bromoform	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
1,2,3-Trichloropropane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
trans-1,4-Dichloro-2-butene	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
1,1,2,2-Tetrachloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
1,4-Dichlorobenzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
1,2-Dichlorobenzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
1,2-Dibromo-3-chloropropane	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 3:11	
Surrogate: Dibromofluoromethane	*108 %*			*75-136*	LNH	03/10/23 3:11	
Surrogate: 1,2-Dichloroethane-d4	*136 %*			*61-142*	LNH	03/10/23 3:11	
Surrogate: Toluene-d8	*103 %*			*82-121*	LNH	03/10/23 3:11	
Surrogate: 4-Bromofluorobenzene	*112 %*			*80-116*	LNH	03/10/23 3:11	
Silver, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/14/23 23:44	
Arsenic, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/14/23 23:44	
Barium, total	**0.0739 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/14/23 23:44	
Beryllium, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/14/23 23:44	
Cadmium, total	<0.0008 mg/L	0.0008	1GC0648	EPA 6020A	RVV	03/14/23 23:44	
Cobalt, total	**0.0279 mg/L**	**0.0004**	1GC0648	EPA 6020A	RVV	03/14/23 23:44	
Chromium, total	<0.0080 mg/L	0.0080	1GC0648	EPA 6020A	RVV	03/14/23 23:44	
Copper, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/14/23 23:44	

HLW Engineering
PO Box 314
Story City, IA 50248

Work Order: 1GC0672

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0672-05 MW-303				Matrix: Water	Collected: 03/06/23 14:52		
Nickel, total	**0.0286 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/14/23 23:44	
Lead, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/14/23 23:44	
Antimony, total	<0.0020 mg/L	0.0020	1GC0648	EPA 6020A	RVV	03/14/23 23:44	
Selenium, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/14/23 23:44	
Thallium, total	<0.0020 mg/L	0.0020	1GC0648	EPA 6020A	RVV	03/14/23 23:44	
Vanadium, total	<0.0200 mg/L	0.0200	1GC0648	EPA 6020A	RVV	03/14/23 23:44	
Zinc, total	<0.0200 mg/L	0.0200	1GC0648	EPA 6020A	RVV	03/14/23 23:44	
1GC0672-05RE1 MW-303				Matrix: Water	Collected: 03/06/23 14:52		
Tetrachloroethylene	<1.0 ug/L	1.0	1GC0632	EPA 8260B	BDF	03/12/23 15:01	
Surrogate: Dibromofluoromethane	*102 %*			*75-136*	BDF	03/12/23 15:01	
Surrogate: 1,2-Dichloroethane-d4	*93.8 %*			*61-142*	BDF	03/12/23 15:01	
Surrogate: Toluene-d8	*106 %*			*82-121*	BDF	03/12/23 15:01	
Surrogate: 4-Bromofluorobenzene	*99.1 %*			*80-116*	BDF	03/12/23 15:01	
1GC0672-06 MW-304				Matrix: Water	Collected: 03/06/23 14:12		
Acrylonitrile	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
Surrogate: Dibromofluoromethane	*111 %*			*80-126*	LNH	03/10/23 3:38	
Surrogate: 1,2-Dichloroethane-d4	*135 %*			*63-138*	LNH	03/10/23 3:38	
Surrogate: Toluene-d8	*105 %*			*87-116*	LNH	03/10/23 3:38	
Surrogate: 4-Bromofluorobenzene	*114 %*			*85-111*	LNH	03/10/23 3:38	S-GC
Chloromethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
Vinyl Chloride	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
Bromomethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
Chloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
Trichlorofluoromethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
1,1-Dichloroethylene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
Acetone	<10.0 ug/L	10.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
Methyl Iodide	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
Carbon Disulfide	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
Methylene Chloride	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
trans-1,2-Dichloroethylene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
1,1-Dichloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
Vinyl Acetate	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
cis-1,2-Dichloroethylene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
2-Butanone (MEK)	<10.0 ug/L	10.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
Bromochloromethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
Chloroform	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
1,1,1-Trichloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	

Keystone LABORATORIES
A Microbac Company

M E M B E R ACIL

HLW Engineering
PO Box 314
Story City, IA 50248

Work Order: 1GC0672

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0672-06 MW-304				Matrix: Water		Collected: 03/06/23 14:12	
Carbon Tetrachloride	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
Benzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
1,2-Dichloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
Trichloroethylene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
1,2-Dichloropropane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
Dibromomethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
Bromodichloromethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
cis-1,3-Dichloropropene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
4-Methyl-2-pentanone (MIBK)	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
Toluene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
trans-1,3-Dichloropropene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
1,1,2-Trichloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
2-Hexanone (MBK)	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
Dibromochloromethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
1,2-Dibromoethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
Chlorobenzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
1,1,1,2-Tetrachloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
Ethylbenzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
Xylenes, total	<2.0 ug/L	2.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
Styrene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
Bromoform	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
1,2,3-Trichloropropane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
trans-1,4-Dichloro-2-butene	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
1,1,2,2-Tetrachloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
1,4-Dichlorobenzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
1,2-Dichlorobenzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
1,2-Dibromo-3-chloropropane	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 3:38	
Surrogate: Dibromofluoromethane	*111 %*			*75-136*	LNH	03/10/23 3:38	
Surrogate: 1,2-Dichloroethane-d4	*135 %*			*61-142*	LNH	03/10/23 3:38	
Surrogate: Toluene-d8	*105 %*			*82-121*	LNH	03/10/23 3:38	
Surrogate: 4-Bromofluorobenzene	*114 %*			*80-116*	LNH	03/10/23 3:38	
Silver, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:01	
Arsenic, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:01	
Barium, total	**0.0665 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/15/23 0:01	
Beryllium, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:01	
Cadmium, total	<0.0008 mg/L	0.0008	1GC0648	EPA 6020A	RVV	03/15/23 0:01	
Cobalt, total	**0.0044 mg/L**	**0.0004**	1GC0648	EPA 6020A	RVV	03/15/23 0:01	
Chromium, total	<0.0080 mg/L	0.0080	1GC0648	EPA 6020A	RVV	03/15/23 0:01	

HLW Engineering
PO Box 314
Story City, IA 50248

Work Order: 1GC0672

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0672-06 MW-304				Matrix: Water		Collected: 03/06/23 14:12	
Copper, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:01	
Nickel, total	**0.0041 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/15/23 0:01	
Lead, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:01	
Antimony, total	<0.0020 mg/L	0.0020	1GC0648	EPA 6020A	RVV	03/15/23 0:01	
Selenium, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:01	
Thallium, total	<0.0020 mg/L	0.0020	1GC0648	EPA 6020A	RVV	03/15/23 0:01	
Vanadium, total	<0.0200 mg/L	0.0200	1GC0648	EPA 6020A	RVV	03/15/23 0:01	
Zinc, total	<0.0200 mg/L	0.0200	1GC0648	EPA 6020A	RVV	03/15/23 0:01	
1GC0672-06RE1 MW-304				Matrix: Water		Collected: 03/06/23 14:12	
Tetrachloroethylene	<1.0 ug/L	1.0	1GC0632	EPA 8260B	BDF	03/12/23 15:41	
Surrogate: Dibromofluoromethane	*104 %*			*75-136*	BDF	03/12/23 15:41	
Surrogate: 1,2-Dichloroethane-d4	*96.6 %*			*61-142*	BDF	03/12/23 15:41	
Surrogate: Toluene-d8	*107 %*			*82-121*	BDF	03/12/23 15:41	
Surrogate: 4-Bromofluorobenzene	*98.5 %*			*80-116*	BDF	03/12/23 15:41	
1GC0672-07 MW-313				Matrix: Water		Collected: 03/06/23 13:30	
Acrylonitrile	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
Surrogate: Dibromofluoromethane	*112 %*			*80-126*	LNH	03/10/23 4:05	
Surrogate: 1,2-Dichloroethane-d4	*139 %*			*63-138*	LNH	03/10/23 4:05	S-GC
Surrogate: Toluene-d8	*104 %*			*87-116*	LNH	03/10/23 4:05	
Surrogate: 4-Bromofluorobenzene	*110 %*			*85-111*	LNH	03/10/23 4:05	
Chloromethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
Vinyl Chloride	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
Bromomethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
Chloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
Trichlorofluoromethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
1,1-Dichloroethylene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
Acetone	<10.0 ug/L	10.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
Methyl Iodide	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
Carbon Disulfide	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
Methylene Chloride	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
trans-1,2-Dichloroethylene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
1,1-Dichloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
Vinyl Acetate	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
cis-1,2-Dichloroethylene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
2-Butanone (MEK)	<10.0 ug/L	10.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
Bromochloromethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
Chloroform	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	

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Keystone LABORATORIES
A Microbac Company

MEMBER ACIL

HLW Engineering
PO Box 314
Story City, IA 50248

Work Order: 1GC0672

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0672-07 MW-313				Matrix: Water		Collected: 03/06/23 13:30	
1,1,1-Trichloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
Carbon Tetrachloride	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
Benzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
1,2-Dichloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
Trichloroethylene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
1,2-Dichloropropane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
Dibromomethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
Bromodichloromethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
cis-1,3-Dichloropropene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
4-Methyl-2-pentanone (MIBK)	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
Toluene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
trans-1,3-Dichloropropene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
1,1,2-Trichloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
2-Hexanone (MBK)	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
Dibromochloromethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
1,2-Dibromoethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
Chlorobenzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
1,1,1,2-Tetrachloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
Ethylbenzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
Xylenes, total	<2.0 ug/L	2.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
Styrene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
Bromoform	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
1,2,3-Trichloropropane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
trans-1,4-Dichloro-2-butene	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
1,1,2,2-Tetrachloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
1,4-Dichlorobenzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
1,2-Dichlorobenzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
1,2-Dibromo-3-chloropropane	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 4:05	
Surrogate: Dibromofluoromethane	*112 %*			*75-136*	LNH	03/10/23 4:05	
Surrogate: 1,2-Dichloroethane-d4	*139 %*			*61-142*	LNH	03/10/23 4:05	
Surrogate: Toluene-d8	*104 %*			*82-121*	LNH	03/10/23 4:05	
Surrogate: 4-Bromofluorobenzene	*110 %*			*80-116*	LNH	03/10/23 4:05	
Silver, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:07	
Arsenic, total	**0.0049 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/15/23 0:07	
Barium, total	**0.0226 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/15/23 0:07	
Beryllium, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:07	
Cadmium, total	<0.0008 mg/L	0.0008	1GC0648	EPA 6020A	RVV	03/15/23 0:07	
Cobalt, total	**0.0014 mg/L**	**0.0004**	1GC0648	EPA 6020A	RVV	03/15/23 0:07	

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HLW Engineering
PO Box 314
Story City, IA 50248

Work Order: 1GC0672

Analyte		Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0672-07	MW-313				Matrix: Water	Collected:	03/06/23 13:30	
Chromium, total		<0.0080 mg/L	0.0080	1GC0648	EPA 6020A	RVV	03/15/23 0:07	
Copper, total		<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:07	
Nickel, total		**0.0198 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/15/23 0:07	
Lead, total		<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:07	
Antimony, total		<0.0020 mg/L	0.0020	1GC0648	EPA 6020A	RVV	03/15/23 0:07	
Selenium, total		<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:07	
Thallium, total		<0.0020 mg/L	0.0020	1GC0648	EPA 6020A	RVV	03/15/23 0:07	
Vanadium, total		<0.0200 mg/L	0.0200	1GC0648	EPA 6020A	RVV	03/15/23 0:07	
Zinc, total		<0.0200 mg/L	0.0200	1GC0648	EPA 6020A	RVV	03/15/23 0:07	
1GC0672-07RE1	MW-313				Matrix: Water	Collected:	03/06/23 13:30	
Tetrachloroethylene		<1.0 ug/L	1.0	1GC0632	EPA 8260B	BDF	03/12/23 16:21	
Surrogate: Dibromofluoromethane		*102 %*			*75-136*	BDF	03/12/23 16:21	
Surrogate: 1,2-Dichloroethane-d4		*92.8 %*			*61-142*	BDF	03/12/23 16:21	
Surrogate: Toluene-d8		*107 %*			*82-121*	BDF	03/12/23 16:21	
Surrogate: 4-Bromofluorobenzene		*102 %*			*80-116*	BDF	03/12/23 16:21	
1GC0672-08	MW-335				Matrix: Water	Collected:	03/06/23 13:53	
Acrylonitrile		<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
Surrogate: Dibromofluoromethane		*113 %*			*80-126*	LNH	03/10/23 4:31	
Surrogate: 1,2-Dichloroethane-d4		*142 %*			*63-138*	LNH	03/10/23 4:31	S-GC
Surrogate: Toluene-d8		*103 %*			*87-116*	LNH	03/10/23 4:31	
Surrogate: 4-Bromofluorobenzene		*111 %*			*85-111*	LNH	03/10/23 4:31	
Chloromethane		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
Vinyl Chloride		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
Bromomethane		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
Chloroethane		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
Trichlorofluoromethane		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
1,1-Dichloroethylene		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
Acetone		<10.0 ug/L	10.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
Methyl Iodide		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
Carbon Disulfide		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
Methylene Chloride		<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
trans-1,2-Dichloroethylene		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
1,1-Dichloroethane		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
Vinyl Acetate		<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
cis-1,2-Dichloroethylene		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
2-Butanone (MEK)		<10.0 ug/L	10.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
Bromochloromethane		<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	

HLW Engineering
PO Box 314
Story City, IA 50248

Work Order: 1GC0672

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0672-08 MW-335				Matrix: Water	Collected: 03/06/23 13:53		
Chloroform	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
1,1,1-Trichloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
Carbon Tetrachloride	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
Benzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
1,2-Dichloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
Trichloroethylene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
1,2-Dichloropropane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
Dibromomethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
Bromodichloromethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
cis-1,3-Dichloropropene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
4-Methyl-2-pentanone (MIBK)	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
Toluene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
trans-1,3-Dichloropropene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
1,1,2-Trichloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
2-Hexanone (MBK)	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
Dibromochloromethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
1,2-Dibromoethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
Chlorobenzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
1,1,1,2-Tetrachloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
Ethylbenzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
Xylenes, total	<2.0 ug/L	2.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
Styrene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
Bromoform	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
1,2,3-Trichloropropane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
trans-1,4-Dichloro-2-butene	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
1,1,2,2-Tetrachloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
1,4-Dichlorobenzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
1,2-Dichlorobenzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
1,2-Dibromo-3-chloropropane	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 4:31	
Surrogate: Dibromofluoromethane	*113 %*			*75-136*	LNH	03/10/23 4:31	
Surrogate: 1,2-Dichloroethane-d4	*142 %*			*61-142*	LNH	03/10/23 4:31	
Surrogate: Toluene-d8	*103 %*			*82-121*	LNH	03/10/23 4:31	
Surrogate: 4-Bromofluorobenzene	*111 %*			*80-116*	LNH	03/10/23 4:31	
Silver, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:12	
Arsenic, total	**0.0169 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/15/23 0:12	
Barium, total	**0.0170 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/15/23 0:12	
Beryllium, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:12	
Cadmium, total	<0.0008 mg/L	0.0008	1GC0648	EPA 6020A	RVV	03/15/23 0:12	

Keystone LABORATORIES
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HLW Engineering
PO Box 314
Story City, IA 50248

Work Order: 1GC0672

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0672-08 MW-335				Matrix: Water	Collected: 03/06/23 13:53		
Cobalt, total	**0.0682 mg/L**	**0.0004**	1GC0648	EPA 6020A	RVV	03/15/23 0:12	
Chromium, total	<0.0080 mg/L	0.0080	1GC0648	EPA 6020A	RVV	03/15/23 0:12	
Copper, total	**0.0047 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/15/23 0:12	
Nickel, total	**0.106 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/15/23 0:12	
Lead, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:12	
Antimony, total	<0.0020 mg/L	0.0020	1GC0648	EPA 6020A	RVV	03/15/23 0:12	
Selenium, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:12	
Thallium, total	<0.0020 mg/L	0.0020	1GC0648	EPA 6020A	RVV	03/15/23 0:12	
Vanadium, total	<0.0200 mg/L	0.0200	1GC0648	EPA 6020A	RVV	03/15/23 0:12	
Zinc, total	**0.0692 mg/L**	**0.0200**	1GC0648	EPA 6020A	RVV	03/15/23 0:12	
1GC0672-08RE1 MW-335				Matrix: Water	Collected: 03/06/23 13:53		
Tetrachloroethylene	<1.0 ug/L	1.0	1GC0632	EPA 8260B	BDF	03/12/23 17:00	
Surrogate: Dibromofluoromethane	*101 %*			*75-136*	BDF	03/12/23 17:00	
Surrogate: 1,2-Dichloroethane-d4	*96.7 %*			*61-142*	BDF	03/12/23 17:00	
Surrogate: Toluene-d8	*105 %*			*82-121*	BDF	03/12/23 17:00	
Surrogate: 4-Bromofluorobenzene	*99.9 %*			*80-116*	BDF	03/12/23 17:00	
1GC0672-09 MW-344				Matrix: Water	Collected: 03/06/23 12:45		
Acrylonitrile	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
Surrogate: Dibromofluoromethane	*111 %*			*80-126*	LNH	03/10/23 4:58	
Surrogate: 1,2-Dichloroethane-d4	*141 %*			*63-138*	LNH	03/10/23 4:58	S-GC
Surrogate: Toluene-d8	*104 %*			*87-116*	LNH	03/10/23 4:58	
Surrogate: 4-Bromofluorobenzene	*110 %*			*85-111*	LNH	03/10/23 4:58	
Chloromethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
Vinyl Chloride	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
Bromomethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
Chloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
Trichlorofluoromethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
1,1-Dichloroethylene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
Acetone	<10.0 ug/L	10.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
Methyl Iodide	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
Carbon Disulfide	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
Methylene Chloride	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
trans-1,2-Dichloroethylene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
1,1-Dichloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
Vinyl Acetate	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
cis-1,2-Dichloroethylene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
2-Butanone (MEK)	<10.0 ug/L	10.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	

HLW Engineering
PO Box 314
Story City, IA 50248

Work Order: 1GC0672

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0672-09 MW-344				Matrix: Water		Collected: 03/06/23 12:45	
Bromochloromethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
Chloroform	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
1,1,1-Trichloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
Carbon Tetrachloride	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
Benzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
1,2-Dichloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
Trichloroethylene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
1,2-Dichloropropane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
Dibromomethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
Bromodichloromethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
cis-1,3-Dichloropropene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
4-Methyl-2-pentanone (MIBK)	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
Toluene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
trans-1,3-Dichloropropene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
1,1,2-Trichloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
2-Hexanone (MBK)	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
Dibromochloromethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
1,2-Dibromoethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
Chlorobenzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
1,1,1,2-Tetrachloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
Ethylbenzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
Xylenes, total	<2.0 ug/L	2.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
Styrene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
Bromoform	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
1,2,3-Trichloropropane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
trans-1,4-Dichloro-2-butene	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
1,1,2,2-Tetrachloroethane	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
1,4-Dichlorobenzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
1,2-Dichlorobenzene	<1.0 ug/L	1.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
1,2-Dibromo-3-chloropropane	<5.0 ug/L	5.0	1GC0501	EPA 8260B	LNH	03/10/23 4:58	
Surrogate: Dibromofluoromethane	*111 %*			*75-136*	LNH	03/10/23 4:58	
Surrogate: 1,2-Dichloroethane-d4	*141 %*			*61-142*	LNH	03/10/23 4:58	
Surrogate: Toluene-d8	*104 %*			*82-121*	LNH	03/10/23 4:58	
Surrogate: 4-Bromofluorobenzene	*110 %*			*80-116*	LNH	03/10/23 4:58	
Silver, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:18	
Arsenic, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:18	
Barium, total	**0.0117 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/15/23 0:18	
Beryllium, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:18	

Keystone LABORATORIES
A Microbac Company

HLW Engineering
PO Box 314
Story City, IA 50248

Work Order: 1GC0672

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0672-09 MW-344				Matrix: Water	Collected: 03/06/23 12:45		
Cadmium, total	<0.0008 mg/L	0.0008	1GC0648	EPA 6020A	RVV	03/15/23 0:18	
Cobalt, total	**0.209 mg/L**	**0.0004**	1GC0648	EPA 6020A	RVV	03/15/23 0:18	
Chromium, total	<0.0080 mg/L	0.0080	1GC0648	EPA 6020A	RVV	03/15/23 0:18	
Copper, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:18	
Nickel, total	**0.165 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/15/23 0:18	
Lead, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:18	
Antimony, total	<0.0020 mg/L	0.0020	1GC0648	EPA 6020A	RVV	03/15/23 0:18	
Selenium, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:18	
Thallium, total	<0.0020 mg/L	0.0020	1GC0648	EPA 6020A	RVV	03/15/23 0:18	
Vanadium, total	<0.0200 mg/L	0.0200	1GC0648	EPA 6020A	RVV	03/15/23 0:18	
Zinc, total	<0.0200 mg/L	0.0200	1GC0648	EPA 6020A	RVV	03/15/23 0:18	
1GC0672-09RE1 MW-344				Matrix: Water	Collected: 03/06/23 12:45		
Tetrachloroethylene	<1.0 ug/L	1.0	1GC0632	EPA 8260B	BDF	03/12/23 17:40	
Surrogate: Dibromofluoromethane	*105 %*			*75-136*	BDF	03/12/23 17:40	
Surrogate: 1,2-Dichloroethane-d4	*95.8 %*			*61-142*	BDF	03/12/23 17:40	
Surrogate: Toluene-d8	*106 %*			*82-121*	BDF	03/12/23 17:40	
Surrogate: 4-Bromofluorobenzene	*99.5 %*			*80-116*	BDF	03/12/23 17:40	
1GC0672-10 MW-380				Matrix: Water	Collected: 03/06/23 11:28		
Acrylonitrile	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
Surrogate: Dibromofluoromethane	*112 %*			*80-126*	AJM	03/09/23 12:24	
Surrogate: 1,2-Dichloroethane-d4	*115 %*			*63-138*	AJM	03/09/23 12:24	
Surrogate: Toluene-d8	*103 %*			*87-116*	AJM	03/09/23 12:24	
Surrogate: 4-Bromofluorobenzene	*99.9 %*			*85-111*	AJM	03/09/23 12:24	
Chloromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
Vinyl Chloride	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
Bromomethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
Chloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
Trichlorofluoromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
1,1-Dichloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
Acetone	<10.0 ug/L	10.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
Methyl Iodide	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
Carbon Disulfide	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
Methylene Chloride	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
trans-1,2-Dichloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
1,1-Dichloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
Vinyl Acetate	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
cis-1,2-Dichloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	

HLW Engineering
PO Box 314
Story City, IA 50248

Work Order: 1GC0672

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0672-10 MW-380				Matrix: Water		Collected: 03/06/23 11:28	
2-Butanone (MEK)	<10.0 ug/L	10.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
Bromochloromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
Chloroform	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
1,1,1-Trichloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
Carbon Tetrachloride	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
Benzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
1,2-Dichloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
Trichloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
1,2-Dichloropropane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
Dibromomethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
Bromodichloromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
cis-1,3-Dichloropropene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
4-Methyl-2-pentanone (MIBK)	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
Toluene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
trans-1,3-Dichloropropene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
1,1,2-Trichloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
Tetrachloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
2-Hexanone (MBK)	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
Dibromochloromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
1,2-Dibromoethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
Chlorobenzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
1,1,1,2-Tetrachloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
Ethylbenzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
Xylenes, total	<2.0 ug/L	2.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
Styrene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
Bromoform	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
1,2,3-Trichloropropane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
trans-1,4-Dichloro-2-butene	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
1,1,2,2-Tetrachloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
1,4-Dichlorobenzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
1,2-Dichlorobenzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
1,2-Dibromo-3-chloropropane	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 12:24	
Surrogate: Dibromofluoromethane	*112 %*			*75-136*	AJM	03/09/23 12:24	
Surrogate: 1,2-Dichloroethane-d4	*115 %*			*61-142*	AJM	03/09/23 12:24	
Surrogate: Toluene-d8	*103 %*			*82-121*	AJM	03/09/23 12:24	
Surrogate: 4-Bromofluorobenzene	*99.9 %*			*80-116*	AJM	03/09/23 12:24	
Silver, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:24	
Arsenic, total	**0.0043 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/15/23 0:24	

HLW Engineering
PO Box 314
Story City, IA 50248

Work Order: 1GC0672

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0672-10 MW-380				Matrix: Water	Collected: 03/06/23 11:28		
Barium, total	**0.0077 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/15/23 0:24	
Beryllium, total	**0.0047 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/15/23 0:24	
Cadmium, total	**0.0031 mg/L**	**0.0008**	1GC0648	EPA 6020A	RVV	03/15/23 0:24	
Cobalt, total	**0.758 mg/L**	**0.0004**	1GC0648	EPA 6020A	RVV	03/15/23 0:24	
Chromium, total	<0.0080 mg/L	0.0080	1GC0648	EPA 6020A	RVV	03/15/23 0:24	
Copper, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:24	
Nickel, total	**0.965 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/15/23 0:24	
Lead, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:24	
Antimony, total	<0.0020 mg/L	0.0020	1GC0648	EPA 6020A	RVV	03/15/23 0:24	
Selenium, total	**0.0096 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/15/23 0:24	
Thallium, total	<0.0020 mg/L	0.0020	1GC0648	EPA 6020A	RVV	03/15/23 0:24	
Vanadium, total	<0.0200 mg/L	0.0200	1GC0648	EPA 6020A	RVV	03/15/23 0:24	
Zinc, total	**2.29 mg/L**	**0.0200**	1GC0648	EPA 6020A	RVV	03/15/23 0:24	
1GC0672-11 MW-381				Matrix: Water	Collected: 03/06/23 12:16		
Acrylonitrile	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
Surrogate: Dibromofluoromethane	*112 %*			*80-126*	AJM	03/09/23 13:09	
Surrogate: 1,2-Dichloroethane-d4	*117 %*			*63-138*	AJM	03/09/23 13:09	
Surrogate: Toluene-d8	*104 %*			*87-116*	AJM	03/09/23 13:09	
Surrogate: 4-Bromofluorobenzene	*99.5 %*			*85-111*	AJM	03/09/23 13:09	
Chloromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
Vinyl Chloride	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
Bromomethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
Chloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
Trichlorofluoromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
1,1-Dichloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
Acetone	<10.0 ug/L	10.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
Methyl Iodide	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
Carbon Disulfide	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
Methylene Chloride	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
trans-1,2-Dichloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
1,1-Dichloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
Vinyl Acetate	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
cis-1,2-Dichloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
2-Butanone (MEK)	<10.0 ug/L	10.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
Bromochloromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
Chloroform	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
1,1,1-Trichloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
Carbon Tetrachloride	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	

HLW Engineering
PO Box 314
Story City, IA 50248

Work Order: 1GC0672

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0672-11 MW-381				Matrix: Water		Collected: 03/06/23 12:16	
Benzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
1,2-Dichloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
Trichloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
1,2-Dichloropropane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
Dibromomethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
Bromodichloromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
cis-1,3-Dichloropropene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
4-Methyl-2-pentanone (MIBK)	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
Toluene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
trans-1,3-Dichloropropene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
1,1,2-Trichloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
Tetrachloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
2-Hexanone (MBK)	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
Dibromochloromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
1,2-Dibromoethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
Chlorobenzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
1,1,1,2-Tetrachloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
Ethylbenzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
Xylenes, total	<2.0 ug/L	2.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
Styrene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
Bromoform	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
1,2,3-Trichloropropane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
trans-1,4-Dichloro-2-butene	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
1,1,2,2-Tetrachloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
1,4-Dichlorobenzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
1,2-Dichlorobenzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
1,2-Dibromo-3-chloropropane	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 13:09	
Surrogate: Dibromofluoromethane	*112 %*			*75-136*	AJM	03/09/23 13:09	
Surrogate: 1,2-Dichloroethane-d4	*117 %*			*61-142*	AJM	03/09/23 13:09	
Surrogate: Toluene-d8	*104 %*			*82-121*	AJM	03/09/23 13:09	
Surrogate: 4-Bromofluorobenzene	*99.5 %*			*80-116*	AJM	03/09/23 13:09	
Silver, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:30	
Arsenic, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:30	
Barium, total	**0.0085 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/15/23 0:30	
Beryllium, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:30	
Cadmium, total	<0.0008 mg/L	0.0008	1GC0648	EPA 6020A	RVV	03/15/23 0:30	
Cobalt, total	**0.0012 mg/L**	**0.0004**	1GC0648	EPA 6020A	RVV	03/15/23 0:30	
Chromium, total	<0.0080 mg/L	0.0080	1GC0648	EPA 6020A	RVV	03/15/23 0:30	

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Work Order: 1GC0672

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0672-11 MW-381				Matrix: Water		Collected: 03/06/23 12:16	
Copper, total	**0.0040 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/15/23 0:30	
Nickel, total	**0.0130 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/15/23 0:30	
Lead, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:30	
Antimony, total	<0.0020 mg/L	0.0020	1GC0648	EPA 6020A	RVV	03/15/23 0:30	
Selenium, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:30	
Thallium, total	<0.0020 mg/L	0.0020	1GC0648	EPA 6020A	RVV	03/15/23 0:30	
Vanadium, total	<0.0200 mg/L	0.0200	1GC0648	EPA 6020A	RVV	03/15/23 0:30	
Zinc, total	<0.0200 mg/L	0.0200	1GC0648	EPA 6020A	RVV	03/15/23 0:30	
1GC0672-12 MW-382R				Matrix: Water		Collected: 03/06/23 13:05	
Acrylonitrile	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
Surrogate: Dibromofluoromethane	*112 %*			*80-126*	AJM	03/09/23 13:56	
Surrogate: 1,2-Dichloroethane-d4	*117 %*			*63-138*	AJM	03/09/23 13:56	
Surrogate: Toluene-d8	*103 %*			*87-116*	AJM	03/09/23 13:56	
Surrogate: 4-Bromofluorobenzene	*99.2 %*			*85-111*	AJM	03/09/23 13:56	
Chloromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
Vinyl Chloride	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
Bromomethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
Chloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
Trichlorofluoromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
1,1-Dichloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
Acetone	<10.0 ug/L	10.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
Methyl Iodide	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
Carbon Disulfide	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
Methylene Chloride	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
trans-1,2-Dichloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
1,1-Dichloroethane	**1.4 ug/L**	**1.0**	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
Vinyl Acetate	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
cis-1,2-Dichloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
2-Butanone (MEK)	<10.0 ug/L	10.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
Bromochloromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
Chloroform	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
1,1,1-Trichloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
Carbon Tetrachloride	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
Benzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
1,2-Dichloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
Trichloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
1,2-Dichloropropane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	

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Work Order: 1GC0672

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0672-12 MW-382R				Matrix: Water		Collected: 03/06/23 13:05	
Dibromomethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
Bromodichloromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
cis-1,3-Dichloropropene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
4-Methyl-2-pentanone (MIBK)	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
Toluene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
trans-1,3-Dichloropropene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
1,1,2-Trichloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
Tetrachloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
2-Hexanone (MBK)	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
Dibromochloromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
1,2-Dibromoethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
Chlorobenzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
1,1,1,2-Tetrachloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
Ethylbenzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
Xylenes, total	<2.0 ug/L	2.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
Styrene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
Bromoform	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
1,2,3-Trichloropropane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
trans-1,4-Dichloro-2-butene	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
1,1,2,2-Tetrachloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
1,4-Dichlorobenzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
1,2-Dichlorobenzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
1,2-Dibromo-3-chloropropane	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 13:56	
Surrogate: Dibromofluoromethane	*112 %*			*75-136*	AJM	03/09/23 13:56	
Surrogate: 1,2-Dichloroethane-d4	*117 %*			*61-142*	AJM	03/09/23 13:56	
Surrogate: Toluene-d8	*103 %*			*82-121*	AJM	03/09/23 13:56	
Surrogate: 4-Bromofluorobenzene	*99.2 %*			*80-116*	AJM	03/09/23 13:56	
Silver, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:36	
Arsenic, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:36	
Barium, total	**0.0297 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/15/23 0:36	
Beryllium, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:36	
Cadmium, total	<0.0008 mg/L	0.0008	1GC0648	EPA 6020A	RVV	03/15/23 0:36	
Cobalt, total	**0.0012 mg/L**	**0.0004**	1GC0648	EPA 6020A	RVV	03/15/23 0:36	
Chromium, total	<0.0080 mg/L	0.0080	1GC0648	EPA 6020A	RVV	03/15/23 0:36	
Copper, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:36	
Nickel, total	**0.0045 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/15/23 0:36	
Lead, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:36	
Antimony, total	<0.0020 mg/L	0.0020	1GC0648	EPA 6020A	RVV	03/15/23 0:36	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Samples were preserved in accordance with 40 CFR for pH adjustment unless otherwise noted. MRL= Method Reporting Limit.

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PO Box 314
Story City, IA 50248

Work Order: 1GC0672

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0672-12 MW-382R				Matrix: Water	Collected: 03/06/23 13:05		
Selenium, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:36	
Thallium, total	<0.0020 mg/L	0.0020	1GC0648	EPA 6020A	RVV	03/15/23 0:36	
Vanadium, total	<0.0200 mg/L	0.0200	1GC0648	EPA 6020A	RVV	03/15/23 0:36	
Zinc, total	<0.0200 mg/L	0.0200	1GC0648	EPA 6020A	RVV	03/15/23 0:36	
1GC0672-13 MW-384				Matrix: Water	Collected: 03/06/23 08:47		
Acrylonitrile	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
Surrogate: Dibromofluoromethane	*113 %*			*80-126*	AJM	03/09/23 14:43	
Surrogate: 1,2-Dichloroethane-d4	*119 %*			*63-138*	AJM	03/09/23 14:43	
Surrogate: Toluene-d8	*103 %*			*87-116*	AJM	03/09/23 14:43	
Surrogate: 4-Bromofluorobenzene	*99.8 %*			*85-111*	AJM	03/09/23 14:43	
Chloromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
Vinyl Chloride	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
Bromomethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
Chloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
Trichlorofluoromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
1,1-Dichloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
Acetone	<10.0 ug/L	10.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
Methyl Iodide	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
Carbon Disulfide	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
Methylene Chloride	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
trans-1,2-Dichloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
1,1-Dichloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
Vinyl Acetate	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
cis-1,2-Dichloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
2-Butanone (MEK)	<10.0 ug/L	10.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
Bromochloromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
Chloroform	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
1,1,1-Trichloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
Carbon Tetrachloride	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
Benzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
1,2-Dichloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
Trichloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
1,2-Dichloropropane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
Dibromomethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
Bromodichloromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
cis-1,3-Dichloropropene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
4-Methyl-2-pentanone (MIBK)	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	

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Story City, IA 50248

Work Order: 1GC0672

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0672-13 MW-384				Matrix: Water		Collected: 03/06/23 08:47	
Toluene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
trans-1,3-Dichloropropene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
1,1,2-Trichloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
Tetrachloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
2-Hexanone (MBK)	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
Dibromochloromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
1,2-Dibromoethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
Chlorobenzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
1,1,1,2-Tetrachloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
Ethylbenzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
Xylenes, total	<2.0 ug/L	2.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
Styrene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
Bromoform	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
1,2,3-Trichloropropane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
trans-1,4-Dichloro-2-butene	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
1,1,2,2-Tetrachloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
1,4-Dichlorobenzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
1,2-Dichlorobenzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
1,2-Dibromo-3-chloropropane	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 14:43	
Surrogate: Dibromofluoromethane	*113 %*			*75-136*	AJM	03/09/23 14:43	
Surrogate: 1,2-Dichloroethane-d4	*119 %*			*61-142*	AJM	03/09/23 14:43	
Surrogate: Toluene-d8	*103 %*			*82-121*	AJM	03/09/23 14:43	
Surrogate: 4-Bromofluorobenzene	*99.8 %*			*80-116*	AJM	03/09/23 14:43	
Silver, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:41	
Arsenic, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:41	
Barium, total	**0.0107 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/15/23 0:41	
Beryllium, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:41	
Cadmium, total	<0.0008 mg/L	0.0008	1GC0648	EPA 6020A	RVV	03/15/23 0:41	
Cobalt, total	**0.0084 mg/L**	**0.0004**	1GC0648	EPA 6020A	RVV	03/15/23 0:41	
Chromium, total	<0.0080 mg/L	0.0080	1GC0648	EPA 6020A	RVV	03/15/23 0:41	
Copper, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:41	
Nickel, total	**0.0432 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/15/23 0:41	
Lead, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:41	
Antimony, total	<0.0020 mg/L	0.0020	1GC0648	EPA 6020A	RVV	03/15/23 0:41	
Selenium, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:41	
Thallium, total	<0.0020 mg/L	0.0020	1GC0648	EPA 6020A	RVV	03/15/23 0:41	
Vanadium, total	<0.0200 mg/L	0.0200	1GC0648	EPA 6020A	RVV	03/15/23 0:41	
Zinc, total	<0.0200 mg/L	0.0200	1GC0648	EPA 6020A	RVV	03/15/23 0:41	

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Work Order: 1GC0672

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0672-14 MW-385				Matrix: Water		Collected: 03/06/23 09:11	
Acrylonitrile	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
Surrogate: Dibromofluoromethane	*112 %*			*80-126*	AJM	03/09/23 15:29	
Surrogate: 1,2-Dichloroethane-d4	*118 %*			*63-138*	AJM	03/09/23 15:29	
Surrogate: Toluene-d8	*104 %*			*87-116*	AJM	03/09/23 15:29	
Surrogate: 4-Bromofluorobenzene	*98.3 %*			*85-111*	AJM	03/09/23 15:29	
Chloromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
Vinyl Chloride	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
Bromomethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
Chloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
Trichlorofluoromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
1,1-Dichloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
Acetone	<10.0 ug/L	10.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
Methyl Iodide	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
Carbon Disulfide	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
Methylene Chloride	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
trans-1,2-Dichloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
1,1-Dichloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
Vinyl Acetate	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
cis-1,2-Dichloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
2-Butanone (MEK)	<10.0 ug/L	10.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
Bromochloromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
Chloroform	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
1,1,1-Trichloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
Carbon Tetrachloride	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
Benzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
1,2-Dichloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
Trichloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
1,2-Dichloropropane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
Dibromomethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
Bromodichloromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
cis-1,3-Dichloropropene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
4-Methyl-2-pentanone (MIBK)	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
Toluene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
trans-1,3-Dichloropropene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
1,1,2-Trichloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
Tetrachloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
2-Hexanone (MBK)	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
Dibromochloromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	

HLW Engineering
PO Box 314
Story City, IA 50248

Work Order: 1GC0672

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0672-14 MW-385				Matrix: Water		Collected: 03/06/23 09:11	
1,2-Dibromoethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
Chlorobenzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
1,1,1,2-Tetrachloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
Ethylbenzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
Xylenes, total	<2.0 ug/L	2.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
Styrene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
Bromoform	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
1,2,3-Trichloropropane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
trans-1,4-Dichloro-2-butene	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
1,1,2,2-Tetrachloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
1,4-Dichlorobenzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
1,2-Dichlorobenzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
1,2-Dibromo-3-chloropropane	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 15:29	
Surrogate: Dibromofluoromethane	*112 %*			*75-136*	AJM	03/09/23 15:29	
Surrogate: 1,2-Dichloroethane-d4	*118 %*			*61-142*	AJM	03/09/23 15:29	
Surrogate: Toluene-d8	*104 %*			*82-121*	AJM	03/09/23 15:29	
Surrogate: 4-Bromofluorobenzene	*98.3 %*			*80-116*	AJM	03/09/23 15:29	
Silver, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:47	
Arsenic, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:47	
Barium, total	**0.0110 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/15/23 0:47	
Beryllium, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:47	
Cadmium, total	<0.0008 mg/L	0.0008	1GC0648	EPA 6020A	RVV	03/15/23 0:47	
Cobalt, total	**0.0024 mg/L**	**0.0004**	1GC0648	EPA 6020A	RVV	03/15/23 0:47	
Chromium, total	<0.0080 mg/L	0.0080	1GC0648	EPA 6020A	RVV	03/15/23 0:47	
Copper, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:47	
Nickel, total	**0.0168 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/15/23 0:47	
Lead, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:47	
Antimony, total	<0.0020 mg/L	0.0020	1GC0648	EPA 6020A	RVV	03/15/23 0:47	
Selenium, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:47	
Thallium, total	<0.0020 mg/L	0.0020	1GC0648	EPA 6020A	RVV	03/15/23 0:47	
Vanadium, total	<0.0200 mg/L	0.0200	1GC0648	EPA 6020A	RVV	03/15/23 0:47	
Zinc, total	<0.0200 mg/L	0.0200	1GC0648	EPA 6020A	RVV	03/15/23 0:47	
1GC0672-15 GU-4A				Matrix: Water		Collected: 03/06/23 08:30	
Acrylonitrile	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
Surrogate: Dibromofluoromethane	*113 %*			*80-126*	AJM	03/09/23 16:15	
Surrogate: 1,2-Dichloroethane-d4	*118 %*			*63-138*	AJM	03/09/23 16:15	
Surrogate: Toluene-d8	*104 %*			*87-116*	AJM	03/09/23 16:15	
Surrogate: 4-Bromofluorobenzene	*99.1 %*			*85-111*	AJM	03/09/23 16:15	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Samples were preserved in accordance with 40 CFR for pH adjustment unless otherwise noted. MRL= Method Reporting Limit.

HLW Engineering
PO Box 314
Story City, IA 50248

Work Order: 1GC0672

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0672-15 GU-4A				Matrix: Water		Collected: 03/06/23 08:30	
Chloromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
Vinyl Chloride	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
Bromomethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
Chloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
Trichlorofluoromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
1,1-Dichloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
Acetone	<10.0 ug/L	10.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
Methyl Iodide	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
Carbon Disulfide	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
Methylene Chloride	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
trans-1,2-Dichloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
1,1-Dichloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
Vinyl Acetate	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
cis-1,2-Dichloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
2-Butanone (MEK)	<10.0 ug/L	10.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
Bromochloromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
Chloroform	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
1,1,1-Trichloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
Carbon Tetrachloride	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
Benzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
1,2-Dichloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
Trichloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
1,2-Dichloropropane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
Dibromomethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
Bromodichloromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
cis-1,3-Dichloropropene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
4-Methyl-2-pentanone (MIBK)	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
Toluene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
trans-1,3-Dichloropropene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
1,1,2-Trichloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
Tetrachloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
2-Hexanone (MBK)	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
Dibromochloromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
1,2-Dibromoethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
Chlorobenzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
1,1,1,2-Tetrachloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
Ethylbenzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	

Keystone LABORATORIES
A Microbac Company

MEMBER ACIL

HLW Engineering
PO Box 314
Story City, IA 50248

Work Order: 1GC0672

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0672-15 GU-4A				Matrix: Water		Collected: 03/06/23 08:30	
Xylenes, total	<2.0 ug/L	2.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
Styrene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
Bromoform	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
1,2,3-Trichloropropane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
trans-1,4-Dichloro-2-butene	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
1,1,2,2-Tetrachloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
1,4-Dichlorobenzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
1,2-Dichlorobenzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
1,2-Dibromo-3-chloropropane	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 16:15	
Surrogate: Dibromofluoromethane	*113 %*			*75-136*	AJM	03/09/23 16:15	
Surrogate: 1,2-Dichloroethane-d4	*118 %*			*61-142*	AJM	03/09/23 16:15	
Surrogate: Toluene-d8	*104 %*			*82-121*	AJM	03/09/23 16:15	
Surrogate: 4-Bromofluorobenzene	*99.1 %*			*80-116*	AJM	03/09/23 16:15	
Silver, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:53	
Arsenic, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:53	
Barium, total	**0.0144 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/15/23 0:53	
Beryllium, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:53	
Cadmium, total	<0.0008 mg/L	0.0008	1GC0648	EPA 6020A	RVV	03/15/23 0:53	
Cobalt, total	**0.0382 mg/L**	**0.0004**	1GC0648	EPA 6020A	RVV	03/15/23 0:53	
Chromium, total	<0.0080 mg/L	0.0080	1GC0648	EPA 6020A	RVV	03/15/23 0:53	
Copper, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:53	
Nickel, total	**0.0909 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/15/23 0:53	
Lead, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:53	
Antimony, total	<0.0020 mg/L	0.0020	1GC0648	EPA 6020A	RVV	03/15/23 0:53	
Selenium, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 0:53	
Thallium, total	<0.0020 mg/L	0.0020	1GC0648	EPA 6020A	RVV	03/15/23 0:53	
Vanadium, total	<0.0200 mg/L	0.0200	1GC0648	EPA 6020A	RVV	03/15/23 0:53	
Zinc, total	**0.0812 mg/L**	**0.0200**	1GC0648	EPA 6020A	RVV	03/15/23 0:53	
1GC0672-16 Field Duplicate				Matrix: Water		Collected: 03/06/23 00:00	
Acrylonitrile	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
Surrogate: Dibromofluoromethane	*113 %*			*80-126*	AJM	03/09/23 17:00	
Surrogate: 1,2-Dichloroethane-d4	*117 %*			*63-138*	AJM	03/09/23 17:00	
Surrogate: Toluene-d8	*103 %*			*87-116*	AJM	03/09/23 17:00	
Surrogate: 4-Bromofluorobenzene	*99.5 %*			*85-111*	AJM	03/09/23 17:00	
Chloromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
Vinyl Chloride	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
Bromomethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
Chloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	

HLW Engineering
PO Box 314
Story City, IA 50248

Work Order: 1GC0672

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0672-16 Field Duplicate				Matrix: Water		Collected: 03/06/23 00:00	
Trichlorofluoromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
1,1-Dichloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
Acetone	<10.0 ug/L	10.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
Methyl Iodide	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
Carbon Disulfide	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
Methylene Chloride	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
trans-1,2-Dichloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
1,1-Dichloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
Vinyl Acetate	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
cis-1,2-Dichloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
2-Butanone (MEK)	<10.0 ug/L	10.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
Bromochloromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
Chloroform	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
1,1,1-Trichloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
Carbon Tetrachloride	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
Benzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
1,2-Dichloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
Trichloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
1,2-Dichloropropane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
Dibromomethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
Bromodichloromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
cis-1,3-Dichloropropene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
4-Methyl-2-pentanone (MIBK)	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
Toluene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
trans-1,3-Dichloropropene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
1,1,2-Trichloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
Tetrachloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
2-Hexanone (MBK)	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
Dibromochloromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
1,2-Dibromoethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
Chlorobenzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
1,1,1,2-Tetrachloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
Ethylbenzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
Xylenes, total	<2.0 ug/L	2.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
Styrene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
Bromoform	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
1,2,3-Trichloropropane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	

HLW Engineering
PO Box 314
Story City, IA 50248

Work Order: 1GC0672

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0672-16 Field Duplicate				Matrix: Water		Collected: 03/06/23 00:00	
trans-1,4-Dichloro-2-butene	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
1,1,2,2-Tetrachloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
1,4-Dichlorobenzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
1,2-Dichlorobenzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
1,2-Dibromo-3-chloropropane	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 17:00	
Surrogate: Dibromofluoromethane	*113 %*			*75-136*	AJM	03/09/23 17:00	
Surrogate: 1,2-Dichloroethane-d4	*117 %*			*61-142*	AJM	03/09/23 17:00	
Surrogate: Toluene-d8	*103 %*			*82-121*	AJM	03/09/23 17:00	
Surrogate: 4-Bromofluorobenzene	*99.5 %*			*80-116*	AJM	03/09/23 17:00	
Silver, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 1:10	
Arsenic, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 1:10	
Barium, total	**0.0133 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/15/23 1:10	
Beryllium, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 1:10	
Cadmium, total	<0.0008 mg/L	0.0008	1GC0648	EPA 6020A	RVV	03/15/23 1:10	
Cobalt, total	**0.0009 mg/L**	**0.0004**	1GC0648	EPA 6020A	RVV	03/15/23 1:10	
Chromium, total	<0.0080 mg/L	0.0080	1GC0648	EPA 6020A	RVV	03/15/23 1:10	
Copper, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 1:10	
Nickel, total	**0.0057 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/15/23 1:10	
Lead, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 1:10	
Antimony, total	<0.0020 mg/L	0.0020	1GC0648	EPA 6020A	RVV	03/15/23 1:10	
Selenium, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 1:10	
Thallium, total	<0.0020 mg/L	0.0020	1GC0648	EPA 6020A	RVV	03/15/23 1:10	
Vanadium, total	<0.0200 mg/L	0.0200	1GC0648	EPA 6020A	RVV	03/15/23 1:10	
Zinc, total	<0.0200 mg/L	0.0200	1GC0648	EPA 6020A	RVV	03/15/23 1:10	
1GC0672-17 MW-601				Matrix: Water		Collected: 03/06/23 09:39	
Acrylonitrile	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
Surrogate: Dibromofluoromethane	*113 %*			*80-126*	AJM	03/09/23 17:46	
Surrogate: 1,2-Dichloroethane-d4	*116 %*			*63-138*	AJM	03/09/23 17:46	
Surrogate: Toluene-d8	*103 %*			*87-116*	AJM	03/09/23 17:46	
Surrogate: 4-Bromofluorobenzene	*99.6 %*			*85-111*	AJM	03/09/23 17:46	
Chloromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
Vinyl Chloride	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
Bromomethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
Chloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
Trichlorofluoromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
1,1-Dichloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
Acetone	<10.0 ug/L	10.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
Methyl Iodide	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	

HLW Engineering
PO Box 314
Story City, IA 50248

Work Order: 1GC0672

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0672-17 MW-601				Matrix: Water		Collected: 03/06/23 09:39	
Carbon Disulfide	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
Methylene Chloride	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
trans-1,2-Dichloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
1,1-Dichloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
Vinyl Acetate	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
cis-1,2-Dichloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
2-Butanone (MEK)	<10.0 ug/L	10.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
Bromochloromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
Chloroform	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
1,1,1-Trichloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
Carbon Tetrachloride	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
Benzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
1,2-Dichloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
Trichloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
1,2-Dichloropropane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
Dibromomethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
Bromodichloromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
cis-1,3-Dichloropropene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
4-Methyl-2-pentanone (MIBK)	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
Toluene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
trans-1,3-Dichloropropene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
1,1,2-Trichloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
Tetrachloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
2-Hexanone (MBK)	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
Dibromochloromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
1,2-Dibromoethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
Chlorobenzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
1,1,1,2-Tetrachloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
Ethylbenzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
Xylenes, total	<2.0 ug/L	2.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
Styrene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
Bromoform	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
1,2,3-Trichloropropane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
trans-1,4-Dichloro-2-butene	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
1,1,2,2-Tetrachloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
1,4-Dichlorobenzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
1,2-Dichlorobenzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Samples were preserved in accordance with 40 CFR for pH adjustment unless otherwise noted. MRL= Method Reporting Limit.

Keystone LABORATORIES
A Microbac Company

HLW Engineering
PO Box 314
Story City, IA 50248

Work Order: 1GC0672

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0672-17 MW-601				Matrix: Water	Collected: 03/06/23 09:39		
1,2-Dibromo-3-chloropropane	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 17:46	
Surrogate: Dibromofluoromethane	*113 %*			*75-136*	AJM	03/09/23 17:46	
Surrogate: 1,2-Dichloroethane-d4	*116 %*			*61-142*	AJM	03/09/23 17:46	
Surrogate: Toluene-d8	*103 %*			*82-121*	AJM	03/09/23 17:46	
Surrogate: 4-Bromofluorobenzene	*99.6 %*			*80-116*	AJM	03/09/23 17:46	
Silver, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 1:16	
Arsenic, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 1:16	
Barium, total	**0.0126 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/15/23 1:16	
Beryllium, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 1:16	
Cadmium, total	<0.0008 mg/L	0.0008	1GC0648	EPA 6020A	RVV	03/15/23 1:16	
Cobalt, total	**0.0008 mg/L**	**0.0004**	1GC0648	EPA 6020A	RVV	03/15/23 1:16	
Chromium, total	<0.0080 mg/L	0.0080	1GC0648	EPA 6020A	RVV	03/15/23 1:16	
Copper, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 1:16	
Nickel, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 1:16	
Lead, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 1:16	
Antimony, total	<0.0020 mg/L	0.0020	1GC0648	EPA 6020A	RVV	03/15/23 1:16	
Selenium, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 1:16	
Thallium, total	<0.0020 mg/L	0.0020	1GC0648	EPA 6020A	RVV	03/15/23 1:16	
Vanadium, total	<0.0200 mg/L	0.0200	1GC0648	EPA 6020A	RVV	03/15/23 1:16	
Zinc, total	<0.0200 mg/L	0.0200	1GC0648	EPA 6020A	RVV	03/15/23 1:16	
1GC0672-18 MW-602				Matrix: Water	Collected: 03/06/23 10:04		
Acrylonitrile	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
Surrogate: Dibromofluoromethane	*114 %*			*80-126*	AJM	03/09/23 18:32	
Surrogate: 1,2-Dichloroethane-d4	*118 %*			*63-138*	AJM	03/09/23 18:32	
Surrogate: Toluene-d8	*104 %*			*87-116*	AJM	03/09/23 18:32	
Surrogate: 4-Bromofluorobenzene	*99.5 %*			*85-111*	AJM	03/09/23 18:32	
Chloromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
Vinyl Chloride	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
Bromomethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
Chloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
Trichlorofluoromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
1,1-Dichloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
Acetone	<10.0 ug/L	10.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
Methyl Iodide	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
Carbon Disulfide	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
Methylene Chloride	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
trans-1,2-Dichloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
1,1-Dichloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	

HLW Engineering
PO Box 314
Story City, IA 50248

Work Order: 1GC0672

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0672-18 MW-602				Matrix: Water	Collected: 03/06/23 10:04		
Vinyl Acetate	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
cis-1,2-Dichloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
2-Butanone (MEK)	<10.0 ug/L	10.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
Bromochloromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
Chloroform	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
1,1,1-Trichloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
Carbon Tetrachloride	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
Benzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
1,2-Dichloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
Trichloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
1,2-Dichloropropane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
Dibromomethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
Bromodichloromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
cis-1,3-Dichloropropene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
4-Methyl-2-pentanone (MIBK)	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
Toluene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
trans-1,3-Dichloropropene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
1,1,2-Trichloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
Tetrachloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
2-Hexanone (MBK)	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
Dibromochloromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
1,2-Dibromoethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
Chlorobenzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
1,1,1,2-Tetrachloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
Ethylbenzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
Xylenes, total	<2.0 ug/L	2.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
Styrene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
Bromoform	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
1,2,3-Trichloropropane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
trans-1,4-Dichloro-2-butene	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
1,1,2,2-Tetrachloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
1,4-Dichlorobenzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
1,2-Dichlorobenzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
1,2-Dibromo-3-chloropropane	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 18:32	
Surrogate: Dibromofluoromethane	*114 %*			*75-136*	AJM	03/09/23 18:32	
Surrogate: 1,2-Dichloroethane-d4	*118 %*			*61-142*	AJM	03/09/23 18:32	
Surrogate: Toluene-d8	*104 %*			*82-121*	AJM	03/09/23 18:32	
Surrogate: 4-Bromofluorobenzene	*99.5 %*			*80-116*	AJM	03/09/23 18:32	

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HLW Engineering
PO Box 314
Story City, IA 50248

Work Order: 1GC0672

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0672-18 MW-602				Matrix: Water	Collected: 03/06/23 10:04		
Silver, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 1:22	
Arsenic, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 1:22	
Barium, total	**0.0105 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/15/23 1:22	
Beryllium, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 1:22	
Cadmium, total	<0.0008 mg/L	0.0008	1GC0648	EPA 6020A	RVV	03/15/23 1:22	
Cobalt, total	**0.194 mg/L**	**0.0004**	1GC0648	EPA 6020A	RVV	03/15/23 1:22	
Chromium, total	<0.0080 mg/L	0.0080	1GC0648	EPA 6020A	RVV	03/15/23 1:22	
Copper, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 1:22	
Nickel, total	**0.270 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/15/23 1:22	
Lead, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 1:22	
Antimony, total	<0.0020 mg/L	0.0020	1GC0648	EPA 6020A	RVV	03/15/23 1:22	
Selenium, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 1:22	
Thallium, total	<0.0020 mg/L	0.0020	1GC0648	EPA 6020A	RVV	03/15/23 1:22	
Vanadium, total	<0.0200 mg/L	0.0200	1GC0648	EPA 6020A	RVV	03/15/23 1:22	
Zinc, total	**0.102 mg/L**	**0.0200**	1GC0648	EPA 6020A	RVV	03/15/23 1:22	
1GC0672-19 MW-603				Matrix: Water	Collected: 03/06/23 10:30		
Acrylonitrile	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
Surrogate: Dibromofluoromethane	*112 %*			*80-126*	AJM	03/09/23 23:10	
Surrogate: 1,2-Dichloroethane-d4	*118 %*			*63-138*	AJM	03/09/23 23:10	
Surrogate: Toluene-d8	*103 %*			*87-116*	AJM	03/09/23 23:10	
Surrogate: 4-Bromofluorobenzene	*100 %*			*85-111*	AJM	03/09/23 23:10	
Chloromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
Vinyl Chloride	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
Bromomethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
Chloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
Trichlorofluoromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
1,1-Dichloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
Acetone	<10.0 ug/L	10.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
Methyl Iodide	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
Carbon Disulfide	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
Methylene Chloride	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
trans-1,2-Dichloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
1,1-Dichloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
Vinyl Acetate	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
cis-1,2-Dichloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
2-Butanone (MEK)	<10.0 ug/L	10.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
Bromochloromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
Chloroform	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	

HLW Engineering
PO Box 314
Story City, IA 50248

Work Order: 1GC0672

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0672-19 MW-603				Matrix: Water		Collected: 03/06/23 10:30	
1,1,1-Trichloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
Carbon Tetrachloride	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
Benzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
1,2-Dichloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
Trichloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
1,2-Dichloropropane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
Dibromomethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
Bromodichloromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
cis-1,3-Dichloropropene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
4-Methyl-2-pentanone (MIBK)	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
Toluene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
trans-1,3-Dichloropropene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
1,1,2-Trichloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
Tetrachloroethylene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
2-Hexanone (MBK)	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
Dibromochloromethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
1,2-Dibromoethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
Chlorobenzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
1,1,1,2-Tetrachloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
Ethylbenzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
Xylenes, total	<2.0 ug/L	2.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
Styrene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
Bromoform	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
1,2,3-Trichloropropane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
trans-1,4-Dichloro-2-butene	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
1,1,2,2-Tetrachloroethane	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
1,4-Dichlorobenzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
1,2-Dichlorobenzene	<1.0 ug/L	1.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
1,2-Dibromo-3-chloropropane	<5.0 ug/L	5.0	1GC0499	EPA 8260B	AJM	03/09/23 23:10	
Surrogate: Dibromofluoromethane	*112 %*			*75-136*	AJM	03/09/23 23:10	
Surrogate: 1,2-Dichloroethane-d4	*118 %*			*61-142*	AJM	03/09/23 23:10	
Surrogate: Toluene-d8	*103 %*			*82-121*	AJM	03/09/23 23:10	
Surrogate: 4-Bromofluorobenzene	*100 %*			*80-116*	AJM	03/09/23 23:10	
Silver, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 1:28	
Arsenic, total	**0.0052 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/15/23 1:28	
Barium, total	**0.0346 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/15/23 1:28	
Beryllium, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 1:28	
Cadmium, total	<0.0008 mg/L	0.0008	1GC0648	EPA 6020A	RVV	03/15/23 1:28	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Samples were preserved in accordance with 40 CFR for pH adjustment unless otherwise noted. MRL= Method Reporting Limit.

Keystone LABORATORIES
A Microbac Company

HLW Engineering
PO Box 314
Story City, IA 50248

Work Order: 1GC0672

Analyte	Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0672-19 MW-603				Matrix: Water		Collected: 03/06/23 10:30	
Cobalt, total	**0.0197 mg/L**	**0.0004**	1GC0648	EPA 6020A	RVV	03/15/23 1:28	
Chromium, total	<0.0080 mg/L	0.0080	1GC0648	EPA 6020A	RVV	03/15/23 1:28	
Copper, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 1:28	
Nickel, total	**0.0095 mg/L**	**0.0040**	1GC0648	EPA 6020A	RVV	03/15/23 1:28	
Lead, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 1:28	
Antimony, total	<0.0020 mg/L	0.0020	1GC0648	EPA 6020A	RVV	03/15/23 1:28	
Selenium, total	<0.0040 mg/L	0.0040	1GC0648	EPA 6020A	RVV	03/15/23 1:28	
Thallium, total	<0.0020 mg/L	0.0020	1GC0648	EPA 6020A	RVV	03/15/23 1:28	
Vanadium, total	<0.0200 mg/L	0.0200	1GC0648	EPA 6020A	RVV	03/15/23 1:28	
Zinc, total	<0.0200 mg/L	0.0200	1GC0648	EPA 6020A	RVV	03/15/23 1:28	

HLW Engineering
PO Box 314
Story City, IA 50248

Work Order: 1GC0672

Determination of Volatile Organic Compounds - Quality Control

Keystone Laboratories - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GC0499 - EPA 5030B										
Blank (1GC0499-BLK1)				Prepared & Analyzed: 03/09/23						
Surrogate: Dibromofluoromethane	*55.7*		*ug/L*	*50.3520*		*111*	*80-126*			
Surrogate: Dibromofluoromethane	*55.7*		"	*50.3520*		*111*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*57.1*		"	*50.4080*		*113*	*61-142*			
Surrogate: 1,2-Dichloroethane-d4	*57.1*		"	*50.4080*		*113*	*63-138*			
Surrogate: Toluene-d8	*51.8*		"	*50.2360*		*103*	*87-116*			
Surrogate: Toluene-d8	*51.8*		"	*50.2360*		*103*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*49.9*		"	*50.4200*		*98.9*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*49.9*		"	*50.4200*		*98.9*	*80-116*			
Chloromethane	ND	1.0	"							
Vinyl Chloride	ND	1.0	"							
Bromomethane	ND	1.0	"							
Chloroethane	ND	1.0	"							
Trichlorofluoromethane	ND	1.0	"							
1,1-Dichloroethylene	ND	1.0	"							
Acetone	ND	10.0	"							
Methyl Iodide	ND	1.0	"							
Carbon Disulfide	ND	1.0	"							
Methylene Chloride	ND	5.0	"							
Acrylonitrile	ND	5.0	"							
trans-1,2-Dichloroethylene	ND	1.0	"							
1,1-Dichloroethane	ND	1.0	"							
Vinyl Acetate	ND	5.0	"							
cis-1,2-Dichloroethylene	ND	1.0	"							
2-Butanone (MEK)	ND	10.0	"							
Bromochloromethane	ND	1.0	"							
Chloroform	ND	1.0	"							
1,1,1-Trichloroethane	ND	1.0	"							
Carbon Tetrachloride	ND	1.0	"							
Benzene	ND	1.0	"							
1,2-Dichloroethane	ND	1.0	"							
Trichloroethylene	ND	1.0	"							
1,2-Dichloropropane	ND	1.0	"							
Dibromomethane	ND	1.0	"							
Bromodichloromethane	ND	1.0	"							
cis-1,3-Dichloropropene	ND	1.0	"							
4-Methyl-2-pentanone (MIBK)	ND	5.0	"							
Toluene	ND	1.0	"							
trans-1,3-Dichloropropene	ND	1.0	"							

HLW Engineering
PO Box 314
Story City, IA 50248

Work Order: 1GC0672

Determination of Volatile Organic Compounds - Quality Control
Keystone Laboratories - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GC0499 - EPA 5030B										
Blank (1GC0499-BLK1)				Prepared & Analyzed: 03/09/23						
1,1,2-Trichloroethane	ND	1.0	ug/L							
Tetrachloroethylene	ND	1.0	"							
2-Hexanone (MBK)	ND	5.0	"							
Dibromochloromethane	ND	1.0	"							
1,2-Dibromoethane	ND	1.0	"							
Chlorobenzene	ND	1.0	"							
1,1,1,2-Tetrachloroethane	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes, total	ND	2.0	"							
Styrene	ND	1.0	"							
Bromoform	ND	1.0	"							
1,2,3-Trichloropropane	ND	1.0	"							
trans-1,4-Dichloro-2-butene	ND	5.0	"							
1,1,2,2-Tetrachloroethane	ND	1.0	"							
1,4-Dichlorobenzene	ND	1.0	"							
1,2-Dichlorobenzene	ND	1.0	"							
1,2-Dibromo-3-chloropropane	ND	5.0	"							
LCS (1GC0499-BS1)				Prepared & Analyzed: 03/09/23						
Surrogate: Dibromofluoromethane	*49.9*		*ug/L*	*50.3520*		*99.2*	*80-126*			
Surrogate: Dibromofluoromethane	*49.9*		*"*	*50.3520*		*99.2*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*50.1*		*"*	*50.4080*		*99.3*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*50.1*		*"*	*50.4080*		*99.3*	*61-142*			
Surrogate: Toluene-d8	*50.5*		*"*	*50.2360*		*100*	*87-116*			
Surrogate: Toluene-d8	*50.5*		*"*	*50.2360*		*100*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*50.2*		*"*	*50.4200*		*99.6*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*50.2*		*"*	*50.4200*		*99.6*	*80-116*			
Chloromethane	24.92	1.0	"	30.0000		83.1	63-155			
Vinyl Chloride	38.39	1.0	"	30.0000		128	70-154			
Bromomethane	22.07	1.0	"	30.0000		73.6	52-176			
Chloroethane	38.79	1.0	"	30.0000		129	72-148			
Trichlorofluoromethane	33.84	1.0	"	30.0000		113	70-152			
1,1-Dichloroethylene	56.35	1.0	"	50.0000		113	70-148			
Acetone	113.2	10.0	"	108.800		104	43-172			
Methyl Iodide	98.69	1.0	"	99.6930		99.0	69-170			
Carbon Disulfide	117.6	1.0	"	104.600		112	72-162			
Methylene Chloride	47.71	5.0	"	50.0000		95.4	68-142			
Acrylonitrile	103.2	5.0	"	100.500		103	67-144			
trans-1,2-Dichloroethylene	51.98	1.0	"	50.0000		104	66-148			

Determination of Volatile Organic Compounds - Quality Control

Keystone Laboratories - Newton

Batch 1GC0499 - EPA 5030B

LCS (1GC0499-BS1) Prepared & Analyzed: 03/09/23

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethane	50.26	1.0	ug/L	50.0000		101	66-143			
Vinyl Acetate	63.05	5.0	"	115.300		54.7	43-153			
cis-1,2-Dichloroethylene	64.83	1.0	"	50.0000		130	71-149			
2-Butanone (MEK)	79.96	10.0	"	105.600		75.7	52-159			
Bromochloromethane	48.63	1.0	"	50.0000		97.3	69-143			
Chloroform	53.81	1.0	"	50.0000		108	69-144			
1,1,1-Trichloroethane	45.47	1.0	"	49.9750		91.0	62-129			
Carbon Tetrachloride	54.43	1.0	"	50.0000		109	63-141			
Benzene	49.42	1.0	"	50.0000		98.8	71-134			
1,2-Dichloroethane	48.78	1.0	"	50.0000		97.6	72-132			
Trichloroethylene	45.89	1.0	"	50.0000		91.8	71-135			
1,2-Dichloropropane	49.44	1.0	"	50.0000		98.9	69-136			
Dibromomethane	44.99	1.0	"	50.0000		90.0	73-147			
Bromodichloromethane	47.57	1.0	"	50.0000		95.1	68-129			
cis-1,3-Dichloropropene	47.03	1.0	"	50.3250		93.5	65-134			
4-Methyl-2-pentanone (MIBK)	100.4	5.0	"	106.400		94.4	58-147			
Toluene	49.12	1.0	"	50.0000		98.2	72-133			
trans-1,3-Dichloropropene	46.37	1.0	"	50.4250		92.0	67-130			
1,1,2-Trichloroethane	48.92	1.0	"	50.0000		97.8	69-135			
Tetrachloroethylene	41.63	1.0	"	50.0000		83.3	69-130			
2-Hexanone (MBK)	96.04	5.0	"	105.000		91.5	55-144			
Dibromochloromethane	49.96	1.0	"	49.5000		101	73-127			
1,2-Dibromoethane	51.13	1.0	"	50.0000		102	67-132			
Chlorobenzene	47.68	1.0	"	50.0000		95.4	72-123			
1,1,1,2-Tetrachloroethane	48.62	1.0	"	50.0000		97.2	73-127			
Ethylbenzene	46.35	1.0	"	50.0000		92.7	71-127			
Xylenes, total	139.2	2.0	"	150.000		92.8	74-127			
Styrene	45.29	1.0	"	50.0000		90.6	66-126			
Bromoform	54.14	1.0	"	50.0000		108	68-130			
1,2,3-Trichloropropane	49.86	1.0	"	50.0000		99.7	63-136			
trans-1,4-Dichloro-2-butene	99.00	5.0	"	116.300		85.1	54-134			
1,1,2,2-Tetrachloroethane	49.34	1.0	"	49.8500		99.0	61-131			
1,4-Dichlorobenzene	48.18	1.0	"	50.0000		96.4	70-129			
1,2-Dichlorobenzene	46.66	1.0	"	50.0000		93.3	69-126			
1,2-Dibromo-3-chloropropane	52.17	5.0	"	50.0000		104	50-143			

Determination of Volatile Organic Compounds - Quality Control

Keystone Laboratories - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GC0499 - EPA 5030B										
LCS Dup (1GC0499-BSD1)				Prepared & Analyzed: 03/09/23						
Surrogate: Dibromofluoromethane	*49.5*		*ug/L*	*50.3520*		*98.2*	*80-126*			
Surrogate: Dibromofluoromethane	*49.5*		*"*	*50.3520*		*98.2*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*49.2*		*"*	*50.4080*		*97.6*	*61-142*			
Surrogate: 1,2-Dichloroethane-d4	*49.2*		*"*	*50.4080*		*97.6*	*63-138*			
Surrogate: Toluene-d8	*50.5*		*"*	*50.2360*		*100*	*82-121*			
Surrogate: Toluene-d8	*50.5*		*"*	*50.2360*		*100*	*87-116*			
Surrogate: 4-Bromofluorobenzene	*50.9*		*"*	*50.4200*		*101*	*80-116*			
Surrogate: 4-Bromofluorobenzene	*50.9*		*"*	*50.4200*		*101*	*85-111*			
Chloromethane	22.77	1.0	"	30.0000		75.9	63-155	9.02	24	
Vinyl Chloride	37.48	1.0	"	30.0000		125	70-154	2.40	25	
Bromomethane	25.15	1.0	"	30.0000		83.8	52-176	13.0	27	
Chloroethane	37.01	1.0	"	30.0000		123	72-148	4.70	25	
Trichlorofluoromethane	31.91	1.0	"	30.0000		106	70-152	5.87	26	
1,1-Dichloroethylene	53.95	1.0	"	50.0000		108	70-148	4.35	24	
Acetone	105.0	10.0	"	108.800		96.5	43-172	7.50	30	
Methyl Iodide	149.8	1.0	"	99.6930		150	69-170	41.1	30	QR-02
Carbon Disulfide	110.3	1.0	"	104.600		105	72-162	6.36	24	
Methylene Chloride	46.87	5.0	"	50.0000		93.7	68-142	1.78	21	
Acrylonitrile	99.96	5.0	"	100.500		99.5	67-144	3.24	24	
trans-1,2-Dichloroethylene	50.00	1.0	"	50.0000		100	66-148	3.88	27	
1,1-Dichloroethane	48.33	1.0	"	50.0000		96.7	66-143	3.92	24	
Vinyl Acetate	88.43	5.0	"	115.300		76.7	43-153	33.5	30	QR-02
cis-1,2-Dichloroethylene	63.70	1.0	"	50.0000		127	71-149	1.76	26	
2-Butanone (MEK)	88.35	10.0	"	105.600		83.7	52-159	9.97	27	
Bromochloromethane	49.36	1.0	"	50.0000		98.7	69-143	1.49	23	
Chloroform	51.98	1.0	"	50.0000		104	69-144	3.46	23	
1,1,1-Trichloroethane	44.19	1.0	"	49.9750		88.4	62-129	2.86	24	
Carbon Tetrachloride	56.23	1.0	"	50.0000		112	63-141	3.25	25	
Benzene	47.50	1.0	"	50.0000		95.0	71-134	3.96	24	
1,2-Dichloroethane	48.28	1.0	"	50.0000		96.6	72-132	1.03	24	
Trichloroethylene	44.83	1.0	"	50.0000		89.7	71-135	2.34	24	
1,2-Dichloropropane	48.86	1.0	"	50.0000		97.7	69-136	1.18	24	
Dibromomethane	48.71	1.0	"	50.0000		97.4	73-147	7.94	25	
Bromodichloromethane	46.89	1.0	"	50.0000		93.8	68-129	1.44	22	
cis-1,3-Dichloropropene	47.00	1.0	"	50.3250		93.4	65-134	0.0638	23	
4-Methyl-2-pentanone (MIBK)	97.38	5.0	"	106.400		91.5	58-147	3.10	27	
Toluene	48.24	1.0	"	50.0000		96.5	72-133	1.81	24	
trans-1,3-Dichloropropene	45.75	1.0	"	50.4250		90.7	67-130	1.35	24	

HLW Engineering
PO Box 314
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Work Order: 1GC0672

Determination of Volatile Organic Compounds - Quality Control
Keystone Laboratories - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GC0499 - EPA 5030B										
LCS Dup (1GC0499-BSD1)				Prepared & Analyzed: 03/09/23						
1,1,2-Trichloroethane	48.19	1.0	ug/L	50.0000		96.4	69-135	1.50	23	
Tetrachloroethylene	40.80	1.0	"	50.0000		81.6	69-130	2.01	25	
2-Hexanone (MBK)	94.11	5.0	"	105.000		89.6	55-144	2.03	25	
Dibromochloromethane	50.05	1.0	"	49.5000		101	73-127	0.180	22	
1,2-Dibromoethane	50.73	1.0	"	50.0000		101	67-132	0.785	24	
Chlorobenzene	47.39	1.0	"	50.0000		94.8	72-123	0.610	23	
1,1,1,2-Tetrachloroethane	48.82	1.0	"	50.0000		97.6	73-127	0.411	24	
Ethylbenzene	45.81	1.0	"	50.0000		91.6	71-127	1.17	26	
Xylenes, total	137.2	2.0	"	150.000		91.5	74-127	1.48	25	
Styrene	44.90	1.0	"	50.0000		89.8	66-126	0.865	23	
Bromoform	53.96	1.0	"	50.0000		108	68-130	0.333	23	
1,2,3-Trichloropropane	48.21	1.0	"	50.0000		96.4	63-136	3.36	24	
trans-1,4-Dichloro-2-butene	97.35	5.0	"	116.300		83.7	54-134	1.68	27	
1,1,2,2-Tetrachloroethane	47.17	1.0	"	49.8500		94.6	61-131	4.50	29	
1,4-Dichlorobenzene	46.29	1.0	"	50.0000		92.6	70-129	4.00	24	
1,2-Dichlorobenzene	46.12	1.0	"	50.0000		92.2	69-126	1.16	26	
1,2-Dibromo-3-chloropropane	50.46	5.0	"	50.0000		101	50-143	3.33	30	
Matrix Spike (1GC0499-MS1)		**Source: 1GC0672-16**		Prepared & Analyzed: 03/09/23						
Surrogate: Dibromofluoromethane	*503*		*ug/L*	*503.520*		*99.9*	*75-136*			
Surrogate: Dibromofluoromethane	*503*		*"*	*503.520*		*99.9*	*80-126*			
Surrogate: 1,2-Dichloroethane-d4	*512*		*"*	*504.080*		*102*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*512*		*"*	*504.080*		*102*	*61-142*			
Surrogate: Toluene-d8	*498*		*"*	*502.360*		*99.2*	*82-121*			
Surrogate: Toluene-d8	*498*		*"*	*502.360*		*99.2*	*87-116*			
Surrogate: 4-Bromofluorobenzene	*503*		*"*	*504.200*		*99.8*	*80-116*			
Surrogate: 4-Bromofluorobenzene	*503*		*"*	*504.200*		*99.8*	*85-111*			
Chloromethane	257.4	10.0	"	300.000	ND	85.8	61-152			
Vinyl Chloride	380.1	10.0	"	300.000	ND	127	66-149			
Bromomethane	265.0	10.0	"	300.000	ND	88.3	43-171			
Chloroethane	380.1	10.0	"	300.000	ND	127	69-148			
Trichlorofluoromethane	321.0	10.0	"	300.000	ND	107	62-163			
1,1-Dichloroethylene	548.8	10.0	"	500.000	ND	110	70-148			
Acetone	1115	100	"	1088.00	ND	102	45-173			
Methyl Iodide	1384	10.0	"	996.930	ND	139	62-167			
Carbon Disulfide	1108	10.0	"	1046.00	ND	106	71-163			
Methylene Chloride	469.3	50.0	"	500.000	ND	93.9	69-140			
Acrylonitrile	1011	50.0	"	1005.00	ND	101	58-151			
trans-1,2-Dichloroethylene	510.8	10.0	"	500.000	ND	102	69-144			

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Work Order: 1GC0672

Determination of Volatile Organic Compounds - Quality Control

Keystone Laboratories - Newton

Batch 1GC0499 - EPA 5030B

Matrix Spike (1GC0499-MS1) **Source: 1GC0672-16** Prepared & Analyzed: 03/09/23

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1-Dichloroethane	486.6	10.0	ug/L	500.000	ND	97.3	70-138			
Vinyl Acetate	1086	50.0	"	1153.00	ND	94.1	58-142			
cis-1,2-Dichloroethylene	649.7	10.0	"	500.000	ND	130	68-151			
2-Butanone (MEK)	972.7	100	"	1056.00	ND	92.1	50-160			
Bromochloromethane	501.1	10.0	"	500.000	ND	100	65-143			
Chloroform	522.4	10.0	"	500.000	ND	104	71-143			
1,1,1-Trichloroethane	449.6	10.0	"	499.750	ND	90.0	63-133			
Carbon Tetrachloride	571.0	10.0	"	500.000	ND	114	63-142			
Benzene	476.4	10.0	"	500.000	ND	95.3	69-133			
1,2-Dichloroethane	482.3	10.0	"	500.000	ND	96.5	63-138			
Trichloroethylene	444.9	10.0	"	500.000	ND	89.0	71-133			
1,2-Dichloropropane	485.7	10.0	"	500.000	ND	97.1	69-132			
Dibromomethane	484.3	10.0	"	500.000	ND	96.9	70-147			
Bromodichloromethane	462.5	10.0	"	500.000	ND	92.5	67-130			
cis-1,3-Dichloropropene	451.7	10.0	"	503.250	ND	89.8	61-126			
4-Methyl-2-pentanone (MIBK)	987.5	50.0	"	1064.00	ND	92.8	55-147			
Toluene	476.4	10.0	"	500.000	ND	95.3	71-133			
trans-1,3-Dichloropropene	441.6	10.0	"	504.250	ND	87.6	63-124			
1,1,2-Trichloroethane	476.3	10.0	"	500.000	ND	95.3	69-133			
Tetrachloroethylene	401.7	10.0	"	500.000	ND	80.3	70-124			
2-Hexanone (MBK)	973.3	50.0	"	1050.00	ND	92.7	53-141			
Dibromochloromethane	487.9	10.0	"	495.000	ND	98.6	74-122			
1,2-Dibromoethane	496.8	10.0	"	500.000	ND	99.4	66-127			
Chlorobenzene	465.8	10.0	"	500.000	ND	93.2	76-116			
1,1,1,2-Tetrachloroethane	473.6	10.0	"	500.000	ND	94.7	77-121			
Ethylbenzene	451.8	10.0	"	500.000	ND	90.4	73-124			
Xylenes, total	1362	20.0	"	1500.00	ND	90.8	75-123			
Styrene	439.0	10.0	"	500.000	ND	87.8	70-120			
Bromoform	522.6	10.0	"	500.000	ND	105	70-124			
1,2,3-Trichloropropane	484.6	10.0	"	500.000	ND	96.9	62-135			
trans-1,4-Dichloro-2-butene	947.1	50.0	"	1163.00	ND	81.4	50-120			
1,1,2,2-Tetrachloroethane	478.2	10.0	"	498.500	ND	95.9	63-126			
1,4-Dichlorobenzene	463.1	10.0	"	500.000	ND	92.6	72-119			
1,2-Dichlorobenzene	449.5	10.0	"	500.000	ND	89.9	71-117			
1,2-Dibromo-3-chloropropane	508.0	50.0	"	500.000	ND	102	49-134			

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Work Order: 1GC0672

Determination of Volatile Organic Compounds - Quality Control

Keystone Laboratories - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GC0499 - EPA 5030B										
Matrix Spike Dup (1GC0499-MSD1)		**Source: 1GC0672-16**		Prepared & Analyzed: 03/09/23						
Surrogate: Dibromofluoromethane	*501*		*ug/L*	*503.520*		*99.6*	*75-136*			
Surrogate: Dibromofluoromethane	*501*		*"*	*503.520*		*99.6*	*80-126*			
Surrogate: 1,2-Dichloroethane-d4	*504*		*"*	*504.080*		*100*	*61-142*			
Surrogate: 1,2-Dichloroethane-d4	*504*		*"*	*504.080*		*100*	*63-138*			
Surrogate: Toluene-d8	*502*		*"*	*502.360*		*99.8*	*82-121*			
Surrogate: Toluene-d8	*502*		*"*	*502.360*		*99.8*	*87-116*			
Surrogate: 4-Bromofluorobenzene	*500*		*"*	*504.200*		*99.2*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*500*		*"*	*504.200*		*99.2*	*80-116*			
Chloromethane	227.0	10.0	"	300.000	ND	75.7	61-152	12.6	26	
Vinyl Chloride	360.0	10.0	"	300.000	ND	120	66-149	5.43	23	
Bromomethane	260.2	10.0	"	300.000	ND	86.7	43-171	1.83	29	
Chloroethane	364.1	10.0	"	300.000	ND	121	69-148	4.30	25	
Trichlorofluoromethane	311.3	10.0	"	300.000	ND	104	62-163	3.07	25	
1,1-Dichloroethylene	525.4	10.0	"	500.000	ND	105	70-148	4.36	22	
Acetone	1158	100	"	1088.00	ND	106	45-173	3.79	30	
Methyl Iodide	1432	10.0	"	996.930	ND	144	62-167	3.39	24	
Carbon Disulfide	1063	10.0	"	1046.00	ND	102	71-163	4.14	22	
Methylene Chloride	454.2	50.0	"	500.000	ND	90.8	69-140	3.27	19	
Acrylonitrile	1059	50.0	"	1005.00	ND	105	58-151	4.57	15	
trans-1,2-Dichloroethylene	489.9	10.0	"	500.000	ND	98.0	69-144	4.18	22	
1,1-Dichloroethane	466.1	10.0	"	500.000	ND	93.2	70-138	4.30	20	
Vinyl Acetate	1117	50.0	"	1153.00	ND	96.9	58-142	2.90	24	
cis-1,2-Dichloroethylene	641.9	10.0	"	500.000	ND	128	68-151	1.21	22	
2-Butanone (MEK)	1011	100	"	1056.00	ND	95.8	50-160	3.88	23	
Bromochloromethane	501.4	10.0	"	500.000	ND	100	65-143	0.0598	22	
Chloroform	505.5	10.0	"	500.000	ND	101	71-143	3.29	21	
1,1,1-Trichloroethane	437.8	10.0	"	499.750	ND	87.6	63-133	2.66	23	
Carbon Tetrachloride	561.4	10.0	"	500.000	ND	112	63-142	1.70	22	
Benzene	464.9	10.0	"	500.000	ND	93.0	69-133	2.44	18	
1,2-Dichloroethane	481.9	10.0	"	500.000	ND	96.4	63-138	0.0830	20	
Trichloroethylene	431.4	10.0	"	500.000	ND	86.3	71-133	3.08	23	
1,2-Dichloropropane	478.4	10.0	"	500.000	ND	95.7	69-132	1.51	20	
Dibromomethane	514.1	10.0	"	500.000	ND	103	70-147	5.97	22	
Bromodichloromethane	464.9	10.0	"	500.000	ND	93.0	67-130	0.518	21	
cis-1,3-Dichloropropene	452.1	10.0	"	503.250	ND	89.8	61-126	0.0885	21	
4-Methyl-2-pentanone (MIBK)	1050	50.0	"	1064.00	ND	98.7	55-147	6.17	23	
Toluene	465.4	10.0	"	500.000	ND	93.1	71-133	2.34	19	
trans-1,3-Dichloropropene	445.7	10.0	"	504.250	ND	88.4	63-124	0.924	21	

Determination of Volatile Organic Compounds - Quality Control

Keystone Laboratories - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GC0499 - EPA 5030B										
Matrix Spike Dup (1GC0499-MSD1)		**Source: 1GC0672-16**		Prepared & Analyzed: 03/09/23						
1,1,2-Trichloroethane	483.1	10.0	ug/L	500.000	ND	96.6	69-133	1.42	19	
Tetrachloroethylene	385.2	10.0	"	500.000	ND	77.0	70-124	4.19	24	
2-Hexanone (MBK)	1018	50.0	"	1050.00	ND	96.9	53-141	4.45	24	
Dibromochloromethane	490.5	10.0	"	495.000	ND	99.1	74-122	0.531	21	
1,2-Dibromoethane	505.8	10.0	"	500.000	ND	101	66-127	1.80	23	
Chlorobenzene	450.7	10.0	"	500.000	ND	90.1	76-116	3.30	21	
1,1,1,2-Tetrachloroethane	464.2	10.0	"	500.000	ND	92.8	77-121	2.00	25	
Ethylbenzene	434.2	10.0	"	500.000	ND	86.8	73-124	3.97	20	
Xylenes, total	1308	20.0	"	1500.00	ND	87.2	75-123	4.05	20	
Styrene	427.6	10.0	"	500.000	ND	85.5	70-120	2.63	23	
Bromoform	530.1	10.0	"	500.000	ND	106	70-124	1.42	22	
1,2,3-Trichloropropane	504.7	10.0	"	500.000	ND	101	62-135	4.06	28	
trans-1,4-Dichloro-2-butene	974.2	50.0	"	1163.00	ND	83.8	50-120	2.82	26	
1,1,2,2-Tetrachloroethane	494.5	10.0	"	498.500	ND	99.2	63-126	3.35	24	
1,4-Dichlorobenzene	455.0	10.0	"	500.000	ND	91.0	72-119	1.76	24	
1,2-Dichlorobenzene	445.1	10.0	"	500.000	ND	89.0	71-117	0.984	24	
1,2-Dibromo-3-chloropropane	541.1	50.0	"	500.000	ND	108	49-134	6.31	28	
Batch 1GC0501 - EPA 5030B										
Blank (1GC0501-BLK1)				Prepared & Analyzed: 03/09/23						
Surrogate: Dibromofluoromethane	*54.0*		*ug/L*	*50.3520*		*107*	*80-126*			
Surrogate: Dibromofluoromethane	*54.0*		*"*	*50.3520*		*107*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*58.2*		*"*	*50.4080*		*115*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*58.2*		*"*	*50.4080*		*115*	*61-142*			
Surrogate: Toluene-d8	*48.9*		*"*	*50.2360*		*97.3*	*82-121*			
Surrogate: Toluene-d8	*48.9*		*"*	*50.2360*		*97.3*	*87-116*			
Surrogate: 4-Bromofluorobenzene	*54.8*		*"*	*50.4200*		*109*	*80-116*			
Surrogate: 4-Bromofluorobenzene	*54.8*		*"*	*50.4200*		*109*	*85-111*			
Chloromethane	ND	1.0	"							
Vinyl Chloride	ND	1.0	"							
Bromomethane	ND	1.0	"							
Chloroethane	ND	1.0	"							
Trichlorofluoromethane	ND	1.0	"							
1,1-Dichloroethylene	ND	1.0	"							
Acetone	ND	10.0	"							
Methyl Iodide	ND	1.0	"							
Carbon Disulfide	ND	1.0	"							
Methylene Chloride	ND	5.0	"							

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Determination of Volatile Organic Compounds - Quality Control
Keystone Laboratories - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GC0501 - EPA 5030B										
Blank (1GC0501-BLK1)				Prepared & Analyzed: 03/09/23						
Acrylonitrile	ND	5.0	ug/L							
trans-1,2-Dichloroethylene	ND	1.0	"							
1,1-Dichloroethane	ND	1.0	"							
Vinyl Acetate	ND	5.0	"							
cis-1,2-Dichloroethylene	ND	1.0	"							
2-Butanone (MEK)	ND	10.0	"							
Bromochloromethane	ND	1.0	"							
Chloroform	ND	1.0	"							
1,1,1-Trichloroethane	ND	1.0	"							
Carbon Tetrachloride	ND	1.0	"							
Benzene	ND	1.0	"							
1,2-Dichloroethane	ND	1.0	"							
Trichloroethylene	ND	1.0	"							
1,2-Dichloropropane	ND	1.0	"							
Dibromomethane	ND	1.0	"							
Bromodichloromethane	ND	1.0	"							
cis-1,3-Dichloropropene	ND	1.0	"							
4-Methyl-2-pentanone (MIBK)	ND	5.0	"							
Toluene	ND	1.0	"							
trans-1,3-Dichloropropene	ND	1.0	"							
1,1,2-Trichloroethane	ND	1.0	"							
2-Hexanone (MBK)	ND	5.0	"							
Dibromochloromethane	ND	1.0	"							
1,2-Dibromoethane	ND	1.0	"							
Chlorobenzene	ND	1.0	"							
1,1,1,2-Tetrachloroethane	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes, total	ND	2.0	"							
Styrene	ND	1.0	"							
Bromoform	ND	1.0	"							
1,2,3-Trichloropropane	ND	1.0	"							
trans-1,4-Dichloro-2-butene	ND	5.0	"							
1,1,2,2-Tetrachloroethane	ND	1.0	"							
1,4-Dichlorobenzene	ND	1.0	"							
1,2-Dichlorobenzene	ND	1.0	"							
1,2-Dibromo-3-chloropropane	ND	5.0	"							

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Determination of Volatile Organic Compounds - Quality Control

Keystone Laboratories - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GC0501 - EPA 5030B										
Blank (1GC0501-BLK2)				Prepared: 03/09/23 Analyzed: 03/10/23						
Surrogate: Dibromofluoromethane	*54.1*		*ug/L*	*50.3520*		*107*	*80-126*			
Surrogate: Dibromofluoromethane	*54.1*		"	*50.3520*		*107*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*64.0*		"	*50.4080*		*127*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*64.0*		"	*50.4080*		*127*	*61-142*			
Surrogate: Toluene-d8	*50.8*		"	*50.2360*		*101*	*82-121*			
Surrogate: Toluene-d8	*50.8*		"	*50.2360*		*101*	*87-116*			
Surrogate: 4-Bromofluorobenzene	*54.4*		"	*50.4200*		*108*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*54.4*		"	*50.4200*		*108*	*80-116*			
Chloromethane	ND	1.0	"							
Vinyl Chloride	ND	1.0	"							
Bromomethane	ND	1.0	"							
Chloroethane	ND	1.0	"							
Trichlorofluoromethane	ND	1.0	"							
1,1-Dichloroethylene	ND	1.0	"							
Acetone	ND	10.0	"							
Methyl Iodide	ND	1.0	"							
Carbon Disulfide	ND	1.0	"							
Methylene Chloride	ND	5.0	"							
Acrylonitrile	ND	5.0	"							
trans-1,2-Dichloroethylene	ND	1.0	"							
1,1-Dichloroethane	ND	1.0	"							
Vinyl Acetate	ND	5.0	"							
cis-1,2-Dichloroethylene	ND	1.0	"							
2-Butanone (MEK)	ND	10.0	"							
Bromochloromethane	ND	1.0	"							
Chloroform	ND	1.0	"							
1,1,1-Trichloroethane	ND	1.0	"							
Carbon Tetrachloride	ND	1.0	"							
Benzene	ND	1.0	"							
1,2-Dichloroethane	ND	1.0	"							
Trichloroethylene	ND	1.0	"							
1,2-Dichloropropane	ND	1.0	"							
Dibromomethane	ND	1.0	"							
Bromodichloromethane	ND	1.0	"							
cis-1,3-Dichloropropene	ND	1.0	"							
4-Methyl-2-pentanone (MIBK)	ND	5.0	"							
Toluene	ND	1.0	"							
trans-1,3-Dichloropropene	ND	1.0	"							

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Samples were preserved in accordance with 40 CFR for pH adjustment unless otherwise noted. MRL= Method Reporting Limit.

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Determination of Volatile Organic Compounds - Quality Control

Keystone Laboratories - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GC0501 - EPA 5030B										
Blank (1GC0501-BLK2)				Prepared: 03/09/23 Analyzed: 03/10/23						
1,1,2-Trichloroethane	ND	1.0	ug/L							
2-Hexanone (MBK)	ND	5.0	"							
Dibromochloromethane	ND	1.0	"							
1,2-Dibromoethane	ND	1.0	"							
Chlorobenzene	ND	1.0	"							
1,1,1,2-Tetrachloroethane	ND	1.0	"							
Ethylbenzene	ND	1.0	"							
Xylenes, total	ND	2.0	"							
Styrene	ND	1.0	"							
Bromoform	ND	1.0	"							
1,2,3-Trichloropropane	ND	1.0	"							
trans-1,4-Dichloro-2-butene	ND	5.0	"							
1,1,2,2-Tetrachloroethane	ND	1.0	"							
1,4-Dichlorobenzene	ND	1.0	"							
1,2-Dichlorobenzene	ND	1.0	"							
1,2-Dibromo-3-chloropropane	ND	5.0	"							
LCS (1GC0501-BS1)				Prepared & Analyzed: 03/09/23						
Surrogate: Dibromofluoromethane	*54.4*		*ug/L*	*50.3520*		*108*	*80-126*			
Surrogate: Dibromofluoromethane	*54.4*		*"*	*50.3520*		*108*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*57.2*		*"*	*50.4080*		*113*	*61-142*			
Surrogate: 1,2-Dichloroethane-d4	*57.2*		*"*	*50.4080*		*113*	*63-138*			
Surrogate: Toluene-d8	*52.6*		*"*	*50.2360*		*105*	*82-121*			
Surrogate: Toluene-d8	*52.6*		*"*	*50.2360*		*105*	*87-116*			
Surrogate: 4-Bromofluorobenzene	*52.0*		*"*	*50.4200*		*103*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*52.0*		*"*	*50.4200*		*103*	*80-116*			
Chloromethane	35.77	1.0	"	30.0000		119	63-155			
Vinyl Chloride	36.82	1.0	"	30.0000		123	70-154			
Bromomethane	32.17	1.0	"	30.0000		107	52-176			
Chloroethane	36.15	1.0	"	30.0000		120	72-148			
Trichlorofluoromethane	33.69	1.0	"	30.0000		112	70-152			
1,1-Dichloroethylene	59.06	1.0	"	50.0000		118	70-148			
Acetone	128.8	10.0	"	108.800		118	43-172			
Methyl Iodide	114.7	1.0	"	99.6930		115	69-170			
Carbon Disulfide	115.0	1.0	"	104.600		110	72-162			
Methylene Chloride	52.93	5.0	"	50.0000		106	68-142			
Acrylonitrile	110.1	5.0	"	100.500		110	67-144			
trans-1,2-Dichloroethylene	56.82	1.0	"	50.0000		114	66-148			
1,1-Dichloroethane	54.86	1.0	"	50.0000		110	66-143			

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Determination of Volatile Organic Compounds - Quality Control
Keystone Laboratories - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GC0501 - EPA 5030B										
LCS (1GC0501-BS1)				Prepared & Analyzed: 03/09/23						
Vinyl Acetate	122.3	5.0	ug/L	115.300		106	43-153			
cis-1,2-Dichloroethylene	59.40	1.0	"	50.0000		119	71-149			
2-Butanone (MEK)	135.8	10.0	"	105.600		129	52-159			
Bromochloromethane	57.66	1.0	"	50.0000		115	69-143			
Chloroform	57.64	1.0	"	50.0000		115	69-144			
1,1,1-Trichloroethane	51.37	1.0	"	49.9750		103	62-129			
Carbon Tetrachloride	54.63	1.0	"	50.0000		109	63-141			
Benzene	52.99	1.0	"	50.0000		106	71-134			
1,2-Dichloroethane	51.72	1.0	"	50.0000		103	72-132			
Trichloroethylene	50.58	1.0	"	50.0000		101	71-135			
1,2-Dichloropropane	52.08	1.0	"	50.0000		104	69-136			
Dibromomethane	54.47	1.0	"	50.0000		109	73-147			
Bromodichloromethane	51.32	1.0	"	50.0000		103	68-129			
cis-1,3-Dichloropropene	51.42	1.0	"	50.3250		102	65-134			
4-Methyl-2-pentanone (MIBK)	120.4	5.0	"	106.400		113	58-147			
Toluene	51.13	1.0	"	50.0000		102	72-133			
trans-1,3-Dichloropropene	50.61	1.0	"	50.4250		100	67-130			
1,1,2-Trichloroethane	49.23	1.0	"	50.0000		98.5	69-135			
2-Hexanone (MBK)	113.2	5.0	"	105.000		108	55-144			
Dibromochloromethane	50.38	1.0	"	49.5000		102	73-127			
1,2-Dibromoethane	49.71	1.0	"	50.0000		99.4	67-132			
Chlorobenzene	48.38	1.0	"	50.0000		96.8	72-123			
1,1,1,2-Tetrachloroethane	49.19	1.0	"	50.0000		98.4	73-127			
Ethylbenzene	50.10	1.0	"	50.0000		100	71-127			
Xylenes, total	151.1	2.0	"	150.000		101	74-127			
Styrene	48.51	1.0	"	50.0000		97.0	66-126			
Bromoform	51.40	1.0	"	50.0000		103	68-130			
1,2,3-Trichloropropane	51.83	1.0	"	50.0000		104	63-136			
trans-1,4-Dichloro-2-butene	115.6	5.0	"	116.300		99.4	54-134			
1,1,2,2-Tetrachloroethane	48.38	1.0	"	49.8500		97.1	61-131			
1,4-Dichlorobenzene	48.65	1.0	"	50.0000		97.3	70-129			
1,2-Dichlorobenzene	47.90	1.0	"	50.0000		95.8	69-126			
1,2-Dibromo-3-chloropropane	46.61	5.0	"	50.0000		93.2	50-143			

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Determination of Volatile Organic Compounds - Quality Control

Keystone Laboratories - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GC0501 - EPA 5030B										
LCS (1GC0501-BS2)				Prepared & Analyzed: 03/09/23						
Surrogate: Dibromofluoromethane	*55.6*		*ug/L*	*50.3520*		*110*	*80-126*			
Surrogate: Dibromofluoromethane	*55.6*		*"*	*50.3520*		*110*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*65.1*		*"*	*50.4080*		*129*	*61-142*			
Surrogate: 1,2-Dichloroethane-d4	*65.1*		*"*	*50.4080*		*129*	*63-138*			
Surrogate: Toluene-d8	*52.0*		*"*	*50.2360*		*103*	*87-116*			
Surrogate: Toluene-d8	*52.0*		*"*	*50.2360*		*103*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*54.7*		*"*	*50.4200*		*109*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*54.7*		*"*	*50.4200*		*109*	*80-116*			
Chloromethane	43.02	1.0	"	30.0000		143	63-155			
Vinyl Chloride	40.34	1.0	"	30.0000		134	70-154			
Bromomethane	30.34	1.0	"	30.0000		101	52-176			
Chloroethane	35.21	1.0	"	30.0000		117	72-148			
Trichlorofluoromethane	34.46	1.0	"	30.0000		115	70-152			
1,1-Dichloroethylene	62.65	1.0	"	50.0000		125	70-148			
Acetone	144.5	10.0	"	108.800		133	43-172			
Methyl Iodide	106.5	1.0	"	99.6930		107	69-170			
Carbon Disulfide	109.2	1.0	"	104.600		104	72-162			
Methylene Chloride	51.36	5.0	"	50.0000		103	68-142			
Acrylonitrile	116.2	5.0	"	100.500		116	67-144			
trans-1,2-Dichloroethylene	56.76	1.0	"	50.0000		114	66-148			
1,1-Dichloroethane	55.70	1.0	"	50.0000		111	66-143			
Vinyl Acetate	173.7	5.0	"	115.300		151	43-153			
cis-1,2-Dichloroethylene	69.68	1.0	"	50.0000		139	71-149			
2-Butanone (MEK)	148.4	10.0	"	105.600		141	52-159			
Bromochloromethane	60.36	1.0	"	50.0000		121	69-143			
Chloroform	61.09	1.0	"	50.0000		122	69-144			
1,1,1-Trichloroethane	53.48	1.0	"	49.9750		107	62-129			
Carbon Tetrachloride	57.24	1.0	"	50.0000		114	63-141			
Benzene	51.81	1.0	"	50.0000		104	71-134			
1,2-Dichloroethane	56.95	1.0	"	50.0000		114	72-132			
Trichloroethylene	51.03	1.0	"	50.0000		102	71-135			
1,2-Dichloropropane	53.45	1.0	"	50.0000		107	69-136			
Dibromomethane	54.91	1.0	"	50.0000		110	73-147			
Bromodichloromethane	52.83	1.0	"	50.0000		106	68-129			
cis-1,3-Dichloropropene	50.34	1.0	"	50.3250		100	65-134			
4-Methyl-2-pentanone (MIBK)	126.5	5.0	"	106.400		119	58-147			
Toluene	50.08	1.0	"	50.0000		100	72-133			
trans-1,3-Dichloropropene	50.26	1.0	"	50.4250		99.7	67-130			

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Work Order: 1GC0672

Determination of Volatile Organic Compounds - Quality Control

Keystone Laboratories - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GC0501 - EPA 5030B										
LCS (1GC0501-BS2)				Prepared & Analyzed: 03/09/23						
1,1,2-Trichloroethane	48.31	1.0	ug/L	50.0000		96.6	69-135			
2-Hexanone (MBK)	121.2	5.0	"	105.000		115	55-144			
Dibromochloromethane	49.40	1.0	"	49.5000		99.8	73-127			
1,2-Dibromoethane	50.06	1.0	"	50.0000		100	67-132			
Chlorobenzene	46.78	1.0	"	50.0000		93.6	72-123			
1,1,1,2-Tetrachloroethane	48.39	1.0	"	50.0000		96.8	73-127			
Ethylbenzene	49.33	1.0	"	50.0000		98.7	71-127			
Xylenes, total	153.4	2.0	"	150.000		102	74-127			
Styrene	47.80	1.0	"	50.0000		95.6	66-126			
Bromoform	51.91	1.0	"	50.0000		104	68-130			
1,2,3-Trichloropropane	50.09	1.0	"	50.0000		100	63-136			
trans-1,4-Dichloro-2-butene	122.0	5.0	"	116.300		105	54-134			
1,1,2,2-Tetrachloroethane	45.74	1.0	"	49.8500		91.8	61-131			
1,4-Dichlorobenzene	48.19	1.0	"	50.0000		96.4	70-129			
1,2-Dichlorobenzene	46.95	1.0	"	50.0000		93.9	69-126			
1,2-Dibromo-3-chloropropane	45.92	5.0	"	50.0000		91.8	50-143			
LCS Dup (1GC0501-BSD1)				Prepared & Analyzed: 03/09/23						
Surrogate: Dibromofluoromethane	*54.3*		*ug/L*	*50.3520*		*108*	*75-136*			
Surrogate: Dibromofluoromethane	*54.3*		*"*	*50.3520*		*108*	*80-126*			
Surrogate: 1,2-Dichloroethane-d4	*56.1*		*"*	*50.4080*		*111*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*56.1*		*"*	*50.4080*		*111*	*61-142*			
Surrogate: Toluene-d8	*50.4*		*"*	*50.2360*		*100*	*82-121*			
Surrogate: Toluene-d8	*50.4*		*"*	*50.2360*		*100*	*87-116*			
Surrogate: 4-Bromofluorobenzene	*50.9*		*"*	*50.4200*		*101*	*80-116*			
Surrogate: 4-Bromofluorobenzene	*50.9*		*"*	*50.4200*		*101*	*85-111*			
Chloromethane	33.23	1.0	"	30.0000		111	63-155	7.36	24	
Vinyl Chloride	34.04	1.0	"	30.0000		113	70-154	7.85	25	
Bromomethane	31.19	1.0	"	30.0000		104	52-176	3.09	27	
Chloroethane	34.30	1.0	"	30.0000		114	72-148	5.25	25	
Trichlorofluoromethane	31.15	1.0	"	30.0000		104	70-152	7.83	26	
1,1-Dichloroethylene	56.23	1.0	"	50.0000		112	70-148	4.91	24	
Acetone	130.2	10.0	"	108.800		120	43-172	1.14	30	
Methyl Iodide	107.2	1.0	"	99.6930		108	69-170	6.77	30	
Carbon Disulfide	105.5	1.0	"	104.600		101	72-162	8.60	24	
Methylene Chloride	51.00	5.0	"	50.0000		102	68-142	3.71	21	
Acrylonitrile	109.5	5.0	"	100.500		109	67-144	0.546	24	
trans-1,2-Dichloroethylene	53.99	1.0	"	50.0000		108	66-148	5.11	27	
1,1-Dichloroethane	52.83	1.0	"	50.0000		106	66-143	3.77	24	

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Determination of Volatile Organic Compounds - Quality Control
Keystone Laboratories - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GC0501 - EPA 5030B										
LCS Dup (1GC0501-BSD1)				Prepared & Analyzed: 03/09/23						
Vinyl Acetate	126.4	5.0	ug/L	115.300		110	43-153	3.30	30	
cis-1,2-Dichloroethylene	65.81	1.0	"	50.0000		132	71-149	10.2	26	
2-Butanone (MEK)	127.7	10.0	"	105.600		121	52-159	6.19	27	
Bromochloromethane	57.26	1.0	"	50.0000		115	69-143	0.696	23	
Chloroform	54.77	1.0	"	50.0000		110	69-144	5.11	23	
1,1,1-Trichloroethane	48.12	1.0	"	49.9750		96.3	62-129	6.53	24	
Carbon Tetrachloride	51.88	1.0	"	50.0000		104	63-141	5.16	25	
Benzene	49.57	1.0	"	50.0000		99.1	71-134	6.67	24	
1,2-Dichloroethane	50.06	1.0	"	50.0000		100	72-132	3.26	24	
Trichloroethylene	48.52	1.0	"	50.0000		97.0	71-135	4.16	24	
1,2-Dichloropropane	50.85	1.0	"	50.0000		102	69-136	2.39	24	
Dibromomethane	52.95	1.0	"	50.0000		106	73-147	2.83	25	
Bromodichloromethane	49.09	1.0	"	50.0000		98.2	68-129	4.44	22	
cis-1,3-Dichloropropene	48.03	1.0	"	50.3250		95.4	65-134	6.82	23	
4-Methyl-2-pentanone (MIBK)	115.4	5.0	"	106.400		108	58-147	4.18	27	
Toluene	48.34	1.0	"	50.0000		96.7	72-133	5.61	24	
trans-1,3-Dichloropropene	48.55	1.0	"	50.4250		96.3	67-130	4.15	24	
1,1,2-Trichloroethane	48.31	1.0	"	50.0000		96.6	69-135	1.89	23	
2-Hexanone (MBK)	115.3	5.0	"	105.000		110	55-144	1.86	25	
Dibromochloromethane	49.37	1.0	"	49.5000		99.7	73-127	2.03	22	
1,2-Dibromoethane	49.46	1.0	"	50.0000		98.9	67-132	0.504	24	
Chlorobenzene	46.27	1.0	"	50.0000		92.5	72-123	4.46	23	
1,1,1,2-Tetrachloroethane	48.47	1.0	"	50.0000		96.9	73-127	1.47	24	
Ethylbenzene	47.54	1.0	"	50.0000		95.1	71-127	5.24	26	
Xylenes, total	144.7	2.0	"	150.000		96.5	74-127	4.35	25	
Styrene	47.49	1.0	"	50.0000		95.0	66-126	2.12	23	
Bromoform	49.94	1.0	"	50.0000		99.9	68-130	2.88	23	
1,2,3-Trichloropropane	50.65	1.0	"	50.0000		101	63-136	2.30	24	
trans-1,4-Dichloro-2-butene	114.2	5.0	"	116.300		98.2	54-134	1.21	27	
1,1,2,2-Tetrachloroethane	48.96	1.0	"	49.8500		98.2	61-131	1.19	29	
1,4-Dichlorobenzene	48.70	1.0	"	50.0000		97.4	70-129	0.103	24	
1,2-Dichlorobenzene	48.44	1.0	"	50.0000		96.9	69-126	1.12	26	
1,2-Dibromo-3-chloropropane	50.55	5.0	"	50.0000		101	50-143	8.11	30	

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Determination of Volatile Organic Compounds - Quality Control
Keystone Laboratories - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GC0501 - EPA 5030B										
LCS Dup (1GC0501-BSD2)				Prepared & Analyzed: 03/09/23						
Surrogate: Dibromofluoromethane	*56.4*		*ug/L*	*50.3520*		*112*	*80-126*			
Surrogate: Dibromofluoromethane	*56.4*		*"*	*50.3520*		*112*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*65.0*		*"*	*50.4080*		*129*	*61-142*			
Surrogate: 1,2-Dichloroethane-d4	*65.0*		*"*	*50.4080*		*129*	*63-138*			
Surrogate: Toluene-d8	*52.4*		*"*	*50.2360*		*104*	*82-121*			
Surrogate: Toluene-d8	*52.4*		*"*	*50.2360*		*104*	*87-116*			
Surrogate: 4-Bromofluorobenzene	*54.7*		*"*	*50.4200*		*108*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*54.7*		*"*	*50.4200*		*108*	*80-116*			
Chloromethane	36.25	1.0	"	30.0000		121	63-155	17.1	24	
Vinyl Chloride	34.92	1.0	"	30.0000		116	70-154	14.4	25	
Bromomethane	29.58	1.0	"	30.0000		98.6	52-176	2.54	27	
Chloroethane	33.71	1.0	"	30.0000		112	72-148	4.35	25	
Trichlorofluoromethane	33.56	1.0	"	30.0000		112	70-152	2.65	26	
1,1-Dichloroethylene	60.17	1.0	"	50.0000		120	70-148	4.04	24	
Acetone	148.7	10.0	"	108.800		137	43-172	2.84	30	
Methyl Iodide	106.9	1.0	"	99.6930		107	69-170	0.394	30	
Carbon Disulfide	107.0	1.0	"	104.600		102	72-162	2.05	24	
Methylene Chloride	53.14	5.0	"	50.0000		106	68-142	3.41	21	
Acrylonitrile	120.6	5.0	"	100.500		120	67-144	3.71	24	
trans-1,2-Dichloroethylene	60.53	1.0	"	50.0000		121	66-148	6.43	27	
1,1-Dichloroethane	59.45	1.0	"	50.0000		119	66-143	6.51	24	
Vinyl Acetate	214.5	5.0	"	115.300		186	43-153	21.0	30	QS-02
cis-1,2-Dichloroethylene	72.92	1.0	"	50.0000		146	71-149	4.54	26	
2-Butanone (MEK)	152.2	10.0	"	105.600		144	52-159	2.51	27	
Bromochloromethane	63.83	1.0	"	50.0000		128	69-143	5.59	23	
Chloroform	59.81	1.0	"	50.0000		120	69-144	2.12	23	
1,1,1-Trichloroethane	52.52	1.0	"	49.9750		105	62-129	1.81	24	
Carbon Tetrachloride	55.46	1.0	"	50.0000		111	63-141	3.16	25	
Benzene	52.22	1.0	"	50.0000		104	71-134	0.788	24	
1,2-Dichloroethane	57.62	1.0	"	50.0000		115	72-132	1.17	24	
Trichloroethylene	49.97	1.0	"	50.0000		99.9	71-135	2.10	24	
1,2-Dichloropropane	51.37	1.0	"	50.0000		103	69-136	3.97	24	
Dibromomethane	54.84	1.0	"	50.0000		110	73-147	0.128	25	
Bromodichloromethane	51.87	1.0	"	50.0000		104	68-129	1.83	22	
cis-1,3-Dichloropropene	50.35	1.0	"	50.3250		100	65-134	0.0199	23	
4-Methyl-2-pentanone (MIBK)	128.4	5.0	"	106.400		121	58-147	1.45	27	
Toluene	49.66	1.0	"	50.0000		99.3	72-133	0.842	24	
trans-1,3-Dichloropropene	51.80	1.0	"	50.4250		103	67-130	3.02	24	

HLW Engineering
PO Box 314
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Work Order: 1GC0672

Determination of Volatile Organic Compounds - Quality Control
Keystone Laboratories - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GC0501 - EPA 5030B										
LCS Dup (1GC0501-BSD2)				Prepared & Analyzed: 03/09/23						
1,1,2-Trichloroethane	50.18	1.0	ug/L	50.0000		100	69-135	3.80	23	
2-Hexanone (MBK)	123.4	5.0	"	105.000		118	55-144	1.77	25	
Dibromochloromethane	49.21	1.0	"	49.5000		99.4	73-127	0.385	22	
1,2-Dibromoethane	48.81	1.0	"	50.0000		97.6	67-132	2.53	24	
Chlorobenzene	45.49	1.0	"	50.0000		91.0	72-123	2.80	23	
1,1,1,2-Tetrachloroethane	48.69	1.0	"	50.0000		97.4	73-127	0.618	24	
Ethylbenzene	48.20	1.0	"	50.0000		96.4	71-127	2.32	26	
Xylenes, total	148.8	2.0	"	150.000		99.2	74-127	3.01	25	
Styrene	47.94	1.0	"	50.0000		95.9	66-126	0.292	23	
Bromoform	51.65	1.0	"	50.0000		103	68-130	0.502	23	
1,2,3-Trichloropropane	53.03	1.0	"	50.0000		106	63-136	5.70	24	
trans-1,4-Dichloro-2-butene	125.8	5.0	"	116.300		108	54-134	3.04	27	
1,1,2,2-Tetrachloroethane	44.53	1.0	"	49.8500		89.3	61-131	2.68	29	
1,4-Dichlorobenzene	46.89	1.0	"	50.0000		93.8	70-129	2.73	24	
1,2-Dichlorobenzene	43.86	1.0	"	50.0000		87.7	69-126	6.81	26	
1,2-Dibromo-3-chloropropane	44.58	5.0	"	50.0000		89.2	50-143	2.96	30	
Matrix Spike (1GC0501-MS1)	**Source: 1GC0531-18**			Prepared & Analyzed: 03/09/23						
Surrogate: Dibromofluoromethane	*578*		*ug/L*	*503.520*		*115*	*75-136*			
Surrogate: Dibromofluoromethane	*578*		*"*	*503.520*		*115*	*80-126*			
Surrogate: 1,2-Dichloroethane-d4	*669*		*"*	*504.080*		*133*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*669*		*"*	*504.080*		*133*	*61-142*			
Surrogate: Toluene-d8	*562*		*"*	*502.360*		*112*	*82-121*			
Surrogate: Toluene-d8	*562*		*"*	*502.360*		*112*	*87-116*			
Surrogate: 4-Bromofluorobenzene	*579*		*"*	*504.200*		*115*	*85-111*			*S-GC*
Surrogate: 4-Bromofluorobenzene	*579*		*"*	*504.200*		*115*	*80-116*			
Chloromethane	418.4	10.0	"	300.000	ND	139	61-152			
Vinyl Chloride	386.7	10.0	"	300.000	ND	129	66-149			
Bromomethane	309.9	10.0	"	300.000	ND	103	43-171			
Chloroethane	395.2	10.0	"	300.000	ND	132	69-148			
Trichlorofluoromethane	366.5	10.0	"	300.000	ND	122	62-163			
1,1-Dichloroethylene	664.7	10.0	"	500.000	ND	133	70-148			
Acetone	1549	100	"	1088.00	ND	142	45-173			
Methyl Iodide	1130	10.0	"	996.930	ND	113	62-167			
Carbon Disulfide	1209	10.0	"	1046.00	ND	116	71-163			
Methylene Chloride	540.9	50.0	"	500.000	ND	108	69-140			
Acrylonitrile	1234	50.0	"	1005.00	ND	123	58-151			
trans-1,2-Dichloroethylene	596.0	10.0	"	500.000	ND	119	69-144			
1,1-Dichloroethane	575.3	10.0	"	500.000	ND	115	70-138			

Determination of Volatile Organic Compounds - Quality Control
Keystone Laboratories - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GC0501 - EPA 5030B										
Matrix Spike (1GC0501-MS1)		**Source: 1GC0531-18**		Prepared & Analyzed: 03/09/23						
Vinyl Acetate	2276	50.0	ug/L	1153.00	ND	197	58-142			QS-02
cis-1,2-Dichloroethylene	731.9	10.0	"	500.000	ND	146	68-151			
2-Butanone (MEK)	1459	100	"	1056.00	ND	138	50-160			
Bromochloromethane	640.1	10.0	"	500.000	ND	128	65-143			
Chloroform	614.1	10.0	"	500.000	ND	123	71-143			
1,1,1-Trichloroethane	539.0	10.0	"	499.750	ND	108	63-133			
Carbon Tetrachloride	565.4	10.0	"	500.000	ND	113	63-142			
Benzene	494.2	10.0	"	500.000	ND	98.8	69-133			
1,2-Dichloroethane	540.5	10.0	"	500.000	ND	108	63-138			
Trichloroethylene	510.8	10.0	"	500.000	ND	102	71-133			
1,2-Dichloropropane	573.7	10.0	"	500.000	ND	115	69-132			
Dibromomethane	589.7	10.0	"	500.000	ND	118	70-147			
Bromodichloromethane	540.2	10.0	"	500.000	ND	108	67-130			
cis-1,3-Dichloropropene	540.6	10.0	"	503.250	ND	107	61-126			
4-Methyl-2-pentanone (MIBK)	1417	50.0	"	1064.00	ND	133	55-147			
Toluene	524.0	10.0	"	500.000	ND	105	71-133			
trans-1,3-Dichloropropene	539.0	10.0	"	504.250	ND	107	63-124			
1,1,2-Trichloroethane	522.9	10.0	"	500.000	ND	105	69-133			
2-Hexanone (MBK)	1384	50.0	"	1050.00	ND	132	53-141			
Dibromochloromethane	478.3	10.0	"	495.000	ND	96.6	74-122			
1,2-Dibromoethane	472.1	10.0	"	500.000	ND	94.4	66-127			
Chlorobenzene	454.4	10.0	"	500.000	ND	90.9	76-116			
1,1,1,2-Tetrachloroethane	488.8	10.0	"	500.000	ND	97.8	77-121			
Ethylbenzene	507.1	10.0	"	500.000	ND	101	73-124			
Xylenes, total	1598	20.0	"	1500.00	ND	107	75-123			
Styrene	495.4	10.0	"	500.000	ND	99.1	70-120			
Bromoform	511.0	10.0	"	500.000	ND	102	70-124			
1,2,3-Trichloropropane	546.0	10.0	"	500.000	ND	109	62-135			
trans-1,4-Dichloro-2-butene	1320	50.0	"	1163.00	ND	114	50-120			
1,1,2,2-Tetrachloroethane	497.9	10.0	"	498.500	ND	99.9	63-126			
1,4-Dichlorobenzene	453.9	10.0	"	500.000	ND	90.8	72-119			
1,2-Dichlorobenzene	459.8	10.0	"	500.000	ND	92.0	71-117			
1,2-Dibromo-3-chloropropane	452.3	50.0	"	500.000	ND	90.5	49-134			

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Work Order: 1GC0672

Determination of Volatile Organic Compounds - Quality Control

Keystone Laboratories - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GC0501 - EPA 5030B										
Matrix Spike (1GC0501-MS2)		**Source: 1GC0672-05**		Prepared & Analyzed: 03/09/23						
Surrogate: Dibromofluoromethane	*546*		*ug/L*	*503.520*		*108*	*75-136*			
Surrogate: Dibromofluoromethane	*546*		*"*	*503.520*		*108*	*80-126*			
Surrogate: 1,2-Dichloroethane-d4	*626*		*"*	*504.080*		*124*	*61-142*			
Surrogate: 1,2-Dichloroethane-d4	*626*		*"*	*504.080*		*124*	*63-138*			
Surrogate: Toluene-d8	*519*		*"*	*502.360*		*103*	*87-116*			
Surrogate: Toluene-d8	*519*		*"*	*502.360*		*103*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*543*		*"*	*504.200*		*108*	*80-116*			
Surrogate: 4-Bromofluorobenzene	*543*		*"*	*504.200*		*108*	*85-111*			
Chloromethane	357.7	10.0	"	300.000	ND	119	61-152			
Vinyl Chloride	361.2	10.0	"	300.000	ND	120	66-149			
Bromomethane	295.6	10.0	"	300.000	ND	98.5	43-171			
Chloroethane	348.3	10.0	"	300.000	ND	116	69-148			
Trichlorofluoromethane	344.9	10.0	"	300.000	ND	115	62-163			
1,1-Dichloroethylene	598.9	10.0	"	500.000	ND	120	70-148			
Acetone	1450	100	"	1088.00	ND	133	45-173			
Methyl Iodide	1034	10.0	"	996.930	ND	104	62-167			
Carbon Disulfide	1098	10.0	"	1046.00	ND	105	71-163			
Methylene Chloride	516.6	50.0	"	500.000	ND	103	69-140			
Acrylonitrile	1123	50.0	"	1005.00	ND	112	58-151			
trans-1,2-Dichloroethylene	577.7	10.0	"	500.000	ND	116	69-144			
1,1-Dichloroethane	562.1	10.0	"	500.000	ND	112	70-138			
Vinyl Acetate	2163	50.0	"	1153.00	ND	188	58-142			QS-02
cis-1,2-Dichloroethylene	708.1	10.0	"	500.000	ND	142	68-151			
2-Butanone (MEK)	1377	100	"	1056.00	ND	130	50-160			
Bromochloromethane	605.7	10.0	"	500.000	ND	121	65-143			
Chloroform	593.5	10.0	"	500.000	ND	119	71-143			
1,1,1-Trichloroethane	528.6	10.0	"	499.750	ND	106	63-133			
Carbon Tetrachloride	564.2	10.0	"	500.000	ND	113	63-142			
Benzene	509.3	10.0	"	500.000	ND	102	69-133			
1,2-Dichloroethane	557.5	10.0	"	500.000	ND	112	63-138			
Trichloroethylene	497.3	10.0	"	500.000	ND	99.5	71-133			
1,2-Dichloropropane	530.0	10.0	"	500.000	ND	106	69-132			
Dibromomethane	544.5	10.0	"	500.000	ND	109	70-147			
Bromodichloromethane	520.2	10.0	"	500.000	ND	104	67-130			
cis-1,3-Dichloropropene	511.6	10.0	"	503.250	ND	102	61-126			
4-Methyl-2-pentanone (MIBK)	1263	50.0	"	1064.00	ND	119	55-147			
Toluene	493.9	10.0	"	500.000	ND	98.8	71-133			
trans-1,3-Dichloropropene	507.9	10.0	"	504.250	ND	101	63-124			

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Work Order: 1GC0672

Determination of Volatile Organic Compounds - Quality Control

Keystone Laboratories - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GC0501 - EPA 5030B										
Matrix Spike (1GC0501-MS2)		**Source: 1GC0672-05**		Prepared & Analyzed: 03/09/23						
1,1,2-Trichloroethane	493.5	10.0	ug/L	500.000	ND	98.7	69-133			
2-Hexanone (MBK)	1239	50.0	"	1050.00	ND	118	53-141			
Dibromochloromethane	488.4	10.0	"	495.000	ND	98.7	74-122			
1,2-Dibromoethane	494.6	10.0	"	500.000	ND	98.9	66-127			
Chlorobenzene	467.6	10.0	"	500.000	ND	93.5	76-116			
1,1,1,2-Tetrachloroethane	486.3	10.0	"	500.000	ND	97.3	77-121			
Ethylbenzene	495.0	10.0	"	500.000	ND	99.0	73-124			
Xylenes, total	1514	20.0	"	1500.00	ND	101	75-123			
Styrene	471.3	10.0	"	500.000	ND	94.3	70-120			
Bromoform	497.2	10.0	"	500.000	ND	99.4	70-124			
1,2,3-Trichloropropane	492.4	10.0	"	500.000	ND	98.5	62-135			
trans-1,4-Dichloro-2-butene	1191	50.0	"	1163.00	ND	102	50-120			
1,1,2,2-Tetrachloroethane	497.4	10.0	"	498.500	ND	99.8	63-126			
1,4-Dichlorobenzene	504.8	10.0	"	500.000	ND	101	72-119			
1,2-Dichlorobenzene	482.3	10.0	"	500.000	ND	96.5	71-117			
1,2-Dibromo-3-chloropropane	469.1	50.0	"	500.000	ND	93.8	49-134			
Matrix Spike Dup (1GC0501-MSD1)		**Source: 1GC0531-18**		Prepared & Analyzed: 03/09/23						
Surrogate: Dibromofluoromethane	*568*		*ug/L*	*503.520*		*113*	*80-126*			
Surrogate: Dibromofluoromethane	*568*		*"*	*503.520*		*113*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*28.1*		*"*	*504.080*		*5.57*	*63-138*			*S-GC*
Surrogate: 1,2-Dichloroethane-d4	*28.1*		*"*	*504.080*		*5.57*	*61-142*			*S-GC*
Surrogate: Toluene-d8	*529*		*"*	*502.360*		*105*	*82-121*			
Surrogate: Toluene-d8	*529*		*"*	*502.360*		*105*	*87-116*			
Surrogate: 4-Bromofluorobenzene	*554*		*"*	*504.200*		*110*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*554*		*"*	*504.200*		*110*	*80-116*			
Chloromethane	396.4	10.0	"	300.000	ND	132	61-152	5.40	26	
Vinyl Chloride	369.0	10.0	"	300.000	ND	123	66-149	4.68	23	
Bromomethane	304.9	10.0	"	300.000	ND	102	43-171	1.63	29	
Chloroethane	351.4	10.0	"	300.000	ND	117	69-148	11.7	25	
Trichlorofluoromethane	337.5	10.0	"	300.000	ND	112	62-163	8.24	25	
1,1-Dichloroethylene	621.2	10.0	"	500.000	ND	124	70-148	6.77	22	
Acetone	1460	100	"	1088.00	ND	134	45-173	5.92	30	
Methyl Iodide	1055	10.0	"	996.930	ND	106	62-167	6.82	24	
Carbon Disulfide	1078	10.0	"	1046.00	ND	103	71-163	11.5	22	
Methylene Chloride	534.1	50.0	"	500.000	ND	107	69-140	1.27	19	
Acrylonitrile	1183	50.0	"	1005.00	ND	118	58-151	4.26	15	
trans-1,2-Dichloroethylene	560.7	10.0	"	500.000	ND	112	69-144	6.10	22	
1,1-Dichloroethane	546.8	10.0	"	500.000	ND	109	70-138	5.08	20	

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Work Order: 1GC0672

Determination of Volatile Organic Compounds - Quality Control

Keystone Laboratories - Newton

Batch 1GC0501 - EPA 5030B

Matrix Spike Dup (1GC0501-MSD1) **Source: 1GC0531-18** Prepared & Analyzed: 03/09/23

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Vinyl Acetate	2187	50.0	ug/L	1153.00	ND	190	58-142	4.02	24	QS-02
cis-1,2-Dichloroethylene	687.1	10.0	"	500.000	ND	137	68-151	6.31	22	
2-Butanone (MEK)	1440	100	"	1056.00	ND	136	50-160	1.31	23	
Bromochloromethane	614.8	10.0	"	500.000	ND	123	65-143	4.03	22	
Chloroform	584.9	10.0	"	500.000	ND	117	71-143	4.87	21	
1,1,1-Trichloroethane	514.0	10.0	"	499.750	ND	103	63-133	4.75	23	
Carbon Tetrachloride	533.4	10.0	"	500.000	ND	107	63-142	5.82	22	
Benzene	491.7	10.0	"	500.000	ND	98.3	69-133	0.507	18	
1,2-Dichloroethane	533.6	10.0	"	500.000	ND	107	63-138	1.28	20	
Trichloroethylene	470.7	10.0	"	500.000	ND	94.1	71-133	8.17	23	
1,2-Dichloropropane	511.9	10.0	"	500.000	ND	102	69-132	11.4	20	
Dibromomethane	532.5	10.0	"	500.000	ND	106	70-147	10.2	22	
Bromodichloromethane	506.7	10.0	"	500.000	ND	101	67-130	6.40	21	
cis-1,3-Dichloropropene	490.0	10.0	"	503.250	ND	97.4	61-126	9.82	21	
4-Methyl-2-pentanone (MIBK)	1313	50.0	"	1064.00	ND	123	55-147	7.58	23	
Toluene	479.9	10.0	"	500.000	ND	96.0	71-133	8.79	19	
trans-1,3-Dichloropropene	494.3	10.0	"	504.250	ND	98.0	63-124	8.65	21	
1,1,2-Trichloroethane	475.1	10.0	"	500.000	ND	95.0	69-133	9.58	19	
2-Hexanone (MBK)	1302	50.0	"	1050.00	ND	124	53-141	6.09	24	
Dibromochloromethane	482.4	10.0	"	495.000	ND	97.5	74-122	0.854	21	
1,2-Dibromoethane	478.7	10.0	"	500.000	ND	95.7	66-127	1.39	23	
Chlorobenzene	439.7	10.0	"	500.000	ND	87.9	76-116	3.29	21	
1,1,1,2-Tetrachloroethane	461.0	10.0	"	500.000	ND	92.2	77-121	5.85	25	
Ethylbenzene	466.6	10.0	"	500.000	ND	93.3	73-124	8.32	20	
Xylenes, total	1454	20.0	"	1500.00	ND	96.9	75-123	9.48	20	
Styrene	452.8	10.0	"	500.000	ND	90.6	70-120	8.99	23	
Bromoform	484.2	10.0	"	500.000	ND	96.8	70-124	5.39	22	
1,2,3-Trichloropropane	507.0	10.0	"	500.000	ND	101	62-135	7.41	28	
trans-1,4-Dichloro-2-butene	1244	50.0	"	1163.00	ND	107	50-120	5.97	26	
1,1,2,2-Tetrachloroethane	466.5	10.0	"	498.500	ND	93.6	63-126	6.51	24	
1,4-Dichlorobenzene	447.5	10.0	"	500.000	ND	89.5	72-119	1.42	24	
1,2-Dichlorobenzene	449.4	10.0	"	500.000	ND	89.9	71-117	2.29	24	
1,2-Dibromo-3-chloropropane	468.5	50.0	"	500.000	ND	93.7	49-134	3.52	28	

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Keystone Laboratories - Newton

Batch 1GC0501 - EPA 5030B

Matrix Spike Dup (1GC0501-MSD2) **Source: 1GC0672-05** Prepared & Analyzed: 03/09/23

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Surrogate: Dibromofluoromethane	*560*		*ug/L*	*503.520*		*111*	*80-126*			
Surrogate: Dibromofluoromethane	*560*		*"*	*503.520*		*111*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*642*		*"*	*504.080*		*127*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*642*		*"*	*504.080*		*127*	*61-142*			
Surrogate: Toluene-d8	*523*		*"*	*502.360*		*104*	*87-116*			
Surrogate: Toluene-d8	*523*		*"*	*502.360*		*104*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*528*		*"*	*504.200*		*105*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*528*		*"*	*504.200*		*105*	*80-116*			
Chloromethane	385.3	10.0	"	300.000	ND	128	61-152	7.43	26	
Vinyl Chloride	364.0	10.0	"	300.000	ND	121	66-149	0.772	23	
Bromomethane	302.4	10.0	"	300.000	ND	101	43-171	2.27	29	
Chloroethane	340.1	10.0	"	300.000	ND	113	69-148	2.38	25	
Trichlorofluoromethane	322.8	10.0	"	300.000	ND	108	62-163	6.62	25	
1,1-Dichloroethylene	572.4	10.0	"	500.000	ND	114	70-148	4.52	22	
Acetone	1398	100	"	1088.00	ND	128	45-173	3.65	30	
Methyl Iodide	1025	10.0	"	996.930	ND	103	62-167	0.913	24	
Carbon Disulfide	1025	10.0	"	1046.00	ND	98.0	71-163	6.84	22	
Methylene Chloride	501.2	50.0	"	500.000	ND	100	69-140	3.03	19	
Acrylonitrile	1126	50.0	"	1005.00	ND	112	58-151	0.294	15	
trans-1,2-Dichloroethylene	551.8	10.0	"	500.000	ND	110	69-144	4.59	22	
1,1-Dichloroethane	528.7	10.0	"	500.000	ND	106	70-138	6.12	20	
Vinyl Acetate	2107	50.0	"	1153.00	ND	183	58-142	2.66	24	QS-02
cis-1,2-Dichloroethylene	676.3	10.0	"	500.000	ND	135	68-151	4.59	22	
2-Butanone (MEK)	1408	100	"	1056.00	ND	133	50-160	2.20	23	
Bromochloromethane	581.8	10.0	"	500.000	ND	116	65-143	4.03	22	
Chloroform	574.1	10.0	"	500.000	ND	115	71-143	3.32	21	
1,1,1-Trichloroethane	514.6	10.0	"	499.750	ND	103	63-133	2.68	23	
Carbon Tetrachloride	546.5	10.0	"	500.000	ND	109	63-142	3.19	22	
Benzene	506.3	10.0	"	500.000	ND	101	69-133	0.591	18	
1,2-Dichloroethane	558.3	10.0	"	500.000	ND	112	63-138	0.143	20	
Trichloroethylene	489.2	10.0	"	500.000	ND	97.8	71-133	1.64	23	
1,2-Dichloropropane	507.0	10.0	"	500.000	ND	101	69-132	4.44	20	
Dibromomethane	549.7	10.0	"	500.000	ND	110	70-147	0.950	22	
Bromodichloromethane	511.3	10.0	"	500.000	ND	102	67-130	1.73	21	
cis-1,3-Dichloropropene	500.9	10.0	"	503.250	ND	99.5	61-126	2.11	21	
4-Methyl-2-pentanone (MIBK)	1260	50.0	"	1064.00	ND	118	55-147	0.214	23	
Toluene	493.5	10.0	"	500.000	ND	98.7	71-133	0.0810	19	
trans-1,3-Dichloropropene	511.0	10.0	"	504.250	ND	101	63-124	0.609	21	

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Work Order: 1GC0672

Determination of Volatile Organic Compounds - Quality Control
Keystone Laboratories - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GC0501 - EPA 5030B										
Matrix Spike Dup (1GC0501-MSD2)	**Source: 1GC0672-05**			Prepared & Analyzed: 03/09/23						
1,1,2-Trichloroethane	486.4	10.0	ug/L	500.000	ND	97.3	69-133	1.45	19	
2-Hexanone (MBK)	1234	50.0	"	1050.00	ND	117	53-141	0.469	24	
Dibromochloromethane	493.1	10.0	"	495.000	ND	99.6	74-122	0.958	21	
1,2-Dibromoethane	492.6	10.0	"	500.000	ND	98.5	66-127	0.405	23	
Chlorobenzene	446.3	10.0	"	500.000	ND	89.3	76-116	4.66	21	
1,1,1,2-Tetrachloroethane	473.0	10.0	"	500.000	ND	94.6	77-121	2.77	25	
Ethylbenzene	464.2	10.0	"	500.000	ND	92.8	73-124	6.42	20	
Xylenes, total	1451	20.0	"	1500.00	ND	96.7	75-123	4.24	20	
Styrene	463.3	10.0	"	500.000	ND	92.7	70-120	1.71	23	
Bromoform	502.8	10.0	"	500.000	ND	101	70-124	1.12	22	
1,2,3-Trichloropropane	491.1	10.0	"	500.000	ND	98.2	62-135	0.264	28	
trans-1,4-Dichloro-2-butene	1176	50.0	"	1163.00	ND	101	50-120	1.28	26	
1,1,2,2-Tetrachloroethane	458.2	10.0	"	498.500	ND	91.9	63-126	8.20	24	
1,4-Dichlorobenzene	461.1	10.0	"	500.000	ND	92.2	72-119	9.05	24	
1,2-Dichlorobenzene	460.6	10.0	"	500.000	ND	92.1	71-117	4.60	24	
1,2-Dibromo-3-chloropropane	471.0	50.0	"	500.000	ND	94.2	49-134	0.404	28	
Batch 1GC0576 - EPA 5030B										
Blank (1GC0576-BLK1)				Prepared & Analyzed: 03/11/23						
Surrogate: Dibromofluoromethane	*47.6*		*ug/L*	*50.3520*		*94.5*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*50.9*		*"*	*50.4080*		*101*	*61-142*			
Surrogate: Toluene-d8	*53.1*		*"*	*50.2360*		*106*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*47.2*		*"*	*50.4200*		*93.6*	*80-116*			
Tetrachloroethylene	ND	1.0	"							
LCS (1GC0576-BS1)				Prepared & Analyzed: 03/11/23						
Surrogate: Dibromofluoromethane	*48.5*		*ug/L*	*50.3520*		*96.4*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*47.5*		*"*	*50.4080*		*94.3*	*61-142*			
Surrogate: Toluene-d8	*52.1*		*"*	*50.2360*		*104*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*47.9*		*"*	*50.4200*		*94.9*	*80-116*			
Tetrachloroethylene	41.74	1.0	"	50.0000		83.5	69-130			

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Determination of Volatile Organic Compounds - Quality Control
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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GC0576 - EPA 5030B										
LCS Dup (1GC0576-BSD1)				Prepared & Analyzed: 03/11/23						
Surrogate: Dibromofluoromethane	*49.4*		*ug/L*	*50.3520*		*98.1*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*49.7*		*"*	*50.4080*		*98.6*	*61-142*			
Surrogate: Toluene-d8	*53.5*		*"*	*50.2360*		*106*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*48.3*		*"*	*50.4200*		*95.8*	*80-116*			
Tetrachloroethylene	44.10	1.0	"	50.0000		88.2	69-130	5.50	25	
Matrix Spike (1GC0576-MS1)		**Source: 1GC0531-11RE1**		Prepared & Analyzed: 03/11/23						
Surrogate: Dibromofluoromethane	*243*		*ug/L*	*251.760*		*96.7*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*236*		*"*	*252.040*		*93.5*	*61-142*			
Surrogate: Toluene-d8	*267*		*"*	*251.180*		*106*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*246*		*"*	*252.100*		*97.5*	*80-116*			
Tetrachloroethylene	219.4	5.0	"	250.000	ND	87.8	70-124			
Matrix Spike Dup (1GC0576-MSD1)		**Source: 1GC0531-11RE1**		Prepared & Analyzed: 03/11/23						
Surrogate: Dibromofluoromethane	*236*		*ug/L*	*251.760*		*93.8*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*262*		*"*	*252.040*		*104*	*61-142*			
Surrogate: Toluene-d8	*261*		*"*	*251.180*		*104*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*225*		*"*	*252.100*		*89.3*	*80-116*			
Tetrachloroethylene	193.4	5.0	"	250.000	ND	77.3	70-124	12.6	24	
Batch 1GC0632 - EPA 5030B										
Blank (1GC0632-BLK1)				Prepared: 03/11/23 Analyzed: 03/12/23						
Surrogate: Dibromofluoromethane	*51.7*		*ug/L*	*50.3520*		*103*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*49.7*		*"*	*50.4080*		*98.6*	*61-142*			
Surrogate: Toluene-d8	*53.3*		*"*	*50.2360*		*106*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*51.0*		*"*	*50.4200*		*101*	*80-116*			
Tetrachloroethylene	ND	1.0	"							

Determination of Volatile Organic Compounds - Quality Control

Keystone Laboratories - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GC0632 - EPA 5030B										
LCS (1GC0632-BS1)				Prepared: 03/11/23 Analyzed: 03/12/23						
Surrogate: Dibromofluoromethane	*51.7*		*ug/L*	*50.3520*		*103*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*50.0*		*"*	*50.4080*		*99.2*	*61-142*			
Surrogate: Toluene-d8	*51.8*		*"*	*50.2360*		*103*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*51.3*		*"*	*50.4200*		*102*	*80-116*			
Tetrachloroethylene	40.60	1.0	"	50.0000		81.2	69-130			
LCS Dup (1GC0632-BSD1)				Prepared: 03/11/23 Analyzed: 03/12/23						
Surrogate: Dibromofluoromethane	*51.4*		*ug/L*	*50.3520*		*102*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*50.5*		*"*	*50.4080*		*100*	*61-142*			
Surrogate: Toluene-d8	*51.9*		*"*	*50.2360*		*103*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*52.1*		*"*	*50.4200*		*103*	*80-116*			
Tetrachloroethylene	40.31	1.0	"	50.0000		80.6	69-130	0.717	25	
Matrix Spike (1GC0632-MS1)		**Source: 1GC0672-02RE1**		Prepared: 03/11/23 Analyzed: 03/12/23						
Surrogate: Dibromofluoromethane	*208*		*ug/L*	*201.408*		*103*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*201*		*"*	*201.632*		*99.6*	*61-142*			
Surrogate: Toluene-d8	*207*		*"*	*200.944*		*103*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*209*		*"*	*201.680*		*103*	*80-116*			
Tetrachloroethylene	162.6	4.0	"	200.000	ND	81.3	70-124			
Matrix Spike Dup (1GC0632-MSD1)		**Source: 1GC0672-02RE1**		Prepared: 03/11/23 Analyzed: 03/12/23						
Surrogate: Dibromofluoromethane	*211*		*ug/L*	*201.408*		*105*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*206*		*"*	*201.632*		*102*	*61-142*			
Surrogate: Toluene-d8	*207*		*"*	*200.944*		*103*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*206*		*"*	*201.680*		*102*	*80-116*			
Tetrachloroethylene	165.5	4.0	"	200.000	ND	82.7	70-124	1.78	24	

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Determination of Total Metals - Quality Control

Keystone Laboratories - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GC0648 - EPA 3005A Total Recoverable Metals										
Blank (1GC0648-BLK1)				Prepared: 03/13/23 Analyzed: 03/14/23						
Antimony, total	ND	0.0020	mg/L							
Arsenic, total	ND	0.0040	"							
Barium, total	ND	0.0040	"							
Beryllium, total	ND	0.0040	"							
Cadmium, total	ND	0.0008	"							
Chromium, total	ND	0.0080	"							
Cobalt, total	ND	0.0004	"							
Copper, total	ND	0.0040	"							
Lead, total	ND	0.0040	"							
Nickel, total	ND	0.0040	"							
Selenium, total	ND	0.0040	"							
Silver, total	ND	0.0040	"							
Thallium, total	ND	0.0020	"							
Vanadium, total	ND	0.0200	"							
Zinc, total	ND	0.0200	"							
LCS (1GC0648-BS1)				Prepared: 03/13/23 Analyzed: 03/14/23						
Antimony, total	0.0983	0.0020	mg/L	0.100000		98.3	80-120			
Arsenic, total	0.0964	0.0040	"	0.100000		96.4	80-120			
Barium, total	0.108	0.0040	"	0.100000		108	80-120			
Beryllium, total	0.102	0.0040	"	0.100000		102	80-120			
Cadmium, total	0.0934	0.0008	"	0.100000		93.4	80-120			
Chromium, total	0.102	0.0080	"	0.100000		102	80-120			
Cobalt, total	0.108	0.0004	"	0.100000		108	80-120			
Copper, total	0.104	0.0040	"	0.100000		104	80-120			
Lead, total	0.102	0.0040	"	0.100000		102	80-120			
Nickel, total	0.107	0.0040	"	0.100000		107	80-120			
Selenium, total	0.0900	0.0040	"	0.100000		90.0	80-120			
Silver, total	0.104	0.0040	"	0.100000		104	80-120			
Thallium, total	0.0996	0.0020	"	0.100000		99.6	80-120			
Vanadium, total	0.111	0.0200	"	0.100000		111	80-120			
Zinc, total	0.0945	0.0200	"	0.100000		94.5	80-120			

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Determination of Total Metals - Quality Control

Keystone Laboratories - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GC0648 - EPA 3005A Total Recoverable Metals										
Matrix Spike (1GC0648-MS1)	**Source: 1GC0672-01**		Prepared: 03/13/23 Analyzed: 03/14/23							
Antimony, total	0.0933	0.0020	mg/L	0.100000	ND	93.3	75-125			
Arsenic, total	0.0944	0.0040	"	0.100000	0.0043	90.1	75-125			
Barium, total	0.114	0.0040	"	0.100000	0.0089	105	75-125			
Beryllium, total	0.0849	0.0040	"	0.100000	0.0004	84.6	75-125			
Cadmium, total	0.0867	0.0008	"	0.100000	0.0001	86.6	75-125			
Chromium, total	0.0911	0.0080	"	0.100000	ND	91.1	75-125			
Cobalt, total	0.145	0.0004	"	0.100000	0.0485	96.6	75-125			
Copper, total	0.0841	0.0040	"	0.100000	ND	84.1	75-125			
Lead, total	0.0915	0.0040	"	0.100000	ND	91.5	75-125			
Nickel, total	0.175	0.0040	"	0.100000	0.0837	91.0	75-125			
Selenium, total	0.0883	0.0040	"	0.100000	ND	88.3	75-125			
Silver, total	0.0916	0.0040	"	0.100000	ND	91.6	75-125			
Thallium, total	0.0927	0.0020	"	0.100000	0.0003	92.5	75-125			
Vanadium, total	0.0854	0.0200	"	0.100000	ND	85.4	75-125			
Zinc, total	0.402	0.0200	"	0.100000	0.324	77.9	75-125			
Matrix Spike Dup (1GC0648-MSD1)	**Source: 1GC0672-01**		Prepared: 03/13/23 Analyzed: 03/14/23							
Antimony, total	0.102	0.0020	mg/L	0.100000	ND	102	75-125	9.42	20	
Arsenic, total	0.104	0.0040	"	0.100000	0.0043	100	75-125	9.99	20	
Barium, total	0.124	0.0040	"	0.100000	0.0089	115	75-125	8.42	20	
Beryllium, total	0.0927	0.0040	"	0.100000	0.0004	92.3	75-125	8.73	20	
Cadmium, total	0.0942	0.0008	"	0.100000	0.0001	94.1	75-125	8.36	20	
Chromium, total	0.101	0.0080	"	0.100000	ND	101	75-125	10.0	20	
Cobalt, total	0.162	0.0004	"	0.100000	0.0485	114	75-125	11.2	20	
Copper, total	0.0928	0.0040	"	0.100000	ND	92.8	75-125	9.83	20	
Lead, total	0.100	0.0040	"	0.100000	ND	100	75-125	8.90	20	
Nickel, total	0.196	0.0040	"	0.100000	0.0837	112	75-125	11.5	20	
Selenium, total	0.1003	0.0040	"	0.100000	ND	100	75-125	12.8	20	
Silver, total	0.0994	0.0040	"	0.100000	ND	99.4	75-125	8.21	20	
Thallium, total	0.101	0.0020	"	0.100000	0.0003	101	75-125	8.88	20	
Vanadium, total	0.0945	0.0200	"	0.100000	ND	94.5	75-125	10.1	20	
Zinc, total	0.462	0.0200	"	0.100000	0.324	138	75-125	13.8	20	QM-07

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Determination of Total Metals - Quality Control

Keystone Laboratories - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GC0648 - EPA 3005A Total Recoverable Metals										
Post Spike (1GC0648-PS1)		**Source: 1GC0672-01**		Prepared: 03/13/23 Analyzed: 03/14/23						
Antimony, total	0.0777		mg/L	0.0800000	0.00009	97.0	80-120			
Arsenic, total	0.0799		"	0.0800000	0.0042	94.7	80-120			
Barium, total	0.0902		"	0.0800000	0.0088	102	80-120			
Beryllium, total	0.0716		"	0.0800000	0.0004	89.0	80-120			
Cadmium, total	0.0714		"	0.0800000	0.0001	89.1	80-120			
Chromium, total	0.0761		"	0.0800000	0.0002	94.9	80-120			
Cobalt, total	0.129		"	0.0800000	0.0475	102	80-120			
Copper, total	0.0688		"	0.0800000	0.0005	85.4	80-120			
Lead, total	0.0758		"	0.0800000	0.00005	94.7	80-120			
Nickel, total	0.163		"	0.0800000	0.0821	101	80-120			
Selenium, total	0.0721		"	0.0800000	0.0013	88.6	80-120			
Silver, total	0.0751		"	0.0800000	0.0013	92.3	80-120			
Thallium, total	0.0771		"	0.0800000	0.0003	96.1	80-120			
Vanadium, total	0.0705		"	0.0800000	-0.0020	88.1	80-120			
Zinc, total	0.472		"	0.0800000	0.317	193	80-120			PS-02

ND = Non Detect; REC= Recovery; RPD= Relative Percent Difference

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Certified Analyses Included In This Report

Method/Matrix	Analyte	Certifications
EPA 6020A in Water		
	Antimony, total	SIA1X,KS-NT
	Arsenic, total	SIA1X,KS-NT
	Barium, total	SIA1X,KS-NT
	Beryllium, total	SIA1X,KS-NT
	Cadmium, total	SIA1X,KS-NT
	Chromium, total	SIA1X,KS-NT
	Cobalt, total	SIA1X,KS-NT
	Copper, total	SIA1X,KS-NT
	Lead, total	SIA1X,KS-NT
	Nickel, total	SIA1X,KS-NT
	Selenium, total	SIA1X,KS-NT
	Silver, total	SIA1X,KS-NT
	Thallium, total	SIA1X,KS-NT
	Vanadium, total	SIA1X,KS-NT
	Zinc, total	SIA1X,KS-NT
EPA 8260B in Water		
	Chloromethane	KS-NT,SIA1X
	Vinyl Chloride	KS-NT,SIA1X
	Bromomethane	KS-NT,SIA1X
	Chloroethane	KS-NT,SIA1X
	Trichlorofluoromethane	KS-NT,SIA1X
	1,1-Dichloroethylene	KS-NT,SIA1X
	Acetone	KS-NT,SIA1X
	Methyl Iodide	SIA1X
	Carbon Disulfide	KS-NT,SIA1X
	Methylene Chloride	KS-NT,SIA1X
	Acrylonitrile	KS-NT,SIA1X
	trans-1,2-Dichloroethylene	KS-NT,SIA1X
	1,1-Dichloroethane	KS-NT,SIA1X
	Vinyl Acetate	KS-NT,SIA1X
	cis-1,2-Dichloroethylene	KS-NT,SIA1X
	2-Butanone (MEK)	KS-NT,SIA1X
	Bromochloromethane	KS-NT,SIA1X
	Chloroform	KS-NT,SIA1X
	1,1,1-Trichloroethane	KS-NT,SIA1X
	Carbon Tetrachloride	KS-NT,SIA1X
	Benzene	KS-NT,SIA1X
	1,2-Dichloroethane	KS-NT,SIA1X
	Trichloroethylene	KS-NT,SIA1X
	1,2-Dichloropropane	KS-NT,SIA1X
	Dibromomethane	SIA1X
	Bromodichloromethane	KS-NT,SIA1X
	cis-1,3-Dichloropropene	KS-NT,SIA1X
	4-Methyl-2-pentanone (MIBK)	KS-NT,SIA1X
	Toluene	KS-NT,SIA1X
	trans-1,3-Dichloropropene	KS-NT,SIA1X

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1,1,2-Trichloroethane	KS-NT,SIA1X
Tetrachloroethylene	KS-NT,SIA1X
2-Hexanone (MBK)	KS-NT,SIA1X
Dibromochloromethane	KS-NT,SIA1X
1,2-Dibromoethane	KS-NT,SIA1X
Chlorobenzene	KS-NT,SIA1X
1,1,1,2-Tetrachloroethane	KS-NT,SIA1X
Ethylbenzene	KS-NT,SIA1X
Xylenes, total	KS-NT,SIA1X
Styrene	KS-NT,SIA1X
Bromoform	KS-NT,SIA1X
1,2,3-Trichloropropane	KS-NT,SIA1X
trans-1,4-Dichloro-2-butene	SIA1X
1,1,2,2-Tetrachloroethane	KS-NT,SIA1X
1,4-Dichlorobenzene	KS-NT,SIA1X
1,2-Dichlorobenzene	KS-NT,SIA1X
1,2-Dibromo-3-chloropropane	KS-NT,SIA1X

Code	Description	Number	Expires
KS-KC	Kansas Department of Health and Environment-KC	E-10110	04/30/2023
KS-NT	Kansas Department of Health and Environment (NELAP)	E-10287	10/31/2023
MO-KC	Missouri Department of Natural Resources	140	04/30/2023
SIA1X	Iowa Dept. of Natural Resources	95	02/01/2024

Notes and Definitions

PS-02	The post spike recovery exceeded acceptance limits.
QM-07	The spike recovery and/or RPD was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
QR-02	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
QS-02	The spike recovery for this QC sample exceeded established acceptance limits. However, all samples were below the reporting and/or regulatory limit so the data is acceptable.
S-GC	Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.
S-GC	Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.

End of Report

Sue Thompson

Keystone Laboratories

Sue Thompson
Client Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Samples were preserved in accordance with 40 CFR for pH adjustment unless otherwise noted. MRL= Method Reporting Limit.

CHAIN OF (

Keystone
LABORATORIES, INC.

600 East 17th Street S
Newton, IA 50208
641-792-8451

1 G C 0 6 7 2
HLW Engineering
PM: Sue Thompson

Printed: 2/21/2023 7:38:59PM

www.keystonelabs.c

SITE INFORMATION

Sampler: TODD WHIPPLE

Project: SCISWA - New Regs

5009

REPORT TO

Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50248

INVOICE TO

Rick Hurt
South Central IA Solid Waste Agency
1736 Highway T17
Tracy, IA 50256

SPECIAL INSTRUCTIONS

None

Turn Around Time
☐ Standard ☐ RUSH, need by __/__/__

LAB USE ONLY

Work Order 1GC0672
Temperature 3.9
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
01-001	MW-307	Water	GRAB	3/6/23	8:13	7	lndfll-appl-metals-6020 lndfll-appl-voc	01
02-001	MW-312	Water	GRAB	3/6/23	11:03	7	lndfll-appl-metals-6020 lndfll-appl-voc	02
03-001	MW-390	Water	GRAB	3/6/23	7:52	7	lndfll-appl-metals-6020 lndfll-appl-voc	03
04-001	MW-300	Water	GRAB	3/6/23	11:52	7	lndfll-appl-metals-6020 lndfll-appl-voc	04
05-001	MW-303	Water	GRAB	3/6/23	14:52	7	lndfll-appl-metals-6020 lndfll-appl-voc	05
06-001	MW-304	Water	GRAB	3/6/23	14:12	7	lndfll-appl-metals-6020 lndfll-appl-voc	06
07-001	MW-313	Water	GRAB	3/6/23	13:30	7	lndfll-appl-metals-6020 lndfll-appl-voc	07

Relinquished By: Todd Whipple Date/Time: 3/7/23
Received By: [signature] Date/Time: 3/7/23 10am

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Remarks:

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CHAIN OF CUS

Keystone LABORATORIES, INC.

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PM: Sue Thompson

nted: 2/21/2023 7:38:59PM
www.keystonelabs.co

SITE INFORMATION
Sampler: TODD WHIPPLE
Project: **SCISWA - New Regs**
6009

REPORT TO
Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50248

INVOICE TO
Rick Hurt
South Central IA Solid Waste Agency
1736 Highway T17
Tracy, IA 50256

SPECIAL INSTRUCTIONS
None

Turn Around Time
☐ Standard ☐ RUSH, need by __/__/__

LAB USE ONLY
Work Order 1GC0672
Temperature 3.9
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
08-001	MW-335	Water	GRAB	3/6/23	13:53	7	lndfil-appl-metals-6020 lndfil-appl-voc	08
09-001	MW-344	Water	GRAB	3/6/23	12:45	7	lndfil-appl-metals-6020 lndfil-appl-voc	09
10-001	MW-380	Water	GRAB	3/6/23	11:28	7	lndfil-appl-metals-6020 lndfil-appl-voc	10
11-001	MW-381	Water	GRAB	3/6/23	12:14	7	lndfil-appl-metals-6020 lndfil-appl-voc	11
12-001	MW-382R	Water	GRAB	3/6/23	13:05	7	lndfil-appl-metals-6020 lndfil-appl-voc	12
13-001	MW-384	Water	GRAB	3/6/23	8:47	7	lndfil-appl-metals-6020 lndfil-appl-voc	13
14-001	MW-385	Water	GRAB	3/6/23	9:11	7	lndfil-appl-metals-6020 lndfil-appl-voc	14

Relinquished By: Todd Whipple Date/Time: 3/7/23
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www.keystonelabs.c

SITE INFORMATION

Sampler: Todd Whipple

Project: SCISWA - New Regs
6009

SPECIAL INSTRUCTIONS

None

Turn Around Time
☐ Standard ☐ RUSH, need by __/__/__

REPORT TO

Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50248

INVOICE TO

Rick Hurt
South Central IA Solid Waste Agency
1736 Highway T17
Tracy, IA 50256

LAB USE ONLY

Work Order 1GC0672
Temperature 3.9
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
15-001	**GU-4A**	Water	GRAB	3/6/23	8:30	7	lndfil-appI-metals-6020 lndfil-appI-voc	15
16-001	**Field Duplicate**	Water	GRAB	3/6/23	✓	7	lndfil-appI-metals-6020 lndfil-appI-voc	16
17-001	**MW-601**	Water	GRAB	3/6/23	9:39	7	lndfil-appI-metals-6020 lndfil-appI-voc	17
18-001	**MW-602**	Water	GRAB	3/6/23	10:04	7	lndfil-appI-metals-6020 lndfil-appI-voc	18
19-001	**MW-603**	Water	GRAB	3/6/23	10:30	7	lndfil-appI-metals-6020 lndfil-appI-voc	19

Relinquished By: Todd Whipple Date/Time: 3/7/23

Received By: [signature] Date/Time: 3/7/23 10 AM

Relinquished By Date/Time

Received for Lab By Date/Time

Remarks:

Original - Lab Copy Yellow - Sampler Copy

ANALYTICAL REPORT

March 23, 2023

Work Order: **1GC0673**

Report To	Work Order Information
Todd Whipple HLW Engineering PO Box 314 Story City, IA 50248	Date Received: 3/7/2023 10:00:00AM Collector: Whipple, Todd Phone: (515) 733-4144 PO Number: Spring 2023

Project: SCISWA - AMD

Project Number: 6009

Analyte		Result		MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0673-01	MW-307					Matrix: Water	Collected:	03/06/23 08:13	
Alkalinity, as CaCO3		**53**	**mg/L**	**10**	1GC0369	2320B	BSS	03/13/23 12:53	
pH		**5.5**	**pH**	**0.5**	1GC0370	SM 4500 H+ B	BSS	03/10/23 14:50	I-03
Sulfate		**2130**	**mg/L**	**50.0**	1GC0923	EPA 9056	MID	03/17/23 3:18	
Aluminum, total		**0.213**	**mg/L**	**0.050**	1GC0423	EPA 6010B	JAR	03/10/23 3:22	
Iron, total		**280**	**mg/L**	**0.100**	1GC0423	EPA 6010B	JAR	03/10/23 3:22	
1GC0673-02	MW-312					Matrix: Water	Collected:	03/06/23 11:03	
Alkalinity, as CaCO3		**328**	**mg/L**	**10**	1GC0369	2320B	BSS	03/13/23 12:53	
pH		**6.2**	**pH**	**0.5**	1GC0370	SM 4500 H+ B	BSS	03/10/23 14:50	I-03
Sulfate		**373**	**mg/L**	**10.0**	1GC0923	EPA 9056	MID	03/16/23 19:07	
Aluminum, total		**0.092**	**mg/L**	**0.050**	1GC0423	EPA 6010B	JAR	03/10/23 4:00	
Iron, total		**5.27**	**mg/L**	**0.100**	1GC0423	EPA 6010B	JAR	03/10/23 4:00	
1GC0673-03	MW-390					Matrix: Water	Collected:	03/06/23 07:52	
Alkalinity, as CaCO3		**203**	**mg/L**	**10**	1GC0369	2320B	BSS	03/13/23 12:53	
pH		**6.0**	**pH**	**0.5**	1GC0370	SM 4500 H+ B	BSS	03/10/23 14:50	I-03
Sulfate		**1910**	**mg/L**	**50.0**	1GC0923	EPA 9056	MID	03/17/23 3:36	
Aluminum, total		<0.050	mg/L	0.050	1GC0423	EPA 6010B	JAR	03/10/23 4:22	
Iron, total		**144**	**mg/L**	**0.100**	1GC0423	EPA 6010B	JAR	03/10/23 4:22	
1GC0673-04	MW-300					Matrix: Water	Collected:	03/06/23 11:52	
Alkalinity, as CaCO3		**270**	**mg/L**	**10**	1GC0369	2320B	BSS	03/13/23 12:53	
pH		**6.1**	**pH**	**0.5**	1GC0370	SM 4500 H+ B	BSS	03/10/23 14:50	I-03
Sulfate		**1760**	**mg/L**	**50.0**	1GC0923	EPA 9056	MID	03/17/23 3:54	
Aluminum, total		**0.138**	**mg/L**	**0.050**	1GC0423	EPA 6010B	JAR	03/10/23 4:32	
Iron, total		**69.8**	**mg/L**	**0.100**	1GC0423	EPA 6010B	JAR	03/10/23 4:32	
1GC0673-05	MW-303					Matrix: Water	Collected:	03/06/23 14:42	
Alkalinity, as CaCO3		**530**	**mg/L**	**10**	1GC0369	2320B	BSS	03/13/23 12:53	
pH		**6.5**	**pH**	**0.5**	1GC0370	SM 4500 H+ B	BSS	03/10/23 14:50	I-03
Sulfate		**99.8**	**mg/L**	**10.0**	1GC0923	EPA 9056	MID	03/16/23 19:26	

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HLW Engineering
PO Box 314
Story City, IA 50248

Work Order: 1GC0673

Analyte		Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0673-05	MW-303				Matrix: Water	Collected:	03/06/23 14:42	
Aluminum, total		**0.142 mg/L**	**0.050**	1GC0423	EPA 6010B	JAR	03/10/23 4:41	
Iron, total		**1.86 mg/L**	**0.100**	1GC0423	EPA 6010B	JAR	03/10/23 4:41	
1GC0673-06	MW-304				Matrix: Water	Collected:	03/06/23 14:12	
Alkalinity, as CaCO3		**367 mg/L**	**10**	1GC0369	2320B	BSS	03/13/23 12:53	
pH		**7.0 pH**	**0.5**	1GC0370	SM 4500 H+ B	BSS	03/10/23 14:50	I-03
Sulfate		**80.9 mg/L**	**10.0**	1GC0923	EPA 9056	MID	03/16/23 19:44	
Aluminum, total		<0.050 mg/L	0.050	1GC0423	EPA 6010B	JAR	03/10/23 4:51	
Iron, total		**6.29 mg/L**	**0.100**	1GC0423	EPA 6010B	JAR	03/10/23 4:51	
1GC0673-07	MW-313				Matrix: Water	Collected:	03/06/23 13:30	
Alkalinity, as CaCO3		**472 mg/L**	**10**	1GC0369	2320B	BSS	03/13/23 12:53	
pH		**6.8 pH**	**0.5**	1GC0370	SM 4500 H+ B	BSS	03/10/23 14:50	I-03
Sulfate		**1800 mg/L**	**50.0**	1GC1007	EPA 9056	MID	03/17/23 12:04	
Aluminum, total		<0.050 mg/L	0.050	1GC0423	EPA 6010B	JAR	03/10/23 4:57	
Iron, total		**4.63 mg/L**	**0.100**	1GC0423	EPA 6010B	JAR	03/10/23 4:57	
1GC0673-08	MW-335				Matrix: Water	Collected:	03/06/23 13:53	
Alkalinity, as CaCO3		**443 mg/L**	**10**	1GC0369	2320B	BSS	03/13/23 12:53	
pH		**6.3 pH**	**0.5**	1GC0370	SM 4500 H+ B	BSS	03/10/23 14:50	I-03
Sulfate		**2900 mg/L**	**50.0**	1GC1007	EPA 9056	MID	03/17/23 12:22	
Aluminum, total		**0.372 mg/L**	**0.050**	1GC0423	EPA 6010B	JAR	03/10/23 5:06	
Iron, total		**9.54 mg/L**	**0.100**	1GC0423	EPA 6010B	JAR	03/10/23 5:06	
1GC0673-09	MW-344				Matrix: Water	Collected:	03/06/23 12:45	
Alkalinity, as CaCO3		**197 mg/L**	**10**	1GC0369	2320B	BSS	03/13/23 12:53	
pH		**6.0 pH**	**0.5**	1GC0370	SM 4500 H+ B	BSS	03/10/23 14:50	I-03
Sulfate		**2150 mg/L**	**50.0**	1GC1007	EPA 9056	MID	03/17/23 12:40	
Aluminum, total		**0.077 mg/L**	**0.050**	1GC0423	EPA 6010B	JAR	03/10/23 5:16	
Iron, total		**11.6 mg/L**	**0.100**	1GC0423	EPA 6010B	JAR	03/10/23 5:16	
1GC0673-10	MW-380				Matrix: Water	Collected:	03/06/23 11:28	
Alkalinity, as CaCO3		**43 mg/L**	**10**	1GC0369	2320B	BSS	03/13/23 12:53	
pH		**3.7 pH**	**0.5**	1GC0370	SM 4500 H+ B	BSS	03/10/23 14:50	I-03
Sulfate		**3410 mg/L**	**50.0**	1GC0923	EPA 9056	MID	03/17/23 4:12	
Aluminum, total		**19.2 mg/L**	**0.050**	1GC0423	EPA 6010B	JAR	03/10/23 5:27	
Iron, total		**453 mg/L**	**0.100**	1GC0423	EPA 6010B	JAR	03/10/23 5:27	
1GC0673-11	MW-381				Matrix: Water	Collected:	03/06/23 12:16	
Alkalinity, as CaCO3		**170 mg/L**	**10**	1GC0369	2320B	BSS	03/13/23 12:53	
pH		**6.8 pH**	**0.5**	1GC0370	SM 4500 H+ B	BSS	03/10/23 14:50	I-03
Sulfate		**711 mg/L**	**10.0**	1GC0923	EPA 9056	MID	03/16/23 23:22	
Aluminum, total		**0.102 mg/L**	**0.050**	1GC0423	EPA 6010B	JAR	03/10/23 5:37	

HLW Engineering
PO Box 314
Story City, IA 50248

Work Order: 1GC0673

Analyte		Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0673-11	MW-381				Matrix: Water	Collected:	03/06/23 12:16	
Iron, total		**0.126 mg/L**	**0.100**	1GC0423	EPA 6010B	JAR	03/10/23 5:37	
1GC0673-12	MW-382R				Matrix: Water	Collected:	03/06/23 13:05	
Alkalinity, as CaCO3		**376 mg/L**	**10**	1GC0369	2320B	BSS	03/13/23 12:53	
pH		**7.1 pH**	**0.5**	1GC0370	SM 4500 H+ B	BSS	03/10/23 14:50	I-03
Sulfate		**1060 mg/L**	**10.0**	1GC0923	EPA 9056	MID	03/16/23 23:40	
Aluminum, total		**0.241 mg/L**	**0.050**	1GC0423	EPA 6010B	JAR	03/10/23 5:42	
Iron, total		**0.685 mg/L**	**0.100**	1GC0423	EPA 6010B	JAR	03/10/23 5:42	
1GC0673-13	MW-384				Matrix: Water	Collected:	03/06/23 08:47	
Alkalinity, as CaCO3		**106 mg/L**	**10**	1GC0369	2320B	BSS	03/13/23 12:53	
pH		**6.0 pH**	**0.5**	1GC0370	SM 4500 H+ B	BSS	03/10/23 14:50	I-03
Sulfate		**2430 mg/L**	**50.0**	1GC1007	EPA 9056	MID	03/17/23 12:58	
Aluminum, total		<0.050 mg/L	0.050	1GC0423	EPA 6010B	JAR	03/10/23 6:03	
Iron, total		**5.52 mg/L**	**0.100**	1GC0423	EPA 6010B	JAR	03/10/23 6:03	
1GC0673-14	MW-385				Matrix: Water	Collected:	03/06/23 09:11	
Alkalinity, as CaCO3		**410 mg/L**	**10**	1GC0369	2320B	BSS	03/13/23 12:53	
pH		**6.7 pH**	**0.5**	1GC0370	SM 4500 H+ B	BSS	03/10/23 14:50	I-03
Sulfate		**1960 mg/L**	**50.0**	1GC1007	EPA 9056	MID	03/17/23 13:16	
Aluminum, total		<0.050 mg/L	0.050	1GC0423	EPA 6010B	JAR	03/10/23 6:13	
Iron, total		**22.6 mg/L**	**0.100**	1GC0423	EPA 6010B	JAR	03/10/23 6:13	
1GC0673-15	GU-4A				Matrix: Water	Collected:	03/06/23 08:30	
Alkalinity, as CaCO3		**179 mg/L**	**10**	1GC0369	2320B	BSS	03/13/23 12:53	
pH		**6.0 pH**	**0.5**	1GC0370	SM 4500 H+ B	BSS	03/10/23 14:50	I-03
Sulfate		**2560 mg/L**	**50.0**	1GC0923	EPA 9056	MID	03/17/23 4:30	
Aluminum, total		<0.050 mg/L	0.050	1GC0423	EPA 6010B	JAR	03/10/23 6:22	
Iron, total		**114 mg/L**	**0.100**	1GC0423	EPA 6010B	JAR	03/10/23 6:22	
1GC0673-16	SW-1				Matrix: Water	Collected:	03/06/23 10:45	
Alkalinity, as CaCO3		**85 mg/L**	**10**	1GC0369	2320B	BSS	03/13/23 12:53	
pH		**7.1 pH**	**0.5**	1GC0370	SM 4500 H+ B	BSS	03/10/23 14:50	I-03
Sulfate		**652 mg/L**	**10.0**	1GC0923	EPA 9056	MID	03/17/23 1:29	
Aluminum, total		**0.057 mg/L**	**0.050**	1GC0423	EPA 6010B	JAR	03/10/23 6:33	
Iron, total		**0.208 mg/L**	**0.100**	1GC0423	EPA 6010B	JAR	03/10/23 6:33	
1GC0673-17	MW-601				Matrix: Water	Collected:	03/06/23 09:39	
Alkalinity, as CaCO3		**99 mg/L**	**10**	1GC0369	2320B	BSS	03/13/23 12:53	
pH		**6.9 pH**	**0.5**	1GC0370	SM 4500 H+ B	BSS	03/10/23 14:50	I-03
Sulfate		**672 mg/L**	**10.0**	1GC0923	EPA 9056	MID	03/16/23 23:58	
Aluminum, total		<0.050 mg/L	0.050	1GC0423	EPA 6010B	JAR	03/10/23 6:39	
Iron, total		**0.380 mg/L**	**0.100**	1GC0423	EPA 6010B	JAR	03/10/23 6:39	

Keystone LABORATORIES
A Microbac Company

HLW Engineering
PO Box 314
Story City, IA 50248

Work Order: 1GC0673

Analyte		Result	MRL	Batch	Method	Analyst	Analyzed	Qualifier
1GC0673-17	MW-601				Matrix: Water		Collected: 03/06/23 09:39	
1GC0673-18	MW-602				Matrix: Water		Collected: 03/06/23 10:04	
Alkalinity, as CaCO3		**85 mg/L**	**10**	1GC0369	2320B	BSS	03/13/23 12:53	
pH		**5.6 pH**	**0.5**	1GC0370	SM 4500 H+ B	BSS	03/10/23 14:50	I-03
Sulfate		**1900 mg/L**	**50.0**	1GC1007	EPA 9056	MID	03/17/23 13:34	
Aluminum, total		<0.050 mg/L	0.050	1GC0423	EPA 6010B	JAR	03/10/23 6:45	
Iron, total		**100 mg/L**	**0.100**	1GC0423	EPA 6010B	JAR	03/10/23 6:45	
1GC0673-19	MW-603				Matrix: Water		Collected: 03/06/23 10:30	
Alkalinity, as CaCO3		**361 mg/L**	**10**	1GC0369	2320B	BSS	03/13/23 12:53	
pH		**6.5 pH**	**0.5**	1GC0370	SM 4500 H+ B	BSS	03/10/23 14:50	I-03
Sulfate		**2170 mg/L**	**50.0**	1GC1007	EPA 9056	MID	03/17/23 13:52	
Aluminum, total		**0.128 mg/L**	**0.050**	1GC0423	EPA 6010B	JAR	03/10/23 6:55	
Iron, total		**43.7 mg/L**	**0.100**	1GC0423	EPA 6010B	JAR	03/10/23 6:55	

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HLW Engineering
PO Box 314
Story City, IA 50248

Work Order: 1GC0673

Determination of Conventional Chemistry Parameters - Quality Control

Keystone Laboratories - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GC0369 - Wet Chem Preparation										
Blank (1GC0369-BLK1)				Prepared: 03/08/23 Analyzed: 03/13/23						
Alkalinity, as CaCO3	ND	10	mg/L							
LCS (1GC0369-BS1)				Prepared: 03/08/23 Analyzed: 03/13/23						
Alkalinity, as CaCO3	218	10	mg/L	235.000		92.8	88-114			
Matrix Spike (1GC0369-MS1)	**Source: 1GC0673-18**			Prepared: 03/08/23 Analyzed: 03/13/23						
Alkalinity, as CaCO3	233	10	mg/L	235.000	85.0	63.1	74-122			QM-07
Matrix Spike Dup (1GC0369-MSD1)	**Source: 1GC0673-18**			Prepared: 03/08/23 Analyzed: 03/13/23						
Alkalinity, as CaCO3	231	10	mg/L	235.000	85.0	62.3	74-122	0.861	10	QM-07
Batch 1GC0370 - Wet Chem Preparation										
Duplicate (1GC0370-DUP1)	**Source: 1GC0673-01**			Prepared: 03/08/23 Analyzed: 03/10/23						
pH	5.4	0.5	pH		5.5			0.275	10	
Duplicate (1GC0370-DUP2)	**Source: 1GC0673-10**			Prepared: 03/08/23 Analyzed: 03/10/23						
pH	3.7	0.5	pH		3.7			0.217	10	
Duplicate (1GC0370-DUP3)	**Source: 1GC0673-19**			Prepared: 03/08/23 Analyzed: 03/10/23						
pH	6.4	0.5	pH		6.5			0.558	10	
Reference (1GC0370-SRM1)				Prepared: 03/08/23 Analyzed: 03/10/23						
pH	7.0	0.5	pH	7.00000		100	90-110			
Reference (1GC0370-SRM2)				Prepared: 03/08/23 Analyzed: 03/10/23						
pH	7.0	0.5	pH	7.00000		101	90-110			

HLW Engineering
PO Box 314
Story City, IA 50248

Work Order: 1GC0673

Determination of Conventional Chemistry Parameters - Quality Control

Keystone Laboratories - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GC0370 - Wet Chem Preparation										
Reference (1GC0370-SRM3)				Prepared: 03/08/23 Analyzed: 03/10/23						
pH	7.1	0.5	pH	7.00000		101	90-110			
Reference (1GC0370-SRM4)				Prepared: 03/08/23 Analyzed: 03/10/23						
pH	1.5	0.5	pH	1.68000		91.0	90-110			

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Story City, IA 50248

Work Order: 1GC0673

Determination of Inorganic Anions - Quality Control

Keystone Laboratories - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GC0923 - General Prep HPLC/IC										
Blank (1GC0923-BLK1)				Prepared & Analyzed: 03/16/23						
Sulfate	ND	1.0	mg/L							
Blank (1GC0923-BLK2)				Prepared & Analyzed: 03/16/23						
Sulfate	ND	1.0	mg/L							
Blank (1GC0923-BLK3)				Prepared & Analyzed: 03/16/23						
Sulfate	ND	1.0	mg/L							
LCS (1GC0923-BS1)				Prepared & Analyzed: 03/16/23						
Sulfate	33.54	1.0	mg/L	34.2650		97.9	80-120			
LCS (1GC0923-BS2)				Prepared & Analyzed: 03/16/23						
Sulfate	32.43	1.0	mg/L	34.2650		94.6	80-120			
LCS Dup (1GC0923-BSD1)				Prepared & Analyzed: 03/16/23						
Sulfate	33.49	1.0	mg/L	34.2650		97.7	80-120	0.152	10	
LCS Dup (1GC0923-BSD2)				Prepared & Analyzed: 03/16/23						
Sulfate	32.40	1.0	mg/L	34.2650		94.6	80-120	0.0925	10	
MRL Check (1GC0923-MRL1)				Prepared & Analyzed: 03/16/23						
Sulfate	1.10	1.0	mg/L	1.10748		99.6	0-200			
Matrix Spike (1GC0923-MS1)		**Source: 1GC1288-02**		Prepared & Analyzed: 03/16/23						
Sulfate	510.2	10.0	mg/L	342.650	167.2	100	87-113			
Matrix Spike (1GC0923-MS2)		**Source: 1GC0862-01**		Prepared & Analyzed: 03/16/23						
Sulfate	912.8	10.0	mg/L	342.650	564.5	102	87-113			

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety. Samples were preserved in accordance with 40 CFR for pH adjustment unless otherwise noted. MRL= Method Reporting Limit.

Phone 641-792-8451 600 East 17th Street South Newton, IA 50208 Fax 641-792-7989

HLW Engineering
PO Box 314
Story City, IA 50248

Work Order: 1GC0673

Determination of Inorganic Anions - Quality Control

Keystone Laboratories - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GC0923 - General Prep HPLC/IC										
Matrix Spike Dup (1GC0923-MSD1)		**Source: 1GC1288-02**		Prepared & Analyzed: 03/16/23						
Sulfate	504.8	10.0	mg/L	342.650	167.2	98.5	87-113	1.06	10	
Matrix Spike Dup (1GC0923-MSD2)		**Source: 1GC0862-01**		Prepared & Analyzed: 03/16/23						
Sulfate	916.4	10.0	mg/L	342.650	564.5	103	87-113	0.387	10	
Batch 1GC1007 - General Prep HPLC/IC										
Blank (1GC1007-BLK1)				Prepared & Analyzed: 03/17/23						
Sulfate	ND	1.0	mg/L							
LCS (1GC1007-BS1)				Prepared & Analyzed: 03/17/23						
Sulfate	32.52	1.0	mg/L	34.2650		94.9	80-120			
LCS Dup (1GC1007-BSD1)				Prepared & Analyzed: 03/17/23						
Sulfate	32.49	1.0	mg/L	34.2650		94.8	80-120	0.0984	10	
MRL Check (1GC1007-MRL1)				Prepared & Analyzed: 03/17/23						
Sulfate	1.09	1.0	mg/L	1.10748		98.4	0-200			
Matrix Spike (1GC1007-MS1)		**Source: 1GC0673-07**		Prepared & Analyzed: 03/17/23						
Sulfate	3483	50.0	mg/L	1713.25	1796	98.5	87-113			
Matrix Spike Dup (1GC1007-MSD1)		**Source: 1GC0673-07**		Prepared & Analyzed: 03/17/23						
Sulfate	3487	50.0	mg/L	1713.25	1796	98.7	87-113	0.110	10	

Determination of Total Metals - Quality Control

Keystone Laboratories - Newton

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GC0423 - EPA 3010A Digestion (Water)										
Blank (1GC0423-BLK1)				Prepared: 03/08/23 Analyzed: 03/10/23						
Aluminum, total	ND	0.050	mg/L							
Iron, total	ND	0.100	"							
LCS (1GC0423-BS1)				Prepared: 03/08/23 Analyzed: 03/10/23						
Aluminum, total	2.24	0.050	mg/L	2.20000		102	80-120			
Iron, total	2.31	0.100	"	2.20000		105	80-120			
Matrix Spike (1GC0423-MS1)		**Source: 1GC0673-01**		Prepared: 03/08/23 Analyzed: 03/10/23						
Aluminum, total	2.47	0.050	mg/L	2.20000	0.213	103	75-125			
Iron, total	274	0.100	"	2.20000	280	NR	75-125			QM-4X
Matrix Spike Dup (1GC0423-MSD1)		**Source: 1GC0673-01**		Prepared: 03/08/23 Analyzed: 03/10/23						
Aluminum, total	2.52	0.050	mg/L	2.20000	0.213	105	75-125	1.76	20	
Iron, total	289	0.100	"	2.20000	280	397	75-125	5.33	20	QM-4X
Post Spike (1GC0423-PS1)		**Source: 1GC0673-01**		Prepared: 03/08/23 Analyzed: 03/10/23						
Aluminum, total	9.63		mg/L	8.80000	0.213	107	80-120			
Iron, total	305		"	8.80000	280	279	80-120			PS-4X

ND = Non Detect; REC= Recovery; RPD= Relative Percent Difference

Certified Analyses Included In This Report

Method/Matrix	Analyte	Certifications
2320B in Water		
	Alkalinity, as CaCO3	KS-NT,SIA1X
EPA 6010B in Water		
	Aluminum, total	KS-NT,SIA1X
	Iron, total	KS-NT,SIA1X
EPA 9056 in Water		
	Sulfate	KS-NT,SIA1X
SM 4500 H+ B in Water		
	pH	KS-NT,SIA1X

Code	Description	Number	Expires
KS-KC	Kansas Department of Health and Environment-KC	E-10110	04/30/2023
KS-NT	Kansas Department of Health and Environment (NELAP)	E-10287	10/31/2023
MO-KC	Missouri Department of Natural Resources	140	04/30/2023
SIA1X	Iowa Dept. of Natural Resources	95	02/01/2024

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HLW Engineering
PO Box 314
Story City, IA 50248

Work Order: 1GC0673

Notes and Definitions

I-03	Analyte required to be analyzed within 15 minutes of sampling. Analysis performed upon receipt of sample at laboratory.
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.
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.

End of Report

Sue Thompson

Keystone Laboratories

Sue Thompson

Client Services Manager

CHAIN OF CUS

Keystone
LABORATORIES, INC.

600 East 17th Street South
Newton, IA 50208
641-792-8451

1 G C 0 6 7 3
HLW Engineering
PM: Sue Thompson

ted: 2/21/2023 7:34:09PM
www.keystonelabs.c

SITE INFORMATION
Sampler: TODD WHIPPLE
Project: SCISWA - ADM
6009

SPECIAL INSTRUCTIONS
None

Turn Around Time
☐ Standard ☐ RUSH, need by __/__/__

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

INVOICE TO
Rick Hurt
South Central IA Solid Waste Agency
1736 Highway T17
Tracy, IA 50256

LAB USE ONLY
Work Order: 1GC0673
Temperature: 2.1
Turn-Cooler: **No**

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

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses	Lab Sample Number
01-001	**MW-307**	Water	GRAB	3/6/23	8:13	2	alk-caco3-2320, fe-t-6010, so4-9056-w, al-t-6010, ph-4500	01
02-001	**MW-312**	Water	GRAB	3/6/23	11:03	2	alk-caco3-2320, fe-t-6010, so4-9056-w, al-t-6010, ph-4500	02
03-001	**MW-390**	Water	GRAB	3/6/23	7:52	2	alk-caco3-2320, fe-t-6010, so4-9056-w, al-t-6010, ph-4500	03
04-001	**MW-300**	Water	GRAB	3/6/23	11:52	2	alk-caco3-2320, fe-t-6010, so4-9056-w, al-t-6010, ph-4500	04
05-001	**MW-303**	Water	GRAB	3/6/23	14:42	2	alk-caco3-2320, fe-t-6010, so4-9056-w, al-t-6010, ph-4500	05

Relinquished By: Todd Whipple Date/Time: 3/7/23
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HLW Engineering
PM: Sue Thompson

ed: 2/21/2023 7:34:09PM
www.keystonelabs.co

SITE INFORMATION

Sampler: TODD WHIPPLE
Project: SCISWA - ADM
6009

REPORT TO

Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50248

INVOICE TO

Rick Hurt
South Central IA Solid Waste Agency
1736 Highway T17
Tracy, IA 50256

SPECIAL INSTRUCTIONS

None

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

LAB USE ONLY

Work Order 1GC0673
Temperature 2.1
Turn-Cooler: No

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

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses	Lab Sample Number
06-001	MW-304	Water	GRAB	3/6/23	14:12	2	alk-caco3-2320, fe-t-6010, so4-9056-w, al-t-6010, ph-4500	06
07-001	MW-313	Water	GRAB	3/6/23	13:30	2	alk-caco3-2320, fe-t-6010, so4-9056-w, al-t-6010, ph-4500	07
08-001	MW-335	Water	GRAB	3/6/23	13:53	2	alk-caco3-2320, fe-t-6010, so4-9056-w, al-t-6010, ph-4500	08
09-001	MW-344	Water	GRAB	3/6/23	12:45	2	alk-caco3-2320, fe-t-6010, so4-9056-w, al-t-6010, ph-4500	09
10-001	MW-380	Water	GRAB	3/6/23	11:28	2	alk-caco3-2320, fe-t-6010, so4-9056-w, al-t-6010, ph-4500	10

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LABORATORIES, INC.

600 East 17th Street Sou
Newton, IA 50208
641-792-8451

1GC0673
HLW Engineering
PM: Sue Thompson

SITE INFORMATION
Sampler: TODD WHIPPLE
Project: SCISWA - ADM
6009

REPORT TO
Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50248

INVOICE TO
Rick Hurt
South Central IA Solid Waste Agency
1736 Highway T17
Tracy, IA 50256

SPECIAL INSTRUCTIONS
None

Turn Around Time
☐ Standard ☐ RUSH, need by __/__/__

LAB USE ONLY
Work Order 1GC0673
Temperature 2.1
Turn-Cooler: No

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

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses		Lab Sample Number
11-001	MW-381	Water	GRAB	3/6/23	12:16	2	alk-caco3-2320 fe-t-6010 so4-9056-w	al-t-6010 ph-4500	11
12-001	MW-382R	Water	GRAB	3/6/23	13:05	2	alk-caco3-2320 fe-t-6010 so4-9056-w	al-t-6010 ph-4500	12
13-001	MW-384	Water	GRAB	3/6/23	8:47	2	alk-caco3-2320 fe-t-6010 so4-9056-w	al-t-6010 ph-4500	13
14-001	MW-385	Water	GRAB	3/6/23	9:11	2	alk-caco3-2320 fe-t-6010 so4-9056-w	al-t-6010 ph-4500	14
15-001	GU-4A	Water	GRAB	3/6/23	8:30	2	alk-caco3-2320 fe-t-6010 so4-9056-w	al-t-6010 ph-4500	15

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SITE INFORMATION

Sampler: TODD WHIPPLE

Project: SCISWA - ADM

6009

REPORT TO

Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50248

INVOICE TO

Rick Hurt
South Central IA Solid Waste Agency
1736 Highway T17
Tracy, IA 50256

SPECIAL INSTRUCTIONS

None

Turn Around Time
☐ Standard ☐ RUSH, need by __/__/__

LAB USE ONLY

Work Order 1GC0673
Temperature 2.1
Turn-Cooler: No

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

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses	Lab Sample Number
16-001	SW-1	Water	GRAB	3/6/23	10:45	2	alk-caco3-2320, fe-t-6010, so4-9056-w, al-t-6010, ph-4500	16
17-001	MW-601	Water	GRAB	3/6/23	9:39	2	alk-caco3-2320, fe-t-6010, so4-9056-w, al-t-6010, ph-4500	17
18-001	MW-602	Water	GRAB	3/6/23	10:04	2	alk-caco3-2320, fe-t-6010, so4-9056-w, al-t-6010, ph-4500	18
19-001	MW-603	Water	GRAB	3/6/23	10:30	2	alk-caco3-2320, fe-t-6010, so4-9056-w, al-t-6010, ph-4500	19

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Remarks:

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Keystone Laboratories - Newton

CERTIFICATE OF ANALYSIS

1GJ0088

Project Description

SCISWA - New Regs

For:

Todd Whipple

HLW Engineering

PO Box 314

Story City, IA 50248

Heather Murphy

Customer Relationship Specialist

Monday, December 11, 2023

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

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

Keystone Laboratories - Newton

CERTIFICATE OF ANALYSIS

1GJ0088

HLW Engineering

Todd Whipple
PO Box 314
Story City, IA 50248

Project Name: SCISWA - New Regs

Project / PO Number: / 6009
Received: 10/02/2023
Reported: 12/11/2023

Sample Summary Report

Sample Name	Laboratory ID	Client Matrix	Sample Type	Sample Begin	Sample Taken	Lab Received
MW-307	1GJ0088-01	Water	GRAB		09/29/23 09:07	10/02/23 11:30
MW-312	1GJ0088-02	Water	GRAB		09/29/23 10:56	10/02/23 11:30
MW-390	1GJ0088-03	Water	GRAB		09/29/23 09:26	10/02/23 11:30
MW-300	1GJ0088-04	Water	GRAB		09/29/23 11:35	10/02/23 11:30
MW-303	1GJ0088-05	Water	GRAB		09/29/23 12:59	10/02/23 11:30
MW-304	1GJ0088-06	Water	GRAB		09/29/23 13:15	10/02/23 11:30
MW-313	1GJ0088-07	Water	GRAB		09/29/23 12:20	10/02/23 11:30
MW-335	1GJ0088-08	Water	GRAB		09/29/23 14:43	10/02/23 11:30
MW-344	1GJ0088-09	Water	GRAB		09/29/23 14:51	10/02/23 11:30
MW-380	1GJ0088-10	Water	GRAB		09/29/23 11:17	10/02/23 11:30
MW-381	1GJ0088-11	Water	GRAB		09/29/23 11:53	10/02/23 11:30
MW-382R	1GJ0088-12	Water	GRAB		09/29/23 15:26	10/02/23 11:30
MW-384	1GJ0088-13	Water	GRAB		09/29/23 14:04	10/02/23 11:30
MW-385	1GJ0088-14	Water	GRAB		09/29/23 13:50	10/02/23 11:30
Field Duplicate	1GJ0088-15	Water	GRAB		09/29/23 00:00	10/02/23 11:30
MW-601	1GJ0088-16	Water	GRAB		09/29/23 09:50	10/02/23 11:30
MW-602	1GJ0088-17	Water	GRAB		09/29/23 10:10	10/02/23 11:30
MW-603	1GJ0088-18	Water	GRAB		09/29/23 10:30	10/02/23 11:30

Keystone Laboratories - Newton

CERTIFICATE OF ANALYSIS

1GJ0088

Analytical Testing Parameters

Client Sample ID:	MW-307			
Sample Matrix:	Water		**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-01		**Collection Date:**	09/29/2023 9:07

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
Vinyl Chloride	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
Bromomethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
Chloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
Acetone	<10.0	10.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
Methyl Iodide	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
Carbon Disulfide	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
Methylene Chloride	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
Acrylonitrile	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
Vinyl Acetate	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
Bromochloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
Chloroform	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
Benzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
Trichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
Dibromomethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
Bromodichloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
Toluene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
Dibromochloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
Chlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
Ethylbenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
Xylenes, total	<2.0	2.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
Styrene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH

Keystone Laboratories - Newton

CERTIFICATE OF ANALYSIS

1GJ0088

Client Sample ID:	MW-307		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-01	**Collection Date:**	09/29/2023 9:07

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Bromoform	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1444	LNH
Surrogate: Dibromofluoromethane	100	Limit: 75-136	% Rec	1		10/03/23 0000	10/03/23 1444	LNH
Surrogate: Dibromofluoromethane	100	Limit: 80-126	% Rec	1		10/03/23 0000	10/03/23 1444	LNH
Surrogate: 1,2-Dichloroethane-d4	94.0	Limit: 61-142	% Rec	1		10/03/23 0000	10/03/23 1444	LNH
Surrogate: 1,2-Dichloroethane-d4	94.0	Limit: 63-138	% Rec	1		10/03/23 0000	10/03/23 1444	LNH
Surrogate: Toluene-d8	98.1	Limit: 82-121	% Rec	1		10/03/23 0000	10/03/23 1444	LNH
Surrogate: Toluene-d8	98.1	Limit: 87-116	% Rec	1		10/03/23 0000	10/03/23 1444	LNH
Surrogate: 4-Bromofluorobenzene	93.1	Limit: 80-116	% Rec	1		10/03/23 0000	10/03/23 1444	LNH
Surrogate: 4-Bromofluorobenzene	93.1	Limit: 85-111	% Rec	1		10/03/23 0000	10/03/23 1444	LNH

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total	**0.0044**	0.0020	mg/L	4		10/06/23 0750	10/12/23 1701	RVV
Arsenic, total	**0.0319**	0.0040	mg/L	4		10/06/23 0750	10/12/23 1701	RVV
Barium, total	**0.0218**	0.0040	mg/L	4		10/06/23 0750	10/12/23 1701	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1701	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/06/23 0750	10/12/23 1701	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/06/23 0750	10/12/23 1701	RVV
Cobalt, total	**0.0366**	0.0004	mg/L	4		10/06/23 0750	10/12/23 1701	RVV
Copper, total	**0.0042**	0.0040	mg/L	4		10/06/23 0750	10/12/23 1701	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1701	RVV
Nickel, total	**0.0681**	0.0040	mg/L	4		10/06/23 0750	10/12/23 1701	RVV
Selenium, total	**0.0064**	0.0040	mg/L	4		10/06/23 0750	10/12/23 1701	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1701	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/06/23 0750	10/12/23 1701	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/06/23 0750	10/12/23 1701	RVV
Zinc, total	**0.383**	0.0200	mg/L	4		10/06/23 0750	10/12/23 1701	RVV

Client Sample ID:	MW-312		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-02	**Collection Date:**	09/29/2023 10:56

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
Vinyl Chloride	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
Bromomethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
Chloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
Acetone	<10.0	10.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
Methyl Iodide	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
Carbon Disulfide	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
Methylene Chloride	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
Acrylonitrile	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
Vinyl Acetate	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
Bromochloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
Chloroform	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
Benzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
Trichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
Dibromomethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
Bromodichloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
Toluene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
Dibromochloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
Chlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
Ethylbenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
Xylenes, total	<2.0	2.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
Styrene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
Bromoform	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH

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Keystone Laboratories - Newton

CERTIFICATE OF ANALYSIS

1GJ0088

Client Sample ID:	MW-312		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-02	**Collection Date:**	09/29/2023 10:56

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1523	LNH
Surrogate: Dibromofluoromethane	97.1	Limit: 80-126	% Rec	1		10/03/23 0000	10/03/23 1523	LNH
Surrogate: Dibromofluoromethane	97.1	Limit: 75-136	% Rec	1		10/03/23 0000	10/03/23 1523	LNH
Surrogate: 1,2-Dichloroethane-d4	91.3	Limit: 63-138	% Rec	1		10/03/23 0000	10/03/23 1523	LNH
Surrogate: 1,2-Dichloroethane-d4	91.3	Limit: 61-142	% Rec	1		10/03/23 0000	10/03/23 1523	LNH
Surrogate: Toluene-d8	101	Limit: 87-116	% Rec	1		10/03/23 0000	10/03/23 1523	LNH
Surrogate: Toluene-d8	101	Limit: 82-121	% Rec	1		10/03/23 0000	10/03/23 1523	LNH
Surrogate: 4-Bromofluorobenzene	92.3	Limit: 80-116	% Rec	1		10/03/23 0000	10/03/23 1523	LNH
Surrogate: 4-Bromofluorobenzene	92.3	Limit: 85-111	% Rec	1		10/03/23 0000	10/03/23 1523	LNH

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		10/06/23 0750	10/12/23 1725	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1725	RVV
Barium, total	**0.0229**	0.0040	mg/L	4		10/06/23 0750	10/12/23 1725	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1725	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/06/23 0750	10/12/23 1725	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/06/23 0750	10/12/23 1725	RVV
Cobalt, total	**0.0429**	0.0004	mg/L	4		10/06/23 0750	10/12/23 1725	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1725	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1725	RVV
Nickel, total	**0.0721**	0.0040	mg/L	4		10/06/23 0750	10/12/23 1725	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1725	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1725	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/06/23 0750	10/12/23 1725	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/06/23 0750	10/12/23 1725	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/06/23 0750	10/12/23 1725	RVV

Keystone Laboratories - Newton

CERTIFICATE OF ANALYSIS

1GJ0088

Client Sample ID:	MW-390		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-03	**Collection Date:**	09/29/2023 9:26

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
Vinyl Chloride	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
Bromomethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
Chloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
Acetone	<10.0	10.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
Methyl Iodide	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
Carbon Disulfide	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
Methylene Chloride	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
Acrylonitrile	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
Vinyl Acetate	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
Bromochloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
Chloroform	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
Benzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
Trichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
Dibromomethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
Bromodichloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
Toluene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
Dibromochloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
Chlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
Ethylbenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
Xylenes, total	<2.0	2.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
Styrene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
Bromoform	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH

Client Sample ID:	MW-390		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-03	**Collection Date:**	09/29/2023 9:26

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1603	LNH
Surrogate: Dibromofluoromethane	97.9	Limit: 75-136	% Rec	1		10/03/23 0000	10/03/23 1603	LNH
Surrogate: Dibromofluoromethane	97.9	Limit: 80-126	% Rec	1		10/03/23 0000	10/03/23 1603	LNH
Surrogate: 1,2-Dichloroethane-d4	93.3	Limit: 61-142	% Rec	1		10/03/23 0000	10/03/23 1603	LNH
Surrogate: 1,2-Dichloroethane-d4	93.3	Limit: 63-138	% Rec	1		10/03/23 0000	10/03/23 1603	LNH
Surrogate: Toluene-d8	100	Limit: 82-121	% Rec	1		10/03/23 0000	10/03/23 1603	LNH
Surrogate: Toluene-d8	100	Limit: 87-116	% Rec	1		10/03/23 0000	10/03/23 1603	LNH
Surrogate: 4-Bromofluorobenzene	92.1	Limit: 80-116	% Rec	1		10/03/23 0000	10/03/23 1603	LNH
Surrogate: 4-Bromofluorobenzene	92.1	Limit: 85-111	% Rec	1		10/03/23 0000	10/03/23 1603	LNH

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		10/06/23 0750	10/13/23 1226	RVV
Arsenic, total	**0.0160**	0.0040	mg/L	4		10/06/23 0750	10/13/23 1226	RVV
Barium, total	**0.0129**	0.0040	mg/L	4		10/06/23 0750	10/13/23 1226	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/13/23 1226	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/06/23 0750	10/13/23 1226	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/06/23 0750	10/13/23 1226	RVV
Cobalt, total	**0.0969**	0.0004	mg/L	4		10/06/23 0750	10/13/23 1226	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/20/23 0213	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/13/23 1226	RVV
Nickel, total	**0.0500**	0.0040	mg/L	4		10/06/23 0750	10/13/23 1226	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/13/23 1226	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/13/23 1226	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/06/23 0750	10/13/23 1226	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/06/23 0750	10/13/23 1226	RVV
Zinc, total	**0.122**	0.0200	mg/L	4		10/06/23 0750	10/13/23 1226	RVV

Client Sample ID:	MW-300		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-04	**Collection Date:**	09/29/2023 11:35

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		10/03/23 0000	10/03/23 1642	LNH
Vinyl Chloride	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
Bromomethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
Chloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
Acetone	<10.0	10.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
Methyl Iodide	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
Carbon Disulfide	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
Methylene Chloride	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
Acrylonitrile	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
Vinyl Acetate	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
Bromochloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
Chloroform	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
Benzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
Trichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
Dibromomethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
Bromodichloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
Toluene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
Dibromochloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
Chlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
Ethylbenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
Xylenes, total	<2.0	2.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
Styrene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
Bromoform	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH

Client Sample ID:	MW-300		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-04	**Collection Date:**	09/29/2023 11:35

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		10/03/23 0000	10/03/23 1642	LNH
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1642	LNH
Surrogate: Dibromofluoromethane	98.1	Limit: 75-136	% Rec	1		10/03/23 0000	10/03/23 1642	LNH
Surrogate: Dibromofluoromethane	98.1	Limit: 80-126	% Rec	1		10/03/23 0000	10/03/23 1642	LNH
Surrogate: 1,2-Dichloroethane-d4	91.3	Limit: 63-138	% Rec	1		10/03/23 0000	10/03/23 1642	LNH
Surrogate: 1,2-Dichloroethane-d4	91.3	Limit: 61-142	% Rec	1		10/03/23 0000	10/03/23 1642	LNH
Surrogate: Toluene-d8	101	Limit: 82-121	% Rec	1		10/03/23 0000	10/03/23 1642	LNH
Surrogate: Toluene-d8	101	Limit: 87-116	% Rec	1		10/03/23 0000	10/03/23 1642	LNH
Surrogate: 4-Bromofluorobenzene	93.3	Limit: 80-116	% Rec	1		10/03/23 0000	10/03/23 1642	LNH
Surrogate: 4-Bromofluorobenzene	93.3	Limit: 85-111	% Rec	1		10/03/23 0000	10/03/23 1642	LNH

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		10/06/23 0750	10/13/23 1232	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/13/23 1232	RVV
Barium, total	**0.0113**	0.0040	mg/L	4		10/06/23 0750	10/13/23 1232	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/13/23 1232	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/06/23 0750	10/13/23 1232	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/06/23 0750	10/13/23 1232	RVV
Cobalt, total	**0.881**	0.0004	mg/L	4		10/06/23 0750	10/13/23 1232	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/13/23 1232	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/13/23 1232	RVV
Nickel, total	**0.955**	0.0040	mg/L	4		10/06/23 0750	10/13/23 1232	RVV
Selenium, total	**0.0045**	0.0040	mg/L	4		10/06/23 0750	10/13/23 1232	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/13/23 1232	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/06/23 0750	10/13/23 1232	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/06/23 0750	10/13/23 1232	RVV
Zinc, total	**0.925**	0.0200	mg/L	4		10/06/23 0750	10/13/23 1232	RVV

Keystone Laboratories - Newton

CERTIFICATE OF ANALYSIS

1GJ0088

Client Sample ID:	MW-303		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-05	**Collection Date:**	09/29/2023 12:59

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
Vinyl Chloride	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
Bromomethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
Chloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
Acetone	<10.0	10.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
Methyl Iodide	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
Carbon Disulfide	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
Methylene Chloride	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
Acrylonitrile	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
Vinyl Acetate	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
Bromochloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
Chloroform	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
Benzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
Trichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
Dibromomethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
Bromodichloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
Toluene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
Dibromochloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
Chlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
Ethylbenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
Xylenes, total	<2.0	2.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
Styrene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
Bromoform	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH

Client Sample ID:	MW-303			
Sample Matrix:	Water		**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-05		**Collection Date:**	09/29/2023 12:59

Determination of Volatile Organic Compounds	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1722	LNH
Surrogate: Dibromofluoromethane	97.5	Limit: 80-126	% Rec	1		10/03/23 0000	10/03/23 1722	LNH
Surrogate: Dibromofluoromethane	97.5	Limit: 75-136	% Rec	1		10/03/23 0000	10/03/23 1722	LNH
Surrogate: 1,2-Dichloroethane-d4	91.8	Limit: 63-138	% Rec	1		10/03/23 0000	10/03/23 1722	LNH
Surrogate: 1,2-Dichloroethane-d4	91.8	Limit: 61-142	% Rec	1		10/03/23 0000	10/03/23 1722	LNH
Surrogate: Toluene-d8	101	Limit: 87-116	% Rec	1		10/03/23 0000	10/03/23 1722	LNH
Surrogate: Toluene-d8	101	Limit: 82-121	% Rec	1		10/03/23 0000	10/03/23 1722	LNH
Surrogate: 4-Bromofluorobenzene	92.2	Limit: 80-116	% Rec	1		10/03/23 0000	10/03/23 1722	LNH
Surrogate: 4-Bromofluorobenzene	92.2	Limit: 85-111	% Rec	1		10/03/23 0000	10/03/23 1722	LNH

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		10/06/23 0750	10/12/23 1755	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1755	RVV
Barium, total	**0.0355**	0.0040	mg/L	4		10/06/23 0750	10/12/23 1755	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1755	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/06/23 0750	10/12/23 1755	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/06/23 0750	10/12/23 1755	RVV
Cobalt, total	**0.0175**	0.0004	mg/L	4		10/06/23 0750	10/12/23 1755	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1755	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1755	RVV
Nickel, total	**0.0415**	0.0040	mg/L	4		10/06/23 0750	10/12/23 1755	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1755	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1755	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/06/23 0750	10/12/23 1755	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/06/23 0750	10/12/23 1755	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/06/23 0750	10/12/23 1755	RVV

Keystone Laboratories - Newton

CERTIFICATE OF ANALYSIS

1GJ0088

Client Sample ID:	MW-304		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-06	**Collection Date:**	09/29/2023 13:15

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
Vinyl Chloride	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
Bromomethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
Chloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
Acetone	<10.0	10.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
Methyl Iodide	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
Carbon Disulfide	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
Methylene Chloride	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
Acrylonitrile	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
Vinyl Acetate	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
Bromochloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
Chloroform	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
Benzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
Trichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
Dibromomethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
Bromodichloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
Toluene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
Dibromochloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
Chlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
Ethylbenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
Xylenes, total	<2.0	2.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
Styrene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
Bromoform	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH

Client Sample ID:	MW-304		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-06	**Collection Date:**	09/29/2023 13:15

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1802	LNH
Surrogate: Dibromofluoromethane	96.8	Limit: 75-136	% Rec	1		10/03/23 0000	10/03/23 1802	LNH
Surrogate: Dibromofluoromethane	96.8	Limit: 80-126	% Rec	1		10/03/23 0000	10/03/23 1802	LNH
Surrogate: 1,2-Dichloroethane-d4	91.9	Limit: 63-138	% Rec	1		10/03/23 0000	10/03/23 1802	LNH
Surrogate: 1,2-Dichloroethane-d4	91.9	Limit: 61-142	% Rec	1		10/03/23 0000	10/03/23 1802	LNH
Surrogate: Toluene-d8	101	Limit: 87-116	% Rec	1		10/03/23 0000	10/03/23 1802	LNH
Surrogate: Toluene-d8	101	Limit: 82-121	% Rec	1		10/03/23 0000	10/03/23 1802	LNH
Surrogate: 4-Bromofluorobenzene	92.5	Limit: 85-111	% Rec	1		10/03/23 0000	10/03/23 1802	LNH
Surrogate: 4-Bromofluorobenzene	92.5	Limit: 80-116	% Rec	1		10/03/23 0000	10/03/23 1802	LNH

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		10/06/23 0750	10/12/23 1801	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1801	RVV
Barium, total	**0.0610**	0.0040	mg/L	4		10/06/23 0750	10/12/23 1801	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1801	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/06/23 0750	10/12/23 1801	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/06/23 0750	10/12/23 1801	RVV
Cobalt, total	**0.0071**	0.0004	mg/L	4		10/06/23 0750	10/12/23 1801	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1801	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1801	RVV
Nickel, total	**0.0055**	0.0040	mg/L	4		10/06/23 0750	10/12/23 1801	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1801	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1801	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/06/23 0750	10/12/23 1801	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/06/23 0750	10/12/23 1801	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/06/23 0750	10/12/23 1801	RVV

Client Sample ID:	MW-313		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-07	**Collection Date:**	09/29/2023 12:20

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		10/03/23 0000	10/03/23 1841	LNH
Vinyl Chloride	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
Bromomethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
Chloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
Acetone	<10.0	10.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
Methyl Iodide	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
Carbon Disulfide	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
Methylene Chloride	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
Acrylonitrile	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
Vinyl Acetate	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
Bromochloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
Chloroform	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
Benzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
Trichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
Dibromomethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
Bromodichloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
Toluene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
Dibromochloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
Chlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
Ethylbenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
Xylenes, total	<2.0	2.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
Styrene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
Bromoform	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH

Client Sample ID:	MW-313		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-07	**Collection Date:**	09/29/2023 12:20

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		10/03/23 0000	10/03/23 1841	LNH
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1841	LNH
Surrogate: Dibromofluoromethane	97.2	Limit: 75-136	% Rec	1		10/03/23 0000	10/03/23 1841	LNH
Surrogate: Dibromofluoromethane	97.2	Limit: 80-126	% Rec	1		10/03/23 0000	10/03/23 1841	LNH
Surrogate: 1,2-Dichloroethane-d4	92.8	Limit: 63-138	% Rec	1		10/03/23 0000	10/03/23 1841	LNH
Surrogate: 1,2-Dichloroethane-d4	92.8	Limit: 61-142	% Rec	1		10/03/23 0000	10/03/23 1841	LNH
Surrogate: Toluene-d8	100	Limit: 82-121	% Rec	1		10/03/23 0000	10/03/23 1841	LNH
Surrogate: Toluene-d8	100	Limit: 87-116	% Rec	1		10/03/23 0000	10/03/23 1841	LNH
Surrogate: 4-Bromofluorobenzene	91.8	Limit: 80-116	% Rec	1		10/03/23 0000	10/03/23 1841	LNH
Surrogate: 4-Bromofluorobenzene	91.8	Limit: 85-111	% Rec	1		10/03/23 0000	10/03/23 1841	LNH

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		10/06/23 0750	10/12/23 1807	RVV
Arsenic, total	**0.0122**	0.0040	mg/L	4		10/06/23 0750	10/12/23 1807	RVV
Barium, total	**0.0268**	0.0040	mg/L	4		10/06/23 0750	10/12/23 1807	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1807	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/06/23 0750	10/12/23 1807	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/06/23 0750	10/12/23 1807	RVV
Cobalt, total	**0.0008**	0.0004	mg/L	4		10/06/23 0750	10/12/23 1807	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1807	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1807	RVV
Nickel, total	**0.0040**	0.0040	mg/L	4		10/06/23 0750	10/12/23 1807	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1807	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1807	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/06/23 0750	10/12/23 1807	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/06/23 0750	10/12/23 1807	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/06/23 0750	10/12/23 1807	RVV

Client Sample ID:	MW-335		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-08	**Collection Date:**	09/29/2023 14:43

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		10/03/23 0000	10/03/23 1921	LNH
Vinyl Chloride	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
Bromomethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
Chloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
Acetone	<10.0	10.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
Methyl Iodide	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
Carbon Disulfide	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
Methylene Chloride	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
Acrylonitrile	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
Vinyl Acetate	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
Bromochloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
Chloroform	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
Benzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
Trichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
Dibromomethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
Bromodichloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
Toluene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
Dibromochloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
Chlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
Ethylbenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
Xylenes, total	<2.0	2.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
Styrene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
Bromoform	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH

Client Sample ID:	MW-335		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-08	**Collection Date:**	09/29/2023 14:43

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		10/03/23 0000	10/03/23 1921	LNH
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 1921	LNH
Surrogate: Dibromofluoromethane	96.9	Limit: 75-136	% Rec	1		10/03/23 0000	10/03/23 1921	LNH
Surrogate: Dibromofluoromethane	96.9	Limit: 80-126	% Rec	1		10/03/23 0000	10/03/23 1921	LNH
Surrogate: 1,2-Dichloroethane-d4	91.1	Limit: 63-138	% Rec	1		10/03/23 0000	10/03/23 1921	LNH
Surrogate: 1,2-Dichloroethane-d4	91.1	Limit: 61-142	% Rec	1		10/03/23 0000	10/03/23 1921	LNH
Surrogate: Toluene-d8	101	Limit: 82-121	% Rec	1		10/03/23 0000	10/03/23 1921	LNH
Surrogate: Toluene-d8	101	Limit: 87-116	% Rec	1		10/03/23 0000	10/03/23 1921	LNH
Surrogate: 4-Bromofluorobenzene	92.8	Limit: 80-116	% Rec	1		10/03/23 0000	10/03/23 1921	LNH
Surrogate: 4-Bromofluorobenzene	92.8	Limit: 85-111	% Rec	1		10/03/23 0000	10/03/23 1921	LNH

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		10/06/23 0750	10/12/23 1813	RVV
Arsenic, total	**0.0051**	0.0040	mg/L	4		10/06/23 0750	10/12/23 1813	RVV
Barium, total	**0.0116**	0.0040	mg/L	4		10/06/23 0750	10/12/23 1813	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1813	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/06/23 0750	10/12/23 1813	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/06/23 0750	10/12/23 1813	RVV
Cobalt, total	**0.0397**	0.0004	mg/L	4		10/06/23 0750	10/12/23 1813	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1813	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1813	RVV
Nickel, total	**0.0389**	0.0040	mg/L	4		10/06/23 0750	10/12/23 1813	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1813	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1813	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/06/23 0750	10/12/23 1813	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/06/23 0750	10/12/23 1813	RVV
Zinc, total	**0.0416**	0.0200	mg/L	4		10/06/23 0750	10/12/23 1813	RVV

Keystone Laboratories - Newton

CERTIFICATE OF ANALYSIS

1GJ0088

Client Sample ID:	MW-344		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-09	**Collection Date:**	09/29/2023 14:51

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Dichlorodifluoromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
Chloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
Vinyl Chloride	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
Bromomethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
Chloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
Acrolein	<10.0	10.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
Acetone	<10.0	10.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
Methyl Iodide	<2.0	2.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
Carbon Disulfide	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
Acetonitrile	<10.0	10.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
Methylene Chloride	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
Acrylonitrile	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
Vinyl Acetate	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
2,2-Dichloropropane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
cis-1,2-Dichloroethylene	**2.4**	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
2-Butanone (MEK)	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
Bromochloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
Chloroform	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
1,1-Dichloropropene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
Benzene	**1.1**	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
Trichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
Dibromomethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
Bromodichloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
Toluene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
Ethyl Methacrylate	<10.0	10.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
1,3-Dichloropropane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
Dibromochloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH

Client Sample ID:	MW-344		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-09	**Collection Date:**	09/29/2023 14:51

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Chlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
Ethylbenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
Xylenes, total	<2.0	2.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
Styrene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
Bromoform	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
1,3-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
1,2-Dibromo-3-chloropropane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
1,2,4-Trichlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2000	LNH
Allyl chloride	<1.0	1.0	ug/L	1		10/04/23 0000	10/04/23 1326	LJS
Chloroprene	<1.0	1.0	ug/L	1		10/04/23 0000	10/04/23 1326	LJS
Methacrylonitrile	<1.0	1.0	ug/L	1		10/04/23 0000	10/04/23 1326	LJS
Methyl Methacrylate	<1.0	1.0	ug/L	1		10/04/23 0000	10/04/23 1326	LJS
Propionitrile	<10.0	10.0	ug/L	1		10/04/23 0000	10/04/23 1326	LJS
Surrogate: Dibromofluoromethane	111	Limit: 80-126	% Rec	1		10/04/23 0000	10/04/23 1326	LJS
Surrogate: Dibromofluoromethane	97.1	Limit: 80-126	% Rec	1		10/03/23 0000	10/03/23 2000	LNH
Surrogate: 1,2-Dichloroethane-d4	92.6	Limit: 63-138	% Rec	1		10/03/23 0000	10/03/23 2000	LNH
Surrogate: 1,2-Dichloroethane-d4	92.6	Limit: 63-138	% Rec	1		10/03/23 0000	10/03/23 2000	LNH
Surrogate: 1,2-Dichloroethane-d4	103	Limit: 63-138	% Rec	1		10/04/23 0000	10/04/23 1326	LJS
Surrogate: Toluene-d8	100	Limit: 87-116	% Rec	1		10/03/23 0000	10/03/23 2000	LNH
Surrogate: Toluene-d8	103	Limit: 87-116	% Rec	1		10/04/23 0000	10/04/23 1326	LJS
Surrogate: Toluene-d8	100	Limit: 87-116	% Rec	1		10/03/23 0000	10/03/23 2000	LNH
Surrogate: 4-Bromofluorobenzene	92.6	Limit: 85-111	% Rec	1		10/03/23 0000	10/03/23 2000	LNH
Surrogate: 4-Bromofluorobenzene	92.6	Limit: 85-111	% Rec	1		10/03/23 0000	10/03/23 2000	LNH
Surrogate: 4-Bromofluorobenzene	119	Limit: 85-111	% Rec	1	**S-GC**	10/04/23 0000	10/04/23 1326	LJS

Determination of General Solvents	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 8015C								
Isobutanol	<1.0	1.0	mg/L	1		10/12/23 0917	10/12/23 1303	PDS

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3520C/EPA 8270C								
N-Nitrosodimethylamine	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Methyl Methanesulfonate	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
N-Nitrosodiethylamine	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
N-Nitrosomethylethylamine	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Ethyl Methanesulfonate	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Phenol	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP

Client Sample ID:	MW-344		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-09	**Collection Date:**	09/29/2023 14:51

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Bis(2-Chloroethyl) Ether	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
2-Chlorophenol	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Benzyl Alcohol	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
2-Methylphenol (o-Cresol)	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Bis[2-Chloroisopropyl]ether	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
n-Nitroso-di-n-propylamine	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
N-Nitrosopyrrolidine	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Acetophenone	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
o-Toluidine	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
(3 & 4)-Methylphenol	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Hexachloroethane	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Nitrobenzene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
N-Nitrosopiperidine	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Isophorone	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
2-Nitrophenol	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
2,4-Dimethylphenol	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Bis (2-Chloroethoxy) Methane	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
2,4-Dichlorophenol	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Naphthalene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
4-Chloroaniline	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
2,6-Dichlorophenol	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Hexachloropropene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Hexachlorobutadiene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
N-Nitrosodi-n-butylamine	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
1,4-Phenylenediamine	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
4-Chloro-3-methylphenol	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
2-Methylnaphthalene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Isosafrole	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
1,2,4,5-Tetrachlorobenzene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Hexachlorocyclopentadiene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
2,4,6-Trichlorophenol	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
2,4,5-Trichlorophenol	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Safrole	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
2-Chloronaphthalene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
2-Nitroaniline	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
1,4-Naphthoquinone	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Dimethylphthalate	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
1,3-Dinitrobenzene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
1,2-Dinitrobenzene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
2,6-Dinitrotoluene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Acenaphthylene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
3-Nitroaniline	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Acenaphthene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP

Keystone LABORATORIES A Microbac Company

Keystone Laboratories - Newton

CERTIFICATE OF ANALYSIS

1GJ0088

Client Sample ID:	MW-344		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-09	**Collection Date:**	09/29/2023 14:51

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
2,4-Dinitrophenol	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
4-Nitrophenol	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Dibenzofuran	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
2,4-Dinitrotoluene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
2,3,4,6-Tetrachlorophenol	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Pentachlorobenzene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
1-Naphthylamine	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
2-Naphthylamine	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Diethyl Phthalate	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Fluorene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
4-Chlorophenyl Phenyl Ether	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
4-Nitroaniline	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
5-Nitro-o-toluidine	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
4,6-Dinitro-2-methylphenol	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
N-Nitrosodiphenylamine	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Diphenylamine	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Azobenzene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Diallate	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
1,3,5-Trinitrobenzene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Phenacetin	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
4-Bromophenyl Phenyl Ether	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
4-Aminobiphenyl	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Pentachlorophenol	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Pronamide	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Pentachloronitrobenzene (PCNB)	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Phenanthrene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Anthracene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Di-n-butyl Phthalate	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Methapyrilene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Fluoranthene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Isodrin	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Chlorobenzilate	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Pyrene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
p-(Dimethylamino)azobenzene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
3,3-Dimethylbenzidine	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Butyl Benzyl Phthalate	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Benzo(a)anthracene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Chrysene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Bis(2-Ethylhexyl) Phthalate	<6	6	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Kepone	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
3,3´-Dichlorobenzidine	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
2-Acetylaminofluorene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Di-n-octyl Phthalate	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP

Keystone Laboratories - Newton

CERTIFICATE OF ANALYSIS

1GJ0088

Client Sample ID:	MW-344			
Sample Matrix:	Water		**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-09		**Collection Date:**	09/29/2023 14:51

Determination of Base/Neutral/Acid Extractable Compounds	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
Benzo(b)Fluoranthene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
7,12-Dimethylbenz [a] anthracene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Benzo(k)Fluoranthene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Benzo(a)Pyrene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
3-Methylcholanthrene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Dibenzo(a,h)anthracene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Indeno(1,2,3-cd)Pyrene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Benzo(g,h,i)perylene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1741	EPP
Surrogate: 2-Fluorophenol	71.6	Limit: 24-136	% Rec	1		10/03/23 1034	10/09/23 1741	EPP
Surrogate: Phenol-d6	65.7	Limit: 15-140	% Rec	1		10/03/23 1034	10/09/23 1741	EPP
Surrogate: Nitrobenzene-d5	71.8	Limit: 29-130	% Rec	1		10/03/23 1034	10/09/23 1741	EPP
Surrogate: 2-Fluorobiphenyl	73.2	Limit: 23-113	% Rec	1		10/03/23 1034	10/09/23 1741	EPP
Surrogate: 2,4,6-Tribromophenol	84.0	Limit: 15-139	% Rec	1		10/03/23 1034	10/09/23 1741	EPP
Surrogate: Terphenyl-dl4	89.1	Limit: 27-141	% Rec	1		10/03/23 1034	10/09/23 1741	EPP

Determination of Organophosphorus Insecticides	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 3510C/EPA 8141								
O,O,O-Triethyl phosphorothioate	<0.4	0.4	ug/L	1		10/04/23 1203	10/09/23 1609	EPP
Thionazin	<0.4	0.4	ug/L	1		10/04/23 1203	10/09/23 1609	EPP
Phorate	<0.4	0.4	ug/L	1		10/04/23 1203	10/09/23 1609	EPP
Dimethoate	<0.4	0.4	ug/L	1		10/04/23 1203	10/09/23 1609	EPP
Disulfoton	<0.4	0.4	ug/L	1		10/04/23 1203	10/09/23 1609	EPP
Methyl Parathion	<0.4	0.4	ug/L	1		10/04/23 1203	10/09/23 1609	EPP
Parathion	<0.4	0.4	ug/L	1		10/04/23 1203	10/09/23 1609	EPP
Famphur	<0.4	0.4	ug/L	1		10/04/23 1203	10/09/23 1609	EPP
Surrogate: 2-Nitro-m-xylene	106	Limit: 38-122	% Rec	1		10/04/23 1203	10/09/23 1609	EPP

Determination of Chlorinated Phenoxy Herbicides	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 8151A								
2,4-D	<2.0	2.0	ug/L	1		10/04/23 1240	10/10/23 1329	EPP
2,4,5-TP (Silvex)	<0.5	0.5	ug/L	1		10/04/23 1240	10/10/23 1329	EPP
2,4,5-T	<0.5	0.5	ug/L	1		10/04/23 1240	10/10/23 1329	EPP
Dinoseb	<0.5	0.5	ug/L	1		10/04/23 1240	10/10/23 1329	EPP
Surrogate: 2,5-Dichlorobenzoic Acid	82.2	Limit: 31-116	% Rec	1		10/04/23 1240	10/10/23 1329	EPP

Determination of Organochlorine Insecticides & Metabolites	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 3510C/EPA 8081								
Alpha-BHC	<0.05	0.05	ug/L	1		10/04/23 1200	10/08/23 1838	EPP
Gamma-BHC [Lindane]	<0.05	0.05	ug/L	1		10/04/23 1200	10/08/23 1838	EPP
Beta-BHC	<0.05	0.05	ug/L	1		10/04/23 1200	10/08/23 1838	EPP
Heptachlor	<0.05	0.05	ug/L	1		10/04/23 1200	10/08/23 1838	EPP

Keystone Laboratories - Newton

CERTIFICATE OF ANALYSIS

1GJ0088

Client Sample ID:	MW-344		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-09	**Collection Date:**	09/29/2023 14:51

Determination of Organochlorine Insecticides & Metabolites	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
Delta-BHC	<0.05	0.05	ug/L	1		10/04/23 1200	10/08/23 1838	EPP
Aldrin	<0.05	0.05	ug/L	1		10/04/23 1200	10/08/23 1838	EPP
Heptachlor Epoxide	<0.05	0.05	ug/L	1		10/04/23 1200	10/08/23 1838	EPP
Endosulfan I	<0.05	0.05	ug/L	1		10/04/23 1200	10/08/23 1838	EPP
4,4`-DDE	<0.05	0.05	ug/L	1		10/04/23 1200	10/08/23 1838	EPP
Dieldrin	<0.05	0.05	ug/L	1		10/04/23 1200	10/08/23 1838	EPP
Endrin	<0.05	0.05	ug/L	1		10/04/23 1200	10/08/23 1838	EPP
4,4`-DDD	<0.05	0.05	ug/L	1		10/04/23 1200	10/08/23 1838	EPP
Endosulfan II	<0.05	0.05	ug/L	1		10/04/23 1200	10/08/23 1838	EPP
4,4`-DDT	<0.05	0.05	ug/L	1		10/04/23 1200	10/08/23 1838	EPP
Endrin Aldehyde	<0.05	0.05	ug/L	1		10/04/23 1200	10/08/23 1838	EPP
Endosulfan Sulfate	<0.05	0.05	ug/L	1		10/04/23 1200	10/08/23 1838	EPP
Methoxychlor	<0.05	0.05	ug/L	1		10/04/23 1200	10/08/23 1838	EPP
Chlordane	<0.10	0.10	ug/L	1		10/04/23 1200	10/08/23 1838	EPP
Toxaphene	<0.20	0.20	ug/L	1		10/04/23 1200	10/08/23 1838	EPP
Hexachlorobenzene	<0.05	0.05	ug/L	1		10/04/23 1200	10/08/23 1838	EPP
Surrogate: Tetrachloro-m-xylene	62.1	Limit: 10-121	% Rec	1		10/04/23 1200	10/08/23 1838	EPP

Determination of Polychlorinated Biphenyls (PCB)	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 3510C/EPA 8082								
Arochlor 1016	<0.20	0.20	ug/L	1		10/04/23 1202	10/08/23 1838	EPP
Arochlor 1221	<0.20	0.20	ug/L	1		10/04/23 1202	10/08/23 1838	EPP
Arochlor 1232	<0.20	0.20	ug/L	1		10/04/23 1202	10/08/23 1838	EPP
Arochlor 1242	<0.20	0.20	ug/L	1		10/04/23 1202	10/08/23 1838	EPP
Arochlor 1248	<0.20	0.20	ug/L	1		10/04/23 1202	10/08/23 1838	EPP
Arochlor 1254	<0.20	0.20	ug/L	1		10/04/23 1202	10/08/23 1838	EPP
Arochlor 1260	<0.20	0.20	ug/L	1		10/04/23 1202	10/08/23 1838	EPP
Surrogate: Tetrachloro-m-xylene	57.5	Limit: 38-121	% Rec	1		10/04/23 1202	10/08/23 1838	EPP
Surrogate: Decachlorobiphenyl	60.0	Limit: 25-119	% Rec	1		10/04/23 1202	10/08/23 1838	EPP

Determination of Conventional Chemistry Parameters	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
4500CN-E								
Cyanide, total	<0.005	0.005	mg/L	1		10/10/23 1401	10/11/23 1358	CHP
EPA 376.2								
Sulfide, total	<0.10	0.10	mg/L	1	**A-01**	11/14/23 0820	11/14/23 1710	CHP
EPA 9010B								
Cyanide, total	<0.005	0.005	mg/L	1	**A-01a**	11/15/23 0827	11/16/23 1424	CHP

Determination of Total Metals	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		11/14/23 1641	11/15/23 1748	RVV

Keystone Laboratories - Newton

CERTIFICATE OF ANALYSIS

1GJ0088

Client Sample ID:	MW-344		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-09	**Collection Date:**	09/29/2023 14:51

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Arsenic, total	<0.0040	0.0040	mg/L	4		11/14/23 1641	11/15/23 1748	RVV
Barium, total	**0.0122**	0.0040	mg/L	4		11/14/23 1641	11/15/23 1748	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		11/14/23 1641	11/15/23 1748	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		11/14/23 1641	11/15/23 1748	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		11/14/23 1641	11/15/23 1748	RVV
Cobalt, total	**0.151**	0.0004	mg/L	4		11/14/23 1641	11/15/23 1748	RVV
Copper, total	<0.0040	0.0040	mg/L	4		11/14/23 1641	11/15/23 1748	RVV
Lead, total	<0.0040	0.0040	mg/L	4		11/14/23 1641	11/15/23 1748	RVV
Nickel, total	**0.124**	0.0040	mg/L	4		11/14/23 1641	11/15/23 1748	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		11/14/23 1641	11/15/23 1748	RVV
Silver, total	<0.0040	0.0040	mg/L	4		11/14/23 1641	11/15/23 1748	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		11/14/23 1641	11/15/23 1748	RVV
Tin, total	<0.0200	0.0200	mg/L	4		11/14/23 1641	11/15/23 1748	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		11/14/23 1641	11/15/23 1748	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		11/14/23 1641	11/15/23 1748	RVV
EPA 7470A								
Mercury, total	<0.00050	0.00050	mg/L	1	**I-06**	11/15/23 0756	11/16/23 0843	JAR

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Keystone Laboratories - Newton

CERTIFICATE OF ANALYSIS

1GJ0088

Client Sample ID:	MW-380			
Sample Matrix:	Water		**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-10		**Collection Date:**	09/29/2023 11:17

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
Vinyl Chloride	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
Bromomethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
Chloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
Acetone	<10.0	10.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
Methyl Iodide	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
Carbon Disulfide	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
Methylene Chloride	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
Acrylonitrile	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
Vinyl Acetate	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
Bromochloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
Chloroform	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
Benzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
Trichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
Dibromomethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
Bromodichloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
Toluene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
Dibromochloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
Chlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
Ethylbenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
Xylenes, total	<2.0	2.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
Styrene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
Bromoform	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH

Keystone Laboratories - Newton

CERTIFICATE OF ANALYSIS

1GJ0088

Client Sample ID:	MW-380			
Sample Matrix:	Water		**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-10		**Collection Date:**	09/29/2023 11:17

Determination of Volatile Organic Compounds	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/03/23 0000	10/03/23 2040	LNH
Surrogate: Dibromofluoromethane	96.9	Limit: 80-126	% Rec	1		10/03/23 0000	10/03/23 2040	LNH
Surrogate: Dibromofluoromethane	96.9	Limit: 75-136	% Rec	1		10/03/23 0000	10/03/23 2040	LNH
Surrogate: 1,2-Dichloroethane-d4	92.3	Limit: 61-142	% Rec	1		10/03/23 0000	10/03/23 2040	LNH
Surrogate: 1,2-Dichloroethane-d4	92.3	Limit: 63-138	% Rec	1		10/03/23 0000	10/03/23 2040	LNH
Surrogate: Toluene-d8	101	Limit: 82-121	% Rec	1		10/03/23 0000	10/03/23 2040	LNH
Surrogate: Toluene-d8	101	Limit: 87-116	% Rec	1		10/03/23 0000	10/03/23 2040	LNH
Surrogate: 4-Bromofluorobenzene	93.3	Limit: 80-116	% Rec	1		10/03/23 0000	10/03/23 2040	LNH
Surrogate: 4-Bromofluorobenzene	93.3	Limit: 85-111	% Rec	1		10/03/23 0000	10/03/23 2040	LNH

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		10/06/23 0750	10/12/23 1819	RVV
Arsenic, total	**0.0046**	0.0040	mg/L	4		10/06/23 0750	10/12/23 1819	RVV
Barium, total	**0.0097**	0.0040	mg/L	4		10/06/23 0750	10/12/23 1819	RVV
Beryllium, total	**0.0050**	0.0040	mg/L	4		10/06/23 0750	10/12/23 1819	RVV
Cadmium, total	**0.0092**	0.0008	mg/L	4		10/06/23 0750	10/12/23 1819	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/06/23 0750	10/12/23 1819	RVV
Cobalt, total	**1.13**	0.0004	mg/L	4		10/06/23 0750	10/12/23 1819	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1819	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1819	RVV
Nickel, total	**1.41**	0.0040	mg/L	4		10/06/23 0750	10/12/23 1819	RVV
Selenium, total	**0.0096**	0.0040	mg/L	4		10/06/23 0750	10/12/23 1819	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1819	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/06/23 0750	10/12/23 1819	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/06/23 0750	10/12/23 1819	RVV
Zinc, total	**4.80**	0.500	mg/L	100		10/06/23 0750	10/13/23 1238	RVV

Client Sample ID:	MW-381		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-11	**Collection Date:**	09/29/2023 11:53

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
Vinyl Chloride	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
Bromomethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
Chloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
Acetone	<10.0	10.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
Methyl Iodide	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
Carbon Disulfide	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
Methylene Chloride	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
Acrylonitrile	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
Vinyl Acetate	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
Bromochloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
Chloroform	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
Benzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
Trichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
Dibromomethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
Bromodichloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
Toluene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
Dibromochloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
Chlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
Ethylbenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
Xylenes, total	<2.0	2.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
Styrene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
Bromoform	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH

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Keystone Laboratories - Newton

CERTIFICATE OF ANALYSIS

1GJ0088

Client Sample ID:	MW-381			
Sample Matrix:	Water		**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-11		**Collection Date:**	09/29/2023 11:53

Determination of Volatile Organic Compounds	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0115	LNH
Surrogate: Dibromofluoromethane	94.3	Limit: 75-136	% Rec	1		10/03/23 0000	10/04/23 0115	LNH
Surrogate: Dibromofluoromethane	94.3	Limit: 80-126	% Rec	1		10/03/23 0000	10/04/23 0115	LNH
Surrogate: 1,2-Dichloroethane-d4	88.2	Limit: 63-138	% Rec	1		10/03/23 0000	10/04/23 0115	LNH
Surrogate: 1,2-Dichloroethane-d4	88.2	Limit: 61-142	% Rec	1		10/03/23 0000	10/04/23 0115	LNH
Surrogate: Toluene-d8	101	Limit: 87-116	% Rec	1		10/03/23 0000	10/04/23 0115	LNH
Surrogate: Toluene-d8	101	Limit: 82-121	% Rec	1		10/03/23 0000	10/04/23 0115	LNH
Surrogate: 4-Bromofluorobenzene	93.1	Limit: 85-111	% Rec	1		10/03/23 0000	10/04/23 0115	LNH
Surrogate: 4-Bromofluorobenzene	93.1	Limit: 80-116	% Rec	1		10/03/23 0000	10/04/23 0115	LNH

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		10/06/23 0750	10/12/23 1825	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1825	RVV
Barium, total	**0.0168**	0.0040	mg/L	4		10/06/23 0750	10/12/23 1825	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1825	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/06/23 0750	10/12/23 1825	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/06/23 0750	10/12/23 1825	RVV
Cobalt, total	**0.0021**	0.0004	mg/L	4		10/06/23 0750	10/12/23 1825	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1825	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1825	RVV
Nickel, total	**0.0053**	0.0040	mg/L	4		10/06/23 0750	10/12/23 1825	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1825	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1825	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/06/23 0750	10/12/23 1825	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/06/23 0750	10/12/23 1825	RVV
Zinc, total	**0.0324**	0.0200	mg/L	4		10/06/23 0750	10/12/23 1825	RVV

Keystone Laboratories - Newton

CERTIFICATE OF ANALYSIS

1GJ0088

Client Sample ID:	MW-382R		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-12	**Collection Date:**	09/29/2023 15:26

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Dichlorodifluoromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
Chloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
Vinyl Chloride	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
Bromomethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
Chloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
Acrolein	<10.0	10.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
Acetone	<10.0	10.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
Methyl Iodide	<2.0	2.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
Carbon Disulfide	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
Acetonitrile	<10.0	10.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
Methylene Chloride	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
Acrylonitrile	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
Vinyl Acetate	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
2,2-Dichloropropane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
2-Butanone (MEK)	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
Bromochloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
Chloroform	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
1,1-Dichloropropene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
Benzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
Trichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
Dibromomethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
Bromodichloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
Toluene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
Ethyl Methacrylate	<10.0	10.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
1,3-Dichloropropane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
Dibromochloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH

Keystone Laboratories - Newton

CERTIFICATE OF ANALYSIS

1GJ0088

Client Sample ID:	MW-382R			
Sample Matrix:	Water		**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-12		**Collection Date:**	09/29/2023 15:26

Determination of Volatile Organic Compounds	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
Chlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
Ethylbenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
Xylenes, total	<2.0	2.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
Styrene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
Bromoform	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
1,3-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
1,2-Dibromo-3-chloropropane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
1,2,4-Trichlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0154	LNH
Allyl chloride	<1.0	1.0	ug/L	1		10/04/23 0000	10/04/23 1353	LJS
Chloroprene	<1.0	1.0	ug/L	1		10/04/23 0000	10/04/23 1353	LJS
Methacrylonitrile	<1.0	1.0	ug/L	1		10/04/23 0000	10/04/23 1353	LJS
Methyl Methacrylate	<1.0	1.0	ug/L	1		10/04/23 0000	10/04/23 1353	LJS
Propionitrile	<10.0	10.0	ug/L	1		10/04/23 0000	10/04/23 1353	LJS
Surrogate: Dibromofluoromethane	94.9	Limit: 80-126	% Rec	1		10/03/23 0000	10/04/23 0154	LNH
Surrogate: Dibromofluoromethane	111	Limit: 80-126	% Rec	1		10/04/23 0000	10/04/23 1353	LJS
Surrogate: 1,2-Dichloroethane-d4	89.5	Limit: 63-138	% Rec	1		10/03/23 0000	10/04/23 0154	LNH
Surrogate: 1,2-Dichloroethane-d4	107	Limit: 63-138	% Rec	1		10/04/23 0000	10/04/23 1353	LJS
Surrogate: 1,2-Dichloroethane-d4	89.5	Limit: 63-138	% Rec	1		10/03/23 0000	10/04/23 0154	LNH
Surrogate: Toluene-d8	101	Limit: 87-116	% Rec	1		10/03/23 0000	10/04/23 0154	LNH
Surrogate: Toluene-d8	103	Limit: 87-116	% Rec	1		10/04/23 0000	10/04/23 1353	LJS
Surrogate: Toluene-d8	101	Limit: 87-116	% Rec	1		10/03/23 0000	10/04/23 0154	LNH
Surrogate: 4-Bromofluorobenzene	93.6	Limit: 85-111	% Rec	1		10/03/23 0000	10/04/23 0154	LNH
Surrogate: 4-Bromofluorobenzene	114	Limit: 85-111	% Rec	1	**S-GC**	10/04/23 0000	10/04/23 1353	LJS
Surrogate: 4-Bromofluorobenzene	93.6	Limit: 85-111	% Rec	1		10/03/23 0000	10/04/23 0154	LNH

Determination of General Solvents	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 8015C								
Isobutanol	<1.0	1.0	mg/L	1		10/12/23 0917	10/12/23 1328	PDS

Determination of Base/Neutral/Acid Extractable Compounds	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 3520C/EPA 8270C								
N-Nitrosodimethylamine	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Methyl Methanesulfonate	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
N-Nitrosodiethylamine	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
N-Nitrosomethylethylamine	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Ethyl Methanesulfonate	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Phenol	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP

Keystone Laboratories - Newton

CERTIFICATE OF ANALYSIS

1GJ0088

Client Sample ID:	MW-382R		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-12	**Collection Date:**	09/29/2023 15:26

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Bis(2-Chloroethyl) Ether	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
2-Chlorophenol	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Benzyl Alcohol	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
2-Methylphenol (o-Cresol)	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Bis[2-Chloroisopropyl]ether	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
n-Nitroso-di-n-propylamine	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
N-Nitrosopyrrolidine	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Acetophenone	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
o-Toluidine	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
(3 & 4)-Methylphenol	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Hexachloroethane	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Nitrobenzene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
N-Nitrosopiperidine	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Isophorone	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
2-Nitrophenol	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
2,4-Dimethylphenol	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Bis (2-Chloroethoxy) Methane	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
2,4-Dichlorophenol	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Naphthalene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
4-Chloroaniline	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
2,6-Dichlorophenol	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Hexachloropropene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Hexachlorobutadiene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
N-Nitrosodi-n-butylamine	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
1,4-Phenylenediamine	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
4-Chloro-3-methylphenol	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
2-Methylnaphthalene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Isosafrole	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
1,2,4,5-Tetrachlorobenzene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Hexachlorocyclopentadiene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
2,4,6-Trichlorophenol	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
2,4,5-Trichlorophenol	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Safrole	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
2-Chloronaphthalene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
2-Nitroaniline	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
1,4-Naphthoquinone	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Dimethylphthalate	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
1,3-Dinitrobenzene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
1,2-Dinitrobenzene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
2,6-Dinitrotoluene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Acenaphthylene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
3-Nitroaniline	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Acenaphthene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP

Client Sample ID:	MW-382R		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-12	**Collection Date:**	09/29/2023 15:26

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
2,4-Dinitrophenol	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
4-Nitrophenol	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Dibenzofuran	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
2,4-Dinitrotoluene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
2,3,4,6-Tetrachlorophenol	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Pentachlorobenzene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
1-Naphthylamine	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
2-Naphthylamine	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Diethyl Phthalate	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Fluorene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
4-Chlorophenyl Phenyl Ether	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
4-Nitroaniline	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
5-Nitro-o-toluidine	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
4,6-Dinitro-2-methylphenol	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
N-Nitrosodiphenylamine	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Diphenylamine	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Azobenzene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Diallate	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
1,3,5-Trinitrobenzene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Phenacetin	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
4-Bromophenyl Phenyl Ether	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
4-Aminobiphenyl	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Pentachlorophenol	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Pronamide	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Pentachloronitrobenzene (PCNB)	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Phenanthrene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Anthracene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Di-n-butyl Phthalate	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Methapyrilene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Fluoranthene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Isodrin	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Chlorobenzilate	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Pyrene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
p-(Dimethylamino)azobenzene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
3,3-Dimethylbenzidine	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Butyl Benzyl Phthalate	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Benzo(a)anthracene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Chrysene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Bis(2-Ethylhexyl) Phthalate	**16**	6	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Kepone	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
3,3´-Dichlorobenzidine	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
2-Acetylaminofluorene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Di-n-octyl Phthalate	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP

Keystone Laboratories - Newton

CERTIFICATE OF ANALYSIS

1GJ0088

Client Sample ID:	MW-382R		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-12	**Collection Date:**	09/29/2023 15:26

Determination of Base/Neutral/Acid Extractable Compounds	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
Benzo(b)Fluoranthene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
7,12-Dimethylbenz [a] anthracene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Benzo(k)Fluoranthene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Benzo(a)Pyrene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
3-Methylcholanthrene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Dibenzo(a,h)anthracene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Indeno(1,2,3-cd)Pyrene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Benzo(g,h,i)perylene	<8	8	ug/L	1		10/03/23 1034	10/09/23 1806	EPP
Surrogate: 2-Fluorophenol	72.3	Limit: 24-136	% Rec	1		10/03/23 1034	10/09/23 1806	EPP
Surrogate: Phenol-d6	76.0	Limit: 15-140	% Rec	1		10/03/23 1034	10/09/23 1806	EPP
Surrogate: Nitrobenzene-d5	70.2	Limit: 29-130	% Rec	1		10/03/23 1034	10/09/23 1806	EPP
Surrogate: 2-Fluorobiphenyl	71.7	Limit: 23-113	% Rec	1		10/03/23 1034	10/09/23 1806	EPP
Surrogate: 2,4,6-Tribromophenol	85.1	Limit: 15-139	% Rec	1		10/03/23 1034	10/09/23 1806	EPP
Surrogate: Terphenyl-dl4	70.6	Limit: 27-141	% Rec	1		10/03/23 1034	10/09/23 1806	EPP

Determination of Organophosphorus Insecticides	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 3510C/EPA 8141								
O,O,O-Triethyl phosphorothioate	<0.4	0.4	ug/L	1		10/04/23 1203	10/09/23 1703	EPP
Thionazin	<0.4	0.4	ug/L	1		10/04/23 1203	10/09/23 1703	EPP
Phorate	<0.4	0.4	ug/L	1		10/04/23 1203	10/09/23 1703	EPP
Dimethoate	<0.4	0.4	ug/L	1		10/04/23 1203	10/09/23 1703	EPP
Disulfoton	<0.4	0.4	ug/L	1		10/04/23 1203	10/09/23 1703	EPP
Methyl Parathion	<0.4	0.4	ug/L	1		10/04/23 1203	10/09/23 1703	EPP
Parathion	<0.4	0.4	ug/L	1		10/04/23 1203	10/09/23 1703	EPP
Famphur	<0.4	0.4	ug/L	1		10/04/23 1203	10/09/23 1703	EPP
Surrogate: 2-Nitro-m-xylene	108	Limit: 38-122	% Rec	1		10/04/23 1203	10/09/23 1703	EPP

Determination of Chlorinated Phenoxy Herbicides	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 8151A								
2,4-D	<2.0	2.0	ug/L	1		10/04/23 1240	10/10/23 1401	EPP
2,4,5-TP (Silvex)	<0.5	0.5	ug/L	1		10/04/23 1240	10/10/23 1401	EPP
2,4,5-T	<0.5	0.5	ug/L	1		10/04/23 1240	10/10/23 1401	EPP
Dinoseb	<0.5	0.5	ug/L	1		10/04/23 1240	10/10/23 1401	EPP
Surrogate: 2,5-Dichlorobenzoic Acid	82.9	Limit: 31-116	% Rec	1		10/04/23 1240	10/10/23 1401	EPP

Determination of Organochlorine Insecticides & Metabolites	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 3510C/EPA 8081								
Alpha-BHC	<0.05	0.05	ug/L	1		10/04/23 1200	10/08/23 1854	EPP
Gamma-BHC [Lindane]	<0.05	0.05	ug/L	1		10/04/23 1200	10/08/23 1854	EPP
Beta-BHC	<0.05	0.05	ug/L	1		10/04/23 1200	10/08/23 1854	EPP
Heptachlor	<0.05	0.05	ug/L	1		10/04/23 1200	10/08/23 1854	EPP

Client Sample ID:	MW-382R			
Sample Matrix:	Water		**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-12		**Collection Date:**	09/29/2023 15:26

Determination of Organochlorine Insecticides & Metabolites	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
Delta-BHC	<0.05	0.05	ug/L	1		10/04/23 1200	10/08/23 1854	EPP
Aldrin	<0.05	0.05	ug/L	1		10/04/23 1200	10/08/23 1854	EPP
Heptachlor Epoxide	<0.05	0.05	ug/L	1		10/04/23 1200	10/08/23 1854	EPP
Endosulfan I	<0.05	0.05	ug/L	1		10/04/23 1200	10/08/23 1854	EPP
4,4`-DDE	<0.05	0.05	ug/L	1		10/04/23 1200	10/08/23 1854	EPP
Dieldrin	<0.05	0.05	ug/L	1		10/04/23 1200	10/08/23 1854	EPP
Endrin	<0.05	0.05	ug/L	1		10/04/23 1200	10/08/23 1854	EPP
4,4`-DDD	<0.05	0.05	ug/L	1		10/04/23 1200	10/08/23 1854	EPP
Endosulfan II	<0.05	0.05	ug/L	1		10/04/23 1200	10/08/23 1854	EPP
4,4`-DDT	<0.05	0.05	ug/L	1		10/04/23 1200	10/08/23 1854	EPP
Endrin Aldehyde	<0.05	0.05	ug/L	1		10/04/23 1200	10/08/23 1854	EPP
Endosulfan Sulfate	<0.05	0.05	ug/L	1		10/04/23 1200	10/08/23 1854	EPP
Methoxychlor	<0.05	0.05	ug/L	1		10/04/23 1200	10/08/23 1854	EPP
Chlordane	<0.10	0.10	ug/L	1		10/04/23 1200	10/08/23 1854	EPP
Toxaphene	<0.20	0.20	ug/L	1		10/04/23 1200	10/08/23 1854	EPP
Hexachlorobenzene	<0.05	0.05	ug/L	1		10/04/23 1200	10/08/23 1854	EPP
Surrogate: Tetrachloro-m-xylene	54.2	Limit: 10-121	% Rec	1		10/04/23 1200	10/08/23 1854	EPP

Determination of Polychlorinated Biphenyls (PCB)	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 3510C/EPA 8082								
Arochlor 1016	<0.20	0.20	ug/L	1		10/04/23 1202	10/08/23 1854	EPP
Arochlor 1221	<0.20	0.20	ug/L	1		10/04/23 1202	10/08/23 1854	EPP
Arochlor 1232	<0.20	0.20	ug/L	1		10/04/23 1202	10/08/23 1854	EPP
Arochlor 1242	<0.20	0.20	ug/L	1		10/04/23 1202	10/08/23 1854	EPP
Arochlor 1248	<0.20	0.20	ug/L	1		10/04/23 1202	10/08/23 1854	EPP
Arochlor 1254	<0.20	0.20	ug/L	1		10/04/23 1202	10/08/23 1854	EPP
Arochlor 1260	<0.20	0.20	ug/L	1		10/04/23 1202	10/08/23 1854	EPP
Surrogate: Tetrachloro-m-xylene	55.0	Limit: 38-121	% Rec	1		10/04/23 1202	10/08/23 1854	EPP
Surrogate: Decachlorobiphenyl	50.0	Limit: 25-119	% Rec	1		10/04/23 1202	10/08/23 1854	EPP

Determination of Conventional Chemistry Parameters	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
4500CN-E								
Cyanide, total	<0.005	0.005	mg/L	1		10/10/23 1401	10/11/23 1358	CHP
EPA 376.2								
Sulfide, total	<0.10	0.10	mg/L	1	**A-01**	11/14/23 0820	11/14/23 1710	CHP
EPA 9010B								
Cyanide, total	<0.005	0.005	mg/L	1	**A-01a**	11/15/23 0827	11/16/23 1424	CHP

Determination of Total Metals	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
EPA 3005A/EPA 6020A								
Antimony, total	<0.0020	0.0020	mg/L	4		11/14/23 1641	11/15/23 1806	RVV

Keystone Laboratories - Newton

CERTIFICATE OF ANALYSIS

1GJ0088

Client Sample ID:	MW-382R		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-12	**Collection Date:**	09/29/2023 15:26

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
Arsenic, total	<0.0040	0.0040	mg/L	4		11/14/23 1641	11/15/23 1806	RVV
Barium, total	**0.0280**	0.0040	mg/L	4		11/14/23 1641	11/15/23 1806	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		11/14/23 1641	11/15/23 1806	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		11/14/23 1641	11/15/23 1806	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		11/14/23 1641	11/15/23 1806	RVV
Cobalt, total	**0.0015**	0.0004	mg/L	4		11/14/23 1641	11/15/23 1806	RVV
Copper, total	<0.0040	0.0040	mg/L	4		11/14/23 1641	11/15/23 1806	RVV
Lead, total	<0.0040	0.0040	mg/L	4		11/14/23 1641	11/15/23 1806	RVV
Nickel, total	**0.0061**	0.0040	mg/L	4		11/14/23 1641	11/15/23 1806	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		11/14/23 1641	11/15/23 1806	RVV
Silver, total	<0.0040	0.0040	mg/L	4		11/14/23 1641	11/15/23 1806	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		11/14/23 1641	11/15/23 1806	RVV
Tin, total	<0.0200	0.0200	mg/L	4		11/14/23 1641	11/15/23 1806	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		11/14/23 1641	11/15/23 1806	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		11/14/23 1641	11/15/23 1806	RVV
EPA 7470A								
Mercury, total	<0.00050	0.00050	mg/L	1	**I-06**	11/15/23 0756	11/16/23 0851	JAR

Client Sample ID:	MW-384		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-13	**Collection Date:**	09/29/2023 14:04

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
Vinyl Chloride	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
Bromomethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
Chloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
Acetone	<10.0	10.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
Methyl Iodide	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
Carbon Disulfide	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
Methylene Chloride	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
Acrylonitrile	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
Vinyl Acetate	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
Bromochloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
Chloroform	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
Benzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
Trichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
Dibromomethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
Bromodichloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
Toluene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
Dibromochloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
Chlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
Ethylbenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
Xylenes, total	<2.0	2.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
Styrene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
Bromoform	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH

Keystone Laboratories - Newton

CERTIFICATE OF ANALYSIS

1GJ0088

Client Sample ID:	MW-384			
Sample Matrix:	Water		**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-13		**Collection Date:**	09/29/2023 14:04

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0233	LNH
Surrogate: Dibromofluoromethane	94.5	Limit: 75-136	% Rec	1		10/03/23 0000	10/04/23 0233	LNH
Surrogate: Dibromofluoromethane	94.5	Limit: 80-126	% Rec	1		10/03/23 0000	10/04/23 0233	LNH
Surrogate: 1,2-Dichloroethane-d4	88.6	Limit: 61-142	% Rec	1		10/03/23 0000	10/04/23 0233	LNH
Surrogate: 1,2-Dichloroethane-d4	88.6	Limit: 63-138	% Rec	1		10/03/23 0000	10/04/23 0233	LNH
Surrogate: Toluene-d8	102	Limit: 87-116	% Rec	1		10/03/23 0000	10/04/23 0233	LNH
Surrogate: Toluene-d8	102	Limit: 82-121	% Rec	1		10/03/23 0000	10/04/23 0233	LNH
Surrogate: 4-Bromofluorobenzene	93.6	Limit: 80-116	% Rec	1		10/03/23 0000	10/04/23 0233	LNH
Surrogate: 4-Bromofluorobenzene	93.6	Limit: 85-111	% Rec	1		10/03/23 0000	10/04/23 0233	LNH

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		10/06/23 0750	10/12/23 1831	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1831	RVV
Barium, total	**0.0100**	0.0040	mg/L	4		10/06/23 0750	10/12/23 1831	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1831	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/06/23 0750	10/12/23 1831	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/06/23 0750	10/12/23 1831	RVV
Cobalt, total	**0.0146**	0.0004	mg/L	4		10/06/23 0750	10/12/23 1831	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1831	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1831	RVV
Nickel, total	**0.0544**	0.0040	mg/L	4		10/06/23 0750	10/12/23 1831	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1831	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1831	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/06/23 0750	10/12/23 1831	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/06/23 0750	10/12/23 1831	RVV
Zinc, total	**0.0203**	0.0200	mg/L	4		10/06/23 0750	10/12/23 1831	RVV

Client Sample ID:	MW-385			
Sample Matrix:	Water		**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-14		**Collection Date:**	09/29/2023 13:50

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
Vinyl Chloride	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
Bromomethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
Chloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
Acetone	<10.0	10.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
Methyl Iodide	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
Carbon Disulfide	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
Methylene Chloride	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
Acrylonitrile	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
Vinyl Acetate	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
Bromochloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
Chloroform	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
Benzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
Trichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
Dibromomethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
Bromodichloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
Toluene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
Dibromochloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
Chlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
Ethylbenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
Xylenes, total	<2.0	2.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
Styrene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
Bromoform	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH

Keystone Laboratories - Newton

CERTIFICATE OF ANALYSIS

1GJ0088

Client Sample ID:	MW-385			
Sample Matrix:	Water		**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-14		**Collection Date:**	09/29/2023 13:50

Determination of Volatile Organic Compounds	**Result**	**RL**	**Units**	**DF**	**Note**	**Prepared**	**Analyzed**	**Analyst**
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0313	LNH
Surrogate: Dibromofluoromethane	94.0	Limit: 80-126	% Rec	1		10/03/23 0000	10/04/23 0313	LNH
Surrogate: Dibromofluoromethane	94.0	Limit: 75-136	% Rec	1		10/03/23 0000	10/04/23 0313	LNH
Surrogate: 1,2-Dichloroethane-d4	87.7	Limit: 63-138	% Rec	1		10/03/23 0000	10/04/23 0313	LNH
Surrogate: 1,2-Dichloroethane-d4	87.7	Limit: 61-142	% Rec	1		10/03/23 0000	10/04/23 0313	LNH
Surrogate: Toluene-d8	102	Limit: 87-116	% Rec	1		10/03/23 0000	10/04/23 0313	LNH
Surrogate: Toluene-d8	102	Limit: 82-121	% Rec	1		10/03/23 0000	10/04/23 0313	LNH
Surrogate: 4-Bromofluorobenzene	92.3	Limit: 80-116	% Rec	1		10/03/23 0000	10/04/23 0313	LNH
Surrogate: 4-Bromofluorobenzene	92.3	Limit: 85-111	% Rec	1		10/03/23 0000	10/04/23 0313	LNH

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		10/06/23 0750	10/12/23 1837	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1837	RVV
Barium, total	**0.0151**	0.0040	mg/L	4		10/06/23 0750	10/12/23 1837	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1837	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/06/23 0750	10/12/23 1837	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/06/23 0750	10/12/23 1837	RVV
Cobalt, total	**0.0067**	0.0004	mg/L	4		10/06/23 0750	10/12/23 1837	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1837	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1837	RVV
Nickel, total	**0.0436**	0.0040	mg/L	4		10/06/23 0750	10/12/23 1837	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1837	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1837	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/06/23 0750	10/12/23 1837	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/06/23 0750	10/12/23 1837	RVV
Zinc, total	**0.0442**	0.0200	mg/L	4		10/06/23 0750	10/12/23 1837	RVV

Client Sample ID:	Field Duplicate		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-15	**Collection Date:**	09/29/2023

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		10/06/23 0750	10/12/23 1855	RVV
Arsenic, total	**0.0176**	0.0040	mg/L	4		10/06/23 0750	10/12/23 1855	RVV
Barium, total	**0.0147**	0.0040	mg/L	4		10/06/23 0750	10/12/23 1855	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1855	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/06/23 0750	10/12/23 1855	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/06/23 0750	10/12/23 1855	RVV
Cobalt, total	**0.103**	0.0004	mg/L	4		10/06/23 0750	10/12/23 1855	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1855	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1855	RVV
Nickel, total	**0.0527**	0.0040	mg/L	4		10/06/23 0750	10/12/23 1855	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1855	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1855	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/06/23 0750	10/12/23 1855	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/06/23 0750	10/12/23 1855	RVV
Zinc, total	**0.135**	0.0200	mg/L	4		10/06/23 0750	10/12/23 1855	RVV

Keystone Laboratories - Newton

CERTIFICATE OF ANALYSIS

1GJ0088

Client Sample ID:	MW-601			
Sample Matrix:	Water		**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-16		**Collection Date:**	09/29/2023 9:50

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
Vinyl Chloride	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
Bromomethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
Chloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
Acetone	<10.0	10.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
Methyl Iodide	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
Carbon Disulfide	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
Methylene Chloride	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
Acrylonitrile	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
Vinyl Acetate	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
Bromochloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
Chloroform	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
Benzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
Trichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
Dibromomethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
Bromodichloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
Toluene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
Dibromochloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
Chlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
Ethylbenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
Xylenes, total	<2.0	2.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
Styrene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
Bromoform	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH

Keystone Laboratories - Newton

CERTIFICATE OF ANALYSIS

1GJ0088

Client Sample ID:	MW-601		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-16	**Collection Date:**	09/29/2023 9:50

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0352	LNH
Surrogate: Dibromofluoromethane	95.5	Limit: 75-136	% Rec	1		10/03/23 0000	10/04/23 0352	LNH
Surrogate: Dibromofluoromethane	95.5	Limit: 80-126	% Rec	1		10/03/23 0000	10/04/23 0352	LNH
Surrogate: 1,2-Dichloroethane-d4	88.4	Limit: 61-142	% Rec	1		10/03/23 0000	10/04/23 0352	LNH
Surrogate: 1,2-Dichloroethane-d4	88.4	Limit: 63-138	% Rec	1		10/03/23 0000	10/04/23 0352	LNH
Surrogate: Toluene-d8	102	Limit: 82-121	% Rec	1		10/03/23 0000	10/04/23 0352	LNH
Surrogate: Toluene-d8	102	Limit: 87-116	% Rec	1		10/03/23 0000	10/04/23 0352	LNH
Surrogate: 4-Bromofluorobenzene	92.7	Limit: 85-111	% Rec	1		10/03/23 0000	10/04/23 0352	LNH
Surrogate: 4-Bromofluorobenzene	92.7	Limit: 80-116	% Rec	1		10/03/23 0000	10/04/23 0352	LNH

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		10/06/23 0750	10/12/23 1902	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1902	RVV
Barium, total	**0.0181**	0.0040	mg/L	4		10/06/23 0750	10/12/23 1902	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1902	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/06/23 0750	10/12/23 1902	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/06/23 0750	10/12/23 1902	RVV
Cobalt, total	**0.183**	0.0004	mg/L	4		10/06/23 0750	10/12/23 1902	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1902	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1902	RVV
Nickel, total	**0.243**	0.0040	mg/L	4		10/06/23 0750	10/12/23 1902	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1902	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1902	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/06/23 0750	10/12/23 1902	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/06/23 0750	10/12/23 1902	RVV
Zinc, total	**0.0704**	0.0200	mg/L	4		10/06/23 0750	10/12/23 1902	RVV

Keystone Laboratories - Newton

CERTIFICATE OF ANALYSIS

1GJ0088

Client Sample ID:	MW-602		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-17	**Collection Date:**	09/29/2023 10:10

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260B								
Chloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
Vinyl Chloride	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
Bromomethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
Chloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
Acetone	<10.0	10.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
Methyl Iodide	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
Carbon Disulfide	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
Methylene Chloride	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
Acrylonitrile	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
Vinyl Acetate	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
Bromochloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
Chloroform	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
Benzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
Trichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
Dibromomethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
Bromodichloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
Toluene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
Dibromochloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
Chlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
Ethylbenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
Xylenes, total	<2.0	2.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
Styrene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
Bromoform	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH

Keystone Laboratories - Newton

CERTIFICATE OF ANALYSIS

1GJ0088

Client Sample ID:	MW-602		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-17	**Collection Date:**	09/29/2023 10:10

Determination of Volatile Organic Compounds	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0431	LNH
Surrogate: Dibromofluoromethane	93.4	Limit: 75-136	% Rec	1		10/03/23 0000	10/04/23 0431	LNH
Surrogate: Dibromofluoromethane	93.4	Limit: 80-126	% Rec	1		10/03/23 0000	10/04/23 0431	LNH
Surrogate: 1,2-Dichloroethane-d4	86.8	Limit: 61-142	% Rec	1		10/03/23 0000	10/04/23 0431	LNH
Surrogate: 1,2-Dichloroethane-d4	86.8	Limit: 63-138	% Rec	1		10/03/23 0000	10/04/23 0431	LNH
Surrogate: Toluene-d8	102	Limit: 82-121	% Rec	1		10/03/23 0000	10/04/23 0431	LNH
Surrogate: Toluene-d8	102	Limit: 87-116	% Rec	1		10/03/23 0000	10/04/23 0431	LNH
Surrogate: 4-Bromofluorobenzene	93.2	Limit: 80-116	% Rec	1		10/03/23 0000	10/04/23 0431	LNH
Surrogate: 4-Bromofluorobenzene	93.2	Limit: 85-111	% Rec	1		10/03/23 0000	10/04/23 0431	LNH

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		10/06/23 0750	10/12/23 1908	RVV
Arsenic, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1908	RVV
Barium, total	**0.0124**	0.0040	mg/L	4		10/06/23 0750	10/12/23 1908	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1908	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/06/23 0750	10/12/23 1908	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/06/23 0750	10/12/23 1908	RVV
Cobalt, total	**0.203**	0.0004	mg/L	4		10/06/23 0750	10/12/23 1908	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1908	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1908	RVV
Nickel, total	**0.289**	0.0040	mg/L	4		10/06/23 0750	10/12/23 1908	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1908	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1908	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/06/23 0750	10/12/23 1908	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/06/23 0750	10/12/23 1908	RVV
Zinc, total	**0.120**	0.0200	mg/L	4		10/06/23 0750	10/12/23 1908	RVV

Client Sample ID:	MW-603		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-18	**Collection Date:**	09/29/2023 10:30

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		10/03/23 0000	10/04/23 0510	LNH
Vinyl Chloride	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
Bromomethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
Chloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
Trichlorofluoromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
1,1-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
Acetone	<10.0	10.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
Methyl Iodide	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
Carbon Disulfide	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
Methylene Chloride	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
Acrylonitrile	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
1,1-Dichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
Vinyl Acetate	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
2-Butanone (MEK)	<10.0	10.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
Bromochloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
Chloroform	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
1,1,1-Trichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
Carbon Tetrachloride	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
Benzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
1,2-Dichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
Trichloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
1,2-Dichloropropane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
Dibromomethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
Bromodichloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
cis-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
Toluene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
trans-1,3-Dichloropropene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
1,1,2-Trichloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
Tetrachloroethylene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
2-Hexanone (MBK)	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
Dibromochloromethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
1,2-Dibromoethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
Chlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
Ethylbenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
Xylenes, total	<2.0	2.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
Styrene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
Bromoform	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
1,2,3-Trichloropropane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH

Keystone Laboratories - Newton

CERTIFICATE OF ANALYSIS

1GJ0088

Client Sample ID:	MW-603			
Sample Matrix:	Water		**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0088-18		**Collection Date:**	09/29/2023 10:30

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		10/03/23 0000	10/04/23 0510	LNH
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
1,4-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
1,2-Dichlorobenzene	<1.0	1.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L	1		10/03/23 0000	10/04/23 0510	LNH
Surrogate: Dibromofluoromethane	95.3	Limit: 80-126	% Rec	1		10/03/23 0000	10/04/23 0510	LNH
Surrogate: Dibromofluoromethane	95.3	Limit: 75-136	% Rec	1		10/03/23 0000	10/04/23 0510	LNH
Surrogate: 1,2-Dichloroethane-d4	87.0	Limit: 63-138	% Rec	1		10/03/23 0000	10/04/23 0510	LNH
Surrogate: 1,2-Dichloroethane-d4	87.0	Limit: 61-142	% Rec	1		10/03/23 0000	10/04/23 0510	LNH
Surrogate: Toluene-d8	103	Limit: 82-121	% Rec	1		10/03/23 0000	10/04/23 0510	LNH
Surrogate: Toluene-d8	103	Limit: 87-116	% Rec	1		10/03/23 0000	10/04/23 0510	LNH
Surrogate: 4-Bromofluorobenzene	93.5	Limit: 80-116	% Rec	1		10/03/23 0000	10/04/23 0510	LNH
Surrogate: 4-Bromofluorobenzene	93.5	Limit: 85-111	% Rec	1		10/03/23 0000	10/04/23 0510	LNH

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		10/06/23 0750	10/12/23 1914	RVV
Arsenic, total	**0.0049**	0.0040	mg/L	4		10/06/23 0750	10/12/23 1914	RVV
Barium, total	**0.0225**	0.0040	mg/L	4		10/06/23 0750	10/12/23 1914	RVV
Beryllium, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1914	RVV
Cadmium, total	<0.0008	0.0008	mg/L	4		10/06/23 0750	10/12/23 1914	RVV
Chromium, total	<0.0080	0.0080	mg/L	4		10/06/23 0750	10/12/23 1914	RVV
Cobalt, total	**0.0125**	0.0004	mg/L	4		10/06/23 0750	10/12/23 1914	RVV
Copper, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1914	RVV
Lead, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1914	RVV
Nickel, total	**0.0052**	0.0040	mg/L	4		10/06/23 0750	10/12/23 1914	RVV
Selenium, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1914	RVV
Silver, total	<0.0040	0.0040	mg/L	4		10/06/23 0750	10/12/23 1914	RVV
Thallium, total	<0.0020	0.0020	mg/L	4		10/06/23 0750	10/12/23 1914	RVV
Vanadium, total	<0.0200	0.0200	mg/L	4		10/06/23 0750	10/12/23 1914	RVV
Zinc, total	<0.0200	0.0200	mg/L	4		10/06/23 0750	10/12/23 1914	RVV

Batch Log Summary

Method	Batch	Laboratory ID	Client / Source ID
EPA 8270C	1GJ0119	1GJ0119-BLK1	
		1GJ0119-BS1	
		1GJ0119-BSD1	
		1GJ0088-09	MW-344
		1GJ0088-12	MW-382R

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260B	1GJ0207	1GJ0207-BS1	
		1GJ0207-BSD1	
		1GJ0207-BLK1	
		1GJ0088-01	MW-307
		1GJ0088-02	MW-312
		1GJ0088-03	MW-390
		1GJ0088-04	MW-300
		1GJ0088-05	MW-303
		1GJ0088-06	MW-304
		1GJ0088-07	MW-313
		1GJ0088-08	MW-335
		1GJ0088-09	MW-344
		1GJ0088-10	MW-380
		1GJ0207-MS1	1GJ0088-01
		1GJ0207-MSD1	1GJ0088-01
		1GJ0088-11	MW-381
		1GJ0088-12	MW-382R
		1GJ0088-13	MW-384
		1GJ0088-14	MW-385
		1GJ0088-16	MW-601
		1GJ0088-17	MW-602
		1GJ0088-18	MW-603

Method	Batch	Laboratory ID	Client / Source ID
EPA 8081	1GJ0225	1GJ0225-BLK1	
		1GJ0225-BS1	
		1GJ0225-BSD1	
		1GJ0088-09	MW-344
		1GJ0088-12	MW-382R

Method	Batch	Laboratory ID	Client / Source ID
EPA 8082	1GJ0227	1GJ0227-BLK1	
		1GJ0088-09	MW-344

Method	Batch	Laboratory ID	Client / Source ID
EPA 8082	1GJ0227	1GJ0088-12	MW-382R
		1GJ0227-BS1	
		1GJ0227-BSD1	

Method	Batch	Laboratory ID	Client / Source ID
EPA 8141	1GJ0228	1GJ0228-BLK1	
		1GJ0088-09	MW-344
		1GJ0088-12	MW-382R
		1GJ0228-BS1	
		1GJ0228-BSD1	

Method	Batch	Laboratory ID	Client / Source ID
EPA 8151A	1GJ0235	1GJ0235-BLK1	
		1GJ0088-09	MW-344
		1GJ0088-12	MW-382R
		1GJ0235-BS1	
		1GJ0235-BSD1	

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260B	1GJ0295	1GJ0295-BS1	
		1GJ0295-BSD1	
		1GJ0295-BLK1	
		1GJ0088-09	MW-344
		1GJ0088-12	MW-382R
		1GJ0295-MS1	3GI0082-01
		1GJ0295-MSD1	3GI0082-01

Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	1GJ0378	1GJ0378-BLK1	
		1GJ0378-BS1	
		1GJ0088-01	MW-307
		1GJ0378-MS1	1GJ0088-01
		1GJ0378-MSD1	1GJ0088-01
		1GJ0378-PS1	1GJ0088-01
		1GJ0088-02	MW-312
		1GJ0088-05	MW-303
		1GJ0088-06	MW-304
		1GJ0088-07	MW-313
		1GJ0088-08	MW-335
		1GJ0088-10	MW-380
		1GJ0088-11	MW-381
		1GJ0088-13	MW-384
		1GJ0088-14	MW-385
		1GJ0088-15	Field Duplicate

Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	1GJ0378	1GJ0088-16	MW-601
		1GJ0088-17	MW-602
		1GJ0088-18	MW-603
		1GJ0088-03	MW-390
		1GJ0088-04	MW-300
		1GJ0088-10RE1	MW-380

Method	Batch	Laboratory ID	Client / Source ID
EPA 8015C	1GJ0497	1GJ0497-BS1	
		1GJ0497-BLK1	
		1GJ0088-09	MW-344
		1GJ0088-12	MW-382R
		1GJ0497-MS1	1GI2469-05
		1GJ0497-MSD1	1GI2469-05

Method	Batch	Laboratory ID	Client / Source ID
4500CN-E	1GJ0576	1GJ0576-BS1	
		1GJ0576-MS1	1GJ0294-03
		1GJ0576-MSD1	1GJ0294-03
		1GJ0088-09	MW-344
		1GJ0088-12	MW-382R
		1GJ0576-BLK1	

Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	1GJ1136	1GJ1136-BLK1	
		1GJ1136-BS1	
		1GJ1136-MS1	1GJ1452-01
		1GJ1136-MSD1	1GJ1452-01
		1GJ1136-PS1	1GJ1452-01
		1GJ0088-03RE3	MW-390

Method	Batch	Laboratory ID	Client / Source ID
EPA 376.2	1GK0764	1GK0764-BLK1	
		1GK0764-BS1	
		1GK0764-MS1	1GK0852-02
		1GK0764-MSD1	1GK0852-02
		1GJ0088-09	MW-344
		1GJ0088-12	MW-382R

Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	1GK0835	1GK0835-BLK1	
		1GK0835-BLK1	
		1GK0835-BS1	
		1GK0835-BS1	

Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	1GK0835	1GJ0088-09	MW-344
		1GJ0088-09	MW-344
		1GJ0088-12	MW-382R
		1GJ0088-12	MW-382R
		1GK0835-MSD1	1GK0852-01
		1GK0835-MSD1	1GK0852-01
		1GK0835-PS1	1GK0852-01
		1GK0835-PS1	1GK0852-01
		1GK0835-MS1	1GK0852-01
		1GK0835-MS1	1GK0852-01

Method	Batch	Laboratory ID	Client / Source ID
EPA 7470A	1GK0845	1GK0845-BLK1	
		1GK0845-BS1	
		1GJ0088-09	MW-344
		1GK0845-MS1	1GJ0088-09
		1GK0845-MSD1	1GJ0088-09
		1GJ0088-12	MW-382R

Method	Batch	Laboratory ID	Client / Source ID
EPA 9010B	1GK0852	1GK0852-BLK1	
		1GK0852-BS1	
		1GK0852-MSD1	1GK0852-02
		1GK0852-MS1	1GK0852-02
		1GJ0088-12	MW-382R
		1GJ0088-09	MW-344

Batch Quality Control Summary: Keystone Laboratories - Newton

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ0207 - EPA 5030B - EPA 8260B										
Blank (1GJ0207-BLK1)			Prepared: 10/03/23 00:00 Analyzed: 10/03/23 11:06							
Dichlorodifluoromethane	<1.0	1.0	ug/L							
Chloromethane	<1.0	1.0	ug/L							
Chloromethane	<1.0	1.0	ug/L							
Vinyl Chloride	<1.0	1.0	ug/L							
Vinyl Chloride	<1.0	1.0	ug/L							
Bromomethane	<1.0	1.0	ug/L							
Bromomethane	<1.0	1.0	ug/L							
Chloroethane	<1.0	1.0	ug/L							
Chloroethane	<1.0	1.0	ug/L							
Trichlorofluoromethane	<1.0	1.0	ug/L							
Trichlorofluoromethane	<1.0	1.0	ug/L							
Acrolein	<10.0	10.0	ug/L							

Keystone Laboratories - Newton

CERTIFICATE OF ANALYSIS

1GJ0088

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ0207 - EPA 5030B - EPA 8260B										
Blank (1GJ0207-BLK1)			Prepared: 10/03/23 00:00 Analyzed: 10/03/23 11:06							
1,1-Dichloroethylene	<1.0	1.0	ug/L							
1,1-Dichloroethylene	<1.0	1.0	ug/L							
Acetone	<10.0	10.0	ug/L							
Acetone	<10.0	10.0	ug/L							
Methyl Iodide	<2.0	2.0	ug/L							
Methyl Iodide	<1.0	1.0	ug/L							
Carbon Disulfide	<1.0	1.0	ug/L							
Carbon Disulfide	<1.0	1.0	ug/L							
Acetonitrile	<10.0	10.0	ug/L							
Methylene Chloride	<5.0	5.0	ug/L							
Methylene Chloride	<5.0	5.0	ug/L							
Acrylonitrile	<5.0	5.0	ug/L							
Acrylonitrile	<5.0	5.0	ug/L							
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L							
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L							
1,1-Dichloroethane	<1.0	1.0	ug/L							
1,1-Dichloroethane	<1.0	1.0	ug/L							
Vinyl Acetate	<5.0	5.0	ug/L							
Vinyl Acetate	<5.0	5.0	ug/L							
2,2-Dichloropropane	<1.0	1.0	ug/L							
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L							
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L							
2-Butanone (MEK)	<5.0	5.0	ug/L							
2-Butanone (MEK)	<10.0	10.0	ug/L							
Bromochloromethane	<1.0	1.0	ug/L							
Bromochloromethane	<1.0	1.0	ug/L							
Chloroform	<1.0	1.0	ug/L							
Chloroform	<1.0	1.0	ug/L							
1,1,1-Trichloroethane	<1.0	1.0	ug/L							
1,1,1-Trichloroethane	<1.0	1.0	ug/L							
1,1-Dichloropropene	<1.0	1.0	ug/L							
Carbon Tetrachloride	<1.0	1.0	ug/L							
Carbon Tetrachloride	<1.0	1.0	ug/L							
Benzene	<1.0	1.0	ug/L							
Benzene	<1.0	1.0	ug/L							
1,2-Dichloroethane	<1.0	1.0	ug/L							
1,2-Dichloroethane	<1.0	1.0	ug/L							
Trichloroethylene	<1.0	1.0	ug/L							
Trichloroethylene	<1.0	1.0	ug/L							
1,2-Dichloropropane	<1.0	1.0	ug/L							
1,2-Dichloropropane	<1.0	1.0	ug/L							
Dibromomethane	<1.0	1.0	ug/L							
Dibromomethane	<1.0	1.0	ug/L							

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ0207 - EPA 5030B - EPA 8260B										
Blank (1GJ0207-BLK1)				Prepared: 10/03/23 00:00 Analyzed: 10/03/23 11:06						
Bromodichloromethane	<1.0	1.0	ug/L							
Bromodichloromethane	<1.0	1.0	ug/L							
cis-1,3-Dichloropropene	<1.0	1.0	ug/L							
cis-1,3-Dichloropropene	<1.0	1.0	ug/L							
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L							
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L							
Toluene	<1.0	1.0	ug/L							
Toluene	<1.0	1.0	ug/L							
trans-1,3-Dichloropropene	<1.0	1.0	ug/L							
trans-1,3-Dichloropropene	<1.0	1.0	ug/L							
Ethyl Methacrylate	<10.0	10.0	ug/L							
1,1,2-Trichloroethane	<1.0	1.0	ug/L							
1,1,2-Trichloroethane	<1.0	1.0	ug/L							
Tetrachloroethylene	<1.0	1.0	ug/L							
Tetrachloroethylene	<1.0	1.0	ug/L							
1,3-Dichloropropane	<1.0	1.0	ug/L							
2-Hexanone (MBK)	<5.0	5.0	ug/L							
2-Hexanone (MBK)	<5.0	5.0	ug/L							
Dibromochloromethane	<1.0	1.0	ug/L							
Dibromochloromethane	<1.0	1.0	ug/L							
1,2-Dibromoethane	<1.0	1.0	ug/L							
1,2-Dibromoethane	<1.0	1.0	ug/L							
Chlorobenzene	<1.0	1.0	ug/L							
Chlorobenzene	<1.0	1.0	ug/L							
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L							
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L							
Ethylbenzene	<1.0	1.0	ug/L							
Ethylbenzene	<1.0	1.0	ug/L							
Xylenes, total	<2.0	2.0	ug/L							
Xylenes, total	<2.0	2.0	ug/L							
Styrene	<1.0	1.0	ug/L							
Styrene	<1.0	1.0	ug/L							
Bromoform	<1.0	1.0	ug/L							
Bromoform	<1.0	1.0	ug/L							
1,2,3-Trichloropropane	<1.0	1.0	ug/L							
1,2,3-Trichloropropane	<1.0	1.0	ug/L							
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L							
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L							
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L							
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L							
1,3-Dichlorobenzene	<1.0	1.0	ug/L							
1,4-Dichlorobenzene	<1.0	1.0	ug/L							
1,4-Dichlorobenzene	<1.0	1.0	ug/L							

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ0207 - EPA 5030B - EPA 8260B										
Blank (1GJ0207-BLK1)			Prepared: 10/03/23 00:00 Analyzed: 10/03/23 11:06							
1,2-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dibromo-3-chloropropane	<1.0	1.0	ug/L							
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L							
1,2,4-Trichlorobenzene	<1.0	1.0	ug/L							
Surrogate: Dibromofluoromethane	*49.5*		ug/L	*50.4*		*98.3*	*80-126*			
Surrogate: Dibromofluoromethane	*49.5*		ug/L	*50.4*		*98.3*	*80-126*			
Surrogate: Dibromofluoromethane	*49.5*		ug/L	*50.4*		*98.3*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*46.2*		ug/L	*50.4*		*91.7*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*46.2*		ug/L	*50.4*		*91.7*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*46.2*		ug/L	*50.4*		*91.7*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*46.2*		ug/L	*50.4*		*91.7*	*61-142*			
Surrogate: Toluene-d8	*50.9*		ug/L	*50.2*		*101*	*87-116*			
Surrogate: Toluene-d8	*50.9*		ug/L	*50.2*		*101*	*87-116*			
Surrogate: Toluene-d8	*50.9*		ug/L	*50.2*		*101*	*87-116*			
Surrogate: Toluene-d8	*50.9*		ug/L	*50.2*		*101*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*47.1*		ug/L	*50.4*		*93.3*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*47.1*		ug/L	*50.4*		*93.3*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*47.1*		ug/L	*50.4*		*93.3*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*47.1*		ug/L	*50.4*		*93.3*	*80-116*			
LCS (1GJ0207-BS1)			Prepared: 10/03/23 00:00 Analyzed: 10/03/23 09:08							
Dichlorodifluoromethane	22.51	1.0	ug/L	30.0		75.0	44-139			
Chloromethane	26.35	1.0	ug/L	30.0		87.8	56-152			
Chloromethane	26.35	1.0	ug/L	30.0		87.8	63-155			
Vinyl Chloride	29.55	1.0	ug/L	30.0		98.5	62-151			
Vinyl Chloride	29.55	1.0	ug/L	30.0		98.5	70-154			
Bromomethane	31.41	1.0	ug/L	30.0		105	61-162			
Bromomethane	31.41	1.0	ug/L	30.0		105	52-176			
Chloroethane	29.59	1.0	ug/L	30.0		98.6	69-138			
Chloroethane	29.59	1.0	ug/L	30.0		98.6	72-148			
Trichlorofluoromethane	28.12	1.0	ug/L	30.0		93.7	70-143			
Trichlorofluoromethane	28.12	1.0	ug/L	30.0		93.7	70-152			
Acrolein	51.82	10.0	ug/L	100		51.7	27-144			
1,1-Dichloroethylene	51.54	1.0	ug/L	50.0		103	76-140			
1,1-Dichloroethylene	51.54	1.0	ug/L	50.0		103	70-148			
Acetone	122.8	10.0	ug/L	102		120	51-156			
Acetone	122.8	10.0	ug/L	102		120	43-172			
Methyl Iodide	116.7	2.0	ug/L	99.7		117	81-166			
Methyl Iodide	116.7	1.0	ug/L	99.7		117	69-170			
Carbon Disulfide	106.7	1.0	ug/L	101		106	76-147			
Carbon Disulfide	106.7	1.0	ug/L	101		106	72-162			
Acetonitrile	102.1	10.0	ug/L	101		101	46-156			
Methylene Chloride	49.63	5.0	ug/L	50.0		99.3	67-139			
Methylene Chloride	49.63	5.0	ug/L	50.0		99.3	68-142			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ0207 - EPA 5030B - EPA 8260B										
LCS (1GJ0207-BS1)					Prepared: 10/03/23 00:00 Analyzed: 10/03/23 09:08					
Acrylonitrile	93.54	5.0	ug/L	100		93.2	67-144			
Acrylonitrile	93.54	5.0	ug/L	100		93.2	67-144			
trans-1,2-Dichloroethylene	52.70	1.0	ug/L	50.0		105	72-135			
trans-1,2-Dichloroethylene	52.70	1.0	ug/L	50.0		105	66-148			
1,1-Dichloroethane	50.45	1.0	ug/L	50.0		101	72-129			
1,1-Dichloroethane	50.45	1.0	ug/L	50.0		101	66-143			
Vinyl Acetate	125.8	5.0	ug/L	102		124	24-144			
Vinyl Acetate	125.8	5.0	ug/L	102		124	43-153			
2,2-Dichloropropane	50.01	1.0	ug/L	50.0		100	64-131			
cis-1,2-Dichloroethylene	52.07	1.0	ug/L	49.5		105	81-137			
cis-1,2-Dichloroethylene	52.07	1.0	ug/L	49.5		105	71-149			
2-Butanone (MEK)	103.9	5.0	ug/L	103		101	47-149			
2-Butanone (MEK)	103.9	10.0	ug/L	103		101	52-159			
Bromochloromethane	53.68	1.0	ug/L	50.0		107	75-138			
Bromochloromethane	53.68	1.0	ug/L	50.0		107	69-143			
Chloroform	54.91	1.0	ug/L	50.0		110	78-131			
Chloroform	54.91	1.0	ug/L	50.0		110	69-144			
1,1,1-Trichloroethane	50.62	1.0	ug/L	50.0		101	67-121			
1,1,1-Trichloroethane	50.62	1.0	ug/L	50.0		101	62-129			
1,1-Dichloropropene	53.96	1.0	ug/L	50.0		108	80-131			
Carbon Tetrachloride	56.16	1.0	ug/L	50.0		112	71-131			
Carbon Tetrachloride	56.16	1.0	ug/L	50.0		112	63-141			
Benzene	52.40	1.0	ug/L	50.0		105	77-130			
Benzene	52.40	1.0	ug/L	50.0		105	71-134			
1,2-Dichloroethane	53.09	1.0	ug/L	50.0		106	76-126			
1,2-Dichloroethane	53.09	1.0	ug/L	50.0		106	72-132			
Trichloroethylene	52.71	1.0	ug/L	50.0		105	80-124			
Trichloroethylene	52.71	1.0	ug/L	50.0		105	71-135			
1,2-Dichloropropane	53.55	1.0	ug/L	50.0		107	81-125			
1,2-Dichloropropane	53.55	1.0	ug/L	50.0		107	69-136			
Dibromomethane	56.47	1.0	ug/L	50.0		113	84-134			
Dibromomethane	56.47	1.0	ug/L	50.0		113	73-147			
Bromodichloromethane	52.27	1.0	ug/L	50.0		105	78-121			
Bromodichloromethane	52.27	1.0	ug/L	50.0		105	68-129			
cis-1,3-Dichloropropene	54.24	1.0	ug/L	50.3		108	78-120			
cis-1,3-Dichloropropene	54.24	1.0	ug/L	50.3		108	65-134			
4-Methyl-2-pentanone (MIBK)	106.3	5.0	ug/L	101		105	67-143			
4-Methyl-2-pentanone (MIBK)	106.3	5.0	ug/L	101		105	58-147			
Toluene	51.04	1.0	ug/L	50.0		102	77-130			
Toluene	51.04	1.0	ug/L	50.0		102	72-133			
trans-1,3-Dichloropropene	53.31	1.0	ug/L	50.4		106	77-123			
trans-1,3-Dichloropropene	53.31	1.0	ug/L	50.4		106	67-130			
Ethyl Methacrylate	100.7	10.0	ug/L	101		100	52-148			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Batch 1GJ0207 - EPA 5030B - EPA 8260B

LCS (1GJ0207-BS1) Prepared: 10/03/23 00:00 Analyzed: 10/03/23 09:08

Analyte	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
1,1,2-Trichloroethane	53.89	1.0	ug/L	50.0		108	78-124			
1,1,2-Trichloroethane	53.89	1.0	ug/L	50.0		108	69-135			
Tetrachloroethylene	51.62	1.0	ug/L	50.0		103	73-124			
Tetrachloroethylene	51.62	1.0	ug/L	50.0		103	69-130			
1,3-Dichloropropane	58.96	1.0	ug/L	50.0		118	78-131			
2-Hexanone (MBK)	104.0	5.0	ug/L	103		101	57-145			
2-Hexanone (MBK)	104.0	5.0	ug/L	103		101	55-144			
Dibromochloromethane	54.12	1.0	ug/L	49.5		109	78-126			
Dibromochloromethane	54.12	1.0	ug/L	49.5		109	73-127			
1,2-Dibromoethane	53.35	1.0	ug/L	50.0		107	69-126			
1,2-Dibromoethane	53.35	1.0	ug/L	50.0		107	67-132			
Chlorobenzene	50.64	1.0	ug/L	50.0		101	76-120			
Chlorobenzene	50.64	1.0	ug/L	50.0		101	72-123			
1,1,1,2-Tetrachloroethane	54.17	1.0	ug/L	50.0		108	81-122			
1,1,1,2-Tetrachloroethane	54.17	1.0	ug/L	50.0		108	73-127			
Ethylbenzene	48.72	1.0	ug/L	50.0		97.4	74-121			
Ethylbenzene	48.72	1.0	ug/L	50.0		97.4	71-127			
Xylenes, total	148.6	2.0	ug/L	150		99.0	75-122			
Xylenes, total	148.6	2.0	ug/L	150		99.0	74-127			
Styrene	50.30	1.0	ug/L	50.0		101	76-119			
Styrene	50.30	1.0	ug/L	50.0		101	66-126			
Bromoform	51.23	1.0	ug/L	50.0		102	74-127			
Bromoform	51.23	1.0	ug/L	50.0		102	68-130			
1,2,3-Trichloropropane	54.52	1.0	ug/L	50.0		109	73-125			
1,2,3-Trichloropropane	54.52	1.0	ug/L	50.0		109	63-136			
trans-1,4-Dichloro-2-butene	98.22	5.0	ug/L	104		94.5	55-135			
trans-1,4-Dichloro-2-butene	98.22	5.0	ug/L	104		94.5	54-134			
1,1,2,2-Tetrachloroethane	52.41	1.0	ug/L	49.8		105	58-133			
1,1,2,2-Tetrachloroethane	52.41	1.0	ug/L	49.8		105	61-131			
1,3-Dichlorobenzene	50.63	1.0	ug/L	50.0		101	70-125			
1,4-Dichlorobenzene	52.83	1.0	ug/L	50.0		106	69-128			
1,4-Dichlorobenzene	52.83	1.0	ug/L	50.0		106	70-129			
1,2-Dichlorobenzene	51.59	1.0	ug/L	50.0		103	70-125			
1,2-Dichlorobenzene	51.59	1.0	ug/L	50.0		103	69-126			
1,2-Dibromo-3-chloropropane	50.32	1.0	ug/L	50.0		101	54-147			
1,2-Dibromo-3-chloropropane	50.32	5.0	ug/L	50.0		101	50-143			
1,2,4-Trichlorobenzene	54.37	1.0	ug/L	50.0		109	55-149			
Surrogate: Dibromofluoromethane	*52.3*		ug/L	*50.4*		*104*	*80-126*			
Surrogate: Dibromofluoromethane	*52.3*		ug/L	*50.4*		*104*	*80-126*			
Surrogate: Dibromofluoromethane	*52.3*		ug/L	*50.4*		*104*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*53.4*		ug/L	*50.4*		*106*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*53.4*		ug/L	*50.4*		*106*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*53.4*		ug/L	*50.4*		*106*	*63-138*			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ0207 - EPA 5030B - EPA 8260B										
LCS (1GJ0207-BS1)				Prepared: 10/03/23 00:00 Analyzed: 10/03/23 09:08						
Surrogate: 1,2-Dichloroethane-d4	*53.4*		ug/L	*50.4*		*106*	*61-142*			
Surrogate: Toluene-d8	*49.8*		ug/L	*50.2*		*99.1*	*87-116*			
Surrogate: Toluene-d8	*49.8*		ug/L	*50.2*		*99.1*	*87-116*			
Surrogate: Toluene-d8	*49.8*		ug/L	*50.2*		*99.1*	*87-116*			
Surrogate: Toluene-d8	*49.8*		ug/L	*50.2*		*99.1*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*48.1*		ug/L	*50.4*		*95.4*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*48.1*		ug/L	*50.4*		*95.4*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*48.1*		ug/L	*50.4*		*95.4*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*48.1*		ug/L	*50.4*		*95.4*	*80-116*			
LCS Dup (1GJ0207-BSD1)				Prepared: 10/03/23 00:00 Analyzed: 10/03/23 09:47						
Dichlorodifluoromethane	20.94	1.0	ug/L	30.0		69.8	44-139	7.23	30	
Chloromethane	24.41	1.0	ug/L	30.0		81.4	56-152	7.64	30	
Chloromethane	24.41	1.0	ug/L	30.0		81.4	63-155	7.64	24	
Vinyl Chloride	26.88	1.0	ug/L	30.0		89.6	62-151	9.46	28	
Vinyl Chloride	26.88	1.0	ug/L	30.0		89.6	70-154	9.46	25	
Bromomethane	29.08	1.0	ug/L	30.0		96.9	61-162	7.70	28	
Bromomethane	29.08	1.0	ug/L	30.0		96.9	52-176	7.70	27	
Chloroethane	27.66	1.0	ug/L	30.0		92.2	69-138	6.74	29	
Chloroethane	27.66	1.0	ug/L	30.0		92.2	72-148	6.74	25	
Trichlorofluoromethane	26.00	1.0	ug/L	30.0		86.7	70-143	7.83	27	
Trichlorofluoromethane	26.00	1.0	ug/L	30.0		86.7	70-152	7.83	26	
Acrolein	51.86	10.0	ug/L	100		51.7	27-144	0.0772	30	
1,1-Dichloroethylene	47.59	1.0	ug/L	50.0		95.2	76-140	7.97	30	
1,1-Dichloroethylene	47.59	1.0	ug/L	50.0		95.2	70-148	7.97	24	
Acetone	121.5	10.0	ug/L	102		119	51-156	1.10	30	
Acetone	121.5	10.0	ug/L	102		119	43-172	1.10	30	
Methyl Iodide	110.7	2.0	ug/L	99.7		111	81-166	5.25	29	
Methyl Iodide	110.7	1.0	ug/L	99.7		111	69-170	5.25	30	
Carbon Disulfide	97.43	1.0	ug/L	101		96.5	76-147	9.05	27	
Carbon Disulfide	97.43	1.0	ug/L	101		96.5	72-162	9.05	24	
Acetonitrile	103.0	10.0	ug/L	101		102	46-156	0.916	30	
Methylene Chloride	46.66	5.0	ug/L	50.0		93.3	67-139	6.17	26	
Methylene Chloride	46.66	5.0	ug/L	50.0		93.3	68-142	6.17	21	
Acrylonitrile	92.43	5.0	ug/L	100		92.1	67-144	1.19	24	
Acrylonitrile	92.43	5.0	ug/L	100		92.1	67-144	1.19	24	
trans-1,2-Dichloroethylene	49.02	1.0	ug/L	50.0		98.0	72-135	7.24	28	
trans-1,2-Dichloroethylene	49.02	1.0	ug/L	50.0		98.0	66-148	7.24	27	
1,1-Dichloroethane	47.05	1.0	ug/L	50.0		94.1	72-129	6.97	26	
1,1-Dichloroethane	47.05	1.0	ug/L	50.0		94.1	66-143	6.97	24	
Vinyl Acetate	122.9	5.0	ug/L	102		121	24-144	2.37	30	
Vinyl Acetate	122.9	5.0	ug/L	102		121	43-153	2.37	30	
2,2-Dichloropropane	45.75	1.0	ug/L	50.0		91.5	64-131	8.90	26	
cis-1,2-Dichloroethylene	48.41	1.0	ug/L	49.5		97.8	81-137	7.29	27	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ0207 - EPA 5030B - EPA 8260B										
LCS Dup (1GJ0207-BSD1)				Prepared: 10/03/23 00:00 Analyzed: 10/03/23 09:47						
cis-1,2-Dichloroethylene	48.41	1.0	ug/L	49.5		97.8	71-149	7.29	26	
2-Butanone (MEK)	103.5	5.0	ug/L	103		100	47-149	0.309	30	
2-Butanone (MEK)	103.5	10.0	ug/L	103		100	52-159	0.309	27	
Bromochloromethane	51.13	1.0	ug/L	50.0		102	75-138	4.87	24	
Bromochloromethane	51.13	1.0	ug/L	50.0		102	69-143	4.87	23	
Chloroform	51.38	1.0	ug/L	50.0		103	78-131	6.64	27	
Chloroform	51.38	1.0	ug/L	50.0		103	69-144	6.64	23	
1,1,1-Trichloroethane	47.11	1.0	ug/L	50.0		94.3	67-121	7.18	28	
1,1,1-Trichloroethane	47.11	1.0	ug/L	50.0		94.3	62-129	7.18	24	
1,1-Dichloropropene	50.12	1.0	ug/L	50.0		100	80-131	7.38	30	
Carbon Tetrachloride	52.04	1.0	ug/L	50.0		104	71-131	7.62	28	
Carbon Tetrachloride	52.04	1.0	ug/L	50.0		104	63-141	7.62	25	
Benzene	49.60	1.0	ug/L	50.0		99.2	77-130	5.49	25	
Benzene	49.60	1.0	ug/L	50.0		99.2	71-134	5.49	24	
1,2-Dichloroethane	51.47	1.0	ug/L	50.0		103	76-126	3.10	24	
1,2-Dichloroethane	51.47	1.0	ug/L	50.0		103	72-132	3.10	24	
Trichloroethylene	49.84	1.0	ug/L	50.0		99.7	80-124	5.60	27	
Trichloroethylene	49.84	1.0	ug/L	50.0		99.7	71-135	5.60	24	
1,2-Dichloropropane	51.04	1.0	ug/L	50.0		102	81-125	4.80	25	
1,2-Dichloropropane	51.04	1.0	ug/L	50.0		102	69-136	4.80	24	
Dibromomethane	55.30	1.0	ug/L	50.0		111	84-134	2.09	23	
Dibromomethane	55.30	1.0	ug/L	50.0		111	73-147	2.09	25	
Bromodichloromethane	50.05	1.0	ug/L	50.0		100	78-121	4.34	25	
Bromodichloromethane	50.05	1.0	ug/L	50.0		100	68-129	4.34	22	
cis-1,3-Dichloropropene	52.27	1.0	ug/L	50.3		104	78-120	3.70	26	
cis-1,3-Dichloropropene	52.27	1.0	ug/L	50.3		104	65-134	3.70	23	
4-Methyl-2-pentanone (MIBK)	106.0	5.0	ug/L	101		105	67-143	0.245	26	
4-Methyl-2-pentanone (MIBK)	106.0	5.0	ug/L	101		105	58-147	0.245	27	
Toluene	48.17	1.0	ug/L	50.0		96.3	77-130	5.79	27	
Toluene	48.17	1.0	ug/L	50.0		96.3	72-133	5.79	24	
trans-1,3-Dichloropropene	51.60	1.0	ug/L	50.4		102	77-123	3.26	28	
trans-1,3-Dichloropropene	51.60	1.0	ug/L	50.4		102	67-130	3.26	24	
Ethyl Methacrylate	99.05	10.0	ug/L	101		98.5	52-148	1.62	30	
1,1,2-Trichloroethane	52.43	1.0	ug/L	50.0		105	78-124	2.75	24	
1,1,2-Trichloroethane	52.43	1.0	ug/L	50.0		105	69-135	2.75	23	
Tetrachloroethylene	48.92	1.0	ug/L	50.0		97.8	73-124	5.37	26	
Tetrachloroethylene	48.92	1.0	ug/L	50.0		97.8	69-130	5.37	25	
1,3-Dichloropropane	57.85	1.0	ug/L	50.0		116	78-131	1.90	24	
2-Hexanone (MBK)	103.1	5.0	ug/L	103		99.8	57-145	0.850	30	
2-Hexanone (MBK)	103.1	5.0	ug/L	103		99.8	55-144	0.850	25	
Dibromochloromethane	52.85	1.0	ug/L	49.5		107	78-126	2.37	23	
Dibromochloromethane	52.85	1.0	ug/L	49.5		107	73-127	2.37	22	
1,2-Dibromoethane	52.32	1.0	ug/L	50.0		105	69-126	1.95	22	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ0207 - EPA 5030B - EPA 8260B										
LCS Dup (1GJ0207-BSD1)			Prepared: 10/03/23 00:00 Analyzed: 10/03/23 09:47							
1,2-Dibromoethane	52.32	1.0	ug/L	50.0		105	67-132	1.95	24	
Chlorobenzene	48.01	1.0	ug/L	50.0		96.0	76-120	5.33	25	
Chlorobenzene	48.01	1.0	ug/L	50.0		96.0	72-123	5.33	23	
1,1,1,2-Tetrachloroethane	51.75	1.0	ug/L	50.0		104	81-122	4.57	23	
1,1,1,2-Tetrachloroethane	51.75	1.0	ug/L	50.0		104	73-127	4.57	24	
Ethylbenzene	46.08	1.0	ug/L	50.0		92.2	74-121	5.57	27	
Ethylbenzene	46.08	1.0	ug/L	50.0		92.2	71-127	5.57	26	
Xylenes, total	141.2	2.0	ug/L	150		94.2	75-122	5.04	26	
Xylenes, total	141.2	2.0	ug/L	150		94.2	74-127	5.04	25	
Styrene	47.87	1.0	ug/L	50.0		95.7	76-119	4.95	26	
Styrene	47.87	1.0	ug/L	50.0		95.7	66-126	4.95	23	
Bromoform	50.46	1.0	ug/L	50.0		101	74-127	1.51	22	
Bromoform	50.46	1.0	ug/L	50.0		101	68-130	1.51	23	
1,2,3-Trichloropropane	53.69	1.0	ug/L	50.0		107	73-125	1.53	20	
1,2,3-Trichloropropane	53.69	1.0	ug/L	50.0		107	63-136	1.53	24	
trans-1,4-Dichloro-2-butene	94.85	5.0	ug/L	104		91.3	55-135	3.49	26	
trans-1,4-Dichloro-2-butene	94.85	5.0	ug/L	104		91.3	54-134	3.49	27	
1,1,2,2-Tetrachloroethane	51.52	1.0	ug/L	49.8		103	58-133	1.71	28	
1,1,2,2-Tetrachloroethane	51.52	1.0	ug/L	49.8		103	61-131	1.71	29	
1,3-Dichlorobenzene	48.37	1.0	ug/L	50.0		96.7	70-125	4.57	27	
1,4-Dichlorobenzene	50.50	1.0	ug/L	50.0		101	69-128	4.51	29	
1,4-Dichlorobenzene	50.50	1.0	ug/L	50.0		101	70-129	4.51	24	
1,2-Dichlorobenzene	49.33	1.0	ug/L	50.0		98.7	70-125	4.48	25	
1,2-Dichlorobenzene	49.33	1.0	ug/L	50.0		98.7	69-126	4.48	26	
1,2-Dibromo-3-chloropropane	49.61	1.0	ug/L	50.0		99.2	54-147	1.42	29	
1,2-Dibromo-3-chloropropane	49.61	5.0	ug/L	50.0		99.2	50-143	1.42	30	
1,2,4-Trichlorobenzene	52.35	1.0	ug/L	50.0		105	55-149	3.79	30	
Surrogate: Dibromofluoromethane	*51.5*		ug/L	*50.4*		*102*	*80-126*			
Surrogate: Dibromofluoromethane	*51.5*		ug/L	*50.4*		*102*	*80-126*			
Surrogate: Dibromofluoromethane	*51.5*		ug/L	*50.4*		*102*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*53.0*		ug/L	*50.4*		*105*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*53.0*		ug/L	*50.4*		*105*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*53.0*		ug/L	*50.4*		*105*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*53.0*		ug/L	*50.4*		*105*	*61-142*			
Surrogate: Toluene-d8	*50.0*		ug/L	*50.2*		*99.4*	*87-116*			
Surrogate: Toluene-d8	*50.0*		ug/L	*50.2*		*99.4*	*87-116*			
Surrogate: Toluene-d8	*50.0*		ug/L	*50.2*		*99.4*	*87-116*			
Surrogate: Toluene-d8	*50.0*		ug/L	*50.2*		*99.4*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*48.0*		ug/L	*50.4*		*95.2*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*48.0*		ug/L	*50.4*		*95.2*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*48.0*		ug/L	*50.4*		*95.2*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*48.0*		ug/L	*50.4*		*95.2*	*80-116*			
Matrix Spike (1GJ0207-MS1)	**Source: 1GJ0088-01**		Prepared: 10/03/23 00:00 Analyzed: 10/03/23 22:38							
Dichlorodifluoromethane	209.2	10.0	ug/L	300	ND	69.7	47-137			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ0207 - EPA 5030B - EPA 8260B										
Matrix Spike (1GJ0207-MS1)	**Source: 1GJ0088-01**	Prepared: 10/03/23 00:00 Analyzed: 10/03/23 22:38								
Chloromethane	243.6	10.0	ug/L	300	ND	81.2	49-154			
Chloromethane	243.6	10.0	ug/L	300	ND	81.2	61-152			
Vinyl Chloride	274.5	10.0	ug/L	300	ND	91.5	61-152			
Vinyl Chloride	274.5	10.0	ug/L	300	ND	91.5	66-149			
Bromomethane	284.8	10.0	ug/L	300	ND	94.9	47-168			
Bromomethane	284.8	10.0	ug/L	300	ND	94.9	43-171			
Chloroethane	275.9	10.0	ug/L	300	ND	92.0	61-148			
Chloroethane	275.9	10.0	ug/L	300	ND	92.0	69-148			
Trichlorofluoromethane	261.5	10.0	ug/L	300	ND	87.2	73-147			
Trichlorofluoromethane	261.5	10.0	ug/L	300	ND	87.2	62-163			
Acrolein	551.7	100	ug/L	1000	ND	55.0	20-164			
1,1-Dichloroethylene	475.8	10.0	ug/L	500	ND	95.2	68-153			
1,1-Dichloroethylene	475.8	10.0	ug/L	500	ND	95.2	70-148			
Acetone	1256	100	ug/L	1020	ND	123	45-175			
Acetone	1256	100	ug/L	1020	ND	123	45-173			
Methyl Iodide	1083	20.0	ug/L	997	ND	109	79-167			
Methyl Iodide	1083	10.0	ug/L	997	ND	109	62-167			
Carbon Disulfide	956.5	10.0	ug/L	1010	ND	94.7	72-156			
Carbon Disulfide	956.5	10.0	ug/L	1010	ND	94.7	71-163			
Acetonitrile	976.6	100	ug/L	1010	ND	97.1	38-166			
Methylene Chloride	455.2	50.0	ug/L	500	ND	91.0	64-143			
Methylene Chloride	455.2	50.0	ug/L	500	ND	91.0	69-140			
Acrylonitrile	894.2	50.0	ug/L	1000	ND	89.1	58-151			
Acrylonitrile	894.2	50.0	ug/L	1000	ND	89.1	58-151			
trans-1,2-Dichloroethylene	487.2	10.0	ug/L	500	ND	97.4	65-145			
trans-1,2-Dichloroethylene	487.2	10.0	ug/L	500	ND	97.4	69-144			
1,1-Dichloroethane	463.7	10.0	ug/L	500	ND	92.7	68-136			
1,1-Dichloroethane	463.7	10.0	ug/L	500	ND	92.7	70-138			
Vinyl Acetate	1348	50.0	ug/L	1020	ND	132	58-143			
Vinyl Acetate	1348	50.0	ug/L	1020	ND	132	58-142			
2,2-Dichloropropane	376.8	10.0	ug/L	500	ND	75.4	50-118			
cis-1,2-Dichloroethylene	474.3	10.0	ug/L	495	ND	95.9	67-153			
cis-1,2-Dichloroethylene	474.3	10.0	ug/L	495	ND	95.9	68-151			
2-Butanone (MEK)	1050	50.0	ug/L	1030	ND	102	52-159			
2-Butanone (MEK)	1050	100	ug/L	1030	ND	102	50-160			
Bromochloromethane	491.7	10.0	ug/L	500	ND	98.3	61-151			
Bromochloromethane	491.7	10.0	ug/L	500	ND	98.3	65-143			
Chloroform	503.5	10.0	ug/L	500	ND	101	77-132			
Chloroform	503.5	10.0	ug/L	500	ND	101	71-143			
1,1,1-Trichloroethane	472.7	10.0	ug/L	500	ND	94.6	71-118			
1,1,1-Trichloroethane	472.7	10.0	ug/L	500	ND	94.6	63-133			
1,1-Dichloropropene	509.3	10.0	ug/L	500	ND	102	82-128			
Carbon Tetrachloride	526.1	10.0	ug/L	500	ND	105	71-133			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ0207 - EPA 5030B - EPA 8260B										
Matrix Spike (1GJ0207-MS1)	**Source: 1GJ0088-01**	Prepared: 10/03/23 00:00 Analyzed: 10/03/23 22:38								
Carbon Tetrachloride	526.1	10.0	ug/L	500	ND	105	63-142			
Benzene	504.1	10.0	ug/L	500	ND	101	81-125			
Benzene	504.1	10.0	ug/L	500	ND	101	69-133			
1,2-Dichloroethane	516.2	10.0	ug/L	500	ND	103	75-125			
1,2-Dichloroethane	516.2	10.0	ug/L	500	ND	103	63-138			
Trichloroethylene	506.7	10.0	ug/L	500	ND	101	83-120			
Trichloroethylene	506.7	10.0	ug/L	500	ND	101	71-133			
1,2-Dichloropropane	516.1	10.0	ug/L	500	ND	103	80-124			
1,2-Dichloropropane	516.1	10.0	ug/L	500	ND	103	69-132			
Dibromomethane	542.7	10.0	ug/L	500	ND	109	84-131			
Dibromomethane	542.7	10.0	ug/L	500	ND	109	70-147			
Bromodichloromethane	501.1	10.0	ug/L	500	ND	100	79-118			
Bromodichloromethane	501.1	10.0	ug/L	500	ND	100	67-130			
cis-1,3-Dichloropropene	508.4	10.0	ug/L	503	ND	101	75-116			
cis-1,3-Dichloropropene	508.4	10.0	ug/L	503	ND	101	61-126			
4-Methyl-2-pentanone (MIBK)	1046	50.0	ug/L	1010	ND	103	65-149			
4-Methyl-2-pentanone (MIBK)	1046	50.0	ug/L	1010	ND	103	55-147			
Toluene	487.8	10.0	ug/L	500	ND	97.6	82-123			
Toluene	487.8	10.0	ug/L	500	ND	97.6	71-133			
trans-1,3-Dichloropropene	500.9	10.0	ug/L	504	ND	99.3	75-117			
trans-1,3-Dichloropropene	500.9	10.0	ug/L	504	ND	99.3	63-124			
Ethyl Methacrylate	995.5	100	ug/L	1010	ND	99.0	73-135			
1,1,2-Trichloroethane	527.6	10.0	ug/L	500	ND	106	77-122			
1,1,2-Trichloroethane	527.6	10.0	ug/L	500	ND	106	69-133			
Tetrachloroethylene	506.9	10.0	ug/L	500	ND	101	74-120			
Tetrachloroethylene	506.9	10.0	ug/L	500	ND	101	70-124			
1,3-Dichloropropane	586.3	10.0	ug/L	500	ND	117	80-127			
2-Hexanone (MBK)	1031	50.0	ug/L	1030	ND	99.8	57-150			
2-Hexanone (MBK)	1031	50.0	ug/L	1030	ND	99.8	53-141			
Dibromochloromethane	533.5	10.0	ug/L	495	ND	108	80-120			
Dibromochloromethane	533.5	10.0	ug/L	495	ND	108	74-122			
1,2-Dibromoethane	532.0	10.0	ug/L	500	ND	106	67-125			
1,2-Dibromoethane	532.0	10.0	ug/L	500	ND	106	66-127			
Chlorobenzene	490.9	10.0	ug/L	500	ND	98.2	81-113			
Chlorobenzene	490.9	10.0	ug/L	500	ND	98.2	76-116			
1,1,1,2-Tetrachloroethane	526.3	10.0	ug/L	500	ND	105	80-119			
1,1,1,2-Tetrachloroethane	526.3	10.0	ug/L	500	ND	105	77-121			
Ethylbenzene	473.6	10.0	ug/L	500	ND	94.7	78-114			
Ethylbenzene	473.6	10.0	ug/L	500	ND	94.7	73-124			
Xylenes, total	1448	20.0	ug/L	1500	ND	96.6	77-116			
Xylenes, total	1448	20.0	ug/L	1500	ND	96.6	75-123			
Styrene	484.5	10.0	ug/L	500	ND	96.9	78-114			
Styrene	484.5	10.0	ug/L	500	ND	96.9	70-120			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ0207 - EPA 5030B - EPA 8260B										
Matrix Spike (1GJ0207-MS1)	**Source: 1GJ0088-01**	Prepared: 10/03/23 00:00 Analyzed: 10/03/23 22:38								
Bromoform	505.5	10.0	ug/L	500	ND	101	69-125			
Bromoform	505.5	10.0	ug/L	500	ND	101	70-124			
1,2,3-Trichloropropane	540.1	10.0	ug/L	500	ND	108	72-125			
1,2,3-Trichloropropane	540.1	10.0	ug/L	500	ND	108	62-135			
trans-1,4-Dichloro-2-butene	914.6	50.0	ug/L	1040	ND	88.0	48-131			
trans-1,4-Dichloro-2-butene	914.6	50.0	ug/L	1040	ND	88.0	50-120			
1,1,2,2-Tetrachloroethane	530.3	10.0	ug/L	498	ND	106	51-138			
1,1,2,2-Tetrachloroethane	530.3	10.0	ug/L	498	ND	106	63-126			
1,3-Dichlorobenzene	492.0	10.0	ug/L	500	ND	98.4	70-122			
1,4-Dichlorobenzene	511.4	10.0	ug/L	500	ND	102	70-124			
1,4-Dichlorobenzene	511.4	10.0	ug/L	500	ND	102	72-119			
1,2-Dichlorobenzene	499.3	10.0	ug/L	500	ND	99.9	68-123			
1,2-Dichlorobenzene	499.3	10.0	ug/L	500	ND	99.9	71-117			
1,2-Dibromo-3-chloropropane	499.8	10.0	ug/L	500	ND	100	46-149			
1,2-Dibromo-3-chloropropane	499.8	50.0	ug/L	500	ND	100	49-134			
1,2,4-Trichlorobenzene	523.2	10.0	ug/L	500	ND	105	60-137			
Surrogate: Dibromofluoromethane	*492*		ug/L	*504*		*97.7*	*80-126*			
Surrogate: Dibromofluoromethane	*492*		ug/L	*504*		*97.7*	*80-126*			
Surrogate: Dibromofluoromethane	*492*		ug/L	*504*		*97.7*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*515*		ug/L	*504*		*102*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*515*		ug/L	*504*		*102*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*515*		ug/L	*504*		*102*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*515*		ug/L	*504*		*102*	*61-142*			
Surrogate: Toluene-d8	*492*		ug/L	*502*		*98.0*	*87-116*			
Surrogate: Toluene-d8	*492*		ug/L	*502*		*98.0*	*87-116*			
Surrogate: Toluene-d8	*492*		ug/L	*502*		*98.0*	*87-116*			
Surrogate: Toluene-d8	*492*		ug/L	*502*		*98.0*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*480*		ug/L	*504*		*95.1*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*480*		ug/L	*504*		*95.1*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*480*		ug/L	*504*		*95.1*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*480*		ug/L	*504*		*95.1*	*80-116*			
Matrix Spike Dup (1GJ0207-MSD1)	**Source: 1GJ0088-01**	Prepared: 10/03/23 00:00 Analyzed: 10/03/23 23:17								
Dichlorodifluoromethane	201.9	10.0	ug/L	300	ND	67.3	47-137	3.55	20	
Chloromethane	232.8	10.0	ug/L	300	ND	77.6	49-154	4.53	25	
Chloromethane	232.8	10.0	ug/L	300	ND	77.6	61-152	4.53	26	
Vinyl Chloride	264.7	10.0	ug/L	300	ND	88.2	61-152	3.64	24	
Vinyl Chloride	264.7	10.0	ug/L	300	ND	88.2	66-149	3.64	23	
Bromomethane	278.9	10.0	ug/L	300	ND	93.0	47-168	2.09	30	
Bromomethane	278.9	10.0	ug/L	300	ND	93.0	43-171	2.09	29	
Chloroethane	271.4	10.0	ug/L	300	ND	90.5	61-148	1.64	29	
Chloroethane	271.4	10.0	ug/L	300	ND	90.5	69-148	1.64	25	
Trichlorofluoromethane	253.0	10.0	ug/L	300	ND	84.3	73-147	3.30	24	
Trichlorofluoromethane	253.0	10.0	ug/L	300	ND	84.3	62-163	3.30	25	
Acrolein	535.0	100	ug/L	1000	ND	53.3	20-164	3.07	24	

Keystone Laboratories - Newton

CERTIFICATE OF ANALYSIS

1GJ0088

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ0207 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1GJ0207-MSD1)		**Source: 1GJ0088-01**	Prepared: 10/03/23 00:00 Analyzed: 10/03/23 23:17							
1,1-Dichloroethylene	466.2	10.0	ug/L	500	ND	93.2	68-153	2.04	21	
1,1-Dichloroethylene	466.2	10.0	ug/L	500	ND	93.2	70-148	2.04	22	
Acetone	1194	100	ug/L	1020	ND	117	45-175	5.06	23	
Acetone	1194	100	ug/L	1020	ND	117	45-173	5.06	30	
Methyl Iodide	1079	20.0	ug/L	997	ND	108	79-167	0.444	14	
Methyl Iodide	1079	10.0	ug/L	997	ND	108	62-167	0.444	24	
Carbon Disulfide	927.4	10.0	ug/L	1010	ND	91.8	72-156	3.09	19	
Carbon Disulfide	927.4	10.0	ug/L	1010	ND	91.8	71-163	3.09	22	
Acetonitrile	958.8	100	ug/L	1010	ND	95.3	38-166	1.84	20	
Methylene Chloride	449.5	50.0	ug/L	500	ND	89.9	64-143	1.26	19	
Methylene Chloride	449.5	50.0	ug/L	500	ND	89.9	69-140	1.26	19	
Acrylonitrile	865.5	50.0	ug/L	1000	ND	86.2	58-151	3.26	15	
Acrylonitrile	865.5	50.0	ug/L	1000	ND	86.2	58-151	3.26	15	
trans-1,2-Dichloroethylene	472.1	10.0	ug/L	500	ND	94.4	65-145	3.15	18	
trans-1,2-Dichloroethylene	472.1	10.0	ug/L	500	ND	94.4	69-144	3.15	22	
1,1-Dichloroethane	458.6	10.0	ug/L	500	ND	91.7	68-136	1.11	17	
1,1-Dichloroethane	458.6	10.0	ug/L	500	ND	91.7	70-138	1.11	20	
Vinyl Acetate	1314	50.0	ug/L	1020	ND	129	58-143	2.57	14	
Vinyl Acetate	1314	50.0	ug/L	1020	ND	129	58-142	2.57	24	
2,2-Dichloropropane	356.6	10.0	ug/L	500	ND	71.3	50-118	5.51	17	
cis-1,2-Dichloroethylene	461.6	10.0	ug/L	495	ND	93.3	67-153	2.71	22	
cis-1,2-Dichloroethylene	461.6	10.0	ug/L	495	ND	93.3	68-151	2.71	22	
2-Butanone (MEK)	1019	50.0	ug/L	1030	ND	98.6	52-159	2.95	28	
2-Butanone (MEK)	1019	100	ug/L	1030	ND	98.6	50-160	2.95	23	
Bromochloromethane	488.6	10.0	ug/L	500	ND	97.7	61-151	0.632	27	
Bromochloromethane	488.6	10.0	ug/L	500	ND	97.7	65-143	0.632	22	
Chloroform	495.1	10.0	ug/L	500	ND	99.0	77-132	1.68	17	
Chloroform	495.1	10.0	ug/L	500	ND	99.0	71-143	1.68	21	
1,1,1-Trichloroethane	460.3	10.0	ug/L	500	ND	92.1	71-118	2.66	15	
1,1,1-Trichloroethane	460.3	10.0	ug/L	500	ND	92.1	63-133	2.66	23	
1,1-Dichloropropene	491.2	10.0	ug/L	500	ND	98.2	82-128	3.62	16	
Carbon Tetrachloride	510.1	10.0	ug/L	500	ND	102	71-133	3.09	14	
Carbon Tetrachloride	510.1	10.0	ug/L	500	ND	102	63-142	3.09	22	
Benzene	495.1	10.0	ug/L	500	ND	99.0	81-125	1.80	12	
Benzene	495.1	10.0	ug/L	500	ND	99.0	69-133	1.80	18	
1,2-Dichloroethane	511.0	10.0	ug/L	500	ND	102	75-125	1.01	13	
1,2-Dichloroethane	511.0	10.0	ug/L	500	ND	102	63-138	1.01	20	
Trichloroethylene	494.7	10.0	ug/L	500	ND	98.9	83-120	2.40	11	
Trichloroethylene	494.7	10.0	ug/L	500	ND	98.9	71-133	2.40	23	
1,2-Dichloropropane	511.1	10.0	ug/L	500	ND	102	80-124	0.974	11	
1,2-Dichloropropane	511.1	10.0	ug/L	500	ND	102	69-132	0.974	20	
Dibromomethane	539.6	10.0	ug/L	500	ND	108	84-131	0.573	13	
Dibromomethane	539.6	10.0	ug/L	500	ND	108	70-147	0.573	22	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ0207 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1GJ0207-MSD1)		**Source: 1GJ0088-01**	Prepared: 10/03/23 00:00 Analyzed: 10/03/23 23:17							
Bromodichloromethane	497.1	10.0	ug/L	500	ND	99.4	79-118	0.801	11	
Bromodichloromethane	497.1	10.0	ug/L	500	ND	99.4	67-130	0.801	21	
cis-1,3-Dichloropropene	499.5	10.0	ug/L	503	ND	99.3	75-116	1.77	11	
cis-1,3-Dichloropropene	499.5	10.0	ug/L	503	ND	99.3	61-126	1.77	21	
4-Methyl-2-pentanone (MIBK)	1021	50.0	ug/L	1010	ND	101	65-149	2.46	14	
4-Methyl-2-pentanone (MIBK)	1021	50.0	ug/L	1010	ND	101	55-147	2.46	23	
Toluene	483.1	10.0	ug/L	500	ND	96.6	82-123	0.968	12	
Toluene	483.1	10.0	ug/L	500	ND	96.6	71-133	0.968	19	
trans-1,3-Dichloropropene	494.6	10.0	ug/L	504	ND	98.1	75-117	1.27	11	
trans-1,3-Dichloropropene	494.6	10.0	ug/L	504	ND	98.1	63-124	1.27	21	
Ethyl Methacrylate	994.1	100	ug/L	1010	ND	98.8	73-135	0.141	10	
1,1,2-Trichloroethane	522.0	10.0	ug/L	500	ND	104	77-122	1.07	11	
1,1,2-Trichloroethane	522.0	10.0	ug/L	500	ND	104	69-133	1.07	19	
Tetrachloroethylene	491.3	10.0	ug/L	500	ND	98.3	74-120	3.13	17	
Tetrachloroethylene	491.3	10.0	ug/L	500	ND	98.3	70-124	3.13	24	
1,3-Dichloropropane	575.5	10.0	ug/L	500	ND	115	80-127	1.86	13	
2-Hexanone (MBK)	1006	50.0	ug/L	1030	ND	97.4	57-150	2.45	17	
2-Hexanone (MBK)	1006	50.0	ug/L	1030	ND	97.4	53-141	2.45	24	
Dibromochloromethane	525.2	10.0	ug/L	495	ND	106	80-120	1.57	12	
Dibromochloromethane	525.2	10.0	ug/L	495	ND	106	74-122	1.57	21	
1,2-Dibromoethane	521.1	10.0	ug/L	500	ND	104	67-125	2.07	12	
1,2-Dibromoethane	521.1	10.0	ug/L	500	ND	104	66-127	2.07	23	
Chlorobenzene	485.1	10.0	ug/L	500	ND	97.0	81-113	1.19	14	
Chlorobenzene	485.1	10.0	ug/L	500	ND	97.0	76-116	1.19	21	
1,1,1,2-Tetrachloroethane	521.1	10.0	ug/L	500	ND	104	80-119	0.993	15	
1,1,1,2-Tetrachloroethane	521.1	10.0	ug/L	500	ND	104	77-121	0.993	25	
Ethylbenzene	466.8	10.0	ug/L	500	ND	93.4	78-114	1.45	14	
Ethylbenzene	466.8	10.0	ug/L	500	ND	93.4	73-124	1.45	20	
Xylenes, total	1422	20.0	ug/L	1500	ND	94.8	77-116	1.82	13	
Xylenes, total	1422	20.0	ug/L	1500	ND	94.8	75-123	1.82	20	
Styrene	479.3	10.0	ug/L	500	ND	95.9	78-114	1.08	12	
Styrene	479.3	10.0	ug/L	500	ND	95.9	70-120	1.08	23	
Bromoform	495.5	10.0	ug/L	500	ND	99.1	69-125	2.00	14	
Bromoform	495.5	10.0	ug/L	500	ND	99.1	70-124	2.00	22	
1,2,3-Trichloropropane	534.7	10.0	ug/L	500	ND	107	72-125	1.00	18	
1,2,3-Trichloropropane	534.7	10.0	ug/L	500	ND	107	62-135	1.00	28	
trans-1,4-Dichloro-2-butene	885.7	50.0	ug/L	1040	ND	85.2	48-131	3.21	17	
trans-1,4-Dichloro-2-butene	885.7	50.0	ug/L	1040	ND	85.2	50-120	3.21	26	
1,1,2,2-Tetrachloroethane	526.4	10.0	ug/L	498	ND	106	51-138	0.738	30	
1,1,2,2-Tetrachloroethane	526.4	10.0	ug/L	498	ND	106	63-126	0.738	24	
1,3-Dichlorobenzene	489.3	10.0	ug/L	500	ND	97.9	70-122	0.550	30	
1,4-Dichlorobenzene	511.5	10.0	ug/L	500	ND	102	70-124	0.0196	28	
1,4-Dichlorobenzene	511.5	10.0	ug/L	500	ND	102	72-119	0.0196	24	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ0207 - EPA 5030B - EPA 8260B										
Matrix Spike Dup (1GJ0207-MSD1)	**Source: 1GJ0088-01**	Prepared: 10/03/23 00:00 Analyzed: 10/03/23 23:17								
1,2-Dichlorobenzene	500.7	10.0	ug/L	500	ND	100	68-123	0.280	29	
1,2-Dichlorobenzene	500.7	10.0	ug/L	500	ND	100	71-117	0.280	24	
1,2-Dibromo-3-chloropropane	485.1	10.0	ug/L	500	ND	97.0	46-149	2.99	30	
1,2-Dibromo-3-chloropropane	485.1	50.0	ug/L	500	ND	97.0	49-134	2.99	28	
1,2,4-Trichlorobenzene	511.0	10.0	ug/L	500	ND	102	60-137	2.36	30	
Surrogate: Dibromofluoromethane	*491*		ug/L	*504*		*97.6*	*80-126*			
Surrogate: Dibromofluoromethane	*491*		ug/L	*504*		*97.6*	*80-126*			
Surrogate: Dibromofluoromethane	*491*		ug/L	*504*		*97.6*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*506*		ug/L	*504*		*100*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*506*		ug/L	*504*		*100*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*506*		ug/L	*504*		*100*	*63-138*			
Surrogate: 1,2-Dichloroethane-d4	*506*		ug/L	*504*		*100*	*61-142*			
Surrogate: Toluene-d8	*491*		ug/L	*502*		*97.8*	*87-116*			
Surrogate: Toluene-d8	*491*		ug/L	*502*		*97.8*	*87-116*			
Surrogate: Toluene-d8	*491*		ug/L	*502*		*97.8*	*87-116*			
Surrogate: Toluene-d8	*491*		ug/L	*502*		*97.8*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*479*		ug/L	*504*		*95.0*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*479*		ug/L	*504*		*95.0*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*479*		ug/L	*504*		*95.0*	*85-111*			
Surrogate: 4-Bromofluorobenzene	*479*		ug/L	*504*		*95.0*	*80-116*			
Batch 1GJ0295 - EPA 5030B - EPA 8260B										
Blank (1GJ0295-BLK1)		Prepared: 10/04/23 00:00 Analyzed: 10/04/23 10:24								
Allyl chloride	<1.0	1.0	ug/L							
Chloroprene	<1.0	1.0	ug/L							
Methacrylonitrile	<1.0	1.0	ug/L							
Methyl Methacrylate	<1.0	1.0	ug/L							
Propionitrile	<10.0	10.0	ug/L							
Surrogate: Dibromofluoromethane	*56.5*		ug/L	*50.4*		*112*	*80-126*			
Surrogate: 1,2-Dichloroethane-d4	*51.7*		ug/L	*50.4*		*103*	*63-138*			
Surrogate: Toluene-d8	*52.4*		ug/L	*50.2*		*104*	*87-116*			
Surrogate: 4-Bromofluorobenzene	*57.6*		ug/L	*50.4*		*114*	*85-111*			*S-GC*
LCS (1GJ0295-BS1)		Prepared: 10/04/23 00:00 Analyzed: 10/04/23 09:05								
Allyl chloride	39.25	1.0	ug/L	50.1		78.3	76-134			
Chloroprene	21.95	1.0	ug/L	25.0		87.6	74-141			
Methacrylonitrile	45.33	1.0	ug/L	50.0		90.7	73-143			
Methyl Methacrylate	36.22	1.0	ug/L	50.1		72.3	72-123			
Propionitrile	55.70	10.0	ug/L	50.1		111	50-151			
Surrogate: Dibromofluoromethane	*51.2*		ug/L	*50.4*		*102*	*80-126*			
Surrogate: 1,2-Dichloroethane-d4	*53.7*		ug/L	*50.4*		*106*	*63-138*			
Surrogate: Toluene-d8	*49.6*		ug/L	*50.2*		*98.7*	*87-116*			
Surrogate: 4-Bromofluorobenzene	*51.6*		ug/L	*50.4*		*102*	*85-111*			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ0295 - EPA 5030B - EPA 8260B										
LCS Dup (1GJ0295-BSD1)			Prepared: 10/04/23 00:00 Analyzed: 10/04/23 09:31							
Allyl chloride	37.71	1.0	ug/L	50.1		75.3	76-134	4.00	30	QM-21
Chloroprene	21.22	1.0	ug/L	25.0		84.7	74-141	3.38	30	
Methacrylonitrile	45.34	1.0	ug/L	50.0		90.7	73-143	0.0221	30	
Methyl Methacrylate	38.59	1.0	ug/L	50.1		77.0	72-123	6.34	30	
Propionitrile	54.91	10.0	ug/L	50.1		110	50-151	1.43	30	
Surrogate: Dibromofluoromethane	*50.4*		ug/L	*50.4*		*100*	*80-126*			
Surrogate: 1,2-Dichloroethane-d4	*52.7*		ug/L	*50.4*		*105*	*63-138*			
Surrogate: Toluene-d8	*49.8*		ug/L	*50.2*		*99.2*	*87-116*			
Surrogate: 4-Bromofluorobenzene	*51.6*		ug/L	*50.4*		*102*	*85-111*			
Matrix Spike (1GJ0295-MS1)	**Source: 3GI0082-01**		Prepared: 10/04/23 00:00 Analyzed: 10/04/23 17:26							**QM-16**
Allyl chloride	<10.0	10.0	ug/L	501	ND		60-140			
Chloroprene	<10.0	10.0	ug/L	250	ND		60-140			
Methacrylonitrile	<10.0	10.0	ug/L	500	ND	1.54	60-140			
Methyl Methacrylate	13.70	10.0	ug/L	501	ND	2.73	60-140			
Propionitrile	<100	100	ug/L	501	ND		60-140			
Surrogate: Dibromofluoromethane	*497*		ug/L	*504*		*98.6*	*80-126*			
Surrogate: 1,2-Dichloroethane-d4	*513*		ug/L	*504*		*102*	*63-138*			
Surrogate: Toluene-d8	*499*		ug/L	*502*		*99.4*	*87-116*			
Surrogate: 4-Bromofluorobenzene	*512*		ug/L	*504*		*101*	*85-111*			
Matrix Spike Dup (1GJ0295-MSD1)	**Source: 3GI0082-01**		Prepared: 10/04/23 00:00 Analyzed: 10/04/23 17:53							**QM-16**
Allyl chloride	<10.0	10.0	ug/L	501	ND		60-140		30	
Chloroprene	<10.0	10.0	ug/L	250	ND		60-140		30	
Methacrylonitrile	<10.0	10.0	ug/L	500	ND		60-140		30	
Methyl Methacrylate	<10.0	10.0	ug/L	501	ND		60-140		30	
Propionitrile	<100	100	ug/L	501	ND		60-140		30	
Surrogate: Dibromofluoromethane	*491*		ug/L	*504*		*97.6*	*80-126*			
Surrogate: 1,2-Dichloroethane-d4	*505*		ug/L	*504*		*100*	*63-138*			
Surrogate: Toluene-d8	*502*		ug/L	*502*		*99.8*	*87-116*			
Surrogate: 4-Bromofluorobenzene	*510*		ug/L	*504*		*101*	*85-111*			

Determination of General Solvents	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ0497 - Semi-Vol GC - EPA 8015C										
Blank (1GJ0497-BLK1)			Prepared: 10/12/23 09:17 Analyzed: 10/12/23 12:12							
Isobutanol	<1.0	1.0	mg/L							
LCS (1GJ0497-BS1)			Prepared: 10/12/23 09:17 Analyzed: 10/12/23 11:22							
Isobutanol	29.68	1.0	mg/L	26.0		114	40-135			
Matrix Spike (1GJ0497-MS1)	**Source: 1GI2469-05**		Prepared: 10/12/23 09:17 Analyzed: 10/12/23 13:53							
Isobutanol	28.53	1.0	mg/L	26.0	ND	110	63-135			

Determination of General Solvents	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ0497 - Semi-Vol GC - EPA 8015C										
Matrix Spike Dup (1GJ0497-MSD1)	**Source: 1GI2469-05**		Prepared: 10/12/23 09:17 Analyzed: 10/12/23 14:17							
Isobutanol	30.01	1.0	mg/L	26.0	ND	115	63-135	5.08	30	

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ0119 - 3520C BNA Cont Liq - EPA 8270C										
Blank (1GJ0119-BLK1)			Prepared: 10/03/23 10:34 Analyzed: 10/09/23 16:03							
N-Nitrosodimethylamine	<8	8	ug/L							
Methyl Methanesulfonate	<8	8	ug/L							
N-Nitrosodiethylamine	<8	8	ug/L							
N-Nitrosomethylethylamine	<8	8	ug/L							
Ethyl Methanesulfonate	<8	8	ug/L							
Phenol	<8	8	ug/L							
Bis(2-Chloroethyl) Ether	<8	8	ug/L							
2-Chlorophenol	<8	8	ug/L							
Benzyl Alcohol	<8	8	ug/L							
2-Methylphenol (o-Cresol)	<8	8	ug/L							
Bis[2-Chloroisopropyl]ether	<8	8	ug/L							
n-Nitroso-di-n-propylamine	<8	8	ug/L							
N-Nitrosopyrrolidine	<8	8	ug/L							
Acetophenone	<8	8	ug/L							
o-Toluidine	<8	8	ug/L							
(3 & 4)-Methylphenol	<8	8	ug/L							
Hexachloroethane	<8	8	ug/L							
Nitrobenzene	<8	8	ug/L							
N-Nitrosopiperidine	<8	8	ug/L							
Isophorone	<8	8	ug/L							
2-Nitrophenol	<8	8	ug/L							
2,4-Dimethylphenol	<8	8	ug/L							
Bis (2-Chloroethoxy) Methane	<8	8	ug/L							
2,4-Dichlorophenol	<8	8	ug/L							
Naphthalene	<8	8	ug/L							
4-Chloroaniline	<8	8	ug/L							
2,6-Dichlorophenol	<8	8	ug/L							
Hexachloropropene	<8	8	ug/L							
Hexachlorobutadiene	<8	8	ug/L							
N-Nitrosodi-n-butylamine	<8	8	ug/L							
1,4-Phenylenediamine	<8	8	ug/L							
4-Chloro-3-methylphenol	<8	8	ug/L							
2-Methylnaphthalene	<8	8	ug/L							
Isosafrole	<8	8	ug/L							
1,2,4,5-Tetrachlorobenzene	<8	8	ug/L							

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ0119 - 3520C BNA Cont Liq - EPA 8270C										
Blank (1GJ0119-BLK1)			Prepared: 10/03/23 10:34 Analyzed: 10/09/23 16:03							
Hexachlorocyclopentadiene	<8	8	ug/L							
2,4,6-Trichlorophenol	<8	8	ug/L							
2,4,5-Trichlorophenol	<8	8	ug/L							
Safrole	<8	8	ug/L							
2-Chloronaphthalene	<8	8	ug/L							
2-Nitroaniline	<8	8	ug/L							
1,4-Naphthoquinone	<8	8	ug/L							
Dimethylphthalate	<8	8	ug/L							
1,3-Dinitrobenzene	<8	8	ug/L							
1,2-Dinitrobenzene	<8	8	ug/L							
2,6-Dinitrotoluene	<8	8	ug/L							
Acenaphthylene	<8	8	ug/L							
3-Nitroaniline	<8	8	ug/L							
Acenaphthene	<8	8	ug/L							
2,4-Dinitrophenol	<8	8	ug/L							
4-Nitrophenol	<8	8	ug/L							
Dibenzofuran	<8	8	ug/L							
2,4-Dinitrotoluene	<8	8	ug/L							
2,3,4,6-Tetrachlorophenol	<8	8	ug/L							
Pentachlorobenzene	<8	8	ug/L							
1-Naphthylamine	<8	8	ug/L							
2-Naphthylamine	<8	8	ug/L							
Diethyl Phthalate	<8	8	ug/L							
Fluorene	<8	8	ug/L							
4-Chlorophenyl Phenyl Ether	<8	8	ug/L							
4-Nitroaniline	<8	8	ug/L							
5-Nitro-o-toluidine	<8	8	ug/L							
4,6-Dinitro-2-methylphenol	<8	8	ug/L							
N-Nitrosodiphenylamine	<8	8	ug/L							
Diphenylamine	<8	8	ug/L							
Azobenzene	<8	8	ug/L							
Diallate	<8	8	ug/L							
1,3,5-Trinitrobenzene	<8	8	ug/L							
Phenacetin	<8	8	ug/L							
4-Bromophenyl Phenyl Ether	<8	8	ug/L							
4-Aminobiphenyl	<8	8	ug/L							
Pentachlorophenol	<8	8	ug/L							
Pronamide	<8	8	ug/L							
Pentachloronitrobenzene (PCNB)	<8	8	ug/L							
Phenanthrene	<8	8	ug/L							
Anthracene	<8	8	ug/L							
Di-n-butyl Phthalate	<8	8	ug/L							

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ0119 - 3520C BNA Cont Liq - EPA 8270C										
Blank (1GJ0119-BLK1)			Prepared: 10/03/23 10:34 Analyzed: 10/09/23 16:03							
Methapyrilene	<8	8	ug/L							
Fluoranthene	<8	8	ug/L							
Isodrin	<8	8	ug/L							
Chlorobenzilate	<8	8	ug/L							
Pyrene	<8	8	ug/L							
p-(Dimethylamino)azobenzene	<8	8	ug/L							
3,3-Dimethylbenzidine	<8	8	ug/L							
Butyl Benzyl Phthalate	<8	8	ug/L							
Benzo(a)anthracene	<8	8	ug/L							
Chrysene	<8	8	ug/L							
Bis(2-Ethylhexyl) Phthalate	<6	6	ug/L							
Kepone	<8	8	ug/L							
3,3´-Dichlorobenzidine	<8	8	ug/L							
2-Acetylaminofluorene	<8	8	ug/L							
Di-n-octyl Phthalate	<8	8	ug/L							
Benzo(b)Fluoranthene	<8	8	ug/L							
7,12-Dimethylbenz [a] anthracene	<8	8	ug/L							
Benzo(k)Fluoranthene	<8	8	ug/L							
Benzo(a)Pyrene	<8	8	ug/L							
3-Methylcholanthrene	<8	8	ug/L							
Dibenzo(a,h)anthracene	<8	8	ug/L							
Indeno(1,2,3-cd)Pyrene	<8	8	ug/L							
Benzo(g,h,i)perylene	<8	8	ug/L							
Surrogate: 2-Fluorophenol	*35.4*		ug/L	*60.6*		*58.4*	*24-136*			
Surrogate: Phenol-d6	*34.3*		ug/L	*61.9*		*55.5*	*15-140*			
Surrogate: Nitrobenzene-d5	*46.2*		ug/L	*62.8*		*73.5*	*29-130*			
Surrogate: 2-Fluorobiphenyl	*39.9*		ug/L	*61.0*		*65.4*	*23-113*			
Surrogate: 2,4,6-Tribromophenol	*44.0*		ug/L	*62.2*		*70.7*	*15-139*			
Surrogate: Terphenyl-dl4	*68.0*		ug/L	*65.1*		*104*	*27-141*			
LCS (1GJ0119-BS1)			Prepared: 10/03/23 10:34 Analyzed: 10/09/23 16:28							
N-Nitrosodimethylamine	35.5	8	ug/L	41.7		85.3	36-138			
Methyl Methanesulfonate	33.4	8	ug/L	50.0		66.7	22-114			
N-Nitrosodiethylamine	37.8	8	ug/L	50.0		75.6	52-114			
N-Nitrosomethylethylamine	43.1	8	ug/L	50.0		86.2	36-120			
Ethyl Methanesulfonate	36.4	8	ug/L	50.0		72.9	46-110			
Phenol	35.9	8	ug/L	41.7		86.1	50-112			
Bis(2-Chloroethyl) Ether	44.0	8	ug/L	41.7		106	39-151			
2-Chlorophenol	34.6	8	ug/L	41.7		82.9	56-116			
Benzyl Alcohol	40.6	8	ug/L	41.7		97.4	13-158			
2-Methylphenol (o-Cresol)	35.8	8	ug/L	41.7		85.8	53-131			
Bis[2-Chloroisopropyl]ether	32.9	8	ug/L	41.7		79.0	50-121			
n-Nitroso-di-n-propylamine	39.1	8	ug/L	41.7		93.8	50-138			

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CERTIFICATE OF ANALYSIS

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Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ0119 - 3520C BNA Cont Liq - EPA 8270C										
LCS (1GJ0119-BS1)			Prepared: 10/03/23 10:34 Analyzed: 10/09/23 16:28							
N-Nitrosopyrrolidine	41.8	8	ug/L	50.0		83.5	31-118			
Acetophenone	40.6	8	ug/L	50.0		81.3	45-104			
o-Toluidine	<8	8	ug/L	50.0		14.9	10-163			
(3 & 4)-Methylphenol	39.2	8	ug/L	41.7		94.1	30-164			
Hexachloroethane	23.4	8	ug/L	41.7		56.3	10-110			
Nitrobenzene	36.0	8	ug/L	41.7		86.4	47-134			
N-Nitrosopiperidine	38.8	8	ug/L	50.0		77.6	51-122			
Isophorone	39.5	8	ug/L	41.7		94.8	54-128			
2-Nitrophenol	35.7	8	ug/L	41.7		85.6	54-117			
2,4-Dimethylphenol	38.4	8	ug/L	41.7		92.2	52-118			
Bis (2-Chloroethoxy) Methane	35.5	8	ug/L	41.7		85.3	13-132			
2,4-Dichlorophenol	38.7	8	ug/L	41.7		93.0	58-114			
Naphthalene	30.5	8	ug/L	41.7		73.2	37-116			
4-Chloroaniline	<8	8	ug/L	41.7		12.0	10-198			
2,6-Dichlorophenol	49.7	8	ug/L	50.0		99.4	52-129			
Hexachloropropene	24.5	8	ug/L	50.0		49.0	14-110			
Hexachlorobutadiene	26.1	8	ug/L	41.7		62.7	14-110			
N-Nitrosodi-n-butylamine	39.4	8	ug/L	50.0		78.8	40-135			
4-Chloro-3-methylphenol	44.8	8	ug/L	41.7		107	57-136			
2-Methylnaphthalene	35.1	8	ug/L	41.7		84.2	44-111			
Isosafrole	40.5	8	ug/L	50.0		80.9	49-107			
1,2,4,5-Tetrachlorobenzene	40.9	8	ug/L	50.0		81.8	42-110			
Hexachlorocyclopentadiene	29.1	8	ug/L	41.7		69.9	11-110			
2,4,6-Trichlorophenol	40.1	8	ug/L	41.7		96.3	55-120			
2,4,5-Trichlorophenol	40.9	8	ug/L	41.7		98.1	55-121			
Safrole	43.9	8	ug/L	50.0		87.8	40-118			
2-Chloronaphthalene	49.0	8	ug/L	41.7		118	47-127			
2-Nitroaniline	41.2	8	ug/L	41.7		98.9	36-143			
1,4-Naphthoquinone	51.3	8	ug/L	50.0		103	43-152			
Dimethylphthalate	41.5	8	ug/L	41.7		99.6	59-128			
1,3-Dinitrobenzene	42.6	8	ug/L	41.7		102	63-125			
1,2-Dinitrobenzene	41.7	8	ug/L	41.7		100	63-123			
2,6-Dinitrotoluene	40.5	8	ug/L	41.7		97.2	60-127			
Acenaphthylene	37.4	8	ug/L	41.7		89.9	49-113			
3-Nitroaniline	<8	8	ug/L	41.7		15.6	10-162			
Acenaphthene	38.8	8	ug/L	41.7		93.1	50-119			
2,4-Dinitrophenol	46.8	8	ug/L	41.7		112	27-157			
4-Nitrophenol	42.9	8	ug/L	41.7		103	49-154			
Dibenzofuran	40.0	8	ug/L	41.7		96.0	56-121			
2,4-Dinitrotoluene	45.3	8	ug/L	41.7		109	53-138			
2,3,4,6-Tetrachlorophenol	44.8	8	ug/L	41.7		108	47-132			
Pentachlorobenzene	49.6	8	ug/L	50.0		99.1	41-125			

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ0119 - 3520C BNA Cont Liq - EPA 8270C										
LCS (1GJ0119-BS1)			Prepared: 10/03/23 10:34 Analyzed: 10/09/23 16:28							
Diethyl Phthalate	41.4	8	ug/L	41.7		99.3	53-138			
Fluorene	41.2	8	ug/L	41.7		98.8	54-125			
4-Chlorophenyl Phenyl Ether	40.0	8	ug/L	41.7		96.0	51-122			
4-Nitroaniline	27.1	8	ug/L	41.7		65.1	10-136			
5-Nitro-o-toluidine	17.2	8	ug/L	50.0		34.3	10-145			
4,6-Dinitro-2-methylphenol	45.8	8	ug/L	41.7		110	49-137			
Diphenylamine	39.0	8	ug/L	41.7		93.5	35-151			
Azobenzene	40.4	8	ug/L	41.7		96.9	16-156			
Diallate	56.7	8	ug/L	50.0		113	54-132			
1,3,5-Trinitrobenzene	65.9	8	ug/L	50.0		132	57-173			
Phenacetin	49.3	8	ug/L	50.0		98.6	55-121			
4-Bromophenyl Phenyl Ether	41.7	8	ug/L	41.7		100	53-122			
Pentachlorophenol	49.0	8	ug/L	41.7		118	18-152			
Pronamide	51.9	8	ug/L	50.0		104	42-122			
Pentachloronitrobenzene (PCNB)	57.6	8	ug/L	50.0		115	50-128			
Phenanthrene	42.0	8	ug/L	41.7		101	59-131			
Anthracene	41.4	8	ug/L	41.7		99.3	59-127			
Di-n-butyl Phthalate	42.3	8	ug/L	41.7		101	64-148			
Fluoranthene	41.8	8	ug/L	41.7		100	62-132			
Isodrin	48.8	8	ug/L	50.0		97.7	46-130			
Chlorobenzilate	51.2	8	ug/L	50.0		102	48-150			
Pyrene	42.6	8	ug/L	41.7		102	58-135			
p-(Dimethylamino)azobenzene	35.6	8	ug/L	50.0		71.3	28-146			
Butyl Benzyl Phthalate	42.5	8	ug/L	41.7		102	52-150			
Benzo(a)anthracene	41.5	8	ug/L	41.7		99.6	58-131			
Chrysene	41.7	8	ug/L	41.7		100	59-131			
Bis(2-Ethylhexyl) Phthalate	40.2	6	ug/L	41.7		96.4	33-184			
Kepone	38.1	8	ug/L	50.0		76.2	10-134			
2-Acetylaminofluorene	54.2	8	ug/L	50.0		108	47-166			
Di-n-octyl Phthalate	45.6	8	ug/L	41.7		109	48-162			
Benzo(b)Fluoranthene	47.1	8	ug/L	41.7		113	50-146			
7,12-Dimethylbenz [a] anthracene	50.5	8	ug/L	50.0		101	22-155			
Benzo(k)Fluoranthene	43.8	8	ug/L	41.7		105	54-144			
Benzo(a)Pyrene	42.4	8	ug/L	41.7		102	39-148			
3-Methylcholanthrene	43.7	8	ug/L	50.0		87.4	34-118			
Dibenzo(a,h)anthracene	43.2	8	ug/L	41.7		104	46-153			
Indeno(1,2,3-cd)Pyrene	42.9	8	ug/L	41.7		103	48-152			
Benzo(g,h,i)perylene	42.7	8	ug/L	41.7		102	47-161			
Surrogate: 2-Fluorophenol	*48.7*		ug/L	*60.6*		*80.4*	*24-136*			
Surrogate: Phenol-d6	*52.8*		ug/L	*61.9*		*85.3*	*15-140*			
Surrogate: Nitrobenzene-d5	*53.4*		ug/L	*62.8*		*84.9*	*38-115*			
Surrogate: 2-Fluorobiphenyl	*58.1*		ug/L	*61.0*		*95.2*	*33-110*			

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ0119 - 3520C BNA Cont Liq - EPA 8270C										
LCS (1GJ0119-BS1)	Prepared: 10/03/23 10:34 Analyzed: 10/09/23 16:28									
Surrogate: 2,4,6-Tribromophenol	*68.9*		ug/L	*62.2*		*111*	*15-139*			
Surrogate: Terphenyl-dl4	*77.9*		ug/L	*65.1*		*120*	*30-142*			
LCS Dup (1GJ0119-BSD1)	Prepared: 10/03/23 10:34 Analyzed: 10/09/23 16:52									
N-Nitrosodimethylamine	30.8	8	ug/L	41.7		73.9	36-138	14.3	30	
Methyl Methanesulfonate	30.0	8	ug/L	50.0		60.0	22-114	10.6	23	
N-Nitrosodiethylamine	33.9	8	ug/L	50.0		67.9	52-114	10.8	18	
N-Nitrosomethylethylamine	37.2	8	ug/L	50.0		74.4	36-120	14.8	22	
Ethyl Methanesulfonate	31.8	8	ug/L	50.0		63.7	46-110	13.5	24	
Phenol	15.1	8	ug/L	41.7		36.2	50-112	81.6	28	QS-03
Bis(2-Chloroethyl) Ether	40.5	8	ug/L	41.7		97.2	39-151	8.22	30	
2-Chlorophenol	11.2	8	ug/L	41.7		26.8	56-116	102	22	QS-03
Benzyl Alcohol	35.2	8	ug/L	41.7		84.4	13-158	14.3	30	
2-Methylphenol (o-Cresol)	30.8	8	ug/L	41.7		73.8	53-131	15.1	25	
Bis[2-Chloroisopropyl]ether	30.0	8	ug/L	41.7		72.0	50-121	9.28	25	
n-Nitroso-di-n-propylamine	34.7	8	ug/L	41.7		83.2	50-138	11.9	30	
N-Nitrosopyrrolidine	36.4	8	ug/L	50.0		72.7	31-118	13.8	30	
Acetophenone	35.2	8	ug/L	50.0		70.5	45-104	14.3	30	
o-Toluidine	<8	8	ug/L	50.0		11.9	10-163	22.0	30	
(3 & 4)-Methylphenol	31.4	8	ug/L	41.7		75.4	30-164	22.0	30	
Hexachloroethane	20.3	8	ug/L	41.7		48.6	10-110	14.6	37	
Nitrobenzene	31.4	8	ug/L	41.7		75.5	47-134	13.5	28	
N-Nitrosopiperidine	35.1	8	ug/L	50.0		70.3	51-122	9.87	30	
Isophorone	34.2	8	ug/L	41.7		82.2	54-128	14.3	22	
2-Nitrophenol	<8	8	ug/L	41.7		9.60	54-117	160	21	QS-03
2,4-Dimethylphenol	33.2	8	ug/L	41.7		79.7	52-118	14.5	23	
Bis (2-Chloroethoxy) Methane	31.8	8	ug/L	41.7		76.3	13-132	11.2	30	
2,4-Dichlorophenol	14.9	8	ug/L	41.7		35.9	58-114	88.7	20	QS-03
Naphthalene	27.1	8	ug/L	41.7		64.9	37-116	12.0	17	
4-Chloroaniline	<8	8	ug/L	41.7		17.1	10-198	35.0	30	QR-02
2,6-Dichlorophenol	37.0	8	ug/L	50.0		74.1	52-129	29.2	16	QR-02
Hexachloropropene	18.7	8	ug/L	50.0		37.4	14-110	26.7	29	
Hexachlorobutadiene	23.0	8	ug/L	41.7		55.3	14-110	12.5	29	
N-Nitrosodi-n-butylamine	34.3	8	ug/L	50.0		68.6	40-135	13.8	23	
4-Chloro-3-methylphenol	32.6	8	ug/L	41.7		78.3	57-136	31.3	18	QR-02
2-Methylnaphthalene	30.4	8	ug/L	41.7		72.8	44-111	14.4	20	
Isosafrole	35.1	8	ug/L	50.0		70.2	49-107	14.2	12	QR-02
1,2,4,5-Tetrachlorobenzene	34.9	8	ug/L	50.0		69.7	42-110	16.0	30	
Hexachlorocyclopentadiene	24.0	8	ug/L	41.7		57.7	11-110	19.2	29	
2,4,6-Trichlorophenol	29.1	8	ug/L	41.7		69.8	55-120	31.9	15	QR-02
2,4,5-Trichlorophenol	21.4	8	ug/L	41.7		51.2	55-121	62.8	16	QS-03
Safrole	37.8	8	ug/L	50.0		75.6	40-118	15.0	30	

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ0119 - 3520C BNA Cont Liq - EPA 8270C										
LCS Dup (1GJ0119-BSD1)			Prepared: 10/03/23 10:34 Analyzed: 10/09/23 16:52							
2-Chloronaphthalene	43.7	8	ug/L	41.7		105	47-127	11.4	17	
2-Nitroaniline	36.2	8	ug/L	41.7		86.8	36-143	13.1	30	
1,4-Naphthoquinone	41.8	8	ug/L	50.0		83.7	43-152	20.3	30	
Dimethylphthalate	37.6	8	ug/L	41.7		90.3	59-128	9.83	15	
1,3-Dinitrobenzene	37.0	8	ug/L	41.7		88.7	63-125	14.2	14	QR-02
1,2-Dinitrobenzene	37.2	8	ug/L	41.7		89.3	63-123	11.5	18	
2,6-Dinitrotoluene	36.8	8	ug/L	41.7		88.3	60-127	9.60	13	
Acenaphthylene	32.8	8	ug/L	41.7		78.8	49-113	13.2	23	
3-Nitroaniline	16.9	8	ug/L	41.7		40.5	10-162	88.8	30	QR-02
Acenaphthene	33.4	8	ug/L	41.7		80.3	50-119	14.8	16	
2,4-Dinitrophenol	<8	8	ug/L	41.7		9.29	27-157	169	23	QS-03
4-Nitrophenol	<8	8	ug/L	41.7		9.60	49-154	166	28	QS-03
Dibenzofuran	35.3	8	ug/L	41.7		84.8	56-121	12.4	18	
2,4-Dinitrotoluene	40.5	8	ug/L	41.7		97.2	53-138	11.1	18	
2,3,4,6-Tetrachlorophenol	29.5	8	ug/L	41.7		70.8	47-132	41.2	29	QR-02
Pentachlorobenzene	42.7	8	ug/L	50.0		85.4	41-125	14.9	22	
Diethyl Phthalate	38.2	8	ug/L	41.7		91.6	53-138	8.07	18	
Fluorene	36.3	8	ug/L	41.7		87.1	54-125	12.6	14	
4-Chlorophenyl Phenyl Ether	36.5	8	ug/L	41.7		87.6	51-122	9.23	15	
4-Nitroaniline	31.2	8	ug/L	41.7		75.0	10-136	14.1	30	
5-Nitro-o-toluidine	32.0	8	ug/L	50.0		63.9	10-145	60.3	30	QR-02
4,6-Dinitro-2-methylphenol	<8	8	ug/L	41.7		14.5	49-137	153	16	QS-03
Diphenylamine	34.6	8	ug/L	41.7		83.2	35-151	11.7	30	
Azobenzene	36.4	8	ug/L	41.7		87.3	16-156	10.5	30	
Diallate	49.6	8	ug/L	50.0		99.2	54-132	13.4	25	
1,3,5-Trinitrobenzene	54.1	8	ug/L	50.0		108	57-173	19.6	30	
Phenacetin	43.4	8	ug/L	50.0		86.9	55-121	12.7	30	
4-Bromophenyl Phenyl Ether	36.8	8	ug/L	41.7		88.3	53-122	12.5	16	
Pentachlorophenol	28.5	8	ug/L	41.7		68.4	18-152	52.8	30	QR-02
Pronamide	45.0	8	ug/L	50.0		90.1	42-122	14.2	30	
Pentachloronitrobenzene (PCNB)	48.8	8	ug/L	50.0		97.5	50-128	16.6	18	
Phenanthrene	36.6	8	ug/L	41.7		87.7	59-131	13.9	16	
Anthracene	36.7	8	ug/L	41.7		88.0	59-127	12.1	16	
Di-n-butyl Phthalate	37.9	8	ug/L	41.7		90.9	64-148	11.0	30	
Fluoranthene	37.1	8	ug/L	41.7		89.0	62-132	11.8	16	
Isodrin	42.5	8	ug/L	50.0		85.0	46-130	13.9	29	
Chlorobenzilate	44.1	8	ug/L	50.0		88.2	48-150	14.9	30	
Pyrene	38.0	8	ug/L	41.7		91.1	58-135	11.6	18	
p-(Dimethylamino)azobenzene	35.7	8	ug/L	50.0		71.3	28-146	0.0561	30	
Butyl Benzyl Phthalate	38.4	8	ug/L	41.7		92.1	52-150	10.2	30	
Benzo(a)anthracene	37.0	8	ug/L	41.7		88.7	58-131	11.5	30	
Chrysene	37.3	8	ug/L	41.7		89.5	59-131	11.2	30	

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ0119 - 3520C BNA Cont Liq - EPA 8270C										
LCS Dup (1GJ0119-BSD1)			Prepared: 10/03/23 10:34 Analyzed: 10/09/23 16:52							
Bis(2-Ethylhexyl) Phthalate	38.0	6	ug/L	41.7		91.2	33-184	5.55	30	
Kepone	21.0	8	ug/L	50.0		42.0	10-134	57.8	30	QR-02
2-Acetylaminofluorene	47.2	8	ug/L	50.0		94.4	47-166	13.8	30	
Di-n-octyl Phthalate	41.1	8	ug/L	41.7		98.7	48-162	10.3	30	
Benzo(b)Fluoranthene	42.2	8	ug/L	41.7		101	50-146	11.1	30	
7,12-Dimethylbenz [a] anthracene	45.2	8	ug/L	50.0		90.5	22-155	10.9	30	
Benzo(k)Fluoranthene	39.3	8	ug/L	41.7		94.3	54-144	10.7	30	
Benzo(a)Pyrene	37.9	8	ug/L	41.7		90.9	39-148	11.3	30	
3-Methylcholanthrene	37.2	8	ug/L	50.0		74.5	34-118	15.9	30	
Dibenzo(a,h)anthracene	38.0	8	ug/L	41.7		91.1	46-153	12.9	30	
Indeno(1,2,3-cd)Pyrene	38.3	8	ug/L	41.7		91.9	48-152	11.5	30	
Benzo(g,h,i)perylene	37.4	8	ug/L	41.7		89.7	47-161	13.2	30	
Surrogate: 2-Fluorophenol	*7.20*		ug/L	*60.6*		*11.9*	*24-136*			*S-AC*
Surrogate: Phenol-d6	*21.7*		ug/L	*61.9*		*35.0*	*15-140*			
Surrogate: Nitrobenzene-d5	*46.5*		ug/L	*62.8*		*74.0*	*38-115*			
Surrogate: 2-Fluorobiphenyl	*49.5*		ug/L	*61.0*		*81.2*	*33-110*			
Surrogate: 2,4,6-Tribromophenol	*56.0*		ug/L	*62.2*		*90.0*	*15-139*			
Surrogate: Terphenyl-dl4	*68.2*		ug/L	*65.1*		*105*	*30-142*			

Determination of Organophosphorus Insecticides	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ0228 - 3510C NP/OC Sep Fnl - EPA 8141										
Blank (1GJ0228-BLK1)			Prepared: 10/04/23 12:03 Analyzed: 10/09/23 15:15							
O,O,O-Triethyl phosphorothioate	<0.4	0.4	ug/L							
Thionazin	<0.4	0.4	ug/L							
Phorate	<0.4	0.4	ug/L							
Dimethoate	<0.4	0.4	ug/L							
Disulfoton	<0.4	0.4	ug/L							
Methyl Parathion	<0.4	0.4	ug/L							
Parathion	<0.4	0.4	ug/L							
Famphur	<0.4	0.4	ug/L							
Surrogate: 2-Nitro-m-xylene	*15.2*		ug/L	*8.34*		*182*	*38-122*			*S-07*
LCS (1GJ0228-BS1)			Prepared: 10/04/23 12:03 Analyzed: 10/09/23 17:56							
O,O,O-Triethyl phosphorothioate	2.44	0.4	ug/L	4.02		60.5	42-115			
Thionazin	3.60	0.4	ug/L	4.03		89.2	28-118			
Phorate	3.26	0.4	ug/L	4.03		80.9	18-159			
Dimethoate	3.32	0.4	ug/L	4.03		82.3	43-155			
Disulfoton	4.53	0.4	ug/L	4.03		112	37-126			
Methyl Parathion	3.64	0.4	ug/L	4.04		90.1	28-145			

Determination of Organophosphorus Insecticides	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ0228 - 3510C NP/OC Sep Fnl - EPA 8141										
LCS (1GJ0228-BS1)			Prepared: 10/04/23 12:03 Analyzed: 10/09/23 17:56							
Parathion	3.68	0.4	ug/L	4.00		91.9	52-121			
Famphur	4.22	0.4	ug/L	4.02		105	44-144			
Surrogate: 2-Nitro-m-xylene	*6.83*		ug/L	*8.34*		*81.9*	*38-122*			
LCS Dup (1GJ0228-BSD1)			Prepared: 10/04/23 12:03 Analyzed: 10/09/23 18:50							
O,O,O-Triethyl phosphorothioate	2.70	0.4	ug/L	4.02		67.2	42-115	10.5	30	
Thionazin	3.44	0.4	ug/L	4.03		85.3	28-118	4.55	30	
Phorate	3.41	0.4	ug/L	4.03		84.5	18-159	4.34	30	
Dimethoate	3.37	0.4	ug/L	4.03		83.7	43-155	1.65	22	
Disulfoton	4.38	0.4	ug/L	4.03		109	37-126	3.37	30	
Methyl Parathion	3.72	0.4	ug/L	4.04		92.2	28-145	2.31	28	
Parathion	3.69	0.4	ug/L	4.00		92.2	52-121	0.407	26	
Famphur	4.08	0.4	ug/L	4.02		102	44-144	3.13	28	
Surrogate: 2-Nitro-m-xylene	*7.59*		ug/L	*8.34*		*91.0*	*38-122*			

Determination of Chlorinated Phenoxy Herbicides	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ0235 - EPA 8151A - EPA 8151A										
Blank (1GJ0235-BLK1)			Prepared: 10/04/23 12:40 Analyzed: 10/10/23 12:23							
2,4-D	<2.0	2.0	ug/L							
2,4,5-TP (Silvex)	<0.5	0.5	ug/L							
2,4,5-T	<0.5	0.5	ug/L							
Dinoseb	<0.5	0.5	ug/L							
Surrogate: 2,5-Dichlorobenzoic Acid	*1.60*		ug/L	*2.02*		*79.0*	*31-116*			
LCS (1GJ0235-BS1)			Prepared: 10/04/23 12:40 Analyzed: 10/10/23 14:34							
2,4-D	<2.0	2.0	ug/L	1.15		83.5	16-161			
2,4,5-TP (Silvex)	0.50	0.5	ug/L	0.575		87.0	35-141			
2,4,5-T	<0.5	0.5	ug/L	0.575		74.8	54-149			
Dinoseb	0.96	0.5	ug/L	1.15		83.9	10-133			
Surrogate: 2,5-Dichlorobenzoic Acid	*1.48*		ug/L	*2.02*		*73.0*	*31-116*			
LCS Dup (1GJ0235-BSD1)			Prepared: 10/04/23 12:40 Analyzed: 10/10/23 15:06							
2,4-D	<2.0	2.0	ug/L	1.15		99.1	16-161	17.1	30	
2,4,5-TP (Silvex)	0.58	0.5	ug/L	0.575		102	35-141	15.7	30	
2,4,5-T	<0.5	0.5	ug/L	0.575		73.0	54-149	2.35	30	
Dinoseb	1.08	0.5	ug/L	1.15		93.5	10-133	10.8	30	
Surrogate: 2,5-Dichlorobenzoic Acid	*1.42*		ug/L	*2.02*		*70.0*	*31-116*			

Determination of Organochlorine Insecticides & Metabolites	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ0225 - 3510C NP/OC Sep Fnl - EPA 8081										
Blank (1GJ0225-BLK1)			Prepared: 10/04/23 12:00 Analyzed: 10/08/23 17:48							
Alpha-BHC	<0.05	0.05	ug/L							
Gamma-BHC [Lindane]	<0.05	0.05	ug/L							
Beta-BHC	<0.05	0.05	ug/L							
Heptachlor	<0.05	0.05	ug/L							
Delta-BHC	<0.05	0.05	ug/L							
Aldrin	<0.05	0.05	ug/L							
Heptachlor Epoxide	<0.05	0.05	ug/L							
Endosulfan I	<0.05	0.05	ug/L							
4,4`-DDE	<0.05	0.05	ug/L							
Dieldrin	<0.05	0.05	ug/L							
Endrin	<0.05	0.05	ug/L							
4,4`-DDD	<0.05	0.05	ug/L							
Endosulfan II	<0.05	0.05	ug/L							
4,4`-DDT	<0.05	0.05	ug/L							
Endrin Aldehyde	<0.05	0.05	ug/L							
Endosulfan Sulfate	<0.05	0.05	ug/L							
Methoxychlor	<0.05	0.05	ug/L							
Chlordane	<0.10	0.10	ug/L							
Toxaphene	<0.20	0.20	ug/L							
Hexachlorobenzene	<0.05	0.05	ug/L							
Surrogate: Tetrachloro-m-xylene	*0.385*		ug/L	*0.600*		*64.1*	*10-121*			
LCS (1GJ0225-BS1)			Prepared: 10/04/23 12:00 Analyzed: 10/08/23 18:05							
Alpha-BHC	0.277	0.05	ug/L	0.250		111	33-123			
Gamma-BHC [Lindane]	0.300	0.05	ug/L	0.250		120	34-120			
Beta-BHC	0.293	0.05	ug/L	0.250		117	33-125			
Heptachlor	0.318	0.05	ug/L	0.250		127	32-117			QS-02
Delta-BHC	0.329	0.05	ug/L	0.250		131	24-140			
Aldrin	0.282	0.05	ug/L	0.250		113	29-122			
Heptachlor Epoxide	0.313	0.05	ug/L	0.250		125	37-137			
Endosulfan I	0.321	0.05	ug/L	0.250		128	27-141			
4,4`-DDE	0.343	0.05	ug/L	0.250		137	38-147			
Dieldrin	0.314	0.05	ug/L	0.250		125	32-137			
Endrin	0.344	0.05	ug/L	0.250		137	25-142			
4,4`-DDD	0.350	0.05	ug/L	0.250		140	43-146			
Endosulfan II	0.336	0.05	ug/L	0.250		135	36-140			
4,4`-DDT	0.345	0.05	ug/L	0.250		138	39-140			
Endrin Aldehyde	0.285	0.05	ug/L	0.250		114	17-150			
Endosulfan Sulfate	0.344	0.05	ug/L	0.250		138	41-135			QS-02
Methoxychlor	0.344	0.05	ug/L	0.250		138	40-148			
Surrogate: Tetrachloro-m-xylene	*0.590*		ug/L	*0.600*		*98.3*	*10-121*			

Determination of Organochlorine Insecticides & Metabolites	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ0225 - 3510C NP/OC Sep Fnl - EPA 8081										
LCS Dup (1GJ0225-BSD1)			Prepared: 10/04/23 12:00 Analyzed: 10/08/23 18:21							
Alpha-BHC	0.310	0.05	ug/L	0.250		124	33-123	11.1	30	QS-02
Gamma-BHC [Lindane]	0.329	0.05	ug/L	0.250		132	34-120	9.29	30	QS-02
Beta-BHC	0.320	0.05	ug/L	0.250		128	33-125	8.63	30	QS-02
Heptachlor	0.348	0.05	ug/L	0.250		139	32-117	8.99	30	QS-02
Delta-BHC	0.355	0.05	ug/L	0.250		142	24-140	7.58	30	QS-02
Aldrin	0.300	0.05	ug/L	0.250		120	29-122	6.33	30	
Heptachlor Epoxide	0.336	0.05	ug/L	0.250		135	37-137	7.33	30	
Endosulfan I	0.342	0.05	ug/L	0.250		137	27-141	6.33	30	
4,4`-DDE	0.306	0.05	ug/L	0.250		122	38-147	11.5	30	
Dieldrin	0.357	0.05	ug/L	0.250		143	32-137	12.8	30	QS-02
Endrin	0.363	0.05	ug/L	0.250		145	25-142	5.49	30	QS-02
4,4`-DDD	0.348	0.05	ug/L	0.250		139	43-146	0.639	30	
Endosulfan II	0.341	0.05	ug/L	0.250		136	36-140	1.33	30	
4,4`-DDT	0.391	0.05	ug/L	0.250		157	39-140	12.5	30	QS-02
Endrin Aldehyde	0.203	0.05	ug/L	0.250		81.1	17-150	33.9	30	QR-02
Endosulfan Sulfate	0.357	0.05	ug/L	0.250		143	41-135	3.65	30	QS-02
Methoxychlor	0.382	0.05	ug/L	0.250		153	40-148	10.5	30	QS-02
Surrogate: Tetrachloro-m-xylene	*0.604*		ug/L	*0.600*		*101*	*10-121*			

Determination of Polychlorinated Biphenyls (PCB)	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ0227 - 3510C NP/OC Sep Fnl - EPA 8082										
Blank (1GJ0227-BLK1)			Prepared: 10/04/23 12:02 Analyzed: 10/08/23 17:48							
Arochlor 1016	<0.20	0.20	ug/L							
Arochlor 1221	<0.20	0.20	ug/L							
Arochlor 1232	<0.20	0.20	ug/L							
Arochlor 1242	<0.20	0.20	ug/L							
Arochlor 1248	<0.20	0.20	ug/L							
Arochlor 1254	<0.20	0.20	ug/L							
Arochlor 1260	<0.20	0.20	ug/L							
Surrogate: Tetrachloro-m-xylene	*0.300*		ug/L	*0.600*		*50.0*	*38-121*			
Surrogate: Decachlorobiphenyl	*0.300*		ug/L	*0.600*		*50.0*	*25-119*			
LCS (1GJ0227-BS1)			Prepared: 10/04/23 12:02 Analyzed: 10/08/23 20:00							
Arochlor 1016	1.930	0.20	ug/L	2.80		68.9	25-126			
Arochlor 1260	2.045	0.20	ug/L	2.80		73.0	29-142			
Surrogate: Tetrachloro-m-xylene	*0.435*		ug/L	*0.600*		*72.5*	*38-121*			
Surrogate: Decachlorobiphenyl	*0.470*		ug/L	*0.600*		*78.3*	*25-119*			

Determination of Polychlorinated Biphenyls (PCB)	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ0227 - 3510C NP/OC Sep Fnl - EPA 8082										
LCS Dup (1GJ0227-BSD1)			Prepared: 10/04/23 12:02 Analyzed: 10/08/23 20:16							
Arochlor 1016	1.825	0.20	ug/L	2.80		65.2	25-126	5.59	30	
Arochlor 1260	2.160	0.20	ug/L	2.80		77.1	29-142	5.47	30	
Surrogate: Tetrachloro-m-xylene	*0.285*		ug/L	*0.600*		*47.5*	*38-121*			
Surrogate: Decachlorobiphenyl	*0.475*		ug/L	*0.600*		*79.2*	*25-119*			

Determination of Conventional Chemistry Parameters	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ0576 - Wet Chem Preparation - 4500CN-E										
Blank (1GJ0576-BLK1)			Prepared: 10/10/23 14:01 Analyzed: 10/11/23 13:58							
Cyanide, total	<0.005	0.005	mg/L							
LCS (1GJ0576-BS1)			Prepared: 10/10/23 14:01 Analyzed: 10/11/23 13:58							
Cyanide, total	0.028	0.005	mg/L	0.0300		94.4	62-110			
Matrix Spike (1GJ0576-MS1)		**Source: 1GJ0294-03**	Prepared: 10/10/23 14:01 Analyzed: 10/11/23 13:58							
Cyanide, total	0.021	0.005	mg/L	0.0300	ND	71.1	50-116			
Matrix Spike Dup (1GJ0576-MSD1)		**Source: 1GJ0294-03**	Prepared: 10/10/23 14:01 Analyzed: 10/11/23 13:58							
Cyanide, total	0.022	0.005	mg/L	0.0300	ND	72.8	50-116	2.42	30	
Batch 1GK0764 - Wet Chem Preparation - EPA 376.2										
Blank (1GK0764-BLK1)			Prepared: 11/14/23 08:20 Analyzed: 11/14/23 17:10							
Sulfide, total	<0.10	0.10	mg/L							
LCS (1GK0764-BS1)			Prepared: 11/14/23 08:20 Analyzed: 11/14/23 17:10							
Sulfide, total	0.173	0.10	mg/L	0.19		90.0	59-110			
Matrix Spike (1GK0764-MS1)		**Source: 1GK0852-02**	Prepared: 11/14/23 08:20 Analyzed: 11/14/23 17:10							
Sulfide, total	<0.10	0.10	mg/L	0.19	ND	38.4	50-150			QM-01
Matrix Spike Dup (1GK0764-MSD1)		**Source: 1GK0852-02**	Prepared: 11/14/23 08:20 Analyzed: 11/14/23 17:10							
Sulfide, total	<0.10	0.10	mg/L	0.19	ND	44.2	50-150	14.0	30	QM-01
Batch 1GK0852 - Wet Chem Preparation - EPA 9010B										
Blank (1GK0852-BLK1)			Prepared: 11/15/23 08:27 Analyzed: 11/16/23 14:24							
Cyanide, total	<0.005	0.005	mg/L							
LCS (1GK0852-BS1)			Prepared: 11/15/23 08:27 Analyzed: 11/16/23 14:24							
Cyanide, total	0.0202	0.005	mg/L	0.0300		67.5	66-136			
Matrix Spike (1GK0852-MS1)		**Source: 1GK0852-02**	Prepared: 11/15/23 08:27 Analyzed: 11/16/23 14:24							
Cyanide, total	0.0235	0.005	mg/L	0.0300	ND	78.5	59-153			
Matrix Spike Dup (1GK0852-MSD1)		**Source: 1GK0852-02**	Prepared: 11/15/23 08:27 Analyzed: 11/16/23 14:24							
Cyanide, total	0.0237	0.005	mg/L	0.0300	ND	79.1	59-153	0.799	30	

Determination of Conventional Chemistry Parameters	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ0378 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1GJ0378-BLK1)			Prepared: 10/06/23 07:50 Analyzed: 10/12/23 16:49							
Antimony, total	<0.0020	0.0020	mg/L							
Arsenic, total	<0.0040	0.0040	mg/L							
Barium, total	<0.0040	0.0040	mg/L							
Beryllium, total	<0.0040	0.0040	mg/L							
Cadmium, total	<0.0008	0.0008	mg/L							
Chromium, total	<0.0080	0.0080	mg/L							
Cobalt, total	<0.0004	0.0004	mg/L							
Copper, total	<0.0040	0.0040	mg/L							
Lead, total	<0.0040	0.0040	mg/L							
Nickel, total	<0.0040	0.0040	mg/L							
Selenium, total	<0.0040	0.0040	mg/L							
Silver, total	<0.0040	0.0040	mg/L							
Thallium, total	<0.0020	0.0020	mg/L							
Vanadium, total	<0.0200	0.0200	mg/L							
Zinc, total	<0.0200	0.0200	mg/L							
LCS (1GJ0378-BS1)			Prepared: 10/06/23 07:50 Analyzed: 10/12/23 16:55							
Antimony, total	0.0998	0.0020	mg/L	0.100		99.8	80-120			
Arsenic, total	0.102	0.0040	mg/L	0.100		102	80-120			
Barium, total	0.109	0.0040	mg/L	0.100		109	80-120			
Beryllium, total	0.100	0.0040	mg/L	0.100		100	80-120			
Cadmium, total	0.101	0.0008	mg/L	0.100		101	80-120			
Chromium, total	0.0976	0.0080	mg/L	0.100		97.6	80-120			
Cobalt, total	0.105	0.0004	mg/L	0.100		105	80-120			
Copper, total	0.115	0.0040	mg/L	0.100		115	80-120			
Lead, total	0.103	0.0040	mg/L	0.100		103	80-120			
Nickel, total	0.105	0.0040	mg/L	0.100		105	80-120			
Selenium, total	0.1025	0.0040	mg/L	0.100		103	80-120			
Silver, total	0.108	0.0040	mg/L	0.100		108	80-120			
Thallium, total	0.0968	0.0020	mg/L	0.100		96.8	80-120			
Vanadium, total	0.0972	0.0200	mg/L	0.100		97.2	80-120			
Zinc, total	0.109	0.0200	mg/L	0.100		109	80-120			
Matrix Spike (1GJ0378-MS1)	**Source: 1GJ0088-01**		Prepared: 10/06/23 07:50 Analyzed: 10/12/23 17:07							
Antimony, total	0.0967	0.0020	mg/L	0.100	0.0044	92.3	75-125			
Arsenic, total	0.125	0.0040	mg/L	0.100	0.0319	93.6	75-125			
Barium, total	0.130	0.0040	mg/L	0.100	0.0218	108	75-125			
Beryllium, total	0.0854	0.0040	mg/L	0.100	0.0020	83.4	75-125			
Cadmium, total	0.0897	0.0008	mg/L	0.100	0.0003	89.4	75-125			
Chromium, total	0.0940	0.0080	mg/L	0.100	0.0018	92.3	75-125			
Cobalt, total	0.128	0.0004	mg/L	0.100	0.0366	91.8	75-125			

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ0378 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Matrix Spike (1GJ0378-MS1)	**Source: 1GJ0088-01**	Prepared: 10/06/23 07:50 Analyzed: 10/12/23 17:07								
Copper, total	0.0837	0.0040	mg/L	0.100	0.0042	79.5	75-125			
Lead, total	0.0980	0.0040	mg/L	0.100	0.0038	94.2	75-125			
Nickel, total	0.159	0.0040	mg/L	0.100	0.0681	90.5	75-125			
Selenium, total	0.0980	0.0040	mg/L	0.100	0.0064	91.6	75-125			
Silver, total	0.0983	0.0040	mg/L	0.100	0.0023	95.9	75-125			
Thallium, total	0.0933	0.0020	mg/L	0.100	0.0005	92.8	75-125			
Vanadium, total	0.0959	0.0200	mg/L	0.100	ND	95.9	75-125			
Zinc, total	0.479	0.0200	mg/L	0.100	0.383	95.8	75-125			
Matrix Spike Dup (1GJ0378-MSD1)	**Source: 1GJ0088-01**	Prepared: 10/06/23 07:50 Analyzed: 10/12/23 17:13								
Antimony, total	0.0942	0.0020	mg/L	0.100	0.0044	89.7	75-125	2.69	20	
Arsenic, total	0.132	0.0040	mg/L	0.100	0.0319	100	75-125	5.07	20	
Barium, total	0.128	0.0040	mg/L	0.100	0.0218	106	75-125	1.47	20	
Beryllium, total	0.0866	0.0040	mg/L	0.100	0.0020	84.7	75-125	1.42	20	
Cadmium, total	0.0903	0.0008	mg/L	0.100	0.0003	89.9	75-125	0.630	20	
Chromium, total	0.0936	0.0080	mg/L	0.100	0.0018	91.9	75-125	0.446	20	
Cobalt, total	0.130	0.0004	mg/L	0.100	0.0366	93.1	75-125	1.04	20	
Copper, total	0.0852	0.0040	mg/L	0.100	0.0042	81.0	75-125	1.70	20	
Lead, total	0.0977	0.0040	mg/L	0.100	0.0038	93.9	75-125	0.285	20	
Nickel, total	0.159	0.0040	mg/L	0.100	0.0681	90.8	75-125	0.243	20	
Selenium, total	0.0980	0.0040	mg/L	0.100	0.0064	91.6	75-125	0.0478	20	
Silver, total	0.0994	0.0040	mg/L	0.100	0.0023	97.1	75-125	1.17	20	
Thallium, total	0.0927	0.0020	mg/L	0.100	0.0005	92.2	75-125	0.629	20	
Vanadium, total	0.0954	0.0200	mg/L	0.100	ND	95.4	75-125	0.570	20	
Zinc, total	0.504	0.0200	mg/L	0.100	0.383	121	75-125	5.18	20	
Post Spike (1GJ0378-PS1)	**Source: 1GJ0088-01**	Prepared: 10/06/23 07:50 Analyzed: 10/12/23 17:19								
Antimony, total	0.101		mg/L	0.0800	0.0044	120	80-120			
Arsenic, total	0.124		mg/L	0.0800	0.0312	116	80-120			
Barium, total	0.120		mg/L	0.0800	0.0213	123	80-120			PS-04
Beryllium, total	0.0866		mg/L	0.0800	0.0019	106	80-120			
Cadmium, total	0.0918		mg/L	0.0800	0.0003	114	80-120			
Chromium, total	0.0934		mg/L	0.0800	0.0017	115	80-120			
Cobalt, total	0.133		mg/L	0.0800	0.0359	121	80-120			PS-04
Copper, total	0.0867		mg/L	0.0800	0.0041	103	80-120			
Lead, total	0.0982		mg/L	0.0800	0.0037	118	80-120			
Nickel, total	0.162		mg/L	0.0800	0.0667	119	80-120			
Selenium, total	0.0961		mg/L	0.0800	0.0063	112	80-120			
Silver, total	0.0975		mg/L	0.0800	0.0023	119	80-120			
Thallium, total	0.0919		mg/L	0.0800	0.0005	114	80-120			
Vanadium, total	0.0955		mg/L	0.0800	0.0019	117	80-120			
Zinc, total	0.466		mg/L	0.0800	0.375	113	80-120			
Batch 1GJ1136 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1GJ1136-BLK1)		Prepared: 10/18/23 15:30 Analyzed: 10/19/23 23:48								

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CERTIFICATE OF ANALYSIS

1GJ0088

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ1136 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1GJ1136-BLK1)			Prepared: 10/18/23 15:30 Analyzed: 10/19/23 23:48							
Copper, total	<0.0040	0.0040	mg/L							
LCS (1GJ1136-BS1)			Prepared: 10/18/23 15:30 Analyzed: 10/19/23 23:54							
Copper, total	0.0977	0.0040	mg/L	0.100		97.7	80-120			
Matrix Spike (1GJ1136-MS1)		**Source: 1GJ1452-01**	Prepared: 10/18/23 15:30 Analyzed: 10/20/23 00:06							
Copper, total	0.0897	0.0040	mg/L	0.100	ND	89.7	75-125			
Matrix Spike Dup (1GJ1136-MSD1)		**Source: 1GJ1452-01**	Prepared: 10/18/23 15:30 Analyzed: 10/20/23 00:12							
Copper, total	0.0899	0.0040	mg/L	0.100	ND	89.9	75-125	0.222	20	
Post Spike (1GJ1136-PS1)		**Source: 1GJ1452-01**	Prepared: 10/18/23 15:30 Analyzed: 10/20/23 00:18							
Copper, total	0.0753		mg/L	0.0800	0.0005	93.6	80-120			
Batch 1GK0835 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1GK0835-BLK1)			Prepared: 11/14/23 16:41 Analyzed: 11/15/23 17:36							
Antimony, total	<0.0020	0.0020	mg/L							
Arsenic, total	<0.0040	0.0040	mg/L							
Barium, total	<0.0040	0.0040	mg/L							
Beryllium, total	<0.0040	0.0040	mg/L							
Cadmium, total	<0.0008	0.0008	mg/L							
Chromium, total	<0.0080	0.0080	mg/L							
Cobalt, total	<0.0004	0.0004	mg/L							
Copper, total	<0.0040	0.0040	mg/L							
Lead, total	<0.0040	0.0040	mg/L							
Nickel, total	<0.0040	0.0040	mg/L							
Selenium, total	<0.0040	0.0040	mg/L							
Silver, total	<0.0040	0.0040	mg/L							
Thallium, total	<0.0020	0.0020	mg/L							
Tin, total	<0.0200	0.0200	mg/L							
Vanadium, total	<0.0200	0.0200	mg/L							
Zinc, total	<0.0200	0.0200	mg/L							
LCS (1GK0835-BS1)			Prepared: 11/14/23 16:41 Analyzed: 11/15/23 17:42							
Antimony, total	0.0973	0.0020	mg/L	0.100		97.3	80-120			
Arsenic, total	0.0969	0.0040	mg/L	0.100		96.9	80-120			
Barium, total	0.107	0.0040	mg/L	0.100		107	80-120			
Beryllium, total	0.0991	0.0040	mg/L	0.100		99.1	80-120			
Cadmium, total	0.0974	0.0008	mg/L	0.100		97.4	80-120			
Chromium, total	0.0992	0.0080	mg/L	0.100		99.2	80-120			
Cobalt, total	0.101	0.0004	mg/L	0.100		101	80-120			
Copper, total	0.0999	0.0040	mg/L	0.100		99.9	80-120			
Lead, total	0.0988	0.0040	mg/L	0.100		98.8	80-120			
Nickel, total	0.0993	0.0040	mg/L	0.100		99.3	80-120			
Selenium, total	0.1010	0.0040	mg/L	0.100		101	80-120			
Silver, total	0.112	0.0040	mg/L	0.100		112	80-120			
Thallium, total	0.0983	0.0020	mg/L	0.100		98.3	80-120			

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GK0835 - EPA 3005A Total Recoverable Metals - EPA 6020A										
LCS (1GK0835-BS1)			Prepared: 11/14/23 16:41 Analyzed: 11/15/23 17:42							
Tin, total	0.103	0.0200	mg/L	0.100		103	80-120			
Vanadium, total	0.0978	0.0200	mg/L	0.100		97.8	80-120			
Zinc, total	0.0996	0.0200	mg/L	0.100		99.6	80-120			
Matrix Spike (1GK0835-MS1)	**Source: 1GK0852-01**		Prepared: 11/14/23 16:41 Analyzed: 11/16/23 10:05							
Antimony, total	0.0918	0.0020	mg/L	0.100	ND	91.8	75-125			
Arsenic, total	0.0905	0.0040	mg/L	0.100	0.0023	88.2	75-125			
Barium, total	0.322	0.0040	mg/L	0.100	0.257	65.6	75-125			QM-07
Beryllium, total	0.0958	0.0040	mg/L	0.100	ND	95.8	75-125			
Cadmium, total	0.0910	0.0008	mg/L	0.100	ND	91.0	75-125			
Chromium, total	0.0923	0.0080	mg/L	0.100	0.0008	91.6	75-125			
Cobalt, total	0.0958	0.0004	mg/L	0.100	ND	95.8	75-125			
Copper, total	0.0910	0.0040	mg/L	0.100	ND	91.0	75-125			
Lead, total	0.0828	0.0040	mg/L	0.100	ND	82.8	75-125			
Nickel, total	0.0951	0.0040	mg/L	0.100	ND	95.1	75-125			
Selenium, total	0.0891	0.0040	mg/L	0.100	0.0018	87.2	75-125			
Silver, total	0.0998	0.0040	mg/L	0.100	ND	99.8	75-125			
Thallium, total	0.0844	0.0020	mg/L	0.100	ND	84.4	75-125			
Tin, total	0.0949	0.0200	mg/L	0.100	ND	94.9	75-125			
Vanadium, total	0.0958	0.0200	mg/L	0.100	ND	95.8	75-125			
Zinc, total	0.0963	0.0200	mg/L	0.100	ND	96.3	75-125			
Matrix Spike Dup (1GK0835-MSD1)	**Source: 1GK0852-01**		Prepared: 11/14/23 16:41 Analyzed: 11/15/23 18:24							
Antimony, total	0.100	0.0020	mg/L	0.100	ND	100	75-125	8.96	20	
Arsenic, total	0.103	0.0040	mg/L	0.100	0.0023	101	75-125	13.3	20	
Barium, total	0.364	0.0040	mg/L	0.100	0.257	107	75-125	12.1	20	
Beryllium, total	0.102	0.0040	mg/L	0.100	ND	102	75-125	6.52	20	
Cadmium, total	0.0982	0.0008	mg/L	0.100	ND	98.2	75-125	7.67	20	
Chromium, total	0.0981	0.0080	mg/L	0.100	0.0008	97.3	75-125	6.08	20	
Cobalt, total	0.103	0.0004	mg/L	0.100	ND	103	75-125	7.06	20	
Copper, total	0.0976	0.0040	mg/L	0.100	ND	97.6	75-125	7.02	20	
Lead, total	0.0969	0.0040	mg/L	0.100	ND	96.9	75-125	15.7	20	
Nickel, total	0.101	0.0040	mg/L	0.100	ND	101	75-125	5.63	20	
Selenium, total	0.1046	0.0040	mg/L	0.100	0.0018	103	75-125	16.0	20	
Silver, total	0.113	0.0040	mg/L	0.100	ND	113	75-125	12.1	20	
Thallium, total	0.0993	0.0020	mg/L	0.100	ND	99.3	75-125	16.2	20	
Tin, total	0.105	0.0200	mg/L	0.100	ND	105	75-125	10.2	20	
Vanadium, total	0.104	0.0200	mg/L	0.100	ND	104	75-125	8.06	20	
Zinc, total	0.110	0.0200	mg/L	0.100	ND	110	75-125	13.0	20	
Post Spike (1GK0835-PS1)	**Source: 1GK0852-01**		Prepared: 11/14/23 16:41 Analyzed: 11/15/23 18:30							
Antimony, total	0.0776		mg/L	0.0800	0.0003	96.6	80-120			
Arsenic, total	0.0782		mg/L	0.0800	0.0022	95.0	80-120			
Barium, total	0.322		mg/L	0.0800	0.251	87.7	80-120			
Beryllium, total	0.0791		mg/L	0.0800	0.000003	98.9	80-120			
Cadmium, total	0.0752		mg/L	0.0800	0.00003	93.9	80-120			

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GK0835 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Post Spike (1GK0835-PS1)	**Source: 1GK0852-01**		Prepared: 11/14/23 16:41 Analyzed: 11/15/23 18:30							
Chromium, total	0.0754		mg/L	0.0800	0.0008	93.3	80-120			
Cobalt, total	0.0792		mg/L	0.0800	0.00009	98.8	80-120			
Copper, total	0.0740		mg/L	0.0800	0.0007	91.6	80-120			
Lead, total	0.0742		mg/L	0.0800	-0.00004	92.7	80-120			
Nickel, total	0.0779		mg/L	0.0800	0.0010	96.1	80-120			
Selenium, total	0.0743		mg/L	0.0800	0.0018	90.7	80-120			
Silver, total	0.0852		mg/L	0.0800	0.0009	105	80-120			
Thallium, total	0.0764		mg/L	0.0800	-0.00006	95.5	80-120			
Tin, total	0.0792		mg/L	0.0800	-0.0002	99.0	75-125			
Vanadium, total	0.0814		mg/L	0.0800	0.0052	95.3	80-120			
Zinc, total	0.0820		mg/L	0.0800	0.0112	88.6	80-120			
Batch 1GK0845 - EPA 7470A Hg Water - EPA 7470A										
Blank (1GK0845-BLK1)			Prepared: 11/15/23 07:56 Analyzed: 11/16/23 08:38							
Mercury, total	<0.00050	0.00050	mg/L							
LCS (1GK0845-BS1)			Prepared: 11/15/23 07:56 Analyzed: 11/16/23 08:40							
Mercury, total	0.00267	0.00050	mg/L	0.00250		107	80-120			
Matrix Spike (1GK0845-MS1)	**Source: 1GJ0088-09**		Prepared: 11/15/23 07:56 Analyzed: 11/16/23 08:45							
Mercury, total	0.00255	0.00050	mg/L	0.00250	ND	102	75-125			
Matrix Spike Dup (1GK0845-MSD1)	**Source: 1GJ0088-09**		Prepared: 11/15/23 07:56 Analyzed: 11/16/23 08:48							
Mercury, total	0.00245	0.00050	mg/L	0.00250	ND	98.1	75-125	3.68	20	

Keystone Laboratories - Newton

CERTIFICATE OF ANALYSIS

1GJ0088

Definitions

A-01:	Analysis was performed outside the holding time due to a logging error. Samples were disposed; however, nonpreserved sample was treated with zinc acetate/NaOH and analyzed.
A-01a:	Analyzed after expiration due to logging error. Samples had been disposed; however, NaOH was added to nonpreserved sample to run this analysis.
I-06:	Analysis requested by client past EPA recommended hold time.
PS-04:	The post spike recovery exceeded acceptance limits. However, all other QC was acceptable.
QM-01:	The spike recovery for this QC sample is outside of established control limits due to sample matrix interference.
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-16:	Spike recoveries outside acceptance limits due to analyst error. 8260-240 spike not added to MS/MSD
QM-21:	The recovery for the blank spike was outside the established laboratory control limits. The batch was accepted based upon the acceptable recovery of the CCV.
QR-02:	The RPD result exceeded the QC control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
QS-02:	The spike recovery for this QC sample exceeded established acceptance limits. However, all samples were below the reporting and/or regulatory limit so the data is acceptable.
QS-03:	The blank spike recovery was below established acceptance limits.
RL:	Reporting Limit
RPD:	Relative Percent Difference
S-07:	The surrogate recovery for this sample is outside of established control limits.
S-AC:	Acid surrogate recovery outside of control limits. The data was accepted based on valid recovery of remaining two acid surrogates.
S-GC:	Surrogate recovery outside of control limits. The data was accepted based on valid recovery of the remaining surrogate.

Cooler Receipt Log

Cooler ID:	N1-13082	Temp:	3.2°C	**Cooler ID:**	N1-13088	Temp:	2.7°C

Cooler Inspection Checklist

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

Report Comments

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

Reviewed and Approved By:

Heather Murphy

Heather Murphy
Customer Relationship Specialist
heather.murphy@microbac.com
12/11/23 08:22

CHAIN OF CUSTO

Keystone LABORATORIES, INC.

600 East 17th Street South
Newton, IA 50208
641-792-8451

1 G J 0 0 8 8
HLW Engineering
PM: Sue Thompson

I: 8/21/2023 10:34:01AM
www.keystonelabs.com

SITE INFORMATION

Sampler: TODD WHIPPLE

Project: SCISWA - New Regs

6009

REPORT TO

Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50248

INVOICE TO

Rick Hurt
South Central IA Solid Waste Agency
1736 Highway T17
Tracy, IA 50256

SPECIAL INSTRUCTIONS

None

Turn Around Time
☐ Standard ☐ RUSH, need by __/__/__

LAB USE ONLY

Work Order 16J0088
Temperature 3.2/2.7
Turn-Cooler: No

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

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses	Lab Sample Number
01-001	MW-307	Water	GRAB	9/29/23	9:07	7	lndfill-app1-voc-group lndfill-app1-metals-6020 lndfill-app1-voc	01
02-001	MW-312	Water	GRAB	9/29/23	10:56	7	lndfill-app1-voc-group lndfill-app1-metals-6020 lndfill-app1-voc	02
03-001	MW-390	Water	GRAB	9/29/23	9:26	7	lndfill-app1-voc-group lndfill-app1-metals-6020 lndfill-app1-voc	03
04-001	MW-300	Water	GRAB	9/29/23	11:35	7	lndfill-app1-voc-group lndfill-app1-metals-6020 lndfill-app1-voc	04
05-001	MW-303	Water	GRAB	9/29/23	12:59	7	lndfill-app1-voc-group lndfill-app1-metals-6020 lndfill-app1-voc	05
06-001	MW-304	Water	GRAB	9/29/23	13:15	7	lndfill-app1-voc-group lndfill-app1-metals-6020 lndfill-app1-voc	06
07-001	MW-313	Water	GRAB	9/29/23	12:20	7	lndfill-app1-voc-group lndfill-app1-metals-6020 lndfill-app1-voc	07

Relinquished By: Todd Whipple — Date/Time: 10/2/23 11:30

Relinquished By — Date/Time

Received By — Date/Time

Received for Lab By: [signature] — Date/Time: 10/2/23 11:30

Remarks:

Original - Lab Copy Yellow - Sampler Copy

CHAIN OF CUSTODY R

Keystone LABORATORIES, INC.

600 East 17th Street South
Newton, IA 50208
641-792-8451

1GJ0088
HLW Engineering
PM: Sue Thompson

2023 10:34:01AM
v.keystonelabs.com

SITE INFORMATION

Sampler: TODD WHIPPLE

Project: SCISWA - New Regs
6009

REPORT TO

Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50248

INVOICE TO

Rick Hurt
South Central IA Solid Waste Agency
1736 Highway T17
Tracy, IA 50256

SPECIAL INSTRUCTIONS

None

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

LAB USE ONLY

Work Order 1GJ0088
Temperature 3.2/2.7
Turn-Cooler: No

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

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses	Lab Sample Number
08-001	MW-335	Water	GRAB	9/29/23	12:43	7	lndfill-app1-voc-group lndfill-app1-metals-6020 lndfill-app1-voc	08
09-001	MW-344	Water	GRAB	9/29/23	14:51	17	lndfill-app2-inorg-6020 lndfill-app2-org	09
10-001	MW-380	Water	GRAB	9/29/23	11:17	7	lndfill-app1-voc-group lndfill-app1-metals-6020	10
11-001	MW-381	Water	GRAB	9/29/23	11:53	7	lndfill-app1-voc-group lndfill-app1-metals-6020	11
12-001	MW-382R	Water	GRAB	9/29/23	15:26	17	lndfill-app2-inorg-6020 lndfill-app2-org	12
13-001	MW-384	Water	GRAB	9/29/23	14:04	7	lndfill-app1-voc-group lndfill-app1-metals-6020	13
14-001	MW-385	Water	GRAB	9/29/23	13:50	7	lndfill-app1-voc-group lndfill-app1-metals-6020	14

Todd Whipple 10/2/23 11:30
Relinquished By Date/Time

Relinquished By Date/Time

Received By Date/Time

[signature] 10/2/23 11:30
Received for Lab By Date/Time

Remarks:

Original - Lab Copy Yellow - Sampler Copy

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Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50248

INVOICE TO

Rick Hurt
South Central IA Solid Waste Agency
1736 Highway T17
Tracy, IA 50256

SPECIAL INSTRUCTIONS

None

Turn Around Time
☐ Standard ☐ RUSH, need by __/__/__

LAB USE ONLY

Work Order 1GJ0088
Temperature 3.2/2.7
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
15-001	GU-4A DRY	Water	GRAB	9/29/23	—	—	lndfill-app1-voc-group lndfil-app1-metals-6020	—
16-001	Field Duplicate	Water	GRAB	9/29/23	✓	1	~~lndfill-app1-voc-group~~ lndfil-app1-metals-6020	15
17-001	MW-601	Water	GRAB	9/29/23	9:50	7	lndfill-app1-voc-group lndfil-app1-metals-6020	16
18-001	MW-602	Water	GRAB	9/29/23	10:10	7	lndfill-app1-voc-group lndfil-app1-metals-6020	17
19-001	MW-603	Water	GRAB	9/29/23	10:30	7	lndfill-app1-voc-group lndfil-app1-metals-6020	18

Relinquished By: [signature] Date/Time: 10/2/23 11:30

Relinquished By: Date/Time:

Received By: Date/Time:

Received for Lab By: [signature] Date/Time: 10/2/23 11:30

Remarks:

Original - Lab Copy Yellow - Sampler Copy

Keystone Laboratories - Newton

CERTIFICATE OF ANALYSIS

1GJ0080

Project Description

SCISWA - AMD

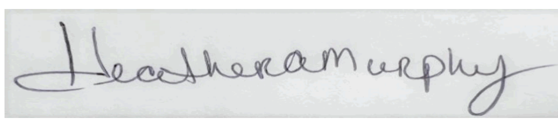
For:

Todd Whipple

HLW Engineering

PO Box 314

Story City, IA 50248



Heather Murphy

Customer Relationship Specialist

Monday, October 16, 2023

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

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

Keystone Laboratories - Newton

CERTIFICATE OF ANALYSIS

1GJ0080

HLW Engineering

Todd Whipple
PO Box 314
Story City, IA 50248

Project Name: SCISWA - AMD

Project / PO Number: / 6009
Received: 10/02/2023
Reported: 10/16/2023

Sample Summary Report

Sample Name	Laboratory ID	Client Matrix	Sample Type	Sample Begin	Sample Taken	Lab Received
MW-307	1GJ0080-01	Water	GRAB		09/29/23 09:07	10/02/23 11:30
MW-312	1GJ0080-02	Water	GRAB		09/29/23 10:56	10/02/23 11:30
MW-390	1GJ0080-03	Water	GRAB		09/29/23 09:26	10/02/23 11:30
MW-300	1GJ0080-04	Water	GRAB		09/29/23 11:35	10/02/23 11:30
MW-303	1GJ0080-05	Water	GRAB		09/29/23 12:59	10/02/23 11:30
MW-304	1GJ0080-06	Water	GRAB		09/29/23 13:15	10/02/23 11:30
MW-313	1GJ0080-07	Water	GRAB		09/29/23 12:20	10/02/23 11:30
MW-335	1GJ0080-08	Water	GRAB		09/29/23 12:43	10/02/23 11:30
MW-344	1GJ0080-09	Water	GRAB		09/29/23 14:40	10/02/23 11:30
MW-380	1GJ0080-10	Water	GRAB		09/29/23 11:17	10/02/23 11:30
MW-381	1GJ0080-11	Water	GRAB		09/29/23 11:53	10/02/23 11:30
MW-382R	1GJ0080-12	Water	GRAB		09/29/23 15:20	10/02/23 11:30
MW-384	1GJ0080-13	Water	GRAB		09/29/23 14:04	10/02/23 11:30
MW-385	1GJ0080-14	Water	GRAB		09/29/23 13:50	10/02/23 11:30
MW-601	1GJ0080-15	Water	GRAB		09/29/23 09:50	10/02/23 11:30
MW-602	1GJ0080-16	Water	GRAB		09/29/23 10:10	10/02/23 11:30
MW-603	1GJ0080-17	Water	GRAB		09/29/23 10:30	10/02/23 11:30

Keystone Laboratories - Newton

CERTIFICATE OF ANALYSIS

1GJ0080

Analytical Testing Parameters

Client Sample ID:	MW-307		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0080-01	**Collection Date:**	09/29/2023 9:07

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
2320B								
Alkalinity, as CaCO3	**84**	10	mg/L	1		10/02/23 1627	10/04/23 1625	BSS
SM 4500 H+ B								
pH	**5.6**	0.5	pH	1	**I-03**		10/02/23 1624	BSS

Determination of Inorganic Anions	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 9056								
Sulfate	**1980**	50.0	mg/L	50		10/05/23 0000	10/06/23 0220	MID

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3010A/EPA 6010B								
Aluminum, total	**0.695**	0.050	mg/L	1		10/03/23 1602	10/04/23 1936	JAR
Iron, total	**266**	0.100	mg/L	1		10/03/23 1602	10/04/23 1936	JAR

Client Sample ID:	MW-312		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0080-02	**Collection Date:**	09/29/2023 10:56

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
2320B								
Alkalinity, as CaCO3	**312**	10	mg/L	1		10/02/23 1627	10/04/23 1625	BSS
SM 4500 H+ B								
pH	**6.1**	0.5	pH	1	**I-03**		10/02/23 1624	BSS

Determination of Inorganic Anions	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 9056								
Sulfate	**422**	10.0	mg/L	10		10/04/23 0000	10/04/23 2111	MID

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3010A/EPA 6010B								
Aluminum, total	**0.053**	0.050	mg/L	1		10/03/23 1602	10/04/23 2012	JAR
Iron, total	**0.800**	0.100	mg/L	1		10/03/23 1602	10/04/23 2012	JAR

Keystone Laboratories - Newton

CERTIFICATE OF ANALYSIS

1GJ0080

Client Sample ID:	MW-390		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0080-03	**Collection Date:**	09/29/2023 9:26

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
2320B								
Alkalinity, as CaCO3	**250**	10	mg/L	1		10/02/23 1627	10/04/23 1625	BSS
SM 4500 H+ B								
pH	**5.9**	0.5	pH	1	**I-03**		10/02/23 1624	BSS

Determination of Inorganic Anions	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 9056								
Sulfate	**1940**	50.0	mg/L	50		10/05/23 0000	10/06/23 0238	MID

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3010A/EPA 6010B								
Aluminum, total	**0.232**	0.050	mg/L	1		10/03/23 1602	10/04/23 2021	JAR
Iron, total	**132**	0.100	mg/L	1		10/03/23 1602	10/04/23 2021	JAR

Client Sample ID:	MW-300		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0080-04	**Collection Date:**	09/29/2023 11:35

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
2320B								
Alkalinity, as CaCO3	**172**	10	mg/L	1		10/02/23 1627	10/04/23 1625	BSS
SM 4500 H+ B								
pH	**5.8**	0.5	pH	1	**I-03**		10/02/23 1624	BSS

Determination of Inorganic Anions	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 9056								
Sulfate	**3280**	50.0	mg/L	50		10/05/23 0000	10/06/23 0256	MID

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3010A/EPA 6010B								
Aluminum, total	**0.663**	0.050	mg/L	1		10/03/23 1602	10/04/23 2031	JAR
Iron, total	**116**	0.100	mg/L	1		10/03/23 1602	10/04/23 2031	JAR

Client Sample ID:	MW-303		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0080-05	**Collection Date:**	09/29/2023 12:59

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
2320B								
Alkalinity, as CaCO3	**536**	10	mg/L	1		10/02/23 1627	10/04/23 1625	BSS
SM 4500 H+ B								
pH	**6.4**	0.5	pH	1	**I-03**		10/02/23 1624	BSS

Determination of Inorganic Anions	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 9056								
Sulfate	**272**	10.0	mg/L	10		10/04/23 0000	10/04/23 2206	MID

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3010A/EPA 6010B								
Aluminum, total	**0.076**	0.050	mg/L	1		10/03/23 1602	10/04/23 2040	JAR
Iron, total	**1.36**	0.100	mg/L	1		10/03/23 1602	10/04/23 2040	JAR

Client Sample ID:	MW-304		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0080-06	**Collection Date:**	09/29/2023 13:15

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
2320B								
Alkalinity, as CaCO3	**343**	50	mg/L	1		10/02/23 1627	10/04/23 1625	BSS
SM 4500 H+ B								
pH	**6.8**	0.5	pH	1	**I-03**		10/02/23 1624	BSS

Determination of Inorganic Anions	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 9056								
Sulfate	**92.6**	10.0	mg/L	10		10/04/23 0000	10/04/23 2224	MID

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3010A/EPA 6010B								
Aluminum, total	<0.050	0.050	mg/L	1		10/03/23 1602	10/04/23 2050	JAR
Iron, total	**3.78**	0.100	mg/L	1		10/03/23 1602	10/04/23 2050	JAR

Keystone Laboratories - Newton

CERTIFICATE OF ANALYSIS

1GJ0080

Client Sample ID:	MW-313		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0080-07	**Collection Date:**	09/29/2023 12:20

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
2320B								
Alkalinity, as CaCO3	**478**	50	mg/L	1		10/02/23 1627	10/04/23 1625	BSS
SM 4500 H+ B								
pH	**6.9**	0.5	pH	1	**I-03**		10/02/23 1624	BSS

Determination of Inorganic Anions	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 9056								
Sulfate	**387**	10.0	mg/L	10		10/04/23 0000	10/04/23 2242	MID

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3010A/EPA 6010B								
Aluminum, total	**0.115**	0.050	mg/L	1		10/03/23 1602	10/04/23 2107	JAR
Iron, total	**39.4**	0.100	mg/L	1		10/03/23 1602	10/04/23 2107	JAR

Client Sample ID:	MW-335		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0080-08	**Collection Date:**	09/29/2023 12:43

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
2320B								
Alkalinity, as CaCO3	**558**	50	mg/L	1		10/02/23 1627	10/04/23 1625	BSS
SM 4500 H+ B								
pH	**6.2**	0.5	pH	1	**I-03**		10/02/23 1624	BSS

Determination of Inorganic Anions	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 9056								
Sulfate	**2650**	50.0	mg/L	50		10/05/23 0000	10/06/23 0314	MID

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3010A/EPA 6010B								
Aluminum, total	**0.342**	0.050	mg/L	1		10/03/23 1602	10/04/23 2118	JAR
Iron, total	**11.0**	0.100	mg/L	1		10/03/23 1602	10/04/23 2118	JAR

Client Sample ID:	MW-344		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0080-09	**Collection Date:**	09/29/2023 14:40

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
2320B								
Alkalinity, as CaCO3	**219**	50	mg/L	1		10/02/23 1627	10/04/23 1625	BSS
SM 4500 H+ B								
pH	**5.8**	0.5	pH	1	**I-03**		10/02/23 1624	BSS

Determination of Inorganic Anions	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 9056								
Sulfate	**2160**	50.0	mg/L	50		10/05/23 0000	10/06/23 0332	MID

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3010A/EPA 6010B								
Aluminum, total	**0.110**	0.050	mg/L	1		10/03/23 1602	10/04/23 2127	JAR
Iron, total	**8.33**	0.100	mg/L	1		10/03/23 1602	10/04/23 2127	JAR

Client Sample ID:	MW-380		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0080-10	**Collection Date:**	09/29/2023 11:17

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
2320B								
Alkalinity, as CaCO3	<10	10	mg/L	1		10/13/23 1453	10/13/23 1700	BSS
SM 4500 H+ B								
pH	**4.8**	0.5	pH	1	**I-03**		10/02/23 1624	BSS

Determination of Inorganic Anions	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 9056								
Sulfate	**3450**	50.0	mg/L	50		10/05/23 0000	10/06/23 0350	MID

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3010A/EPA 6010B								
Aluminum, total	**14.5**	0.050	mg/L	1		10/03/23 1602	10/04/23 2137	JAR
Iron, total	**435**	0.100	mg/L	1		10/03/23 1602	10/04/23 2137	JAR

Client Sample ID:	MW-381		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0080-11	**Collection Date:**	09/29/2023 11:53

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
2320B								
Alkalinity, as CaCO3	**263**	50	mg/L	1		10/02/23 1627	10/04/23 1625	BSS
SM 4500 H+ B								
pH	**6.6**	0.5	pH	1	**I-03**		10/02/23 1624	BSS

Determination of Inorganic Anions	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 9056								
Sulfate	**777**	10.0	mg/L	10		10/04/23 0000	10/05/23 0049	MID

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3010A/EPA 6010B								
Aluminum, total	**0.351**	0.050	mg/L	1		10/03/23 1602	10/04/23 2146	JAR
Iron, total	**0.287**	0.100	mg/L	1		10/03/23 1602	10/04/23 2146	JAR

Client Sample ID:	MW-382R		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0080-12	**Collection Date:**	09/29/2023 15:20

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
2320B								
Alkalinity, as CaCO3	**379**	50	mg/L	1		10/02/23 1627	10/04/23 1625	BSS
SM 4500 H+ B								
pH	**6.5**	0.5	pH	1	**I-03**		10/02/23 1624	BSS

Determination of Inorganic Anions	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 9056								
Sulfate	**1090**	10.0	mg/L	10		10/04/23 0000	10/05/23 0107	MID

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3010A/EPA 6010B								
Aluminum, total	**0.135**	0.050	mg/L	1		10/03/23 1602	10/04/23 2152	JAR
Iron, total	<0.100	0.100	mg/L	1		10/03/23 1602	10/04/23 2152	JAR

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1GJ0080

Client Sample ID:	MW-384		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0080-13	**Collection Date:**	09/29/2023 14:04

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
2320B								
Alkalinity, as CaCO3	**125**	50	mg/L	1		10/02/23 1627	10/04/23 1625	BSS
SM 4500 H+ B								
pH	**5.8**	0.5	pH	1	**I-03**		10/02/23 1624	BSS

Determination of Inorganic Anions	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 9056								
Sulfate	**2450**	50.0	mg/L	50		10/05/23 0000	10/06/23 0503	MID

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3010A/EPA 6010B								
Aluminum, total	**0.117**	0.050	mg/L	1		10/03/23 1602	10/04/23 2202	JAR
Iron, total	**103**	0.100	mg/L	1		10/03/23 1602	10/04/23 2202	JAR

Client Sample ID:	MW-385		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0080-14	**Collection Date:**	09/29/2023 13:50

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
2320B								
Alkalinity, as CaCO3	**515**	50	mg/L	1		10/02/23 1627	10/04/23 1625	BSS
SM 4500 H+ B								
pH	**6.6**	0.5	pH	1	**I-03**		10/02/23 1624	BSS

Determination of Inorganic Anions	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 9056								
Sulfate	**2140**	50.0	mg/L	50		10/05/23 0000	10/06/23 0521	MID

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3010A/EPA 6010B								
Aluminum, total	**0.269**	0.050	mg/L	1		10/03/23 1602	10/04/23 2211	JAR
Iron, total	**67.6**	0.100	mg/L	1		10/03/23 1602	10/04/23 2211	JAR

Client Sample ID:	MW-601		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0080-15	**Collection Date:**	09/29/2023 9:50

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
2320B								
Alkalinity, as CaCO3	**155**	50	mg/L	1		10/02/23 1627	10/04/23 1625	BSS
SM 4500 H+ B								
pH	**6.2**	0.5	pH	1	**I-03**		10/02/23 1624	BSS

Determination of Inorganic Anions	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 9056								
Sulfate	**2260**	50.0	mg/L	50		10/05/23 0000	10/06/23 0539	MID

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3010A/EPA 6010B								
Aluminum, total	**0.116**	0.050	mg/L	1		10/03/23 1602	10/04/23 2222	JAR
Iron, total	**60.0**	0.100	mg/L	1		10/03/23 1602	10/04/23 2222	JAR

Client Sample ID:	MW-602		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0080-16	**Collection Date:**	09/29/2023 10:10

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
2320B								
Alkalinity, as CaCO3	**94**	50	mg/L	1		10/02/23 1627	10/04/23 1625	BSS
SM 4500 H+ B								
pH	**5.6**	0.5	pH	1	**I-03**		10/02/23 1624	BSS

Determination of Inorganic Anions	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 9056								
Sulfate	**1870**	50.0	mg/L	50		10/05/23 0000	10/06/23 0557	MID

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3010A/EPA 6010B								
Aluminum, total	**0.182**	0.050	mg/L	1		10/03/23 1602	10/04/23 2231	JAR
Iron, total	**51.8**	0.100	mg/L	1		10/03/23 1602	10/04/23 2231	JAR

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1GJ0080

Client Sample ID:	MW-603		
Sample Matrix:	Water	**Collected By:**	Whipple, Todd
Lab Sample ID:	1GJ0080-17	**Collection Date:**	09/29/2023 10:30

Determination of Conventional Chemistry Parameters	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
2320B								
Alkalinity, as CaCO3	**410**	50	mg/L	1		10/02/23 1627	10/04/23 1625	BSS
SM 4500 H+ B								
pH	**6.4**	0.5	pH	1	**I-03**		10/02/23 1624	BSS

Determination of Inorganic Anions	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 9056								
Sulfate	**2300**	50.0	mg/L	50		10/05/23 0000	10/06/23 0616	MID

Determination of Total Metals	Result	RL	Units	DF	Note	Prepared	Analyzed	Analyst
EPA 3010A/EPA 6010B								
Aluminum, total	**0.128**	0.050	mg/L	1		10/03/23 1602	10/04/23 2252	JAR
Iron, total	**49.8**	0.100	mg/L	1		10/03/23 1602	10/04/23 2252	JAR

Batch Log Summary

Method	Batch	Laboratory ID	Client / Source ID
SM 4500 H+ B	1GJ0094	1GJ0080-10	MW-380
		1GJ0080-13	MW-384
		1GJ0080-14	MW-385
		1GJ0080-01	MW-307
		1GJ0080-03	MW-390
		1GJ0080-15	MW-601
		1GJ0080-16	MW-602
		1GJ0080-17	MW-603
		1GJ0094-SRM1	
		1GJ0094-SRM2	
		1GJ0080-11	MW-381
		1GJ0094-DUP1	1GJ0080-01
		1GJ0080-09	MW-344
		1GJ0080-08	MW-335
		1GJ0080-07	MW-313
		1GJ0080-02	MW-312
		1GJ0080-12	MW-382R
		1GJ0080-06	MW-304
		1GJ0080-05	MW-303
		1GJ0080-04	MW-300
		1GJ0094-DUP2	1GJ0080-10
		1GJ0094-SRM3	

Method	Batch	Laboratory ID	Client / Source ID
2320B	1GJ0095	1GJ0080-04	MW-300
		1GJ0095-BLK1	
		1GJ0080-08	MW-335
		1GJ0080-17	MW-603
		1GJ0080-16	MW-602
		1GJ0080-15	MW-601
		1GJ0080-03	MW-390
		1GJ0080-14	MW-385
		1GJ0080-13	MW-384
		1GJ0080-12	MW-382R
		1GJ0095-MS1	1GJ0080-01
		1GJ0080-09	MW-344
		1GJ0095-BS1	
		1GJ0080-07	MW-313
		1GJ0080-02	MW-312
		1GJ0080-01	MW-307

Method	Batch	Laboratory ID	Client / Source ID
2320B	1GJ0095	1GJ0080-06	MW-304
		1GJ0080-05	MW-303
		1GJ0095-MSD1	1GJ0080-01
		1GJ0080-11	MW-381

Method	Batch	Laboratory ID	Client / Source ID
EPA 6010B	1GJ0168	1GJ0168-BLK1	
		1GJ0168-BS1	
		1GJ0080-01	MW-307
		1GJ0168-MS1	1GJ0080-01
		1GJ0168-MSD1	1GJ0080-01
		1GJ0168-PS1	1GJ0080-01
		1GJ0080-02	MW-312
		1GJ0080-03	MW-390
		1GJ0080-04	MW-300
		1GJ0080-05	MW-303
		1GJ0080-06	MW-304
		1GJ0080-07	MW-313
		1GJ0080-08	MW-335
		1GJ0080-09	MW-344
		1GJ0080-10	MW-380
		1GJ0080-11	MW-381
		1GJ0080-12	MW-382R
		1GJ0080-13	MW-384
		1GJ0080-14	MW-385
		1GJ0080-15	MW-601
		1GJ0080-16	MW-602
		1GJ0080-17	MW-603

Method	Batch	Laboratory ID	Client / Source ID
EPA 9056	1GJ0349	1GJ0349-BLK1	
		1GJ0349-MRL1	
		1GJ0349-BS1	
		1GJ0349-BSD1	
		1GJ0349-BLK2	
		1GJ0349-MS1	1GI2250-01
		1GJ0349-MSD1	1GI2250-01
		1GJ0080-02	MW-312
		1GJ0080-05	MW-303
		1GJ0080-06	MW-304
		1GJ0080-07	MW-313
		1GJ0080-11	MW-381
		1GJ0080-12	MW-382R

Method	Batch	Laboratory ID	Client / Source ID
EPA 9056	1GJ0438	1GJ0438-BLK1	
		1GJ0438-MRL1	
		1GJ0438-BS1	
		1GJ0438-BSD1	
		1GJ0438-BLK2	
		1GJ0438-BLK3	
		1GJ0438-BS2	
		1GJ0438-BSD2	
		1GJ0438-MS1	1GJ0370-02
		1GJ0438-MSD1	1GJ0370-02
		1GJ0080-01	MW-307
		1GJ0080-03	MW-390
		1GJ0080-04	MW-300
		1GJ0080-08	MW-335
		1GJ0080-09	MW-344
		1GJ0080-10	MW-380
		1GJ0080-13	MW-384
		1GJ0080-14	MW-385
		1GJ0080-15	MW-601
		1GJ0080-16	MW-602
		1GJ0080-17	MW-603
		1GJ0438-MS2	1GJ0409-01
		1GJ0438-MSD2	1GJ0409-01

Method	Batch	Laboratory ID	Client / Source ID
2320B	1GJ0864	1GJ0080-10RE1	MW-380
		1GJ0864-BLK1	
		1GJ0864-BS1	
		1GJ0864-MS1	1GJ0934-04
		1GJ0864-MSD1	1GJ0934-04

Batch Quality Control Summary: Keystone Laboratories - Newton

Determination of Conventional Chemistry Parameters	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ0094 - Wet Chem Preparation - SM 4500 H+ B										
Duplicate (1GJ0094-DUP1)	**Source: 1GJ0080-01**		Prepared & Analyzed: 10/02/23 16:24							
pH	5.6	0.5	pH		5.6			0.0890	10	
Duplicate (1GJ0094-DUP2)	**Source: 1GJ0080-10**		Prepared & Analyzed: 10/02/23 16:24							
pH	4.8	0.5	pH		4.8			0.0619	10	
Reference (1GJ0094-SRM1)			Prepared & Analyzed: 10/02/23 16:24							

Determination of Conventional Chemistry Parameters	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ0094 - Wet Chem Preparation - SM 4500 H+ B										
Reference (1GJ0094-SRM1)			Prepared & Analyzed: 10/02/23 16:24							
pH	7.0	0.5	pH	7.00		100	90-110			
Reference (1GJ0094-SRM2)			Prepared & Analyzed: 10/02/23 16:24							
pH	7.0	0.5	pH	7.00		101	90-110			
Reference (1GJ0094-SRM3)			Prepared & Analyzed: 10/02/23 16:24							
pH	7.0	0.5	pH	7.00		101	90-110			
Batch 1GJ0095 - Wet Chem Preparation - 2320B										
Blank (1GJ0095-BLK1)			Prepared: 10/02/23 16:27 Analyzed: 10/04/23 16:25							
Alkalinity, as CaCO3	<10	10	mg/L							
LCS (1GJ0095-BS1)			Prepared: 10/02/23 16:27 Analyzed: 10/04/23 16:25							
Alkalinity, as CaCO3	46.6	10	mg/L	50.0		93.2	88-114			
Matrix Spike (1GJ0095-MS1)	**Source: 1GJ0080-01**		Prepared: 10/02/23 16:27 Analyzed: 10/04/23 16:25							
Alkalinity, as CaCO3	135	10	mg/L	50.0	84.3	102	74-122			
Matrix Spike Dup (1GJ0095-MSD1)	**Source: 1GJ0080-01**		Prepared: 10/02/23 16:27 Analyzed: 10/04/23 16:25							
Alkalinity, as CaCO3	133	10	mg/L	50.0	84.3	96.8	74-122	1.87	10	
Batch 1GJ0864 - Wet Chem Preparation - 2320B										
Blank (1GJ0864-BLK1)			Prepared: 10/13/23 14:53 Analyzed: 10/13/23 17:00							
Alkalinity, as CaCO3	<10	10	mg/L							
LCS (1GJ0864-BS1)			Prepared: 10/13/23 14:53 Analyzed: 10/13/23 17:00							
Alkalinity, as CaCO3	218	10	mg/L	235		93.0	88-114			
Matrix Spike (1GJ0864-MS1)	**Source: 1GJ0934-04**		Prepared: 10/13/23 14:53 Analyzed: 10/13/23 17:00							
Alkalinity, as CaCO3	343	10	mg/L	235	139	86.6	74-122			
Matrix Spike Dup (1GJ0864-MSD1)	**Source: 1GJ0934-04**		Prepared: 10/13/23 14:53 Analyzed: 10/13/23 17:00							
Alkalinity, as CaCO3	342	10	mg/L	235	139	86.2	74-122	0.263	10	

Determination of Inorganic Anions	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ0349 - General Prep HPLC/IC - EPA 9056										
Blank (1GJ0349-BLK1)			Prepared: 10/04/23 00:00 Analyzed: 10/04/23 09:41							
Sulfate	<1.0	1.0	mg/L							
Blank (1GJ0349-BLK2)			Prepared: 10/04/23 00:00 Analyzed: 10/04/23 14:32							
Sulfate	<1.0	1.0	mg/L							
LCS (1GJ0349-BS1)			Prepared: 10/04/23 00:00 Analyzed: 10/04/23 11:12							
Sulfate	34.22	1.0	mg/L	34.1		100	80-120			
LCS Dup (1GJ0349-BSD1)			Prepared: 10/04/23 00:00 Analyzed: 10/04/23 11:30							

Determination of Inorganic Anions	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ0349 - General Prep HPLC/IC - EPA 9056										
LCS Dup (1GJ0349-BSD1)			Prepared: 10/04/23 00:00 Analyzed: 10/04/23 11:30							
Sulfate	34.06	1.0	mg/L	34.1		100	80-120	0.451	10	
Matrix Spike (1GJ0349-MS1)	**Source: 1GI2250-01**		Prepared: 10/04/23 00:00 Analyzed: 10/04/23 18:10							
Sulfate	916.8	10.0	mg/L	341	593.7	94.8	87-113			
Matrix Spike Dup (1GJ0349-MSD1)	**Source: 1GI2250-01**		Prepared: 10/04/23 00:00 Analyzed: 10/04/23 18:28							
Sulfate	920.4	10.0	mg/L	341	593.7	95.9	87-113	0.395	10	
Batch 1GJ0438 - General Prep HPLC/IC - EPA 9056										
Blank (1GJ0438-BLK1)			Prepared: 10/05/23 00:00 Analyzed: 10/05/23 09:59							
Sulfate	<1.0	1.0	mg/L							
Blank (1GJ0438-BLK2)			Prepared: 10/05/23 00:00 Analyzed: 10/05/23 14:32							
Sulfate	<1.0	1.0	mg/L							
Blank (1GJ0438-BLK3)			Prepared: 10/05/23 00:00 Analyzed: 10/05/23 18:28							
Sulfate	<1.0	1.0	mg/L							
LCS (1GJ0438-BS1)			Prepared: 10/05/23 00:00 Analyzed: 10/05/23 10:54							
Sulfate	33.58	1.0	mg/L	34.1		98.5	80-120			
LCS (1GJ0438-BS2)			Prepared: 10/05/23 00:00 Analyzed: 10/05/23 23:54							
Sulfate	34.06	1.0	mg/L	34.1		100	80-120			
LCS Dup (1GJ0438-BSD1)			Prepared: 10/05/23 00:00 Analyzed: 10/05/23 11:12							
Sulfate	33.70	1.0	mg/L	34.1		98.9	80-120	0.339	10	
LCS Dup (1GJ0438-BSD2)			Prepared: 10/05/23 00:00 Analyzed: 10/06/23 00:13							
Sulfate	34.07	1.0	mg/L	34.1		100	80-120	0.0147	10	
Matrix Spike (1GJ0438-MS1)	**Source: 1GJ0370-02**		Prepared: 10/05/23 00:00 Analyzed: 10/06/23 00:49							
Sulfate	445.5	10.0	mg/L	341	91.16	104	87-113			
Matrix Spike (1GJ0438-MS2)	**Source: 1GJ0409-01**		Prepared: 10/05/23 00:00 Analyzed: 10/06/23 06:52							
Sulfate	1104	10.0	mg/L	341	743.6	106	87-113			
Matrix Spike Dup (1GJ0438-MSD1)	**Source: 1GJ0370-02**		Prepared: 10/05/23 00:00 Analyzed: 10/06/23 01:07							
Sulfate	446.4	10.0	mg/L	341	91.16	104	87-113	0.195	10	
Matrix Spike Dup (1GJ0438-MSD2)	**Source: 1GJ0409-01**		Prepared: 10/05/23 00:00 Analyzed: 10/06/23 07:10							
Sulfate	1106	10.0	mg/L	341	743.6	106	87-113	0.203	10	

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ0168 - EPA 3010A Digestion (Water) - EPA 6010B										
Blank (1GJ0168-BLK1)			Prepared: 10/03/23 16:02 Analyzed: 10/04/23 19:13							
Aluminum, total	<0.050	0.050	mg/L							
Iron, total	<0.100	0.100	mg/L							
LCS (1GJ0168-BS1)			Prepared: 10/03/23 16:02 Analyzed: 10/04/23 19:30							
Aluminum, total	2.16	0.050	mg/L	2.20		98.4	80-120			

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1GJ0168 - EPA 3010A Digestion (Water) - EPA 6010B										
LCS (1GJ0168-BS1)			Prepared: 10/03/23 16:02 Analyzed: 10/04/23 19:30							
Iron, total	2.31	0.100	mg/L	2.20		105	80-120			
Matrix Spike (1GJ0168-MS1)	**Source: 1GJ0080-01**		Prepared: 10/03/23 16:02 Analyzed: 10/04/23 19:46							
Aluminum, total	2.86	0.050	mg/L	2.20	0.695	98.4	75-125			
Iron, total	261	0.100	mg/L	2.20	266	NR	75-125			QM-4X
Matrix Spike Dup (1GJ0168-MSD1)	**Source: 1GJ0080-01**		Prepared: 10/03/23 16:02 Analyzed: 10/04/23 19:55							
Aluminum, total	3.00	0.050	mg/L	2.20	0.695	105	75-125	4.63	20	
Iron, total	278	0.100	mg/L	2.20	266	553	75-125	6.44	20	QM-4X
Post Spike (1GJ0168-PS1)	**Source: 1GJ0080-01**		Prepared: 10/03/23 16:02 Analyzed: 10/04/23 20:05							
Aluminum, total	9.43		mg/L	8.80	0.695	99.2	80-120			
Iron, total	297		mg/L	8.80	266	351	80-120			PS-4X

Definitions

I-03: Analyte required to be analyzed within 15 minutes of sampling. Analysis performed upon receipt of sample at laboratory.
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.
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: 3.7°C

Cooler Inspection Checklist

Custody Seals	No	Containers Intact	Yes
COC/Labels Agree	No	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
10/16/23 16:10

CHAIN OF CUSTODY

Keystone
LABORATORIES, INC.

600 East 17th Street South
Newton, IA 50208
641-792-8451

1 G J 0 0 8 0
HLW Engineering
PM: Sue Thompson

8/15/2023 4:02:47PM
www.keystonelabs.com

SITE INFORMATION
Sampler: TODD WHIPPLE
Project: SCISWA - AMD
6009

REPORT TO
Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50248

Rick Hurt
South Central IA Solid Waste Agency
1736 Highway T17
Tracy, IA 50256

SPECIAL INSTRUCTIONS
None

Turn Around Time
☐ Standard ☐ RUSH, need by __/__/__

LAB USE ONLY
Work Order 1GJ0080
Temperature 3.7
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
01-001	MW-307	Water	GRAB	9/29/23	9:07	2	alk-caco3-2320, fe-t-6010, so4-9056-w, al-t-6010, ph-4500	01
02-001	MW-312	Water	GRAB	9/29/23	10:56	2	alk-caco3-2320, fe-t-6010, so4-9056-w, al-t-6010, ph-4500	02
03-001	MW-390	Water	GRAB	9/29/23	9:26	2	alk-caco3-2320, fe-t-6010, so4-9056-w, al-t-6010, ph-4500	03
04-001	MW-300	Water	GRAB	9/29/23	11:35	2	alk-caco3-2320, fe-t-6010, so4-9056-w, al-t-6010, ph-4500	04
05-001	MW-303	Water	GRAB	9/29/23	12:59	2	alk-caco3-2320, fe-t-6010, so4-9056-w, al-t-6010, ph-4500	05

Relinquished By [signature] Date/Time 10/2/23 11:30

Received By Date/Time

Relinquished By [signature] Date/Time

Received for Lab By 10/2/23 [signature] Date/Time 11:30

Original - Lab Copy Yellow - Sampler Copy

Remarks:

CHAIN OF CUSTODY RECORD

Keystone LABORATORIES, INC.

600 East 17th Street South
Newton, IA 50208
641-792-8451

1 G J 0 0 8 0
HLW Engineering
PM: Sue Thompson

/2023 4:02:47PM
v.keystonelabs.com

SITE INFORMATION

Sampler: TODD WHIPPLE

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6009

REPORT TO

Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50248

INVOICE TO

Rick Hurt
South Central IA Solid Waste Agency
1736 Highway T17
Tracy, IA 50256

SPECIAL INSTRUCTIONS

None

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

LAB USE ONLY

Work Order 1GJ0080
Temperature 3.7
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
06-001	MW-304	Water	GRAB	9/29/23	13:15	2	alk-caco3-2320, fe-t-6010, so4-9056-w, al-t-6010, ph-4500	06
07-001	MW-313	Water	GRAB	9/29/23	12:20	2	alk-caco3-2320, fe-t-6010, so4-9056-w, al-t-6010, ph-4500	07
08-001	MW-335	Water	GRAB	9/29/23	12:43	2	alk-caco3-2320, fe-t-6010, so4-9056-w, al-t-6010, ph-4500	08
09-001	MW-344	Water	GRAB	9/29/23	14:40	2	alk-caco3-2320, fe-t-6010, so4-9056-w, al-t-6010, ph-4500	09
10-001	MW-380	Water	GRAB	9/29/23	11:17	2	alk-caco3-2320, fe-t-6010, so4-9056-w, al-t-6010, ph-4500	10

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Remarks:

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Keystone LABORATORIES, INC.
600 East 17th Street South
Newton, IA 50208
641-792-8451

1 G J 0 0 8 0
HLW Engineering
PM: Sue Thompson

SITE INFORMATION
Sampler: TODD WHIPPLE
Project: SCISWA - AMD
6009

REPORT TO
Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50248

INVOICE TO
Rick Hurt
South Central IA Solid Waste Agency
1736 Highway T17
Tracy, IA 50256

SPECIAL INSTRUCTIONS
None

Turn Around Time
☐ Standard ☐ RUSH, need by __/__/__

LAB USE ONLY
Work Order: 16J0080
Temperature: 3.7
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
11-001	MW-381	Water	GRAB	9/29/23	11:53	2	alk-caco3-2320, fe-t-6010, so4-9056-w, al-t-6010, ph-4500	11
12-001	MW-382R	Water	GRAB	9/29/23	15:20	2	alk-caco3-2320, fe-t-6010, so4-9056-w, al-t-6010, ph-4500	12
13-001	MW-384	Water	GRAB	9/29/23	14:04	2	alk-caco3-2320, fe-t-6010, so4-9056-w, al-t-6010, ph-4500	13
14-001	MW-385	Water	GRAB	9/29/23	13:50	2	alk-caco3-2320, fe-t-6010, so4-9056-w, al-t-6010, ph-4500	14
15-001	GU-4A DRY	Water	GRAB	9/29/23	—	—	alk-caco3-2320, fe-t-6010, so4-9056-w, al-t-6010, ph-4500	—

Relinquished By: [signature] Date/Time: 10/2/23 11:30
Received By: Date/Time:

Relinquished By: Date/Time:
Received for Lab By: [signature] Date/Time: 10/2/23 11:30

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Remarks:

CHAIN OF CUSTODY RECOF

Keystone LABORATORIES, INC.
600 East 17th Street South
Newton, IA 50208
641-792-8451
:onelabs.com

1GJ0080
HLW Engineering
PM: Sue Thompson

SITE INFORMATION

Sampler:

Project: SCISWA - AMD
6009

REPORT TO

Todd Whipple
HLW Engineering
PO Box 314
Story City, IA 50248

INVOICE

Rick Hurt
South Central IA Solid Waste Agency
1736 Highway T17
Tracy, IA 50256

SPECIAL INSTRUCTIONS

None

Turn Around Time
☐ Standard ☐ RUSH, need by __/__/__

LAB USE ONLY

Work Order 16J0080
Temperature 3.7
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
16-001	SW-1 DRY	Water	GRAB	9/29/23	—	—	alk-caco3-2320, fe-t-6010, so4-9056-w, al-t-6010, ph-4500	—
17-001	MW-601	Water	GRAB	9/29/23	9:50	2	alk-caco3-2320, fe-t-6010, so4-9056-w, al-t-6010, ph-4500	15
18-001	MW-602	Water	GRAB	9/29/23	10:10	2	alk-caco3-2320, fe-t-6010, so4-9056-w, al-t-6010, ph-4500	16
19-001	MW-603	Water	GRAB	9/29/23	10:30	2	alk-caco3-2320, fe-t-6010, so4-9056-w, al-t-6010, ph-4500	17

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Appendix E

Field Turbidity (NTU) Summary

SCISWA Sanitary Landfill

Field Turbidity Over Time

No-Purge Sampling

	6/16/22	9/1/22	11/15/22	3/6/23	9/29/23	Max	Min	Ave	Std Dev
Well	**NTU**	**NTU**	**NTU**	**NTU**	**NTU**				
300		1.8	6.46	2.3	5.47	6.46	1.80	4.01	2.31
303		9.73		21.66	22.6	22.60	9.73	18.00	7.17
304		8.45		23.6	25.62	25.62	8.45	19.22	9.38
307	1.06	1.72		2.61	5.2	5.20	1.06	2.65	1.82
312		8.52		43.81	9.35	43.81	8.52	20.56	20.14
313		23.75		16.43	9.94	23.75	9.94	16.71	6.91
335		9.06		146.8	22.03	146.80	9.06	59.30	76.06
344	2.18	6.87		147.2	10.14	147.20	2.18	41.60	70.48
380		26.56		9.77	10.74	26.56	9.77	15.69	9.43
381		1.4		24.84	8.36	24.84	1.40	11.53	12.04
382R		3		47.34	9.64	47.34	3.00	19.99	23.91
384		3.28		65.14	7.26	65.14	3.28	25.23	34.62
385		215.8		36.07	40.06	215.80	36.07	97.31	102.63
390		6.67		10.35	21.13	21.13	6.67	12.72	7.51
GU-4A				1.01		1.01	1.01	1.01	
SW-1				2.61		2.61	2.61	2.61	
601		1.47		2.25	17.62	17.62	1.47	7.11	9.11
602		25.11		109.9	53.02	109.90	25.11	62.68	43.21
603		29.96		39.96	15.94	39.96	15.94	28.62	12.07
Max	2.18	215.80	6.46	147.20	53.02				
Min	1.06	1.40	6.46	1.01	5.20				
Median	1.62	8.45	6.46	23.60	10.74				
Average	1.62	22.54	6.46	39.67	17.30				

Appendix F

Summary of VOC Quantification Limit Exceedances

Spring 2020		**Fall 2020**	
MW-344*	cis-1,2-dichloroethylene	MW-344*	cis-1,2-dichloroethylene
MW-382R*	1,1-dichloroethane	MW-382R*	1,1-dichloroethane

Spring 2021		**Fall 2021**	
MW-344*	cis-1,2-dichloroethylene	MW-344*	cis-1,2-dichloroethylene
MW-382R*	1,1-dichloroethane	MW-382R*	1,1-dichloroethane

Spring 2022		**Fall 2022**	
MW-344*	cis-1,2-dichloroethylene	MW-344*	cis-1,2-dichloroethylene
MW-382R*	1,1-dichloroethane	MW-382R*	None

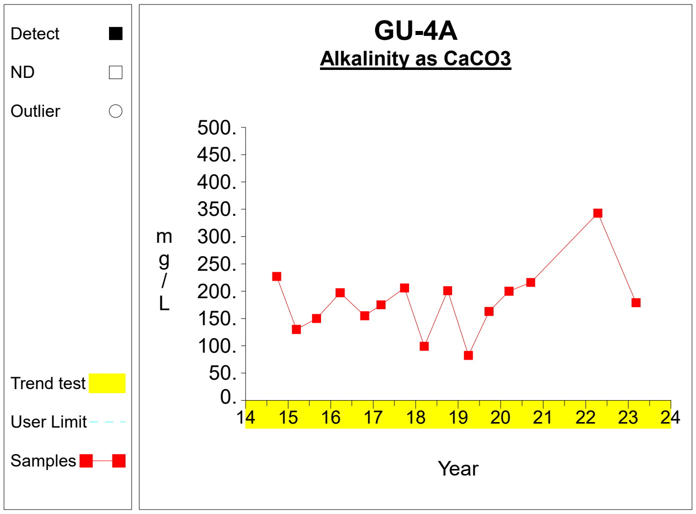
Spring 2023		**Fall 2023**	
MW-344*	None	MW-344*	benzene
MW-344*	None	MW-344*	cis-1,2-dichloroethylene
MW-382R*	1,1-dichloroethane	MW-382R*	bis(2ethylhexyl)phthalate

**Assessment Monitoring Well.*

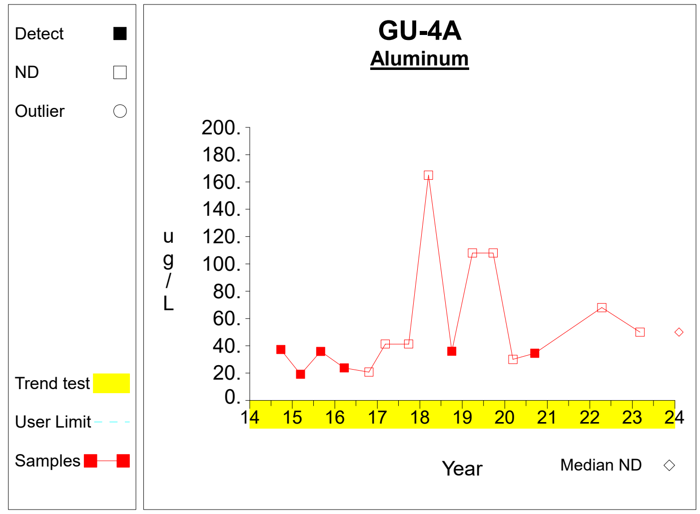
Appendix G

Time Series Graphs – Inorganic Compounds
Site Monitoring Points

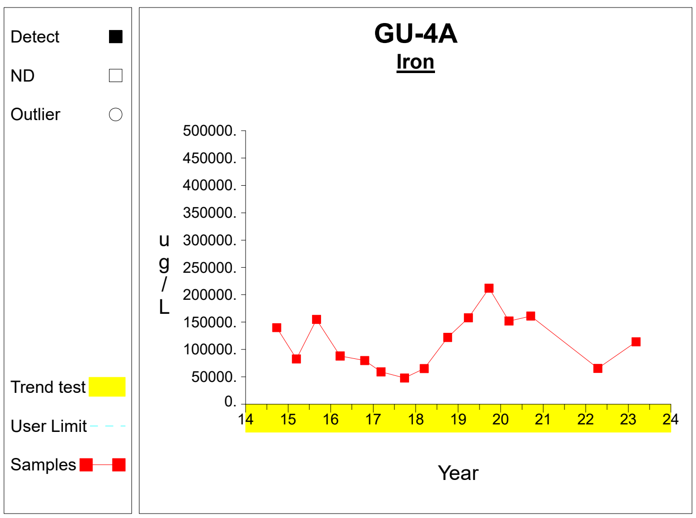
Time Series



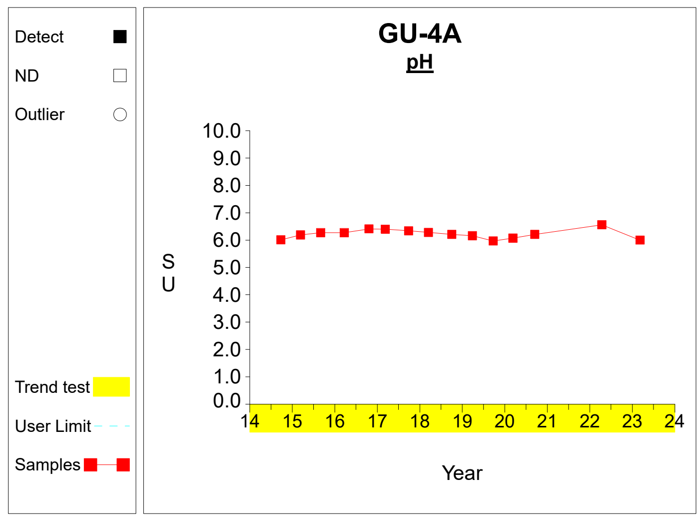
Graph 1



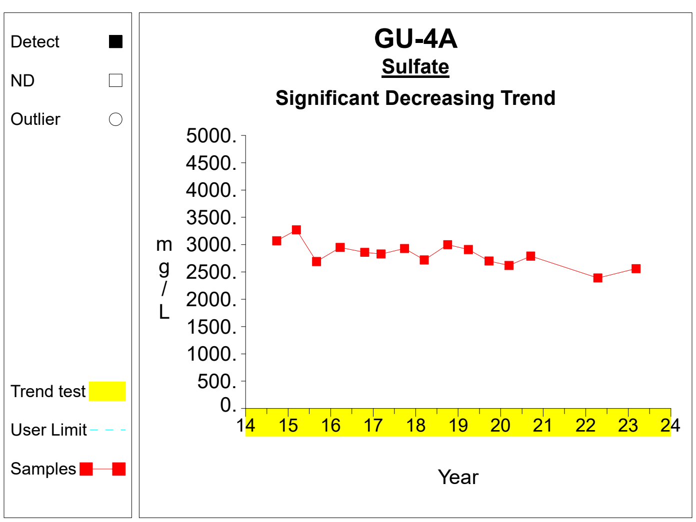
Graph 2



Graph 3

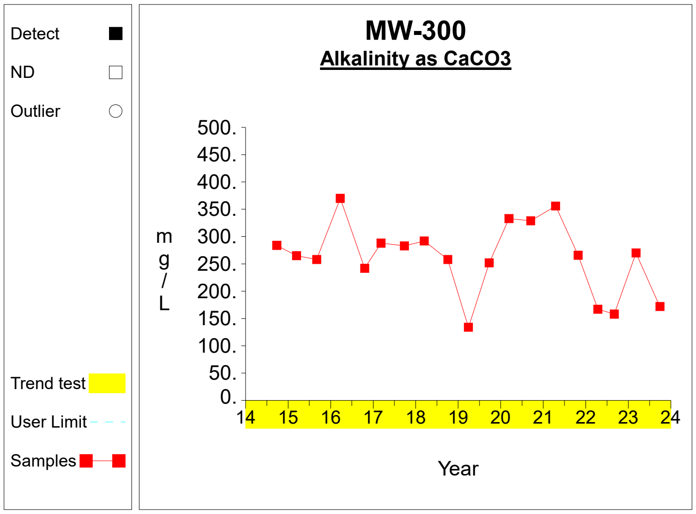


Graph 4

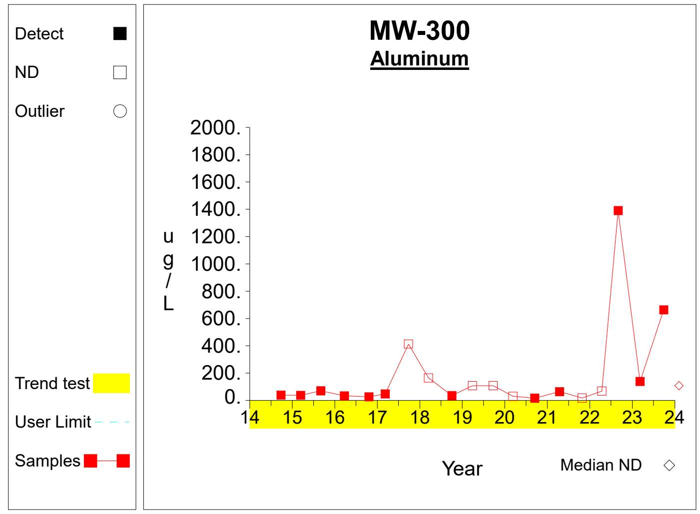


Graph 5

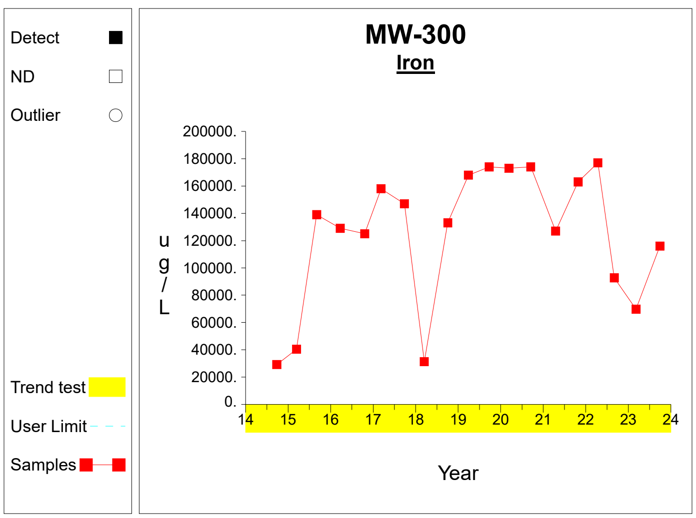
Time Series



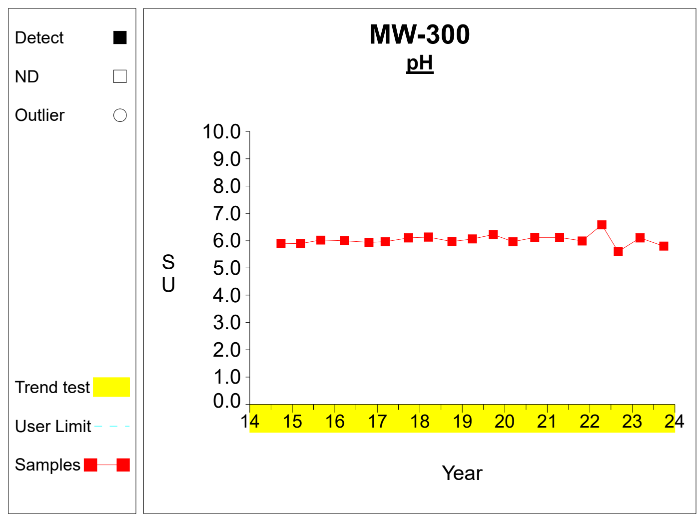
Graph 6



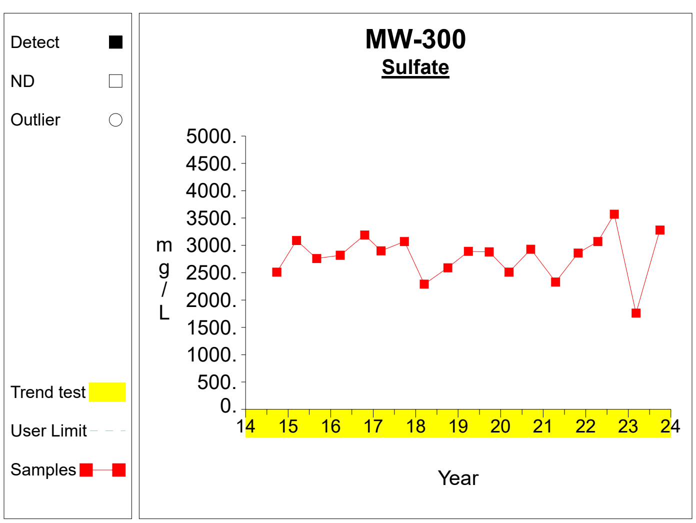
Graph 7



Graph 8

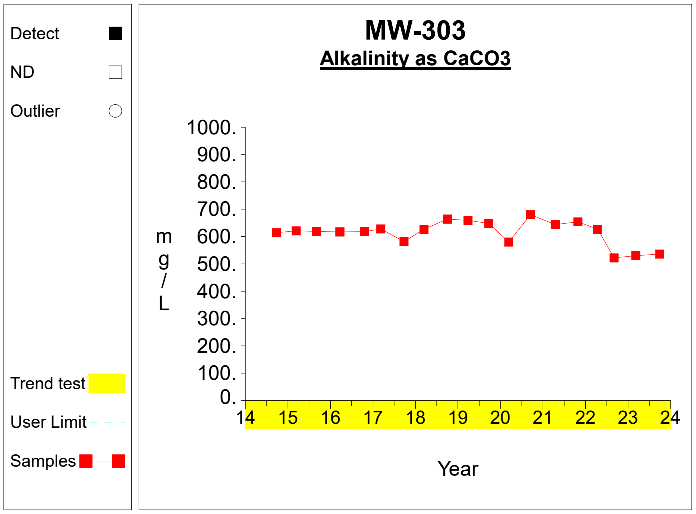


Graph 9

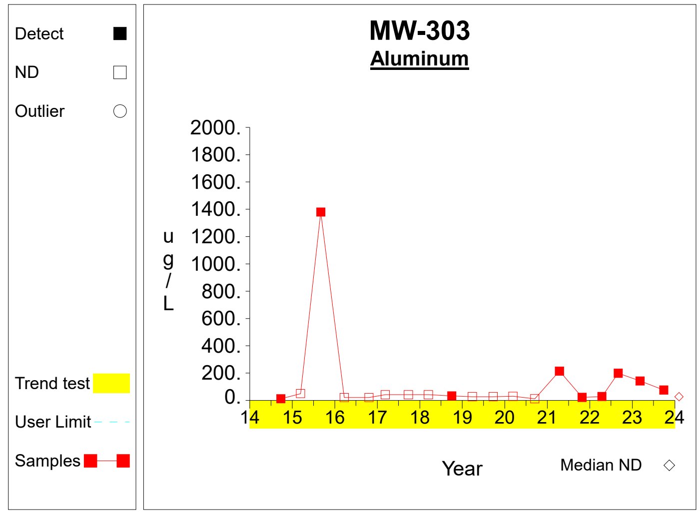


Graph 10

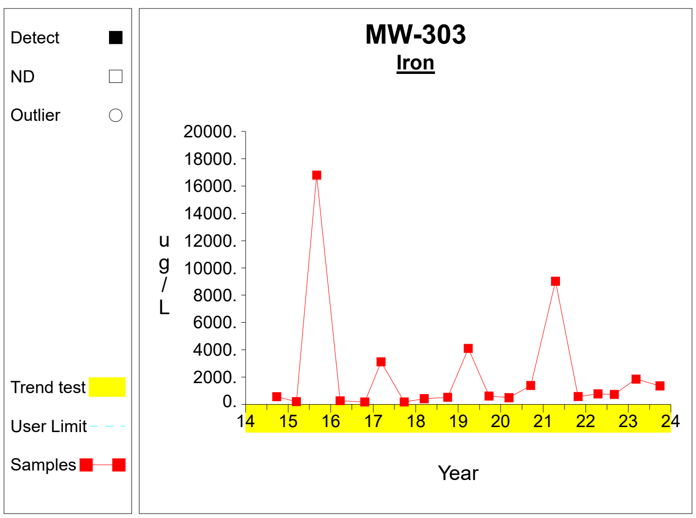
Time Series



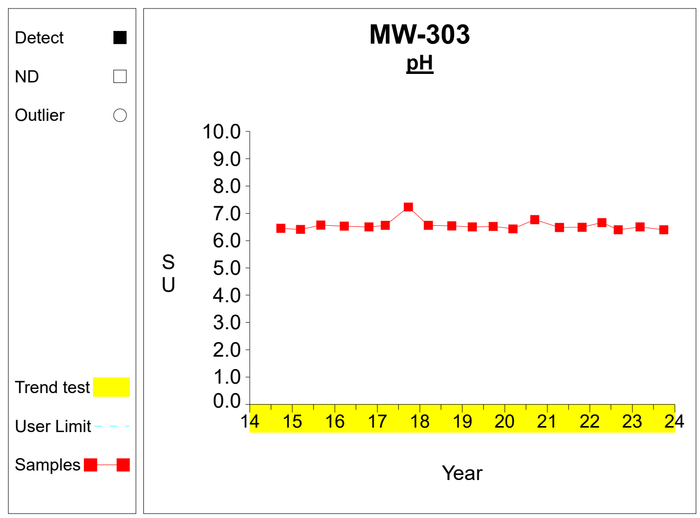
Graph 11



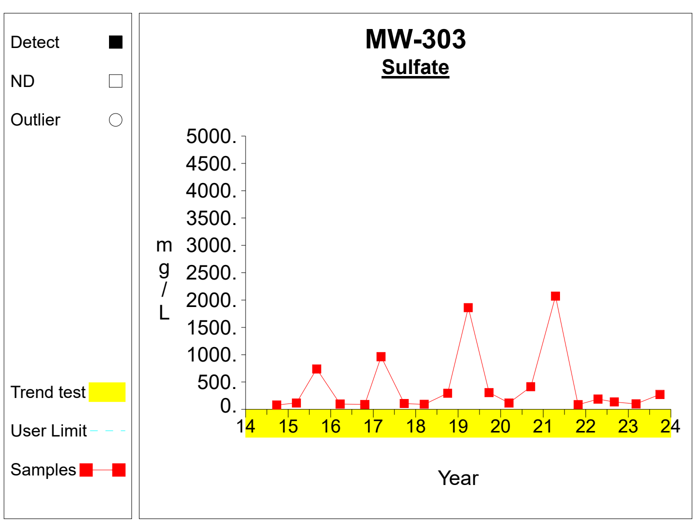
Graph 12



Graph 13

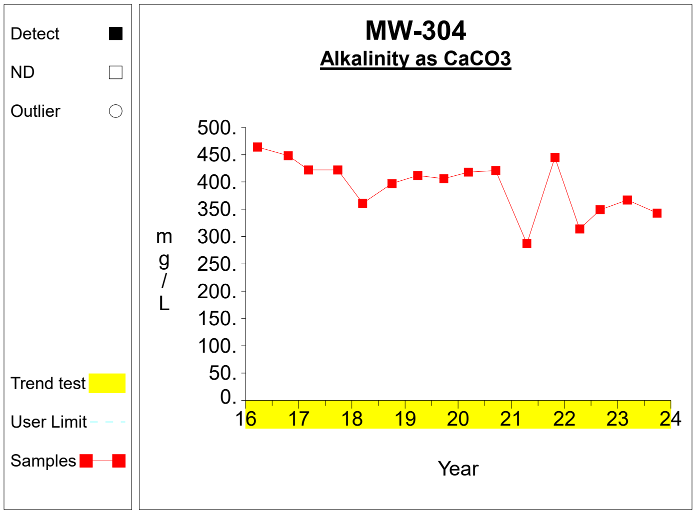


Graph 14

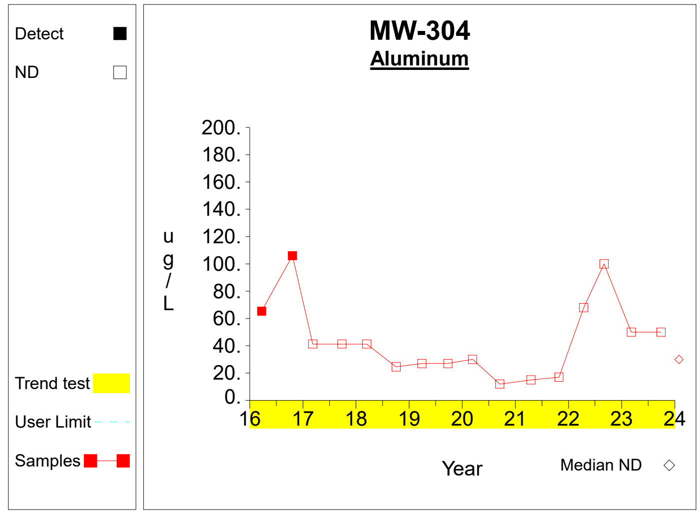


Graph 15

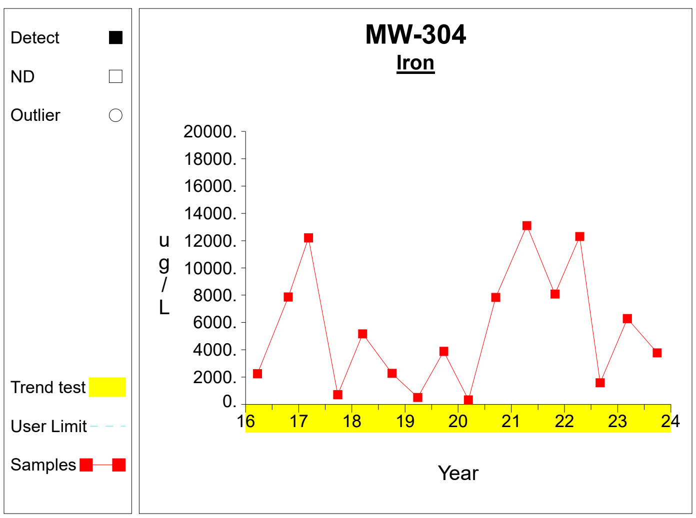
Time Series



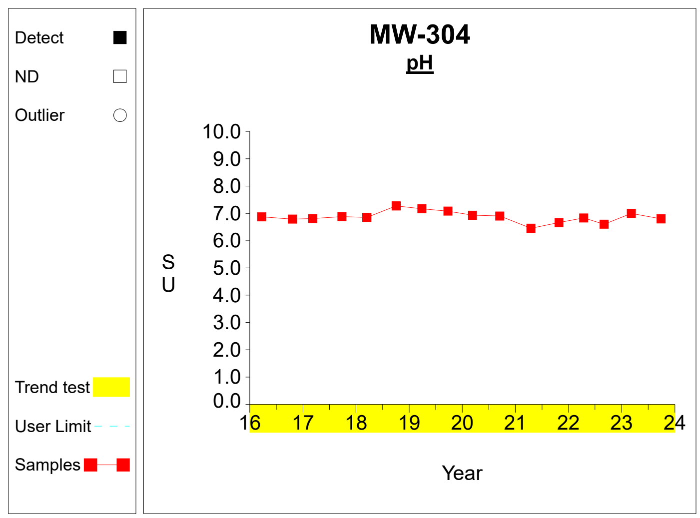
Graph 16



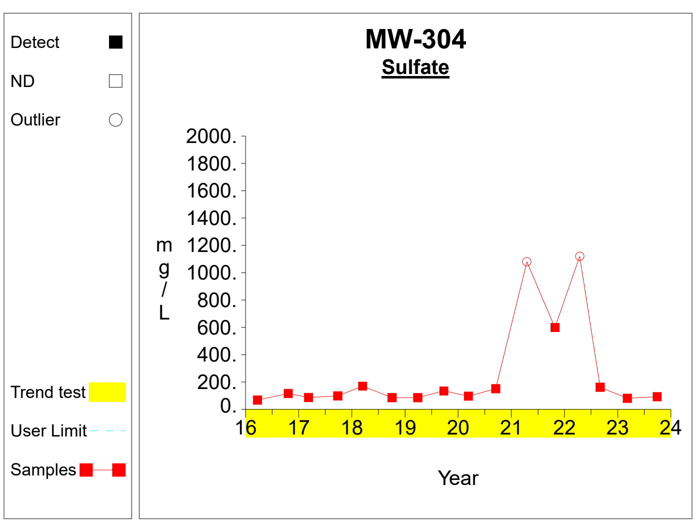
Graph 17



Graph 18

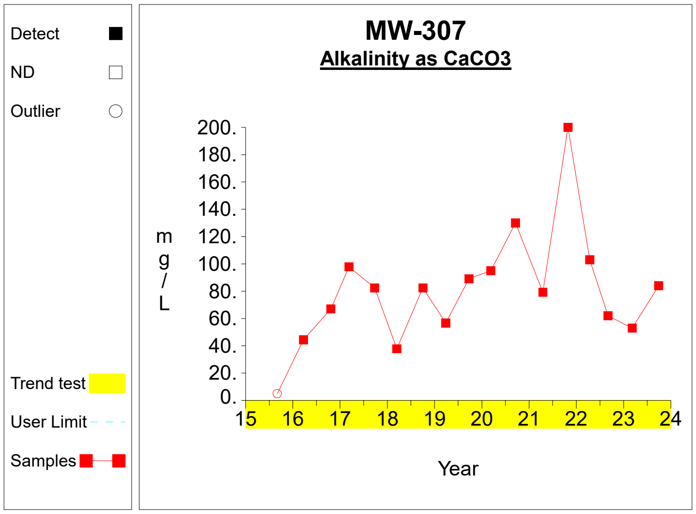


Graph 19

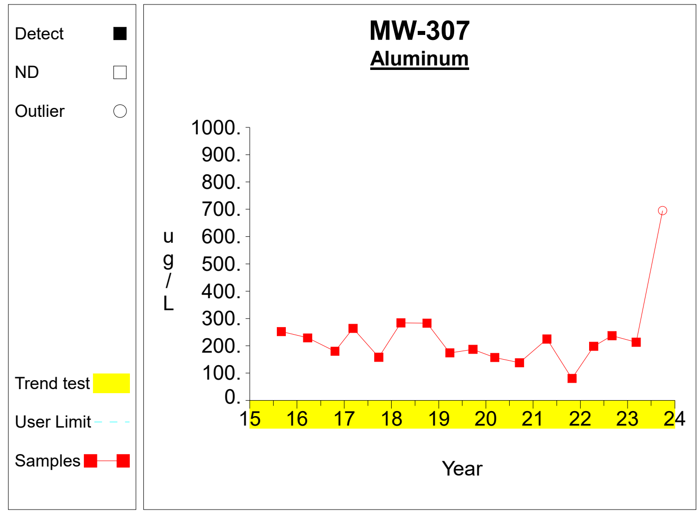


Graph 20

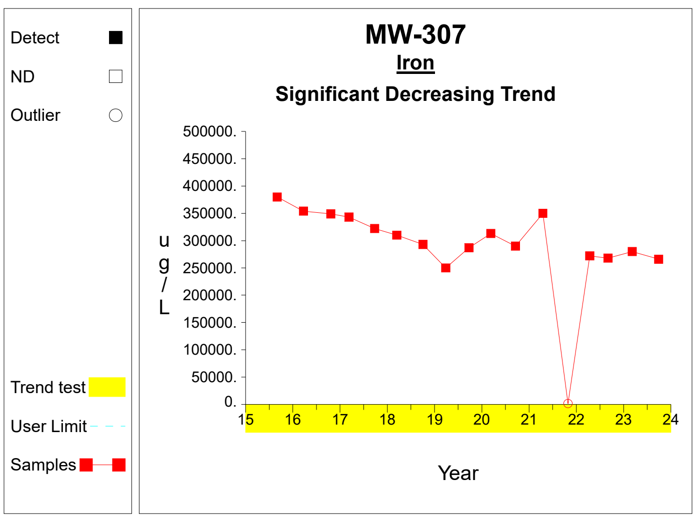
Time Series



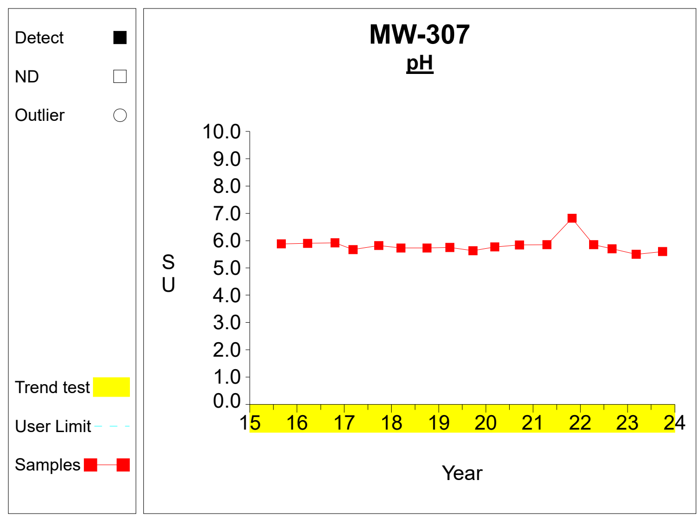
Graph 21



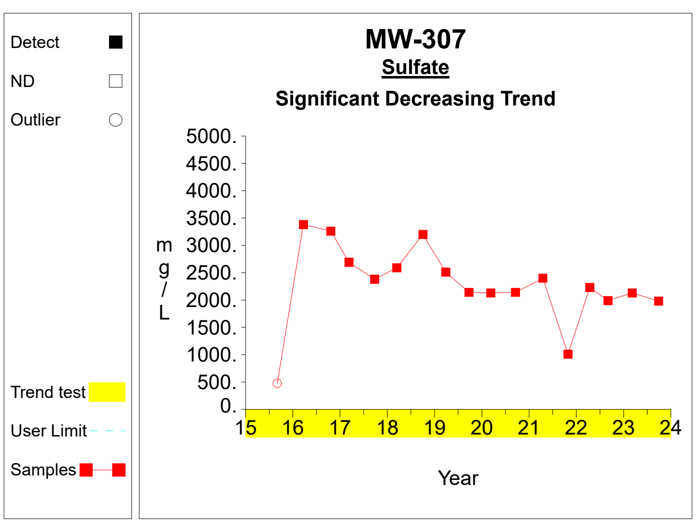
Graph 22



Graph 23

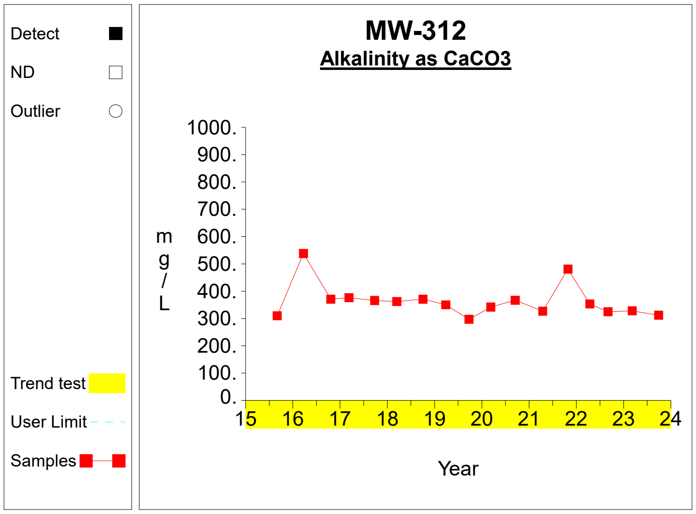


Graph 24

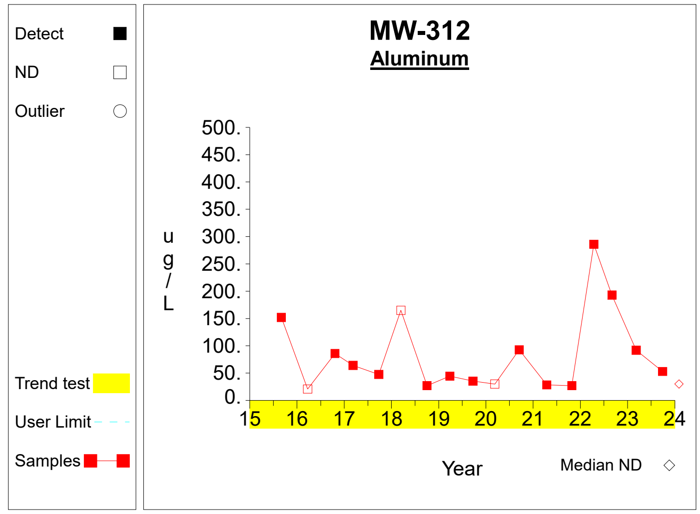


Graph 25

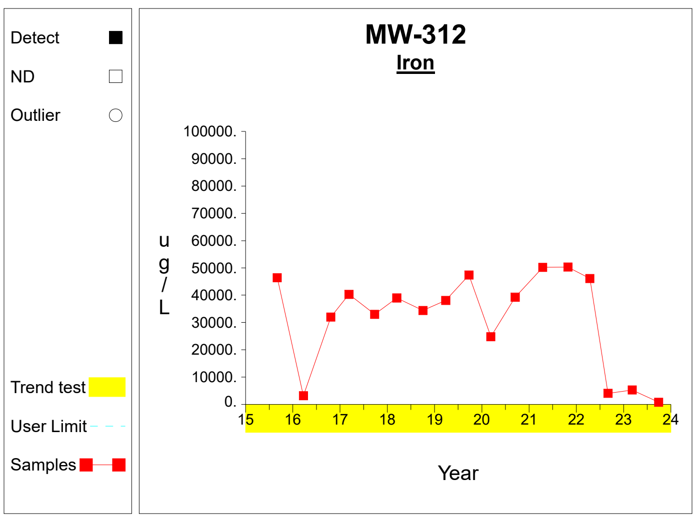
Time Series



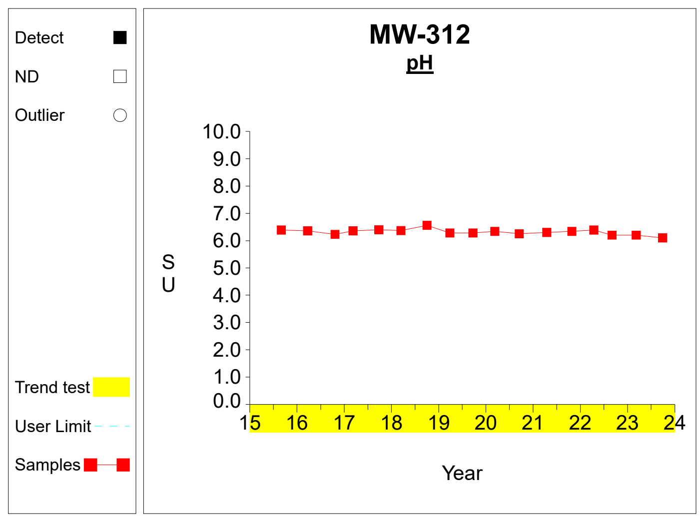
Graph 26



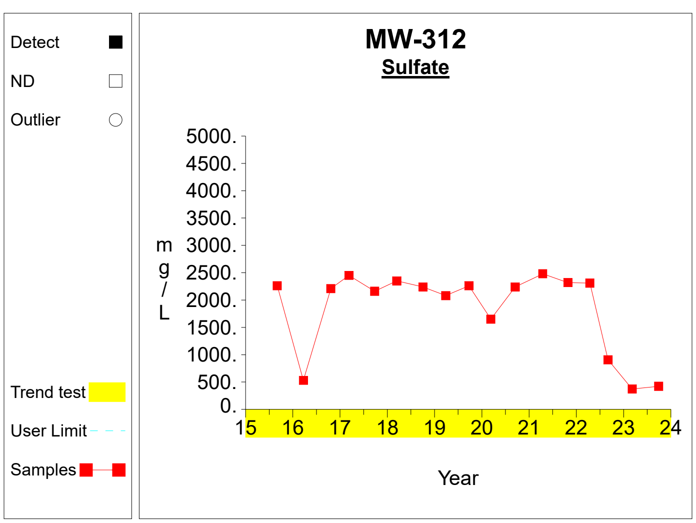
Graph 27



Graph 28

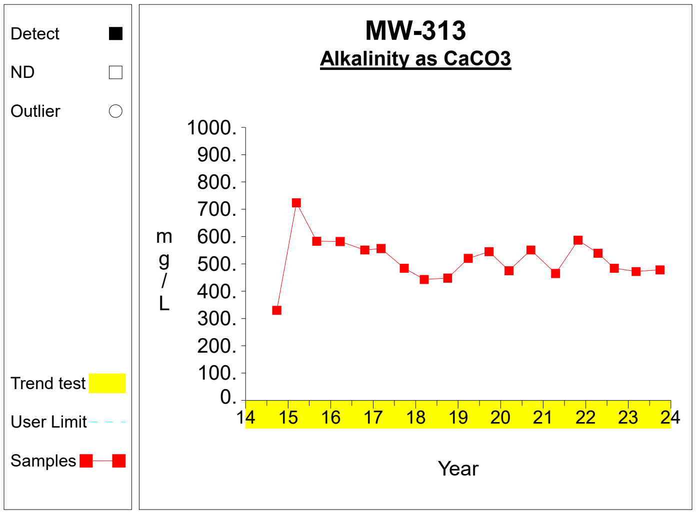


Graph 29

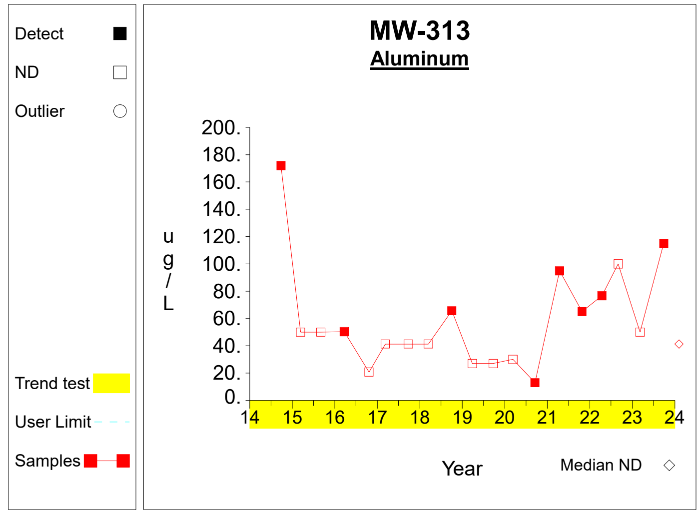


Graph 30

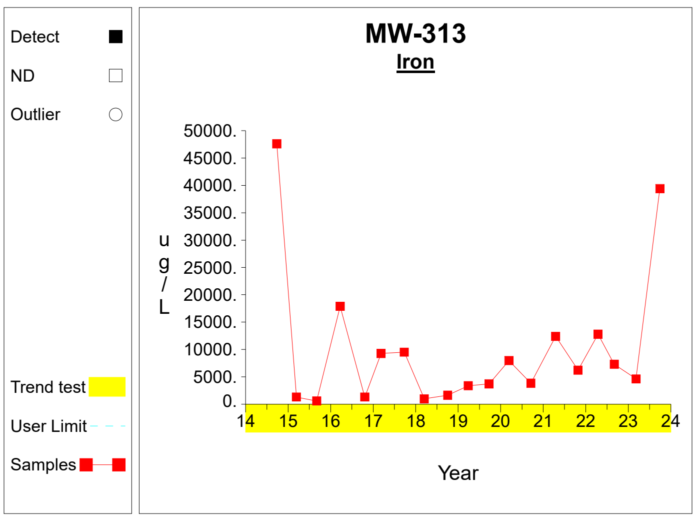
Time Series



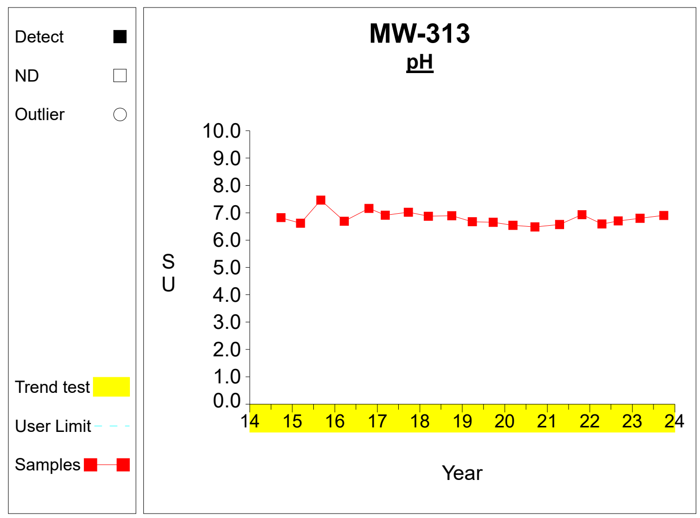
Graph 31



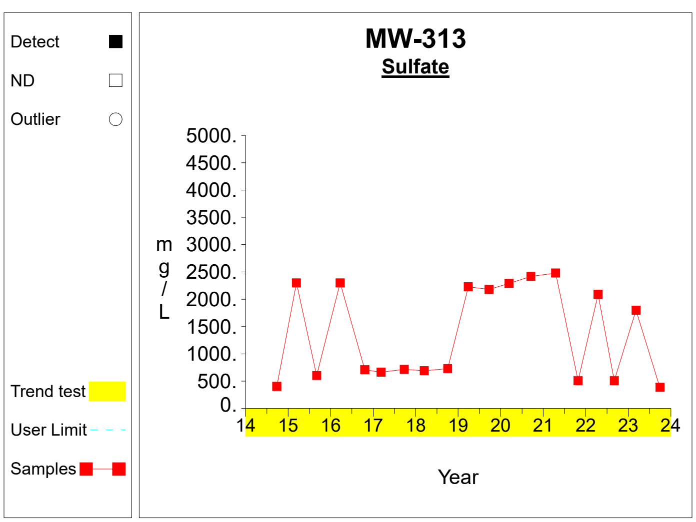
Graph 32



Graph 33

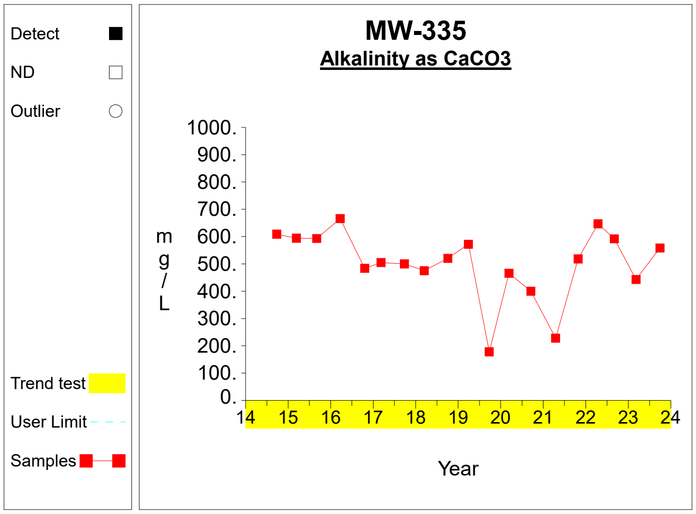


Graph 34



Graph 35

Time Series



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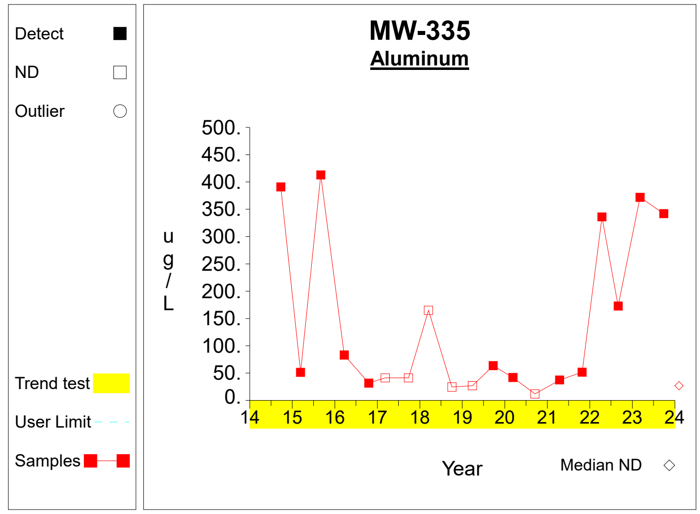

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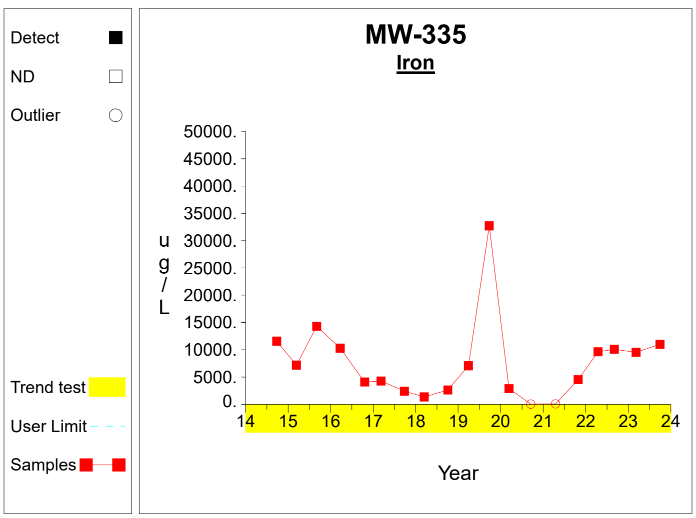
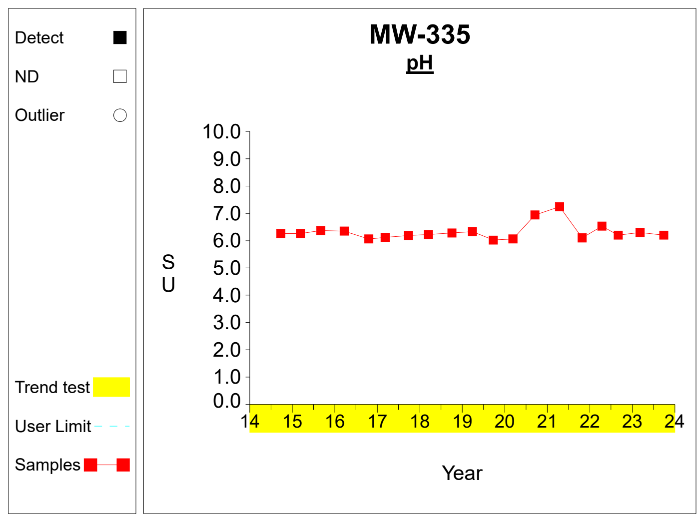
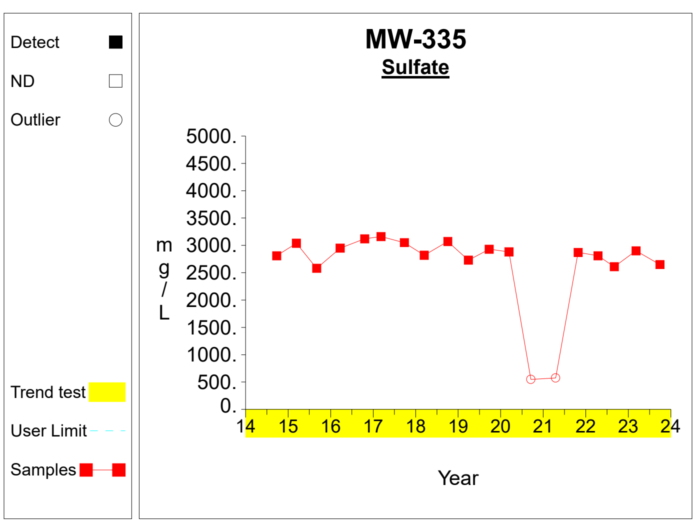


Graph 38

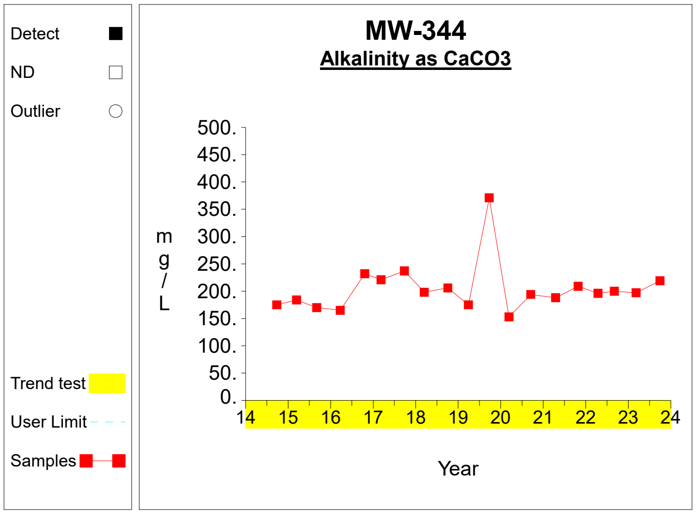


Graph 39



Graph 40

Time Series



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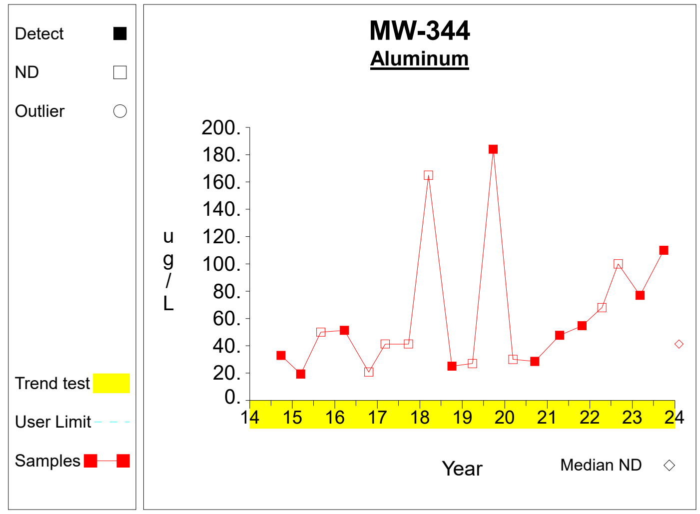

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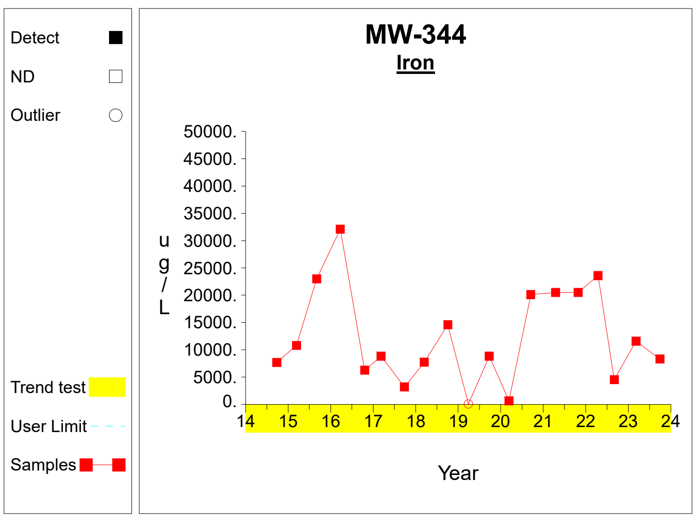
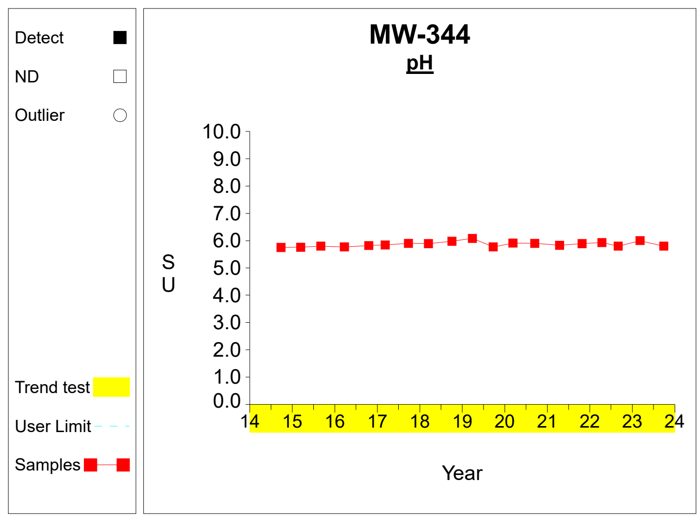


Graph 43



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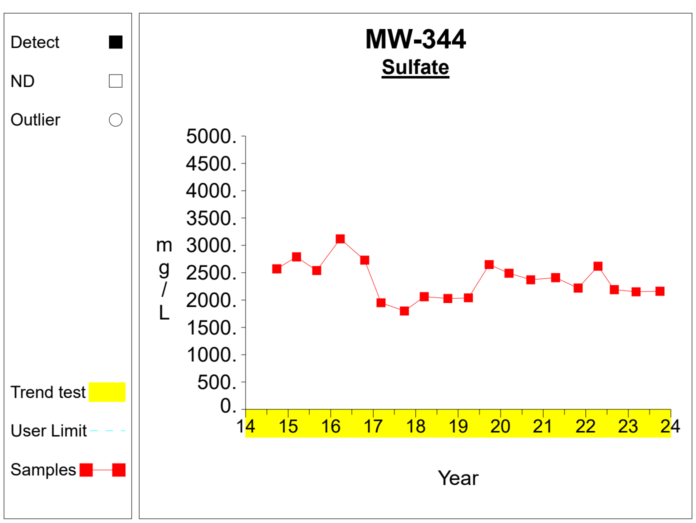
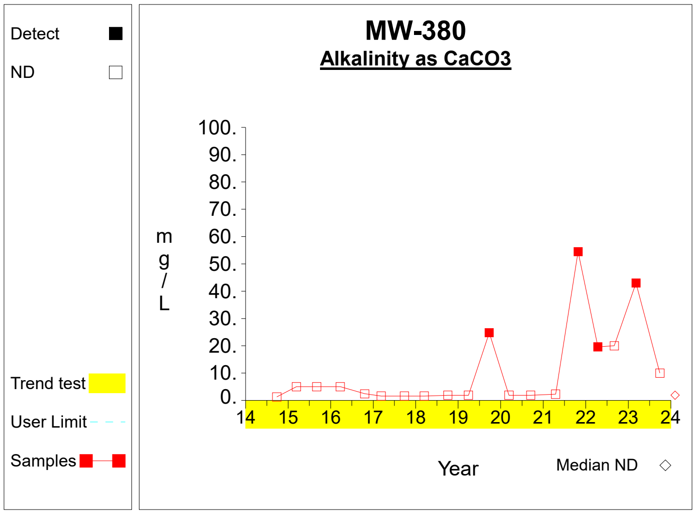


Graph 45

Time Series



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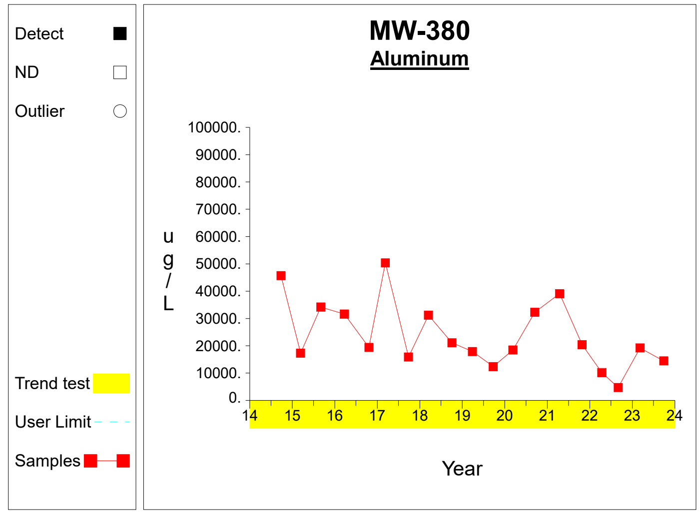
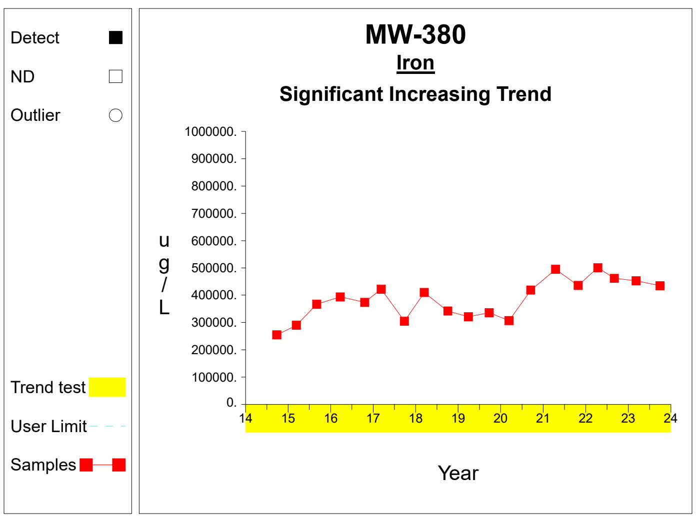
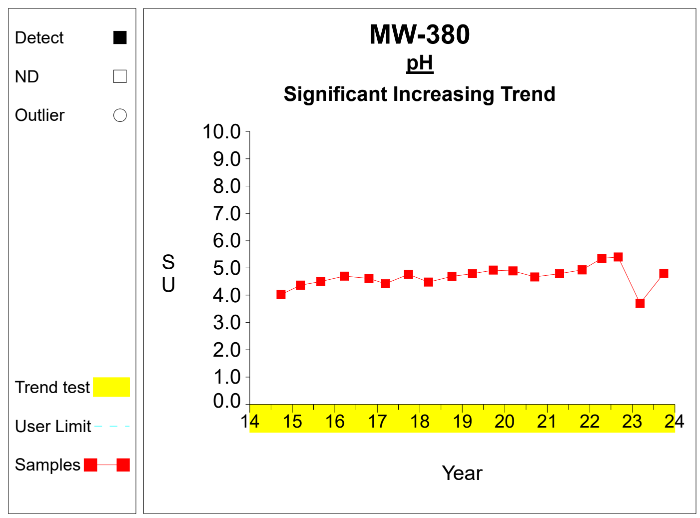


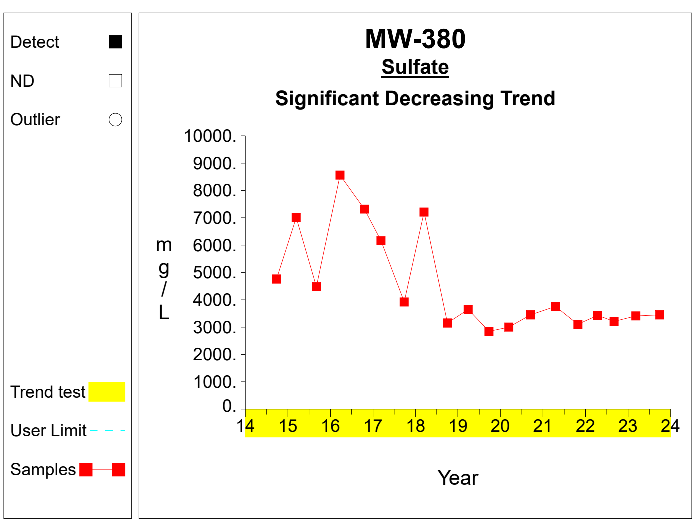
Graph 47



Graph 48

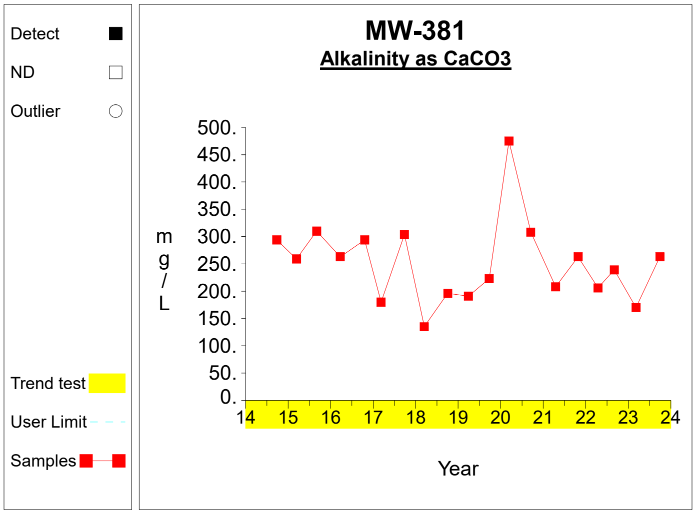


Graph 49

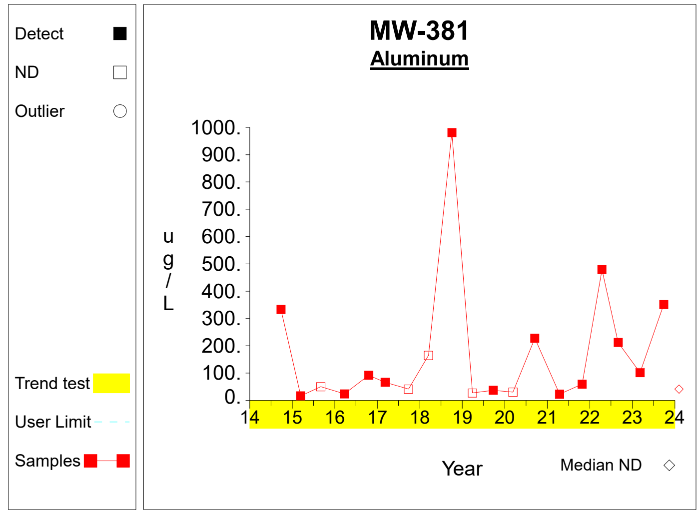


Graph 50

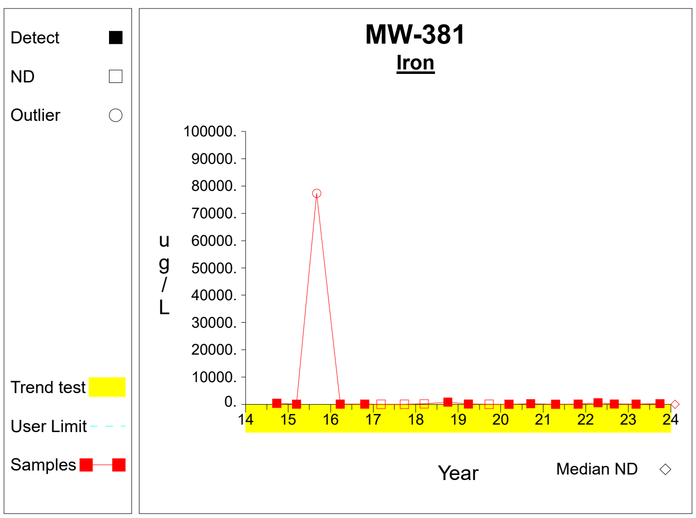
Time Series



Graph 51



Graph 52



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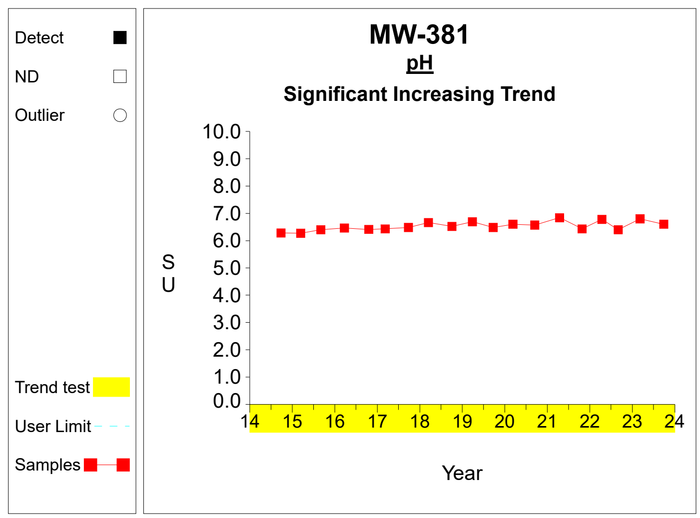

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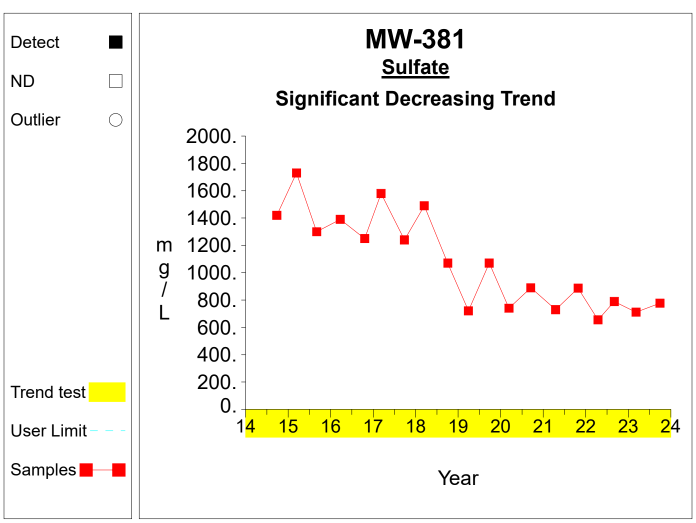
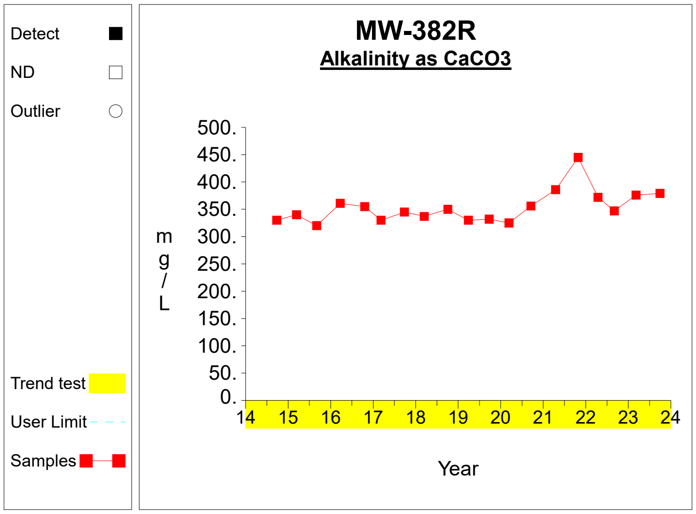
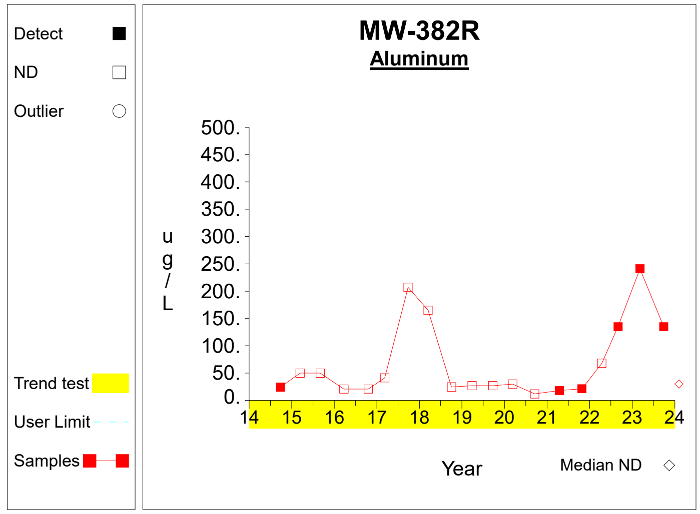


Graph 55

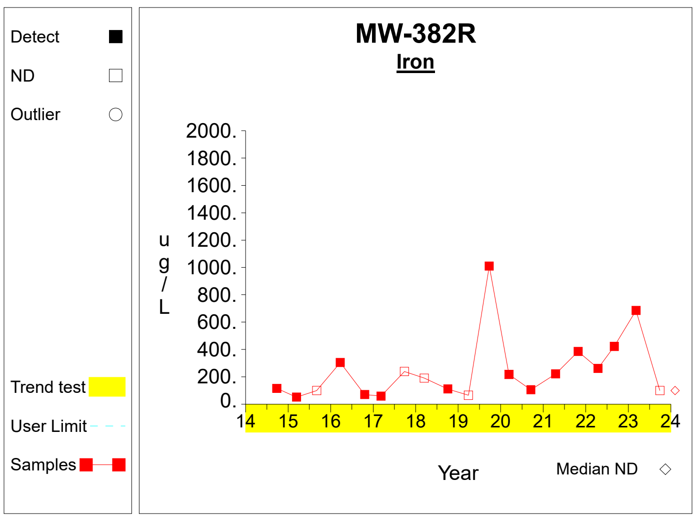
Time Series



Graph 56



Graph 57



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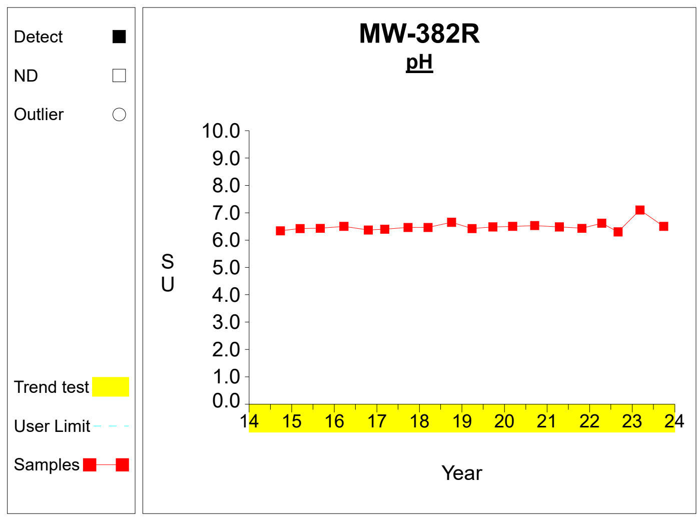

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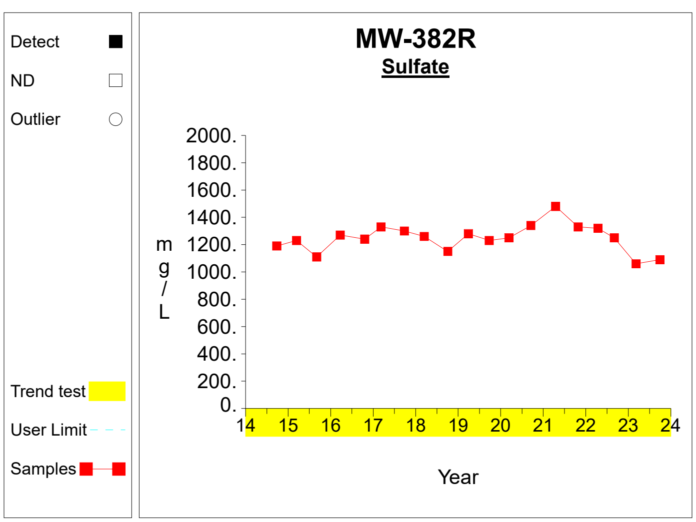
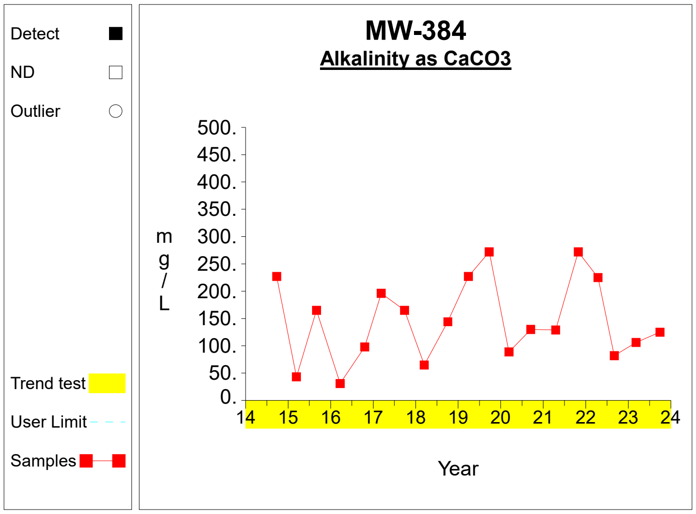
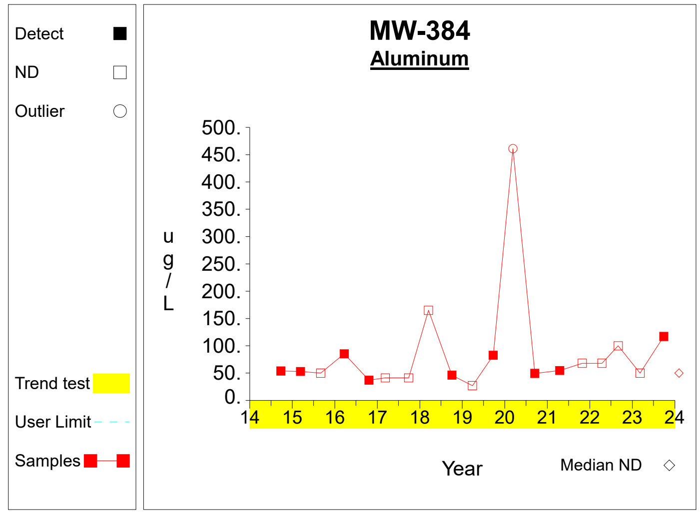


Graph 60

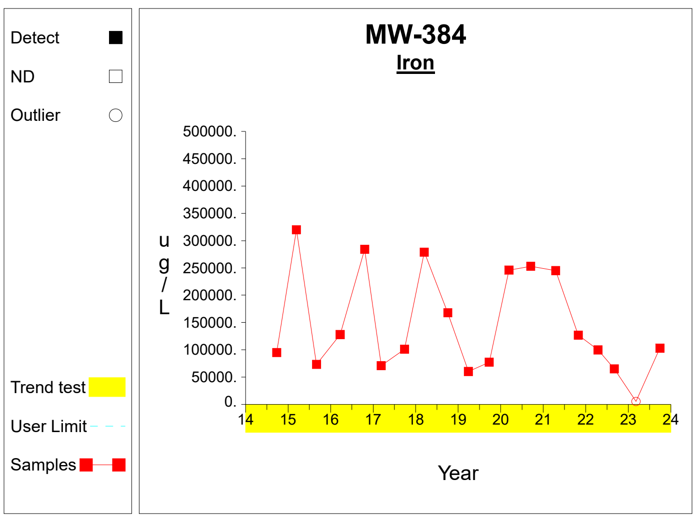
Time Series



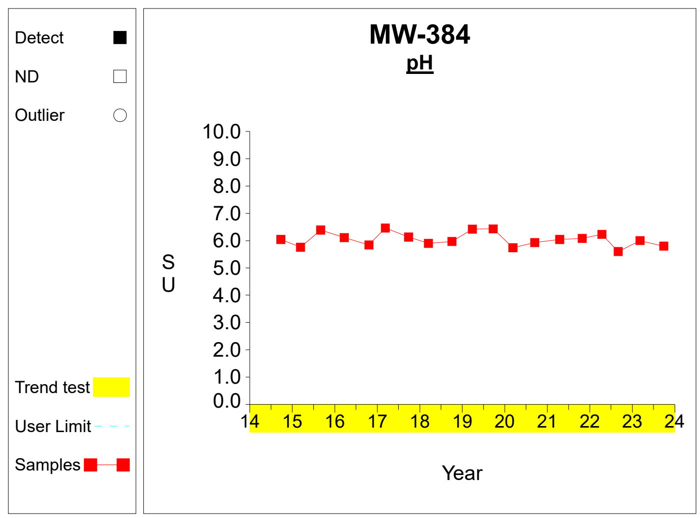
Graph 61



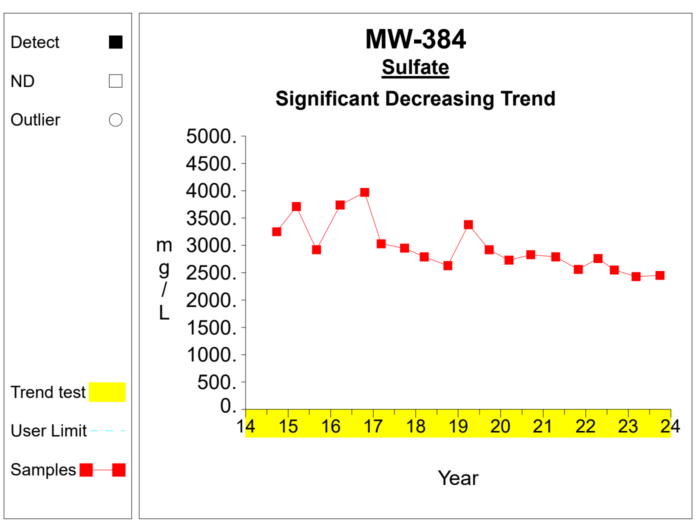
Graph 62



Graph 63



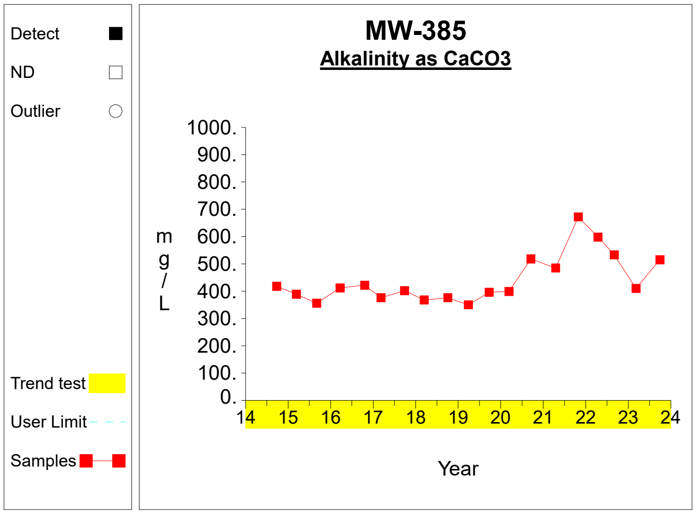
Graph 64



Graph 65

Prepared by: Otter Creek Environmental

Time Series



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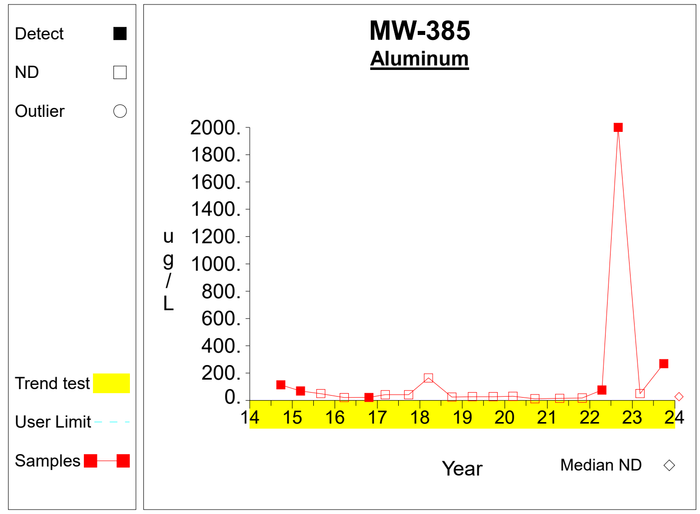
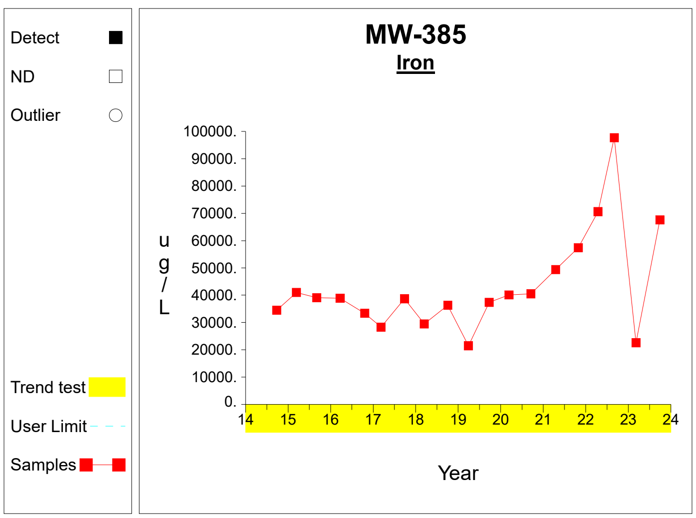
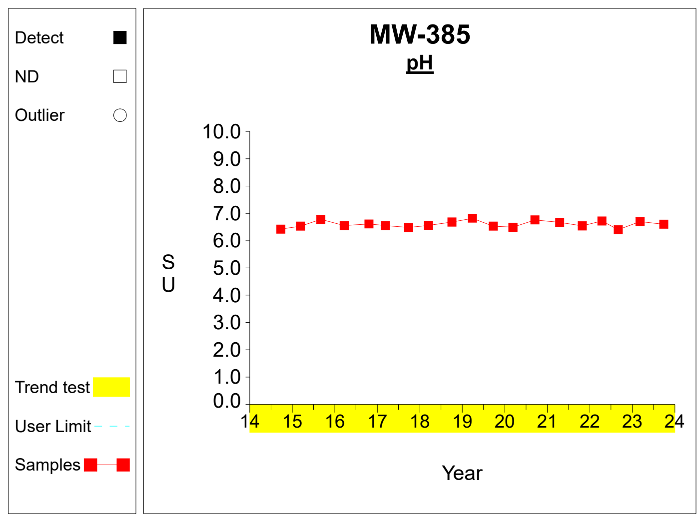


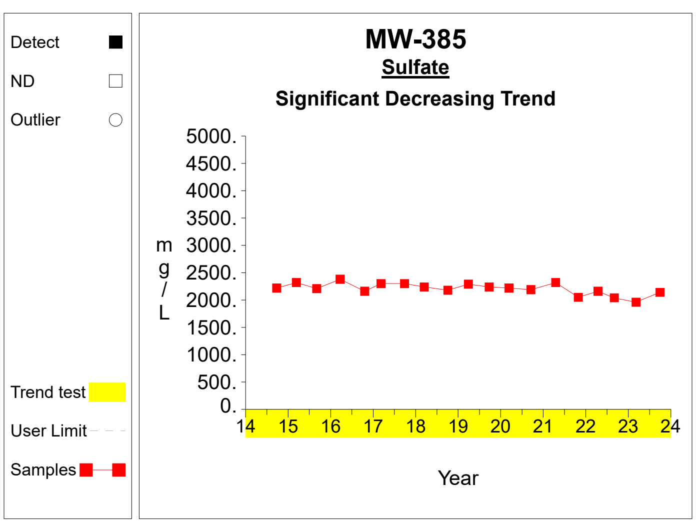
Graph 67



Graph 68

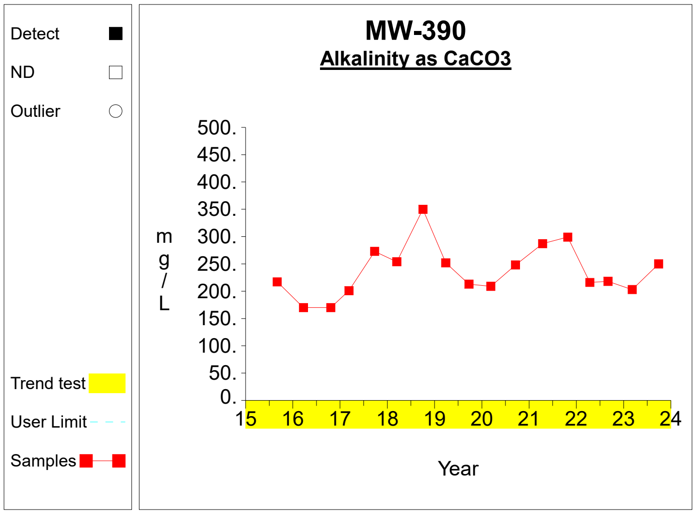


Graph 69

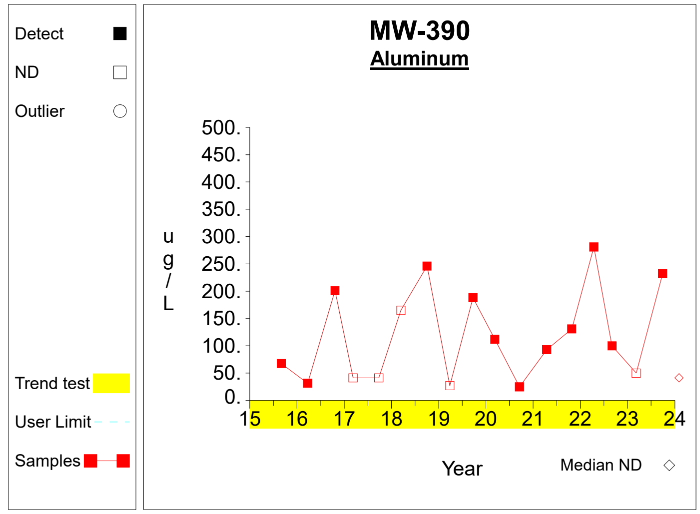


Graph 70

Time Series



Graph 71



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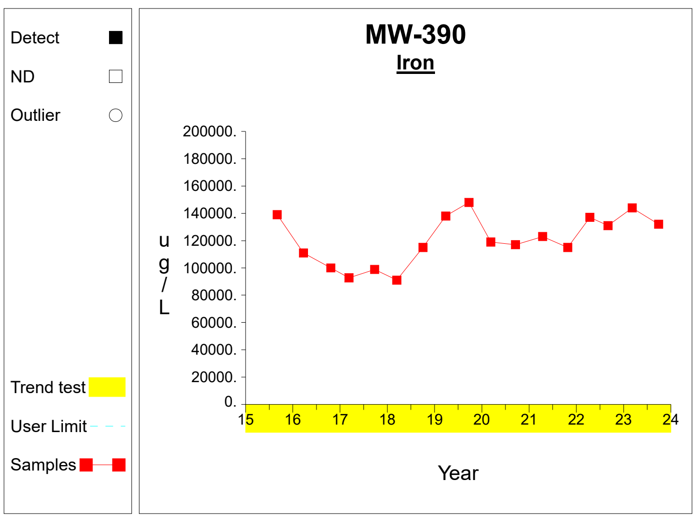

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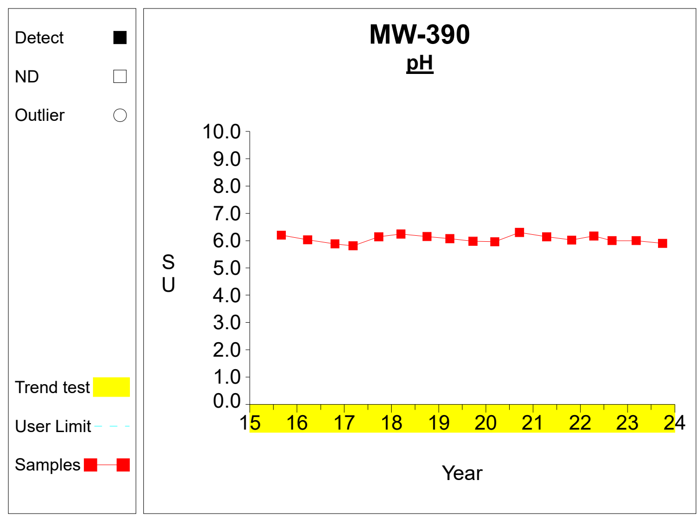

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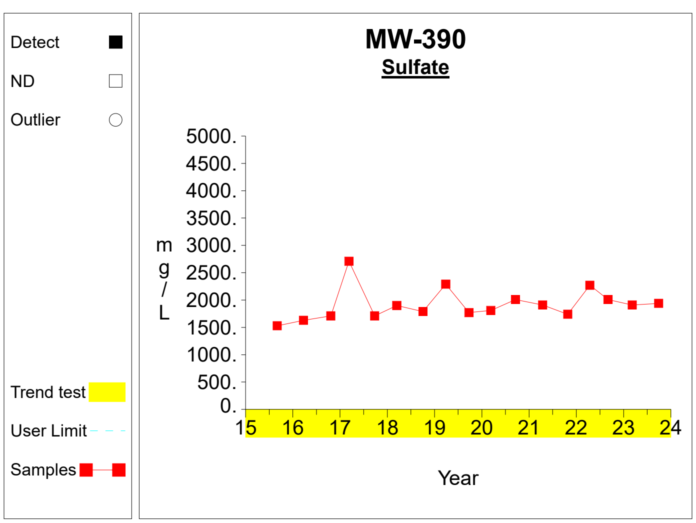
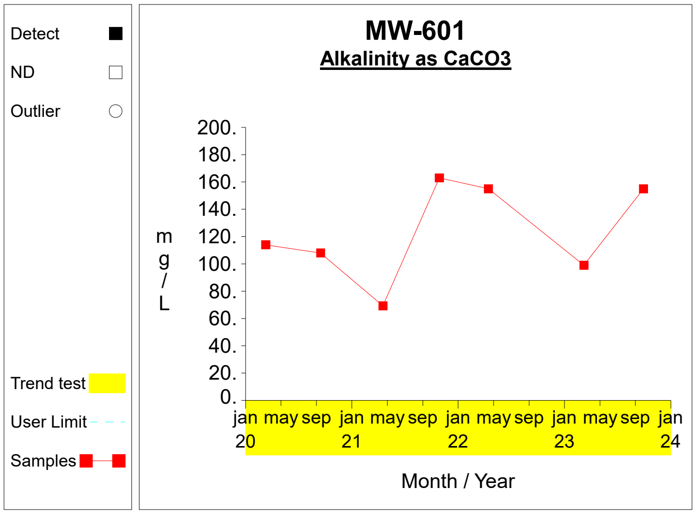
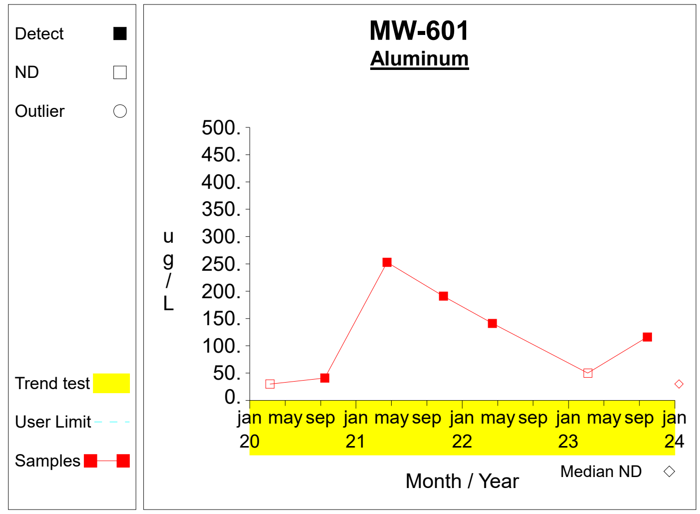


Graph 75

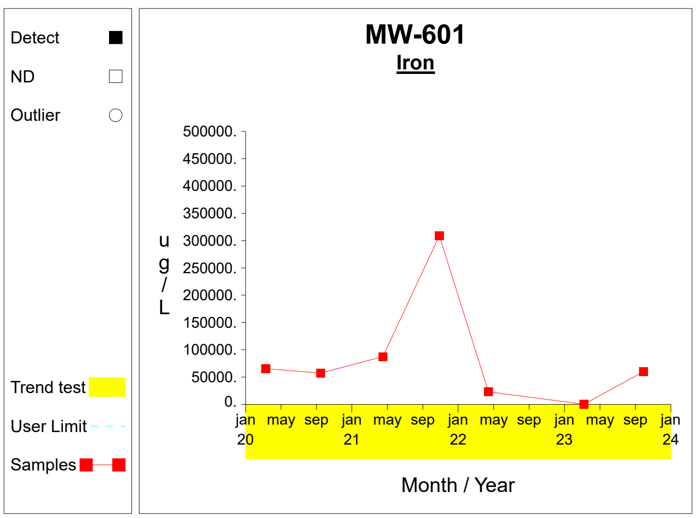
Time Series



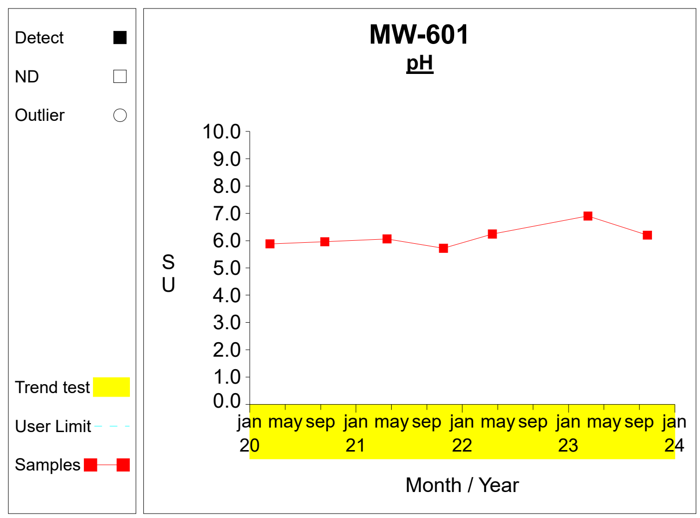
Graph 76



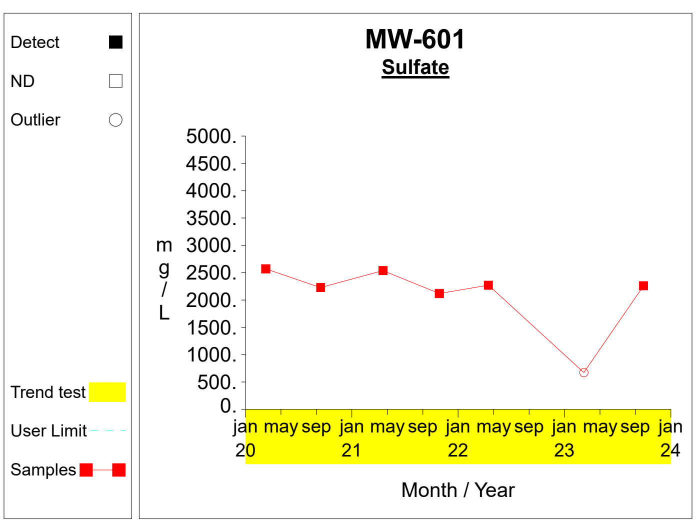
Graph 77



Graph 78

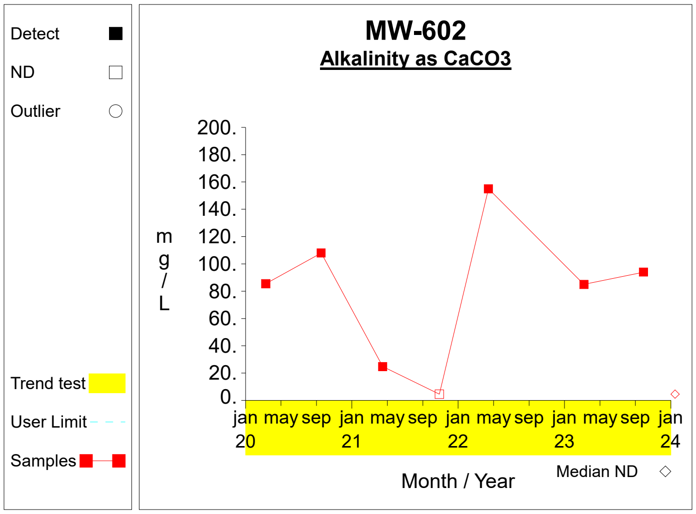


Graph 79

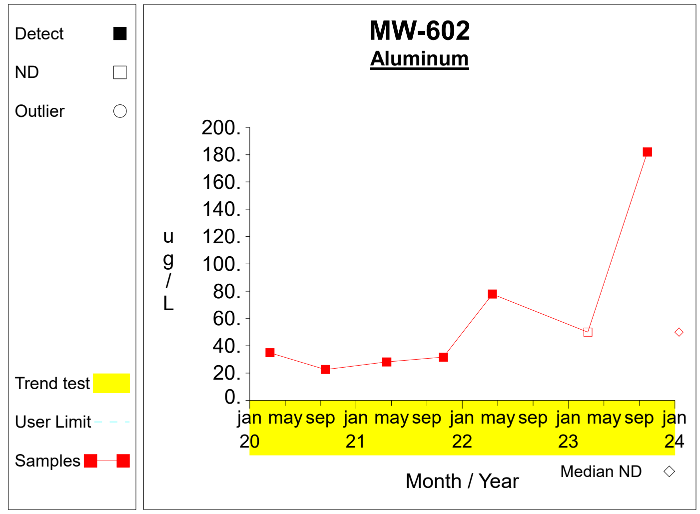


Graph 80

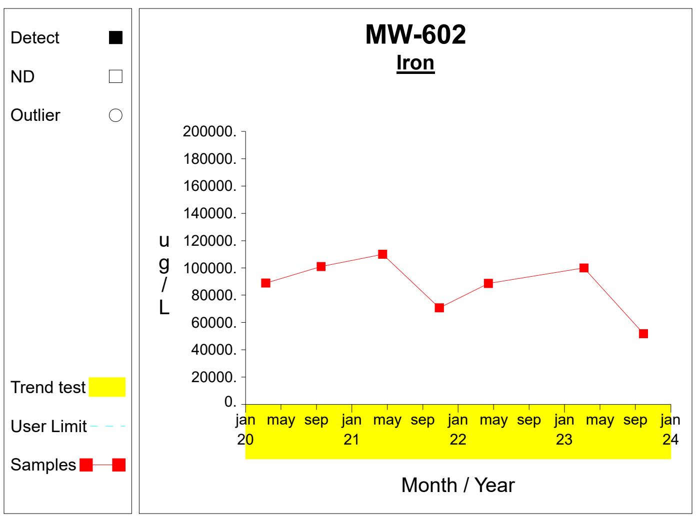
Time Series



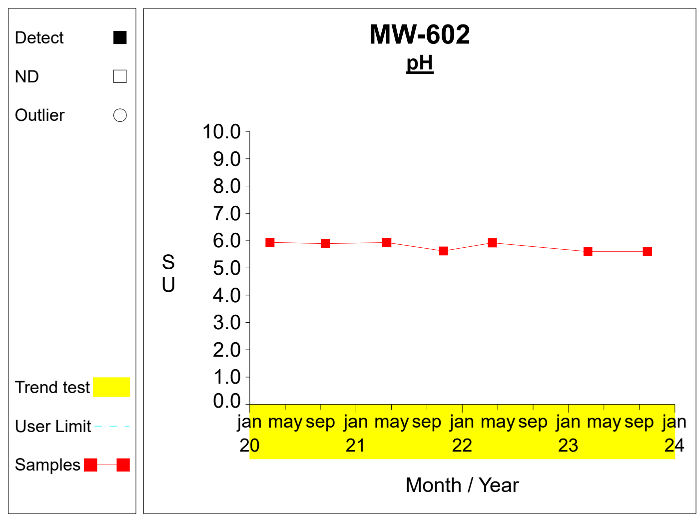
Graph 81



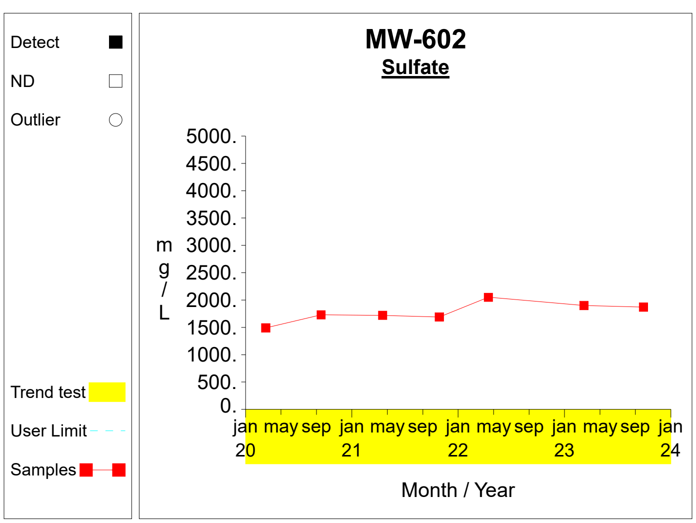
Graph 82



Graph 83



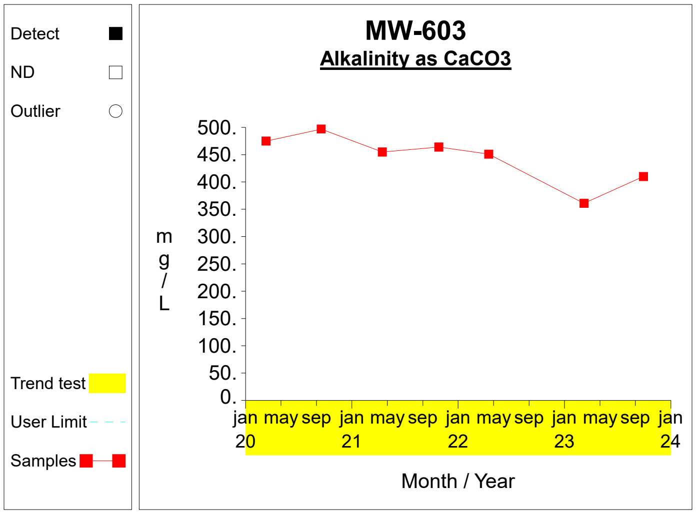
Graph 84



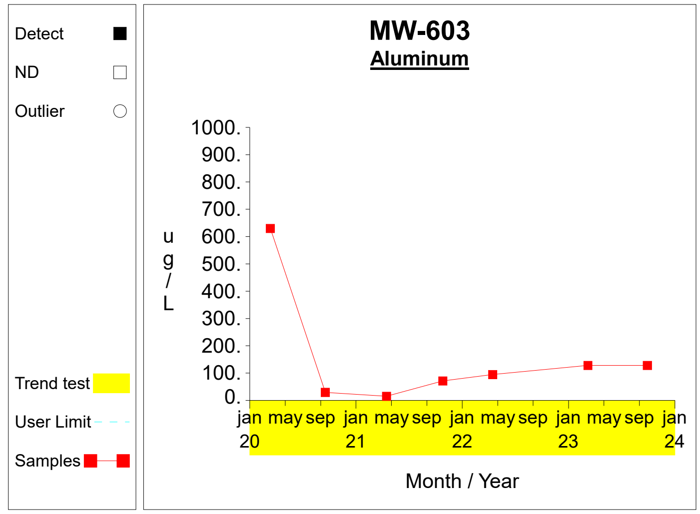
Graph 85

South Central Iowa SWA [GWI] December 2023

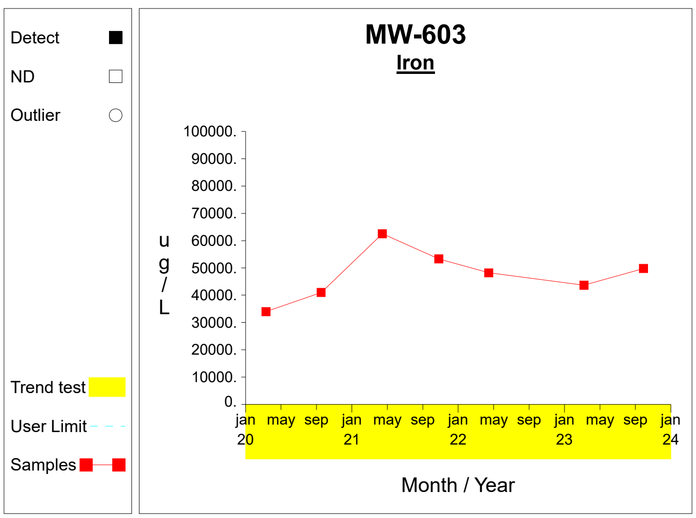
Time Series



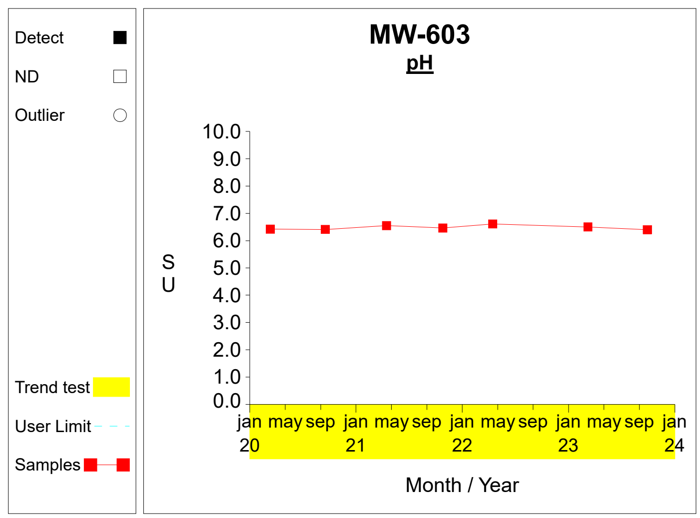
Graph 86



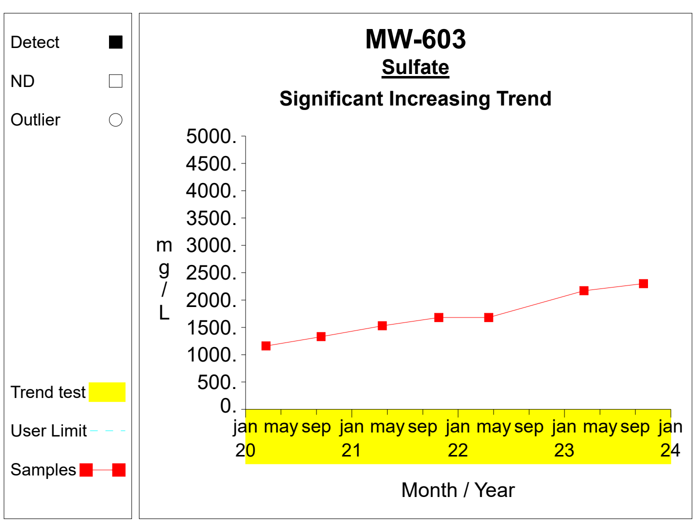
Graph 87



Graph 88

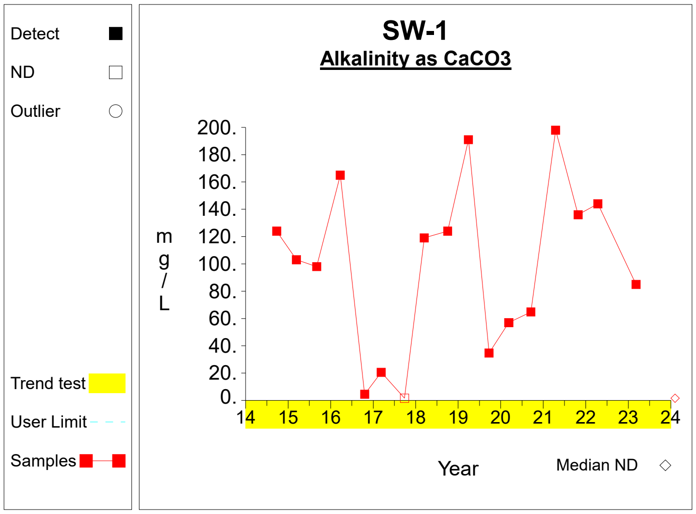


Graph 89

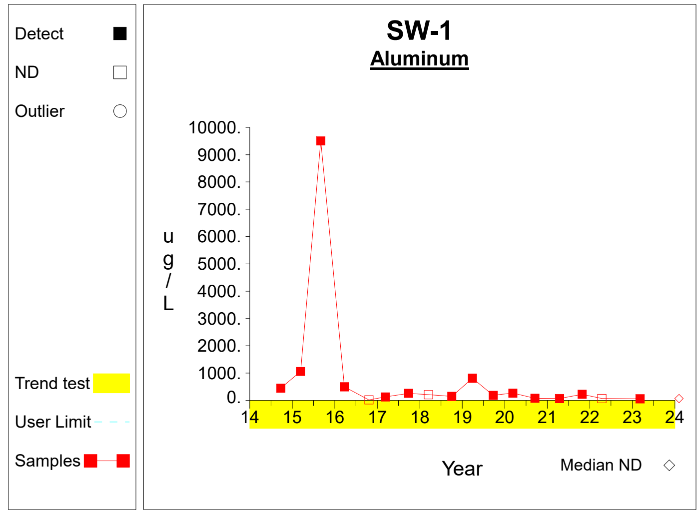


Graph 90

Time Series



Graph 91



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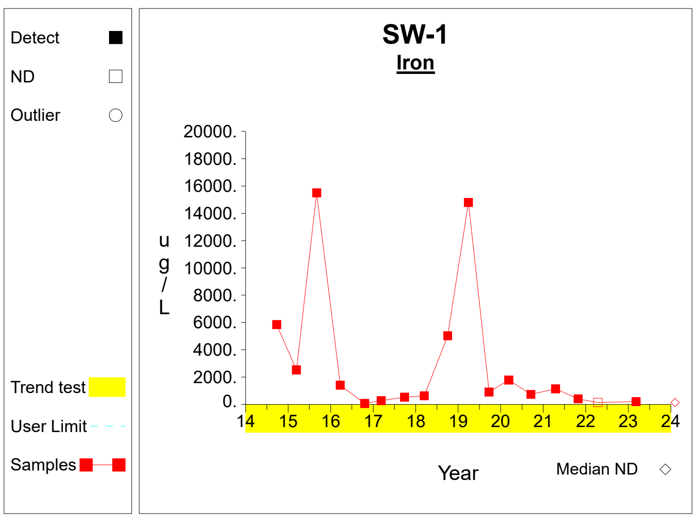
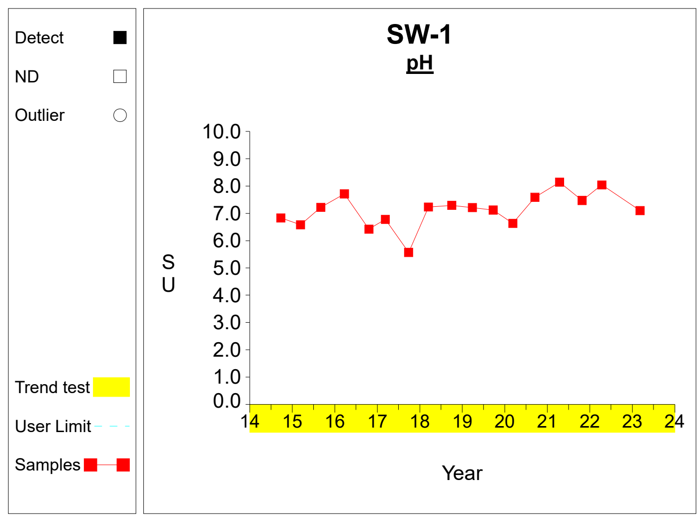
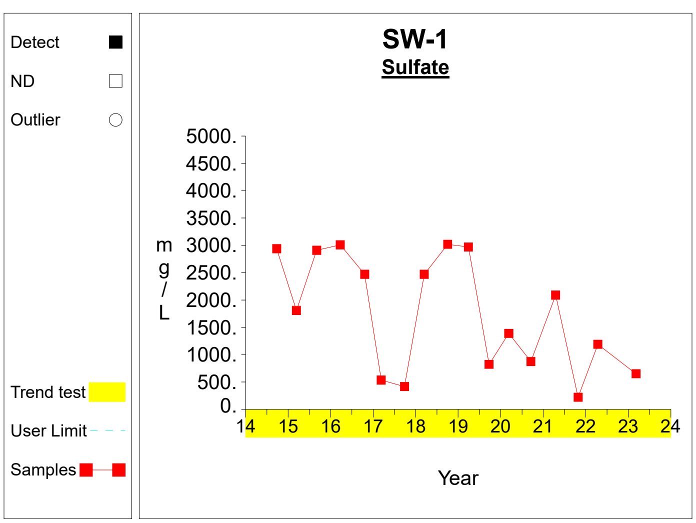


Graph 93

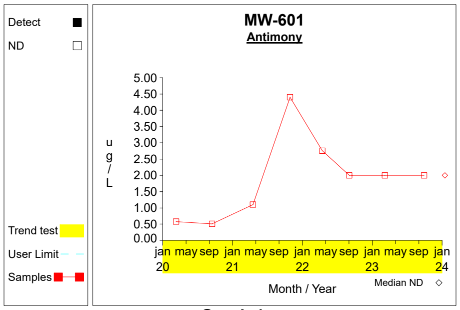


Graph 94

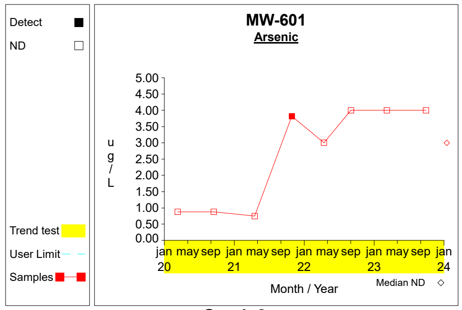


Graph 95

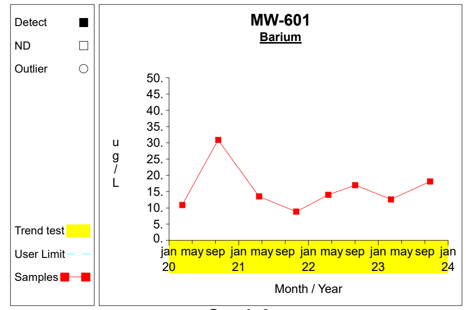
Time Series



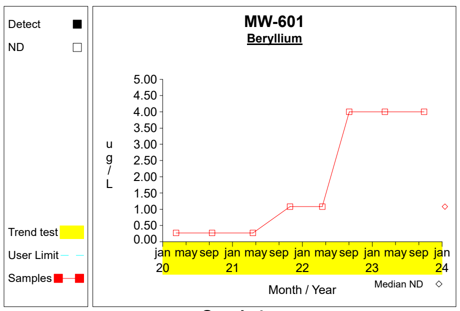
Graph 1



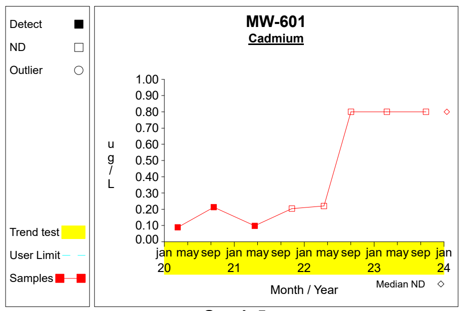
Graph 2



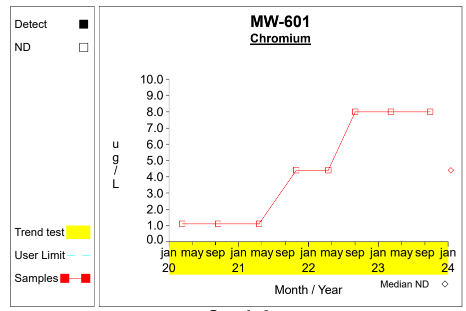
Graph 3



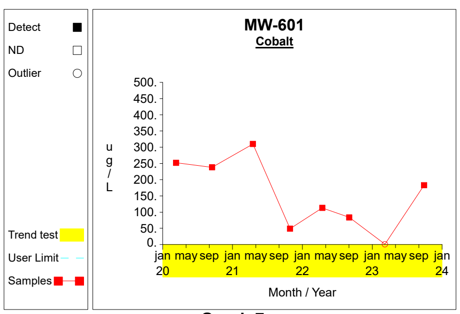
Graph 4



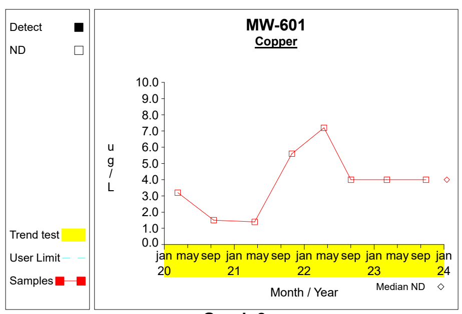
Graph 5



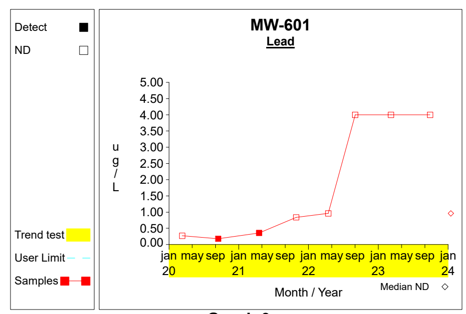
Graph 6



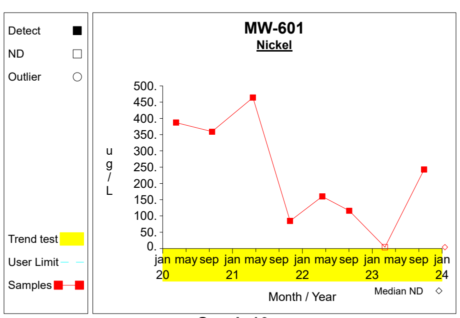
Graph 7



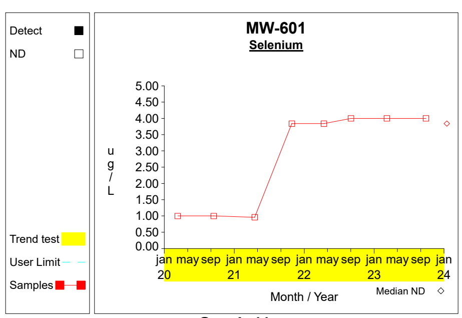
Graph 8



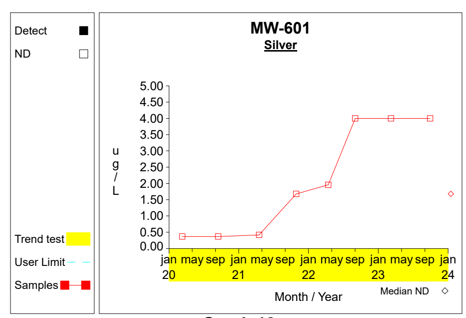
Graph 9



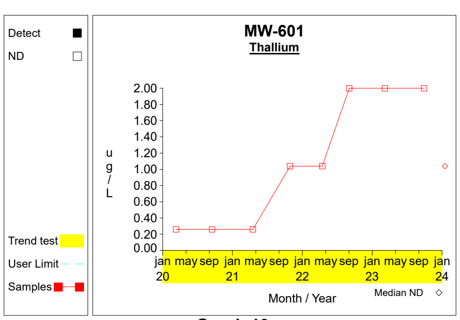
Graph 10



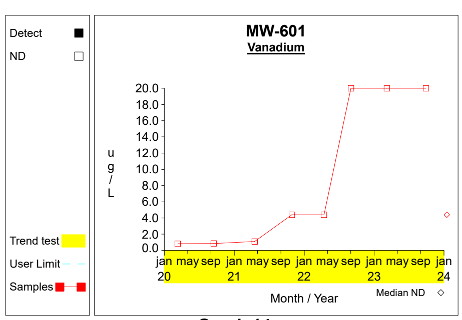
Graph 11



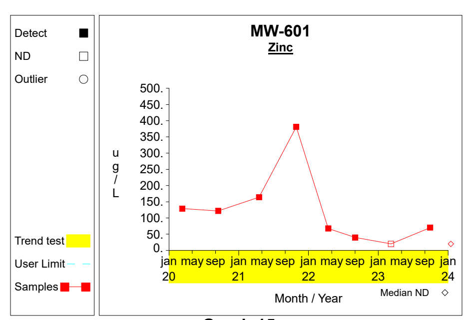
Graph 12



Graph 13

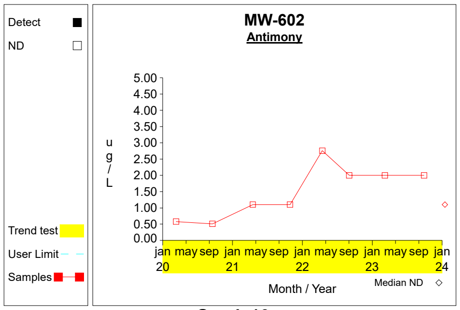


Graph 14

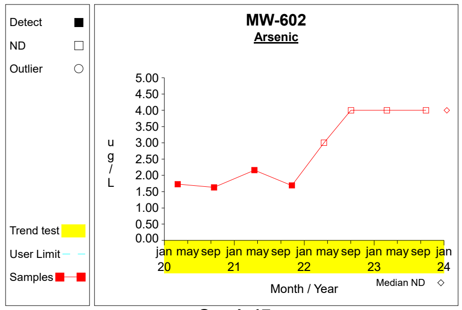


Graph 15

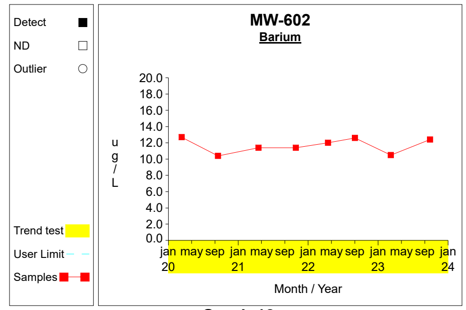
Time Series



Graph 16



Graph 17



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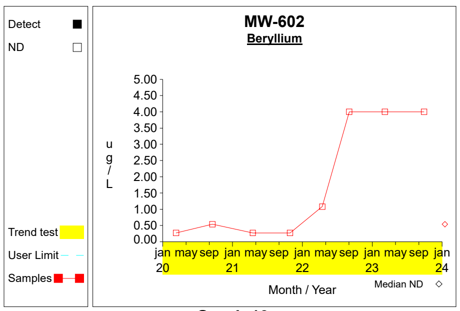

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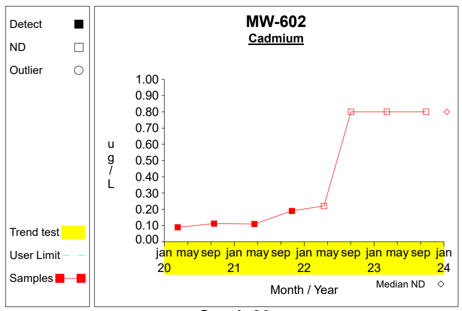

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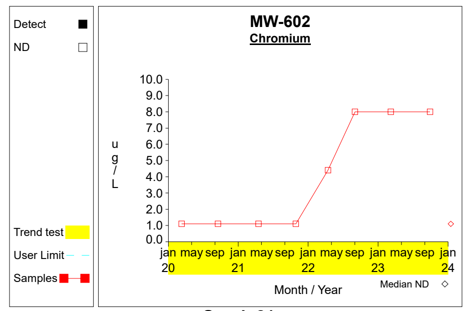

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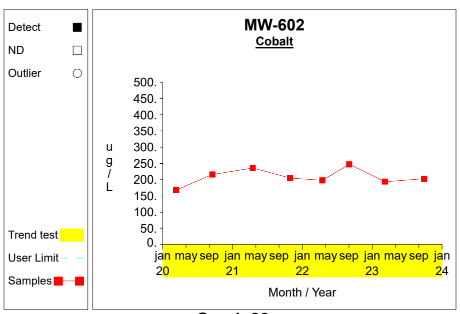

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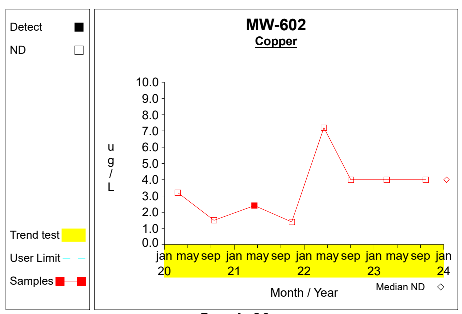
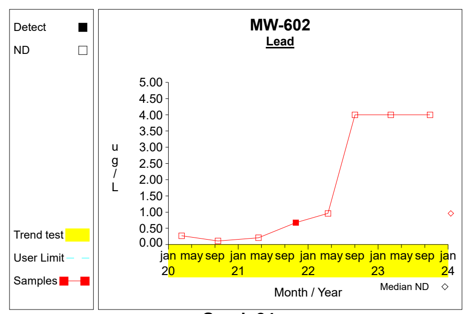
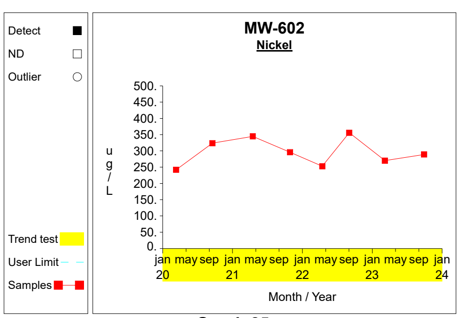


Graph 23



Graph 24



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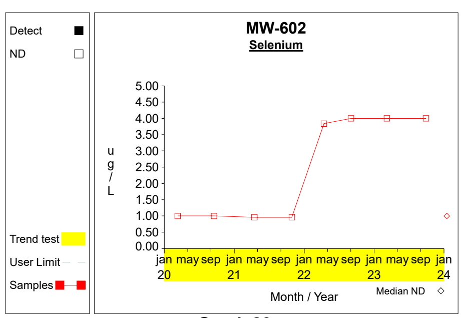

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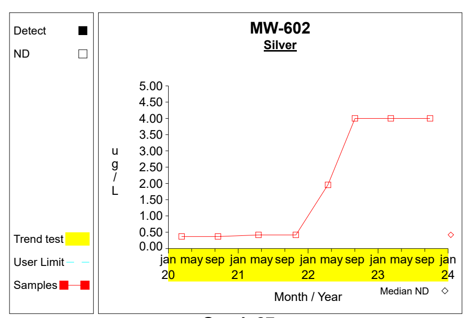

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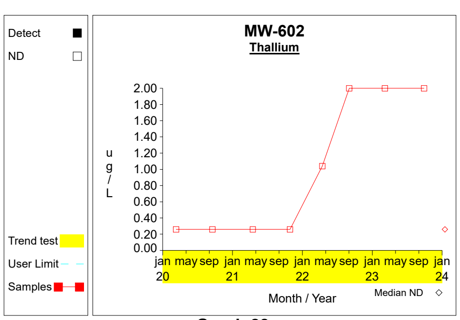

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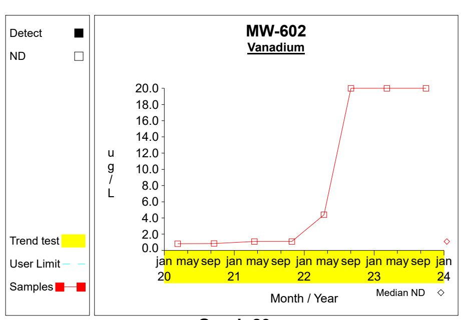
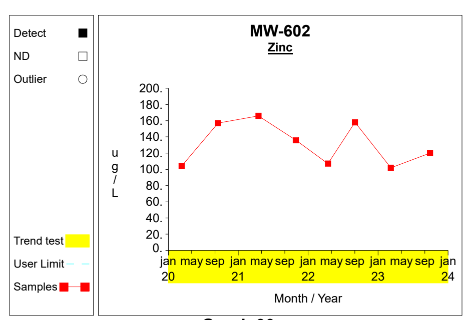
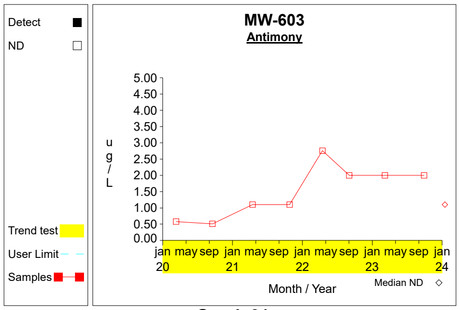


Graph 29



Graph 30

Time Series



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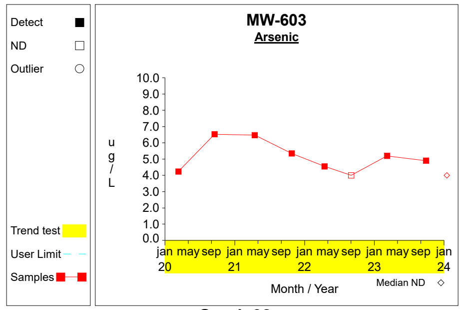
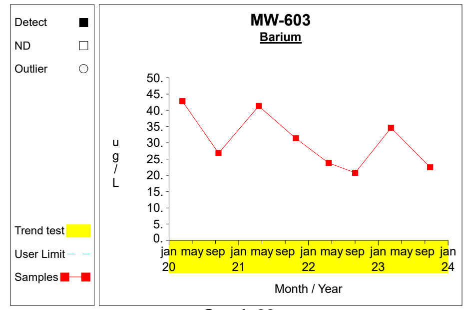


Graph 32



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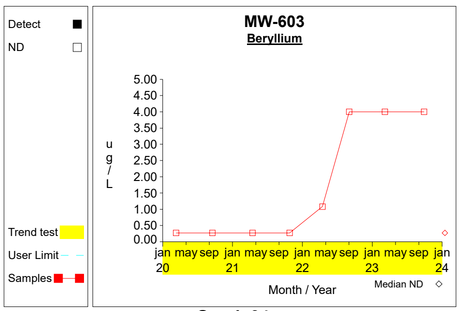
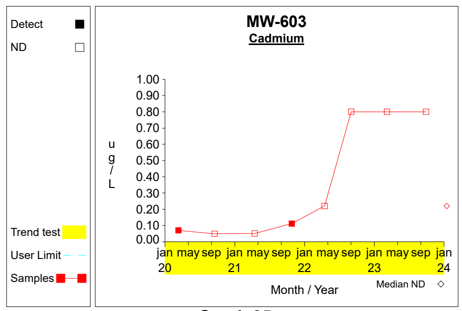


Graph 34



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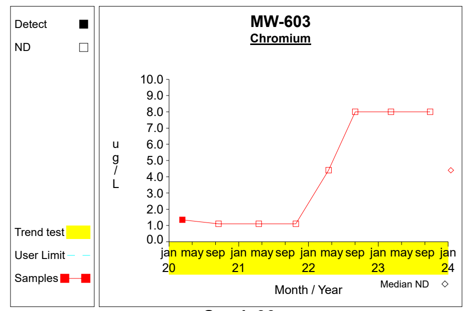

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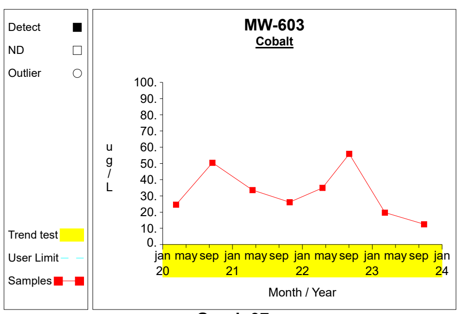

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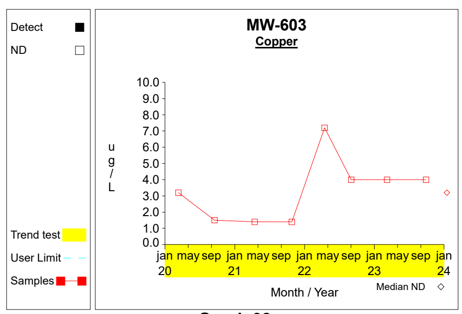

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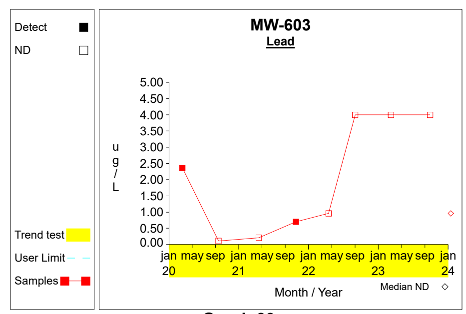

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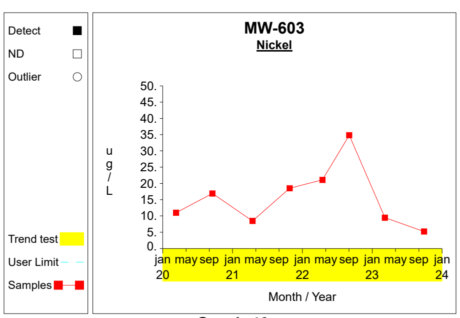

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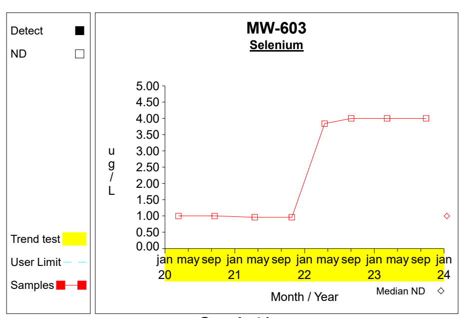

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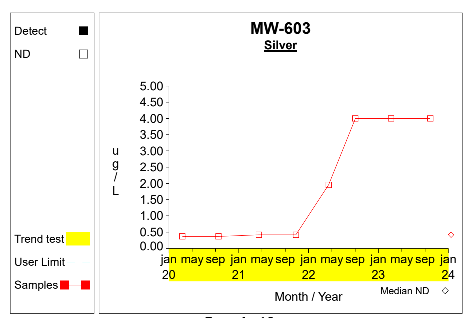

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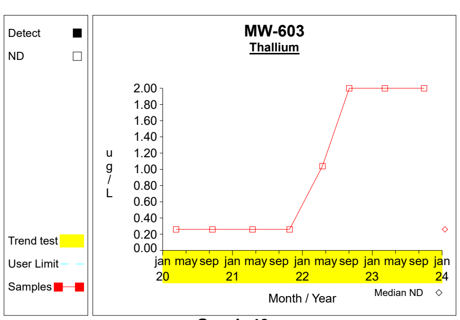
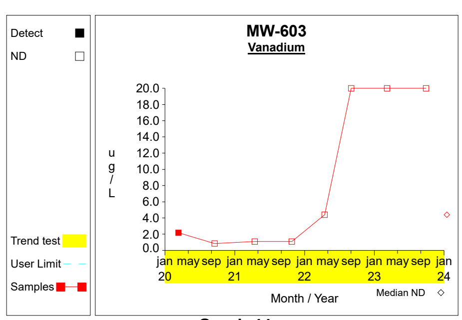
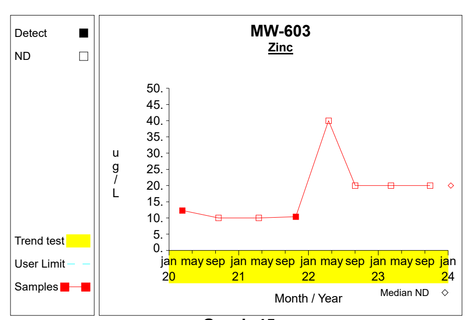


Graph 43



Graph 44



Graph 45

Appendix H

Assessment Testing Results Summary

Dichlorodifluoromethane (ug/L)
(*green highlights* =*a full Appendix II sample*)

Date	MW-344	MW-382R
Mar-2012	<3	**3.11**
Sep-2012	<3	<5
Mar-2013	NT	**2.4J**
Sep-2013	<3	**2.73J**
Apr-2014	NT	**2.14J**
Sep-2014	NT	**2.7J**
Mar-2015	NT	**1.59J**
Sep-2016	NT	<3
Mar-2016	NT	<1
Oct-2016	NT	**1.77J**
Mar-2017	NT	**1.86J**
Sep-2017	NT	**0.898J**
Mar-2018	NT	**1.11J**
Oct-2018	<3	**0.962J**
Mar-2019	NT	NT
Sep-2019	NT	NT
Mar-2020	NT	NT
Sep-2020	NT	NT
Apr-2021	NT	NT
Oct-2021	NT	NT
Apr-2022	NT	NT
9/1/2022	NT	NT
3/6/2023	NT	NT
9/29/23	<1	<1

Bis(2-ethylhexyl)phthalate (ug/L)
(*green highlights* =*a full Appendix II sample*)

Date	MW-344	MW-382R
Mar-2012	<10	<10
Sep-2012	<10	<10
Mar-2013	NT	NT
Sep-2013	<10	<10
Apr-2014	NT	NT
Sep-2014	NT	NT
Mar-2015	NT	NT
Sep-2016	NT	NT
Mar-2016	NT	NT
Oct-2016	NT	NT
Mar-2017	NT	NT
Sep-2017	NT	NT
Mar-2018	NT	NT
Oct-2018	<6	<6
Mar-2019	NT	NT
Sep-2019	NT	NT
Mar-2020	NT	NT
Sep-2020	NT	NT
Apr-2021	NT	NT
Oct-2021	NT	NT
Apr-2022	NT	NT
9/1/2022	NT	NT
3/6/2023	NT	NT
9/29/23	<6	**16.0**

Tin (mg/L)
(*green highlights =a full Appendix II sample*)

Date	MW-344	MW-382R
Mar-2012	<0.1	<0.1
Sep-2012	<0.1	<0.1
Mar-2013	NT	NT
Sep-2013	**0.605**	**0.606**
Apr-2014	<0.1	<0.1
Sep-2014	**0.0935J**	**0.153**
Mar-2015	**0.0815**	**0.0377**
Sep-2016	<0.2	<0.1
Mar-2016	<0.000255	<0.00255
Oct-2016	<0.000832	<0.00832
Mar-2017	NT	<0.00162
Sep-2017	<0.00162	<0.00162
Mar-2018	<0.00648	**0.015J**
Oct-2018	<0.00130	<0.00130
Mar-2019	<0.00180	NT
Sep-2019	NT	NT
Mar-2020	NT	NT
Sep-2020	NT	NT
Apr-2021	NT	NT
Oct-2021	NT	NT
Apr-2022	NT	NT
9/1/2022	NT	NT
3/6/2023	NT	NT
9/29/23	<0.020	<0.020

Appendix I

Leachate Collection System Performance Evaluation Report

Appendix I.1 - Leachate Recirculation Volumes

SCISWA LANDFILL LEACHATE VOLUMES 2023

Leachate Recirculation Log - with Tanker

Date	Time	Location	Volume	Driver
None				
2023 Annual Recirculated w/tanker			0	gallons

Leachate Off Site -Loads

Date	DMWW Ticket #	Net Lbs	Ticket # ?	Gallons
2023 Leachate gallons hauled off-site to Des MoinesMetro				0

Maintenance and changes to leachate equipment in CY 2023:
No changes to leachate pond and recirculation pump or 10,000 gallon tank pump

Total gallons recirculated in 2023:

425,000

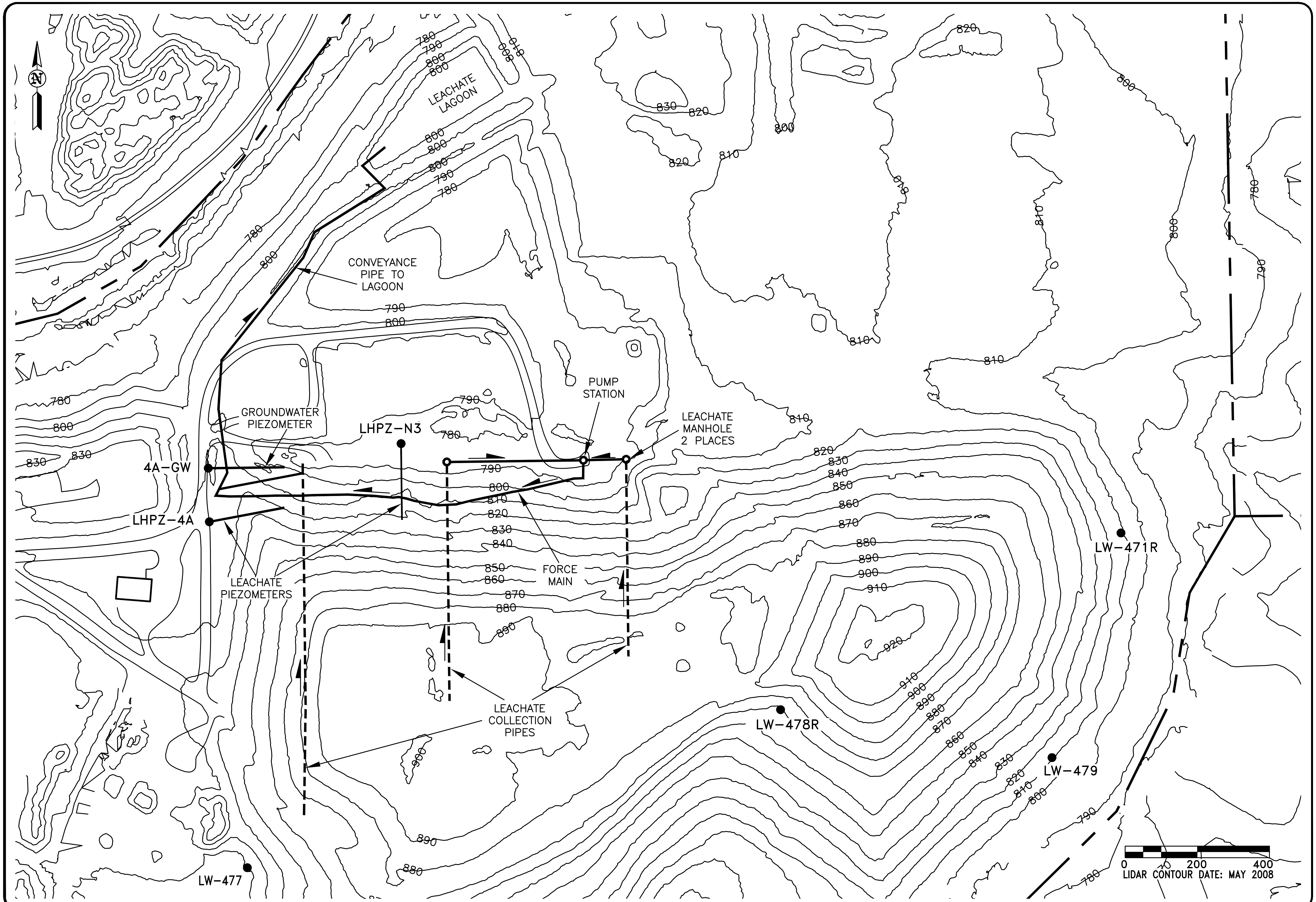
Leachate Recirculation Log - with Pump (built in or backup)

Date	Starting Hours	Ending Hours	Gallons	Location
5/23/23	new pond pump with meter		25,000	4A-F
5/24/23	new pond pump with meter		79,000	4A-F
5/26/23	new pond pump with meter		21,000	4A-F
6/23/23	new pond pump with meter		25,000	4A-F
10/10/23	new pond pump with meter		25,000	4A-F
10/11/23	new pond pump with meter		50,000	4A-F
10/12/23	new pond pump with meter		50,000	4A-F
10/17/23	new pond pump with meter		75,000	4A-F
10/25/23	new pond pump with meter		75,000	4A-F
2023 Leachate gallons recirculated with pump (TO 4A-f)			425,000	gallons

LEACHATE PUMPED FROM 4A AND 10K PUMPS TO POND CY 2023

PUMP	START READING	FINISH READING	TOTAL GALLONS	
4A	47,577,529	47,764,883	187,354	
10K	23,174,589	23,829,496	654,907	
COMBINED			842,261	GALLONS

Appendix I.2 - Leachate Collection, Conveyance, Storage, and Monitoring Map



LEACHATE COLLECTION, CONVEYANCE, STORAGE AND MONITORING MAP

SOUTH CENTRAL IOWA SOLID WASTE AGENCY SLF
TRACY, IOWA

FIGURE: 1

NO.	REVISION	DATE

DRAWN	PROJECT NO.	DATE
DRA	6009	1-12-24

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