

2025 ANNUAL WATER QUALITY REPORT

FOR THE

JONES COUNTY SANITARY LANDFILL

**53-SDP-1-76C
JONES COUNTY, IOWA**

by:

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January 2026



6038-25A.320

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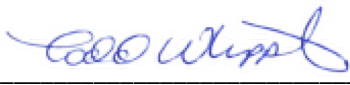
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Certification

Prepared by: 

Date: 1-13-2026

Printed: Todd Whipple, CPG

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 (Special Provision 5.g.) included in Revised Permit #7, dated October 4, 2024 (Doc #111013).

1.2 Report Priority

Review of water quality data is considered low priority. This report concludes that detection, assessment, and corrective action monitoring should continue in accordance with the Permit.

Exceedances of the Prediction Limits continue to be detected at MW-6. MW-6 remains in the Assessment Monitoring network. MW-16 was moved from the detection monitoring system to the assessment monitoring system in 2025.

An exceedance of the Prediction Limit for barium was verified on December 16, 2025 at MW-11. However, a request will be submitted separately from this Report, requesting that MW-11 be designated as an additional background well for the facility, in lieu of designating MW-11 as an Assessment Monitoring Well.

MW-15 is designated as a Supplemental Well and continues to demonstrate impact for arsenic, cobalt, and benzene. MW-22 is the designated attenuation zone point of compliance (AZPOC) well located beyond the limits of impact and is the effective point of compliance for the facility. Arsenic, cobalt, and benzene are undetected or detected below the site prediction limits at MW-22 and the Upper Confidence Limit for each compound is below groundwater protection standards (GWPS).

Corrective action monitoring will continue at MW-15 in accordance with the Permit.

1.3 Period of Report Coverage

Water quality data evaluation is based on a running compilation of data beginning April 20, 2015. A variance was approved August 28, 2012 (Doc #73888) and authorized the facility to conduct groundwater monitoring in accordance with IAC 567-113.10(4) and 113.10(5). Statistical evaluations herein are based on the 2025 water quality data collected April 3, 2025, and October 14, 2025.

1.4 Current Site Map

Figure 1 and Figure 2 are attached illustrating the current site features, monitoring well locations, vent locations, and gas monitoring locations.

1.5 Site Status and Applicable Rules

Site Location

The Jones County Sanitary Landfill is located on about 50 acres in NE 1/4 SE 1/4 sec. 36, T. 85 N., R. 3 W., Jones County, Iowa (Figure 1). The landfill was closed in October

2007. The facility operates under the Iowa Department of Natural Resources (IDNR) Permit Number 53-SDP-01-76C.

Landfill Layout

The site is situated in gently rolling terrain and adjacent properties are cultivated farm ground. Surface runoff from the site follows site topography and flows radially from the closed landfill area. The site drainage ultimately ends up in Mineral Creek to the south of the site.

The facility includes a closed landfill area that was closed in 2007 with a 4' soil cap. The Transfer Station is located approximately 1,000 feet north of the closed landfill facility.

Applicable Rules

Groundwater monitoring at the site is conducted in accordance with Iowa Administrative Code (IAC) 567-113 as per the variance approved August 28, 2012 (Doc #73888).

1.6 Summary of Hydrologic Monitoring System Plan (HMSP)

The HMSP includes seven (7) monitoring wells in accordance with Revised Permit #7, dated October 4, 2024 (Doc #111013). MW-12 is the designated background well for the facility. Downgradient monitoring wells include MW-6, MW-11, MW-16, MW-20, and MW-22. MW-15 is included as a Supplemental well within the attenuation zone plume. Figure 3 is the Groundwater Contour Map for the site.

Corrective Action Monitoring Points related to the approved Corrective Action Plan (CAP) include leachate piezometer LPZ-6 and the twelve (12) gas vents (E1-E6 and W1-W6) associated with the vent trenches (Figure 4). Since the remedy is documented as completed, the HMSP has been changed removing LPZ-6 and the twelve (12) gas vents from the HMSP (see Special Provision 5.a of Revised Permit #7, dated October 4, 2024 (Doc #111013)).

Monitoring wells MW-4, MW-18, MW-19, and MW-21 are retained for water elevation measurements. The Site Plan and the approved monitoring network are illustrated on Figure 1 and Figure 2. The current HMSP is summarized in Table 1. The HMSP Implementation Schedule for 2026 is itemized in Table 2.

MONITORING WELL MAINTENANCE PERFORMANCE REEVALUATION

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

High & Low Water Levels

Current water elevation data is included on Table 4. Historic water elevation data is included in the Table 4A. The maximum depth to water and the minimum depth to water are included in the tables. The Groundwater Contour Map (Figure 3) dated October 2025 is included with this report. The Groundwater Contour Map illustrates the water table surface and the effects of the topography.

Well Depth & Sedimentation

Well depth measurements were made on October 14, 2025. Review of the well depth data included on Table 4 indicates 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 (1991) for each site monitoring well is included on Table 4. The horizontal hydraulic conductivities ranged between 10^{-4} cm/sec and 10^{-7} cm/sec.

Field recovery data recorded April 8, 2024 indicated that the monitoring wells recovered to at least 90% recovery within 6 hours after purging. The exception was at MW-12 and MW-16, where greater than 24 hours were required for the wells to recover. Field recovery data recorded April 8, 2024 is included in Table 4.

Well recovery information indicates that recharge to the individual wells remained sufficient to promote collection of representative water quality samples and the wells were functioning as intended. Monitoring well recharge reevaluation is due biennially according to 113.10(2)"F", and should be evaluated again in 2026.

Based on the apparent static condition of the water surfaces across the site, it appears that the semi-annual water elevation data is sufficient to adequately monitor the hydrologic condition of the site. Further, the wells are interpreted to be appropriately located to detect any impact, should it occur. No changes or modifications to the site monitoring wells are recommended.

Section 2.0 Reporting Period Monitoring Activities

Prior to August 28, 2012, monitoring was performed according to Iowa Administrative Code 567-103 and 113 that predates current IAC 567, Chapter 113. For a summary of testing performed under the previous rule see document #82296. In addition, full Appendix II samples were collected from five (5) of the seven (7) HMSP monitoring wells in March, 2009. A summary of the Appendix II sample collection events at each well is included in Table 2. A comprehensive summary of all sampling episodes to date is included on Table 2A.

Field sampling information for April 3, 2025; July 14, 2025; October 14, 2025; and December 16, 2025 sampling episodes is included on the field forms (IDNR Form 542-1322) in Appendix A.

A comprehensive summary of Analytical Data for the episodes between April 20, 2015 and October 14, 2025 is included on Table 9.

2.1 Current Detection Monitoring Activities

The background well is MW-12. Downgradient detection monitoring wells for this facility include MW-11, MW-20, and MW-22. It is recognized that inclusion of an additional

background monitoring well would better represent spatial variability that may exist across the facility.

2.2 Current Assessment Monitoring Activities

Assessment monitoring wells include MW-6 and MW-16. MW-6 has had four (4) rounds of full Appendix II sampling performed to date, with the most recent collected on April 8, 2024. Full Appendix II sampling is scheduled at MW-6 for April, 2029 (Table 2).

MW-16 has had one (1) round of full Appendix II sampling performed to date (October 14, 2025). Full Appendix II sampling is scheduled at MW-16 for October, 2026 (Table 2).

2.3 Corrective Action Monitoring

The Closed Landfill has been retrofitted with a leachate collection toe drain system on the north and east sides of the fill in order to control seeps. The landfill base slopes down from west to east. Note that the leachate collection toe drain system is located downgradient of MW-15. The leachate collection toe drain system has not been accepted by IDNR as a Corrective Action related to water quality at MW-15.

Monitoring Well MW-15 is designated as a Supplemental Monitoring Point within the attenuation zone approved as a part of the corrective action plan (CAP). MW-22 is the AZPOC monitoring well located beyond the attenuation zone and is now the effective point of compliance for the east side of the landfill.

Time Series Plots are utilized to evaluate changes in water quality over time at Supplemental Well MW-15 (Appendix G).

Section 3.0 Data Evaluation and Summary

Statistical Evaluations are prepared by Otter Creek Environmental Services for each monitoring episode. The Groundwater Statistics Report for the Jones County Sanitary Landfill, First Semi-Annual Monitoring Event in 2025, dated June, 2025 is included in Appendix B.1. The Groundwater Statistics Report for the Jones County Sanitary Landfill, Second Semi-Annual Monitoring Event in 2025, dated November, 2025 is included in Appendix B.2.

The Analytical Reports for the laboratory testing April 3, 2025, July 14, 2025; October 14, 2025; and December 16, 2025 are included in Appendix C.

QUALITY ASSURANCE/QUALITY CONTROL

A blind duplicate sample was collected at MW-6 during the April 3, 2025 sampling episode. A blind duplicate was collected at MW-11 during the October 14, 2025 sampling episode.

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

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

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

The results of the blind duplicate and the monitoring well results for April 3, 2025, and October 14, 2025 were within the limits established and indicate that the data quality is acceptable without restriction.

BACKGROUND DATA VALIDATION

On July 10, 2014 an unnumbered Permit Amendment and Memo was issued by the IDNR regarding turbidity (Doc # 80715). A TSS and Field Turbidity Evaluation Report was prepared and submitted on August 18, 2015 (Doc# 84119) and was approved by IDNR on September 16, 2016 (Doc #87164). The TSS and Field Turbidity Evaluation Report includes a recommendation to retain only the data collected by “No-Purge” methods beginning April 20, 2015. The background data utilized in the current statistical evaluation is indeed restricted to data collected from April 20, 2015 to the present.

A summary table of field measured turbidity is included in Appendix D. The background data collected by “No-Purge” methods is documented to have field turbidity measurements that fall in the range of 0.18 to 4.46 NTU and meets the turbidity goals stated in the July 10, 2014, unnumbered Permit Amendment and Memo that was issued by the IDNR regarding turbidity (Doc # 80715).

Upgradient Data, Table 1, Attachment B, to the Spring and Fall 2025 Statistical Evaluation Reports (Appendix B.1 and B.2) include a summary of the background data. The site prediction limits established in the Spring and Fall 2025 Statistical Evaluation Reports (Appendix B.1 and B.2) are based on the validated background. The calculated Prediction Limits are summarized on Table 5, Attachment B, to the Spring and Fall 2025 Statistical Evaluation Reports (Appendix B.1 and B.2) and in Table 5 herein.

GROUNDWATER PROTECTION STANDARDS (GWPS)

The Statewide Standards for Protected Groundwater as published in IAC 567, Chapter 137, are utilized as the Groundwater Protection Standards (GWPS) for all compounds, except cobalt. Table 5 indicates that the prediction limit for cobalt *exceeds* the published IAC 567, Chapter 137 Statewide Standard:

<u>Compound</u>	<u>Prediction Limit</u>	<u>IAC 137 GWPS</u>
Cobalt	2.6 ug/L	2.1 ug/L

The Site-Specific GWPS should not be set lower than the Site Prediction Limit calculated from the site background data. For this report, the prediction limit of 2.6 ug/L is utilized as the Site-Specific GWPS for cobalt at this site. For all other compounds the published IAC 567, Chapter 137 Statewide Standard are utilized as the GWPS.

STATISTICALLY SIGNIFICANT INCREASES (SSI)

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

Since the Prediction limit for VOC is set at the laboratory Method Reporting Limit, any VOC detection is recorded as an SSI. Table 6 is a summary of all compounds at site monitoring wells that have exceeded a *current* prediction limit in 2025.

MW-20, and MW-22 remain in the detection monitoring system.

Prediction limit exceedances are recorded at MW-6 and MW-16 which are included in the assessment monitoring system. Table 7 includes an on-going summary of compound detections that exceed the prediction limits (highlighted in light brown) at MW-6 and MW-16.

The Prediction Limit exceedance for barium at MW-11 on December 16, 2025, will be addressed separately from this report. A request will be filed with IDNR to designate MW-11 as an additional background well (in addition to the single background well MW-12). MW-11 and MW-12 are located in the same well cluster, separated 10 feet laterally from one another, exhibit nearly identical water elevations (997.54 versus 997.48), and are both located clearly hydraulically upgradient of the site waste boundaries.

Exceedances of the Prediction Limit at a well that is in the Assessment Monitoring System, or the Corrective Action Monitoring System is not an SSI, instead the exceedance is further evaluated by Confidence Interval Statistics.

Exceedance of the Prediction Limits for the current year is summarized on Table 1 and Table 6. A running summary of recorded Prediction Limit exceedances by year is included in Appendix E.

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

A summary of current inorganic prediction limit exceedances is included on page 3 of each respective Otter Creek Report (Appendix B.1 and B.2). A summary of current VOC SSI is

included on page 4 of the respective Otter Creek Reports (Appendix B.1 and B.2). Table 1, Attachment C to the Statistical Evaluation Report completed following the Fall sampling event (Appendix B.2) is a comprehensive summary of historic VOC detections that exceed the prediction limit (set at the laboratory method reporting limit).

ASSESSMENT MONITORING SUMMARY

Special Provision 5f of the Revised Permit #7, dated October 4, 2024 (Doc #111013) allows a five (5) year frequency for full Appendix II sampling, once two (2) rounds of annual testing are completed.

Dichlorodifluoromethane and bis (2-ethylhexyl)phthalate are the only compounds detected to date beyond the Appendix I list of testing parameters. When detected, dichlorodifluoromethane and bis (2-ethylhexyl) phthalate are inconsistent and the follow-up testing does not verify that the compounds persist. The second annual full Appendix II sample is scheduled to be collected at MW-16 in October, 2026. The full Appendix II sampling at MW-6 is on a five (5) year frequency and is scheduled to occur during the April, 2029 sampling episode (Table 2).

MW-15 is designated as a Supplemental Well and there is no requirement for ongoing sampling for the full Appendix II list.

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

STATISTICALLY SIGNIFICANT LEVELS (SSL)

The compounds with detections that exceed site prediction limits (see Table 6 and Table 7) are utilized to calculate the Confidence Interval (the 95% lower confidence limits (LCL) and the 95% upper control limits (UCL)) in accordance with the 2009 Unified Guidance for Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities by US EPA. The 95% LCL values are compared to applicable GWPS. Any 95% LCL value that exceeds an applicable GWPS is recorded as an SSL. All wells with a recorded SSL require the plume of impact to be defined in the horizontal and vertical directions and require completion of an Assessment of Corrective Action (ACM).

An SSL was previously identified at MW-15 (2014) for arsenic, cobalt, and benzene. As discussed in the Corrective Action Monitoring Section below, MW-15 is designated as a Supplemental Well and does not require further evaluation under the approved Corrective Action.

The Confidence Intervals (95% LCL and 95% UCL) are calculated during each statistical evaluation based on the most recent four (4) data points. The 95% LCL evaluation is presented in Table 7. A yellow highlight in Table 7 would indicate an exceedance of the GWPS. Wells included in the 95% LCL evaluation are limited to MW-6 and MW-16, the only wells where an SSI has been recorded.

There are no SSL recorded for the facility. IDNR standard Tables 8, 10, and 11 are not required for MW-6 or MW-16 based on the absence of SSL.

However, Table 8 is included for MW-15 to summarize the 95% UCL relative to the GWPS over time.

As required by the IDNR comment letter dated October 4, 2024 (Doc #111012), Table 10 for MW-22 is added to the report and includes evaluation of Confidence Intervals at the AZPOC Well MW-22.

DELINEATION & ASSESSMENT OF CORRECTIVE MEASURES (ACM)

Preliminary plume delineation for arsenic, cobalt, and benzene in the vicinity of MW-15 was submitted July 25, 2014 (Doc# 80862). The findings document that the extent of impact in the horizontal and vertical directions is limited. Review of the water quality results at MW-15 for 2016-2025 confirm that the site conditions are unchanged.

An Assessment of Corrective Measures (ACM) Report was submitted to IDNR on November 27, 2019 (Doc #96470) and approved by IDNR on May 5, 2020 (Doc #97672). The Corrective Action Plan dated July 9, 2020 (Doc #98246) for the selected remedy was approved in Revised Permit #4, dated August 14, 2020 (Doc #98248). Construction of the selected remedy (gas vent trenches) was completed in April, 2021. Construction documentation was submitted to IDNR on May 7, 2021 (Doc #100434). The construction documentation was approved by Revised Permit #5, dated May 13, 2021 (Doc #100487).

CORRECTIVE ACTION MONITORING & EVALUATIONS

MW-15 is a Supplemental Well within the attenuation zone and MW-22 is the designated attenuation zone point of compliance (AZPOC). The results from MW-15 are to be evaluated to gauge the effectiveness of the remedy over time.

Although MW-15 is not a compliance point for the site, water quality within the attenuation zone is required to be monitored for changes over time as attenuation progresses. Time Series Plots for MW-15 are included in Appendix G and illustrate decreasing trends for several parameters (cobalt, 1,4-dichlorobenzene, benzene, chloroethane, ethylbenzene, and xylenes). Also, Table 8 is included for MW-15 to help illustrate the difference between the current 95% UCL compared to the GWPS at MW-15. Compliance is not determined at MW-15.

Compliance is determined at MW-22. Arsenic, cobalt, and benzene at MW-22 (AZPOC) are undetected or detected below the respective prediction limits for arsenic, cobalt, and benzene. Table 10 is included for MW-22 to illustrate that Compliance Interval (95% LCL to 95% UCL) is below the GWPS.

The remedy was approved August 14, 2020, so the remedy has reached completion. Revised Permit #7, dated October 4, 2024 (Doc #111013) approves the successful completion of the remedy and amends the required Corrective Action Monitoring. Monitoring of leachate quality at LPZ-6 and gas concentration monitoring at the vent trenches is no longer required.

Dissolved methane, ethane, ethene and alkalinity and pH are evaluated in the impacted well (Supplemental Well MW-15). The recorded concentrations are tabulated and graphed in Table 12.

Section 4.0 Leachate Collection System Performance Evaluation

Leachate System Performance

As per Special Provision X.11 of the Closure Permit dated September 4, 2008 (Doc# 30396), the Jones County Sanitary Landfill is exempt from installing a leachate collection system based on the completed and certified site risk assessment. However, to control visual surface seeps a leachate/groundwater collection system was installed in the fall of 1994. The initial collection system extends along the entire east side of the site (the landfill base slopes from west to east) with a series of collection laterals spaced at approximately 100-foot intervals extending into the waste mass. The system was extended from the northeast corner to the northwest corner of the site in 1998. The perimeter leachate collection system was designed to control surface leachate seeps and not necessarily designed to lower leachate levels within the landfill. A lift station is located at the low point along the east waste boundary and pumps the collected leachate into a sump located near the leachate loadout. From the sump the leachate is pumped to a 10,000-gallon underground leachate storage tank. A second 10,000-gallon leachate tank was installed and connected to the initial tank with a gravity pipe (total leachate storage capacity is 20,000 gallons).

A replacement pump with a dial-up alarm system was installed in the leachate lift station in 2017. Cleanouts were also installed on the leachate force main to allow future cleaning of the force main as needed. A pump in the leachate pump station was replaced in 2020.

The facility received a Notice of Violation (NOV) from IDNR on June 25, 2024 and another NOV on September 23, 2024 related to the leachate storage and loadout system. Significant repairs and improvements to the leachate storage and loadout system were completed in 2024 and 2025. The items in the historic NOV are believed to be fully addressed at this time as documented in the October 24, 2025 Semi-Annual Engineer Inspection of the facility (Doc #114560).

A map is included in Appendix H showing the approximate locations of the leachate collection system.

Special Provision 12.c. of Revised Permit #6 (Doc #102804) requires leachate level measurements to be completed semi-annually in LPZ-6. The location of LPZ-6 is shown on the figures in this report. Current and historical measurements of LPZ-6 are summarized in Table 13.

Based on the above measurements, there appears to be leachate mounding within the waste mass which is typical for closed facilities. The leachate collection system is a perimeter collection drain

as opposed to an underdrain system and has been effective in controlling leachate seepage. Note that leachate thickness values typically range from 3 to 9 feet, depending upon the season and the year.

Leachate Treatment and Testing

The collected leachate is pumped into tanker trucks and hauled to the Cedar Rapids Water Pollution Control Facility (WPCF) for treatment and disposal. In 2025, approximately 295,760 gallons of leachate were hauled to the Cedar Rapids WPCF. The Cedar Rapids WPCF does not require a leachate analysis for disposal.

Leachate Line Cleaning

The LCP lines were cleaned in the Summer of 2023. As per IDNR regulations, the lines should be cleaned every 3 years (next cleaning will be tentatively scheduled for 2026).

Section 5.0 Gas Monitoring

Explosive gas monitoring was conducted in 2025 per 113.9(2) and Special Provision 10 of the Revised Permit #7, dated October 4, 2024 (Doc #111013). Gas Monitoring was performed at a semi-annual frequency. The following ambient air and subsurface monitoring points are included in the approved GMSP, as illustrated on Figure 1 and Figure 2.

GP-1 -	subsurface
GP-2 -	subsurface
GP-3 -	subsurface
GP-4	subsurface
MW-6 -	subsurface
MW-11 -	subsurface
Old Office -	breathing zone
Old Shop -	breathing zone
Site Perimeter -	breathing zone

A summary table of gas monitoring is included as Table 14. Table 14 includes an assessment of the exposed screens at MW-6, MW-11, GP-1, GP-2, GP-3, and GP4.

Explosive gas concentrations are recorded as percent lower explosive limit (%LEL) and were below actionable levels during monitoring episodes.

Section 6.0 Recommendations

This report concludes that detection, assessment, and corrective action monitoring should continue in accordance with the approved HMSP. MW-11, MW-12, MW-20, and MW-22 should remain in detection monitoring. MW-6 and MW-16 should remain in Assessment Monitoring. MW-15 is a Supplemental Monitoring Well.

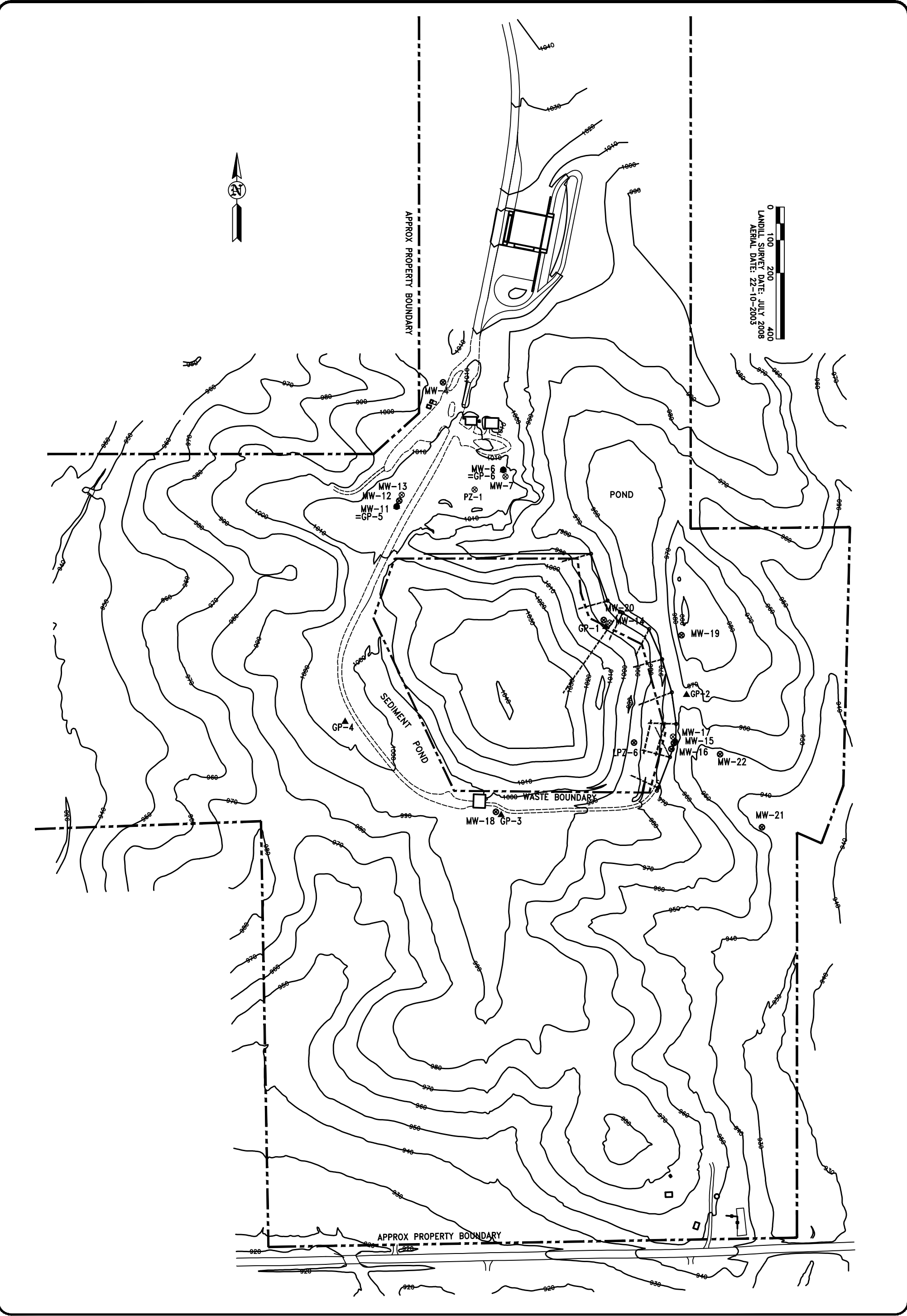
Request modification of the HMSP to designate MW-11 and an additional background well for the facility. If this request is denied, MW-11 should be designated as an Assessment Monitoring Well in 2026.

Continue to haul leachate to the Cedar Rapids WPCF to maintain adequate storage in the leachate storage tanks.

Leachate lines should be cleaned in 2026.

Gas monitoring should continue in accordance with the permit provisions and the GMSP.

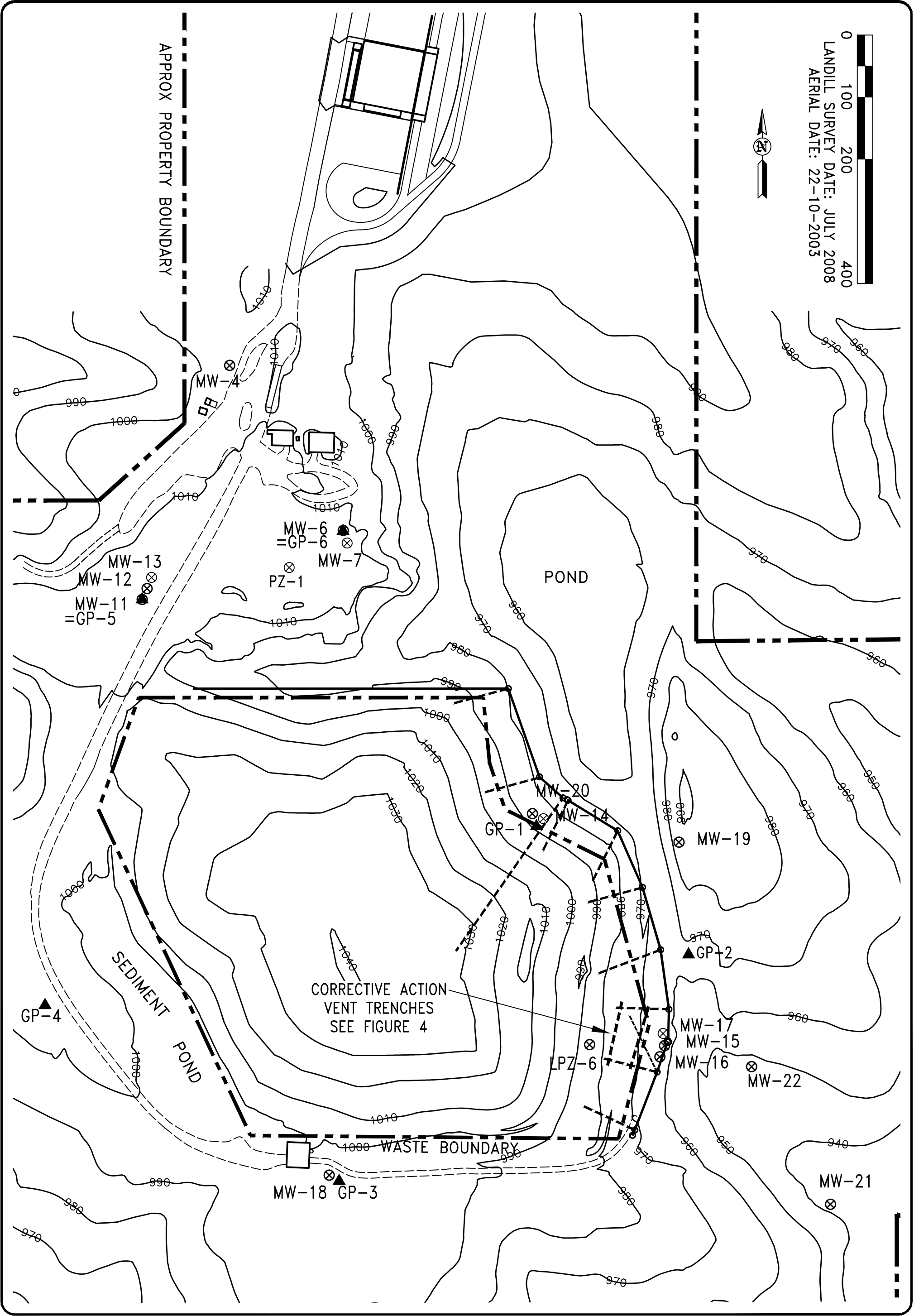
Figures



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SITE PLAN
TOTAL PROPERTY
JONES COUNTY SANITARY LANDFILL
ANAMOSA, IOWA

FIGURE: 1		
REVISION	NO.	DATE
DRAWN DRA	PROJECT NO. 6038	DATE 11-17-25



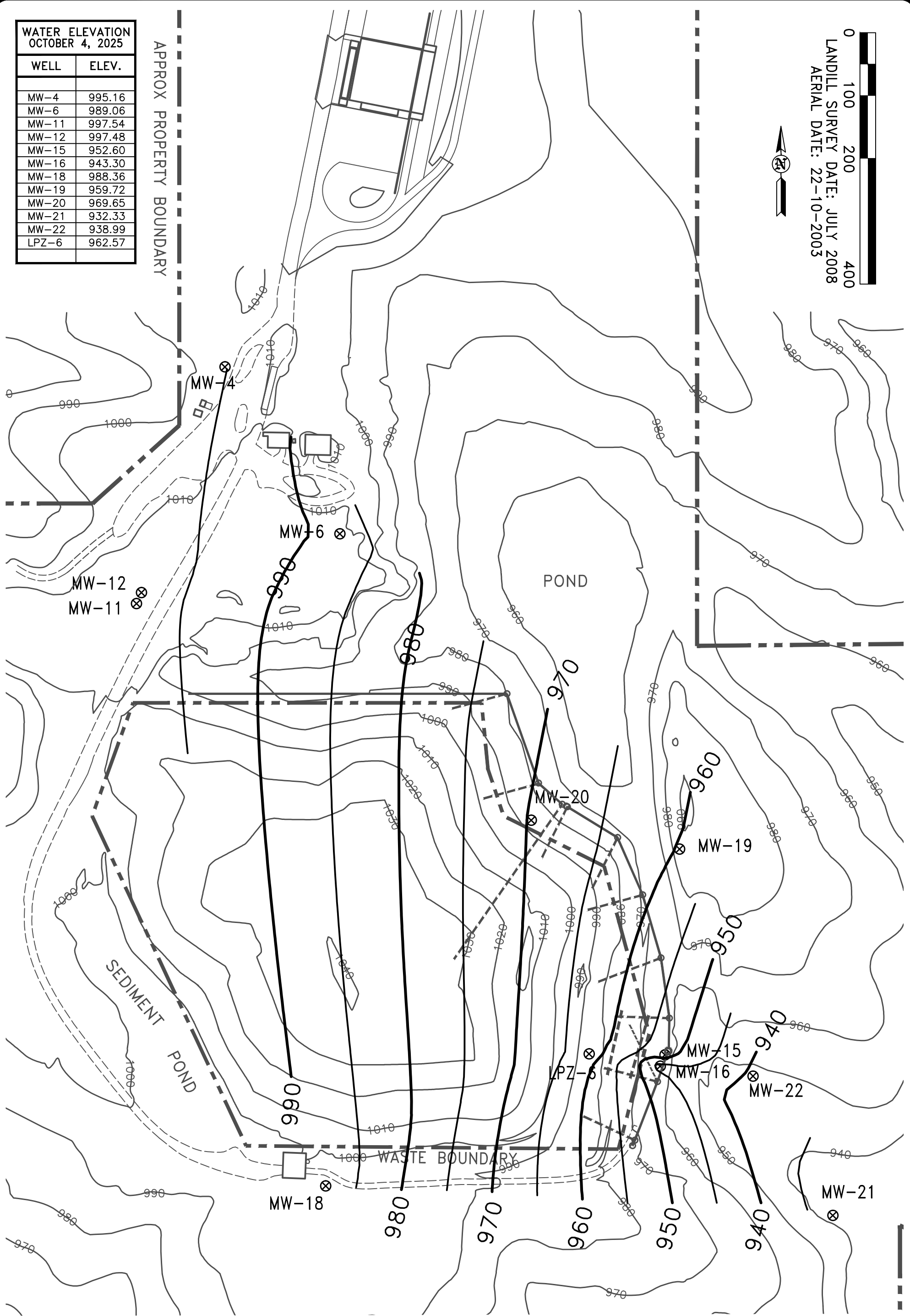
WATER ELEVATION
OCTOBER 4, 2025

WELL	ELEV.
MW-4	995.16
MW-6	989.06
MW-11	997.54
MW-12	997.48
MW-15	952.60
MW-16	943.30
MW-18	988.36
MW-19	959.72
MW-20	969.65
MW-21	932.33
MW-22	938.99
LPZ-6	962.57

APPROX PROPERTY BOUNDARY



LANDFILL SURVEY DATE: JULY 2008
AERIAL DATE: 22-10-2003

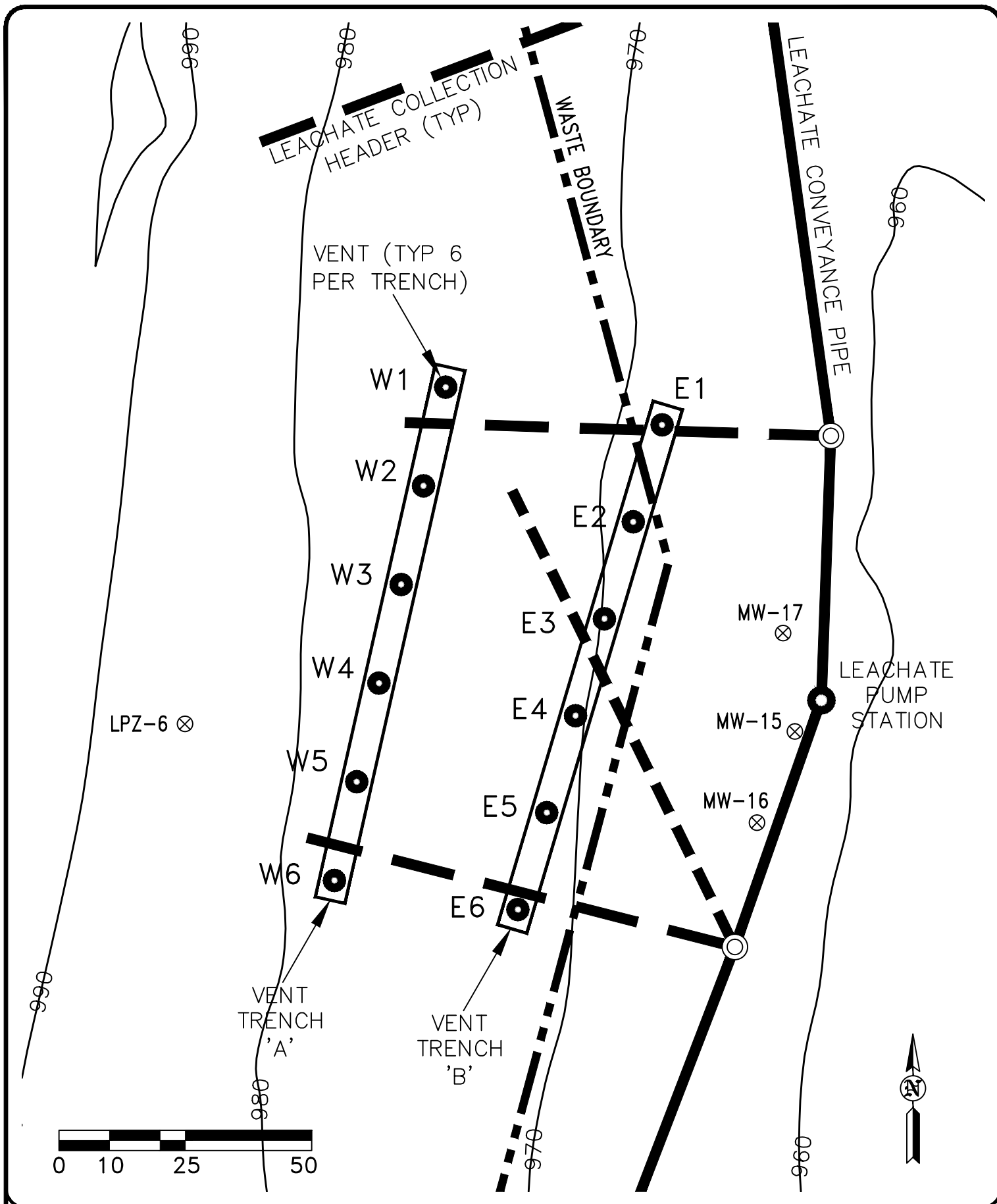


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GROUNDWATER CONTOURS
JONES COUNTY SANITARY LANDFILL
ANAMOSA, IOWA

FIGURE: 3

REVISION	NO.	DATE
DRAWN DRA	PROJECT NO. 6038	DATE 11-17-25



**CORRECTIVE ACTION
VENT TRENCHES**
JONES COUNTY SANITARY LANDFILL
ANAMOSA, IOWA

FIGURE: 4

REVISION	NO.	DATE
DRAWN DRA	PROJECT NO. 6038	DATE 11-17-25

Tables (in IDNR Format)

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Table 1 – Monitoring Program Summary

Table 1 Monitoring Program Summary Annual Water Quality Report Jones County Sanitary Landfill Permit No. 53-SDP-01-76C												
Monitoring Well	Formation	Current Monitoring Program	Change for next sampling event	Historic - Constituents w/ SSI	Current Spring - Constituents w/ SSI	Current Fall - Constituents w/ SSI	Historic - Constituents w/ SSL	Current Spring - Constituents w/ SSL	Current Fall - Constituents w/ SSL	Total # of Samples in each monitoring program since April 20, 2015		
										Detection	Assessment	Corrective Action
MW-12 (b)	Glacial Till	Background	NC	None	None	None	None	None	None	23	0	0
MW-6	Glacial Till	Assessment	NC	barium, cadmium, cobalt, copper, nickel, bis(2ethylhexyl)phthalate, dichlorofluoromethane	barium	barium, cobalt	None	None	None	0	23	0
MW-11	Glacial Till	Detection	NC	None	None	barium*	None	None	None	22	0	0
MW-15	Glacial Till	Supplemental Well	NC	N/A	N/A	N/A	arsenic, cobalt, benzene	N/A	N/A	0	0	22
MW-16	Glacial Till	Assessment	NC	Zinc	Zinc	Zinc	None	None	None	0	22	0
MW-20	Glacial Till	Detection	NC	None	None	None	None	None	None	22	0	0
MW-22	Glacial Till	AZPOC Well - detection	NC	None	None	None	None	None	None	22	0	0

* The barium exceedance of the prediction limit at MW-11 will be addressed separately from this report. A request will be filed with IDNR to designate MW-11 as an additional background well.

Table 2 – Monitoring Program Implementation Schedule

Table 2
Monitoring Program Implementation Schedule
Annual Water Quality Report
Jones County Sanitary Landfill
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Monitoring Well	Designated Use	Recent Sampling Dates and Constituents	Upcoming Sampling Dates and Constituents		Full Appendix II Sample Dates	
			April, 2026	October, 2026	Previously Collected	Next Event
MW-12 (b)	Background		Appendix I	Appendix I	March, 2009	N/A
MW-6	Assessment		Appendix I	Appendix I	March, 2009; March, 2014; April, 2019; April, 2024	April, 2029
MW-11	Detection	See Table 2A	Appendix I	Appendix I		N/A
MW-15	Supplemental		Appendix I ⁽¹⁾	Appendix I	March, 2009; March, 2013; March, 2014; April, 2019	N/A
MW-16	Assessment		Appendix I	Appendix II	October, 2025	October, 2026
MW-20	Detection		Appendix I	Appendix I	March, 2009	N/A
MW-22	AZPOC - Detection		Appendix I	Appendix I	March, 2009	N/A
LPZ-6	---		---	---		
Vent E1-E6 & W1-W6	---		---	---		

(b) background well
(1) = dissolved methane, ethane, and ethene and alkalinity and pH.
(2) = arsenic (total), cobalt (total), ammonia (N), sulfate, chloride, TDS, BOD5

Table 2A – Summary of Well Testing to Date

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

Expanded list, [benzene, chloroethane, chlorobenzene, 1,4 dichlorobenzene, ethylbenzene, toluene and xylenes, and metals – arsenic, barium, cadmium, chromium, cobalt, copper, lead, nickel, thallium, vanadium, and zinc]; App I, Appendix I; App II, Appendix II; A, Appendix I related.

2005

WELL	March	September
MW-6	e	e and f
MW-11	e	e and f
MW-12	e	e and f
MW-15	e	e and f
	arsenic & benzene	App I
MW-16	e	e and f
MW-20	e	e and f
MW-21		e and f + arsenic & benzene

2006-2008

	March	September
MW-6	e	e and f
MW-11	e	e and f
MW-12	e	e and f
MW-15	e	e and f
	expanded list	expanded list
MW-20	e	e and f
MW-22	d and e	d, e and f
	expanded list	expanded list

2009

	March	June	July	August	October
MW-6	d(1)+ App II	A	A	d(2)+A	A
MW-11	d(1)			d(2)	
MW-12	d(1)+ App II			d(2)	
MW-15	d(1)+ App II	A	A	d(2)+A	A
	expanded list			expanded list	
MW-16	d(1)			d(2)	
MW-20	d(1)+ App II	A	A	d(2)+A	A
MW-22	d(1)+ App II	A	A	d(2)+A	A
	expanded list			expanded list	

2010

	March	June	September
MW-6	d(1) + A	A	d(2) + A
MW-11	d(1)		d(2)
MW-12	d(1) + A		d(2)
MW-15	d(1) + A	A	d(2) + A
	expanded list		expanded list
MW-16	d(1)		d(2)
MW-20	d(1) + A	A	d(2) + A
MW-22	d(1) + A	A	d(2) + A
	expanded list		expanded list

2011

	March	September
MW-6	d(1) + A	d(2) + A
MW-11	d(1)	d(2)
MW-12	d(1) + A	d(2)
MW-15	d(1) + A expanded list	d(2) + A expanded list
MW-16	d(1)	d(2)
MW-20	d(1) + A	d(2) + A
MW-22	d(1) + A expanded list	d(2) + A expanded list

2012

MW-6	d(1) + A	App I
MW-11	d(1)	App I
MW-12	d(1) + A	App I
MW-15	d(1) + A expanded list	App I
MW-16	d(1)	App I
MW-20	d(1) + A	App I
MW-22	d(1) + A expanded list	App I

2013

MW-6	App I	App I
MW-11	App I	App I
MW-12	App I	App I
MW-15	App II	App I + bis(2-ethylhexyl)phthalate
MW-16	App I	App I
MW-20	App I	App I
MW-22	App I	App I

2014

MW-6	App II	App I bis(2-ethylhexyl)phthalate dichlorodifluoromethane
MW-11	App I	App I
MW-12	App I	App I
MW-15	App II	App I bis(2-ethylhexyl)phthalate dichlorodifluoromethane
MW-16	App I	App I
MW-20	App I	App I
MW-22	App I	App I

2015

	April	July	October
MW-6	App I bis(2-ethylhexyl)phthalate dichlorodifluoromethane		App I bis(2-ethylhexyl)phthalate dichlorodifluoromethane
MW-11	App I		App I
MW-12	App I		App I
MW-15	App I bis(2-ethylhexyl)phthalate dichlorodifluoromethane		App I bis(2-ethylhexyl)phthalate dichlorodifluoromethane
MW-16	App I		App I
MW-20	App I		App I
MW-22	App I		App I

2016

	April	October
MW-6	App I bis(2-ethylhexyl)phthalate dichlorodifluoromethane	App I bis(2-ethylhexyl)phthalate dichlorodifluoromethane
MW-11	App I	App I
MW-12	App I	App I
MW-15	App I bis(2-ethylhexyl)phthalate dichlorodifluoromethane	App I bis(2-ethylhexyl)phthalate dichlorodifluoromethane
MW-16	App I	App I
MW-20	App I	App I
MW-22	App I bis(2-ethylhexyl)phthalate dichlorodifluoromethane	NT

2017

	April	October
MW-6	App I bis(2-ethylhexyl)phthalate dichlorodifluoromethane	App I bis(2-ethylhexyl)phthalate dichlorodifluoromethane
MW-11	App I	App I
MW-12	App I	App I
MW-15	App I bis(2-ethylhexyl)phthalate dichlorodifluoromethane	App I bis(2-ethylhexyl)phthalate dichlorodifluoromethane
MW-16	App I	App I
MW-20	App I	App I
MW-22	App I bis(2-ethylhexyl)phthalate dichlorodifluoromethane	App I bis(2-ethylhexyl)phthalate dichlorodifluoromethane

2018

	January		October
	April		
MW-6	<u>Resample</u> <i>Barium</i> <i>Cobalt</i> <i>nickel</i>	App I bis(2-ethylhexyl)phthalate dichlorodifluoromethane	App I bis(2-ethylhexyl)phthalate dichlorodifluoromethane
MW-11	N/A	App I	App I
MW-12	N/A	App I	App I
MW-15	N/A	App I bis(2-ethylhexyl)phthalate dichlorodifluoromethane	App I bis(2-ethylhexyl)phthalate dichlorodifluoromethane
MW-16	N/A	App I	App I
MW-20	N/A	App I	App I
MW-22	<u>Resample</u> Zinc	Arsenic Cobalt Benzene	Arsenic Cobalt Benzene

2019

	April	October
MW-6	App II	App I bis(2-ethylhexyl)phthalate dichlorodifluoromethane
MW-11	App I	App I
MW-12	App I	App I
MW-15	App II	App I bis(2-ethylhexyl)phthalate dichlorodifluoromethane methane, ethane, ethene, alkalinity, pH
MW-16	App I	App I

MW-20	App I	App I
MW-22	Arsenic	Arsenic
	Cobalt	Cobalt
	Benzene	Benzene
2020		
	April	October
MW-6	App I bis(2-ethylhexyl)phthalate dichlorodifluoromethane	App I bis(2-ethylhexyl)phthalate dichlorodifluoromethane
MW-11	App I	App I
MW-12	App I	App I
MW-15	App I bis(2-ethylhexyl)phthalate dichlorodifluoromethane	App I, Note 1
MW-16	App I	App I
MW-20	App I	App I
MW-22	Arsenic Cobalt Benzene	App I
LPZ-6	-----	App I VOC, Note 1, Note 2
2021		
	April	October
MW-6	App I	App I
MW-11	App I	App I
MW-12	App I	App I
MW-15	App I	App I, Note 1
MW-16	App I	App I
MW-20	App I	App I
MW-22	App I	App I
LPZ-6	App I VOC, Note 2	App I VOC, Note 1, Note 2
2022		
	April	October
MW-6	App I	App I
MW-11	App I	App I
MW-12	App I	App I
MW-15	App I, Note 1	App I
MW-16	App I	App I
MW-20	App I	App I
MW-22	App I	App I
LPZ-6	App I VOC, Note 1, Note 2	App I VOC
2023		
	April	October

MW-6	App I	App I
MW-11	App I	App I
MW-12	App I	App I
MW-15	App I, Note 1	App I
MW-16	App I	App I
MW-20	App I	App I
MW-22	App I	App I
LPZ-6	App I VOC, Note 1, Note 2	App I VOC

Note 1 = dissolved methane, ethane, ethene, pH, alkalinity

Note 2 = As (total), Co (Total), ammonia (N), sulfate, chloride, TDS, BOD5

2024

	April	October
MW-6	App II	App I+Note 2
MW-11	App I	App I
MW-12	App I	App I
MW-15	App I + Note 1	App I
MW-16	App I	App I
MW-20	App I	App I
MW-22	App I	App I
LPZ-6	App I VOC, Note 1	

Note 1 = dissolved methane, ethane, ethene, pH, alkalinity

Note 2 = bis(2-ethylhexyl)phthalate

2025

	April	October
MW-6	App I	App I
MW-11	App I	App I
MW-12	App I	App I
MW-15	App I + Note 1	App I
MW-16	App I	App II
MW-20	App I	App I
MW-22	App I	App I

Note 1 = dissolved methane, ethane, ethene, pH, alkalinity

Note 2 = bis(2-ethylhexyl)phthalate

Table 3 – Monitoring Well Maintenance Performance Reevaluation Schedule

Table 3
Monitoring Well Maintenance and Performance Revaluation Schedule
Annual Water Quality Report
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Compliance with:	Monitoring Calendar Years									
	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
567 IAC 113.10(2)"f"(1) high and low water levels (biennial)	X	x	X	X	X	X	X	X	X	X
567 IAC 113.10(2)"f"(2) changes in the hydrologic setting and flow paths (historic = 1 per 5 years; current = (biennial)	X	X	X	X	X	X	X	X	X	X
567 IAC 113.10(2)"f"(3) well depths (annual)	X	X	X	X	X	X	X	X	X	X
567 IAC 113.10(2)"f"(4) well recharge rates and chemistry (biennial)	X		X		X	X		X		X
Waste separation from ground water 113.6(2)"I"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Compliance with:	Monitoring Calendar Years									
	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
567 IAC 113.10(2)"f"(1) high and low water levels (biennial)	X	X	X	P	P	P	P	P	P	P
567 IAC 113.10(2)"f"(2) changes in the hydrologic setting and flow paths (historic = 1 per 5 years; current = (biennial)	X	X	X	P	P	P	P	P	P	P
567 IAC 113.10(2)"f"(3) well depths (annual)	X	X	X	P	P	P	P	P	P	P
567 IAC 113.10(2)"f"(4) well recharge rates and chemistry (biennial)		X		P		P		P		P
Waste separation from ground water 113.6(2)"I"	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

X = completed
P = Planned
N/A = Not Applicable

Table 4 – Monitoring Well Maintenance Performance Reevaluation Summary

Table 4
Monitoring Well Maintenance and Performance Summary
Annual Water Quality Report
Jones County Sanitary Landfill
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Well	Top of casing	Top of Screen	Total Depth		Date of Measurements		Maximum Depth Discrepancy (ft)	Hydraulic Cond. (cm/sec)/date	Most Recent Recharge Rate	
					4/3/2025	10/14/2025			4/8/2024	Change
MW-12	1018.98	981.11	47.87	Groundwater Level (ft)	19.35	21.5	0.17	0.0000005 1991	Full recovery in >24 hour	None percieved
				Groundwater Elevation (Ft MSL)	999.63	997.48				
				Measured Well Depth (ft)	47.7	47.7				
				Submerged (+) or Exposed screen (-)	18.52	16.37				
MW-6	1012.71	995.93	36.78	Groundwater Level (ft)	16.55	23.65	0.13	0.00001 1991	Full recovery in 4 hour	None percieved
				Groundwater Elevation (Ft MSL)	996.16	989.06				
				Measured Well Depth (ft)	36.65	36.65				
				Submerged (+) or Exposed screen (-)	0.23	-6.87				
MW-11	1019.23	1007.83	26.4	Groundwater Level (ft)	19.2	21.69	0.05	0.000003 1991	Full recovery in 4 hour	None percieved
				Groundwater Elevation (Ft MSL)	1000.03	997.54				
				Measured Well Depth (ft)	26.35	26.35				
				Submerged (+) or Exposed screen (-)	-7.8	-10.29				
MW-15	964.04	944.4	29.81	Groundwater Level (ft)	11.80	11.4	0.21	0.0001 1991	Full recovery in 2 hours	None percieved
				Groundwater Elevation (Ft MSL)	952.24	952.64				
				Measured Well Depth (ft)	29.6	29.6				
				Submerged (+) or Exposed screen (-)	7.84	8.24				
MW-16	964.58	920.91	53.67	Groundwater Level (ft)	18.42	21.28	0.07	0.0000001 1991	Full recovery in >24 hour	None percieved
				Groundwater Elevation (Ft MSL)	946.16	943.3				
				Measured Well Depth (ft)	53.6	53.6				
				Submerged (+) or Exposed screen (-)	25.25	22.39				
MW-20	977.6	969.5	18.1	Groundwater Level (ft)	1.9	7.95	0.1	0.000001 1991	Full recovery in 4 hour	None percieved
				Groundwater Elevation (Ft MSL)	975.7	969.65				
				Measured Well Depth (ft)	18	18				
				Submerged (+) or Exposed screen (-)	6.2	0.15				
MW-22	950.92	941.42	19.5	Groundwater Level (ft)	5.35	11.93	0.1	No Record 2006	Full recovery in 2 hour	None percieved
				Groundwater Elevation (Ft MSL)	945.57	938.99				
				Measured Well Depth (ft)	19.4	19.4				
				Submerged (+) or Exposed screen (-)	4.15	-2.43				

Table 4A – Historic Water Level Summary

Table 4A
Water Level Summary
Annual Water Quality Report
Jones County Sanitary Landfill
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Monitor Well/ TOC Elev. (ft)	Screened Interval Depth (ft)	Elev. (ft)	Water Level	12/28/92	3/30/93	6/28/93	9/22/93	3/31/94
MW-6 1012.71	19.0	991.7	Depth (ft)	12.74	16.57	11.80	12.72	15.16
	34.0	976.7	Elev. (ft)	999.97	996.14	1000.91	999.99	997.55
MW-11 1019.23	8.0	1008.7	Depth (ft)	14.21	19.20	11.78	15.48	19.28
	23.0	993.7	Elev. (ft)	1005.02	1000.03	1005.02	1003.75	999.95
MW-12 1018.98	35.0	981.8	Depth (ft)	14.05	19.54	—	15.45	19.11
	45.0	971.8	Elev. (ft)	1004.93	999.44	—	1003.53	999.87
MW-15 964.04	8.0	954.2	Depth (ft)	16.92	18.18	14.83	17.11	16.49
	28.0	934.2	Elev. (ft)	947.12	945.86	949.21	946.93	947.55
MW-16 964.58	41.0	921.4	Depth (ft)	18.09	19.82	—	18.19	18.14
	51.0	911.4	Elev. (ft)	946.49	944.76	964.58	946.39	946.44
MW-20 977.60	5.5	970.1	Depth (ft)	5.61	3.11	5.23	4.60	4.21
	15.5	960.1	Elev. (ft)	971.99	974.49	972.37	973.00	973.39
MW-22 950.92	7.0	941.4	Depth (ft)	—	—	—	—	—
	17.0	931.4	Elev. (ft)	—	—	—	—	—
MW-4 1011.36	14.0	995.3	Depth (ft)	13.54	17.61	14.50	14.89	17.58
	29.0	980.3	Elev. (ft)	997.82	993.75	996.86	996.47	993.78
MW-18 999.46	9.1	987.3	Depth (ft)					
	24.1	972.3	Elev. (ft)					
MW-19 988.53	32.0	956.5	Depth (ft)					
	47.0	941.5	Elev. (ft)					
MW-21 943.10	16.5	929.7	Depth (ft)					
	23.5	919.7	Elev. (ft)					
LPZ-6 980.57	17.3	963.3	Depth (ft)					
	27.3	953.3	Elev. (ft)					
				12/28/92	3/30/93	6/28/93	9/22/93	3/31/94

Table 4A
Water Level Summary
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Monitor Well/ TOC Elev. (ft)	Screened Interval Depth (ft)	Elev. (ft)	Water Level	Date							
				10/5/94	4/15/95	9/19/95	4/2/96	9/5/96	2/28/97	9/11/97	3/21/98
MW-6 1012.71	19.0	991.7	Depth (ft)	18.60	15.40	17.60	17.60	16.85	16.16	18.65	12.28
	34.0	976.7	Elev. (ft)	994.11	997.31	995.11	995.11	995.86	996.55	994.06	1000.43
MW-11 1019.23	8.0	1008.7	Depth (ft)	21.18	19.14	19.80	21.50	19.40	19.72	20.49	15.12
	23.0	993.7	Elev. (ft)	998.05	1000.09	999.43	997.73	999.83	999.51	998.74	1004.11
MW-12 1018.98	35.0	981.8	Depth (ft)	21.31	21.10	19.88	21.70	19.39	19.85	20.46	16.5
	45.0	971.8	Elev. (ft)	997.67	997.88	999.10	997.28	999.59	999.13	998.52	1002.48
MW-15 964.04	8.0	954.2	Depth (ft)	18.43	16.84	18.50	18.35	19.90	18.33	18.42	12.75
	28.0	934.2	Elev. (ft)	945.61	947.20	945.54	945.69	944.14	945.71	945.62	951.29
MW-16 964.58	41.0	921.4	Depth (ft)	19.95	19.70	19.82	19.80	19.49	19.05	19.51	16.09
	51.0	911.4	Elev. (ft)	944.63	944.88	944.76	944.78	945.09	945.53	945.07	948.49
MW-20 977.60	5.5	970.1	Depth (ft)	5.53	3.98	6.10	4.25	10.31	6.05	6.18	2.63
	15.5	960.1	Elev. (ft)	972.07	973.62	971.50	973.35	967.29	971.55	971.42	974.97
MW-22 950.92	7.0	941.4	Depth (ft)	—	—	—	—	—	—	—	—
	17.0	931.4	Elev. (ft)	—	—	—	—	—	—	—	—
MW-4 1011.36	14.0	995.3	Depth (ft)	16.73	12.86	17.42	18.10	16.20	16.92	15.80	11.71
	29.0	980.3	Elev. (ft)	994.63	998.50	993.94	993.26	995.16	994.44	995.56	999.65
MW-18 999.46	9.1	987.3	Depth (ft)								
	24.1	972.3	Elev. (ft)								
MW-19 988.53	32.0	956.5	Depth (ft)								
	47.0	941.5	Elev. (ft)								
MW-21 943.10	16.5	929.7	Depth (ft)								
	23.5	919.7	Elev. (ft)								
LPZ-6 980.57	17.3	963.3	Depth (ft)								
	27.3	953.3	Elev. (ft)								
				10/5/94	4/15/95	9/19/95	4/2/96	9/5/96	2/28/97	9/11/97	3/21/98

Table 4A
Water Level Summary
Annual Water Quality Report
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Monitor Well/ TOC Elev. (ft)	Screened Interval Depth (ft)	Elev. (ft)	Water Level	Date						
				9/12/98	3/20/99	9/3/99	3/10/00	9/16/00	3/22/01	9/11/01
MW-6 1012.71	19.0	991.7	Depth (ft)	15.86	14.73	18.36	20.49	21.49	11.75	20.93
	34.0	976.7	Elev. (ft)	996.85	997.98	994.35	992.22	991.22	1000.96	991.78
MW-11 1019.23	8.0	1008.7	Depth (ft)	18.71	18.74	20.99	22.16	20.38	13.26	21.39
	23.0	993.7	Elev. (ft)	1000.52	1000.49	998.24	997.07	998.85	1005.97	997.84
MW-12 1018.98	35.0	981.8	Depth (ft)	18.5	19.23	21.01	22.48	20.34	15.31	21.26
	45.0	971.8	Elev. (ft)	1000.48	999.75	997.97	996.50	998.64	1003.67	997.72
MW-15 964.04	8.0	954.2	Depth (ft)	18.81	13.99	18.38	18.59	18.55	11.21	18.23
	28.0	934.2	Elev. (ft)	945.23	950.05	945.66	945.45	945.49	952.83	945.81
MW-16 964.58	41.0	921.4	Depth (ft)	18.83	16.44	18.83	19.86	19.15	15.34	19.20
	51.0	911.4	Elev. (ft)	945.75	948.14	945.75	944.72	945.43	949.24	945.38
MW-20 977.60	5.5	970.1	Depth (ft)	7.21	4.08	9.27	4.76	4.73	1.75	8.83
	15.5	960.1	Elev. (ft)	970.39	973.52	968.33	972.84	972.87	975.85	968.77
MW-22 950.92	7.0	941.4	Depth (ft)	—	—	—	—	—	—	—
	17.0	931.4	Elev. (ft)	—	—	—	—	—	—	—
MW-4 1011.36	14.0	995.3	Depth (ft)	15.66	13.94	16.98	18.09	16.65	10.37	16.83
	29.0	980.3	Elev. (ft)	995.70	997.42	994.38	993.27	994.71	1000.99	994.53
MW-18 999.46	9.1	987.3	Depth (ft)							
	24.1	972.3	Elev. (ft)							
MW-19 988.53	32.0	956.5	Depth (ft)							
	47.0	941.5	Elev. (ft)							
MW-21 943.10	16.5	929.7	Depth (ft)							
	23.5	919.7	Elev. (ft)							
LPZ-6 980.57	17.3	963.3	Depth (ft)							
	27.3	953.3	Elev. (ft)							
				9/12/98	3/20/99	9/3/99	3/10/00	9/16/00	3/22/01	9/11/01

Table 4A
Water Level Summary
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Jones County Sanitary Landfill
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Monitor Well/ TOC Elev. (ft)	Screened Interval Depth (ft)	Elev. (ft)	Water Level	Date								
				3/16/02	9/12/02	4/1/03	9/5/03	3/25/04	9/3/04	3/17/05	9/1/05	4/6/06
MW-6 1012.71	19.0	991.7	Depth (ft)	16.39	15.96	20.70	23.59	12.35	18.81	18.06	26.02	19.85
	34.0	976.7	Elev. (ft)	996.32	996.75	992.01	989.12	1000.36	993.90	994.65	986.69	992.86
MW-11 1019.23	8.0	1008.7	Depth (ft)	21.52	19.06	22.36	21.80	18.30	20.36	21.15	22.69	22.70
	23.0	993.7	Elev. (ft)	997.71	1000.17	996.87	997.43	1000.93	998.87	998.08	996.54	996.53
MW-12 1018.98	35.0	981.8	Depth (ft)	22.11	19.39	22.53	21.84	19.60	20.39	21.12	22.89	23.11
	45.0	971.8	Elev. (ft)	996.87	999.59	996.45	997.14	999.38	998.59	997.86	996.09	995.87
MW-15 964.04	8.0	954.2	Depth (ft)	15.45	18.47	18.50	18.52	12.78	18.25	15.61	18.58	13.80
	28.0	934.2	Elev. (ft)	948.59	945.57	945.54	945.52	951.26	945.79	948.43	945.46	950.24
MW-16 964.58	41.0	921.4	Depth (ft)	18.84	17.92	19.53	19.44	17.22	18.74	16.91	19.93	18.54
	51.0	911.4	Elev. (ft)	945.74	946.66	945.05	945.14	947.36	945.84	947.67	944.65	946.04
MW-20 977.60	5.5	970.1	Depth (ft)	2.46	6.86	2.53	9.38	1.98	4.85	3.29	7.76	2.02
	15.5	960.1	Elev. (ft)	975.14	970.74	975.07	968.22	975.62	972.75	974.31	969.84	975.58
MW-22 950.92	7.0	941.4	Depth (ft)	—	—	—	—	—	—	—	—	5.10
	17.0	931.4	Elev. (ft)	—	—	—	—	—	—	—	—	945.82
MW-4 1011.36	14.0	995.3	Depth (ft)	15.42	16.09	18.02	16.98	13.13	15.07	16.7	16.08	13.53
	29.0	980.3	Elev. (ft)	995.94	995.27	993.34	994.38	998.23	996.29	994.66	995.28	997.83
MW-18 999.46	9.1	987.3	Depth (ft)									
	24.1	972.3	Elev. (ft)									
MW-19 988.53	32.0	956.5	Depth (ft)									
	47.0	941.5	Elev. (ft)									
MW-21 943.10	16.5	929.7	Depth (ft)									
	23.5	919.7	Elev. (ft)									
LPZ-6 980.57	17.3	963.3	Depth (ft)									
	27.3	953.3	Elev. (ft)									
				3/16/02	9/12/02	4/1/03	9/5/03	3/25/04	9/3/04	3/17/05	9/1/05	4/6/06

Table 4A
Water Level Summary
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Monitor Well/ TOC Elev. (ft)	Screened Interval Depth (ft)	Elev. (ft)	Water Level	Date							
				9/7/06	3/14/07	9/19/07	3/25/08	9/5/08	3/6/09	8/31/09	3/15/10
MW-6 1012.71	19.0	991.7	Depth (ft)	21.79	15.62	20.81	13.25	20.11	18.09	13.96	14.43
	34.0	976.7	Elev. (ft)	990.92	997.09	991.90	999.46	992.60	994.62	998.75	998.28
MW-11 1019.23	8.0	1008.7	Depth (ft)	9.29	14.63	20.71	12.72	19.87	19.81	11.69	13.17
	23.0	993.7	Elev. (ft)	1009.94	1004.60	998.52	1006.51	999.36	999.42	1007.54	1006.06
MW-12 1018.98	35.0	981.8	Depth (ft)	19.27	18.30	20.25	13.27	19.61	19.70	13.12	14.43
	45.0	971.8	Elev. (ft)	999.71	1000.68	998.73	1005.71	999.37	999.28	1005.86	1004.55
MW-15 964.04	8.0	954.2	Depth (ft)	20.45	12.99	18.55	11.51	18.51	15.84	12.09	11.54
	28.0	934.2	Elev. (ft)	943.59	951.05	945.49	952.53	945.53	948.20	951.95	952.50
MW-16 964.58	41.0	921.4	Depth (ft)	18.69	17.89	19.35	15.28	18.49	17.91	17.51	15.29
	51.0	911.4	Elev. (ft)	945.89	946.69	945.23	949.30	946.09	946.67	947.07	949.29
MW-20 977.60	5.5	970.1	Depth (ft)	4.24	1.89	4.78	1.95	4.88	2.73	1.74	2.20
	15.5	960.1	Elev. (ft)	973.36	975.71	972.82	975.65	972.72	974.87	975.86	975.40
MW-22 950.92	7.0	941.4	Depth (ft)	8.95	2.77	10.38	2.81	10.50	5.40	3.16	2.89
	17.0	931.4	Elev. (ft)	941.97	948.15	940.54	948.11	940.42	945.52	947.76	948.03
MW-4 1011.36	14.0	995.3	Depth (ft)	15.35	16.67	15.98	14.51	15.09	17.42	11.81	12.29
	29.0	980.3	Elev. (ft)	996.01	994.69	995.38	996.85	996.27	993.94	999.55	999.07
MW-18 999.46	9.1	987.3	Depth (ft)								
	24.1	972.3	Elev. (ft)								
MW-19 988.53	32.0	956.5	Depth (ft)								
	47.0	941.5	Elev. (ft)								
MW-21 943.10	16.5	929.7	Depth (ft)								
	23.5	919.7	Elev. (ft)								
LPZ-6 980.57	17.3	963.3	Depth (ft)								
	27.3	953.3	Elev. (ft)								
				9/7/06	3/14/07	9/19/07	3/25/08	9/5/08	3/6/09	8/31/09	3/15/10

Table 4A
Water Level Summary
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Monitor Well/ TOC Elev. (ft)	Screened Interval Depth (ft)	Elev. (ft)	Water Level	Date						
				9/14/10	3/11/11	9/7/11	3/14/12	9/1/12	4/1/13	9/9/13
MW-6 1012.71	19.0	991.7	Depth (ft)	19.08	14.42	21.78	14.99	26.35	20.69	23.45
	34.0	976.7	Elev. (ft)	993.63	998.29	990.93	997.72	986.36	992.02	989.26
MW-11 1019.23	8.0	1008.7	Depth (ft)	19.53	15.26	21.17	15.68	22.74	22.48	21.00
	23.0	993.7	Elev. (ft)	999.70	1003.97	998.06	1003.55	996.49	996.75	998.23
MW-12 1018.98	35.0	981.8	Depth (ft)	18.94	16.13	21.04	16.60	22.73	22.65	20.80
	45.0	971.8	Elev. (ft)	1000.04	1002.85	997.94	1002.38	996.25	996.33	998.18
MW-15 964.04	8.0	954.2	Depth (ft)	18.50	11.21	18.72	11.61	19.12	11.71	18.84
	28.0	934.2	Elev. (ft)	945.54	952.83	945.32	952.43	944.92	952.33	945.20
MW-16 964.58	41.0	921.4	Depth (ft)	17.25	16.18	19.17	16.39	20.65	18.09	19.36
	51.0	911.4	Elev. (ft)	947.33	948.40	945.41	948.19	943.93	946.49	945.22
MW-20 977.60	5.5	970.1	Depth (ft)	7.19	2.21	7.41	2.15	9.05	2.11	9.95
	15.5	960.1	Elev. (ft)	970.41	975.39	970.19	975.45	968.55	975.49	967.65
MW-22 950.92	7.0	941.4	Depth (ft)	8.43	1.80	10.50	5.24	12.66	6.39	11.06
	17.0	931.4	Elev. (ft)	942.49	949.12	940.42	945.68	938.26	944.53	939.86
MW-4 1011.36	14.0	995.3	Depth (ft)	16.45	13.2	15.89	13.18	16.05	18.2	17.68
	29.0	980.3	Elev. (ft)	994.91	998.16	995.47	998.18	995.31	993.16	993.68
MW-18 999.46	9.1	987.3	Depth (ft)							
	24.1	972.3	Elev. (ft)							
MW-19 988.53	32.0	956.5	Depth (ft)							
	47.0	941.5	Elev. (ft)							
MW-21 943.10	16.5	929.7	Depth (ft)							
	23.5	919.7	Elev. (ft)							
LPZ-6 980.57	17.3	963.3	Depth (ft)							
	27.3	953.3	Elev. (ft)							
				9/14/10	3/11/11	9/7/11	3/14/12	9/1/12	4/1/13	9/9/13

Table 4A
Water Level Summary
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Monitor Well/ TOC Elev. (ft)	Screened Interval Depth (ft)	Elev. (ft)	Water Level	Date							
				3/30/14	9/19/14	4/20/15	10/5/15	4/5/16	10/5/16	4/4/17	10/3/17
MW-6 1012.71	19.0	991.7	Depth (ft)	20.35	15.69	18.35	19.77	16.14	18.03	14.79	23.51
	34.0	976.7	Elev. (ft)	992.36	997.02	994.36	992.94	996.57	994.68	997.92	989.20
MW-11 1019.23	8.0	1008.7	Depth (ft)	22.58	16.47	21.45	21.00	16.07	19.24	16.43	21.35
	23.0	993.7	Elev. (ft)	996.65	1002.76	997.78	998.23	1003.16	999.99	1002.80	997.88
MW-12 1018.98	35.0	981.8	Depth (ft)	22.70	17.09	21.50	20.93	16.11	19.02	18.33	21.16
	45.0	971.8	Elev. (ft)	996.28	1001.89	997.48	998.05	1002.87	999.96	1000.65	997.82
MW-15 964.04	8.0	954.2	Depth (ft)	12.51	16.43	16.70	19.05	14.30	17.86	11.35	20.10
	28.0	934.2	Elev. (ft)	951.53	947.61	947.34	944.99	949.74	946.18	952.69	943.94
MW-16 964.58	41.0	921.4	Depth (ft)	19.20	18.59	18.70	20.41	15.96	17.89	16.26	20.04
	51.0	911.4	Elev. (ft)	945.38	945.99	945.88	944.17	948.62	946.69	948.32	944.54
MW-20 977.60	5.5	970.1	Depth (ft)	2.21	4.31	1.90	6.15	2.40	5.06	1.96	10.02
	15.5	960.1	Elev. (ft)	975.39	973.29	975.70	971.45	975.20	972.54	975.64	967.58
MW-22 950.92	7.0	941.4	Depth (ft)	6.51	7.00	7.00	10.98	6.25	---	4.71	12.21
	17.0	931.4	Elev. (ft)	944.41	943.92	943.92	939.94	944.67	950.92	946.21	938.71
MW-4 1011.36	14.0	995.3	Depth (ft)	18.35	14.46	---	16.33	15.20	16.15	14.53	17.18
	29.0	980.3	Elev. (ft)	993.01	996.90	1011.36	995.03	996.16	995.21	996.83	994.18
MW-18 999.46	9.1	987.3	Depth (ft)	12.10	11.35	15.15	15.35	11.65	13.44	11.00	17.95
	24.1	972.3	Elev. (ft)	987.36	988.11	984.31	984.11	987.81	986.02	988.46	981.51
MW-19 988.53	32.0	956.5	Depth (ft)	31.59	25.65	25.95	27.04	21.33	23.15	20.72	27.44
	47.0	941.5	Elev. (ft)	956.94	962.88	962.58	961.49	967.20	965.38	967.81	961.09
MW-21 943.10	16.5	929.7	Depth (ft)	4.61	5.65	4.15	8.06	4.53	---	4.10	9.69
	23.5	919.7	Elev. (ft)	938.49	937.45	938.95	935.04	938.57	943.10	939.00	933.41
LPZ-6 980.57	17.3	963.3	Depth (ft)	17.00	16.58	18.49	18.40	16.80	16.87	13.95	18.40
	27.3	953.3	Elev. (ft)	963.57	963.99	962.08	962.17	963.77	963.70	966.62	962.17
				3/30/14	9/19/14	4/20/15	10/5/15	4/5/16	10/5/16	4/4/17	10/3/17

Table 4A
Water Level Summary
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Monitor Well/ TOC Elev. (ft)	Screened Interval Depth (ft)	Elev. (ft)	Water Level	Date							
				4/10/18	10/12/18	4/16/19	9/30/19	4/7/20	10/7/20	4/22/21	10/5/21
MW-6 1012.71	19.0	991.7	Depth (ft)	18.08	13.07	15.89	19.03	15.42	18.48	15.13	26.20
	34.0	976.7	Elev. (ft)	994.63	999.64	996.82	993.68	997.29	994.23	997.58	986.51
MW-11 1019.23	8.0	1008.7	Depth (ft)	20.75	10.02	17.38	19.86	14.01	16.95	13.50	22.59
	23.0	993.7	Elev. (ft)	998.48	1009.21	1001.85	999.37	1005.22	1002.28	1005.73	996.64
MW-12 1018.98	35.0	981.8	Depth (ft)	21.25	10.95	17.50	20.45	13.97	16.42	13.05	22.47
	45.0	971.8	Elev. (ft)	997.73	1008.03	1001.48	998.53	1005.01	1002.56	1005.93	996.51
MW-15 964.04	8.0	954.2	Depth (ft)	15.45	11.16	13.60	17.46	13.75	17.51	11.00	19.61
	28.0	934.2	Elev. (ft)	948.59	952.88	950.44	946.58	950.29	946.53	953.04	944.43
MW-16 964.58	41.0	921.4	Depth (ft)	19.41	16.05	15.22	19.99	15.65	18.18	14.09	21.03
	51.0	911.4	Elev. (ft)	945.17	948.53	949.36	944.59	948.93	946.40	950.49	943.55
MW-20 977.60	5.5	970.1	Depth (ft)	2.20	2.03	2.15	2.02	2.15	7.03	3.13	10.44
	15.5	960.1	Elev. (ft)	975.40	975.57	975.45	975.58	975.45	970.57	974.47	967.16
MW-22 950.92	7.0	941.4	Depth (ft)	7.24	5.45	6.03	7.73	5.97	8.44	5.22	13.25
	17.0	931.4	Elev. (ft)	943.68	945.47	944.89	943.19	944.95	942.48	945.70	937.67
MW-4 1011.36	14.0	995.3	Depth (ft)	17.96	11.10	15.80	13.13	14.25	15.29	13.76	17.75
	29.0	980.3	Elev. (ft)	993.40	1000.26	995.56	998.23	997.11	996.07	997.60	993.61
MW-18 999.46	9.1	987.3	Depth (ft)	12.21	8.20	10.54	12.74	9.95	13.21	10.29	18.70
	24.1	972.3	Elev. (ft)	987.25	991.26	988.92	986.72	989.51	986.25	989.17	980.76
MW-19 988.53	32.0	956.5	Depth (ft)	30.20	20.41	19.15	26.87	21.14	25.63	17.85	28.92
	47.0	941.5	Elev. (ft)	958.33	968.12	969.38	961.66	967.39	962.90	970.68	959.61
MW-21 943.10	16.5	929.7	Depth (ft)	5.07	3.98	4.17	5.71	4.24	7.15	4.16	11.12
	23.5	919.7	Elev. (ft)	938.03	939.12	938.93	937.39	938.86	935.95	938.94	931.98
LPZ-6 980.57	17.3	963.3	Depth (ft)	15.55	15.52	17.03	15.40	15.45	17.10	16.60	22.45
	27.3	953.3	Elev. (ft)	965.02	965.05	963.54	965.17	965.12	963.47	963.97	958.12
				4/10/18	10/12/18	4/16/19	9/30/19	4/7/20	10/7/20	4/22/21	10/5/21

Table 4A
Water Level Summary
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Monitor Well/ TOC Elev. (ft)	Screened Interval Depth (ft)	Elev. (ft)	Water Level									Max	Min
				4/4/22	10/5/22	4/14/23	10/18/23	4/8/24	10/8/24	4/3/25	10/14/25		
MW-6	19.0	991.7	Depth (ft)	17.65	23.05	17.53	28.80	15.66	23.20	16.55	23.65	28.80	11.75
1012.71	34.0	976.7	Elev. (ft)	995.06	989.66	995.18	983.91	997.05	989.51	996.16	989.06	1000.96	983.91
MW-11	8.0	1008.7	Depth (ft)	19.21	20.38	17.33	23.80	18.42	20.91	19.20	21.69	23.80	9.29
1019.23	23.0	993.7	Elev. (ft)	1000.02	998.85	1001.90	995.43	1000.81	998.32	1000.03	997.54	1009.94	996.49
MW-12	35.0	981.8	Depth (ft)	20.19	20.09	17.04	23.66	20.11	20.60	19.35	21.50	23.66	10.95
1018.98	45.0	971.8	Elev. (ft)	998.79	998.89	1001.94	995.32	998.87	998.38	999.63	997.48	1008.03	995.87
MW-15	8.0	954.2	Depth (ft)	11.80	18.88	14.50	19.77	10.65	12.05	11.80	11.40	20.45	11.00
964.04	28.0	934.2	Elev. (ft)	952.24	945.16	949.54	944.27	953.39	951.99	952.24	952.64	953.04	943.59
MW-16	41.0	921.4	Depth (ft)	18.63	20.28	15.02	21.98	18.00	20.60	18.42	21.28	21.98	14.09
964.58	51.0	911.4	Elev. (ft)	945.95	944.30	949.56	942.60	946.58	943.98	946.16	943.30	964.58	943.55
MW-20	5.5	970.1	Depth (ft)	1.70	9.24	3.00	13.81	1.77	8.76	1.90	7.95	13.81	1.74
977.60	15.5	960.1	Elev. (ft)	975.90	968.36	974.60	963.79	975.83	968.84	975.70	969.65	975.86	967.16
MW-22	7.0	941.4	Depth (ft)	5.33	10.70	6.33	13.50	5.33	11.75	5.35	11.93	13.50	1.80
950.92	17.0	931.4	Elev. (ft)	945.59	940.22	944.59	937.42	945.59	939.17	945.57	938.99	950.92	937.67
MW-4	14.0	995.3	Depth (ft)	13.70	17.24	16.31	18.98	12.22	17.18	14.86	16.20	18.98	10.37
1011.36	29.0	980.3	Elev. (ft)	997.66	994.12	995.05	992.38	999.14	994.18	996.50	995.16	1011.36	993.01
MW-18	9.1	987.3	Depth (ft)	8.45	16.65	11.23	12.86	8.69	15.18	11.95	11.10	18.70	8.20
999.46	24.1	972.3	Elev. (ft)	991.01	982.81	988.23	986.60	990.77	984.28	987.51	988.36	991.26	980.76
MW-19	32.0	956.5	Depth (ft)	30.42	27.10	23.43	30.78	30.60	28.03	29.11	28.81	31.59	17.85
988.53	47.0	941.5	Elev. (ft)	958.11	961.43	965.10	957.75	957.93	960.50	959.42	959.72	970.68	956.94
MW-21	16.5	929.7	Depth (ft)	3.91	9.67	4.25	13.84	4.14	11.17	4.00	10.77	13.84	3.98
943.10	23.5	919.7	Elev. (ft)	939.19	933.43	938.85	929.26	938.96	931.93	939.10	932.33	943.10	931.98
LPZ-6	17.3	963.3	Depth (ft)	13.30	18.00	15.65	17.30	15.88	18.11	13.80	18.00	22.45	13.95
980.57	27.3	953.3	Elev. (ft)	967.27	962.57	964.92	963.27	964.69	962.46	966.77	962.57	966.62	958.12
				4/4/22	10/5/22	4/14/23	10/18/23	4/8/24	10/8/24	4/3/25	10/14/25	Max	Min

Table 4A
Water Level Summary
Annual Water Quality Report
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Monitor Well/ TOC Elev. (ft)	Screened Interval Depth (ft)	Elev. (ft)	Water Level	Mean/ Std. Dev.	
MW-6 1012.71	19.0 34.0	991.7 976.7	Depth (ft) Elev. (ft)	18.03 994.68	MW-6
MW-11 1019.23	8.0 23.0	1008.7 993.7	Depth (ft) Elev. (ft)	18.52 1000.67	MW-11
MW-12 1018.98	35.0 45.0	981.8 971.8	Depth (ft) Elev. (ft)	19.14 999.84	MW-12
MW-15 964.04	8.0 28.0	954.2 934.2	Depth (ft) Elev. (ft)	16.20 947.84	MW-15
MW-16 964.58	41.0 51.0	921.4 911.4	Depth (ft) Elev. (ft)	18.25 946.64	MW-16
MW-20 977.60	5.5 15.5	970.1 960.1	Depth (ft) Elev. (ft)	4.65 972.95	MW-20
MW-22 950.92	7.0 17.0	941.4 931.4	Depth (ft) Elev. (ft)	7.16 943.98	MW-22
MW-4 1011.36	14.0 29.0	995.3 980.3	Depth (ft) Elev. (ft)	15.50 996.12	MW-4
MW-18 999.46	9.1 24.1	987.3 972.3	Depth (ft) Elev. (ft)	12.74 986.72	MW-18
MW-19 988.53	32.0 47.0	956.5 941.5	Depth (ft) Elev. (ft)	24.57 963.97	MW-19
MW-21 943.10	16.5 23.5	929.7 919.7	Depth (ft) Elev. (ft)	5.76 937.70	MW-21
LPZ-6 980.57	17.3 27.3	963.3 953.3	Depth (ft) Elev. (ft)	16.97 963.60	LPZ-6
				Mean/	

Table 5 – Background and GWPS Summary

Table 5
Background and GWPS Summary
Annual Water Quality Report
Jones County Sanitary Landfill
Permit No. 53-SDP-01-76C

Interwell Background Well (MW-12)

Inorganics - Appendix I										
Constituent	Units	Model Type	Samples - N	Detections	Mean	SD	Prediction Limit	Confidence	GWPS	Source
Antimony (Sb)	µg/l	nonparametric	23	1			3.5000	0.98	6	SS
Arsenic (As)	µg/l	nonparametric	23	0			4.0000	0.98	10	SS
Barium (Ba)	µg/l	normal	23	23	259.3478	20.7334	312.4586		2000	SS
Beryllium (Be)	µg/l	nonparametric	23	0			4.0000	0.98	4	SS
Cadmium (Cd)	µg/l	nonparametric	23	0			0.8000	0.98	5	SS
Chromium (Cr)	µg/l	nonparametric	23	0			8.0000	0.98	100	SS
Cobalt (Co)	µg/l	nonparametric	23	1			2.6000	0.98	2.6	Site
Copper (Cu)	µg/l	nonparametric	23	0			4.0000	0.98	1300	SS
Lead (Pb)	µg/l	nonparametric	23	0			4.0000	0.98	15	SS
Nickel (Ni)	µg/l	nonparametric	23	3			13.4000	0.98	100	SS
Selenium (Se)	µg/l	nonparametric	23	0			4.0000	0.98	50	SS
Silver (Ag)	µg/l	nonparametric	23	0			4.0000	0.98	100	SS
Thallium (Tl)	µg/l	nonparametric	23	0			2.0000	0.98	2	SS
Vanadium (V)	µg/l	nonparametric	23	0			20.0000	0.98	35	SS
Zinc (Zn)	µg/l	nonparametric	23	8			27.2000	0.98	2000	SS
VOC - Appendix I										
Constituent	Units	Model Type	Samples - N	Detections	Mean	SD	Prediction Limit	Confidence	GWPS	Source
All	µg/l	DQR	23	0	<1	<1	<1	<1	various	SS

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

see attached information for notes

* The prediction limit for thallium is artificially elevated based on the historic elevated Method Reporting Limit (MRL) of 4.0 ug/L utilized by the laboratory. The MRL is now set at 2.0 ug/L.

Table 6 – Summary of Detections

Table 6
Summary of Well/Detected Constituent Pairs that Exceed the Prediction Limit
Annual Water Quality Report
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Date	Well	Constituent	Units	Most recent result	Background Standard	GWPS
4/3/2025	MW-6	Barium	ug/L	415	314.02	2000.00
10/14/2025	MW-6	Barium	ug/L	590	312.46	2000.00
10/14/2025	MW-6	Cobalt	ug/L	3.3	2.6	2.60
10/14/2025	MW-11	Barium	ug/L	334	312.46	2000.00
12/16/2025	MW-11	Barium	ug/L	324	312.46	2000.00
4/3/2025	MW-16	Zinc	ug/L	28.3	27.2	2000.00
7/14/2025	MW-16	Zinc	ug/L	45.7	27.2	2000.00
10/14/2025	MW-16	Zinc	ug/L	33.9	27.2	2000.00

Table 7 – Summary of Ongoing and Newly Identified SSI

Table 7
Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
Jones County Sanitary Landfill
Permit No. 53-SDP-01-76C

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	Initial Exceedance	Resamples Due	5th Background Sample
MW-6	Barium	10/5/2016	231.00	328.64	221.979	2,000	NA	NA	10/5/2016
MW-6	Barium	4/4/2017	154.00	328.64	140.273	2,000	NA	NA	10/5/2016
MW-6	Barium	10/3/2017	573.00	328.64	121.038	2,000	10/3/2017	1/3/2018	10/5/2016
MW-6	Barium	1/3/2018	613.00	328.64	121.038	2,000	10/3/2017	NA	10/5/2016
MW-6	Barium	4/10/2018	435.00	328.64	199.468	2,000	10/3/2017	NA	10/5/2016
MW-6	Barium	10/12/2018	289.00	328.64	304.596	2,000	10/3/2017	NA	10/5/2016
MW-6	Barium	4/16/2019	274.00	324.18	217.059	2,000	10/3/2017	NA	10/5/2016
MW-6	Barium	9/30/2019	409.00	321.64	255.25	2,000	10/3/2017	NA	10/5/2016
MW-6	Barium	4/7/2020	209.00	318.80	197.143	2,000	10/3/2017	NA	10/5/2016
MW-6	Barium	10/7/2020	226.00	316.46	172.911	2,000	10/3/2017	NA	10/5/2016
MW-6	Barium	4/22/2021	180.00	314.76	133.957	2,000	10/3/2017	NA	10/5/2016
MW-6	Barium	10/5/2021	497.00	322.72	104.815	2,000	10/3/2017	NA	10/5/2016
MW-6	Barium	4/4/2022	521.00	320.04	146.698	2,000	10/3/2017	NA	10/5/2016
MW-6	Barium	10/5/2022	551.00	322.78	233.850	2,000	10/3/2017	NA	10/5/2016
MW-6	Barium	4/14/2023	133.00	321.76	194.657	2,000	10/3/2017	NA	10/5/2016
MW-6	Barium	10/18/2023	431.00	319.42	184.406	2,000	10/3/2017	NA	10/5/2016
MW-6	Barium	4/8/2024	171.00	317.33	83.472	2,000	10/3/2017	NA	10/5/2016
MW-6	Barium	10/8/2024	519.00	315.37	89.363	2,000	10/3/2017	NA	10/5/2016
MW-6	Barium	4/3/2025	415.00	314.02	208.521	2,000	10/3/2017	NA	10/5/2016
MW-6	Barium	10/14/2025	590.00	312.46	208.271	2,000	10/3/2017	NA	10/5/2016

Table 7

Summary of Ongoing & Newly Identified SSI

Annual Water Quality Report

Jones County Sanitary Landfill

Permit No. 53-SDP-01-76C

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)	Initial Exceedance	Resamples Due	5th Background Sample
MW-6	Cadmium	10/5/2016	<0.8	0.80	0.400	5	NA	NA	10/5/2016
MW-6	Cadmium	4/4/2017	<0.8	0.80	0.400	5	NA	NA	10/5/2016
MW-6	Cadmium	10/3/2017	<0.8	0.80	0.400	5	NA	NA	10/5/2016
MW-6	Cadmium	1/3/2018	<0.8	0.80	0.400	5	NA	NA	10/5/2016
MW-6	Cadmium	4/10/2018	<0.8	0.80	0.400	5	NA	NA	10/5/2016
MW-6	Cadmium	10/12/2018	<0.8	0.80	0.400	5	NA	NA	10/5/2016
MW-6	Cadmium	4/16/2019	<0.8	0.80	0.400	5	NA	NA	10/5/2016
MW-6	Cadmium	9/30/2019	<0.8	0.80	0.400	5	NA	NA	10/5/2016
MW-6	Cadmium	4/7/2020	<0.8	0.80	0.400	5	NA	NA	10/5/2016
MW-6	Cadmium	10/7/2020	<0.8	0.80	0.400	5	NA	NA	10/5/2016
MW-6	Cadmium	4/22/2021	<0.8	0.80	0.400	5	NA	NA	10/5/2016
MW-6	Cadmium	10/5/2021	1.10	0.80	0.163	5	NA	NA	10/5/2016
MW-6	Cadmium	4/4/2022	<0.8	0.80	0.163	5	NA	NA	10/5/2016
MW-6	Cadmium	10/5/2022	<0.8	0.80	0.163	5	NA	NA	10/5/2016
MW-6	Cadmium	4/14/2023	<0.8	0.80	0.163	5	NA	NA	10/5/2016
MW-6	Cadmium	10/18/2023	<0.8	0.80	0.400	5	NA	NA	10/5/2016
MW-6	Cadmium	4/8/2024	<0.8	0.80	0.400	5	NA	NA	10/5/2016
MW-6	Cadmium	10/8/2024	<0.8	0.80	0.400	5	NA	NA	10/5/2016
MW-6	Cadmium	4/3/2025	0.30	0.80	0.400	5	NA	NA	10/5/2016
MW-6	Cadmium	10/14/2025	<0.2	0.80	0.400	5	NA	NA	10/5/2016

Table 7
Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
Jones County Sanitary Landfill
Permit No. 53-SDP-01-76C

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	Initial Exceedance	Resamples Due	5th Background Sample
MW-6	Cobalt	10/5/2016	<0.8	0.80	0.000	2.8	NA	NA	10/5/2016
MW-6	Cobalt	4/4/2017	<0.8	0.80	0.400	2.8	NA	NA	10/5/2016
MW-6	Cobalt	10/3/2017	1.70	0.80	0.000	2.8	10/3/2017	1/3/2018	10/5/2016
MW-6	Cobalt	1/3/2018	1.50	0.80	0.000	2.8	10/3/2017	NA	10/5/2016
MW-6	Cobalt	4/10/2018	<0.8	0.80	0.179	2.1	10/3/2017	NA	10/5/2016
MW-6	Cobalt	10/12/2018	<0.8	0.80	0.179	2.1	10/3/2017	NA	10/5/2016
MW-6	Cobalt	4/16/2019	<0.8	0.80	0.028	2.1	10/3/2017	NA	10/5/2016
MW-6	Cobalt	9/30/2019	0.8	0.80	0.265	2.1	10/3/2017	NA	10/5/2016
MW-6	Cobalt	4/7/2020	0.9	0.80	0.316	2.1	10/3/2017	NA	10/5/2016
MW-6	Cobalt	10/7/2020	0.5	0.80	0.370	2.1	10/3/2017	NA	10/5/2016
MW-6	Cobalt	4/22/2021	0.6	0.80	0.485	2.1	10/3/2017	NA	10/5/2016
MW-6	Cobalt	10/5/2021	4.1	0.80	0.000	2.1	10/3/2017	NA	10/5/2016
MW-6	Cobalt	4/4/2022	<0.8	0.80	0.000	2.1	10/3/2017	NA	10/5/2016
MW-6	Cobalt	10/5/2022	5.3	2.60	0.000	2.6	10/3/2017	NA	10/5/2016
MW-6	Cobalt	4/14/2023	<0.4	2.60	0.000	2.6	10/3/2017	NA	10/5/2016
MW-6	Cobalt	10/18/2023	2.3	2.60	0.000	2.6	10/3/2017	NA	10/5/2016
MW-6	Cobalt	4/8/2024	<0.4	2.60	0.000	2.6	10/3/2017	NA	10/5/2016
MW-6	Cobalt	10/8/2024	2.2	2.60	0.068	2.6	10/3/2017	NA	10/5/2016
MW-6	Cobalt	4/3/2025	0.5	2.60	0.126	2.6	10/3/2017	NA	10/5/2016
MW-6	Cobalt	10/14/2025	3.3	2.60	0.000	2.6	10/3/2017	NA	10/5/2016

Table 7
Summary of Ongoing & Newly Identified SSI
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Jones County Sanitary Landfill
Permit No. 53-SDP-01-76C

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)	Initial Exceedance	Resamples Due	5th Background Sample
MW-6	Copper	10/5/2016	<4	4.00	---	1300	10/5/2022	NA	10/5/2016
MW-6	Copper	4/4/2017	<4	4.00	---	1300	10/5/2022	NA	10/5/2016
MW-6	Copper	10/3/2017	<4	4.00	---	1300	10/5/2022	NA	10/5/2016
MW-6	Copper	1/3/2018	<4	4.00	2.000	1300	10/5/2022	NA	10/5/2016
MW-6	Copper	4/10/2018	<4	4.00	2.000	1300	10/5/2022	NA	10/5/2016
MW-6	Copper	10/12/2018	<4	4.00	2.000	1300	10/5/2022	NA	10/5/2016
MW-6	Copper	4/16/2019	<4	4.00	2.000	1300	10/5/2022	NA	10/5/2016
MW-6	Copper	9/30/2019	<4	4.00	2.000	1300	10/5/2022	NA	10/5/2016
MW-6	Copper	4/7/2020	<4	4.00	2.000	1300	10/5/2022	NA	10/5/2016
MW-6	Copper	10/7/2020	<4	4.00	2.000	1300	10/5/2022	NA	10/5/2016
MW-6	Copper	4/22/2021	<4	4.00	2.000	1300	10/5/2022	NA	10/5/2016
MW-6	Copper	10/5/2021	<4	4.00	2.000	1300	10/5/2022	NA	10/5/2016
MW-6	Copper	4/4/2022	<4	4.00	2.000	1300	10/5/2022	NA	10/5/2016
MW-6	Copper	10/5/2022	6.9	4.00	0.343	1300	10/5/2022	NA	10/5/2016
MW-6	Copper	4/14/2023	<4	4.00	0.343	1300	10/5/2022	NA	10/5/2016
MW-6	Copper	10/18/2023	4.1	4.00	1.019	1300	10/5/2022	NA	10/5/2016
MW-6	Copper	4/8/2024	<4	4.00	1.019	1300	10/5/2022	NA	10/5/2016
MW-6	Copper	10/8/2024	<4	4.00	2.000	1300	10/5/2022	NA	10/5/2016
MW-6	Copper	4/3/2025	<5	4.00	2.000	1300	10/5/2022	NA	10/5/2016
MW-6	Copper	10/14/2025	<5	4.00	2.000	1300	10/5/2022	NA	10/5/2016

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	Initial Exceedance	Resamples Due	5th Background Sample
MW-6	Nickel	10/5/2016	<4	13.4	1.200	100	NA	NA	10/5/2016
MW-6	Nickel	4/4/2017	<4	13.4	1.002	100	NA	NA	10/5/2016
MW-6	Nickel	10/3/2017	9.3	13.4	0.604	100	NA	NA	10/5/2016
MW-6	Nickel	1/3/2018	9.4	13.4	0.604	100	NA	NA	10/5/2016
MW-6	Nickel	4/10/2018	7.5	13.4	2.959	100	NA	NA	10/5/2016
MW-6	Nickel	10/12/2018	<4	13.4	2.959	100	NA	NA	10/5/2016
MW-6	Nickel	4/16/2019	<4	13.4	0.751	100	NA	NA	10/5/2016
MW-6	Nickel	9/30/2019	8.1	13.4	0.951	100	NA	NA	10/5/2016
MW-6	Nickel	4/7/2020	<4	13.4	0.000	100	NA	NA	10/5/2016
MW-6	Nickel	10/7/2020	<4	13.4	0.000	100	NA	NA	10/5/2016
MW-6	Nickel	4/22/2021	<4	13.4	0.000	100	NA	NA	10/5/2016
MW-6	Nickel	10/5/2021	8.6	13.4	0.000	100	NA	NA	10/5/2016
MW-6	Nickel	4/4/2022	9.1	13.4	0.767	100	NA	NA	10/5/2016
MW-6	Nickel	10/5/2022	10.9	13.4	3.070	100	NA	NA	10/5/2016
MW-6	Nickel	4/14/2023	<4	13.4	3.070	100	NA	NA	10/5/2016
MW-6	Nickel	10/18/2023	10.0	13.4	3.216	100	NA	NA	10/5/2016
MW-6	Nickel	4/8/2024	<4	13.4	0.470	100	NA	NA	10/5/2016
MW-6	Nickel	10/8/2024	12.9	13.4	0.158	100	NA	NA	10/5/2016
MW-6	Nickel	4/3/2025	7.0	13.4	2.499	100	NA	NA	10/5/2016
MW-6	Nickel	10/14/2025	9.7	13.4	2.473	100	NA	NA	10/5/2016

Table 7
Summary of Ongoing & Newly Identified SSI
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KEY:

SSI

SSL LCL>GWPS

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	Initial Exceedance	Resamples Due	5th Background Sample
MW-6	Bis(2-ethylhexyl)phthalate	10/5/2016	<10	6.0	5.000	6	NA	NA	10/5/2016
MW-6	Bis(2-ethylhexyl)phthalate	4/4/2017	<10	6.0	5.000	6	NA	NA	10/5/2016
MW-6	Bis(2-ethylhexyl)phthalate	10/3/2017	10.00	6.0	3.309	6	10/3/2017	NA	10/5/2016
MW-6	Bis(2-ethylhexyl)phthalate	4/10/2018	<6.0	6.0	3.309	6	10/3/2017	NA	10/5/2016
MW-6	Bis(2-ethylhexyl)phthalate	10/12/2018	<6.0	6.0	3.309	6	10/3/2017	NA	10/5/2016
MW-6	Bis(2-ethylhexyl)phthalate	4/16/2019	<6.0	6.0	3.309	6	10/3/2017	NA	10/5/2016
MW-6	Bis(2-ethylhexyl)phthalate	9/30/2019	<6.0	6.0	3.000	6	10/3/2017	NA	10/5/2016
MW-6	Bis(2-ethylhexyl)phthalate	4/7/2020	<6.0	6.0	3.000	6	10/3/2017	NA	10/5/2016
MW-6	Bis(2-ethylhexyl)phthalate	10/7/2020	<6.0	6.0	3.000	6	10/3/2017	NA	10/5/2016
MW-6	Bis(2-ethylhexyl)phthalate	4/22/2021	NT	6.0	3.000	6	10/3/2017	NA	10/5/2016
MW-6	Bis(2-ethylhexyl)phthalate	10/5/2021	NT	6.0	3.000	6	10/3/2017	NA	10/5/2016
MW-6	Bis(2-ethylhexyl)phthalate	4/4/2022	NT	6.0	3.000	6	10/3/2017	NA	10/5/2016
MW-6	Bis(2-ethylhexyl)phthalate	10/5/2022	NT	6.0	3.000	6	10/3/2017	NA	10/5/2016
MW-6	Bis(2-ethylhexyl)phthalate	4/14/2023	NT	6.0	3.000	6	10/3/2017	NA	10/5/2016
MW-6	Bis(2-ethylhexyl)phthalate	10/18/2023	NT	6.0	3.000	6	10/3/2017	NA	10/5/2016
MW-6	Bis(2-ethylhexyl)phthalate	4/8/2024	32.00	6.0	0.000	6	10/3/2017	NA	10/5/2016
MW-6	Bis(2-ethylhexyl)phthalate	10/8/2024	<13	6.0	0.000	6	10/3/2017	NA	10/5/2016
MW-6	Bis(2-ethylhexyl)phthalate	4/3/2025	NT	6.0	0.000	6	10/3/2017	NA	10/5/2016
MW-6	Bis(2-ethylhexyl)phthalate	10/14/2025	NT	6.0	0.000	6	10/3/2017	NA	10/5/2016

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

Jones County Sanitary Landfill

Permit No. 53-SDP-01-76C

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	Initial Exceedance	Resamples Due	5th Background Sample
MW-6	dichlorodifluoromethane	10/5/2016	1.0	1.0	0.410	1,000	NA	NA	10/5/2016
MW-6	dichlorodifluoromethane	4/4/2017	<1.0	1.0	0.331	1,000	NA	NA	10/5/2016
MW-6	dichlorodifluoromethane	10/3/2017	<1.0	1.0	0.331	1,000	NA	NA	10/5/2016
MW-6	dichlorodifluoromethane	4/10/2018	<1.0	1.0	0.331	1,000	NA	NA	10/5/2016
MW-6	dichlorodifluoromethane	10/12/2018	<1.0	1.0	0.500	1,000	NA	NA	10/5/2016
MW-6	dichlorodifluoromethane	4/16/2019	<1.0	1.0	0.500	1,000	NA	NA	10/5/2016
MW-6	dichlorodifluoromethane	9/30/2019	<1.0	1.0	0.500	1,000	NA	NA	10/5/2016
MW-6	dichlorodifluoromethane	4/7/2020	<1.0	1.0	0.500	1,000	NA	NA	10/5/2016
MW-6	dichlorodifluoromethane	10/7/2020	<1.0	1.0	0.500	1,000	NA	NA	10/5/2016
MW-6	dichlorodifluoromethane	4/22/2021	NT	1.0	0.500	1,000	NA	NA	10/5/2016
MW-6	dichlorodifluoromethane	10/5/2021	NT	1.0	0.500	1,000	NA	NA	10/5/2016
MW-6	dichlorodifluoromethane	4/4/2022	NT	1.0	0.500	1,000	NA	NA	10/5/2016
MW-6	dichlorodifluoromethane	10/5/2022	NT	1.0	0.500	1,000	NA	NA	10/5/2016
MW-6	dichlorodifluoromethane	4/14/2023	NT	1.0	0.500	1,000	NA	NA	10/5/2016
MW-6	dichlorodifluoromethane	10/18/2023	NT	1.0	0.500	1,000	NA	NA	10/5/2016
MW-6	dichlorodifluoromethane	4/8/2024	<1.0	1.0	0.500	1,000	NA	NA	10/5/2016
MW-6	dichlorodifluoromethane	10/8/2024	NT	1.0	0.500	1,000	NA	NA	10/5/2016
MW-6	dichlorodifluoromethane	4/3/2025	NT	1.0	0.500	1,000	NA	NA	10/5/2016
MW-6	dichlorodifluoromethane	10/14/2025	NT	1.0	0.500	1,000	NA	NA	10/5/2016

Table 7

Summary of Ongoing & Newly Identified SSI

Annual Water Quality Report

Jones County Sanitary Landfill

Permit No. 53-SDP-01-76C

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)	Initial Exceedance	Resamples Due	5th Background Sample
MW-16	Zinc	10/5/2016	<20.	27.20	---	100	4/3/2025	NA	4/10/2018
MW-16	Zinc	4/4/2017	<20.	27.20	---	100	4/3/2025	NA	4/10/2018
MW-16	Zinc	10/3/2017	<20.	27.20	---	100	4/3/2025	NA	4/10/2018
MW-16	Zinc	1/3/2018	<20.	27.20	---	100	4/3/2025	NA	4/10/2018
MW-16	Zinc	4/10/2018	<20.	27.20	---	100	4/3/2025	NA	4/10/2018
MW-16	Zinc	10/12/2018	<20.	27.20	---	100	4/3/2025	NA	4/10/2018
MW-16	Zinc	4/16/2019	<20.	27.20	---	100	4/3/2025	NA	4/10/2018
MW-16	Zinc	9/30/2019	<20.	27.20	---	100	4/3/2025	NA	4/10/2018
MW-16	Zinc	4/7/2020	<20.	27.20	---	100	4/3/2025	NA	4/10/2018
MW-16	Zinc	10/7/2020	<20.	27.20	---	100	4/3/2025	NA	4/10/2018
MW-16	Zinc	4/22/2021	<20.	27.20	---	100	4/3/2025	NA	4/10/2018
MW-16	Zinc	10/5/2021	<20.	27.20	---	100	4/3/2025	NA	4/10/2018
MW-16	Zinc	4/4/2022	<20.	27.20	---	100	4/3/2025	NA	4/10/2018
MW-16	Zinc	10/5/2022	30.70	27.20	---	100	4/3/2025	NA	4/10/2018
MW-16	Zinc	4/14/2023	<20.	27.20	---	100	4/3/2025	NA	4/10/2018
MW-16	Zinc	10/18/2023	<20.	27.20	---	100	4/3/2025	NA	4/10/2018
MW-16	Zinc	4/8/2024	32.40	27.20	---	100	4/3/2025	NA	4/10/2018
MW-16	Zinc	6/13/2024	20.00	27.20	---	100	4/3/2025	NA	4/10/2018
MW-16	Zinc	10/8/2024	25.60	27.20	---	100	4/3/2025	NA	4/10/2018
MW-16	Zinc	4/3/2025	28.30	27.20	20.460	100	4/3/2025	NA	4/10/2018
MW-16	Zinc	7/14/2025	45.70	27.20	20.460	100	4/3/2025	7/14/2025	4/10/2018
MW-16	Zinc	10/14/2025	33.90	27.20	22.889	100	4/3/2025	NA	4/10/2018

Table 8 - Summary of Ongoing and Newly Identified SSL
(**Not Required, MW-15 Included**)

Table 8
Summary of Ongoing & Newly Identified SSL
Annual Water Quality Report
Jones County Sanitary Landfill
Permit No. 53-SDP-01-76C

KEY:

SSI

SSL UCL>GWPS

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	95% UCL (ug/L)	GWPS Limit (ug/L)	Initial Exceedance	Compliance Date 1st Occurrence	Compliance Date Most Recent	Compliance Date Duration (years)
MW-15	Arsenic	10/5/2016	153.000	207.021	10	10/5/2016	None	None	0
MW-15	Arsenic	4/4/2017	177.000	206.821	10	10/5/2016	None	None	0
MW-15	Arsenic	10/3/2017	233.000	226.024	10	10/5/2016	None	None	0
MW-15	Arsenic	4/10/2018	142.000	223.957	10	10/5/2016	None	None	0
MW-15	Arsenic	10/12/2018	128.000	225.031	10	10/5/2016	None	None	0
MW-15	Arsenic	4/16/2019	125.000	217.232	10	10/5/2016	None	None	0
MW-15	Arsenic	9/30/2019	212.000	199.795	10	10/5/2016	None	None	0
MW-15	Arsenic	4/7/2020	149.000	201.063	10	10/5/2016	None	None	0
MW-15	Arsenic	10/7/2020	168.000	206.800	10	10/5/2016	None	None	0
MW-15	Arsenic	4/22/2021	177.000	207.540	10	10/5/2016	None	None	0
MW-15	Arsenic	10/5/2021	200.000	198.407	10	10/5/2016	None	None	0
MW-15	Arsenic	4/4/2022	143.000	199.720	10	10/5/2016	None	None	0
MW-15	Arsenic	10/5/2022	250.000	245.337	10	10/5/2016	None	None	0
MW-15	Arsenic	4/14/2023	168.000	244.550	10	10/5/2016	None	None	0
MW-15	Arsenic	10/18/2023	166.000	236.909	10	10/5/2016	None	None	0
MW-15	Arsenic	4/8/2024	151.000	236.464	10	10/5/2016	None	None	0
MW-15	Arsenic	10/8/2024	209.000	202.734	10	10/5/2016	None	None	0
MW-15	Arsenic	4/3/2025	157.000	201.609	10	10/5/2016	None	None	0
MW-15	Arsenic	10/14/2025	204.000	216.101	10	10/5/2016	None	None	0

Table 8
Summary of Ongoing & Newly Identified SSL
Annual Water Quality Report
Jones County Sanitary Landfill
Permit No. 53-SDP-01-76C

KEY:

SSI

SSL UCL>GWPS

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	95% UCL (ug/L)	GWPS Limit (ug/L)	Initial Exceedance	Compliance Date 1st Occurrence	Compliance Date Most Recent	Compliance Date Duration (years)
MW-15	Cobalt	10/5/2016	20.100	24.091	2.8	10/5/2016	None	None	0
MW-15	Cobalt	4/4/2017	19.800	23.792	2.8	10/5/2016	None	None	0
MW-15	Cobalt	10/3/2017	22.500	22.376	2.8	10/5/2016	None	None	0
MW-15	Cobalt	4/10/2018	12.300	23.872	2.8	10/5/2016	None	None	0
MW-15	Cobalt	10/12/2018	22.000	24.696	2.1	10/5/2016	None	None	0
MW-15	Cobalt	4/16/2019	23.700	26.318	2.1	10/5/2016	None	None	0
MW-15	Cobalt	9/30/2019	24.200	27.114	2.1	10/5/2016	None	None	0
MW-15	Cobalt	4/7/2020	19.600	24.817	2.1	10/5/2016	None	None	0
MW-15	Cobalt	10/7/2020	15.000	25.658	2.1	10/5/2016	None	None	0
MW-15	Cobalt	4/22/2021	15.100	23.625	2.1	10/5/2016	None	None	0
MW-15	Cobalt	10/5/2021	20.000	20.657	2.1	10/5/2016	None	None	0
MW-15	Cobalt	4/4/2022	18.400	20.047	2.1	10/5/2016	None	None	0
MW-15	Cobalt	10/5/2022	21.200	21.786	2.6	10/5/2016	None	None	0
MW-15	Cobalt	4/14/2023	13.100	22.377	2.6	10/5/2016	None	None	0
MW-15	Cobalt	10/18/2023	15.900	21.221	2.6	10/5/2016	None	None	0
MW-15	Cobalt	4/8/2024	14.100	20.319	2.6	10/5/2016	None	None	0
MW-15	Cobalt	10/8/2024	15.500	16.167	2.6	10/5/2016	None	None	0
MW-15	Cobalt	4/3/2025	13.000	16.190	2.6	10/5/2016	None	None	0
MW-15	Cobalt	10/14/2025	16.100	16.317	2.6	10/5/2016	None	None	0

Table 8
Summary of Ongoing & Newly Identified SSL
Annual Water Quality Report
Jones County Sanitary Landfill
Permit No. 53-SDP-01-76C

KEY:

SSI

SSL UCL>GWPS

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

Monitoring Well	Compound	Sample Date	Each		GWPS Limit (ug/L)	Initial Exceedance	Compliance Date	Compliance Date	Compliance Date
			Result (ug/L)	95% UCL (ug/L)			1st Occurrence	Most Recent	Duration (years)
MW-15	Benzene	10/5/2016	5.0	8.217	5	None	NA	NA	NA
MW-15	Benzene	4/4/2017	6.6	7.631	5	None	NA	NA	NA
MW-15	Benzene	10/3/2017	6.2	7.686	5	10/3/2017	None	None	0
MW-15	Benzene	4/10/2018	8.9	8.594	5	10/3/2017	None	None	0
MW-15	Benzene	10/12/2018	5.6	8.522	5	10/3/2017	None	None	0
MW-15	Benzene	4/16/2019	6.9	8.588	5	10/3/2017	None	None	0
MW-15	Benzene	9/30/2019	3.6	8.871	5	10/3/2017	None	None	0
MW-15	Benzene	4/7/2020	5.1	6.904	5	10/3/2017	None	None	0
MW-15	Benzene	10/7/2020	3.5	6.651	5	10/3/2017	None	None	0
MW-15	Benzene	4/22/2021	6.1	6.048	5	10/3/2017	None	None	0
MW-15	Benzene	10/5/2021	3.0	6.109	5	10/3/2017	None	None	0
MW-15	Benzene	4/4/2022	4.8	5.987	5	10/3/2017	None	None	0
MW-15	Benzene	10/5/2022	4.1	6.028	5	10/3/2017	None	None	0
MW-15	Benzene	4/14/2023	4.2	4.907	5	10/3/2017	None	None	0
MW-15	Benzene	10/18/2023	1.4	5.407	5	10/3/2017	None	None	0
MW-15	Benzene	4/8/2024	4.0	5.016	5	10/3/2017	None	None	0
MW-15	Benzene	10/8/2024	2.8	4.619	5	10/3/2017	None	None	0
MW-15	Benzene	4/3/2025	4.0	4.505	5	10/3/2017	None	None	0
MW-15	Benzene	10/14/2025	2.6	4.238	5	10/3/2017	None	None	0

Table 9 – Analytical Data Summary

Table 9

Analytical Data Summary for LPZ-6

Constituents	Units	4/16/2019	10/7/2020	4/22/2021	10/5/2021	4/4/2022	10/5/2022	4/14/2023	10/18/2023	4/8/2024
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<1	<5	<5	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1.0	6.5	6.4	6.0	2.2	6.0	5.3	2.4	9.2
2-butanone (mek)	ug/L	<5	<5	<5	<10	<10	<10	<10	<10	<10
2-hexanone (mbk)	ug/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50.8
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Alkalinity, as cacO3	mg/L	623	380	442	585	370		571		562
Arsenic, total	ug/L	19.3	26.4	<4.0	13.6	13.2		7.7		20.7
Benzene	ug/L	10.5	10.6	9.4	8.8	1.2	9.3	13.6	<1.0	17.7
BOD (5 day)	mg/L		17	29	20	20				22
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
Calcium, total	mg/L	191								
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	2	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chemical oxygen demand	mg/L									156
Chloride	mg/L	98.5	106.0	102.0	237.0	20.4		114.0		169.0
Chlorobenzene	ug/L	2.7	2.4	2.0	2.0	<1.0	1.3	1.3	<1.0	1.7
Chloroethane	ug/L	<1.0	<1.0	1.6	<1.0	<1.0	<1.0	<1.0	1.2	1.3
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	9.6	17.6	8.5	17.1	6.0		2.6		6.8
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethane	ug/L		<10							
Ethene	ug/L		<10							
Ethylbenzene	ug/L	43.6	52.0	27.4	1.6	2.6	2.1	7.4	<1.0	7.6
Magnesium, total	mg/L	58								
Methane	ug/L		15300							
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nitrogen, ammonia	mg/L		9.99	2.65	7.70	2.14		4.38		13.30
pH	pH		6.6	6.6	6.5	6.8		6.4		6.5
Potassium, total	mg/L	3.1								
Sodium, total	mg/L	33.1								
Solids, total dissolved	mg/L	836	633	763	1000	400		886		908
Solids, total suspended	mg/L									104
Styrene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.5
Sulfate	mg/L	84.4	20.3	78.2	9.6	46.3		16.1		20.3
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toluene	ug/L	<1.0	1.4	<1.0	<1.0	<1.0	1.0	<1.0	<1.0	1.0
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
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	9.5	99.1	27.5	4.9	2.4	22.3	22.6	3.8	95.0

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

Table 9

Analytical Data Summary for MW-11

Constituents	Units	3/30/2014	9/19/2014	4/20/2015	10/5/2015	4/5/2016	10/5/2016	4/4/2017	10/3/2017	4/10/2018
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	20.6	<10.0
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Alkalinity, as caco3	mg/L									
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	ug/L	327	283	293	309	239	265	265	265	310
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Calcium, total	mg/L									
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride	mg/L									
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	ug/L	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	<4.0	1.5	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Copper, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Magnesium, total	mg/L									
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	<4.0	6.2	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Potassium, total	mg/L									
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total	mg/L									
Solids, total dissolved	mg/L									
Solids, total suspended	mg/L		40	48						
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate	mg/L									
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<20.0	18.8	12.4	<8.0	<8.0	<8.0	<8.0	<8.0	<20.0

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

Table 9

Analytical Data Summary for MW-11

Constituents	10/12/2018	4/16/2019	9/30/2019	12/20/2019	4/7/2020	10/7/2020	4/22/2021	10/5/2021	4/4/2022
1,1,1,2-tetrachloroethane	<1	<1	<1		<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1		<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1		<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1		<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1		<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1		<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1		<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<1	<1	<1		<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1		<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1		<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1		<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1		<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1		<1	<1	<1	<1	<1
2-butanone (mek)	<5	<5	<5		<5	<5	<5	<5	<10
2-hexanone (mbk)	<5	<5	<5		<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5		<5	<5	<5	<5	<5
Acetone	<10.0	<10.0	<10.0		<10.0	<10.0	<10.0	<10.0	<10.0
Acrylonitrile	<5	<5	<5		<5	<5	<5	<5	<5
Alkalinity, as cacO3		715							
Antimony, total	<2	<2	<2		<2	<2	<2	<2	<2
Arsenic, total	<4	<4	<4		<4	<4	<4	<4	<4
Barium, total	93	254	355	245	281	284	275	300	314
Benzene	<1	<1	<1		<1	<1	<1	<1	<1
Beryllium, total	<4.0	<4.0	<4.0		<4.0	<4.0	<4.0	<4.0	<4.0
Bromochloromethane	<1	<1	<1		<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1		<1	<1	<1	<1	<1
Bromoform	<1	<1	<1		<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1		<1	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8		<.8	<.8	<.8	<.8	<.8
Calcium, total		158							
Carbon disulfide	<1	<1	<1		<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1		<1	<1	<1	<1	<1
Chloride		3.6							
Chlorobenzene	<1	<1	<1		<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1		<1	<1	<1	<1	<1
Chloroform	<1	<1	<1		<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1		<1	<1	<1	<1	<1
Chromium, total	<8.0	<8.0	<8.0		<8.0	<8.0	<8.0	<8.0	<8.0
Cis-1,2-dichloroethylene	<1	<1	<1		<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1		<1	<1	<1	<1	<1
Cobalt, total	<.8	<.8	<.8		<.4	<.4	<.4	<.4	<.4
Copper, total	<4	<4	<4		<4	<4	<4	<4	<4
Dibromochloromethane	<1	<1	<1		<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1		<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1		<1	<1	<1	<1	<1
Lead, total	<4	<4	<4		<4	<4	<4	<4	<4
Magnesium, total		53.9							
Methyl iodide	<1	<1	<1		<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5		<5	<5	<5	<5	<5
Nickel, total	<4.0	<4.0	<4.0		<4.0	<4.0	<4.0	<4.0	<4.0
Potassium, total		<1							
Selenium, total	<4	<4	<4		<4	<4	<4	<4	<4
Silver, total	<4	<4	<4		<4	<4	<4	<4	<4
Sodium, total		12.7							
Solids, total dissolved		536							
Solids, total suspended									
Styrene	<1	<1	<1		<1	<1	<1	<1	<1
Sulfate		7.9							
Tetrachloroethylene	<1	<1	<1		<1	<1	<1	<1	<1
Thallium, total	<4.0	<2.0	<2.0		<2.0	<2.0	<2.0	<2.0	<2.0
Toluene	<1	<1	<1		<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	<1	<1	<1		<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1		<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5		<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1		<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1		<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20		<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5		<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1		<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2		<2	<2	<2	<2	<2
Zinc, total	<20.0	<8.0	<8.0		<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-11

Constituents	10/5/2022	4/14/2023	10/18/2023	4/8/2024	10/8/2024	4/3/2025	10/14/2025
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<10	<10	<10	<10	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5
Acetone	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5
Alkalinity, as cac03							
Antimony, total	<2	<2	<2	<2	<2	<1	<1
Arsenic, total	<4	<4	<4	<4	<4	<2	<2
Barium, total	234	221	269	286	249	305	334
Benzene	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	<4.0	<4.0	<4.0	<4.0	<4.0	<.5	<.5
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.2	<.2
Calcium, total							
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1
Chloride							
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1
Chromium, total	<8.0	<8.0	<8.0	<8.0	<8.0	2.3	1.6
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	1.4	<.4	<.4	<.4	<.4	<.5	<.5
Copper, total	<4	<4	<4	<4	<4	<5	<5
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4	<4	<1	<1
Magnesium, total							
Methyl iodide	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5	<5
Nickel, total	<4.0	<4.0	<4.0	<4.0	<4.0	<5.0	<5.0
Potassium, total							
Selenium, total	<4	<4	<4	<4	<4	<2	<2
Silver, total	<4	<4	<4	<4	<4	<5	<5
Sodium, total							
Solids, total dissolved							
Solids, total suspended							
Styrene	<1	<1	<1	<1	<1	<1	<1
Sulfate							
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<2.0	<2.0	<2.0	<2.0	<2.0	<.5	<.5
Toluene	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<2	<2
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0	<20.0	<20.0	13.0	<5.0

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

Table 9

Analytical Data Summary for MW-12

Constituents	Units	3/30/2014	9/19/2014	4/20/2015	7/9/2015	10/5/2015	4/5/2016	10/5/2016	4/4/2017	10/3/2017
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	19.6
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Alkalinity, as caco3	mg/L									
Antimony, total	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Arsenic, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	ug/L	310	305	264	269	293	306	274	279	268
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Calcium, total	mg/L									
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride	mg/L									
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	<4.0	1.5	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Copper, total	ug/L	7.6	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Magnesium, total	mg/L									
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	10.6	5.4	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Potassium, total	mg/L									
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total	mg/L									
Solids, total dissolved	mg/L									
Solids, total suspended	mg/L		5	3						
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate	mg/L									
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<20.0	<8.0	<8.0	18.1	10.1	<8.0	<8.0	<8.0	<8.0

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

Table 9

Analytical Data Summary for MW-12

Constituents	4/10/2018	10/12/2018	4/16/2019	9/30/2019	4/7/2020	10/7/2020	4/22/2021	10/5/2021	4/4/2022
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<1	<1	<1	<1	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<5	<5	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Alkalinity, as cac03			486						
Antimony, total	<2.0	<2.0	3.5	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Arsenic, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	273	243	261	253	276	256	252	216	254
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Calcium, total			120						
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride			6.4						
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.8	<.8	<.8	<.8	<.4	<.4	<.4	<.4	<.4
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Magnesium, total			30.2						
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	13.4	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	10.4
Potassium, total			1.4						
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<8	<4	<4	<4	<4	<4	<4	<4
Sodium, total			15.1						
Solids, total dissolved			404						
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate			20						
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4.0	<4.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	27.2	<20.0	<8.0	10.9	<20.0	<20.0	<20.0	<20.0	24.2

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

Table 9

Analytical Data Summary for MW-12

Constituents	10/5/2022	4/14/2023	10/18/2023	4/8/2024	10/8/2024	4/3/2025	10/14/2025
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<10	<10	<10	<10	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5
Acetone	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5
Alkalinity, as cac03							
Antimony, total	<2.0	<2.0	<2.0	<2.0	<2.0	<1.0	<1.0
Arsenic, total	<4	<4	<4	<4	<4	<2	<2
Barium, total	219	232	255	247	253	264	258
Benzene	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	<4.0	<4.0	<4.0	<4.0	<4.0	<.5	<.5
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.2	<.2
Calcium, total							
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1
Chloride							
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8	<8	<1	<1
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	2.6	<.4	<.4	<.4	<.4	<.5	<.5
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	<5.0	<5.0
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4	<4	<1	<1
Magnesium, total							
Methyl iodide	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5	<5
Nickel, total	6.2	<4.0	<4.0	<4.0	<4.0	<5.0	<5.0
Potassium, total							
Selenium, total	<4	<4	<4	<4	<4	<2	<2
Silver, total	<4	<4	<4	<4	<4	<5	<5
Sodium, total							
Solids, total dissolved							
Solids, total suspended							
Styrene	<1	<1	<1	<1	<1	<1	<1
Sulfate							
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<2.0	<2.0	<2.0	<2.0	<2.0	<.5	<.5
Toluene	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<2	<2
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	21.8	<20.0	<20.0	7.1	19.9

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

Table 9

Analytical Data Summary for MW-15

Constituents	Units	3/30/2014	9/19/2014	4/20/2015	10/5/2015	4/5/2016	10/5/2016	4/4/2017	10/3/2017	4/10/2018
(3,4)-methylphenol	ug/L	<8								
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene	ug/L	<1								
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	ug/L	<8								
1,2,4-trichlorobenzene	ug/L	<1								
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene	ug/L	<8								
1,3,5-trinitrobenzene	ug/L	<8								
1,3-dichlorobenzene	ug/L	<1								
1,3-dichloropropane	ug/L	<1								
1,3-dinitrobenzene	ug/L	<8								
1,4-dichlorobenzene	ug/L	3.1	2.9	2.4	2.7	2.2	2.5	2.0	2.8	2.6
1,4-naphthoquinone	ug/L	<8								
1,4-phenylenediamine	ug/L	<8								
1-naphthylamine	ug/L	<8								
2,2-dichloropropane	ug/L	<1								
2,3,4,6-tetrachlorophenol	ug/L	<8								
2,4,5-t	ug/L	<5								
2,4,5-tp (silvex)	ug/L	<5								
2,4,5-trichlorophenol	ug/L	<8								
2,4,6-trichlorophenol	ug/L	<8								
2,4-d	ug/L	<2								
2,4-dichlorophenol	ug/L	<8								
2,4-dimethylphenol	ug/L	<8								
2,4-dinitrophenol	ug/L	<8								
2,4-dinitrotoluene	ug/L	<8								
2,6-dichlorophenol	ug/L	<8								
2,6-dinitrotoluene	ug/L	<8								
2-acetylaminofluorene	ug/L	<8								
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-chloronaphthalene	ug/L	<8								
2-chlorophenol	ug/L	<8								
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene	ug/L	<8								
2-methylphenol	ug/L	<8								
2-naphthylamine	ug/L	<8								
2-nitroaniline	ug/L	<8								
2-nitrophenol	ug/L	<8								
3,3'-dichlorobenzidine	ug/L	<8								
3,3'-dimethylbenzidine	ug/L	<8								
3-methylcholanthrene	ug/L	<8								
3-nitroaniline	ug/L	<8								
4,4'-ddd	ug/L	<.05								
4,4'-dde	ug/L	<.05								
4,4'-ddt	ug/L	<.05								
4,6-dinitro-2-methylphenol	ug/L	<8								
4-aminobiphenyl	ug/L	<8								
4-bromophenyl phenyl ether	ug/L	<8								
4-chloro-3-methylphenol	ug/L	<8								
4-chloroaniline	ug/L	<8								
4-chlorophenyl phenyl ether	ug/L	<8								
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline	ug/L	<8								
4-nitrophenol	ug/L	<8								
5-nitro-o-toluidine	ug/L	<8								
7,12-dimethylbenz(a)anthracene	ug/L	<8								
Acenaphthene	ug/L	<8								
Acenaphthylene	ug/L	<8								
Acetone	ug/L	<10.0	13.1	51.3	<10.0	<10.0	26.3	<10.0	<10.0	<10.0
Acetonitrile	ug/L	<10								
Acetophenone	ug/L	<8								
Acrolein	ug/L	<10								
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin	ug/L	<.05								
Alkalinity, as CaCO3	mg/L									
Allyl chloride	ug/L	<1								
Alpha-bhc	ug/L	<.05								

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

Table 9

Analytical Data Summary for MW-15

Constituents	10/12/2018	4/16/2019	9/30/2019	4/7/2020	10/7/2020	4/22/2021	10/5/2021	4/4/2022	10/5/2022
(3,4)-methylphenol		<8							
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene		<1							
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene		<8							
1,2,4-trichlorobenzene		<1							
1,2-dibromo-3-chloropropane	<1	<1	<1	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene		<8							
1,3,5-trinitrobenzene		<8							
1,3-dichlorobenzene		<1							
1,3-dichloropropane		<1							
1,3-dinitrobenzene		<8							
1,4-dichlorobenzene	<1.0	<1.0	<1.0	2.0	1.9	1.8	2.1	1.8	2.2
1,4-naphthoquinone		<8							
1,4-phenylenediamine		<8							
1-naphthylamine		<8							
2,2-dichloropropane		<1							
2,3,4,6-tetrachlorophenol		<8							
2,4,5-t		<5							
2,4,5-tp (silvex)		<5							
2,4,5-trichlorophenol		<8							
2,4,6-trichlorophenol		<8							
2,4-d		<2							
2,4-dichlorophenol		<8							
2,4-dimethylphenol		<8							
2,4-dinitrophenol		<8							
2,4-dinitrotoluene		<8							
2,6-dichlorophenol		<8							
2,6-dinitrotoluene		<8							
2-acetylaminofluorene		<8							
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<5	<10	<10
2-chloronaphthalene		<8							
2-chlorophenol		<8							
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene		<8							
2-methylphenol		<8							
2-naphthylamine		<8							
2-nitroaniline		<8							
2-nitrophenol		<8							
3,3'-dichlorobenzidine		<8							
3,3'-dimethylbenzidine		<8							
3-methylcholanthrene		<8							
3-nitroaniline		<8							
4,4'-ddd		<.05							
4,4'-dde		<.05							
4,4'-ddt		<.05							
4,6-dinitro-2-methylphenol		<8							
4-aminobiphenyl		<8							
4-bromophenyl phenyl ether		<8							
4-chloro-3-methylphenol		<8							
4-chloroaniline		<8							
4-chlorophenyl phenyl ether		<8							
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline		<8							
4-nitrophenol		<8							
5-nitro-o-toluidine		<8							
7,12-dimethylbenz(a)anthracene		<8							
Acenaphthene		<8							
Acenaphthylene		<8							
Acetone	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acetonitrile		<10							
Acetophenone		<8							
Acrolein		<10							
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin		<.05							
Alkalinity, as CaCO3		562			451	467	445	551	
Allyl chloride		<1							
Alpha-bhc		<.05							

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

Table 9

Analytical Data Summary for MW-15

Constituents	4/14/2023	10/18/2023	4/8/2024	10/8/2024	4/3/2025	10/14/2025
(3,4)-methylphenol						
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	1	<1	<1	<1
1,1-dichloropropene						
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene						
1,2,4-trichlorobenzene						
1,2-dibromo-3-chloropropane	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene						
1,3,5-trinitrobenzene						
1,3-dichlorobenzene						
1,3-dichloropropane						
1,3-dinitrobenzene						
1,4-dichlorobenzene	1.9	1.7	2.1	1.6	1.7	1.4
1,4-naphthoquinone						
1,4-phenylenediamine						
1-naphthylamine						
2,2-dichloropropane						
2,3,4,6-tetrachlorophenol						
2,4,5-t						
2,4,5-tp (silvex)						
2,4,5-trichlorophenol						
2,4,6-trichlorophenol						
2,4-d						
2,4-dichlorophenol						
2,4-dimethylphenol						
2,4-dinitrophenol						
2,4-dinitrotoluene						
2,6-dichlorophenol						
2,6-dinitrotoluene						
2-acetylaminofluorene						
2-butanone (mek)	<10	<10	<10	<10	<10	<10
2-chloronaphthalene						
2-chlorophenol						
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5
2-methylnaphthalene						
2-methylphenol						
2-naphthylamine						
2-nitroaniline						
2-nitrophenol						
3,3'-dichlorobenzidine						
3,3'-dimethylbenzidine						
3-methylcholanthrene						
3-nitroaniline						
4,4'-ddd						
4,4'-dde						
4,4'-ddt						
4,6-dinitro-2-methylphenol						
4-aminobiphenyl						
4-bromophenyl phenyl ether						
4-chloro-3-methylphenol						
4-chloroaniline						
4-chlorophenyl phenyl ether						
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5
4-nitroaniline						
4-nitrophenol						
5-nitro-o-toluidine						
7,12-dimethylbenz(a)anthracene						
Acenaphthene						
Acenaphthylene						
Acetone	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acetonitrile						
Acetophenone						
Acrolein						
Acrylonitrile	<5	<5	<5	<5	<5	<5
Aldrin						
Alkalinity, as CaCO3	422		397	394	438	
Allyl chloride						
Alpha-bhc						

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

Table 9

Analytical Data Summary for MW-15

Constituents	Units	3/30/2014	9/19/2014	4/20/2015	10/5/2015	4/5/2016	10/5/2016	4/4/2017	10/3/2017	4/10/2018
Anthracene	ug/L	<8								
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016	ug/L	<.1								
Arochlor 1221	ug/L	<.2								
Arochlor 1232	ug/L	<.2								
Arochlor 1242	ug/L	<.2								
Arochlor 1248	ug/L	<.2								
Arochlor 1254	ug/L	<.1								
Arochlor 1260	ug/L	<.1								
Arsenic, total	ug/L	99.5	21.9	178.0	208.0	183.0	153.0	177.0	233.0	142.0
Azobenzene	ug/L	<8								
Barium, total	ug/L	1120	694	1160	1030	1080	1160	1130	1160	598
Benzene	ug/L	10.0	7.4	7.8	5.8	7.7	5.0	6.6	6.2	8.9
Benzo(a)anthracene	ug/L	<8								
Benzo(a)pyrene	ug/L	<8								
Benzo(b)fluoranthene	ug/L	<8								
Benzo(g,h,i)perylene	ug/L	<8								
Benzo(k)fluoranthene	ug/L	<8								
Benzyl alcohol	ug/L	<8								
Beryllium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Beta-bhc	ug/L	<.05								
Bis (2-chloroethoxy) methane	ug/L	<8								
Bis(2-chloroethyl) ether	ug/L	<8								
Bis(2-chloroisopropyl) ether	ug/L	<8								
Bis(2-ethylhexyl) phthalate	ug/L	85	<10	<10	10	<10	<10	<10	<6	<6
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate	ug/L	<8								
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Calcium, total	mg/L									
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								
Chloride	mg/L									
Chlorobenzene	ug/L	15.4	14.2	13.5	12.8	11.2	14.4	10.4	12.6	11.1
Chlorobenzilate	ug/L	<8								
Chloroethane	ug/L	15.4	16.3	14.1	10.2	12.9	10.6	12.0	8.4	12.3
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, total	ug/L	10.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0
Chrysene	ug/L	<8								
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	30.0	19.4	22.3	24.3	21.3	20.1	19.8	22.5	12.3
Copper, total	ug/L	16.3	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Cyanide, total	mg/L	<.005								
Delta-bhc	ug/L	<.05								
Diallate	ug/L	<8								
Dibenzo(a,h)anthracene	ug/L	<8								
Dibenzofuran	ug/L	<8								
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	2.5	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	<1.0	<1.0
Dieldrin	ug/L	<.05								
Diethyl phthalate	ug/L	<8								
Dimethoate	ug/L	<.4								
Dimethylphthalate	ug/L	<8								
Di-n-butyl phthalate	ug/L	<8								
Di-n-octyl phthalate	ug/L	<8								
Dinoseb	ug/L	<.5								
Diphenylamine	ug/L	<8								
Disulfoton	ug/L	<.4								
Endosulfan i	ug/L	<.05								
Endosulfan ii	ug/L	<.05								
Endosulfan sulfate	ug/L	<.05								
Endrin	ug/L	<.05								
Endrin aldehyde	ug/L	<.05								
Ethane	ug/L									
Ethene	ug/L									
Ethyl methacrylate	ug/L	<10								
Ethyl methanesulfonate	ug/L	<8								
Ethylbenzene	ug/L	39.0	15.3	6.5	<1.0	10.5	<1.0	4.9	<1.0	5.1
Famphur	ug/L	<.4								
Fluoranthene	ug/L	<8								

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

Table 9

Analytical Data Summary for MW-15

Constituents	10/12/2018	4/16/2019	9/30/2019	4/7/2020	10/7/2020	4/22/2021	10/5/2021	4/4/2022	10/5/2022
Anthracene		<8							
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016		<.1							
Arochlor 1221		<.2							
Arochlor 1232		<.2							
Arochlor 1242		<.2							
Arochlor 1248		<.2							
Arochlor 1254		<.1							
Arochlor 1260		<.1							
Arsenic, total	128.0	125.0	212.0	149.0	168.0	177.0	200.0	143.0	250.0
Azobenzene		<8							
Barium, total	1050	1390	1170	1300	881	868	1180	1000	1170
Benzene	5.6	6.9	3.6	5.1	3.5	6.1	3.0	4.8	4.1
Benzo(a)anthracene		<8							
Benzo(a)pyrene		<8							
Benzo(b)fluoranthene		<8							
Benzo(g,h,i)perylene		<8							
Benzo(k)fluoranthene		<8							
Benzyl alcohol		<8							
Beryllium, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Beta-bhc		<.05							
Bis (2-chloroethoxy) methane		<8							
Bis(2-chloroethyl) ether		<8							
Bis(2-chloroisopropyl) ether		<8							
Bis(2-ethylhexyl) phthalate	<6	10	<8	<6					
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate		<8							
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Calcium, total		241							
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane		<.1							
Chloride		485							
Chlorobenzene	8.7	9.6	9.4	9.0	8.3	7.4	8.1	7.8	6.9
Chlorobenzilate		<8							
Chloroethane	8.6	8.5	8.8	9.0	9.4	9.8	6.3	8.3	7.5
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene		<1							
Chromium, total	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0
Chrysene		<8							
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	22.0	23.7	24.2	19.6	15.0	15.1	20.0	18.4	21.2
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Cyanide, total		<.005							
Delta-bhc		<.05							
Diallate		<8							
Dibenzo(a,h)anthracene		<8							
Dibenzofuran		<8							
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	<1.0	<1.0	<1.0	<1.0					
Dieldrin		<.05							
Diethyl phthalate		<8							
Dimethoate		<.4							
Dimethylphthalate		<8							
Di-n-butyl phthalate		<8							
Di-n-octyl phthalate		<8							
Dinoseb		<.5							
Diphenylamine		<8							
Disulfoton		<.4							
Endosulfan i		<.05							
Endosulfan ii		<.05							
Endosulfan sulfate		<.05							
Endrin		<.05							
Endrin aldehyde		<.05							
Ethane			<5		<10				
Ethene			<5		<10				
Ethyl methacrylate		<10							
Ethyl methanesulfonate		<8							
Ethylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Famphur		<.4							
Fluoranthene		<8							

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

Table 9

Analytical Data Summary for MW-15

Constituents	4/14/2023	10/18/2023	4/8/2024	10/8/2024	4/3/2025	10/14/2025
Anthracene						
Antimony, total	<2	<2	<2	<2	<1	<1
Arochlor 1016						
Arochlor 1221						
Arochlor 1232						
Arochlor 1242						
Arochlor 1248						
Arochlor 1254						
Arochlor 1260						
Arsenic, total	168.0	166.0	151.0	209.0	157.0	204.0
Azobenzene						
Barium, total	783	1350	800	1200	963	1640
Benzene	4.2	1.4	4.0	2.8	4.0	2.6
Benzo(a)anthracene						
Benzo(a)pyrene						
Benzo(b)fluoranthene						
Benzo(g,h,i)perylene						
Benzo(k)fluoranthene						
Benzyl alcohol						
Beryllium, total	<4.0	<4.0	<4.0	<4.0	<5	<5
Beta-bhc						
Bis (2-chloroethoxy) methane						
Bis(2-chloroethyl) ether						
Bis(2-chloroisopropyl) ether						
Bis(2-ethylhexyl) phthalate						
Bromochloromethane	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate						
Cadmium, total	<.8	<.8	<.8	<.8	<.2	<.2
Calcium, total						
Carbon disulfide	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1
Chlordane						
Chloride						
Chlorobenzene	6.5	4.2	6.1	4.7	5.7	3.9
Chlorobenzilate						
Chloroethane	4.6	3.8	4.4	4.2	5.4	6.1
Chloroform	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1
Chloroprene						
Chromium, total	<8.0	<8.0	<8.0	<8.0	1.2	1.2
Chrysene						
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1
Cobalt, total	13.1	15.9	14.1	15.5	13.0	16.1
Copper, total	<4.0	<4.0	<4.0	<4.0	<5.0	<5.0
Cyanide, total						
Delta-bhc						
Diallate						
Dibenzo(a,h)anthracene						
Dibenzofuran						
Dibromochloromethane	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane						
Dieldrin						
Diethyl phthalate						
Dimethoate						
Dimethylphthalate						
Di-n-butyl phthalate						
Di-n-octyl phthalate						
Dinoseb						
Diphenylamine						
Disulfoton						
Endosulfan i						
Endosulfan ii						
Endosulfan sulfate						
Endrin						
Endrin aldehyde						
Ethane				<5	<5	
Ethene				<5	<5	
Ethyl methacrylate						
Ethyl methanesulfonate						
Ethylbenzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Famphur						
Fluoranthene						

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

Table 9

Analytical Data Summary for MW-15

Constituents	Units	3/30/2014	9/19/2014	4/20/2015	10/5/2015	4/5/2016	10/5/2016	4/4/2017	10/3/2017	4/10/2018
Fluorene	ug/L	<8								
Gamma-bhc (lindane)	ug/L	<.05								
Heptachlor	ug/L	<.05								
Heptachlor epoxide	ug/L	<.05								
Hexachlorobenzene	ug/L	<4.03 *								
Hexachlorobutadiene	ug/L	<8								
Hexachlorocyclopentadiene	ug/L	<8								
Hexachloroethane	ug/L	<8								
Hexachloropropene	ug/L	<8								
Indeno(1,2,3-cd)pyrene	ug/L	<8								
Isobutanol	mg/L	<1								
Isodrin	ug/L	<8								
Isophorone	ug/L	<8								
Isosafrole	ug/L	<8								
Kepone	ug/L	<8								
Lead, total	ug/L	8.3	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Magnesium, total	mg/L									
Mercury, total	ug/L	<.5								
Methacrylonitrile	ug/L	<1								
Methane	ug/L									
Methapyrilene	ug/L	<8								
Methoxychlor	ug/L	<.05								
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl methacrylate	ug/L	<1								
Methyl methanesulfonate	ug/L	<8								
Methyl parathion	ug/L	<.4								
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene	ug/L	<8								
Nickel, total	ug/L	97.0	67.0	73.3	102.0	70.3	59.8	71.0	101.0	57.8
Nitrobenzene	ug/L	<8								
N-nitrosodiethylamine	ug/L	<8								
N-nitrosodimethylamine	ug/L	<8								
N-nitrosodi-n-butylamine	ug/L	<8								
N-nitroso-di-n-propylamine	ug/L	<8								
N-nitrosodiphenylamine	ug/L	<8								
N-nitrosomethylethylamine	ug/L	<8								
N-nitrosopiperidine	ug/L	<8								
N-nitrosopyrrolidine	ug/L	<8								
O,o,o-triethyl phosphorothioate	ug/L	<.4								
O-toluidine	ug/L	<8								
Parathion	ug/L	<.4								
P-dimethylaminoazobenzene	ug/L	<8								
Pentachlorobenzene	ug/L	<8								
Pentachloronitrobenzene (pcnb)	ug/L	<8								
Pentachlorophenol	ug/L	<8								
pH	pH									
Phenacetin	ug/L	<8								
Phenanthrene	ug/L	<8								
Phenol	ug/L	<8								
Phorate	ug/L	<.4								
Potassium, total	mg/L									
Pronamide	ug/L	<8								
Propionitrile	ug/L	<10								
Pyrene	ug/L	<8								
Safrole	ug/L	<8								
Selenium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	5.2	<4.0	<4.0	<4.0
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total	mg/L									
Solids, total dissolved	mg/L									
Solids, total suspended	mg/L		823	128						
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate	mg/L									
Sulfide, total	mg/L	<.1								
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Thionazin	ug/L	<.4								
Tin, total	ug/L	<20								
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene	ug/L	<.2								
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1

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

Table 9

Analytical Data Summary for MW-15

Constituents	10/12/2018	4/16/2019	9/30/2019	4/7/2020	10/7/2020	4/22/2021	10/5/2021	4/4/2022	10/5/2022
Fluorene		<8							
Gamma-bhc (lindane)		<.05							
Heptachlor		<.05							
Heptachlor epoxide		<.05							
Hexachlorobenzene		<.05							
Hexachlorobutadiene		<8							
Hexachlorocyclopentadiene		<8							
Hexachloroethane		<8							
Hexachloropropene		<8							
Indeno(1,2,3-cd)pyrene		<8							
Isobutanol		<1							
Isodrin		<8							
Isophorone		<8							
Isosafrole		<8							
Kepon		<8							
Lead, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Magnesium, total		107							
Mercury, total		<.5							
Methacrylonitrile		<1							
Methane			5640		7150				
Methapyrilene		<8							
Methoxychlor		<.05							
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl methacrylate		<1							
Methyl methanesulfonate		<8							
Methyl parathion		<.4							
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene		<8							
Nickel, total	52.9	70.3	92.8	60.1	65.1	61.8	86.1	63.4	93.6
Nitrobenzene		<8							
N-nitrosodiethylamine		<8							
N-nitrosodimethylamine		<8							
N-nitrosodi-n-butylamine		<8							
N-nitroso-di-n-propylamine		<8							
N-nitrosodiphenylamine		<8							
N-nitrosomethylethylamine		<8							
N-nitrosopiperidine		<8							
N-nitrosopyrrolidine		<8							
O,o,o-triethyl phosphorothioate		<.4							
O-toluidine		<8							
Parathion		<.4							
P-dimethylaminoazobenzene		<8							
Pentachlorobenzene		<8							
Pentachloronitrobenzene (pcnb)		<8							
Pentachlorophenol		<8							
pH					6.6	6.5	6.5	6.6	
Phenacetin		<8							
Phenanthrene		<8							
Phenol		<8							
Phorate		<.4							
Potassium, total		8							
Pronamide		<8							
Propionitrile		<10							
Pyrene		<8							
Safrole		<8							
Selenium, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total		92.2							
Solids, total dissolved		1370							
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate		1.3							
Sulfide, total		<.1							
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Thionazin		<.4							
Tin, total		<20							
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene		<.2							
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1

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

Table 9

Analytical Data Summary for MW-15

Constituents	4/14/2023	10/18/2023	4/8/2024	10/8/2024	4/3/2025	10/14/2025
Fluorene						
Gamma-bhc (lindane)						
Heptachlor						
Heptachlor epoxide						
Hexachlorobenzene						
Hexachlorobutadiene						
Hexachlorocyclopentadiene						
Hexachloroethane						
Hexachloropropene						
Indeno(1,2,3-cd)pyrene						
Isobutanol						
Isodrin						
Isophorone						
Isosafrole						
Kepone						
Lead, total	<4.0	<4.0	<4.0	<4.0	<1.0	<1.0
Magnesium, total						
Mercury, total						
Methacrylonitrile						
Methane				3150	2650	
Methapyrilene						
Methoxychlor						
Methyl iodide	<1	<1	<1	<1	<1	<1
Methyl methacrylate						
Methyl methanesulfonate						
Methyl parathion						
Methylene chloride	<5	<5	<5	<5	<5	<5
Naphthalene						
Nickel, total	67.5	72.1	58.3	85.1	58.2	87.3
Nitrobenzene						
N-nitrosodiethylamine						
N-nitrosodimethylamine						
N-nitrosodi-n-butylamine						
N-nitroso-di-n-propylamine						
N-nitrosodiphenylamine						
N-nitrosomethylethylamine						
N-nitrosopiperidine						
N-nitrosopyrrolidine						
O,o,o-triethyl phosphorothioate						
O-toluidine						
Parathion						
P-dimethylaminoazobenzene						
Pentachlorobenzene						
Pentachloronitrobenzene (pcnb)						
Pentachlorophenol						
pH	6.4		6.6	6.8	6.4	
Phenacetin						
Phenanthrene						
Phenol						
Phorate						
Potassium, total						
Pronamide						
Propionitrile						
Pyrene						
Safrole						
Selenium, total	<4.0	<4.0	<4.0	<4.0	<2.0	3.3
Silver, total	<4	<4	<4	<4	<5	<5
Sodium, total						
Solids, total dissolved						
Solids, total suspended						
Styrene	<1	<1	<1	<1	<1	<1
Sulfate						
Sulfide, total						
Tetrachloroethylene	<1	<1	<1	<1	<1	<1
Thallium, total	<2.0	<2.0	<2.0	<2.0	<5	<5
Thionazin						
Tin, total						
Toluene	<1	<1	<1	<1	<1	<1
Toxaphene						
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<2	<2
Vinyl acetate	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1

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

Table 9

Analytical Data Summary for MW-15

Constituents	Units	3/30/2014	9/19/2014	4/20/2015	10/5/2015	4/5/2016	10/5/2016	4/4/2017	10/3/2017	4/10/2018
Xylenes, total	ug/L	132.0	89.8	58.0	11.8	59.2	19.2	26.1	6.3	56.2
Zinc, total	ug/L	86.9	<8.0	16.6	<8.0	<8.0	14.5	<8.0	8.6	<20.0

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

Table 9

Analytical Data Summary for MW-15

Constituents	10/12/2018	4/16/2019	9/30/2019	4/7/2020	10/7/2020	4/22/2021	10/5/2021	4/4/2022	10/5/2022
Xylenes, total	3.5	4.3	3.1	4.0	10.3	2.3	<2.0	<2.0	<2.0
Zinc, total	<20.0	8.0	10.2	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-15

Constituents	4/14/2023	10/18/2023	4/8/2024	10/8/2024	4/3/2025	10/14/2025
Xylenes, total	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Zinc, total	<20.0	<20.0	<20.0	<20.0	<5.0	10.3

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

Table 9

Analytical Data Summary for MW-16

Constituents	Units	3/30/2014	9/19/2014	4/20/2015	10/5/2015	4/5/2016	10/5/2016	4/4/2017	10/3/2017	4/10/2018
(3,4)-methylphenol	ug/L									
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene	ug/L									
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	ug/L									
1,2,4-trichlorobenzene	ug/L									
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene	ug/L									
1,3,5-trinitrobenzene	ug/L									
1,3-dichlorobenzene	ug/L									
1,3-dichloropropane	ug/L									
1,3-dinitrobenzene	ug/L									
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone	ug/L									
1,4-phenylenediamine	ug/L									
1-naphthylamine	ug/L									
2,2-dichloropropane	ug/L									
2,3,4,6-tetrachlorophenol	ug/L									
2,4,5-t	ug/L									
2,4,5-tp (silvex)	ug/L									
2,4,5-trichlorophenol	ug/L									
2,4,6-trichlorophenol	ug/L									
2,4-d	ug/L									
2,4-dichlorophenol	ug/L									
2,4-dimethylphenol	ug/L									
2,4-dinitrophenol	ug/L									
2,4-dinitrotoluene	ug/L									
2,6-dichlorophenol	ug/L									
2,6-dinitrotoluene	ug/L									
2-acetylaminofluorene	ug/L									
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-chloronaphthalene	ug/L									
2-chlorophenol	ug/L									
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene	ug/L									
2-naphthylamine	ug/L									
2-nitroaniline	ug/L									
2-nitrophenol	ug/L									
3,3'-dichlorobenzidine	ug/L									
3,3'-dimethylbenzidine	ug/L									
3-methylcholanthrene	ug/L									
3-nitroaniline	ug/L									
4,4'-ddd	ug/L									
4,4'-dde	ug/L									
4,4'-ddt	ug/L									
4,6-dinitro-2-methylphenol	ug/L									
4-aminobiphenyl	ug/L									
4-bromophenyl phenyl ether	ug/L									
4-chloro-3-methylphenol	ug/L									
4-chloroaniline	ug/L									
4-chlorophenyl phenyl ether	ug/L									
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline	ug/L									
4-nitrophenol	ug/L									
5-nitro-o-toluidine	ug/L									
7,12-dimethylbenz(a)anthracene	ug/L									
Acenaphthene	ug/L									
Acenaphthylene	ug/L									
Acetone	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	27.9	<10.0
Acetonitrile	ug/L									
Acetophenone	ug/L									
Acrolein	ug/L									
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin	ug/L									
Alkalinity, as CaCO3	mg/L									
Allyl chloride	ug/L									
Alpha-bhc	ug/L									
Anthracene	ug/L									

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

Table 9

Analytical Data Summary for MW-16

Constituents	10/12/2018	4/16/2019	9/30/2019	4/7/2020	10/7/2020	4/22/2021	10/5/2021	4/4/2022	10/5/2022
(3 4)-methylphenol									
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene									
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene									
1,2,4-trichlorobenzene									
1,2-dibromo-3-chloropropane	<1	<1	<1	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene									
1,3,5-trinitrobenzene									
1,3-dichlorobenzene									
1,3-dichloropropane									
1,3-dinitrobenzene									
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone									
1,4-phenylenediamine									
1-naphthylamine									
2,2-dichloropropane									
2,3,4,6-tetrachlorophenol									
2,4,5-t									
2,4,5-tp (silvex)									
2,4,5-trichlorophenol									
2,4,6-trichlorophenol									
2,4-d									
2,4-dichlorophenol									
2,4-dimethylphenol									
2,4-dinitrophenol									
2,4-dinitrotoluene									
2,6-dichlorophenol									
2,6-dinitrotoluene									
2-acetylaminofluorene									
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<5	<10	<10
2-chloronaphthalene									
2-chlorophenol									
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene									
2-naphthylamine									
2-nitroaniline									
2-nitrophenol									
3,3'-dichlorobenzidine									
3,3'-dimethylbenzidine									
3-methylcholanthrene									
3-nitroaniline									
4,4'-ddd									
4,4'-dde									
4,4'-ddt									
4,6-dinitro-2-methylphenol									
4-aminobiphenyl									
4-bromophenyl phenyl ether									
4-chloro-3-methylphenol									
4-chloroaniline									
4-chlorophenyl phenyl ether									
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline									
4-nitrophenol									
5-nitro-o-toluidine									
7,12-dimethylbenz(a)anthracene									
Acenaphthene									
Acenaphthylene									
Acetone	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acetonitrile									
Acetophenone									
Acrolein									
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin									
Alkalinity, as cac03		449							
Allyl chloride									
Alpha-bhc									
Anthracene									

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

Table 9

Analytical Data Summary for MW-16

Constituents	1/3/2023	4/14/2023	10/18/2023	4/8/2024	6/13/2024	10/8/2024	4/3/2025	7/14/2025	10/14/2025
(3,4)-methylphenol									<8
1,1,1,2-tetrachloroethane		<1	<1	<1		<1	<1		<1
1,1,1-trichloroethane		<1	<1	<1		<1	<1		<1
1,1,2,2-tetrachloroethane		<1	<1	<1		<1	<1		<1
1,1,2-trichloroethane		<1	<1	<1		<1	<1		<1
1,1-dichloroethane		<1	<1	<1		<1	<1		<1
1,1-dichloroethylene		<1	<1	<1		<1	<1		<1
1,1-dichloropropene									<1
1,2,3-trichloropropane		<1	<1	<1		<1	<1		<1
1,2,4,5-tetrachlorobenzene									<8
1,2,4-trichlorobenzene									<1
1,2-dibromo-3-chloropropane		<5	<5	<5		<5	<5		<1
1,2-dibromoethane		<1	<1	<1		<1	<1		<1
1,2-dichlorobenzene		<1	<1	<1		<1	<1		<1
1,2-dichloroethane		<1	<1	<1		<1	<1		<1
1,2-dichloropropane		<1	<1	<1		<1	<1		<1
1,2-dinitrobenzene									<8
1,3,5-trinitrobenzene									<8
1,3-dichlorobenzene									<1
1,3-dichloropropane									<1
1,3-dinitrobenzene									<8
1,4-dichlorobenzene		<1	<1	<1		<1	<1		<1
1,4-naphthoquinone									<8
1,4-phenylenediamine									<8
1-naphthylamine									<8
2,2-dichloropropane									<1
2,3,4,6-tetrachlorophenol									<8
2,4,5-t									<.5
2,4,5-tp (silvex)									<.5
2,4,5-trichlorophenol									<8
2,4,6-trichlorophenol									<8
2,4-d									<2
2,4-dichlorophenol									<8
2,4-dimethylphenol									<8 *
2,4-dinitrophenol									<8
2,4-dinitrotoluene									<8
2,6-dichlorophenol									<8
2,6-dinitrotoluene									<8
2-acetylaminofluorene									<8
2-butanone (mek)		<10	<10	<10		<10	<10		<5
2-chloronaphthalene									<8
2-chlorophenol									<8
2-hexanone (mbk)		<5	<5	<5		<5	<5		<5
2-methylnaphthalene									<8
2-naphthylamine									<8
2-nitroaniline									<8
2-nitrophenol									<8
3,3'-dichlorobenzidine									<8
3,3'-dimethylbenzidine									<8
3-methylcholanthrene									<8
3-nitroaniline									<8
4,4'-ddd									<.05
4,4'-dde									<.05
4,4'-ddt									<.05
4,6-dinitro-2-methylphenol									<8
4-aminobiphenyl									<8
4-bromophenyl phenyl ether									<8
4-chloro-3-methylphenol									<8
4-chloroaniline									<8
4-chlorophenyl phenyl ether									<8
4-methyl-2-pentanone (mibk)		<5	<5	<5		<5	<5		<5
4-nitroaniline									<8
4-nitrophenol									<8
5-nitro-o-toluidine									<8
7,12-dimethylbenz(a)anthracene									<8
Acenaphthene									<8
Acenaphthylene									<8
Acetone		<10.0	<10.0	<10.0		<10.0	<10.0		<10.0
Acetonitrile									<10
Acetophenone									<8
Acrolein									<10
Acrylonitrile		<5	<5	<5		<5	<5		<5
Aldrin									<.05
Alkalinity, as cacO3									
Allyl chloride									<1
Alpha-bhc									<.05
Anthracene									<8

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

Table 9

Analytical Data Summary for MW-16

Constituents	Units	3/30/2014	9/19/2014	4/20/2015	10/5/2015	4/5/2016	10/5/2016	4/4/2017	10/3/2017	4/10/2018
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016	ug/L									
Arochlor 1221	ug/L									
Arochlor 1232	ug/L									
Arochlor 1242	ug/L									
Arochlor 1248	ug/L									
Arochlor 1254	ug/L									
Arochlor 1260	ug/L									
Arsenic, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Azobenzene	ug/L									
Barium, total	ug/L	168.0	111.0	103.0	98.0	96.9	86.5	95.8	87.4	87.7
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Benzo(a)anthracene	ug/L									
Benzo(a)pyrene	ug/L									
Benzo(b)fluoranthene	ug/L									
Benzo(g,h,i)perylene	ug/L									
Benzo(k)fluoranthene	ug/L									
Benzyl alcohol	ug/L									
Beryllium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Beta-bhc	ug/L									
Bis (2-chloroethoxy) methane	ug/L									
Bis(2-chloroethyl) ether	ug/L									
Bis(2-chloroisopropyl) ether	ug/L									
Bis(2-ethylhexyl) phthalate	ug/L									
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate	ug/L									
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Calcium, total	mg/L									
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									
Chloride	mg/L									
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate	ug/L									
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									
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene	ug/L									
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	<4.0	1.2	1.5	<.8	<.8	<.8	<.8	<.8	<.8
Copper, total	ug/L	7.3	4.8	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Cyanide, total	mg/L									
Delta-bhc	ug/L									
Diallate	ug/L									
Dibenzo(a,h)anthracene	ug/L									
Dibenzofuran	ug/L									
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L									
Dieldrin	ug/L									
Diethyl phthalate	ug/L									
Dimethoate	ug/L									
Dimethylphthalate	ug/L									
Di-n-butyl phthalate	ug/L									
Di-n-octyl phthalate	ug/L									
Dinoseb	ug/L									
Diphenylamine	ug/L									
Disulfoton	ug/L									
Endosulfan i	ug/L									
Endosulfan ii	ug/L									
Endosulfan sulfate	ug/L									
Endrin	ug/L									
Endrin aldehyde	ug/L									
Ethyl methacrylate	ug/L									
Ethyl methanesulfonate	ug/L									
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Famphur	ug/L									
Fluoranthene	ug/L									
Fluorene	ug/L									
Gamma-bhc (lindane)	ug/L									
Heptachlor	ug/L									

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

Table 9

Analytical Data Summary for MW-16

Constituents	10/12/2018	4/16/2019	9/30/2019	4/7/2020	10/7/2020	4/22/2021	10/5/2021	4/4/2022	10/5/2022
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016									
Arochlor 1221									
Arochlor 1232									
Arochlor 1242									
Arochlor 1248									
Arochlor 1254									
Arochlor 1260									
Arsenic, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Azobenzene									
Barium, total	82.6	91.8	109.0	90.8	92.3	89.0	78.7	83.4	95.8
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Benzo(a)anthracene									
Benzo(a)pyrene									
Benzo(b)fluoranthene									
Benzo(g,h,i)perylene									
Benzo(k)fluoranthene									
Benzyl alcohol									
Beryllium, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Beta-bhc									
Bis (2-chloroethoxy) methane									
Bis(2-chloroethyl) ether									
Bis(2-chloroisopropyl) ether									
Bis(2-ethylhexyl) phthalate									
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate									
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Calcium, total		134							
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane									
Chloride		1.9							
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate									
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene									
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8
Chrysene									
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.8	<.8	<.8	.4	<.4	<.4	<.4	.6	2.2
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Cyanide, total									
Delta-bhc									
Diallate									
Dibenzo(a,h)anthracene									
Dibenzofuran									
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane									
Dieldrin									
Diethyl phthalate									
Dimethoate									
Dimethylphthalate									
Di-n-butyl phthalate									
Di-n-octyl phthalate									
Dinoseb									
Diphenylamine									
Disulfoton									
Endosulfan i									
Endosulfan ii									
Endosulfan sulfate									
Endrin									
Endrin aldehyde									
Ethyl methacrylate									
Ethyl methanesulfonate									
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Famphur									
Fluoranthene									
Fluorene									
Gamma-bhc (lindane)									
Heptachlor									

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

Table 9

Analytical Data Summary for MW-16

Constituents	1/3/2023	4/14/2023	10/18/2023	4/8/2024	6/13/2024	10/8/2024	4/3/2025	7/14/2025	10/14/2025
Antimony, total		<2	<2	<2		<2	<1		<1
Arochlor 1016									<.2
Arochlor 1221									<.2
Arochlor 1232									<.2
Arochlor 1242									<.2
Arochlor 1248									<.2
Arochlor 1254									<.2
Arochlor 1260									<.2
Arsenic, total		<4	<4	<4		<4	<2		<2
Azobenzene									<8
Barium, total		85.3	84.0	84.3		82.7	87.9		84.2
Benzene		<1	<1	<1		<1	<1		<1
Benzo(a)anthracene									<8
Benzo(a)pyrene									<8
Benzo(b)fluoranthene									<8
Benzo(g,h,i)perylene									<8
Benzo(k)fluoranthene									<8
Benzyl alcohol									<8
Beryllium, total		<4.0	<4.0	<4.0		<4.0	<.5		<.5
Beta-bhc									<.05
Bis (2-chloroethoxy) methane									<8
Bis(2-chloroethyl) ether									<8
Bis(2-chloroisopropyl) ether									<8
Bis(2-ethylhexyl) phthalate									<6
Bromochloromethane		<1	<1	<1		<1	<1		<1
Bromodichloromethane		<1	<1	<1		<1	<1		<1
Bromoform		<1	<1	<1		<1	<1		<1
Bromomethane		<1	<1	<1		<1	<1		<1
Butyl benzyl phthalate									<8
Cadmium, total		<.8	<.8	<.8		<.8	<.2		<.2
Calcium, total									
Carbon disulfide		<1	<1	<1		<1	<1		<1
Carbon tetrachloride		<1	<1	<1		<1	<1		<1
Chlordane									<.1
Chloride									
Chlorobenzene		<1	<1	<1		<1	<1		<1
Chlorobenzilate									<8
Chloroethane		<1	<1	<1		<1	<1		<1
Chloroform		<1	<1	<1		<1	<1		<1
Chloromethane		<1	<1	<1		<1	<1		<1
Chloroprene									<1
Chromium, total		<8	<8	<8		<8	<1		<1
Chrysene									<8
Cis-1,2-dichloroethylene		<1	<1	<1		<1	<1		<1
Cis-1,3-dichloropropene		<1	<1	<1		<1	<1		<1
Cobalt, total		<.4	.4	<.4		.6	<.5		<.5
Copper, total		<4.0	<4.0	<4.0		<4.0	<5.0		<5.0
Cyanide, total									<.01
Delta-bhc									<.05
Diallate									<8
Dibenzo(a,h)anthracene									<8
Dibenzofuran									<8
Dibromochloromethane		<1	<1	<1		<1	<1		<1
Dibromomethane		<1	<1	<1		<1	<1		<1
Dichlorodifluoromethane									<1
Dieldrin									<.05
Diethyl phthalate									<8
Dimethoate									<.4
Dimethylphthalate									<8
Di-n-butyl phthalate									<8
Di-n-octyl phthalate									<8
Dinoseb									<.5
Diphenylamine									<8
Disulfoton									<.4
Endosulfan i									<.05
Endosulfan ii									<.05
Endosulfan sulfate									<.05
Endrin									<.05
Endrin aldehyde									<.05
Ethyl methacrylate									<10
Ethyl methanesulfonate									<8
Ethylbenzene		<1	<1	<1		<1	<1		<1
Famphur									<.4
Fluoranthene									<8
Fluorene									<8
Gamma-bhc (lindane)									<.05
Heptachlor									<.05

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

Table 9

Analytical Data Summary for MW-16

Constituents	Units	3/30/2014	9/19/2014	4/20/2015	10/5/2015	4/5/2016	10/5/2016	4/4/2017	10/3/2017	4/10/2018
Heptachlor epoxide	ug/L									
Hexachlorobenzene	ug/L									
Hexachlorobutadiene	ug/L									
Hexachlorocyclopentadiene	ug/L									
Hexachloroethane	ug/L									
Hexachloropropene	ug/L									
Indeno(1,2,3-cd)pyrene	ug/L									
Isobutanol	mg/L									
Isodrin	ug/L									
Isophorone	ug/L									
Isosafrole	ug/L									
Kepone	ug/L									
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Magnesium, total	mg/L									
Mercury, total	ug/L									
Methacrylonitrile	ug/L									
Methapyrilene	ug/L									
Methoxychlor	ug/L									
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl methacrylate	ug/L									
Methyl methanesulfonate	ug/L									
Methyl parathion	ug/L									
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene	ug/L									
Nickel, total	ug/L	7.7	4.2	4.2	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Nitrobenzene	ug/L									
N-nitrosodiethylamine	ug/L									
N-nitrosodimethylamine	ug/L									
N-nitrosodi-n-butylamine	ug/L									
N-nitroso-di-n-propylamine	ug/L									
N-nitrosodiphenylamine	ug/L									
N-nitrosomethylethylamine	ug/L									
N-nitrosopiperidine	ug/L									
N-nitrosopyrrolidine	ug/L									
O,o,o-triethyl phosphorothioate	ug/L									
O-toluidine	ug/L									
Parathion	ug/L									
P-dimethylaminoazobenzene	ug/L									
Pentachlorobenzene	ug/L									
Pentachloronitrobenzene (pcnb)	ug/L									
Pentachlorophenol	ug/L									
Phenacetin	ug/L									
Phenanthrene	ug/L									
Phenol	ug/L									
Phorate	ug/L									
Potassium, total	mg/L									
Pronamide	ug/L									
Propionitrile	ug/L									
Pyrene	ug/L									
Safrole	ug/L									
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total	mg/L									
Solids, total dissolved	mg/L									
Solids, total suspended	mg/L		48	12						
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate	mg/L									
Sulfide, total	mg/L									
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Thionazin	ug/L									
Tin, total	ug/L									
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene	ug/L									
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	31.9	11.0	12.2	9.5	12.1	<8.0	<8.0	<8.0	<20.0

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

Table 9

Analytical Data Summary for MW-16

Constituents	10/12/2018	4/16/2019	9/30/2019	4/7/2020	10/7/2020	4/22/2021	10/5/2021	4/4/2022	10/5/2022
Heptachlor epoxide									
Hexachlorobenzene									
Hexachlorobutadiene									
Hexachlorocyclopentadiene									
Hexachloroethane									
Hexachloropropene									
Indeno(1,2,3-cd)pyrene									
Isobutanol									
Isodrin									
Isophorone									
Isosafrole									
Kepon									
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Magnesium, total		40.8							
Mercury, total									
Methacrylonitrile									
Methacrylonitrile									
Methoxychlor									
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl methacrylate									
Methyl methanesulfonate									
Methyl parathion									
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene									
Nickel, total	<4.0	<4.0	11.1	<4.0	<4.0	<4.0	<4.0	5.8	<4.0
Nitrobenzene									
N-nitrosodiethylamine									
N-nitrosodimethylamine									
N-nitrosodi-n-butylamine									
N-nitroso-di-n-propylamine									
N-nitrosodiphenylamine									
N-nitrosomethylethylamine									
N-nitrosopiperidine									
N-nitrosopyrrolidine									
O,o,o-triethyl phosphorothioate									
O-toluidine									
Parathion									
P-dimethylaminoazobenzene									
Pentachlorobenzene									
Pentachloronitrobenzene (pcnb)									
Pentachlorophenol									
Phenacetin									
Phenanthrene									
Phenol									
Phorate									
Potassium, total		3.9							
Pronamide									
Propionitrile									
Pyrene									
Safrole									
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total		27							
Solids, total dissolved		493							
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate		54.7							
Sulfide, total									
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Thionazin									
Tin, total									
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene									
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<20.0	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	30.7

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

Table 9

Analytical Data Summary for MW-16

Constituents	1/3/2023	4/14/2023	10/18/2023	4/8/2024	6/13/2024	10/8/2024	4/3/2025	7/14/2025	10/14/2025
Heptachlor epoxide									<.05
Hexachlorobenzene									<.05
Hexachlorobutadiene									<8
Hexachlorocyclopentadiene									<8
Hexachloroethane									<8
Hexachloropropene									<8
Indeno(1,2,3-cd)pyrene									<8
Isobutanol									<1
Isodrin									<8
Isophorone									<8
Isosafrole									<8
Kepon									<8
Lead, total		<4	<4	<4		<4	<1		<1
Magnesium, total									
Mercury, total									<.5
Methacrylonitrile									<1
Methapyrene									<8
Methoxychlor									<.05
Methyl iodide		<1	<1	<1		<1	<1		<2
Methyl methacrylate									<1
Methyl methanesulfonate									<8
Methyl parathion									<.4
Methylene chloride		<5	<5	<5		<5	<5		<5
Naphthalene									<8
Nickel, total		<4.0	<4.0	<4.0		6.7	6.0		<5.0
Nitrobenzene									<8
N-nitrosodiethylamine									<8
N-nitrosodimethylamine									<8
N-nitrosodi-n-butylamine									<8
N-nitroso-di-n-propylamine									<8
N-nitrosodiphenylamine									<8
N-nitrosomethylethylamine									<8
N-nitrosopiperidine									<8
N-nitrosopyrrolidine									<8
O,o,o-triethyl phosphorothioate									<.4
O-toluidine									<8
Parathion									<.4
P-dimethylaminoazobenzene									<8
Pentachlorobenzene									<8
Pentachloronitrobenzene (pcnb)									<8
Pentachlorophenol									<8
Phenacetin									<8
Phenanthrene									<8
Phenol									<8
Phorate									<.4
Potassium, total									
Pronamide									<8
Propionitrile									<10
Pyrene									<8
Safrole									<8
Selenium, total		<4	<4	<4		<4	<2		<2
Silver, total		<4	<4	<4		<4	<5		<5
Sodium, total									
Solids, total dissolved									
Solids, total suspended									
Styrene		<1	<1	<1		<1	<1		<1
Sulfate									
Sulfide, total									<.1
Tetrachloroethylene		<1	<1	<1		<1	<1		<1
Thallium, total		<2.0	<2.0	<2.0		<2.0	<.5		<.5
Thionazin									<.4
Tin, total									<5
Toluene		<1	<1	<1		<1	<1		<1
Toxaphene									<.2
Trans-1,2-dichloroethylene		<1	<1	<1		<1	<1		<1
Trans-1,3-dichloropropene		<1	<1	<1		<1	<1		<1
Trans-1,4-dichloro-2-butene		<5	<5	<5		<5	<5		<5
Trichloroethylene		<1	<1	<1		<1	<1		<1
Trichlorofluoromethane		<1	<1	<1		<1	<1		<1
Vanadium, total		<20	<20	<20		<20	<2		<2
Vinyl acetate		<5	<5	<5		<5	<5		<5
Vinyl chloride		<1	<1	<1		<1	<1		<1
Xylenes, total		<2	<2	<2		<2	<2		<2
Zinc, total	<20.0	<20.0	<20.0	32.4	20.0	25.6	28.3	45.7	33.9

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

Table 9

Analytical Data Summary for MW-20

Constituents	Units	3/30/2014	9/19/2014	4/20/2015	10/5/2015	4/5/2016	10/5/2016	4/4/2017	10/3/2017	4/10/2018
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	22.4	<10.0
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Alkalinity, as caco3	mg/L									
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	ug/L	124.0	153.0	146.0	154.0	135.0	99.4	110.0	114.0	111.0
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Calcium, total	mg/L									
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride	mg/L									
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	ug/L	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	<4.0	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Copper, total	ug/L	<4.0	<4.0	4.6	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Magnesium, total	mg/L									
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	<4.0	<4.0	8.7	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Potassium, total	mg/L									
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total	mg/L									
Solids, total dissolved	mg/L									
Solids, total suspended	mg/L		83	6						
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate	mg/L									
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<20.0	<8.0	15.3	9.2	<8.0	<8.0	<8.0	<8.0	<20.0

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

Table 9

Analytical Data Summary for MW-20

Constituents	10/12/2018	4/16/2019	9/30/2019	4/8/2020	10/7/2020	4/22/2021	10/5/2021	4/4/2022	10/5/2022
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<1	<1	<1	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<5	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Alkalinity, as cacO3		437							
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total	91.9	128.0	105.0	144.0	85.2	112.0	118.0	100.0	114.0
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Calcium, total		133							
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloride		18.2							
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<8	<8
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.8	<.8	<.8	<.4	<.4	<.4	<.4	<.4	1.5
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Magnesium, total		37							
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Potassium, total		1.3							
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Sodium, total		11							
Solids, total dissolved		527							
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate		77.8							
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<20.0	<8.0	<8.0	<20.0	<20.0	23.4	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-20

Constituents	4/14/2023	10/18/2023	4/8/2024	10/8/2024	4/3/2025	10/14/2025
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<10	<10	<10	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5
Acetone	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acrylonitrile	<5	<5	<5	<5	<5	<5
Alkalinity, as cac03						
Antimony, total	<2	<2	<2	<2	<1	<1
Arsenic, total	<4	<4	<4	<4	<2	<2
Barium, total	103.0	133.0	144.0	120.0	92.1	107.0
Benzene	<1	<1	<1	<1	<1	<1
Beryllium, total	<4.0	<4.0	<4.0	<4.0	<5	<5
Bromochloromethane	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	<.8	<2	<2
Calcium, total						
Carbon disulfide	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1
Chloride						
Chlorobenzene	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1
Chromium, total	<8	<8	<8	<8	<1	<1
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1
Cobalt, total	<.4	<.4	<.4	<.4	<.5	<.5
Copper, total	<4.0	<4.0	<4.0	<4.0	<5.0	<5.0
Dibromochloromethane	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4	<1	<1
Magnesium, total						
Methyl iodide	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5
Nickel, total	<4.0	<4.0	<4.0	<4.0	<5.0	<5.0
Potassium, total						
Selenium, total	<4	<4	<4	<4	<2	<2
Silver, total	<4	<4	<4	<4	<5	<5
Sodium, total						
Solids, total dissolved						
Solids, total suspended						
Styrene	<1	<1	<1	<1	<1	<1
Sulfate						
Tetrachloroethylene	<1	<1	<1	<1	<1	<1
Thallium, total	<2.0	<2.0	<2.0	<2.0	<5	<5
Toluene	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<2	<2
Vinyl acetate	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0	<20.0	<5.0	9.0

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

Table 9

Analytical Data Summary for MW-22

Constituents	Units	3/30/2014	9/19/2014	4/20/2015	10/5/2015	4/5/2016	4/4/2017	10/3/2017	1/3/2018	4/10/2018
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1		
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1		
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1		
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1		
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1		
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1		
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1		
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1		
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1		
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1		
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1		
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1		
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1		
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5		
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5		
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5		
Acetone	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	28.8		
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5		
Alkalinity, as cacO3	mg/L									
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2		
Arsenic, total	ug/L	<4	<4	<4	<4	<4	<4	<4		<4
Barium, total	ug/L	225.0	200.0	214.0	213.0	208.0	204.0	192.0		
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1		<1
Beryllium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0		
Bis(2-ethylhexyl) phthalate	ug/L					<10	<10	<6		
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1		
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1		
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1		
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1		
Cadmium, total	ug/L	<.8	<.8	<.8	<.8	<.8	<.8	<.8		
Calcium, total	mg/L									
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1		
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1		
Chloride	mg/L									
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1		
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1		
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1		
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1		
Chromium, total	ug/L	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0		
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1		
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1		
Cobalt, total	ug/L	<4.0	<.8	<.8	<.8	<.8	<.8	<.8		<.8
Copper, total	ug/L	<4	<4	<4	<4	<4	<4	<4		
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1		
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1		
Dichlorodifluoromethane	ug/L					<1	<1	<1		
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1		
Lead, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0		
Magnesium, total	mg/L									
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1		
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5		
Nickel, total	ug/L	6.3	4.3	8.2	<4.0	<4.0	<4.0	<4.0		
Potassium, total	mg/L									
Selenium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0		
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4		
Sodium, total	mg/L									
Solids, total dissolved	mg/L									
Solids, total suspended	mg/L		809	30						
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1		
Sulfate	mg/L									
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1		
Thallium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0		
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1		
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1		
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1		
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5		
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1		
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1		
Vanadium, total	ug/L	<20	<20	<20	<20	<20	<20	<20		
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5		
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1		
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2		
Zinc, total	ug/L	<20.0	<8.0	<8.0	<8.0	<8.0	<8.0	29.6	<8.0	

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

Table 9

Analytical Data Summary for MW-22

Constituents	10/12/2018	4/16/2019	9/30/2019	4/7/2020	10/7/2020	4/22/2021	10/5/2021	4/4/2022	10/5/2022
1,1,1,2-tetrachloroethane					<1	<1	<1	<1	<1
1,1,1-trichloroethane					<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane					<1	<1	<1	<1	<1
1,1,2-trichloroethane					<1	<1	<1	<1	<1
1,1-dichloroethane					<1	<1	<1	<1	<1
1,1-dichloroethylene					<1	<1	<1	<1	<1
1,2,3-trichloropropane					<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane					<5	<5	<5	<5	<5
1,2-dibromoethane					<1	<1	<1	<1	<1
1,2-dichlorobenzene					<1	<1	<1	<1	<1
1,2-dichloroethane					<1	<1	<1	<1	<1
1,2-dichloropropane					<1	<1	<1	<1	<1
1,4-dichlorobenzene					<1	<1	<1	<1	<1
2-butanone (mek)					<5	<5	<5	<10	<10
2-hexanone (mbk)					<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)					<5	<5	<5	<5	<5
Acetone					<10.0	<10.0	<10.0	<10.0	<10.0
Acrylonitrile					<5	<5	<5	<5	<5
Alkalinity, as cacO3		390							
Antimony, total					<2	<2	<2	<2	<2
Arsenic, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Barium, total					164.0	164.0	169.0	81.4	191.0
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, total					<4.0	<4.0	<4.0	<4.0	<4.0
Bis(2-ethylhexyl) phthalate									
Bromochloromethane					<1	<1	<1	<1	<1
Bromodichloromethane					<1	<1	<1	<1	<1
Bromoform					<1	<1	<1	<1	<1
Bromomethane					<1	<1	<1	<1	<1
Cadmium, total					<.8	<.8	<.8	<.8	<.8
Calcium, total		113							
Carbon disulfide					<1	<1	<1	<1	<1
Carbon tetrachloride					<1	<1	<1	<1	<1
Chloride		13.2							
Chlorobenzene					<1	<1	<1	<1	<1
Chloroethane					<1	<1	<1	<1	<1
Chloroform					<1	<1	<1	<1	<1
Chloromethane					<1	<1	<1	<1	<1
Chromium, total					<8.0	<8.0	<8.0	<8.0	13.4
Cis-1,2-dichloroethylene					<1	<1	<1	<1	<1
Cis-1,3-dichloropropene					<1	<1	<1	<1	<1
Cobalt, total	<.8	<.8	<.8	<.4	<.4	<.4	<.4	<.4	2.5
Copper, total					<4	<4	<4	<4	<4
Dibromochloromethane					<1	<1	<1	<1	<1
Dibromomethane					<1	<1	<1	<1	<1
Dichlorodifluoromethane									
Ethylbenzene					<1	<1	<1	<1	<1
Lead, total					<4.0	<4.0	<4.0	<4.0	<4.0
Magnesium, total		42.1							
Methyl iodide					<1	<1	<1	<1	<1
Methylene chloride					<5	<5	<5	<5	<5
Nickel, total					<4.0	<4.0	<4.0	<4.0	6.8
Potassium, total		<1							
Selenium, total					<4.0	<4.0	<4.0	<4.0	<4.0
Silver, total					<4	<4	<4	<4	<4
Sodium, total		11.1							
Solids, total dissolved		441							
Solids, total suspended									
Styrene					<1	<1	<1	<1	<1
Sulfate		27.8							
Tetrachloroethylene					<1	<1	<1	<1	<1
Thallium, total					<2.0	<2.0	<2.0	<2.0	<2.0
Toluene					<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene					<1	<1	<1	<1	<1
Trans-1,3-dichloropropene					<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene					<5	<5	<5	<5	<5
Trichloroethylene					<1	<1	<1	<1	<1
Trichlorofluoromethane					<1	<1	<1	<1	<1
Vanadium, total					<20	<20	<20	<20	<20
Vinyl acetate					<5	<5	<5	<5	<5
Vinyl chloride					<1	<1	<1	<1	<1
Xylenes, total					<2	<2	<2	<2	<2
Zinc, total					<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-22

Constituents	1/3/2023	4/14/2023	7/10/2023	10/18/2023	4/8/2024	10/8/2024	4/3/2025	10/14/2025
1,1,1,2-tetrachloroethane		<1		<1	<1	<1	<1	<1
1,1,1-trichloroethane		<1		<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane		<1		<1	<1	<1	<1	<1
1,1,2-trichloroethane		<1		<1	<1	<1	<1	<1
1,1-dichloroethane		<1		<1	<1	<1	<1	<1
1,1-dichloroethylene		<1		<1	<1	<1	<1	<1
1,2,3-trichloropropane		<1		<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane		<5		<5	<5	<5	<5	<5
1,2-dibromoethane		<1		<1	<1	<1	<1	<1
1,2-dichlorobenzene		<1		<1	<1	<1	<1	<1
1,2-dichloroethane		<1		<1	<1	<1	<1	<1
1,2-dichloropropane		<1		<1	<1	<1	<1	<1
1,4-dichlorobenzene		<1		<1	<1	<1	<1	<1
2-butanone (mek)		<10		<10	<10	<10	<10	<10
2-hexanone (mbk)		<5		<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)		<5		<5	<5	<5	<5	<5
Acetone		<10.0		<10.0	<10.0	<10.0	<10.0	<10.0
Acrylonitrile		<5		<5	<5	<5	<5	<5
Alkalinity, as cac03								
Antimony, total		<2		<2	<2	<2	<1	<1
Arsenic, total		<4		<4	<4	<4	<2	<2
Barium, total		175.0		195.0	134.0	161.0	160.0	194.0
Benzene		<1		<1	<1	<1	<1	<1
Beryllium, total		<4.0		<4.0	<4.0	<4.0	<.5	<.5
Bis(2-ethylhexyl) phthalate								
Bromochloromethane		<1		<1	<1	<1	<1	<1
Bromodichloromethane		<1		<1	<1	<1	<1	<1
Bromoform		<1		<1	<1	<1	<1	<1
Bromomethane		<1		<1	<1	<1	<1	<1
Cadmium, total		<.8		<.8	<.8	<.8	<.2	<.2
Calcium, total								
Carbon disulfide		<1		<1	<1	<1	<1	<1
Carbon tetrachloride		<1		<1	<1	<1	<1	<1
Chloride								
Chlorobenzene		<1		<1	<1	<1	<1	<1
Chloroethane		<1		<1	<1	<1	<1	<1
Chloroform		<1		<1	<1	<1	<1	<1
Chloromethane		<1		<1	<1	<1	<1	<1
Chromium, total	<8.0	<8.0		<8.0	<8.0	<8.0	1.8	2.7
Cis-1,2-dichloroethylene		<1		<1	<1	<1	<1	<1
Cis-1,3-dichloropropene		<1		<1	<1	<1	<1	<1
Cobalt, total		<.4		<.4	<.4	.5	<.5	<.5
Copper, total		<4		<4	<4	<4	<5	<5
Dibromochloromethane		<1		<1	<1	<1	<1	<1
Dibromomethane		<1		<1	<1	<1	<1	<1
Dichlorodifluoromethane								
Ethylbenzene		<1		<1	<1	<1	<1	<1
Lead, total	9.9	<4.0	<4.0	<4.0	<4.0	<4.0	<1.0	<1.0
Magnesium, total								
Methyl iodide		<1		<1	<1	<1	<1	<1
Methylene chloride		<5		<5	<5	<5	<5	<5
Nickel, total		<4.0		<4.0	<4.0	<4.0	<5.0	<5.0
Potassium, total								
Selenium, total		<4.0		<4.0	<4.0	<4.0	2.1	<2.0
Silver, total		<4		<4	<4	<4	<5	<5
Sodium, total								
Solids, total dissolved								
Solids, total suspended								
Styrene		<1		<1	<1	<1	<1	<1
Sulfate								
Tetrachloroethylene		<1		<1	<1	<1	<1	<1
Thallium, total		<2.0		<2.0	<2.0	<2.0	<.5	<.5
Toluene		<1		<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene		<1		<1	<1	<1	<1	<1
Trans-1,3-dichloropropene		<1		<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene		<5		<5	<5	<5	<5	<5
Trichloroethylene		<1		<1	<1	<1	<1	<1
Trichlorofluoromethane		<1		<1	<1	<1	<1	<1
Vanadium, total		<20		<20	<20	<20	<2	<2
Vinyl acetate		<5		<5	<5	<5	<5	<5
Vinyl chloride		<1		<1	<1	<1	<1	<1
Xylenes, total		<2		<2	<2	<2	<2	<2
Zinc, total		<20.0		<20.0	<20.0	<20.0	5.8	8.2

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

Table 9

Analytical Data Summary for MW-6

Constituents	Units	3/30/2014	9/19/2014	9/30/2014	4/20/2015	7/9/2015	10/5/2015	4/5/2016	10/5/2016	4/4/2017
(3,4)-methylphenol	ug/L	<8								
1,1,1,2-tetrachloroethane	ug/L	<1	<1		<1		<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1		<1		<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1		<1		<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1		<1		<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1		<1		<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1		<1		<1	<1	<1	<1
1,1-dichloropropene	ug/L	<1								
1,2,3-trichloropropane	ug/L	<1	<1		<1		<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	ug/L	<8								
1,2,4-trichlorobenzene	ug/L	<1								
1,2-dibromo-3-chloropropane	ug/L	<1	<1		<1		<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1		<1		<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1		<1		<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1		<1		<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1		<1		<1	<1	<1	<1
1,2-dinitrobenzene	ug/L	<8								
1,3,5-trinitrobenzene	ug/L	<8								
1,3-dichlorobenzene	ug/L	<1								
1,3-dichloropropane	ug/L	<1								
1,3-dinitrobenzene	ug/L	<8								
1,4-dichlorobenzene	ug/L	<1	<1		<1		<1	<1	<1	<1
1,4-naphthoquinone	ug/L	<8								
1,4-phenylenediamine	ug/L	<8								
1-naphthylamine	ug/L	<8								
2,2-dichloropropane	ug/L	<1								
2,3,4,6-tetrachlorophenol	ug/L	<8								
2,4,5-t	ug/L	<6								
2,4,5-tp (silvex)	ug/L	<6								
2,4,5-trichlorophenol	ug/L	<8								
2,4,6-trichlorophenol	ug/L	<8								
2,4-d	ug/L	<2.6								
2,4-dichlorophenol	ug/L	<8								
2,4-dimethylphenol	ug/L	<8								
2,4-dinitrophenol	ug/L	<8								
2,4-dinitrotoluene	ug/L	<8								
2,6-dichlorophenol	ug/L	<8								
2,6-dinitrotoluene	ug/L	<8								
2-acetylaminofluorene	ug/L	<8								
2-butanone (mek)	ug/L	<5	<5		<5		<5	<5	<5	<5
2-chloronaphthalene	ug/L	<8								
2-chlorophenol	ug/L	<8								
2-hexanone (mbk)	ug/L	<5	<5		<5		<5	<5	<5	<5
2-methylnaphthalene	ug/L	<8								
2-methylphenol	ug/L	<8								
2-naphthylamine	ug/L	<8								
2-nitroaniline	ug/L	<8								
2-nitrophenol	ug/L	<8								
3,3'-dichlorobenzidine	ug/L	<8								
3,3'-dimethylbenzidine	ug/L	<8								
3-methylcholanthrene	ug/L	<8								
3-nitroaniline	ug/L	<8								
4,4'-ddd	ug/L	<.05								
4,4'-dde	ug/L	<.05								
4,4'-ddt	ug/L	<.05								
4,6-dinitro-2-methylphenol	ug/L	<8								
4-aminobiphenyl	ug/L	<8								
4-bromophenyl phenyl ether	ug/L	<8								
4-chloro-3-methylphenol	ug/L	<8								
4-chloroaniline	ug/L	<8								
4-chlorophenyl phenyl ether	ug/L	<8								
4-methyl-2-pentanone (mibk)	ug/L	<5	<5		<5		<5	<5	<5	<5
4-nitroaniline	ug/L	<8								
4-nitrophenol	ug/L	<8								
5-nitro-o-toluidine	ug/L	<8								
7,12-dimethylbenz(a)anthracene	ug/L	<8								
Acenaphthene	ug/L	<8								
Acenaphthylene	ug/L	<8								
Acetone	ug/L	<10.0	<10.0		<10.0		<10.0	<10.0	<10.0	<10.0
Acetonitrile	ug/L	<10								
Acetophenone	ug/L	<8								
Acrolein	ug/L	<10								
Acrylonitrile	ug/L	<5	<5		<5		<5	<5	<5	<5
Aldrin	ug/L	<.05								
Alkalinity, as CaCO3	mg/L									
Allyl chloride	ug/L	<1								
Alpha-bhc	ug/L	<.05								

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

Table 9

Analytical Data Summary for MW-6

Constituents	10/3/2017	1/3/2018	4/10/2018	10/12/2018	4/16/2019	9/30/2019	4/7/2020	10/7/2020	4/22/2021
(3,4)-methylphenol					<8				
1,1,1,2-tetrachloroethane	<1		<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1		<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1		<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1		<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1		<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1		<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene					<1				
1,2,3-trichloropropane	<1		<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene					<8				
1,2,4-trichlorobenzene					<1				
1,2-dibromo-3-chloropropane	<1		<1	<1	<1	<1	<5	<5	<5
1,2-dibromoethane	<1		<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1		<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1		<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1		<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene					<8				
1,3,5-trinitrobenzene					<8				
1,3-dichlorobenzene					<1				
1,3-dichloropropane					<1				
1,3-dinitrobenzene					<8				
1,4-dichlorobenzene	<1		<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone					<8				
1,4-phenylenediamine					<8				
1-naphthylamine					<8				
2,2-dichloropropane					<1				
2,3,4,6-tetrachlorophenol					<8				
2,4,5-t					<5				
2,4,5-tp (silvex)					<5				
2,4,5-trichlorophenol					<8				
2,4,6-trichlorophenol					<8				
2,4-d					<2.0				
2,4-dichlorophenol					<8				
2,4-dimethylphenol					<8				
2,4-dinitrophenol					<8				
2,4-dinitrotoluene					<8				
2,6-dichlorophenol					<8				
2,6-dinitrotoluene					<8				
2-acetylaminofluorene					<8				
2-butanone (mek)	<5		<5	<5	<5	<5	<5	<5	<5
2-chloronaphthalene					<8				
2-chlorophenol					<8				
2-hexanone (mbk)	<5		<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene					<8				
2-methylphenol					<8				
2-naphthylamine					<8				
2-nitroaniline					<8				
2-nitrophenol					<8				
3,3'-dichlorobenzidine					<8				
3,3'-dimethylbenzidine					<8				
3-methylcholanthrene					<8				
3-nitroaniline					<8				
4,4'-ddd					<.05				
4,4'-dde					<.05				
4,4'-ddt					<.05				
4,6-dinitro-2-methylphenol					<8				
4-aminobiphenyl					<8				
4-bromophenyl phenyl ether					<8				
4-chloro-3-methylphenol					<8				
4-chloroaniline					<8				
4-chlorophenyl phenyl ether					<8				
4-methyl-2-pentanone (mibk)	<5		<5	<5	<5	<5	<5	<5	<5
4-nitroaniline					<8				
4-nitrophenol					<8				
5-nitro-o-toluidine					<8				
7,12-dimethylbenz(a)anthracene					<8				
Acenaphthene					<8				
Acenaphthylene					<8				
Acetone	16.2		<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acetonitrile					<10				
Acetophenone					<8				
Acrolein					<10				
Acrylonitrile	<5		<5	<5	<5	<5	<5	<5	<5
Aldrin					<.05				
Alkalinity, as CaCO3					504				
Allyl chloride					<1				
Alpha-bhc					<.05				

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

Table 9

Analytical Data Summary for MW-6

Constituents	10/5/2021	4/4/2022	10/5/2022	4/14/2023	10/18/2023	4/8/2024	10/8/2024	4/3/2025	10/14/2025
(3,4)-methylphenol						<8			
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene						<1			
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene						<8			
1,2,4-trichlorobenzene						<1			
1,2-dibromo-3-chloropropane	<5	<5	<5	<5	<5	<1	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene						<8			
1,3,5-trinitrobenzene						<8			
1,3-dichlorobenzene						<1			
1,3-dichloropropane						<1			
1,3-dinitrobenzene						<8			
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone						<8			
1,4-phenylenediamine						<8			
1-naphthylamine						<8			
2,2-dichloropropane						<1			
2,3,4,6-tetrachlorophenol						<8			
2,4,5-t						<.5			
2,4,5-tp (silvex)						<.5			
2,4,5-trichlorophenol						<8			
2,4,6-trichlorophenol						<8			
2,4-d						<2.0			
2,4-dichlorophenol						<8			
2,4-dimethylphenol						<8 *			
2,4-dinitrophenol						<8			
2,4-dinitrotoluene						<8			
2,6-dichlorophenol						<8			
2,6-dinitrotoluene						<8			
2-acetylaminofluorene						<8			
2-butanone (mek)	<5	<10	<10	<10	<10	<5	<10	<10	<10
2-chloronaphthalene						<8			
2-chlorophenol						<8			
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene						<8			
2-methylphenol						<8			
2-naphthylamine						<8			
2-nitroaniline						<8			
2-nitrophenol						<8			
3,3'-dichlorobenzidine						<8			
3,3'-dimethylbenzidine						<8			
3-methylcholanthrene						<8			
3-nitroaniline						<8			
4,4'-ddd						<.05			
4,4'-dde						<.05			
4,4'-ddt						<.05			
4,6-dinitro-2-methylphenol						<8			
4-aminobiphenyl						<8			
4-bromophenyl phenyl ether						<8			
4-chloro-3-methylphenol						<8			
4-chloroaniline						<8			
4-chlorophenyl phenyl ether						<8			
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline						<8			
4-nitrophenol						<8			
5-nitro-o-toluidine						<8			
7,12-dimethylbenz(a)anthracene						<8			
Acenaphthene						<8			
Acenaphthylene						<8			
Acetone	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acetonitrile						<10			
Acetophenone						<8			
Acrolein						<10			
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin						<.05			
Alkalinity, as CaCO3						<1			
Allyl chloride						<.05			
Alpha-bhc						<.05			

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

Table 9

Analytical Data Summary for MW-6

Constituents	Units	3/30/2014	9/19/2014	9/30/2014	4/20/2015	7/9/2015	10/5/2015	4/5/2016	10/5/2016	4/4/2017
Anthracene	ug/L	<8								
Antimony, total	ug/L	<2	<2		<2		<2	<2	<2	<2
Arochlor 1016	ug/L	<1								
Arochlor 1221	ug/L	<2								
Arochlor 1232	ug/L	<2								
Arochlor 1242	ug/L	<2								
Arochlor 1248	ug/L	<2								
Arochlor 1254	ug/L	<1								
Arochlor 1260	ug/L	<1								
Arsenic, total	ug/L	<4	<4		<4		<4	<4	<4	<4
Azobenzene	ug/L	<8								
Barium, total	ug/L	612	591		717		479	408	231	154
Benzene	ug/L	<1	<1		<1		<1	<1	<1	<1
Benzo(a)anthracene	ug/L	<8								
Benzo(a)pyrene	ug/L	<8								
Benzo(b)fluoranthene	ug/L	<8								
Benzo(g,h,i)perylene	ug/L	<8								
Benzo(k)fluoranthene	ug/L	<8								
Benzyl alcohol	ug/L	<8								
Beryllium, total	ug/L	<4.0	<4.0		<4.0		<4.0	<4.0	<4.0	<4.0
Beta-bhc	ug/L	<.05								
Bis (2-chloroethoxy) methane	ug/L	<8								
Bis(2-chloroethyl) ether	ug/L	<8								
Bis(2-chloroisopropyl) ether	ug/L	<8								
Bis(2-ethylhexyl) phthalate	ug/L	36		<10	<10	<10	<10	<10	<10	<10
Bromochloromethane	ug/L	<1	<1		<1		<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1		<1		<1	<1	<1	<1
Bromoform	ug/L	<1	<1		<1		<1	<1	<1	<1
Bromomethane	ug/L	<1	<1		<1		<1	<1	<1	<1
Butyl benzyl phthalate	ug/L	<8								
Cadmium, total	ug/L	<.8	<.8		<.8		<.8	<.8	<.8	<.8
Calcium, total	mg/L									
Carbon disulfide	ug/L	<1	<1		<1		<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1		<1		<1	<1	<1	<1
Chlordane	ug/L	<1								
Chloride	mg/L									
Chlorobenzene	ug/L	<1	<1		<1		<1	<1	<1	<1
Chlorobenzilate	ug/L	<8								
Chloroethane	ug/L	<1	<1		<1		<1	<1	<1	<1
Chloroform	ug/L	<1	<1		<1		<1	<1	<1	<1
Chloromethane	ug/L	<1	<1		<1		<1	<1	<1	<1
Chloroprene	ug/L	<1								
Chromium, total	ug/L	<8	<8		<8		<8	<8	<8	<8
Chrysene	ug/L	<8								
Cis-1,2-dichloroethylene	ug/L	<1	<1		<1		<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1		<1		<1	<1	<1	<1
Cobalt, total	ug/L	<4.0	<.8		10.0		<.8	<.8	<.8	<.8
Copper, total	ug/L	6.0	4.5		4.2		<4.0	<4.0	<4.0	<4.0
Cyanide, total	mg/L	<.005								
Delta-bhc	ug/L	<.05								
Diallate	ug/L	<8								
Dibenzo(a,h)anthracene	ug/L	<8								
Dibenzofuran	ug/L	<8								
Dibromochloromethane	ug/L	<1	<1		<1		<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1		<1		<1	<1	<1	<1
Dichlorodifluoromethane	ug/L	3.5	1.3		1.0		<1.0	<1.0	1.0	<1.0
Dieldrin	ug/L	<.05								
Diethyl phthalate	ug/L	<8								
Dimethoate	ug/L	<.5								
Dimethylphthalate	ug/L	<8								
Di-n-butyl phthalate	ug/L	<8								
Di-n-octyl phthalate	ug/L	<8								
Dinoseb	ug/L	<.6								
Diphenylamine	ug/L	<8								
Disulfoton	ug/L	<.5								
Endosulfan i	ug/L	<.05								
Endosulfan ii	ug/L	<.05								
Endosulfan sulfate	ug/L	<.05								
Endrin	ug/L	<.05								
Endrin aldehyde	ug/L	<.05								
Ethyl methacrylate	ug/L	<10								
Ethyl methanesulfonate	ug/L	<8								
Ethylbenzene	ug/L	<1	<1		<1		<1	<1	<1	<1
Famphur	ug/L	<.5								
Fluoranthene	ug/L	<8								
Fluorene	ug/L	<8								
Gamma-bhc (lindane)	ug/L	<.05								

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

Table 9

Analytical Data Summary for MW-6

Constituents	10/3/2017	1/3/2018	4/10/2018	10/12/2018	4/16/2019	9/30/2019	4/7/2020	10/7/2020	4/22/2021
Anthracene					<8				
Antimony, total	<2		<2	<2	<2	<2	<2	<2	<2
Arochlor 1016					<.1				
Arochlor 1221					<.2				
Arochlor 1232					<.2				
Arochlor 1242					<.2				
Arochlor 1248					<.2				
Arochlor 1254					<.1				
Arochlor 1260					<.1				
Arsenic, total	<4		<4	<4	<4	<4	<4	<4	<4
Azobenzene					<8				
Barium, total	573	613	435	289	274	409	209	226	180
Benzene	<1		<1	<1	<1	<1	<1	<1	<1
Benzo(a)anthracene					<8				
Benzo(a)pyrene					<8				
Benzo(b)fluoranthene					<8				
Benzo(g,h,i)perylene					<8				
Benzo(k)fluoranthene					<8				
Benzyl alcohol					<8				
Beryllium, total	<4.0		<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Beta-bhc					<.05				
Bis (2-chloroethoxy) methane					<8				
Bis(2-chloroethyl) ether					<8				
Bis(2-chloroisopropyl) ether					<8				
Bis(2-ethylhexyl) phthalate	10		<6	<6	<6	<6	<6	<6	
Bromochloromethane	<1		<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1		<1	<1	<1	<1	<1	<1	<1
Bromoform	<1		<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1		<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate					<8				
Cadmium, total	<.8		<.8	<.8	<.8	<.8	<.8	<.8	<.8
Calcium, total					97.9				
Carbon disulfide	<1		<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1		<1	<1	<1	<1	<1	<1	<1
Chlordane					<.1				
Chloride					28.6				
Chlorobenzene	<1		<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate					<8				
Chloroethane	<1		<1	<1	<1	<1	<1	<1	<1
Chloroform	<1		<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1		<1	<1	<1	<1	<1	<1	<1
Chloroprene					<1				
Chromium, total	<8		<8	<8	<8	<8	<8	<8	<8
Chrysene					<8				
Cis-1,2-dichloroethylene	<1		<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1		<1	<1	<1	<1	<1	<1	<1
Cobalt, total	1.7	1.5	<.8	<.8	<.8	.8	.9	.5	.6
Copper, total	<4.0		<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Cyanide, total					<.005				
Delta-bhc					<.05				
Diallate					<8				
Dibenzo(a,h)anthracene					<8				
Dibenzofuran					<8				
Dibromochloromethane	<1		<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1		<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0		
Dieldrin					<.05				
Diethyl phthalate					<8				
Dimethoate					<.4				
Dimethylphthalate					<8				
Di-n-butyl phthalate					<8				
Di-n-octyl phthalate					<8				
Dinoseb					<.5				
Diphenylamine					<8				
Disulfoton					<.4				
Endosulfan i					<.05				
Endosulfan ii					<.05				
Endosulfan sulfate					<.05				
Endrin					<.05				
Endrin aldehyde					<.05				
Ethyl methacrylate					<10				
Ethyl methanesulfonate					<8				
Ethylbenzene	<1		<1	<1	<1	<1	<1	<1	<1
Famphur					<.4				
Fluoranthene					<8				
Fluorene					<8				
Gamma-bhc (lindane)					<.05				

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

Table 9

Analytical Data Summary for MW-6

Constituents	10/5/2021	4/4/2022	10/5/2022	4/14/2023	10/18/2023	4/8/2024	10/8/2024	4/3/2025	10/14/2025
Anthracene						<8			
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<1	<1
Arochlor 1016						<2			
Arochlor 1221						<2			
Arochlor 1232						<2			
Arochlor 1242						<2			
Arochlor 1248						<2			
Arochlor 1254						<2			
Arochlor 1260						<2			
Arsenic, total	<4	<4	<4	<4	<4	<4	<4	<2	<2
Azobenzene						<8			
Barium, total	497	521	551	133	431	171	519	415	590
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Benzo(a)anthracene						<8			
Benzo(a)pyrene						<8			
Benzo(b)fluoranthene						<8			
Benzo(g,h,i)perylene						<8			
Benzo(k)fluoranthene						<8			
Benzyl alcohol						<8			
Beryllium, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<.5	<.5
Beta-bhc						<.05			
Bis (2-chloroethoxy) methane						<8			
Bis(2-chloroethyl) ether						<8			
Bis(2-chloroisopropyl) ether						<8			
Bis(2-ethylhexyl) phthalate						32	<13		
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate						<8			
Cadmium, total	1.1	<.8	<.8	<.8	<.8	<.8	<.8	.3	<.2
Calcium, total									
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane						<.1			
Chloride									
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate						<8			
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene						<1			
Chromium, total	<8	<8	<8	<8	<8	<8	<8	<1	<1
Chrysene						<8			
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	4.1	.5	5.3	<.4	2.3	<.4	2.2	.5	3.3
Copper, total	<4.0	<4.0	6.9	<4.0	4.1	<4.0	<4.0	<5.0	<5.0
Cyanide, total						<.005			
Delta-bhc						<.05			
Diallate						<8			
Dibenzo(a,h)anthracene						<8			
Dibenzofuran						<8			
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane						<1.0			
Dieldrin						<.05			
Diethyl phthalate						<8			
Dimethoate						<.4			
Dimethylphthalate						<8			
Di-n-butyl phthalate						<8			
Di-n-octyl phthalate						<8			
Dinoseb						<.5			
Diphenylamine						<8			
Disulfoton						<.4			
Endosulfan i						<.05			
Endosulfan ii						<.05			
Endosulfan sulfate						<.05			
Endrin						<.05			
Endrin aldehyde						<.05			
Ethyl methacrylate						<10			
Ethyl methanesulfonate						<8			
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Famphur						<.4			
Fluoranthene						<8			
Fluorene						<8			
Gamma-bhc (lindane)						<.05			

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

Table 9

Analytical Data Summary for MW-6

Constituents	Units	3/30/2014	9/19/2014	9/30/2014	4/20/2015	7/9/2015	10/5/2015	4/5/2016	10/5/2016	4/4/2017
Heptachlor	ug/L	<.05								
Heptachlor epoxide	ug/L	<.05								
Hexachlorobenzene	ug/L	<4.03 *								
Hexachlorobutadiene	ug/L	<8								
Hexachlorocyclopentadiene	ug/L	<8								
Hexachloroethane	ug/L	<8								
Hexachloropropene	ug/L	<8								
Indeno(1,2,3-cd)pyrene	ug/L	<8								
Isobutanol	mg/L	<1								
Isodrin	ug/L	<8								
Isophorone	ug/L	<8								
Isosafrole	ug/L	<8								
Kepone	ug/L	<8								
Lead, total	ug/L	<4	<4		<4		<4	<4	<4	<4
Magnesium, total	mg/L									
Mercury, total	ug/L	<.5								
Methacrylonitrile	ug/L	<1								
Methapyriline	ug/L	<8								
Methoxychlor	ug/L	<.05								
Methyl iodide	ug/L	<1	<1		<1		<1	<1	<1	<1
Methyl methacrylate	ug/L	<1								
Methyl methanesulfonate	ug/L	<8								
Methyl parathion	ug/L	<.5								
Methylene chloride	ug/L	<5	<5		<5		<5	<5	<5	<5
Naphthalene	ug/L	<8								
Nickel, total	ug/L	13.8	54.6		14.6		7.7	5.5	<4.0	<4.0
Nitrobenzene	ug/L	<8								
N-nitrosodiethylamine	ug/L	<8								
N-nitrosodimethylamine	ug/L	<8								
N-nitrosodi-n-butylamine	ug/L	<8								
N-nitroso-di-n-propylamine	ug/L	<8								
N-nitrosodiphenylamine	ug/L	<8								
N-nitrosomethylethylamine	ug/L	<8								
N-nitrosopiperidine	ug/L	<8								
N-nitrosopyrrolidine	ug/L	<8								
O,o,o-triethyl phosphorothioate	ug/L	<.5								
O-toluidine	ug/L	<8								
Parathion	ug/L	<.5								
P-dimethylaminoazobenzene	ug/L	<8								
Pentachlorobenzene	ug/L	<8								
Pentachloronitrobenzene (pcnb)	ug/L	<8								
Pentachlorophenol	ug/L	<8								
Phenacetin	ug/L	<8								
Phenanthrene	ug/L	<8								
Phenol	ug/L	<8								
Phorate	ug/L	<.5								
Potassium, total	mg/L									
Pronamide	ug/L	<8								
Propionitrile	ug/L	<10								
Pyrene	ug/L	<8								
Safrole	ug/L	<8								
Selenium, total	ug/L	<4	<4		<4		<4	<4	<4	<4
Silver, total	ug/L	<4	<4		<4		<4	<4	<4	<4
Sodium, total	mg/L									
Solids, total dissolved	mg/L									
Solids, total suspended	mg/L		232		58					
Styrene	ug/L	<1	<1		<1		<1	<1	<1	<1
Sulfate	mg/L									
Sulfide, total	mg/L	<.1								
Tetrachloroethylene	ug/L	<1	<1		<1		<1	<1	<1	<1
Thallium, total	ug/L	<4.0	<4.0		<4.0		<4.0	<4.0	<4.0	<4.0
Thionazin	ug/L	<.5								
Tin, total	ug/L	<20								
Toluene	ug/L	<1	<1		<1		<1	<1	<1	<1
Toxaphene	ug/L	<.2								
Trans-1,2-dichloroethylene	ug/L	<1	<1		<1		<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1		<1		<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5		<5		<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1		<1		<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1		<1		<1	<1	<1	<1
Vanadium, total	ug/L	<20	<20		<20		<20	<20	<20	<20
Vinyl acetate	ug/L	<5	<5		<5		<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1		<1		<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2		<2		<2	<2	<2	<2
Zinc, total	ug/L	42.5	98.8		9.1		8.7	9.3	<8.0	<8.0

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

Table 9

Analytical Data Summary for MW-6

Constituents	10/3/2017	1/3/2018	4/10/2018	10/12/2018	4/16/2019	9/30/2019	4/7/2020	10/7/2020	4/22/2021
Heptachlor					<.05				
Heptachlor epoxide					<.05				
Hexachlorobenzene					<.05				
Hexachlorobutadiene					<8				
Hexachlorocyclopentadiene					<8				
Hexachloroethane					<8				
Hexachloropropene					<8				
Indeno(1,2,3-cd)pyrene					<8				
Isobutanol					<1				
Isodrin					<8				
Isophorone					<8				
Isosafrole					<8				
Kepone					<8				
Lead, total	<4		<4	<4	<4	<4	<4	<4	<4
Magnesium, total					31.8				
Mercury, total					<.5				
Methacrylonitrile					<1				
Methapyrilene					<8				
Methoxychlor					<.05				
Methyl iodide	<1		<1	<1	<1	<1	<1	<1	<1
Methyl methacrylate					<1				
Methyl methanesulfonate					<8				
Methyl parathion					<.4				
Methylene chloride	<5		<5	<5	<5	<5	<5	<5	<5
Naphthalene					<8				
Nickel, total	9.3	9.4	7.5	<4.0	<4.0	8.1	<4.0	<4.0	<4.0
Nitrobenzene					<8				
N-nitrosodiethylamine					<8				
N-nitrosodimethylamine					<8				
N-nitrosodi-n-butylamine					<8				
N-nitroso-di-n-propylamine					<8				
N-nitrosodiphenylamine					<8				
N-nitrosomethylethylamine					<8				
N-nitrosopiperidine					<8				
N-nitrosopyrrolidine					<8				
O,o,o-triethyl phosphorothioate					<.4				
O-toluidine					<8				
Parathion					<.4				
P-dimethylaminoazobenzene					<8				
Pentachlorobenzene					<8				
Pentachloronitrobenzene (pcnb)					<8				
Pentachlorophenol					<8				
Phenacetin					<8				
Phenanthrene					<8				
Phenol					<8				
Phorate					<.4				
Potassium, total					1				
Pronamide					<8				
Propionitrile					<10				
Pyrene					<8				
Safrole					<8				
Selenium, total	<4		<4	<4	<4	<4	<4	<4	<4
Silver, total	<4		<4	<8	<4	<4	<4	<4	<4
Sodium, total					10				
Solids, total dissolved					500				
Solids, total suspended									
Styrene	<1		<1	<1	<1	<1	<1	<1	<1
Sulfate					16.4				
Sulfide, total					<.1				
Tetrachloroethylene	<1		<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4.0		<4.0	<4.0	<2.0	<2.0	<2.0	<2.0	<2.0
Thionazin					<.4				
Tin, total					<20				
Toluene	<1		<1	<1	<1	<1	<1	<1	<1
Toxaphene					<.2				
Trans-1,2-dichloroethylene	<1		<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1		<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5		<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1		<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1		<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20		<20	<20	<20	<20	<20	<20	<20
Vinyl acetate	<5		<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1		<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2		<2	<2	<2	<2	<2	<2	<2
Zinc, total	<8.0		<20.0	<20.0	<8.0	<8.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-6

Constituents	10/5/2021	4/4/2022	10/5/2022	4/14/2023	10/18/2023	4/8/2024	10/8/2024	4/3/2025	10/14/2025
Heptachlor						<.05			
Heptachlor epoxide						<.05			
Hexachlorobenzene						<.05			
Hexachlorobutadiene						<8			
Hexachlorocyclopentadiene						<8			
Hexachloroethane						<8			
Hexachloropropene						<8			
Indeno(1,2,3-cd)pyrene						<8			
Isobutanol						<1			
Isodrin						<8			
Isophorone						<8			
Isosafrole						<8			
Kepone						<8			
Lead, total	<4	<4	<4	<4	<4	<4	<4	<1	<1
Magnesium, total									
Mercury, total						<.5			
Methacrylonitrile						<1			
Methapyrilene						<8			
Methoxychlor						<.05			
Methyl iodide	<1	<1	<1	<1	<1	<2	<1	<1	<1
Methyl methacrylate						<1			
Methyl methanesulfonate						<8			
Methyl parathion						<.4			
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene						<8			
Nickel, total	8.6	9.1	10.9	<4.0	10.0	<4.0	12.9	7.0	9.7
Nitrobenzene						<8			
N-nitrosodiethylamine						<8			
N-nitrosodimethylamine						<8			
N-nitrosodi-n-butylamine						<8			
N-nitroso-di-n-propylamine						<8			
N-nitrosodiphenylamine						<8			
N-nitrosomethylethylamine						<8			
N-nitrosopiperidine						<8			
N-nitrosopyrrolidine						<8			
O,o,o-triethyl phosphorothioate						<.4			
O-toluidine						<8			
Parathion						<.4			
P-dimethylaminoazobenzene						<8			
Pentachlorobenzene						<8			
Pentachloronitrobenzene (pcnb)						<8			
Pentachlorophenol						<8			
Phenacetin						<8			
Phenanthrene						<8			
Phenol						<8			
Phorate						<.4			
Potassium, total									
Pronamide						<8			
Propionitrile						<10			
Pyrene						<8			
Safrole						<8			
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<2	<2
Silver, total	<4	<4	<4	<4	<4	<4	<4	<5	<5
Sodium, total									
Solids, total dissolved									
Solids, total suspended									
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate									
Sulfide, total						<.3			
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<.5	<.5
Thionazin						<.4			
Tin, total						<20			
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene						<.2			
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20	<20	<20	<20	<20	<20	<20	<2	<2
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0	20.1	<20.0	<20.0	<20.0	<5.0	7.2

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

Table 10 – Historic SSI and SSL
(Not Required, MW-22 Included)

Table 10
Confidence Interval Assessment
Annual Water Quality Report
Jones County Sanitary Landfill
Permit No. 53-SDP-01-76C

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	95% UCL (ug/L)	GWPS Limit (ug/L)
MW-22	Arsenic	4/5/2016	<4	4.00	2	2	10
MW-22	Arsenic	4/4/2017	<4	4.00	2	2	10
MW-22	Arsenic	10/3/2017	<4	4.00	2	2	10
MW-22	Arsenic	4/10/2018	<4	4.00	2	2	10
MW-22	Arsenic	10/12/2018	<4	4.00	2	2	10
MW-22	Arsenic	4/16/2019	<4	4.00	2	2	10
MW-22	Arsenic	9/30/2019	<4	4.00	2	2	10
MW-22	Arsenic	4/7/2020	<4	4.00	2	2	10
MW-22	Arsenic	10/7/2020	<4	4.00	2	2	10
MW-22	Arsenic	4/22/2021	<4	4.00	2	2	10
MW-22	Arsenic	10/5/2021	<4	4.00	2	2	10
MW-22	Arsenic	4/4/2022	<4	4.00	2	2	10
MW-22	Arsenic	10/5/2022	<4	4.00	2	2	10
MW-22	Arsenic	4/14/2023	<4	4.00	2	2	10
MW-22	Arsenic	10/18/2023	<4	4.00	2	2	10
MW-22	Arsenic	4/8/2024	<4	4.00	2	2	10
MW-22	Arsenic	10/8/2024	<4	4.00	2	2	10
MW-22	Arsenic	4/3/2025	<2	4.00	2	2	10
MW-22	Arsenic	10/14/2025	<2	4.00	2	2	10

Table 10
Confidence Interval Assessment
Annual Water Quality Report
Jones County Sanitary Landfill
Permit No. 53-SDP-01-76C

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	95% UCL (ug/L)	GWPS Limit (ug/L)
MW-22	Cobalt	4/5/2016	<0.8	0.80	0.4	0.4	2.8
MW-22	Cobalt	4/4/2017	<0.8	0.80	0.4	0.4	2.8
MW-22	Cobalt	10/3/2017	<0.8	0.80	0.4	0.4	2.8
MW-22	Cobalt	4/10/2018	<0.8	0.80	0.4	0.4	2.8
MW-22	Cobalt	10/12/2018	<0.8	0.80	0.4	0.4	2.1
MW-22	Cobalt	4/16/2019	<0.8	0.80	0.4	0.4	2.1
MW-22	Cobalt	9/30/2019	<0.8	0.80	0.4	0.4	2.1
MW-22	Cobalt	4/7/2020	<0.4	0.80	0.4	0.4	2.1
MW-22	Cobalt	10/7/2020	<0.4	0.80	0.4	0.4	2.1
MW-22	Cobalt	4/22/2021	<0.4	0.80	0.2	0.2	2.1
MW-22	Cobalt	10/5/2021	<0.4	0.80	0.2	0.2	2.1
MW-22	Cobalt	4/4/2022	<0.4	0.80	0.2	0.2	2.1
MW-22	Cobalt	10/5/2022	2.5	2.60	0.000	2.160	2.6
MW-22	Cobalt	4/14/2023	<0.4	2.60	0.000	2.160	2.6
MW-22	Cobalt	10/18/2023	<0.4	2.60	0.000	2.160	2.6
MW-22	Cobalt	4/8/2024	<0.4	2.60	0.000	2.160	2.6
MW-22	Cobalt	10/8/2024	0.5	2.60	0.200	0.200	2.6
MW-22	Cobalt	4/3/2025	<0.5	2.60	0.250	0.250	2.6
MW-22	Cobalt	10/14/2025	<0.5	2.60	0.250	0.250	2.6

Table 10
Confidence Interval Assessment
Annual Water Quality Report
Jones County Sanitary Landfill
Permit No. 53-SDP-01-76C

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	95% UCL (ug/L)	GWPS Limit (ug/L)
MW-22	Benzene	4/5/2016	<1	1.0	0.5	0.5	5
MW-22	Benzene	4/4/2017	<1	1.0	0.5	0.5	5
MW-22	Benzene	10/3/2017	<1	1.0	0.5	0.5	5
MW-22	Benzene	4/10/2018	<1	1.0	0.5	0.5	5
MW-22	Benzene	10/12/2018	<1	1.0	0.5	0.5	5
MW-22	Benzene	4/16/2019	<1	1.0	0.5	0.5	5
MW-22	Benzene	9/30/2019	<1	1.0	0.5	0.5	5
MW-22	Benzene	4/7/2020	<1	1.0	0.5	0.5	5
MW-22	Benzene	10/7/2020	<1	1.0	0.5	0.5	5
MW-22	Benzene	4/22/2021	<1	1.0	0.5	0.5	5
MW-22	Benzene	10/5/2021	<1	1.0	0.5	0.5	5
MW-22	Benzene	4/4/2022	<1	1.0	0.5	0.5	5
MW-22	Benzene	10/5/2022	<1	1.0	0.5	0.5	5
MW-22	Benzene	4/14/2023	<1	1.0	0.5	0.5	5
MW-22	Benzene	10/18/2023	<1	1.0	0.5	0.5	5
MW-22	Benzene	4/8/2024	<1	1.0	0.5	0.5	5
MW-22	Benzene	10/8/2024	<1	1.0	0.5	0.5	5
MW-22	Benzene	4/3/2025	<1	1.0	0.5	0.5	5
MW-22	Benzene	10/14/2025	<1	1.0	0.5	0.5	5

Table 11 – Corrective Action Trend Analysis
(Not Required)

Table 12 – CAMP Methane, Ethane, Ethene, Alkalinity, and pH over time

Table 12
Methane, Ethane, Ethene, Alkalinity, and pH over Time
Annual Water Quality Report
Jones County Sanitary Landfill
Permit No. 53-SDP-01-76C

Sample Date	Methane	Ethane	Ethene	Alkalinity	pH
	MW-15	MW-15	MW-15	MW-15	MW-15
	mg/L	mg/L	mg/L	ug/L	ug/L
4/16/2019					
9/30/2019	5.64	<0.005	<0.005	562	
10/7/2020	7.15	<0.010	<0.010	451	6.6
4/22/2021				467	6.5
10/5/2021	0.514	<0.00828	<0.00773	445	6.6
4/4/2022	2.57	<0.00828	<0.00773	551	6.6
4/14/2023	1.67	<0.007	<0.010	422	6.4
4/8/2024				397	6.6
10/8/2024	3.15	<0.005	<0.005	394	6.8
4/3/2025	2.65	<0.005	<0.005	438	6.4

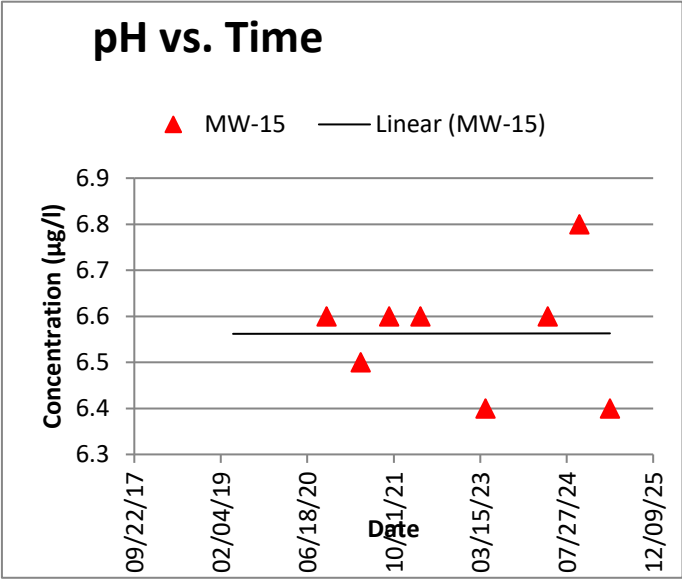
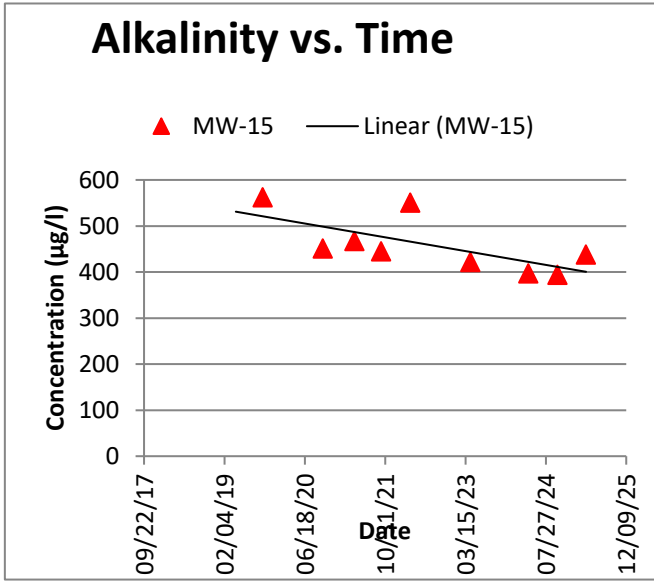
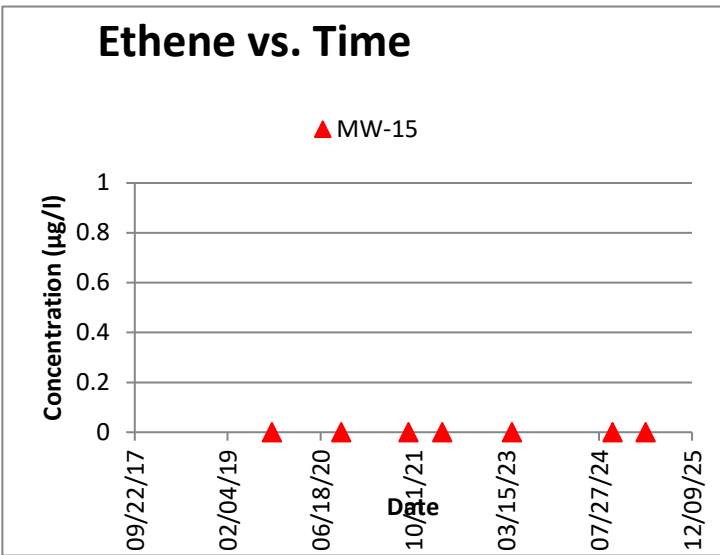
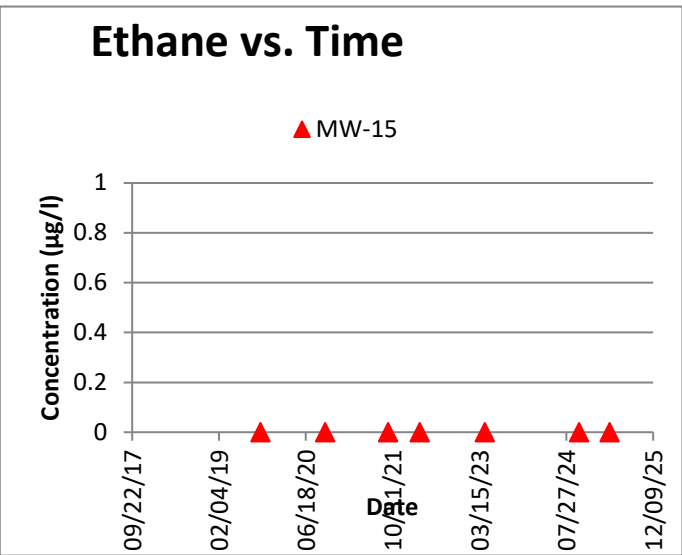
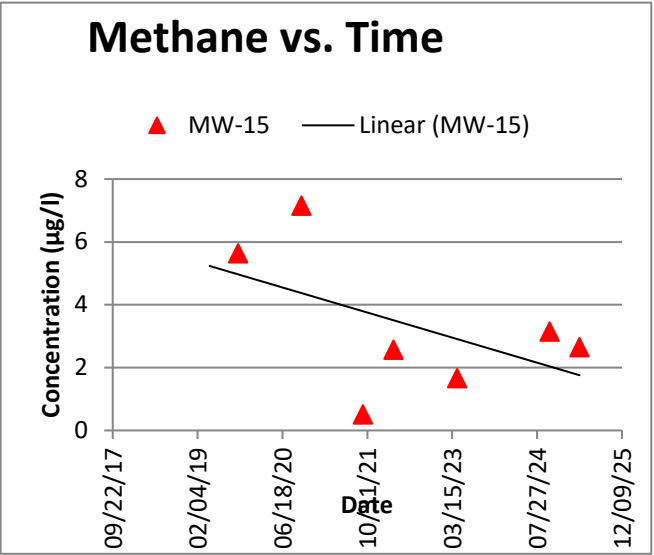


Table 13 – Leachate Summary

Table 13
Leachate Evaluation Report
Jones County Sanitary Landfill
Permit No. 53-SDP-01-76C

LPZ-6

Date	Top Casing Elevation	Depth to Liquid (ft)	Leachate Elevation	Landfill Base Elevation	Thickness Leachate (ft)
3/30/2014	979.7	17	962.7	957.55	5.15
9/19/2014	979.7	16.58	963.12	957.55	5.57
3/20/2015	979.7	18.35	961.35	957.55	3.8
4/20/2015	979.7	18.49	961.21	957.55	3.66
7/9/2015	979.7	16.9	962.8	957.55	5.25
10/5/2015	979.7	18.4	961.3	957.55	3.75
2/25/2016	979.7	18.67	961.03	957.55	3.48
4/5/2016	979.7	16.8	962.9	957.55	5.35
7/12/2016	979.7	16.7	963	957.55	5.45
10/5/2016	979.7	16.87	962.83	957.55	5.28
1/11/2017	979.7	18.2	961.5	957.55	3.95
4/4/2017	979.7	13.95	965.75	957.55	8.2
7/10/2017	979.7	15.4	964.3	957.55	6.75
10/3/2017	979.7	18.4	961.3	957.55	3.75
1/3/2018	979.7	22.2	957.5	957.55	-0.05
4/10/2018	979.7	15.55	964.15	957.55	6.6
7/12/2018	979.7	17.05	962.65	957.55	5.1
10/12/2018	979.7	15.52	964.18	957.55	6.63
3/21/2019	979.7	13.9	965.8	957.55	8.25
4/14/2019	979.7	17.03	962.67	957.55	5.12
9/30/2019	979.7	15.4	964.3	957.55	6.75
12/20/2019	979.7	16.63	963.07	957.55	5.52
1/30/2020	979.7	NR	NR	957.55	NR
4/7/2020	979.7	15.45	964.25	957.55	6.7
8/3/2020	979.7	18	961.7	957.55	4.15
10/7/2020	979.7	17.1	962.6	957.55	5.05
1/8/2021	979.7	14.1	965.6	957.55	8.05
4/22/2021	979.7	16.6	963.1	957.55	5.55
10/5/2021	979.7	22.45	957.25	957.55	-0.3
4/4/2022	979.7	13.3	966.4	957.55	8.85
10/5/2022	979.7	18	961.7	957.55	4.15
4/14/2023	979.7	15.65	964.05	957.55	6.5
10/18/2023	979.7	17.3	962.4	957.55	4.85
4/8/2024	979.7	15.66	964.04	957.55	6.49
10/8/2024	979.7	18.11	961.59	957.55	4.04
4/3/2025	979.7	13.8	965.9	957.55	8.35
10/14/2025	979.7	18	961.7	957.55	4.15

Table 14 – Gas Monitoring Summary

Table 14
Annual Methane Gas Evaluation Report
Jones County Sanitary Landfill
Permit No. 53-SDP-01-76C

Location/Date	4/3/25		10/14/25	
	% LEL	Exposed Screen	% LEL	Exposed Screen
#1	0*	---	0*	---
#2	0*	---	0*	---
#3	0*	---	0*	---
#4	0*	---	0*	---
#5	0*	---	0*	---
Equipment Bldg	0	---	0	---
Office - Shop	0	---	0	---
MW-6**	0	---	0	---
MW-6 Top of Screen Elevation	995.93	---	995.93	---
MW-6 Water Elevation	996.16	---	989.06	---
MW-6 Exposed Screen (ft)**	-0.23	no	6.87	yes
MW-11**	0		0	
MW-11 Top of Screen Elevation	1007.83		1007.83	
MW-11 Water Elevation	1000.03		997.54	
MW-11 Exposed Screen (ft)	7.8	yes	10.29	yes
GP-1 (bottom 2.0 ft is screen)	0	yes - dry probe	0	yes - dry probe
GP-2 (bottom 4.5 ft is screen)	0	yes - dry probe	0	yes - dry probe
GP-3 (bottom 5.0 ft is screen)	62.5	yes - dry probe	0	yes - dry probe
GP-4 (bottom 3.5 ft is screen)	0	yes - dry probe	0	yes - dry probe

*Explosive gas concentrations were recorded in the breathing zone continuously. The concentrations are reported at each reference location for ease in presentation of data.

**Headspace in monitoring wells was monitored. A negative value for exposed screen indicates that the static water elevation was above the screen.

Appendix A

Field Sampling Forms

JONES COUNTY SANITARY LANDFILL
PERMIT # 53-SDP-01-76

4/3/2025

Sampled by: Todd Whipple

Weather conditions:

Partly cloudy, slight breeze, 40 degrees

IDNR Form 542-1322

Monitoring Well: MW 6 (dg)

Primary Sampling Method:

Secondary Sampling Method:

No-Purge for Appendix I

Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	1012.71
Well Depth	36.78
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1012.71
Well Depth	36.78
Top Screen	995.93
Bottom Screen	975.93
Bottom Well	975.93
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	31.00
Top sample	981.71
Bottom sample	977.71
Turbidity(NTU)	2.14

Date	Time	Water Level	Water Elevation	Notes
4/3/2025	10:19	16.55	996.16	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		2.14
Appendix I	Metals	150	150		2.14
Appendix I	VOC	240	240		2.14
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	1 - qt			
Supplemental					
Total			400	0	

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

TOC	1012.71	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	36.78	Before purging	4/3/2025	10:19	16.55	996.16		0.0	
		After purging				1012.71			
		Top of Screen				995.93			
						16.78			feet above (+) or below (-) top screen
		Bottom of Well				975.93			
		Bottom of Well	4/3/2025		36.65	976.06			
						0.13			feet sedimentation
		Before Sampling				1012.71			
		Recovery				1012.71			
		Recovery				1012.71			
		Recovery				1012.71			
		Recovery				1012.71			

IDNR Form 542-1322

Monitoring Well: MW 11 (dg)

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

GENERAL INFORMATION

TOC	1019.23
Well Depth	26.40
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1019.23
Well Depth	26.40
Top Screen	1007.83
Bottom Screen	992.83
Bottom Well	992.83
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	21.00
Top sample	998.23
Bottom sample	994.23
Turbidity(NTU)	2.77

Date	Time	Water Level	Water Elevation	Notes
4/3/2025	9:52	19.2	1000.03	

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		2.77
Appendix I	Metals	150	150		2.77
Appendix I	VOC	240	240		2.77
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	1 - qt			
Supplemental					
Total			400	0	

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

TOC	1019.23	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	24.89	Before purging	4/3/2025	9:52	19.20	1000.03		0.0	
		After purging				1019.23			
		Top of Screen				1007.83			
						11.40			feet above (+) or below (-) top screen
		Bottom of Well				992.83			
		Bottom of Well	4/3/2025		26.35	992.88			
						0.05			feet sedimentation
		Before Sampling				1019.23			
		Recovery				1019.23			
		Recovery				1019.23			
		Recovery				1019.23			
		Recovery				1019.23			

Monitoring Well: MW 12 (up)

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

GENERAL INFORMATION

TOC	1018.98
Well Depth	47.87
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	1018.98
Well Depth	47.87
Top Screen	981.11
Bottom Screen	971.11
Bottom Well	971.11
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	41.50
Top sample	977.48
Bottom sample	973.48
Turbidity(NTU)	2.04

Date	Time	Water Level	Water Elevation	Notes
4/3/2025	9:47	19.35	999.63	

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		2.04
Appendix I	Metals	150	150		2.04
Appendix I	VOC	240	240		2.04
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	1 - qt			
Supplemental					
Total			400	0	

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

TOC	1018.98	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	47.87	Before purging	4/3/2025	9:47	19.35	999.63		0.0	
		After purging				1018.98			
		Top of Screen				981.11			
						37.87	feet above (+) or below (-) top screen		
		Bottom of Well				971.11			
		Bottom of Well	4/3/2025		47.70	971.28			
						0.17	feet sedimentation		
		Before Sampling				1018.98			
		Recovery				1018.98			
		Recovery				1018.98			
		Recovery				1018.98			
		Recovery				1018.98			

IDNR Form 542-1322

Monitoring Well: MW 15 (dg)

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

GENERAL INFORMATION

TOC	964.04
Well Depth	29.81
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	964.04
Well Depth	29.81
Top Screen	944.40
Bottom Screen	934.40
Bottom Well	934.40
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	24.00
Top sample	940.04
Bottom sample	936.04
Turbidity(NTU)	3.83

Date	Time	Water Level	Water Elevation	Notes
4/3/2025	11:29	11.8	952.24	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		3.83
Appendix I	Metals	150	150		3.83
Appendix I	VOC	240	240		3.83
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	Methane	1 - qt			
Supplemental					
Total			400	0	

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

TOC	964.04	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	29.81	Before purging	4/3/2025	11:29	11.8	952.24		0.0	
		After purging				964.04			
		Top of Screen				944.40			
						19.64	feet above (+) or below (-) top screen		
		Bottom of Well				934.40			
		Bottom of Well	4/3/2025		29.60	934.44			
						0.04	feet sedimentation		
		Before Sampling				964.04			
		Recovery				964.04			
		Recovery				964.04			
		Recovery				964.04			
		Recovery				964.04			

IDNR Form 542-1322

Monitoring Well: MW 16 (dg)

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

GENERAL INFORMATION

TOC	964.58
Well Depth	53.67
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	964.58
Well Depth	53.67
Top Screen	920.91
Bottom Screen	910.91
Bottom Well	910.91
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	47.50
Top sample	917.08
Bottom sample	913.08
Turbidity(NTU)	2.99

Date	Time	Water Level	Water Elevation	Notes
4/3/2025	11:14	18.42	946.16	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		2.99
Appendix I	Metals	150	150		2.99
Appendix I	VOC	240	240		2.99
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	1 - qt			
Supplemental					
Total			400	0	

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

	964.58	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	53.67	Before purging	4/3/2025	11:14	18.42	946.16		0.0	
		After purging				964.58			
		Top of Screen				920.91			
						43.67	feet above (+) or below (-) top screen		
		Bottom of Well				910.91			
		Bottom of Well	4/3/2025		53.60	910.98			
						0.07	feet sedimentation		
		Before Sampling				964.58			
		Recovery				964.58			
		Recovery				964.58			
		Recovery				964.58			
		Recovery				964.58			

Monitoring Well: MW 20 (dg)

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

GENERAL INFORMATION

TOC	977.6
Well Depth	18.10
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	977.6
Well Depth	18.10
Top Screen	969.50
Bottom Screen	959.50
Bottom Well	959.50
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	12.50
Top sample	965.10
Bottom sample	961.10
Turbidity(NTU)	1.95

Date	Time	Water Level	Water Elevation	Notes
4/3/2025	10:36	1.9	975.7	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		1.95
Appendix I	Metals	150	150		1.95
Appendix I	VOC	240	240		1.95
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	1 - qt			
Supplemental					
Total			400	0	

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

TOC	977.6	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	18.10	Before purging	4/3/2025	10:36	1.90	975.70		0.0	
		After purging				977.60			
		Top of Screen				969.50			
						8.10			feet above (+) or below (-) top screen
		Bottom of Well				959.50			
		Bottom of Well	4/3/2025		18.00	959.60			
						0.10			feet sedimentation
		Before Sampling				977.60			
		Recovery				977.60			
		Recovery				977.60			
		Recovery				977.60			
		Recovery				977.60			

IDNR Form 542-1322

Monitoring Well: MW 22 (dg)

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

GENERAL INFORMATION

TOC	950.92
Well Depth	19.50
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	950.92
Well Depth	19.50
Top Screen	941.42
Bottom Screen	931.42
Bottom Well	931.42
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	14.00
Top sample	936.92
Bottom sample	932.92
Turbidity(NTU)	1.87

Date	Time	Water Level	Water Elevation	Notes
4/3/2025	11:01	5.35	945.57	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		1.87
Appendix I	Metals	150	150		1.87
Appendix I	VOC	240	240		1.87
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	1 - qt			
Supplemental					
Total			400	0	

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

TOC	950.92	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	19.50	Before purging	4/3/2025	11:01	5.35	945.57		0.0	
		After purging				950.92			
		Top of Screen				941.42			
						9.50			feet above (+) or below (-) top screen
		Bottom of Well				931.42			
		Bottom of Well	4/3/2025		19.4	931.52			
						0.10			feet sedimentation
		Before Sampling				950.92			
		Recovery				950.92			
		Recovery				950.92			
		Recovery				950.92			
		Recovery				950.92			

4/3/2025

Well	Top PVC Elevation	Depth to water (ft)	Water Elevation
MW 4	1011.36	14.85	996.51
MW 18	999.46	11.95	987.51
MW 19	988.53	29.11	959.42
MW 21	943.1	4	939.1

Leachate Piezometer	Top PVC Elevation	Depth to Leachate (ft)	Leachate Elevation	Depth to Bottom (ft)
LPZ-6	980.57	13.8	966.77	27.3

JONES COUNTY SANITARY LANDFILL
PERMIT # 53-SDP-01-76

7/14/2025

Sampled by: Todd Whipple

Weather conditions: foggy, calm, 75 degrees

IDNR Form 542-1322

Monitoring Well: MW 16 (dg)

Primary Sampling Method:

Secondary Sampling Method:

No-Purge for Appendix I

Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	964.58
Well Depth	53.67
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	964.58
Well Depth	53.67
Top Screen	920.91
Bottom Screen	910.91
Bottom Well	910.91
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	47.50
Top sample	917.08
Bottom sample	913.08
Turbidity(NTU)	3.59

Date	Time	Water Level	Water Elevation	Notes
7/14/2025	8:16	20.38	944.2	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		3.59
Appendix I	Metals	150	150		3.59
Appendix I	VOC	240	240		3.59
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	1 - qt			
Supplemental					
Total			400	0	

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

	964.58	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	53.67	Before purging	7/14/2025	8:16	20.38	944.20		0.0	
		After purging				964.58			
		Top of Screen				920.91			
						43.67			feet above (+) or below (-) top screen
		Bottom of Well				910.91			
		Bottom of Well	7/14/2025		53.60	910.98			
						0.07			feet sedimentation
		Before Sampling				964.58			
		Recovery				964.58			
		Recovery				964.58			
		Recovery				964.58			
		Recovery				964.58			

JONES COUNTY SANITARY LANDFILL
PERMIT # 53-SDP-01-76

10/14/2025

Sampled by: Todd Whipple

Weather conditions:

Overcast, breezy, 50 degrees

IDNR Form 542-1322

Monitoring Well: MW 6 (dg)

Primary Sampling Method:

Secondary Sampling Method:

No-Purge for Appendix I

Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	1012.71
Well Depth	36.78
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1012.71
Well Depth	36.78
Top Screen	995.93
Bottom Screen	975.93
Bottom Well	975.93
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	31.00
Top sample	981.71
Bottom sample	977.71
Turbidity(NTU)	1.91

Date	Time	Water Level	Water Elevation	Notes
10/14/2025	11:58	23.65	989.06	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		1.91
Appendix I	Metals	150	150		1.91
Appendix I	VOC	240	240		1.91
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	1 - qt			
Supplemental					
Total			400	0	

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

TOC	1012.71	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	36.78	Before purging	10/14/2025	11:58	23.65	989.06		0.0	
		After purging				1012.71			
		Top of Screen				995.93			
						16.78			feet above (+) or below (-) top screen
		Bottom of Well				975.93			
		Bottom of Well	10/14/2025		36.65	976.06			
						0.13			feet sedimentation
		Before Sampling				1012.71			
		Recovery				1012.71			
		Recovery				1012.71			
		Recovery				1012.71			
		Recovery				1012.71			

IDNR Form 542-1322

Monitoring Well: MW 11 (dg)

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

GENERAL INFORMATION

TOC	1019.23
Well Depth	26.40
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1019.23
Well Depth	26.40
Top Screen	1007.83
Bottom Screen	992.83
Bottom Well	992.83
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	21.70
Top sample	997.53
Bottom sample	993.53
Turbidity(NTU)	9.00

Date	Time	Water Level	Water Elevation	Notes
10/14/2025	11:30	21.69	997.54	

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		9.00
Appendix I	Metals	150	150		9.00
Appendix I	VOC	240	240		9.00
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	1 - qt			
Supplemental					
Total			400	0	

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

TOC	1019.23	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	24.89	Before purging	10/14/2025	11:30	21.69	997.54		0.0	
		After purging				1019.23			
		Top of Screen				1007.83			
						11.40			feet above (+) or below (-) top screen
		Bottom of Well				992.83			
		Bottom of Well	10/14/2025		26.35	992.88			
						0.05			feet sedimentation
		Before Sampling				1019.23			
		Recovery				1019.23			
		Recovery				1019.23			
		Recovery				1019.23			
		Recovery				1019.23			

IDNR Form 542-1322

Monitoring Well: MW 12 (up)

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

GENERAL INFORMATION

TOC	1018.98
Well Depth	47.87
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	1018.98
Well Depth	47.87
Top Screen	981.11
Bottom Screen	971.11
Bottom Well	971.11
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	42.00
Top sample	976.98
Bottom sample	972.98
Turbidity(NTU)	1.16

Date	Time	Water Level	Water Elevation	Notes
10/14/2025	11:40	21.5	997.48	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		1.16
Appendix I	Metals	150	150		1.16
Appendix I	VOC	240	240		1.16
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	1 - qt			
Supplemental					
Total			400	0	

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

TOC	1018.98	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	47.87	Before purging	10/14/2025	11:40	21.50	997.48		0.0	
		After purging				1018.98			
		Top of Screen				981.11			
						37.87	feet above (+) or below (-) top screen		
		Bottom of Well				971.11			
		Bottom of Well	10/14/2025		47.70	971.28			
						0.17	feet sedimentation		
		Before Sampling				1018.98			
		Recovery				1018.98			
		Recovery				1018.98			
		Recovery				1018.98			
		Recovery				1018.98			

IDNR Form 542-1322

Monitoring Well: MW 15 (dg)

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

GENERAL INFORMATION

TOC	964.04
Well Depth	29.81
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	964.04
Well Depth	29.81
Top Screen	944.40
Bottom Screen	934.40
Bottom Well	934.40
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	24.00
Top sample	940.04
Bottom sample	936.04
Turbidity(NTU)	3.36

Date	Time	Water Level	Water Elevation	Notes
10/14/2025	13:17	11.4	952.64	

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		3.36
Appendix I	Metals	150	150		3.36
Appendix I	VOC	240	240		3.36
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	Methane	1 - qt			
Supplemental					
Total			400	0	

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

TOC	964.04	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	29.81	Before purging	10/14/2025	13:17	11.4	952.64		0.0	
		After purging				964.04			
		Top of Screen				944.40			
						19.64	feet above (+) or below (-) top screen		
		Bottom of Well				934.40			
		Bottom of Well	10/14/2025		29.60	934.44			
						0.04	feet sedimentation		
		Before Sampling				964.04			
		Recovery				964.04			
		Recovery				964.04			
		Recovery				964.04			
		Recovery				964.04			

Monitoring Well: MW 16 (dg)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	964.58
Well Depth	53.67
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	964.58
Well Depth	53.67
Top Screen	920.91
Bottom Screen	910.91
Bottom Well	910.91
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	48.00
Top sample	916.58
Bottom sample	912.58
Turbidity(NTU)	1.47

Date	Time	Water Level	Water Elevation	Notes
10/14/2025	12:55	21.28	943.3	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		1.47
Appendix I	Metals	150	150		1.47
Appendix I	VOC	240	240		1.47
Full Appendix II	10 more containers	5620		5620	
TSS	TSS	1000			
Supplemental	BEHP	1 - qt			
Supplemental					
Total			400	5620	

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

	964.58	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	53.67	Before purging	10/14/2025	12:55	21.28	943.30	7	1.3	yes
		After purging	10/14/2025	13:14	50.60	913.98			
		Top of Screen				920.91			
						-6.93			feet above (+) or below (-) top screen
		Bottom of Well				910.91			
		Bottom of Well	10/14/2025		53.60	910.98			
						0.07			feet sedimentation
		Before Sampling				964.58			
		Recovery				964.58			
		Recovery				964.58			
		Recovery				964.58			
		Recovery				964.58			

Monitoring Well: MW 20 (dg)

Primary Sampling Method:

Secondary Sampling Method:

No-Purge for Appendix I

Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	977.6
Well Depth	18.10
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	977.6
Well Depth	18.10
Top Screen	969.50
Bottom Screen	959.50
Bottom Well	959.50
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	12.50
Top sample	965.10
Bottom sample	961.10
Turbidity(NTU)	0.96

Date	Time	Water Level	Water Elevation	Notes
10/14/2025	12:15	7.95	969.65	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		0.96
Appendix I	Metals	150	150		0.96
Appendix I	VOC	240	240		0.96
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	1 - qt			
Supplemental					
Total			400	0	

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

TOC	977.6	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	18.10	Before purging	10/14/2025	12:15	7.95	969.65		0.0	
		After purging				977.60			
		Top of Screen				969.50			
						8.10	feet above (+) or below (-) top screen		
		Bottom of Well				959.50			
		Bottom of Well	10/14/2025		18.00	959.60			
						0.10	feet sedimentation		
		Before Sampling				977.60			
		Recovery				977.60			
		Recovery				977.60			
		Recovery				977.60			
		Recovery				977.60			

Monitoring Well: MW 22 (dg)

Primary Sampling Method:
Secondary Sampling Method:

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

GENERAL INFORMATION

TOC	950.92
Well Depth	19.50
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	950.92
Well Depth	19.50
Top Screen	941.42
Bottom Screen	931.42
Bottom Well	931.42
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	14.00
Top sample	936.92
Bottom sample	932.92
Turbidity(NTU)	1.72

Date	Time	Water Level	Water Elevation	Notes
10/14/2025	12:35	11.93	938.99	

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		1.72
Appendix I	Metals	150	150		1.72
Appendix I	VOC	240	240		1.72
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	1 - qt			
Supplemental					
Total			400	0	

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

TOC	950.92	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	19.50	Before purging	10/14/2025	12:35	11.93	938.99		0.0	
		After purging				950.92			
		Top of Screen				941.42			
						9.50	feet above (+) or below (-) top screen		
		Bottom of Well				931.42			
		Bottom of Well	10/14/2025		19.4	931.52			
						0.10	feet sedimentation		
		Before Sampling				950.92			
		Recovery				950.92			
		Recovery				950.92			
		Recovery				950.92			
		Recovery				950.92			

10/14/2025

Well	Top PVC Elevation	Depth to water (ft)	Water Elevation
MW 4	1011.36	16.2	995.16
MW 18	999.46	11.1	988.36
MW 19	988.53	28.81	959.72
MW 21	943.1	10.77	932.33

Leachate Piezometer	Top PVC Elevation	Depth to Leachate (ft)	Leachate Elevation	Depth to Bottom (ft)
LPZ-6	980.57	18	962.57	27.3

JONES COUNTY SANITARY LANDFILL
PERMIT # 53-SDP-01-76

12/16/2025

Sampled by: Glenn Hunter

Weather conditions:

Sunny, 27 degrees

IDNR Form 542-1322

Monitoring Well: MW 11 (dg)

Primary Sampling Method:

Secondary Sampling Method:

No-Purge for Appendix I

Purge & Sample for all analytes beyond Appendix I

GENERAL INFORMATION

TOC	1019.23
Well Depth	26.40
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1019.23
Well Depth	26.40
Top Screen	1007.83
Bottom Screen	992.83
Bottom Well	992.83
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	22.00
Top sample	997.23
Bottom sample	993.23
Turbidity(NTU)	3.49

Date	Time	Water Level	Water Elevation	Notes
12/16/2025	12:07	22.55	996.68	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		3.49
Appendix I	Metals	150	150		3.49
Appendix I	VOC	240	240		3.49
Full Appendix II	10 more containers	5620			
TSS	TSS	1000			
Supplemental	BEHP	1 - qt			
Supplemental					
Total			400	0	

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

TOC	1019.23	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	24.89	Before purging	12/16/2025	12:07	22.55	996.68		0.0	
		After purging				1019.23			
		Top of Screen				1007.83			
						11.40			feet above (+) or below (-) top screen
		Bottom of Well				992.83			
		Bottom of Well	12/16/2025		26.35	992.88			
						0.05			feet sedimentation
		Before Sampling				1019.23			
		Recovery				1019.23			
		Recovery				1019.23			
		Recovery				1019.23			
		Recovery				1019.23			

Appendix B

Statistical Reports

Appendix B.1 – Spring Statistical Evaluation Report

GROUND WATER STATISTICS

FOR THE

JONES COUNTY SANITARY LANDFILL

First Semi-Annual Monitoring Event in 2025

Prepared for:
Jones County Solid Waste Management
13859 Edinburgh Road
Anamosa, IA

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

June 2025

INTRODUCTION

This report summarizes the results of the statistical analysis used to evaluate the ground water quality data obtained during the first semi-annual monitoring event in 2025 at the Jones County Sanitary Landfill in Anamosa, Iowa. The statistical plan was designed to detect a release from the facility at the earliest indication so that it is protective of human health and the environment. The interwell methodology is described and then applied to the Jones County Sanitary 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 Jones County Landfill includes upgradient well MW-12 and downgradient detection sample points MW-11, MW-15, MW-16, MW-20, MW-22, and MW-6. Each of the groundwater monitoring wells is to be sampled at least semiannually and analyzed for the detection monitoring parameters listed in 113.10(5), which includes 15 inorganic constituents and 47 organic compounds, summarized in Table 1 below.

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

Organic Compounds:

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

Inorganic constituents:

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

The ground water data obtained during the first semi-annual monitoring event in 2025 are summarized in Attachment A.

STATISTICAL METHODOLOGIES FOR DETECTION MONITORING

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

Interwell Statistics: Upgradient versus Downgradient Comparisons

Interwell statistics are appropriate when the upgradient and downgradient wells monitor the same ground water formation and there is similar variability in the upgradient and downgradient zones. Site prediction limits are determined by pooling the historical ground water data from hydraulically upgradient wells. This statistical method compares the current downgradient determinations to site prediction limits and checks for exceedances. The type of prediction limit utilized (e.g., parametric or nonparametric) is based on the detection frequency and the data distribution of each parameter in the background data. The distribution of the background data is tested for normality using the Shapiro-Wilk test (Gibbons, 1994 and USEPA 1992). If the constituent is normally distributed, a normal prediction limit is used. If normality is rejected by the Shapiro-Wilk test, the background data is transformed by taking the natural logarithm. The Shapiro-Wilk test is then reapplied on the transformed data. If it is not rejected, lognormal prediction limits are used. If after transforming the data, normality is still rejected, nonparametric prediction limits are used for that analyte. The nonparametric prediction limit is the largest determination in the background measurements. For constituents where the background detection frequency is greater than 0% but less than 50%, nonparametric prediction limits will be used. If the detection frequency is 0% after eight samples have been collected, the practical quantitation limit (PQL) becomes the nonparametric prediction limit. As an alternative to nonparametric prediction limits, Poisson prediction limits can be used for small data sets where the detection frequency is less than 25%.

Results of the Interwell Statistics

The background data used in this statistical analysis includes the ground water data collected from ground water well MW-12 during the period from 2015 through the current data. A summary of the background data from monitoring well MW-12 used to determine the site prediction limits, is listed in Attachment B, Table 1 “Upgradient Data”. This statistical method compares the current downgradient determinations to site prediction limits and checks for exceedances.

Table 2 “Most Current Downgradient Monitoring Data”, summarizes the current data from downgradient wells MW-11, MW-15, MW-16, MW-20, MW-22, and MW-6, 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.

Summary of Prediction Limit Exceedances for the First Semi-Annual Monitoring Event in 2025

Well	Trace Metal	Result	Prediction Limit	Prediction Limit Type	Verified or Awaiting Verification
MW-15	Arsenic, µg/L	157	4.0000	Nonparametric	Verified
	Barium, µg/L	963	314.0158	Normal	Verified
	Cobalt, µg/L	13.0	2.6000	Nonparametric	Verified
	Nickel, µg/L	58.2	13.4000	Nonparametric	Verified
MW-16	Zinc, µg/L	28.3	27.2000	Nonparametric	Awaiting Verification
MW-6	Barium, µg/L	415	314.0158	Normal	Verified

The detection frequencies of the parameters in the up and down gradient monitoring wells are summarized in Table 3. With the exception of barium, these constituents are rarely detected in the upgradient wells. With the detection frequencies being less than 50% for all but barium, nonparametric site prediction limits are used for those trace metals.

Table 4 summarizes the results of the Shapiro-Wilk test. Table 5 is a summary of the statistics and prediction limits determined for the metals. Table 8 is a historical summary of the data at those wells that have indicated an exceedance. 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 7% and the test becomes sensitive to 4 standard deviation unit increases over background.

The verified exceedances were evaluated against the ground water protection standards (GWPS) using confidence limits. The 95% lower confidence limit (LCL) for the mean of the historical data was used to evaluate whether the regulated unit is in compliance with the ground-water protection standards under 40 CFR 264 (e.g. whether the verified constituent is detected at a significant level above the GWPS). An exceedance is verified if the LCL is above the Regulatory GWPS.

The 95% LCL for arsenic at MW-15 (139.891 µg/L) exceeds the USEPA MCL of 10 µg/L. The 95% LCL for cobalt at MW-15 (13.060 µg/L) exceeds the Iowa Statewide Standard of 2.1 µg/L. The calculated LCLs for the remainder of the verified trace metals are below 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 Jones County Sanitary Landfill during the first semi-annual monitoring event in 2025 are summarized below. Historical VOC detections are summarized in Attachment C.

Organic compounds detected during the first semi-annual monitoring event in 2025

Well	VOC Detected	Result, µg/L	Reporting Limit, µg/L	Verified/ Awaiting Verification	Groundwater Standard, µg/L
MW-15	1,4-Dichlorobenzene	1.7	1	Verified	75 ^a
	Benzene	4.0	1	Verified	5 ^a
	Chlorobenzene	5.7	1	Verified	100 ^a
	Chloroethane	5.4	1	Verified	2,800 ^b

a - USEPA MCL

b – Iowa Statewide Standard

The verified VOC detections were evaluated against the GWPS using confidence limits (Attachment D). The calculated 95% LCLs of the verified VOCs are below GWPS.

CONCLUSIONS

This report summarizes the statistical analyses used to evaluate the ground water data obtained during the first semi-annual monitoring event in 2025 at Jones County Sanitary Landfill. The ground water data obtained during the first semi-annual monitoring event in 2025 was compared to background using prediction limits (interwell). For the most current data, there are verified site prediction limit exceedances detected for arsenic, barium, cobalt, and nickel at MW-15 and barium at MW-6.

The VOCs were compared to MCLs or PQLs, in lieu of statistical comparisons to historical concentrations. There are verified detections of 1,4-dichlorobenzene, benzene, chlorobenzene, and chloroethane at MW-15.

Attachment A

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

Table 1

Analytical Data Summary for 4/3/2025

Constituents	Units	MW-11	MW-12	MW-15	MW-16	MW-20	MW-22	MW-6
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<5	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1.0	<1.0	1.7	<1.0	<1.0	<1.0	<1.0
2-butanone (mek)	ug/L	<10	<10	<10	<10	<10	<10	<10
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5
Alkalinity, as cacO3	mg/L			438				
Antimony, total	ug/L	<1	<1	<1	<1	<1	<1	<1
Arsenic, total	ug/L	<2	<2	157	<2	<2	<2	<2
Barium, total	ug/L	305.0	264.0	963.0	87.9	92.1	160.0	415.0
Benzene	ug/L	<1	<1	4	<1	<1	<1	<1
Beryllium, total	ug/L	<.5	<.5	<.5	<.5	<.5	<.5	<.5
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Cadmium, total	ug/L	<.2	<.2	<.2	<.2	<.2	<.2	.3
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<1.0	<1.0	5.7	<1.0	<1.0	<1.0	<1.0
Chloroethane	ug/L	<1.0	<1.0	5.4	<1.0	<1.0	<1.0	<1.0
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Chromium, total	ug/L	2.3	<1.0	1.2	<1.0	<1.0	1.8	<1.0
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	<.5	<.5	13.0	<.5	<.5	<.5	.5
Copper, total	ug/L	<5	<5	<5	<5	<5	<5	<5
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Ethane	ug/L			<5				
Ethene	ug/L			<5				
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Lead, total	ug/L	<1	<1	<1	<1	<1	<1	<1
Methane	ug/L			2650				
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	<5.0	<5.0	58.2	6.0	<5.0	<5.0	7.0
pH	pH			6.4				
Selenium, total	ug/L	<2.0	<2.0	<2.0	<2.0	<2.0	2.1	<2.0
Silver, total	ug/L	<5	<5	<5	<5	<5	<5	<5
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<.5	<.5	<.5	<.5	<.5	<.5	<.5
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<2	<2	<2	<2	<2	<2	<2
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	13.0	7.1	<5.0	28.3	<5.0	5.8	<5.0

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

Attachment B

Summary Tables and Graphs for the Interwell Comparisons

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Antimony, total	ug/L	MW-12	04/20/2015	ND	2.0000		
Antimony, total	ug/L	MW-12	07/09/2015	ND	2.0000		
Antimony, total	ug/L	MW-12	10/05/2015	ND	2.0000		
Antimony, total	ug/L	MW-12	04/05/2016	ND	2.0000		
Antimony, total	ug/L	MW-12	10/05/2016	ND	2.0000		
Antimony, total	ug/L	MW-12	04/04/2017	ND	2.0000		
Antimony, total	ug/L	MW-12	10/03/2017	ND	2.0000		
Antimony, total	ug/L	MW-12	04/10/2018	ND	2.0000		
Antimony, total	ug/L	MW-12	10/12/2018	ND	2.0000		
Antimony, total	ug/L	MW-12	04/16/2019		3.5000		
Antimony, total	ug/L	MW-12	09/30/2019	ND	2.0000		
Antimony, total	ug/L	MW-12	04/07/2020	ND	2.0000		
Antimony, total	ug/L	MW-12	10/07/2020	ND	2.0000		
Antimony, total	ug/L	MW-12	04/22/2021	ND	2.0000		
Antimony, total	ug/L	MW-12	10/05/2021	ND	2.0000		
Antimony, total	ug/L	MW-12	04/04/2022	ND	2.0000		
Antimony, total	ug/L	MW-12	10/05/2022	ND	2.0000		
Antimony, total	ug/L	MW-12	04/14/2023	ND	2.0000		
Antimony, total	ug/L	MW-12	10/18/2023	ND	2.0000		
Antimony, total	ug/L	MW-12	04/08/2024	ND	2.0000		
Antimony, total	ug/L	MW-12	10/08/2024	ND	2.0000		
Antimony, total	ug/L	MW-12	04/03/2025	ND	1.0000	2.0000	**
Arsenic, total	ug/L	MW-12	04/20/2015	ND	4.0000		
Arsenic, total	ug/L	MW-12	07/09/2015	ND	4.0000		
Arsenic, total	ug/L	MW-12	10/05/2015	ND	4.0000		
Arsenic, total	ug/L	MW-12	04/05/2016	ND	4.0000		
Arsenic, total	ug/L	MW-12	10/05/2016	ND	4.0000		
Arsenic, total	ug/L	MW-12	04/04/2017	ND	4.0000		
Arsenic, total	ug/L	MW-12	10/03/2017	ND	4.0000		
Arsenic, total	ug/L	MW-12	04/10/2018	ND	4.0000		
Arsenic, total	ug/L	MW-12	10/12/2018	ND	4.0000		
Arsenic, total	ug/L	MW-12	04/16/2019	ND	4.0000		
Arsenic, total	ug/L	MW-12	09/30/2019	ND	4.0000		
Arsenic, total	ug/L	MW-12	04/07/2020	ND	4.0000		
Arsenic, total	ug/L	MW-12	10/07/2020	ND	4.0000		
Arsenic, total	ug/L	MW-12	04/22/2021	ND	4.0000		
Arsenic, total	ug/L	MW-12	10/05/2021	ND	4.0000		
Arsenic, total	ug/L	MW-12	04/04/2022	ND	4.0000		
Arsenic, total	ug/L	MW-12	10/05/2022	ND	4.0000		
Arsenic, total	ug/L	MW-12	04/14/2023	ND	4.0000		
Arsenic, total	ug/L	MW-12	10/18/2023	ND	4.0000		
Arsenic, total	ug/L	MW-12	04/08/2024	ND	4.0000		
Arsenic, total	ug/L	MW-12	10/08/2024	ND	4.0000		
Arsenic, total	ug/L	MW-12	04/03/2025	ND	2.0000	4.0000	**
Barium, total	ug/L	MW-12	04/20/2015		264.0000		
Barium, total	ug/L	MW-12	07/09/2015		269.0000		
Barium, total	ug/L	MW-12	10/05/2015		293.0000		
Barium, total	ug/L	MW-12	04/05/2016		306.0000		
Barium, total	ug/L	MW-12	10/05/2016		274.0000		
Barium, total	ug/L	MW-12	04/04/2017		279.0000		
Barium, total	ug/L	MW-12	10/03/2017		268.0000		
Barium, total	ug/L	MW-12	04/10/2018		273.0000		
Barium, total	ug/L	MW-12	10/12/2018		243.0000		
Barium, total	ug/L	MW-12	04/16/2019		261.0000		
Barium, total	ug/L	MW-12	09/30/2019		253.0000		
Barium, total	ug/L	MW-12	04/07/2020		276.0000		
Barium, total	ug/L	MW-12	10/07/2020		256.0000		
Barium, total	ug/L	MW-12	04/22/2021		252.0000		
Barium, total	ug/L	MW-12	10/05/2021		216.0000		
Barium, total	ug/L	MW-12	04/04/2022		254.0000		
Barium, total	ug/L	MW-12	10/05/2022		219.0000		
Barium, total	ug/L	MW-12	04/14/2023		232.0000		
Barium, total	ug/L	MW-12	10/18/2023		255.0000		
Barium, total	ug/L	MW-12	04/08/2024		247.0000		
Barium, total	ug/L	MW-12	10/08/2024		253.0000		
Barium, total	ug/L	MW-12	04/03/2025		264.0000		
Beryllium, total	ug/L	MW-12	04/20/2015	ND	4.0000		
Beryllium, total	ug/L	MW-12	07/09/2015	ND	4.0000		
Beryllium, total	ug/L	MW-12	10/05/2015	ND	4.0000		
Beryllium, total	ug/L	MW-12	04/05/2016	ND	4.0000		
Beryllium, total	ug/L	MW-12	10/05/2016	ND	4.0000		
Beryllium, total	ug/L	MW-12	04/04/2017	ND	4.0000		
Beryllium, total	ug/L	MW-12	10/03/2017	ND	4.0000		
Beryllium, total	ug/L	MW-12	04/10/2018	ND	4.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Beryllium, total	ug/L	MW-12	10/12/2018	ND	4.0000		
Beryllium, total	ug/L	MW-12	04/16/2019	ND	4.0000		
Beryllium, total	ug/L	MW-12	09/30/2019	ND	4.0000		
Beryllium, total	ug/L	MW-12	04/07/2020	ND	4.0000		
Beryllium, total	ug/L	MW-12	10/07/2020	ND	4.0000		
Beryllium, total	ug/L	MW-12	04/22/2021	ND	4.0000		
Beryllium, total	ug/L	MW-12	10/05/2021	ND	4.0000		
Beryllium, total	ug/L	MW-12	04/04/2022	ND	4.0000		
Beryllium, total	ug/L	MW-12	10/05/2022	ND	4.0000		
Beryllium, total	ug/L	MW-12	04/14/2023	ND	4.0000		
Beryllium, total	ug/L	MW-12	10/18/2023	ND	4.0000		
Beryllium, total	ug/L	MW-12	04/08/2024	ND	4.0000		
Beryllium, total	ug/L	MW-12	10/08/2024	ND	4.0000		
Beryllium, total	ug/L	MW-12	04/03/2025	ND	0.5000	4.0000	**
Cadmium, total	ug/L	MW-12	04/20/2015	ND	0.8000		
Cadmium, total	ug/L	MW-12	07/09/2015	ND	0.8000		
Cadmium, total	ug/L	MW-12	10/05/2015	ND	0.8000		
Cadmium, total	ug/L	MW-12	04/05/2016	ND	0.8000		
Cadmium, total	ug/L	MW-12	10/05/2016	ND	0.8000		
Cadmium, total	ug/L	MW-12	04/04/2017	ND	0.8000		
Cadmium, total	ug/L	MW-12	10/03/2017	ND	0.8000		
Cadmium, total	ug/L	MW-12	04/10/2018	ND	0.8000		
Cadmium, total	ug/L	MW-12	10/12/2018	ND	0.8000		
Cadmium, total	ug/L	MW-12	04/16/2019	ND	0.8000		
Cadmium, total	ug/L	MW-12	09/30/2019	ND	0.8000		
Cadmium, total	ug/L	MW-12	04/07/2020	ND	0.8000		
Cadmium, total	ug/L	MW-12	10/07/2020	ND	0.8000		
Cadmium, total	ug/L	MW-12	04/22/2021	ND	0.8000		
Cadmium, total	ug/L	MW-12	10/05/2021	ND	0.8000		
Cadmium, total	ug/L	MW-12	04/04/2022	ND	0.8000		
Cadmium, total	ug/L	MW-12	10/05/2022	ND	0.8000		
Cadmium, total	ug/L	MW-12	04/14/2023	ND	0.8000		
Cadmium, total	ug/L	MW-12	10/18/2023	ND	0.8000		
Cadmium, total	ug/L	MW-12	04/08/2024	ND	0.8000		
Cadmium, total	ug/L	MW-12	10/08/2024	ND	0.8000		
Cadmium, total	ug/L	MW-12	04/03/2025	ND	0.2000	0.8000	**
Chromium, total	ug/L	MW-12	04/20/2015	ND	8.0000		
Chromium, total	ug/L	MW-12	07/09/2015	ND	8.0000		
Chromium, total	ug/L	MW-12	10/05/2015	ND	8.0000		
Chromium, total	ug/L	MW-12	04/05/2016	ND	8.0000		
Chromium, total	ug/L	MW-12	10/05/2016	ND	8.0000		
Chromium, total	ug/L	MW-12	04/04/2017	ND	8.0000		
Chromium, total	ug/L	MW-12	10/03/2017	ND	8.0000		
Chromium, total	ug/L	MW-12	04/10/2018	ND	8.0000		
Chromium, total	ug/L	MW-12	10/12/2018	ND	8.0000		
Chromium, total	ug/L	MW-12	04/16/2019	ND	8.0000		
Chromium, total	ug/L	MW-12	09/30/2019	ND	8.0000		
Chromium, total	ug/L	MW-12	04/07/2020	ND	8.0000		
Chromium, total	ug/L	MW-12	10/07/2020	ND	8.0000		
Chromium, total	ug/L	MW-12	04/22/2021	ND	8.0000		
Chromium, total	ug/L	MW-12	10/05/2021	ND	8.0000		
Chromium, total	ug/L	MW-12	04/04/2022	ND	8.0000		
Chromium, total	ug/L	MW-12	10/05/2022	ND	8.0000		
Chromium, total	ug/L	MW-12	04/14/2023	ND	8.0000		
Chromium, total	ug/L	MW-12	10/18/2023	ND	8.0000		
Chromium, total	ug/L	MW-12	04/08/2024	ND	8.0000		
Chromium, total	ug/L	MW-12	10/08/2024	ND	8.0000		
Chromium, total	ug/L	MW-12	04/03/2025	ND	1.0000	8.0000	**
Cobalt, total	ug/L	MW-12	04/20/2015	ND	0.8000		
Cobalt, total	ug/L	MW-12	07/09/2015	ND	0.8000		
Cobalt, total	ug/L	MW-12	10/05/2015	ND	0.8000		
Cobalt, total	ug/L	MW-12	04/05/2016	ND	0.8000		
Cobalt, total	ug/L	MW-12	10/05/2016	ND	0.8000		
Cobalt, total	ug/L	MW-12	04/04/2017	ND	0.8000		
Cobalt, total	ug/L	MW-12	10/03/2017	ND	0.8000		
Cobalt, total	ug/L	MW-12	04/10/2018	ND	0.8000		
Cobalt, total	ug/L	MW-12	10/12/2018	ND	0.8000		
Cobalt, total	ug/L	MW-12	04/16/2019	ND	0.8000		
Cobalt, total	ug/L	MW-12	09/30/2019	ND	0.8000		
Cobalt, total	ug/L	MW-12	04/07/2020	ND	0.4000	0.8000	***
Cobalt, total	ug/L	MW-12	10/07/2020	ND	0.4000	0.8000	***
Cobalt, total	ug/L	MW-12	04/22/2021	ND	0.4000	0.8000	***
Cobalt, total	ug/L	MW-12	10/05/2021	ND	0.4000	0.8000	***
Cobalt, total	ug/L	MW-12	04/04/2022	ND	0.4000	0.8000	***

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Cobalt, total	ug/L	MW-12	10/05/2022		2.6000		
Cobalt, total	ug/L	MW-12	04/14/2023	ND	0.4000	0.8000	***
Cobalt, total	ug/L	MW-12	10/18/2023	ND	0.4000	0.8000	***
Cobalt, total	ug/L	MW-12	04/08/2024	ND	0.4000	0.8000	***
Cobalt, total	ug/L	MW-12	10/08/2024	ND	0.4000	0.8000	***
Cobalt, total	ug/L	MW-12	04/03/2025	ND	0.5000	0.8000	***
Copper, total	ug/L	MW-12	04/20/2015	ND	4.0000		
Copper, total	ug/L	MW-12	07/09/2015	ND	4.0000		
Copper, total	ug/L	MW-12	10/05/2015	ND	4.0000		
Copper, total	ug/L	MW-12	04/05/2016	ND	4.0000		
Copper, total	ug/L	MW-12	10/05/2016	ND	4.0000		
Copper, total	ug/L	MW-12	04/04/2017	ND	4.0000		
Copper, total	ug/L	MW-12	10/03/2017	ND	4.0000		
Copper, total	ug/L	MW-12	04/10/2018	ND	4.0000		
Copper, total	ug/L	MW-12	10/12/2018	ND	4.0000		
Copper, total	ug/L	MW-12	04/16/2019	ND	4.0000		
Copper, total	ug/L	MW-12	09/30/2019	ND	4.0000		
Copper, total	ug/L	MW-12	04/07/2020	ND	4.0000		
Copper, total	ug/L	MW-12	10/07/2020	ND	4.0000		
Copper, total	ug/L	MW-12	04/22/2021	ND	4.0000		
Copper, total	ug/L	MW-12	10/05/2021	ND	4.0000		
Copper, total	ug/L	MW-12	04/04/2022	ND	4.0000		
Copper, total	ug/L	MW-12	10/05/2022	ND	4.0000		
Copper, total	ug/L	MW-12	04/14/2023	ND	4.0000		
Copper, total	ug/L	MW-12	10/18/2023	ND	4.0000		
Copper, total	ug/L	MW-12	04/08/2024	ND	4.0000		
Copper, total	ug/L	MW-12	10/08/2024	ND	4.0000		
Copper, total	ug/L	MW-12	04/03/2025	ND	5.0000	4.0000	**
Lead, total	ug/L	MW-12	04/20/2015	ND	4.0000		
Lead, total	ug/L	MW-12	07/09/2015	ND	4.0000		
Lead, total	ug/L	MW-12	10/05/2015	ND	4.0000		
Lead, total	ug/L	MW-12	04/05/2016	ND	4.0000		
Lead, total	ug/L	MW-12	10/05/2016	ND	4.0000		
Lead, total	ug/L	MW-12	04/04/2017	ND	4.0000		
Lead, total	ug/L	MW-12	10/03/2017	ND	4.0000		
Lead, total	ug/L	MW-12	04/10/2018	ND	4.0000		
Lead, total	ug/L	MW-12	10/12/2018	ND	4.0000		
Lead, total	ug/L	MW-12	04/16/2019	ND	4.0000		
Lead, total	ug/L	MW-12	09/30/2019	ND	4.0000		
Lead, total	ug/L	MW-12	04/07/2020	ND	4.0000		
Lead, total	ug/L	MW-12	10/07/2020	ND	4.0000		
Lead, total	ug/L	MW-12	04/22/2021	ND	4.0000		
Lead, total	ug/L	MW-12	10/05/2021	ND	4.0000		
Lead, total	ug/L	MW-12	04/04/2022	ND	4.0000		
Lead, total	ug/L	MW-12	10/05/2022	ND	4.0000		
Lead, total	ug/L	MW-12	04/14/2023	ND	4.0000		
Lead, total	ug/L	MW-12	10/18/2023	ND	4.0000		
Lead, total	ug/L	MW-12	04/08/2024	ND	4.0000		
Lead, total	ug/L	MW-12	10/08/2024	ND	4.0000		
Lead, total	ug/L	MW-12	04/03/2025	ND	1.0000	4.0000	**
Nickel, total	ug/L	MW-12	04/20/2015	ND	4.0000		
Nickel, total	ug/L	MW-12	07/09/2015	ND	4.0000		
Nickel, total	ug/L	MW-12	10/05/2015	ND	4.0000		
Nickel, total	ug/L	MW-12	04/05/2016	ND	4.0000		
Nickel, total	ug/L	MW-12	10/05/2016	ND	4.0000		
Nickel, total	ug/L	MW-12	04/04/2017	ND	4.0000		
Nickel, total	ug/L	MW-12	10/03/2017	ND	4.0000		
Nickel, total	ug/L	MW-12	04/10/2018		13.4000		
Nickel, total	ug/L	MW-12	10/12/2018	ND	4.0000		
Nickel, total	ug/L	MW-12	04/16/2019	ND	4.0000		
Nickel, total	ug/L	MW-12	09/30/2019	ND	4.0000		
Nickel, total	ug/L	MW-12	04/07/2020	ND	4.0000		
Nickel, total	ug/L	MW-12	10/07/2020	ND	4.0000		
Nickel, total	ug/L	MW-12	04/22/2021	ND	4.0000		
Nickel, total	ug/L	MW-12	10/05/2021	ND	4.0000		
Nickel, total	ug/L	MW-12	04/04/2022		10.4000		
Nickel, total	ug/L	MW-12	10/05/2022		6.2000		
Nickel, total	ug/L	MW-12	04/14/2023	ND	4.0000		
Nickel, total	ug/L	MW-12	10/18/2023	ND	4.0000		
Nickel, total	ug/L	MW-12	04/08/2024	ND	4.0000		
Nickel, total	ug/L	MW-12	10/08/2024	ND	4.0000		
Nickel, total	ug/L	MW-12	04/03/2025	ND	5.0000	4.0000	**
Selenium, total	ug/L	MW-12	04/20/2015	ND	4.0000		
Selenium, total	ug/L	MW-12	07/09/2015	ND	4.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Selenium, total	ug/L	MW-12	10/05/2015	ND	4.0000		
Selenium, total	ug/L	MW-12	04/05/2016	ND	4.0000		
Selenium, total	ug/L	MW-12	10/05/2016	ND	4.0000		
Selenium, total	ug/L	MW-12	04/04/2017	ND	4.0000		
Selenium, total	ug/L	MW-12	10/03/2017	ND	4.0000		
Selenium, total	ug/L	MW-12	04/10/2018	ND	4.0000		
Selenium, total	ug/L	MW-12	10/12/2018	ND	4.0000		
Selenium, total	ug/L	MW-12	04/16/2019	ND	4.0000		
Selenium, total	ug/L	MW-12	09/30/2019	ND	4.0000		
Selenium, total	ug/L	MW-12	04/07/2020	ND	4.0000		
Selenium, total	ug/L	MW-12	10/07/2020	ND	4.0000		
Selenium, total	ug/L	MW-12	04/22/2021	ND	4.0000		
Selenium, total	ug/L	MW-12	10/05/2021	ND	4.0000		
Selenium, total	ug/L	MW-12	04/04/2022	ND	4.0000		
Selenium, total	ug/L	MW-12	10/05/2022	ND	4.0000		
Selenium, total	ug/L	MW-12	04/14/2023	ND	4.0000		
Selenium, total	ug/L	MW-12	10/18/2023	ND	4.0000		
Selenium, total	ug/L	MW-12	04/08/2024	ND	4.0000		
Selenium, total	ug/L	MW-12	10/08/2024	ND	4.0000		
Selenium, total	ug/L	MW-12	04/03/2025	ND	2.0000	4.0000	**
Silver, total	ug/L	MW-12	04/20/2015	ND	4.0000		
Silver, total	ug/L	MW-12	07/09/2015	ND	4.0000		
Silver, total	ug/L	MW-12	10/05/2015	ND	4.0000		
Silver, total	ug/L	MW-12	04/05/2016	ND	4.0000		
Silver, total	ug/L	MW-12	10/05/2016	ND	4.0000		
Silver, total	ug/L	MW-12	04/04/2017	ND	4.0000		
Silver, total	ug/L	MW-12	10/03/2017	ND	4.0000		
Silver, total	ug/L	MW-12	04/10/2018	ND	4.0000		
Silver, total	ug/L	MW-12	10/12/2018	ND	8.0000	4.0000	**
Silver, total	ug/L	MW-12	04/16/2019	ND	4.0000		
Silver, total	ug/L	MW-12	09/30/2019	ND	4.0000		
Silver, total	ug/L	MW-12	04/07/2020	ND	4.0000		
Silver, total	ug/L	MW-12	10/07/2020	ND	4.0000		
Silver, total	ug/L	MW-12	04/22/2021	ND	4.0000		
Silver, total	ug/L	MW-12	10/05/2021	ND	4.0000		
Silver, total	ug/L	MW-12	04/04/2022	ND	4.0000		
Silver, total	ug/L	MW-12	10/05/2022	ND	4.0000		
Silver, total	ug/L	MW-12	04/14/2023	ND	4.0000		
Silver, total	ug/L	MW-12	10/18/2023	ND	4.0000		
Silver, total	ug/L	MW-12	04/08/2024	ND	4.0000		
Silver, total	ug/L	MW-12	10/08/2024	ND	4.0000		
Silver, total	ug/L	MW-12	04/03/2025	ND	5.0000	4.0000	**
Thallium, total	ug/L	MW-12	04/20/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	07/09/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	10/05/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	04/05/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	10/05/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	04/04/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	10/03/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	04/10/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	10/12/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	04/16/2019	ND	2.0000		
Thallium, total	ug/L	MW-12	09/30/2019	ND	2.0000		
Thallium, total	ug/L	MW-12	04/07/2020	ND	2.0000		
Thallium, total	ug/L	MW-12	10/07/2020	ND	2.0000		
Thallium, total	ug/L	MW-12	04/22/2021	ND	2.0000		
Thallium, total	ug/L	MW-12	10/05/2021	ND	2.0000		
Thallium, total	ug/L	MW-12	04/04/2022	ND	2.0000		
Thallium, total	ug/L	MW-12	10/05/2022	ND	2.0000		
Thallium, total	ug/L	MW-12	04/14/2023	ND	2.0000		
Thallium, total	ug/L	MW-12	10/18/2023	ND	2.0000		
Thallium, total	ug/L	MW-12	04/08/2024	ND	2.0000		
Thallium, total	ug/L	MW-12	10/08/2024	ND	2.0000		
Thallium, total	ug/L	MW-12	04/03/2025	ND	0.5000	2.0000	**
Vanadium, total	ug/L	MW-12	04/20/2015	ND	20.0000		
Vanadium, total	ug/L	MW-12	07/09/2015	ND	20.0000		
Vanadium, total	ug/L	MW-12	10/05/2015	ND	20.0000		
Vanadium, total	ug/L	MW-12	04/05/2016	ND	20.0000		
Vanadium, total	ug/L	MW-12	10/05/2016	ND	20.0000		
Vanadium, total	ug/L	MW-12	04/04/2017	ND	20.0000		
Vanadium, total	ug/L	MW-12	10/03/2017	ND	20.0000		
Vanadium, total	ug/L	MW-12	04/10/2018	ND	20.0000		
Vanadium, total	ug/L	MW-12	10/12/2018	ND	20.0000		
Vanadium, total	ug/L	MW-12	04/16/2019	ND	20.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Vanadium, total	ug/L	MW-12	09/30/2019	ND	20.0000		
Vanadium, total	ug/L	MW-12	04/07/2020	ND	20.0000		
Vanadium, total	ug/L	MW-12	10/07/2020	ND	20.0000		
Vanadium, total	ug/L	MW-12	04/22/2021	ND	20.0000		
Vanadium, total	ug/L	MW-12	10/05/2021	ND	20.0000		
Vanadium, total	ug/L	MW-12	04/04/2022	ND	20.0000		
Vanadium, total	ug/L	MW-12	10/05/2022	ND	20.0000		
Vanadium, total	ug/L	MW-12	04/14/2023	ND	20.0000		
Vanadium, total	ug/L	MW-12	10/18/2023	ND	20.0000		
Vanadium, total	ug/L	MW-12	04/08/2024	ND	20.0000		
Vanadium, total	ug/L	MW-12	10/08/2024	ND	20.0000		
Vanadium, total	ug/L	MW-12	04/03/2025	ND	2.0000	20.0000	**
Zinc, total	ug/L	MW-12	04/20/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-12	07/09/2015		18.1000		
Zinc, total	ug/L	MW-12	10/05/2015		10.1000		
Zinc, total	ug/L	MW-12	04/05/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-12	10/05/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-12	04/04/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-12	10/03/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-12	04/10/2018		27.2000		
Zinc, total	ug/L	MW-12	10/12/2018	ND	20.0000		
Zinc, total	ug/L	MW-12	04/16/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-12	09/30/2019		10.9000		
Zinc, total	ug/L	MW-12	04/07/2020	ND	20.0000		
Zinc, total	ug/L	MW-12	10/07/2020	ND	20.0000		
Zinc, total	ug/L	MW-12	04/22/2021	ND	20.0000		
Zinc, total	ug/L	MW-12	10/05/2021	ND	20.0000		
Zinc, total	ug/L	MW-12	04/04/2022		24.2000		
Zinc, total	ug/L	MW-12	10/05/2022	ND	20.0000		
Zinc, total	ug/L	MW-12	04/14/2023	ND	20.0000		
Zinc, total	ug/L	MW-12	10/18/2023		21.8000		
Zinc, total	ug/L	MW-12	04/08/2024	ND	20.0000		
Zinc, total	ug/L	MW-12	10/08/2024	ND	20.0000		
Zinc, total	ug/L	MW-12	04/03/2025		7.1000		

* - 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 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Antimony, total	ug/L	MW-11	04/03/2025	ND	1.0000		3.5000
Arsenic, total	ug/L	MW-11	04/03/2025	ND	2.0000		4.0000
Barium, total	ug/L	MW-11	04/03/2025		305.0000		314.0158
Beryllium, total	ug/L	MW-11	04/03/2025	ND	0.5000		4.0000
Cadmium, total	ug/L	MW-11	04/03/2025	ND	0.2000		0.8000
Chromium, total	ug/L	MW-11	04/03/2025		2.3000		8.0000
Cobalt, total	ug/L	MW-11	04/03/2025	ND	0.5000		2.6000
Copper, total	ug/L	MW-11	04/03/2025	ND	5.0000		4.0000
Lead, total	ug/L	MW-11	04/03/2025	ND	1.0000		4.0000
Nickel, total	ug/L	MW-11	04/03/2025	ND	5.0000		13.4000
Selenium, total	ug/L	MW-11	04/03/2025	ND	2.0000		4.0000
Silver, total	ug/L	MW-11	04/03/2025	ND	5.0000		4.0000
Thallium, total	ug/L	MW-11	04/03/2025	ND	0.5000		2.0000
Vanadium, total	ug/L	MW-11	04/03/2025	ND	2.0000		20.0000
Zinc, total	ug/L	MW-11	04/03/2025		13.0000		27.2000
Antimony, total	ug/L	MW-15	04/03/2025	ND	1.0000		3.5000
Arsenic, total	ug/L	MW-15	04/03/2025		157.0000	***	4.0000
Barium, total	ug/L	MW-15	04/03/2025		963.0000	***	314.0158
Beryllium, total	ug/L	MW-15	04/03/2025	ND	0.5000		4.0000
Cadmium, total	ug/L	MW-15	04/03/2025	ND	0.2000		0.8000
Chromium, total	ug/L	MW-15	04/03/2025		1.2000		8.0000
Cobalt, total	ug/L	MW-15	04/03/2025		13.0000	***	2.6000
Copper, total	ug/L	MW-15	04/03/2025	ND	5.0000		4.0000
Lead, total	ug/L	MW-15	04/03/2025	ND	1.0000		4.0000
Nickel, total	ug/L	MW-15	04/03/2025		58.2000	***	13.4000
Selenium, total	ug/L	MW-15	04/03/2025	ND	2.0000		4.0000
Silver, total	ug/L	MW-15	04/03/2025	ND	5.0000		4.0000
Thallium, total	ug/L	MW-15	04/03/2025	ND	0.5000		2.0000
Vanadium, total	ug/L	MW-15	04/03/2025	ND	2.0000		20.0000
Zinc, total	ug/L	MW-15	04/03/2025	ND	5.0000		27.2000
Antimony, total	ug/L	MW-16	04/03/2025	ND	1.0000		3.5000
Arsenic, total	ug/L	MW-16	04/03/2025	ND	2.0000		4.0000
Barium, total	ug/L	MW-16	04/03/2025		87.9000		314.0158
Beryllium, total	ug/L	MW-16	04/03/2025	ND	0.5000		4.0000
Cadmium, total	ug/L	MW-16	04/03/2025	ND	0.2000		0.8000
Chromium, total	ug/L	MW-16	04/03/2025	ND	1.0000		8.0000
Cobalt, total	ug/L	MW-16	04/03/2025	ND	0.5000		2.6000
Copper, total	ug/L	MW-16	04/03/2025	ND	5.0000		4.0000
Lead, total	ug/L	MW-16	04/03/2025	ND	1.0000		4.0000
Nickel, total	ug/L	MW-16	04/03/2025		6.0000		13.4000
Selenium, total	ug/L	MW-16	04/03/2025	ND	2.0000		4.0000
Silver, total	ug/L	MW-16	04/03/2025	ND	5.0000		4.0000
Thallium, total	ug/L	MW-16	04/03/2025	ND	0.5000		2.0000
Vanadium, total	ug/L	MW-16	04/03/2025	ND	2.0000		20.0000
Zinc, total	ug/L	MW-16	04/03/2025		28.3000	*	27.2000
Antimony, total	ug/L	MW-20	04/03/2025	ND	1.0000		3.5000
Arsenic, total	ug/L	MW-20	04/03/2025	ND	2.0000		4.0000
Barium, total	ug/L	MW-20	04/03/2025		92.1000		314.0158
Beryllium, total	ug/L	MW-20	04/03/2025	ND	0.5000		4.0000
Cadmium, total	ug/L	MW-20	04/03/2025	ND	0.2000		0.8000
Chromium, total	ug/L	MW-20	04/03/2025	ND	1.0000		8.0000
Cobalt, total	ug/L	MW-20	04/03/2025	ND	0.5000		2.6000
Copper, total	ug/L	MW-20	04/03/2025	ND	5.0000		4.0000
Lead, total	ug/L	MW-20	04/03/2025	ND	1.0000		4.0000
Nickel, total	ug/L	MW-20	04/03/2025	ND	5.0000		13.4000
Selenium, total	ug/L	MW-20	04/03/2025	ND	2.0000		4.0000
Silver, total	ug/L	MW-20	04/03/2025	ND	5.0000		4.0000
Thallium, total	ug/L	MW-20	04/03/2025	ND	0.5000		2.0000
Vanadium, total	ug/L	MW-20	04/03/2025	ND	2.0000		20.0000
Zinc, total	ug/L	MW-20	04/03/2025	ND	5.0000		27.2000
Antimony, total	ug/L	MW-22	04/03/2025	ND	1.0000		3.5000
Arsenic, total	ug/L	MW-22	04/03/2025	ND	2.0000		4.0000
Barium, total	ug/L	MW-22	04/03/2025		160.0000		314.0158
Beryllium, total	ug/L	MW-22	04/03/2025	ND	0.5000		4.0000
Cadmium, total	ug/L	MW-22	04/03/2025	ND	0.2000		0.8000
Chromium, total	ug/L	MW-22	04/03/2025		1.8000		8.0000
Cobalt, total	ug/L	MW-22	04/03/2025	ND	0.5000		2.6000
Copper, total	ug/L	MW-22	04/03/2025	ND	5.0000		4.0000
Lead, total	ug/L	MW-22	04/03/2025	ND	1.0000		4.0000
Nickel, total	ug/L	MW-22	04/03/2025	ND	5.0000		13.4000
Selenium, total	ug/L	MW-22	04/03/2025		2.1000		4.0000
Silver, total	ug/L	MW-22	04/03/2025	ND	5.0000		4.0000

* - Current value failed - awaiting verification.

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

*** - Current value failed - exceedance verified.

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

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

ND = Not Detected, Result = detection limit.

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Thallium, total	ug/L	MW-22	04/03/2025	ND	0.5000		2.0000
Vanadium, total	ug/L	MW-22	04/03/2025	ND	2.0000		20.0000
Zinc, total	ug/L	MW-22	04/03/2025		5.8000		27.2000
Antimony, total	ug/L	MW-6	04/03/2025	ND	1.0000		3.5000
Arsenic, total	ug/L	MW-6	04/03/2025	ND	2.0000		4.0000
Barium, total	ug/L	MW-6	04/03/2025		415.0000	***	314.0158
Beryllium, total	ug/L	MW-6	04/03/2025	ND	0.5000		4.0000
Cadmium, total	ug/L	MW-6	04/03/2025		0.3000		0.8000
Chromium, total	ug/L	MW-6	04/03/2025	ND	1.0000		8.0000
Cobalt, total	ug/L	MW-6	04/03/2025		0.5000		2.6000
Copper, total	ug/L	MW-6	04/03/2025	ND	5.0000		4.0000
Lead, total	ug/L	MW-6	04/03/2025	ND	1.0000		4.0000
Nickel, total	ug/L	MW-6	04/03/2025		7.0000		13.4000
Selenium, total	ug/L	MW-6	04/03/2025	ND	2.0000		4.0000
Silver, total	ug/L	MW-6	04/03/2025	ND	5.0000		4.0000
Thallium, total	ug/L	MW-6	04/03/2025	ND	0.5000		2.0000
Vanadium, total	ug/L	MW-6	04/03/2025	ND	2.0000		20.0000
Zinc, total	ug/L	MW-6	04/03/2025	ND	5.0000		27.2000

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

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

Constituent	Detect	Upgradient N	Proportion	Detect	Downgradient N	Proportion
Antimony, total	1	22	0.045	0	154	0.000
Arsenic, total	0	22	0.000	47	179	0.263
Barium, total	22	22	1.000	196	196	1.000
Beryllium, total	0	22	0.000	0	154	0.000
Cadmium, total	0	22	0.000	24	184	0.130
Chromium, total	0	22	0.000	25	175	0.143
Cobalt, total	1	22	0.045	88	212	0.415
Copper, total	0	22	0.000	63	194	0.325
Lead, total	0	22	0.000	35	185	0.189
Nickel, total	3	22	0.136	111	195	0.569
Selenium, total	0	22	0.000	15	174	0.086
Silver, total	0	22	0.000	0	154	0.000
Thallium, total	0	22	0.000	0	154	0.000
Vanadium, total	0	22	0.000	23	183	0.126
Zinc, total	7	22	0.318	86	197	0.437

N = Total number of measurements in all wells.

Detect = Total number of detections in all wells.

Proportion = Detect/N.

Table 4

Shapiro-Wilk Multiple Group Test of Normality

Constituent	Detect	N	Detect Freq	G raw	G log	G cbrt	G sqrt	G sqr	G cub	Crit Value	Dist Form	Model Type
Antimony, total	1	22	0.045									nonpar
Arsenic, total	0	22	0.000									nonpar
Barium, total	22	22	1.000	0.456	0.026					2.326	normal	normal
Beryllium, total	0	22	0.000									nonpar
Cadmium, total	0	22	0.000									nonpar
Chromium, total	0	22	0.000									nonpar
Cobalt, total	1	22	0.045									nonpar
Copper, total	0	22	0.000									nonpar
Lead, total	0	22	0.000									nonpar
Nickel, total	3	22	0.136	0.903	0.321					2.326	normal	nonpar
Selenium, total	0	22	0.000									nonpar
Silver, total	0	22	0.000									nonpar
Thallium, total	0	22	0.000									nonpar
Vanadium, total	0	22	0.000									nonpar
Zinc, total	7	22	0.318	0.054	0.250					2.326	normal	nonpar

* - Distribution override for that constituent.

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

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

Table 5

Summary Statistics and Prediction Limits

Constituent	Units	Detect	N	Mean	SD	alpha	Factor	Pred Limit	Type		Conf
Antimony, total	ug/L	1	22	259.4091	21.2192	0.0100	2.5735	3.5000	nonpar		0.98
Arsenic, total	ug/L	0	22					4.0000	nonpar	***	0.98
Barium, total	ug/L	22	22					314.0158	normal		
Beryllium, total	ug/L	0	22					4.0000	nonpar	***	0.98
Cadmium, total	ug/L	0	22					0.8000	nonpar	***	0.98
Chromium, total	ug/L	0	22					8.0000	nonpar	***	0.98
Cobalt, total	ug/L	1	22					2.6000	nonpar		0.98
Copper, total	ug/L	0	22					4.0000	nonpar	***	0.98
Lead, total	ug/L	0	22					4.0000	nonpar	***	0.98
Nickel, total	ug/L	3	22					13.4000	nonpar		0.98
Selenium, total	ug/L	0	22					4.0000	nonpar	***	0.98
Silver, total	ug/L	0	22					4.0000	nonpar	***	0.98
Thallium, total	ug/L	0	22					2.0000	nonpar	***	0.98
Vanadium, total	ug/L	0	22					20.0000	nonpar	***	0.98
Zinc, total	ug/L	7	22					27.2000	nonpar		0.98

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

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

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

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Arsenic, total	ug/L	MW-15	03/06/2009	ND	87.6000	*	4.0000
Arsenic, total	ug/L	MW-15	06/16/2009		4.0000		4.0000
Arsenic, total	ug/L	MW-15	07/13/2009		151.0000	*	4.0000
Arsenic, total	ug/L	MW-15	08/31/2009		54.6000	*	4.0000
Arsenic, total	ug/L	MW-15	10/20/2009		184.0000	*	4.0000
Arsenic, total	ug/L	MW-15	03/15/2010		78.4000	*	4.0000
Arsenic, total	ug/L	MW-15	06/10/2010		204.0000	*	4.0000
Arsenic, total	ug/L	MW-15	09/14/2010		209.0000	*	4.0000
Arsenic, total	ug/L	MW-15	03/11/2011		87.3000	*	4.0000
Arsenic, total	ug/L	MW-15	09/07/2011		267.0000	*	4.0000
Arsenic, total	ug/L	MW-15	03/14/2012		117.0000	*	4.0000
Arsenic, total	ug/L	MW-15	09/01/2012		282.0000	*	4.0000
Arsenic, total	ug/L	MW-15	04/01/2013		43.3000	*	4.0000
Arsenic, total	ug/L	MW-15	09/09/2013		187.0000	*	4.0000
Arsenic, total	ug/L	MW-15	03/30/2014		99.5000	*	4.0000
Arsenic, total	ug/L	MW-15	09/19/2014		21.9000	*	4.0000
Arsenic, total	ug/L	MW-15	04/20/2015		178.0000	*	4.0000
Arsenic, total	ug/L	MW-15	10/05/2015		208.0000	*	4.0000
Arsenic, total	ug/L	MW-15	04/05/2016		183.0000	*	4.0000
Arsenic, total	ug/L	MW-15	10/05/2016		153.0000	*	4.0000
Arsenic, total	ug/L	MW-15	04/04/2017		177.0000	*	4.0000
Arsenic, total	ug/L	MW-15	10/03/2017		233.0000	*	4.0000
Arsenic, total	ug/L	MW-15	04/10/2018		142.0000	*	4.0000
Arsenic, total	ug/L	MW-15	10/12/2018		128.0000	*	4.0000
Arsenic, total	ug/L	MW-15	04/16/2019		125.0000	*	4.0000
Arsenic, total	ug/L	MW-15	09/30/2019		212.0000	*	4.0000
Arsenic, total	ug/L	MW-15	04/07/2020		149.0000	*	4.0000
Arsenic, total	ug/L	MW-15	10/07/2020		168.0000	*	4.0000
Arsenic, total	ug/L	MW-15	04/22/2021		177.0000	*	4.0000
Arsenic, total	ug/L	MW-15	10/05/2021		200.0000	*	4.0000
Arsenic, total	ug/L	MW-15	04/04/2022		143.0000	*	4.0000
Arsenic, total	ug/L	MW-15	10/05/2022		250.0000	*	4.0000
Arsenic, total	ug/L	MW-15	04/14/2023		168.0000	*	4.0000
Arsenic, total	ug/L	MW-15	10/18/2023		166.0000	*	4.0000
Arsenic, total	ug/L	MW-15	04/08/2024		151.0000	*	4.0000
Arsenic, total	ug/L	MW-15	10/08/2024		209.0000	*	4.0000
Arsenic, total	ug/L	MW-15	04/03/2025		157.0000	*	4.0000
Barium, total	ug/L	MW-15	03/06/2009		1390.0000	*	314.0158
Barium, total	ug/L	MW-15	06/16/2009		97.7000		314.0158
Barium, total	ug/L	MW-15	07/13/2009		1260.0000	*	314.0158
Barium, total	ug/L	MW-15	08/31/2009		1060.0000	*	314.0158
Barium, total	ug/L	MW-15	10/20/2009		1440.0000	*	314.0158
Barium, total	ug/L	MW-15	03/15/2010		752.0000	*	314.0158
Barium, total	ug/L	MW-15	06/10/2010		1880.0000	*	314.0158
Barium, total	ug/L	MW-15	09/14/2010		3550.0000	*	314.0158
Barium, total	ug/L	MW-15	03/11/2011		1010.0000	*	314.0158
Barium, total	ug/L	MW-15	09/07/2011		2300.0000	*	314.0158
Barium, total	ug/L	MW-15	03/14/2012		869.0000	*	314.0158
Barium, total	ug/L	MW-15	09/01/2012		2010.0000	*	314.0158
Barium, total	ug/L	MW-15	04/01/2013		596.0000	*	314.0158
Barium, total	ug/L	MW-15	09/09/2013		988.0000	*	314.0158
Barium, total	ug/L	MW-15	03/30/2014		1120.0000	*	314.0158
Barium, total	ug/L	MW-15	09/19/2014		694.0000	*	314.0158
Barium, total	ug/L	MW-15	04/20/2015		1160.0000	*	314.0158
Barium, total	ug/L	MW-15	10/05/2015		1030.0000	*	314.0158
Barium, total	ug/L	MW-15	04/05/2016		1080.0000	*	314.0158
Barium, total	ug/L	MW-15	10/05/2016		1160.0000	*	314.0158
Barium, total	ug/L	MW-15	04/04/2017		1130.0000	*	314.0158
Barium, total	ug/L	MW-15	10/03/2017		1160.0000	*	314.0158
Barium, total	ug/L	MW-15	04/10/2018		598.0000	*	314.0158
Barium, total	ug/L	MW-15	10/12/2018		1050.0000	*	314.0158
Barium, total	ug/L	MW-15	04/16/2019		1390.0000	*	314.0158
Barium, total	ug/L	MW-15	09/30/2019		1170.0000	*	314.0158
Barium, total	ug/L	MW-15	04/07/2020		1300.0000	*	314.0158
Barium, total	ug/L	MW-15	10/07/2020		881.0000	*	314.0158
Barium, total	ug/L	MW-15	04/22/2021		868.0000	*	314.0158
Barium, total	ug/L	MW-15	10/05/2021		1180.0000	*	314.0158
Barium, total	ug/L	MW-15	04/04/2022		1000.0000	*	314.0158
Barium, total	ug/L	MW-15	10/05/2022		1170.0000	*	314.0158
Barium, total	ug/L	MW-15	04/14/2023		783.0000	*	314.0158
Barium, total	ug/L	MW-15	10/18/2023		1350.0000	*	314.0158

* - Significantly increased over background.

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

*** - Manual exclusion.

ND = Not Detected, Result = detection limit.

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Barium, total	ug/L	MW-15	04/08/2024		800.0000	*	314.0158
Barium, total	ug/L	MW-15	10/08/2024		1200.0000	*	314.0158
Barium, total	ug/L	MW-15	04/03/2025		963.0000	*	314.0158
Cobalt, total	ug/L	MW-15	04/06/2006	ND	27.0000	*	2.6000
Cobalt, total	ug/L	MW-15	09/07/2006		23.0000	*	2.6000
Cobalt, total	ug/L	MW-15	03/14/2007		23.0000	*	2.6000
Cobalt, total	ug/L	MW-15	09/19/2007		22.0000	*	2.6000
Cobalt, total	ug/L	MW-15	03/25/2008		21.0000	*	2.6000
Cobalt, total	ug/L	MW-15	09/05/2008		24.0000	*	2.6000
Cobalt, total	ug/L	MW-15	03/06/2009		24.7000	*	2.6000
Cobalt, total	ug/L	MW-15	06/16/2009		4.0000	*	2.6000
Cobalt, total	ug/L	MW-15	07/13/2009		54.0000	*	2.6000
Cobalt, total	ug/L	MW-15	08/31/2009		23.6000	*	2.6000
Cobalt, total	ug/L	MW-15	10/20/2009		23.9000	*	2.6000
Cobalt, total	ug/L	MW-15	03/15/2010		23.0000	*	2.6000
Cobalt, total	ug/L	MW-15	06/10/2010		78.4000	*	2.6000
Cobalt, total	ug/L	MW-15	09/14/2010		145.3667	*	2.6000
Cobalt, total	ug/L	MW-15	03/11/2011		22.2333	*	2.6000
Cobalt, total	ug/L	MW-15	09/07/2011		65.1000	*	2.6000
Cobalt, total	ug/L	MW-15	03/14/2012		21.2000	*	2.6000
Cobalt, total	ug/L	MW-15	09/01/2012		43.8000	*	2.6000
Cobalt, total	ug/L	MW-15	04/01/2013		14.9000	*	2.6000
Cobalt, total	ug/L	MW-15	09/09/2013		22.5000	*	2.6000
Cobalt, total	ug/L	MW-15	03/30/2014		30.0000	*	2.6000
Cobalt, total	ug/L	MW-15	09/19/2014		19.4000	*	2.6000
Cobalt, total	ug/L	MW-15	04/20/2015		22.3000	*	2.6000
Cobalt, total	ug/L	MW-15	10/05/2015		24.3000	*	2.6000
Cobalt, total	ug/L	MW-15	04/05/2016		21.3000	*	2.6000
Cobalt, total	ug/L	MW-15	10/05/2016		20.1000	*	2.6000
Cobalt, total	ug/L	MW-15	04/04/2017		19.8000	*	2.6000
Cobalt, total	ug/L	MW-15	10/03/2017		22.5000	*	2.6000
Cobalt, total	ug/L	MW-15	04/10/2018		12.3000	*	2.6000
Cobalt, total	ug/L	MW-15	10/12/2018		22.0000	*	2.6000
Cobalt, total	ug/L	MW-15	04/16/2019		23.7000	*	2.6000
Cobalt, total	ug/L	MW-15	09/30/2019		24.2000	*	2.6000
Cobalt, total	ug/L	MW-15	04/07/2020		19.6000	*	2.6000
Cobalt, total	ug/L	MW-15	10/07/2020		15.0000	*	2.6000
Cobalt, total	ug/L	MW-15	04/22/2021		15.1000	*	2.6000
Cobalt, total	ug/L	MW-15	10/05/2021		20.0000	*	2.6000
Cobalt, total	ug/L	MW-15	04/04/2022		18.4000	*	2.6000
Cobalt, total	ug/L	MW-15	10/05/2022		21.2000	*	2.6000
Cobalt, total	ug/L	MW-15	04/14/2023		13.1000	*	2.6000
Cobalt, total	ug/L	MW-15	10/18/2023		15.9000	*	2.6000
Cobalt, total	ug/L	MW-15	04/08/2024		14.1000	*	2.6000
Cobalt, total	ug/L	MW-15	10/08/2024		15.5000	*	2.6000
Cobalt, total	ug/L	MW-15	04/03/2025		13.0000	*	2.6000
Nickel, total	ug/L	MW-15	03/06/2009		88.9000	*	13.4000
Nickel, total	ug/L	MW-15	06/16/2009		9.7000	*	13.4000
Nickel, total	ug/L	MW-15	07/13/2009		161.0000	*	13.4000
Nickel, total	ug/L	MW-15	08/31/2009		64.8000	*	13.4000
Nickel, total	ug/L	MW-15	10/20/2009		71.9000	*	13.4000
Nickel, total	ug/L	MW-15	03/15/2010		70.5000	*	13.4000
Nickel, total	ug/L	MW-15	06/10/2010		211.0000	*	13.4000
Nickel, total	ug/L	MW-15	09/14/2010		536.0000	*	13.4000
Nickel, total	ug/L	MW-15	03/11/2011		86.4000	*	13.4000
Nickel, total	ug/L	MW-15	09/07/2011		261.0000	*	13.4000
Nickel, total	ug/L	MW-15	03/14/2012		78.1000	*	13.4000
Nickel, total	ug/L	MW-15	09/01/2012		137.0000	*	13.4000
Nickel, total	ug/L	MW-15	04/01/2013		45.2000	*	13.4000
Nickel, total	ug/L	MW-15	09/09/2013		88.9000	*	13.4000
Nickel, total	ug/L	MW-15	03/30/2014		97.0000	*	13.4000
Nickel, total	ug/L	MW-15	09/19/2014		67.0000	*	13.4000
Nickel, total	ug/L	MW-15	04/20/2015		73.3000	*	13.4000
Nickel, total	ug/L	MW-15	10/05/2015		102.0000	*	13.4000
Nickel, total	ug/L	MW-15	04/05/2016		70.3000	*	13.4000
Nickel, total	ug/L	MW-15	10/05/2016		59.8000	*	13.4000
Nickel, total	ug/L	MW-15	04/04/2017		71.0000	*	13.4000
Nickel, total	ug/L	MW-15	10/03/2017		101.0000	*	13.4000
Nickel, total	ug/L	MW-15	04/10/2018		57.8000	*	13.4000
Nickel, total	ug/L	MW-15	10/12/2018		52.9000	*	13.4000
Nickel, total	ug/L	MW-15	04/16/2019		70.3000	*	13.4000

* - Significantly increased over background.

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

*** - Manual exclusion.

ND = Not Detected, Result = detection limit.

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Nickel, total	ug/L	MW-15	09/30/2019		92.8000	*	13.4000
Nickel, total	ug/L	MW-15	04/07/2020		60.1000	*	13.4000
Nickel, total	ug/L	MW-15	10/07/2020		65.1000	*	13.4000
Nickel, total	ug/L	MW-15	04/22/2021		61.8000	*	13.4000
Nickel, total	ug/L	MW-15	10/05/2021		86.1000	*	13.4000
Nickel, total	ug/L	MW-15	04/04/2022		63.4000	*	13.4000
Nickel, total	ug/L	MW-15	10/05/2022		93.6000	*	13.4000
Nickel, total	ug/L	MW-15	04/14/2023		67.5000	*	13.4000
Nickel, total	ug/L	MW-15	10/18/2023		72.1000	*	13.4000
Nickel, total	ug/L	MW-15	04/08/2024		58.3000	*	13.4000
Nickel, total	ug/L	MW-15	10/08/2024		85.1000	*	13.4000
Nickel, total	ug/L	MW-15	04/03/2025		58.2000	*	13.4000
Zinc, total	ug/L	MW-16	09/01/2012	ND	8.0000		27.2000
Zinc, total	ug/L	MW-16	04/01/2013	ND	8.0000		27.2000
Zinc, total	ug/L	MW-16	09/09/2013		66.5000	*	27.2000
Zinc, total	ug/L	MW-16	03/30/2014		31.9000	*	27.2000
Zinc, total	ug/L	MW-16	09/19/2014		11.0000		27.2000
Zinc, total	ug/L	MW-16	04/20/2015		12.2000		27.2000
Zinc, total	ug/L	MW-16	10/05/2015		9.5000		27.2000
Zinc, total	ug/L	MW-16	04/05/2016		12.1000		27.2000
Zinc, total	ug/L	MW-16	10/05/2016	ND	8.0000		27.2000
Zinc, total	ug/L	MW-16	04/04/2017	ND	8.0000		27.2000
Zinc, total	ug/L	MW-16	10/03/2017	ND	8.0000		27.2000
Zinc, total	ug/L	MW-16	04/10/2018	ND	20.0000		27.2000
Zinc, total	ug/L	MW-16	10/12/2018	ND	20.0000		27.2000
Zinc, total	ug/L	MW-16	04/16/2019	ND	8.0000		27.2000
Zinc, total	ug/L	MW-16	09/30/2019	ND	8.0000		27.2000
Zinc, total	ug/L	MW-16	04/07/2020	ND	20.0000		27.2000
Zinc, total	ug/L	MW-16	10/07/2020	ND	20.0000		27.2000
Zinc, total	ug/L	MW-16	04/22/2021	ND	20.0000		27.2000
Zinc, total	ug/L	MW-16	10/05/2021	ND	20.0000		27.2000
Zinc, total	ug/L	MW-16	04/04/2022	ND	20.0000		27.2000
Zinc, total	ug/L	MW-16	10/05/2022		30.7000	*	27.2000
Zinc, total	ug/L	MW-16	01/03/2023	ND	20.0000		27.2000
Zinc, total	ug/L	MW-16	04/14/2023	ND	20.0000		27.2000
Zinc, total	ug/L	MW-16	10/18/2023	ND	20.0000		27.2000
Zinc, total	ug/L	MW-16	04/08/2024		32.4000	*	27.2000
Zinc, total	ug/L	MW-16	06/13/2024		20.0000		27.2000
Zinc, total	ug/L	MW-16	10/08/2024		25.6000		27.2000
Zinc, total	ug/L	MW-16	04/03/2025		28.3000	*	27.2000
Barium, total	ug/L	MW-6	03/06/2009		626.0000	*	314.0158
Barium, total	ug/L	MW-6	06/16/2009		625.0000	*	314.0158
Barium, total	ug/L	MW-6	07/13/2009		636.0000	*	314.0158
Barium, total	ug/L	MW-6	08/31/2009		505.0000	*	314.0158
Barium, total	ug/L	MW-6	10/20/2009		665.0000	*	314.0158
Barium, total	ug/L	MW-6	03/15/2010		329.0000	*	314.0158
Barium, total	ug/L	MW-6	06/10/2010		644.0000	*	314.0158
Barium, total	ug/L	MW-6	09/14/2010		616.0000	*	314.0158
Barium, total	ug/L	MW-6	03/11/2011		653.0000	*	314.0158
Barium, total	ug/L	MW-6	09/07/2011		606.5000	*	314.0158
Barium, total	ug/L	MW-6	03/14/2012		519.0000	*	314.0158
Barium, total	ug/L	MW-6	09/01/2012		497.0000	*	314.0158
Barium, total	ug/L	MW-6	04/01/2013		665.0000	*	314.0158
Barium, total	ug/L	MW-6	09/09/2013		606.0000	*	314.0158
Barium, total	ug/L	MW-6	03/30/2014		612.0000	*	314.0158
Barium, total	ug/L	MW-6	09/19/2014		591.0000	*	314.0158
Barium, total	ug/L	MW-6	04/20/2015		717.0000	*	314.0158
Barium, total	ug/L	MW-6	10/05/2015		479.0000	*	314.0158
Barium, total	ug/L	MW-6	04/05/2016		408.0000	*	314.0158
Barium, total	ug/L	MW-6	10/05/2016		231.0000		314.0158
Barium, total	ug/L	MW-6	04/04/2017		154.0000		314.0158
Barium, total	ug/L	MW-6	10/03/2017		573.0000	*	314.0158
Barium, total	ug/L	MW-6	01/03/2018		613.0000	*	314.0158
Barium, total	ug/L	MW-6	04/10/2018		435.0000	*	314.0158
Barium, total	ug/L	MW-6	10/12/2018		289.0000		314.0158
Barium, total	ug/L	MW-6	04/16/2019		274.0000		314.0158
Barium, total	ug/L	MW-6	09/30/2019		409.0000	*	314.0158
Barium, total	ug/L	MW-6	04/07/2020		209.0000		314.0158
Barium, total	ug/L	MW-6	10/07/2020		226.0000		314.0158
Barium, total	ug/L	MW-6	04/22/2021		180.0000		314.0158
Barium, total	ug/L	MW-6	10/05/2021		497.0000	*	314.0158

* - Significantly increased over background.

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

*** - Manual exclusion.

ND = Not Detected, Result = detection limit.

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Barium, total	ug/L	MW-6	04/04/2022		521.0000	*	314.0158
Barium, total	ug/L	MW-6	10/05/2022		551.0000	*	314.0158
Barium, total	ug/L	MW-6	04/14/2023		133.0000		314.0158
Barium, total	ug/L	MW-6	10/18/2023		431.0000	*	314.0158
Barium, total	ug/L	MW-6	04/08/2024		171.0000		314.0158
Barium, total	ug/L	MW-6	10/08/2024		519.0000	*	314.0158
Barium, total	ug/L	MW-6	04/03/2025		415.0000	*	314.0158

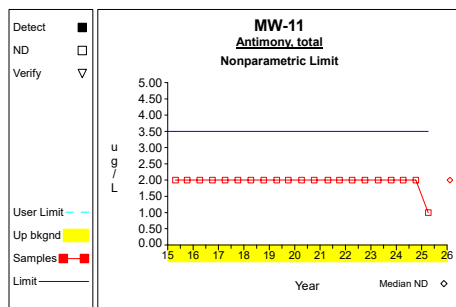
* - Significantly increased over background.

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

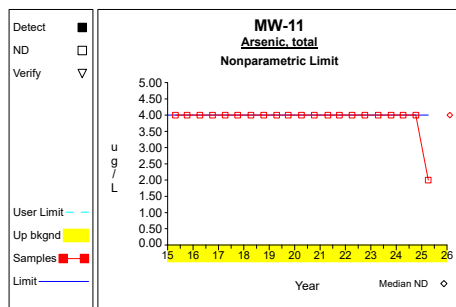
*** - Manual exclusion.

ND = Not Detected, Result = detection limit.

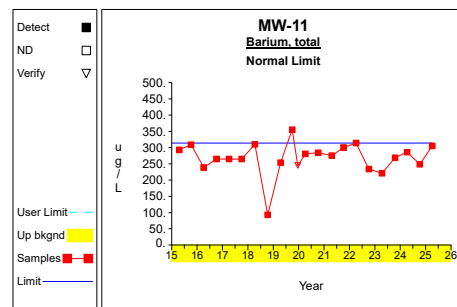
Up vs. Down Prediction Limits



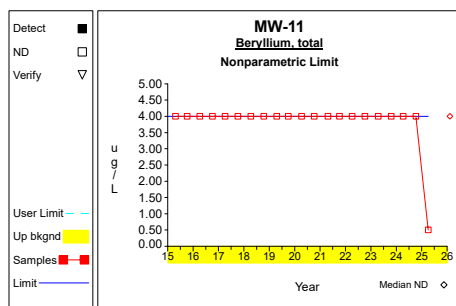
Graph 1



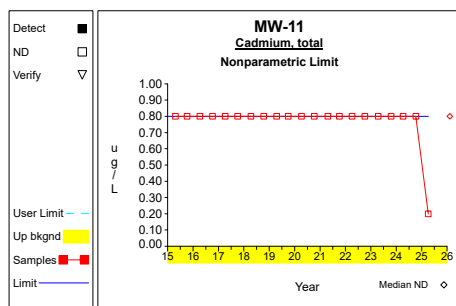
Graph 2



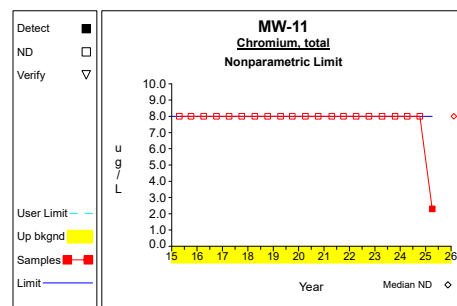
Graph 3



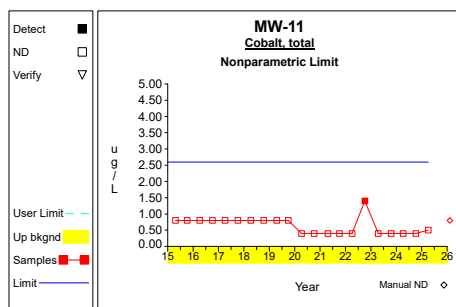
Graph 4



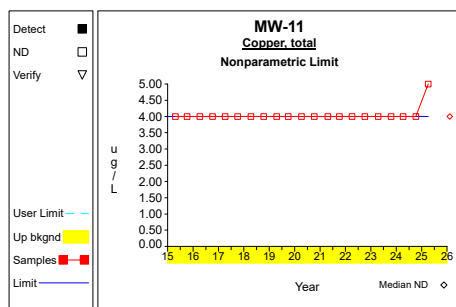
Graph 5



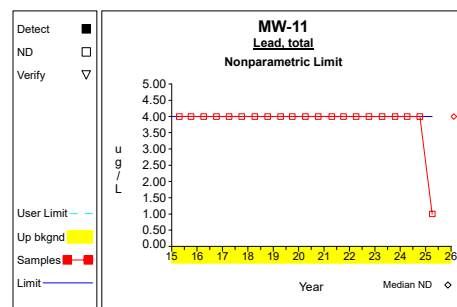
Graph 6



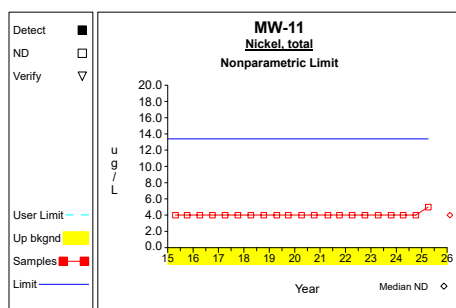
Graph 7



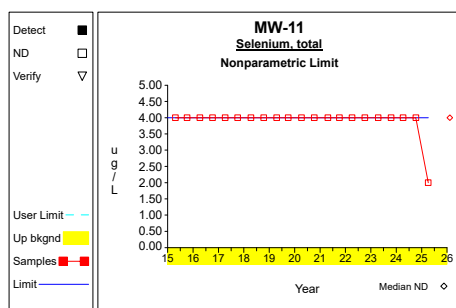
Graph 8



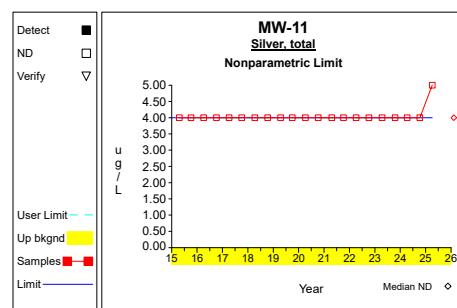
Graph 9



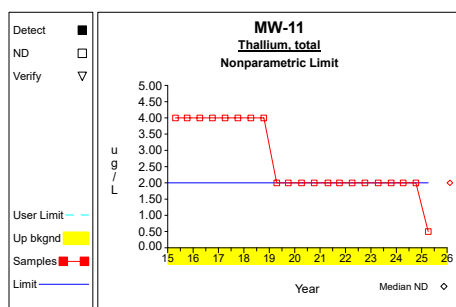
Graph 10



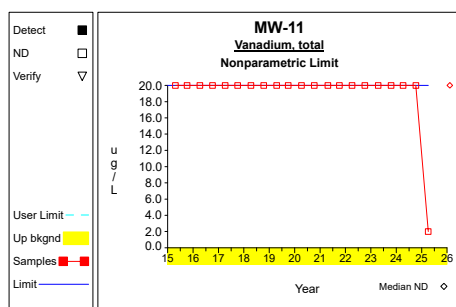
Graph 11



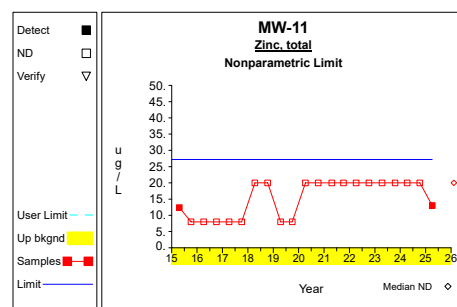
Graph 12



Graph 13

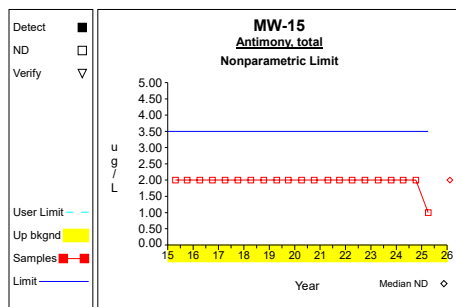


Graph 14

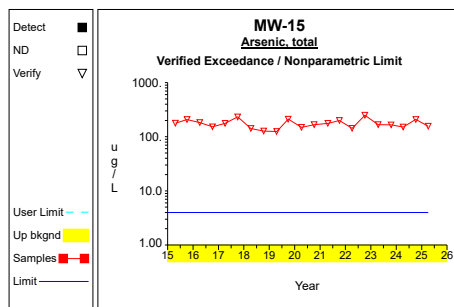


Graph 15

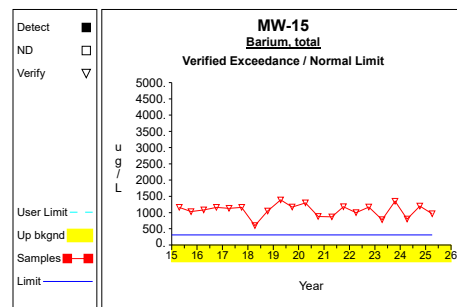
Up vs. Down Prediction Limits



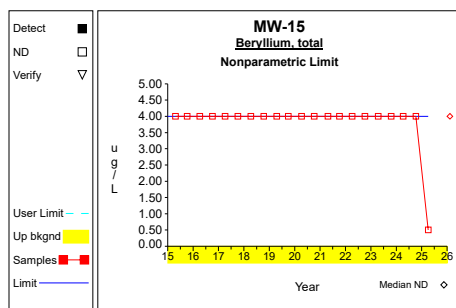
Graph 16



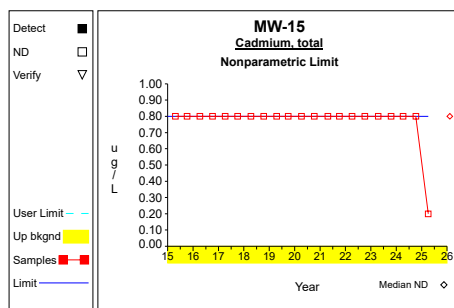
Graph 17



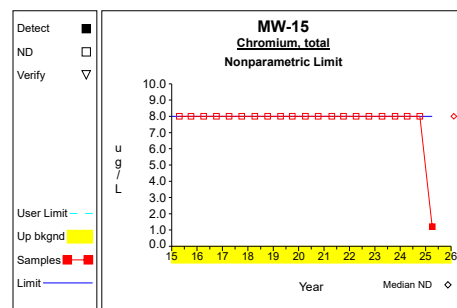
Graph 18



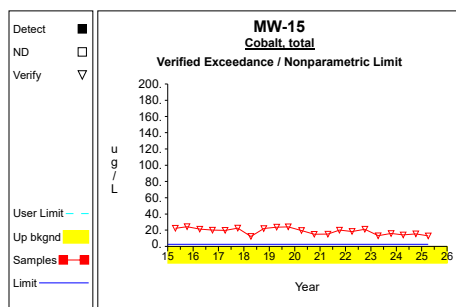
Graph 19



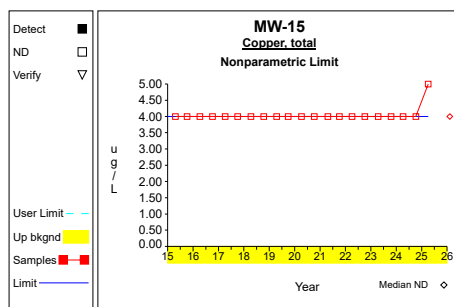
Graph 20



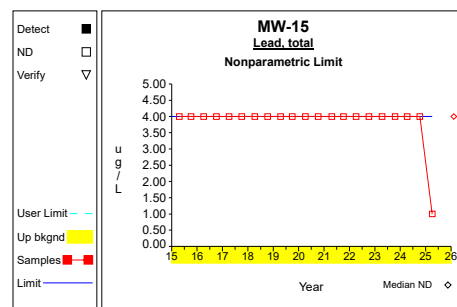
Graph 21



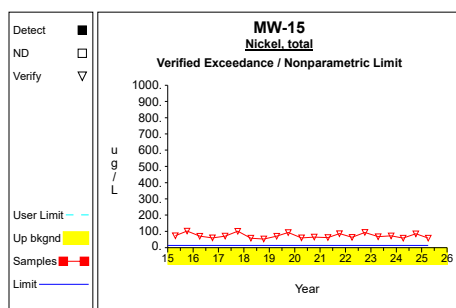
Graph 22



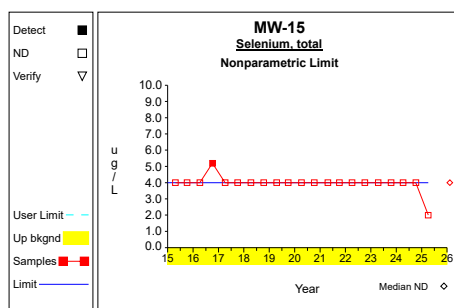
Graph 23



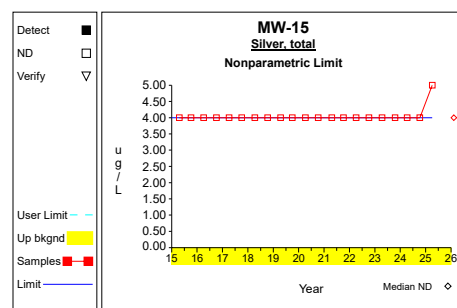
Graph 24



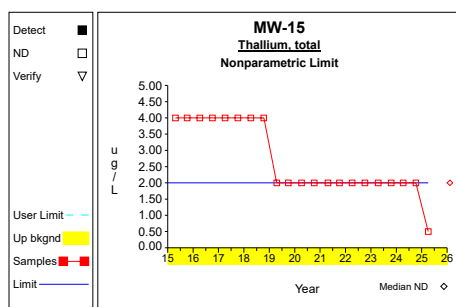
Graph 25



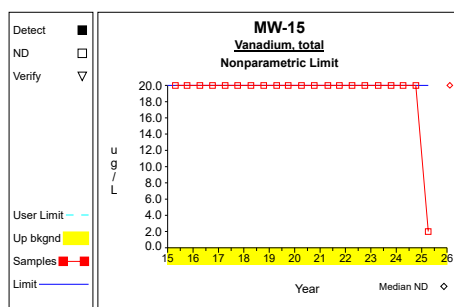
Graph 26



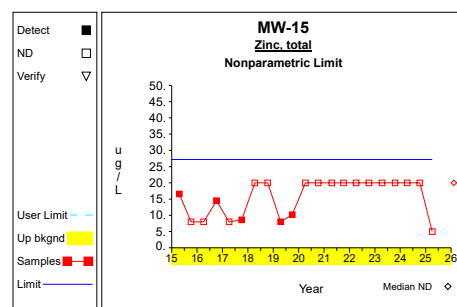
Graph 27



Graph 28

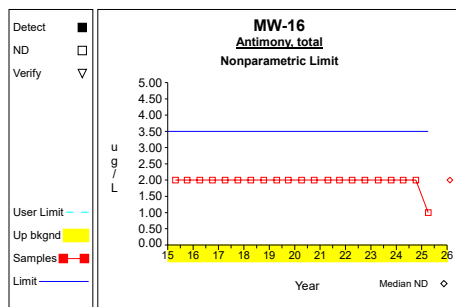


Graph 29

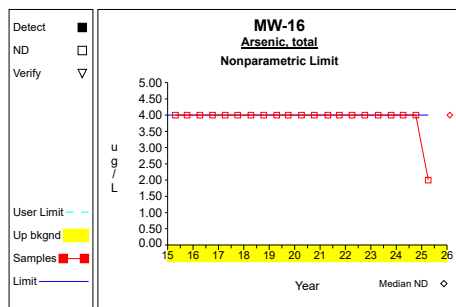


Graph 30

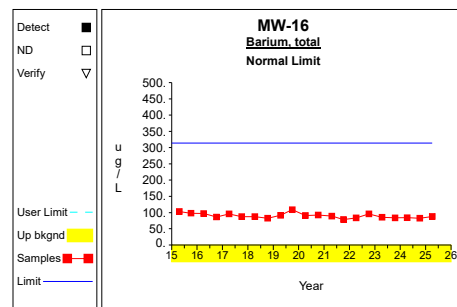
Up vs. Down Prediction Limits



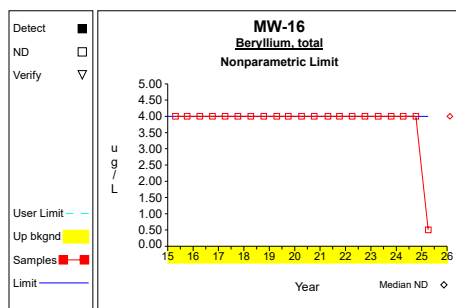
Graph 31



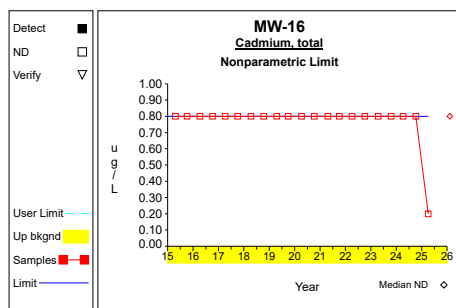
Graph 32



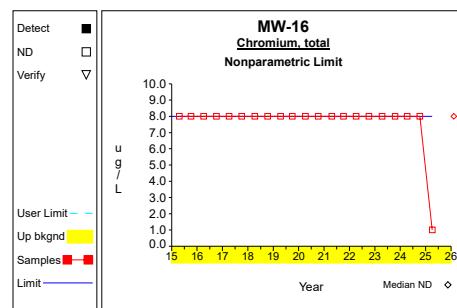
Graph 33



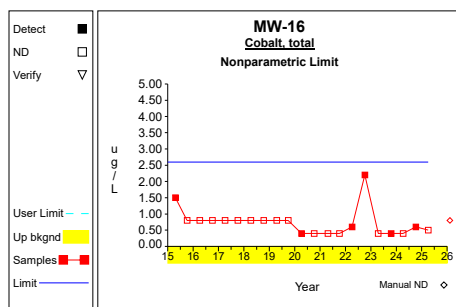
Graph 34



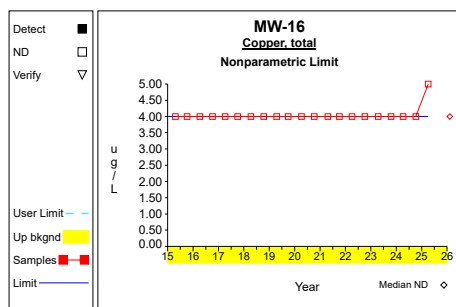
Graph 35



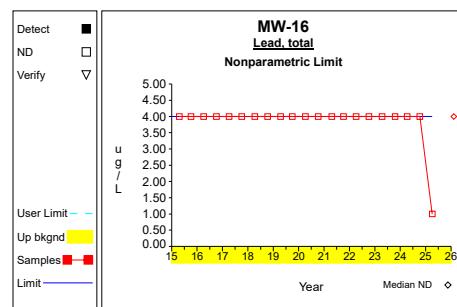
Graph 36



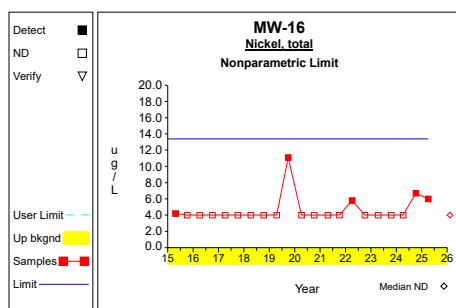
Graph 37



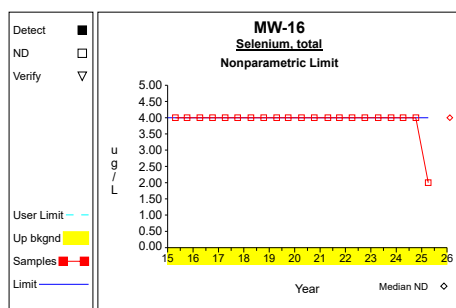
Graph 38



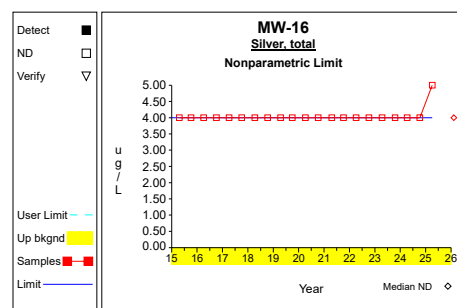
Graph 39



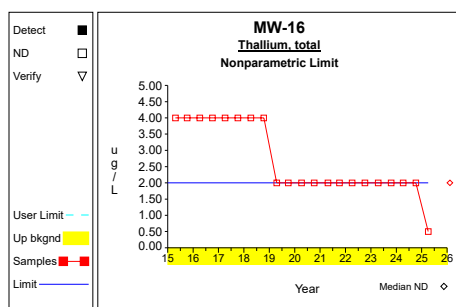
Graph 40



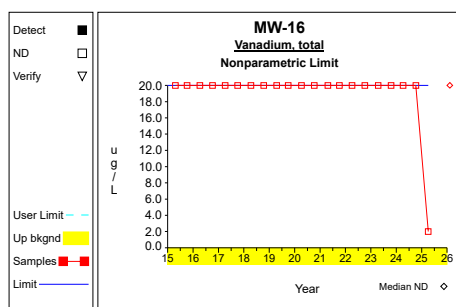
Graph 41



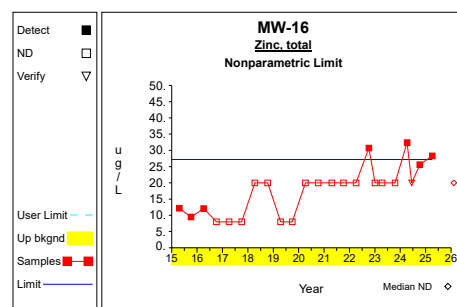
Graph 42



Graph 43

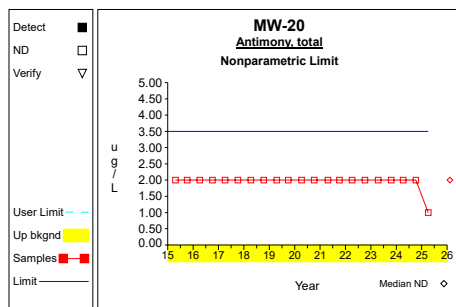


Graph 44

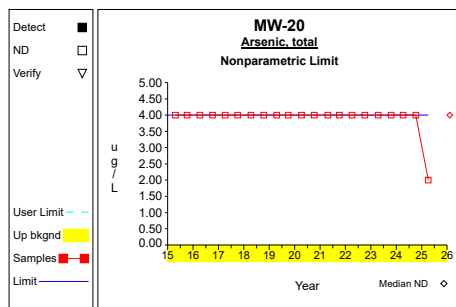


Graph 45

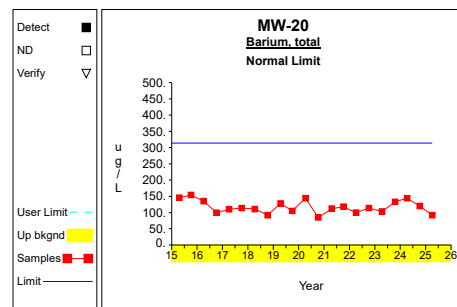
Up vs. Down Prediction Limits



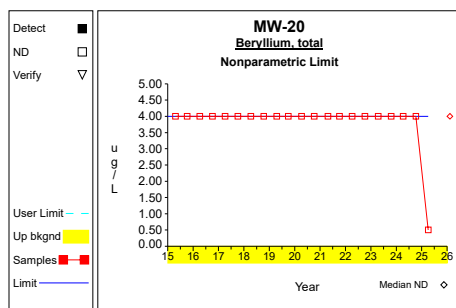
Graph 46



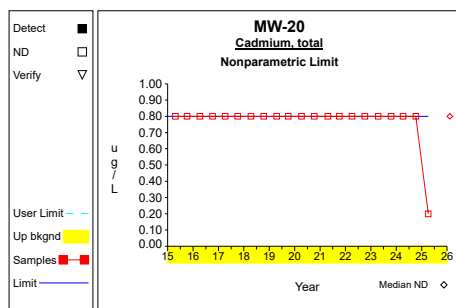
Graph 47



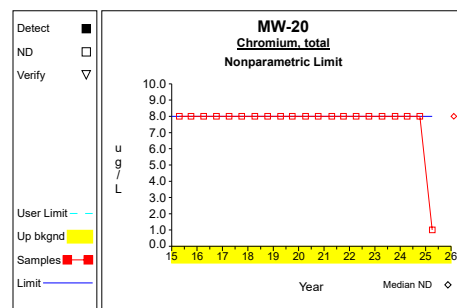
Graph 48



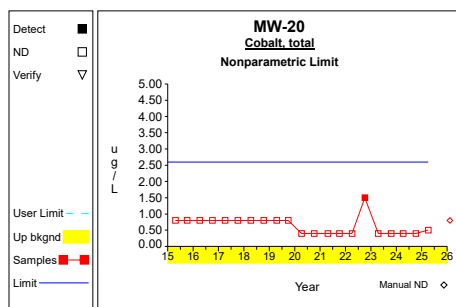
Graph 49



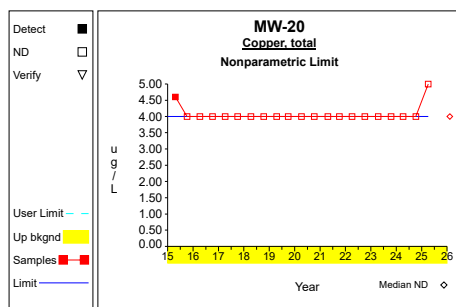
Graph 50



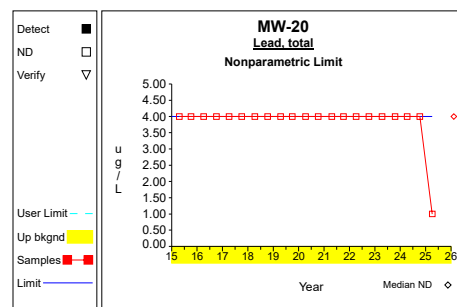
Graph 51



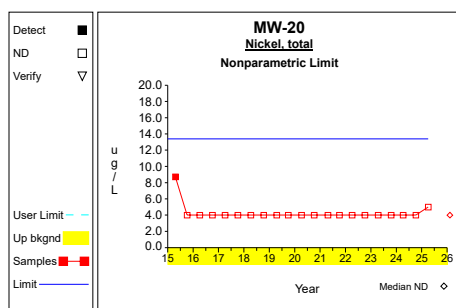
Graph 52



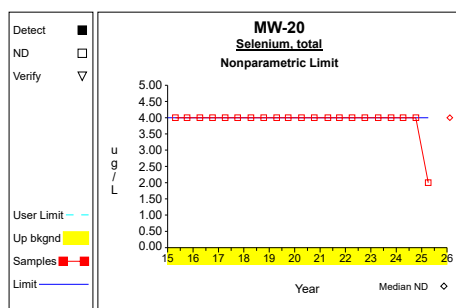
Graph 53



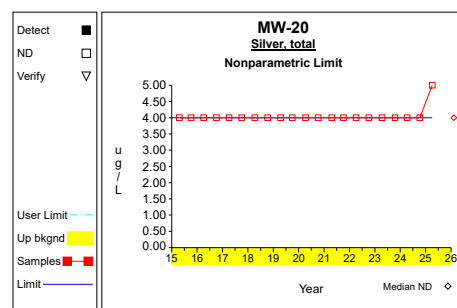
Graph 54



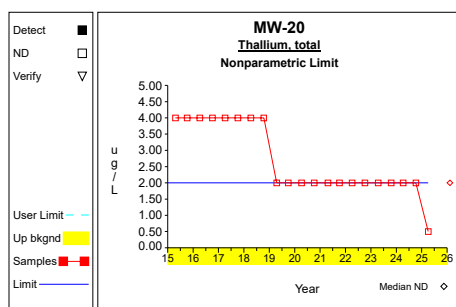
Graph 55



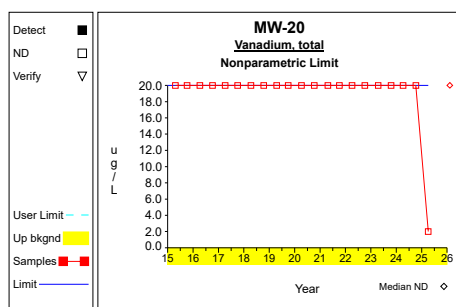
Graph 56



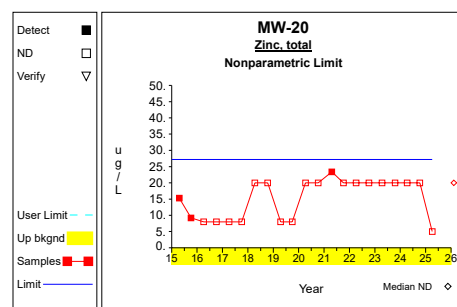
Graph 57



Graph 58

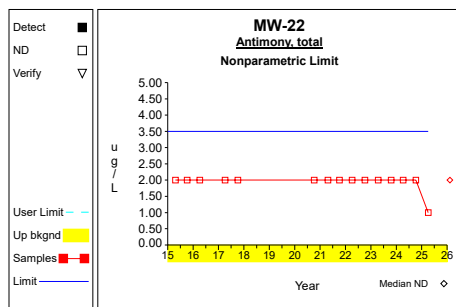


Graph 59

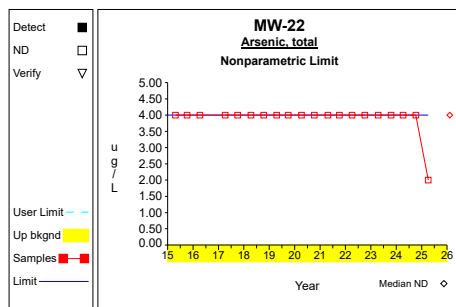


Graph 60

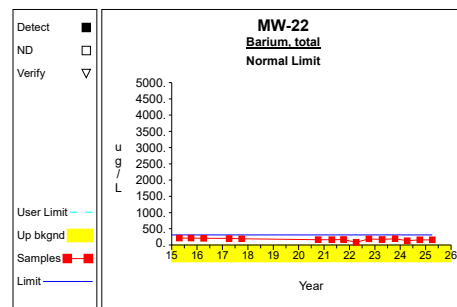
Up vs. Down Prediction Limits



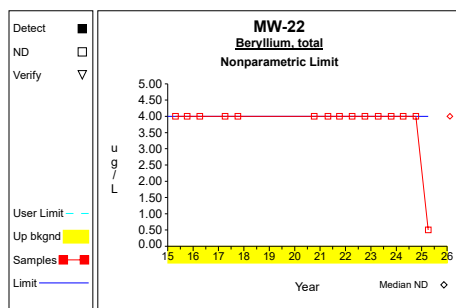
Graph 61



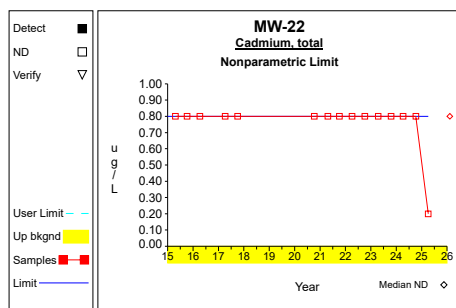
Graph 62



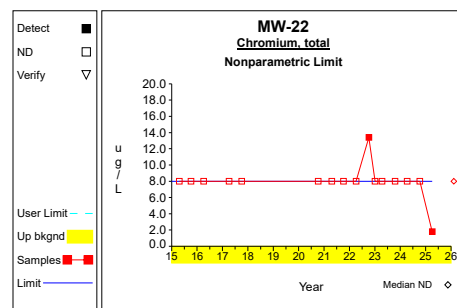
Graph 63



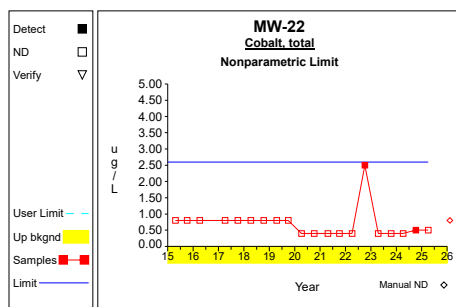
Graph 64



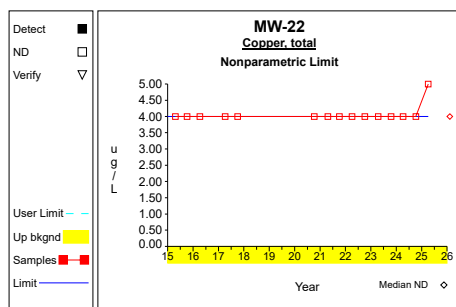
Graph 65



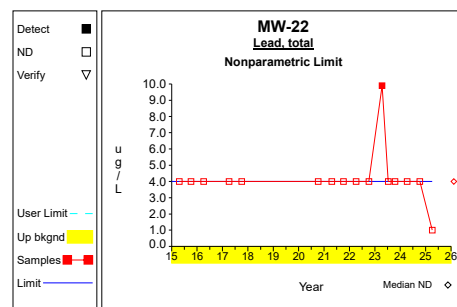
Graph 66



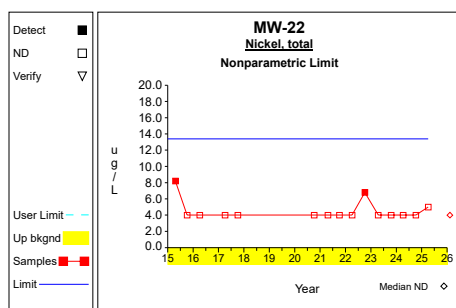
Graph 67



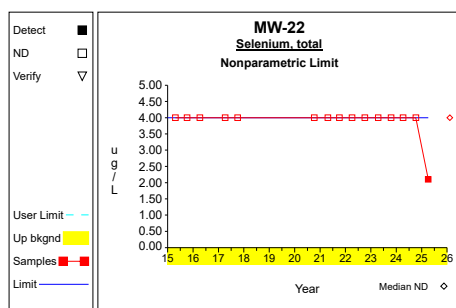
Graph 68



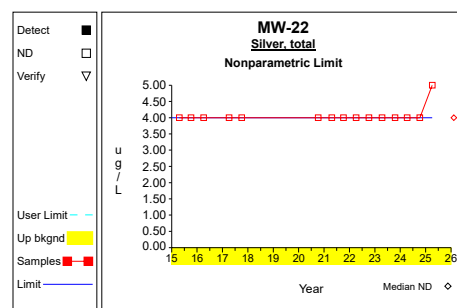
Graph 69



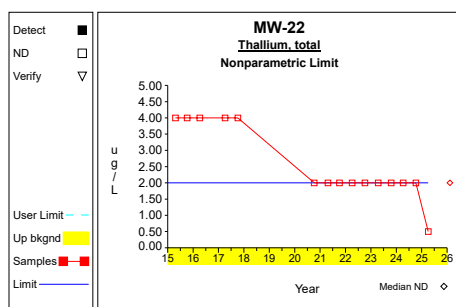
Graph 70



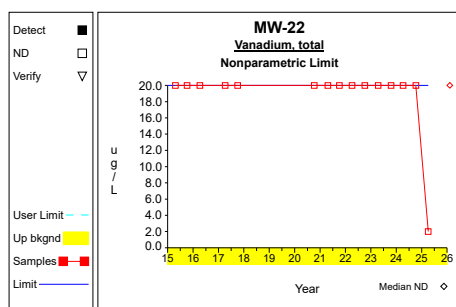
Graph 71



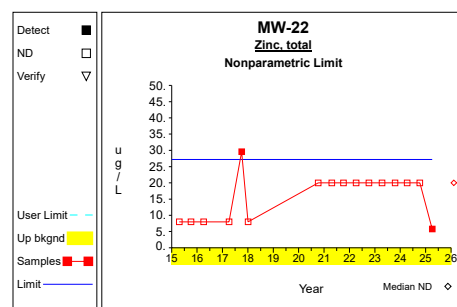
Graph 72



Graph 73

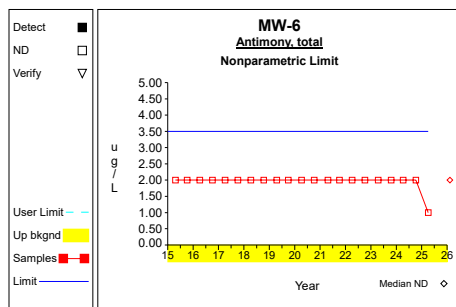


Graph 74

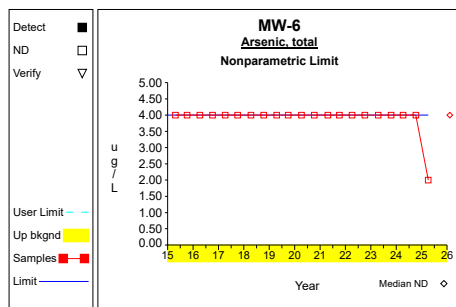


Graph 75

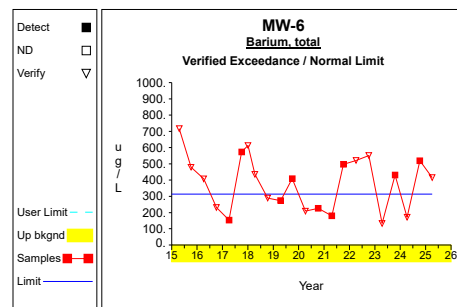
Up vs. Down Prediction Limits



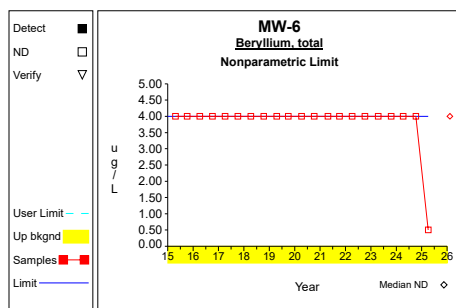
Graph 76



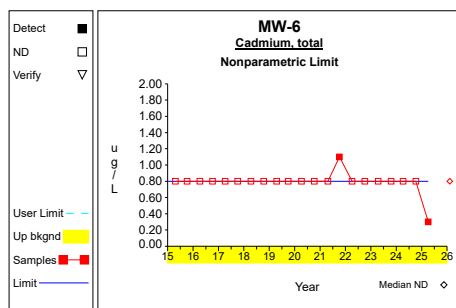
Graph 77



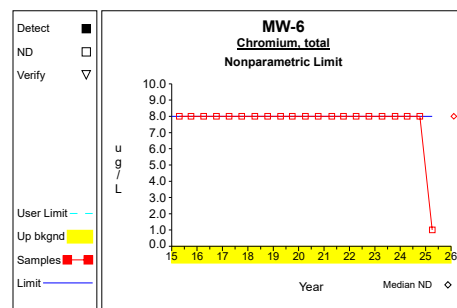
Graph 78



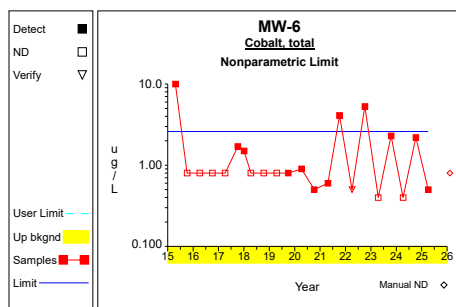
Graph 79



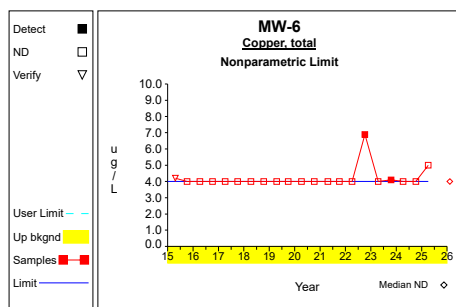
Graph 80



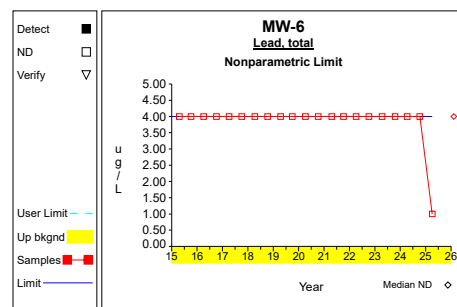
Graph 81



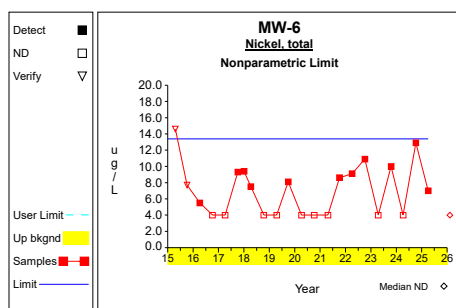
Graph 82



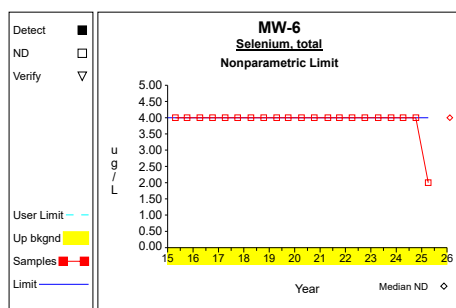
Graph 83



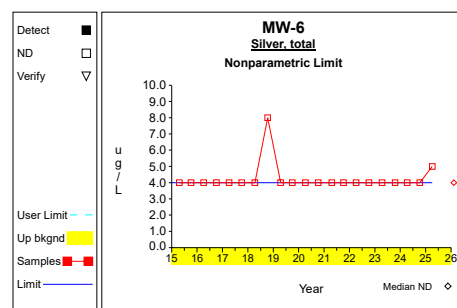
Graph 84



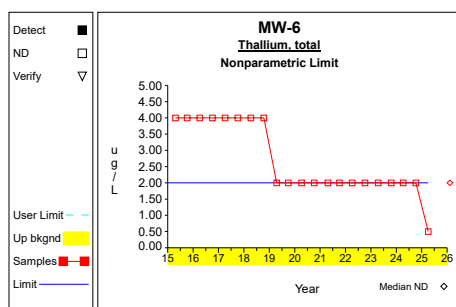
Graph 85



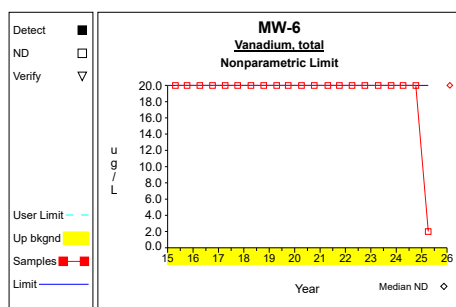
Graph 86



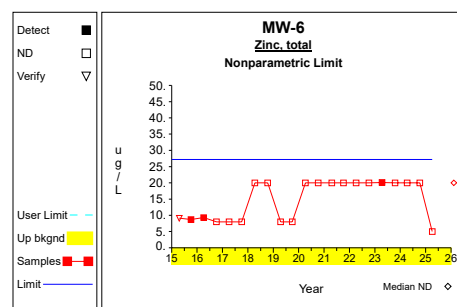
Graph 87



Graph 88

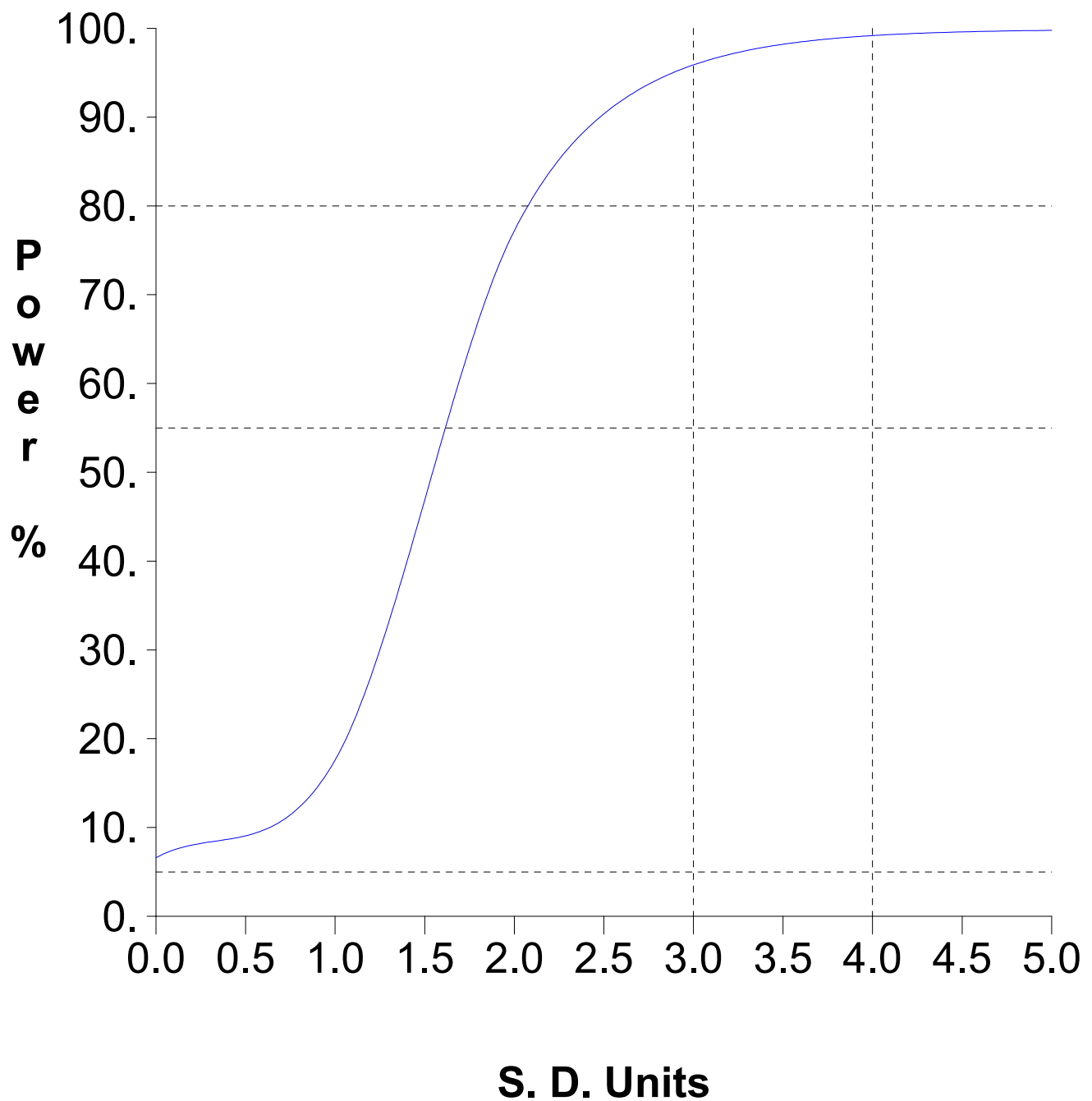


Graph 89



Graph 90

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



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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = max(X) = 3.5	Compute nonparametric prediction limit as largest background measurement.
2	Conf = 0.979	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = median(X) = 4.0	Compute nonparametric prediction limit as median reporting limit in background.
2	Conf = 0.979	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	$\bar{X} = \text{sum}[X] / N$ = 5707.0 / 22 = 259.409	Compute upgradient mean.
2	$S = \left((\text{sum}[X^2] - \text{sum}[X]^2/N) / (N-1) \right)^{1/2}$ = $\left((1.49 \times 10^6 - 3.26 \times 10^7/22) / (22-1) \right)^{1/2}$ = 21.219	Compute upgradient sd.
3	$\alpha = \min[(1-.95^{1/K})^{1/2}, .01]$ = $\min[(1-.95^{1/90})^{1/2}, .01]$ = 0.01	Adjusted per comparison false positive rate. Pass initial or 1 resample.
4	$PL = \bar{X} + tS(1+1/N)^{1/2}$ = 259.409 + $(2.517 \times 21.219)(1+1/22)^{1/2}$ = 314.016	One-sided normal prediction limit (t is Student's t on N-1 degrees of freedom and 1-alpha confidence level).

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = median(X) = 4.0	Compute nonparametric prediction limit as median reporting limit in background.
2	Conf = 0.979	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = median(X) = 0.8	Compute nonparametric prediction limit as median reporting limit in background.
2	Conf = 0.979	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = median(X) = 8.0	Compute nonparametric prediction limit as median reporting limit in background.
2	Conf = 0.979	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = max(X) = 2.6	Compute nonparametric prediction limit as largest background measurement.
2	Conf = 0.979	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = median(X) = 4.0	Compute nonparametric prediction limit as median reporting limit in background.
2	Conf = 0.979	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = median(X) = 4.0	Compute nonparametric prediction limit as median reporting limit in background.
2	Conf = 0.979	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = max(X) = 13.4	Compute nonparametric prediction limit as largest background measurement.
2	Conf = 0.979	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = median(X) = 4.0	Compute nonparametric prediction limit as median reporting limit in background.
2	Conf = 0.979	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = median(X) = 4.0	Compute nonparametric prediction limit as median reporting limit in background.
2	Conf = 0.979	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = median(X) = 2.0	Compute nonparametric prediction limit as median reporting limit in background.
2	Conf = 0.979	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = median(X) = 20.0	Compute nonparametric prediction limit as median reporting limit in background.
2	Conf = 0.979	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

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

<u>Step</u>	<u>Equation</u>	<u>Description</u>
1	PL = max(X) = 27.2	Compute nonparametric prediction limit as largest background measurement.
2	Conf = 0.979	Confidence level is based on N, K and resampling strategy (see Gibbons 1994).

Table 1

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

Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend	
Arsenic, total	ug/L	MW-15	4	170.750	26.235	1.176	139.891	201.609	10.000		**
Barium, total	ug/L	MW-15	4	1078.250	244.525	1.176	790.619	1365.881	2000.000		
Cobalt, total	ug/L	MW-15	4	14.625	1.330	1.176	13.060	16.190	2.100	dec	**
Nickel, total	ug/L	MW-15	4	68.425	12.892	1.176	53.260	83.590	100.000		
Zinc, total	ug/L	MW-15	4	10.000	0.000	1.176	10.000	10.000	2000.000	dec	
Arsenic, total	ug/L	MW-16	4	2.000	0.000	1.176	2.000	2.000	10.000		
Barium, total	ug/L	MW-16	4	84.725	2.228	1.176	82.105	87.345	2000.000	dec	
Cobalt, total	ug/L	MW-16	4	0.450	0.100	1.176	0.332	0.568	2.100		
Nickel, total	ug/L	MW-16	4	4.175	2.528	1.176	1.202	7.148	100.000		
Zinc, total	ug/L	MW-16	4	26.575	5.199	1.176	20.460	32.690	2000.000		
Arsenic, total	ug/L	MW-6	4	2.000	0.000	1.176	2.000	2.000	10.000		
Barium, total	ug/L	MW-6	4	384.000	149.180	1.176	208.521	559.479	2000.000	dec	
Cobalt, total	ug/L	MW-6	4	1.350	1.041	1.176	0.126	2.574	2.100		
Nickel, total	ug/L	MW-6	4	7.975	4.655	1.176	2.499	13.451	100.000	dec	
Zinc, total	ug/L	MW-6	4	10.000	0.000	1.176	10.000	10.000	2000.000		

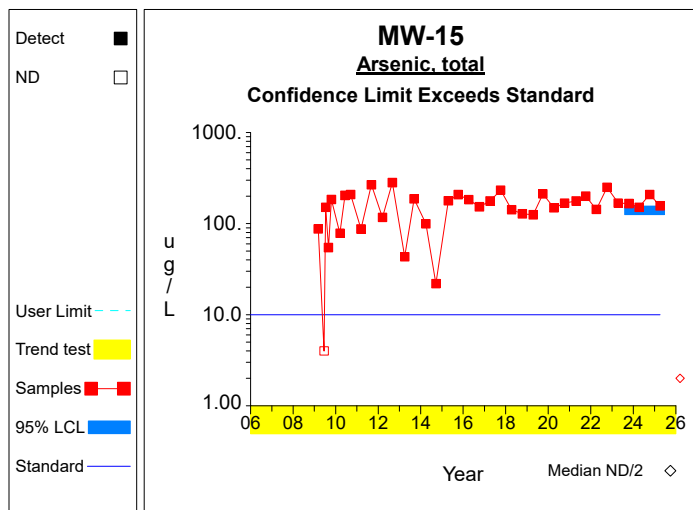
* - Insufficient Data

** - Significant Exceedance

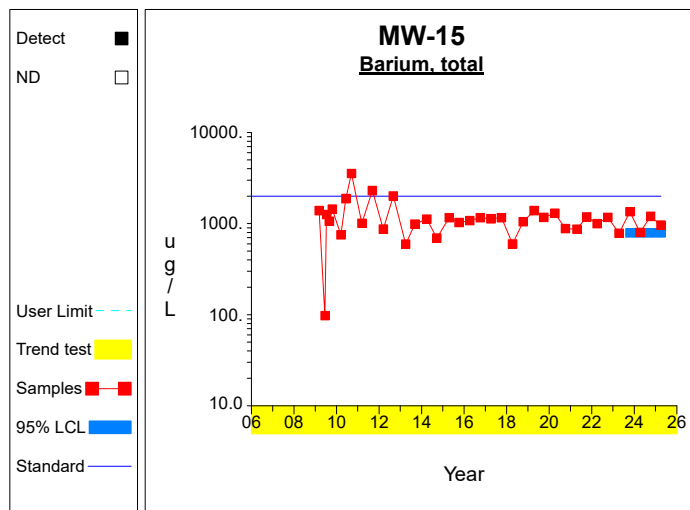
LCL = Lower Confidence Limit

UCL = Upper Confidence Limit

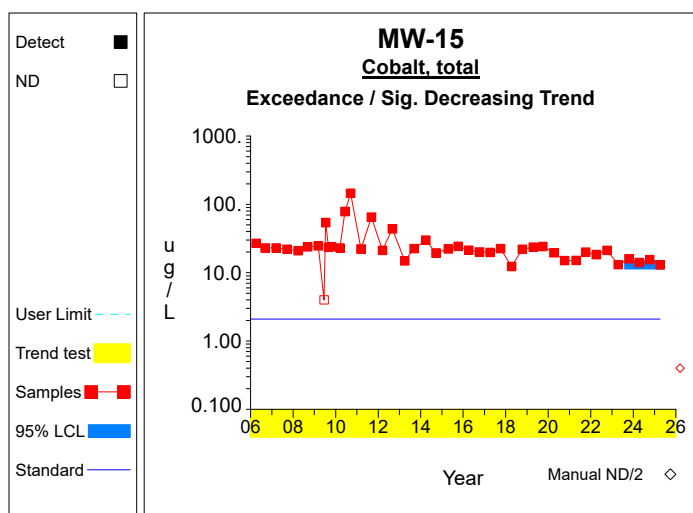
Confidence Limits (Assessment)



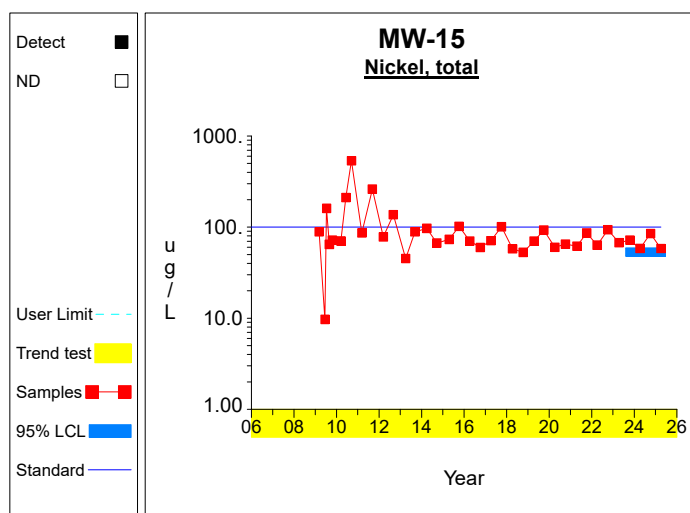
Graph 1



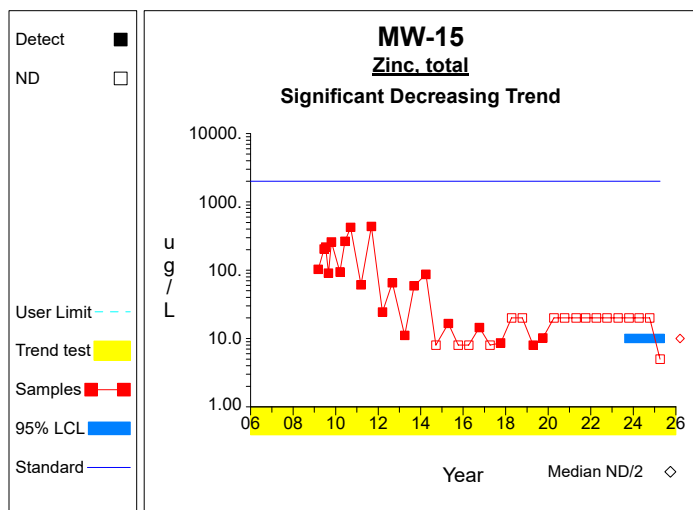
Graph 2



Graph 3

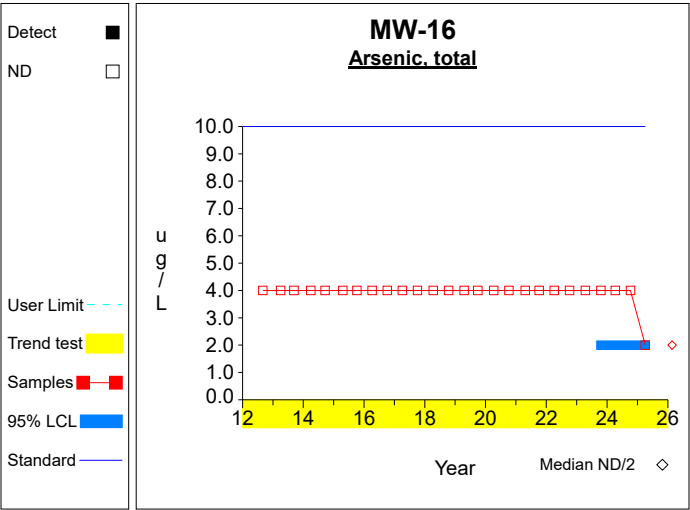


Graph 4

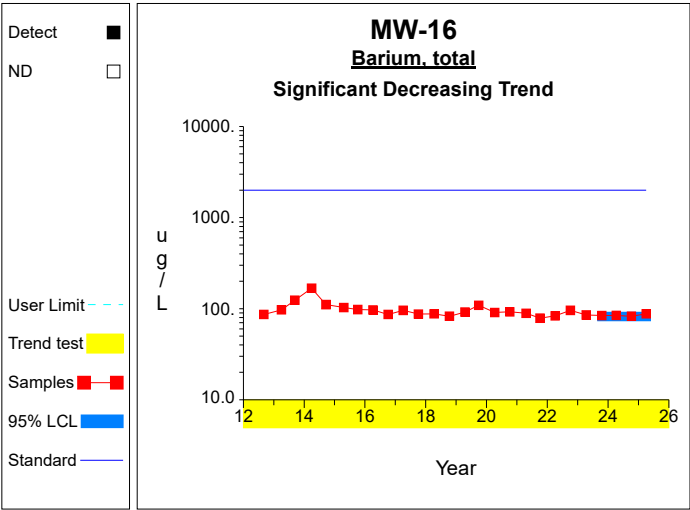


Graph 5

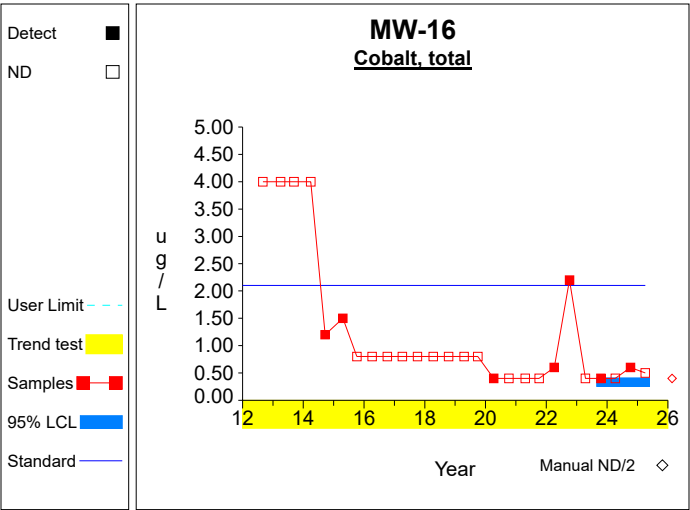
Confidence Limits (Assessment)



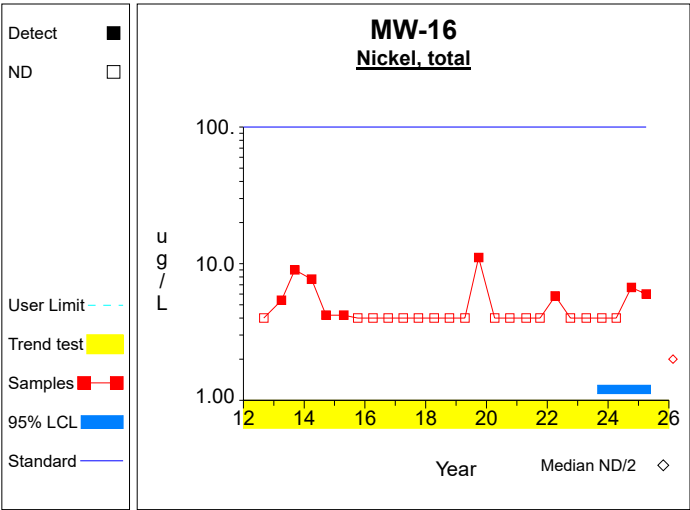
Graph 6



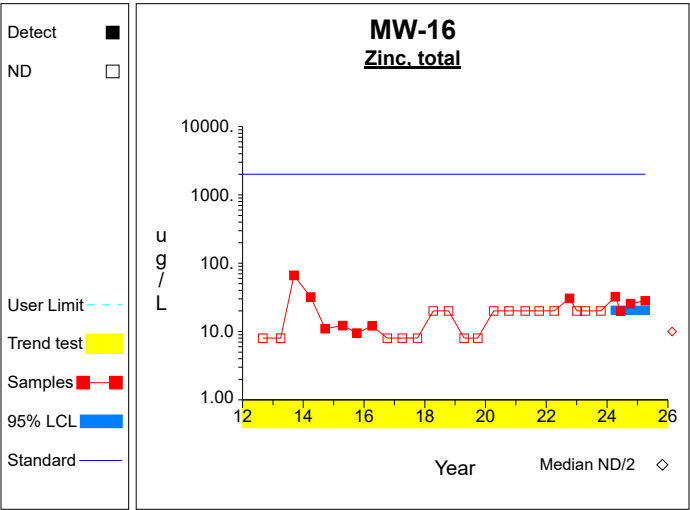
Graph 7



Graph 8

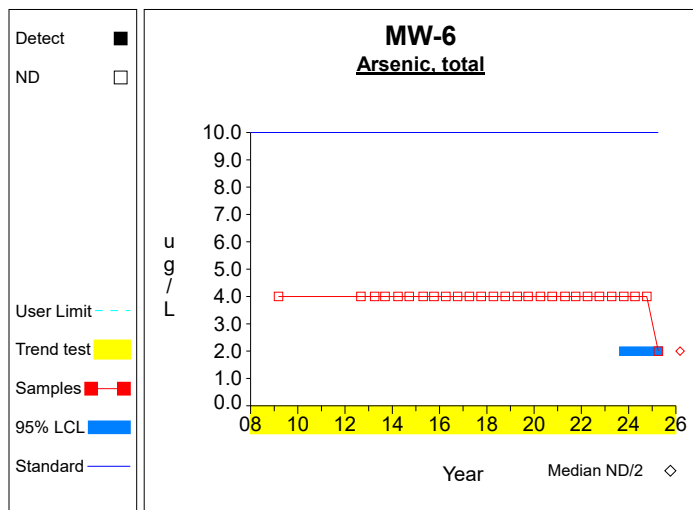


Graph 9

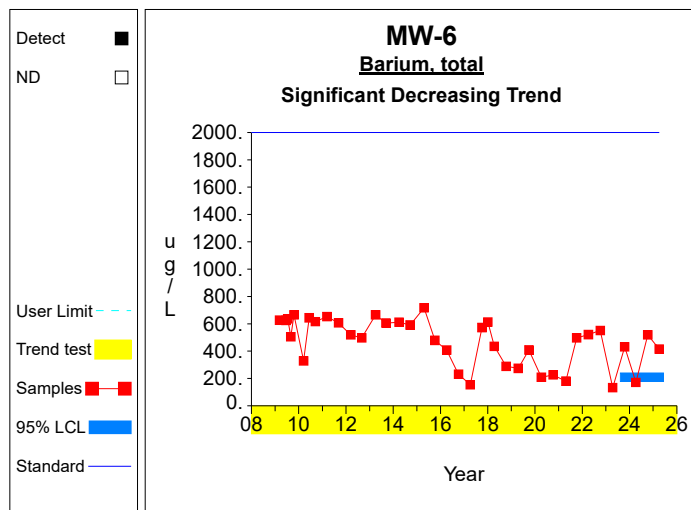


Graph 10

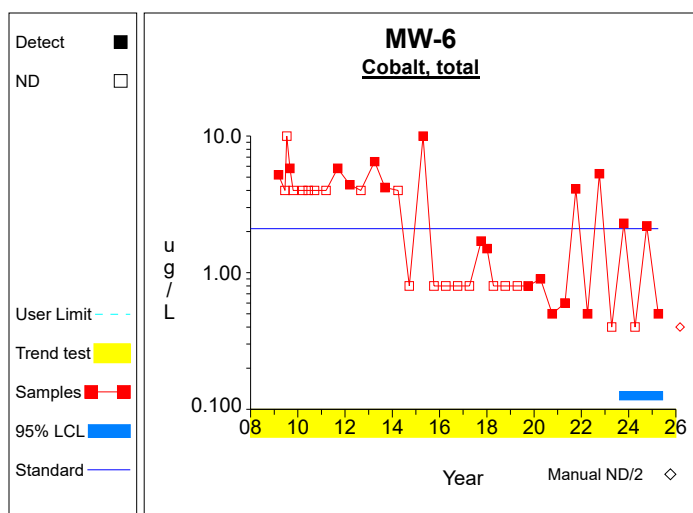
Confidence Limits (Assessment)



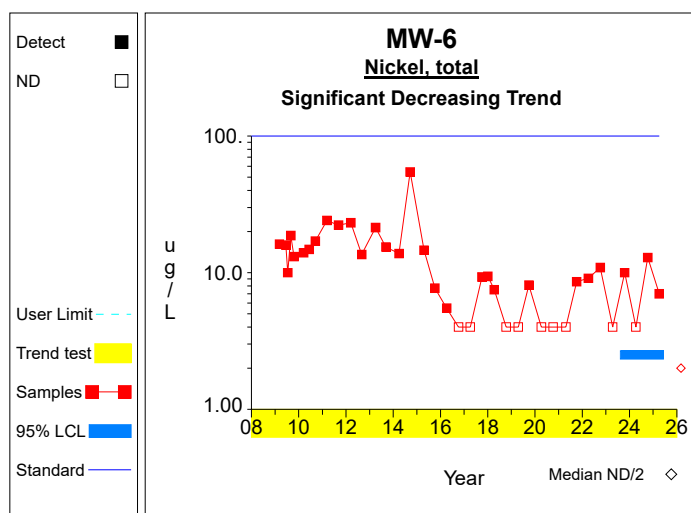
Graph 11



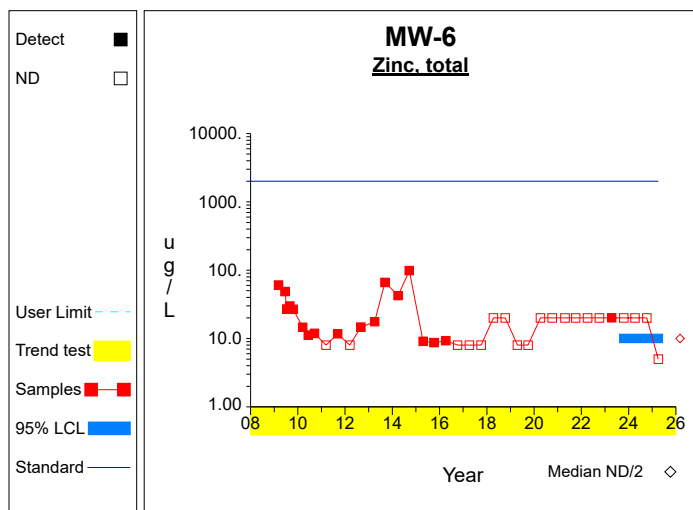
Graph 12



Graph 13



Graph 14



Graph 15

Attachment C

Summary Table of Historical VOC Detections

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,4-dichlorobenzene	LPZ-6	10/07/2020		6.5	1.0	ug/L
1,4-dichlorobenzene	LPZ-6	4/22/2021		6.4	1.0	ug/L
1,4-dichlorobenzene	LPZ-6	10/05/2021		6.0	1.0	ug/L
1,4-dichlorobenzene	LPZ-6	4/04/2022		2.2	1.0	ug/L
1,4-dichlorobenzene	LPZ-6	10/05/2022		6.0	1.0	ug/L
1,4-dichlorobenzene	LPZ-6	4/14/2023		5.3	1.0	ug/L
1,4-dichlorobenzene	LPZ-6	10/18/2023		2.4	1.0	ug/L
1,4-dichlorobenzene	LPZ-6	4/08/2024		9.2	1.0	ug/L
2-hexanone (mbk)	LPZ-6	4/08/2024		50.8	5.0	ug/L
Benzene	LPZ-6	4/16/2019		10.5	1.0	ug/L
Benzene	LPZ-6	10/07/2020		10.6	1.0	ug/L
Benzene	LPZ-6	4/22/2021		9.4	1.0	ug/L
Benzene	LPZ-6	10/05/2021		8.8	1.0	ug/L
Benzene	LPZ-6	4/04/2022		1.2	1.0	ug/L
Benzene	LPZ-6	10/05/2022		9.3	1.0	ug/L
Benzene	LPZ-6	4/14/2023		13.6	1.0	ug/L
Benzene	LPZ-6	4/08/2024		17.7	1.0	ug/L
Carbon disulfide	LPZ-6	10/05/2022		2	1	ug/L
Chlorobenzene	LPZ-6	4/16/2019		2.7	1.0	ug/L
Chlorobenzene	LPZ-6	10/07/2020		2.4	1.0	ug/L
Chlorobenzene	LPZ-6	4/22/2021		2.0	1.0	ug/L
Chlorobenzene	LPZ-6	10/05/2021		2.0	1.0	ug/L
Chlorobenzene	LPZ-6	10/05/2022		1.3	1.0	ug/L
Chlorobenzene	LPZ-6	4/14/2023		1.3	1.0	ug/L
Chlorobenzene	LPZ-6	4/08/2024		1.7	1.0	ug/L
Chloroethane	LPZ-6	4/22/2021		1.6	1.0	ug/L
Chloroethane	LPZ-6	10/18/2023		1.2	1.0	ug/L
Chloroethane	LPZ-6	4/08/2024		1.3	1.0	ug/L
Ethylbenzene	LPZ-6	4/16/2019		43.6	1.0	ug/L
Ethylbenzene	LPZ-6	10/07/2020		52.0	1.0	ug/L
Ethylbenzene	LPZ-6	4/22/2021		27.4	1.0	ug/L
Ethylbenzene	LPZ-6	10/05/2021		1.6	1.0	ug/L
Ethylbenzene	LPZ-6	4/04/2022		2.6	1.0	ug/L
Ethylbenzene	LPZ-6	10/05/2022		2.1	1.0	ug/L
Ethylbenzene	LPZ-6	4/14/2023		7.4	1.0	ug/L
Ethylbenzene	LPZ-6	4/08/2024		7.6	1.0	ug/L
Styrene	LPZ-6	4/08/2024		1.5	1.0	ug/L
Toluene	LPZ-6	10/07/2020		1.4	1.0	ug/L
Toluene	LPZ-6	10/05/2022		1.0	1.0	ug/L
Toluene	LPZ-6	4/08/2024		1.0	1.0	ug/L
Xylenes, total	LPZ-6	4/16/2019		9.5	2.0	ug/L
Xylenes, total	LPZ-6	10/07/2020		99.1	2.0	ug/L
Xylenes, total	LPZ-6	4/22/2021		27.5	2.0	ug/L
Xylenes, total	LPZ-6	10/05/2021		4.9	2.0	ug/L
Xylenes, total	LPZ-6	4/04/2022		2.4	2.0	ug/L
Xylenes, total	LPZ-6	10/05/2022		22.3	2.0	ug/L
Xylenes, total	LPZ-6	4/14/2023		22.6	2.0	ug/L
Xylenes, total	LPZ-6	10/18/2023		3.8	2.0	ug/L
Xylenes, total	LPZ-6	4/08/2024		95.0	2.0	ug/L
Acetone	MW-11	10/03/2017		20.6	10.0	ug/L
Acetone	MW-12	10/03/2017		19.6	10.0	ug/L
1,1-dichloroethylene	MW-15	4/08/2024		1	1	ug/L
1,4-dichlorobenzene	MW-15	4/06/2006		2.3	1.0	ug/L
1,4-dichlorobenzene	MW-15	9/07/2006		2.4	1.0	ug/L
1,4-dichlorobenzene	MW-15	3/14/2007		2.1	1.0	ug/L
1,4-dichlorobenzene	MW-15	9/19/2007		2.3	1.0	ug/L
1,4-dichlorobenzene	MW-15	3/25/2008		3.0	1.0	ug/L
1,4-dichlorobenzene	MW-15	9/05/2008		3.0	1.0	ug/L
1,4-dichlorobenzene	MW-15	3/06/2009		2.8	1.0	ug/L
1,4-dichlorobenzene	MW-15	3/06/2009		2.8	1.0	ug/L
1,4-dichlorobenzene	MW-15	10/20/2009		2.7	1.0	ug/L
1,4-dichlorobenzene	MW-15	3/15/2010		2.5	1.0	ug/L
1,4-dichlorobenzene	MW-15	3/15/2010		2.5	1.0	ug/L
1,4-dichlorobenzene	MW-15	6/10/2010		2.0	1.0	ug/L
1,4-dichlorobenzene	MW-15	9/14/2010		1.9	1.0	ug/L
1,4-dichlorobenzene	MW-15	9/14/2010		1.9	1.0	ug/L
1,4-dichlorobenzene	MW-15	3/11/2011		3.5	1.0	ug/L
1,4-dichlorobenzene	MW-15	3/11/2011		3.5	1.0	ug/L
1,4-dichlorobenzene	MW-15	9/07/2011		3.9	1.0	ug/L
1,4-dichlorobenzene	MW-15	9/01/2012		3.6	1.0	ug/L
1,4-dichlorobenzene	MW-15	4/01/2013		1.8	1.0	ug/L
1,4-dichlorobenzene	MW-15	9/09/2013		3.0	1.0	ug/L
1,4-dichlorobenzene	MW-15	3/30/2014		3.1	1.0	ug/L
1,4-dichlorobenzene	MW-15	9/19/2014		2.9	1.0	ug/L
1,4-dichlorobenzene	MW-15	4/20/2015		2.4	1.0	ug/L
1,4-dichlorobenzene	MW-15	10/05/2015		2.7	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,4-dichlorobenzene	MW-15	4/05/2016		2.2	1.0	ug/L
1,4-dichlorobenzene	MW-15	10/05/2016		2.5	1.0	ug/L
1,4-dichlorobenzene	MW-15	4/04/2017		2.0	1.0	ug/L
1,4-dichlorobenzene	MW-15	10/03/2017		2.8	1.0	ug/L
1,4-dichlorobenzene	MW-15	4/10/2018		2.6	1.0	ug/L
1,4-dichlorobenzene	MW-15	4/07/2020		2.0	1.0	ug/L
1,4-dichlorobenzene	MW-15	10/07/2020		1.9	1.0	ug/L
1,4-dichlorobenzene	MW-15	4/22/2021		1.8	1.0	ug/L
1,4-dichlorobenzene	MW-15	10/05/2021		2.1	1.0	ug/L
1,4-dichlorobenzene	MW-15	4/04/2022		1.8	1.0	ug/L
1,4-dichlorobenzene	MW-15	10/05/2022		2.2	1.0	ug/L
1,4-dichlorobenzene	MW-15	4/14/2023		1.9	1.0	ug/L
1,4-dichlorobenzene	MW-15	10/18/2023		1.7	1.0	ug/L
1,4-dichlorobenzene	MW-15	4/08/2024		2.1	1.0	ug/L
1,4-dichlorobenzene	MW-15	10/08/2024		1.6	1.0	ug/L
1,4-dichlorobenzene	MW-15	4/03/2025		1.7	1.0	ug/L
Acetone	MW-15	9/19/2014		13.1	10.0	ug/L
Acetone	MW-15	4/20/2015		51.3	10.0	ug/L
Acetone	MW-15	10/05/2016		26.3	10.0	ug/L
Benzene	MW-15	4/06/2006		10.0	1.0	ug/L
Benzene	MW-15	9/07/2006		7.8	1.0	ug/L
Benzene	MW-15	3/14/2007		10.3	1.0	ug/L
Benzene	MW-15	9/19/2007		7.6	1.0	ug/L
Benzene	MW-15	3/25/2008		8.9	1.0	ug/L
Benzene	MW-15	9/05/2008		9.4	1.0	ug/L
Benzene	MW-15	3/06/2009		11.5	1.0	ug/L
Benzene	MW-15	10/20/2009		12.3	1.0	ug/L
Benzene	MW-15	3/15/2010		10.9	1.0	ug/L
Benzene	MW-15	3/15/2010		10.9	1.0	ug/L
Benzene	MW-15	6/10/2010		11.7	1.0	ug/L
Benzene	MW-15	9/14/2010		8.2	1.0	ug/L
Benzene	MW-15	9/14/2010		8.2	1.0	ug/L
Benzene	MW-15	3/11/2011		13.9	1.0	ug/L
Benzene	MW-15	3/11/2011		13.9	1.0	ug/L
Benzene	MW-15	9/07/2011		11.8	1.0	ug/L
Benzene	MW-15	9/01/2012		9.5	1.0	ug/L
Benzene	MW-15	4/01/2013		7.1	1.0	ug/L
Benzene	MW-15	9/09/2013		6.3	1.0	ug/L
Benzene	MW-15	3/30/2014		10.0	1.0	ug/L
Benzene	MW-15	9/19/2014		7.4	1.0	ug/L
Benzene	MW-15	4/20/2015		7.8	1.0	ug/L
Benzene	MW-15	10/05/2015		5.8	1.0	ug/L
Benzene	MW-15	4/05/2016		7.7	1.0	ug/L
Benzene	MW-15	10/05/2016		5.0	1.0	ug/L
Benzene	MW-15	4/04/2017		6.6	1.0	ug/L
Benzene	MW-15	10/03/2017		6.2	1.0	ug/L
Benzene	MW-15	4/10/2018		8.9	1.0	ug/L
Benzene	MW-15	10/12/2018		5.6	1.0	ug/L
Benzene	MW-15	4/16/2019		6.9	1.0	ug/L
Benzene	MW-15	9/30/2019		3.6	1.0	ug/L
Benzene	MW-15	4/07/2020		5.1	1.0	ug/L
Benzene	MW-15	10/07/2020		3.5	1.0	ug/L
Benzene	MW-15	4/22/2021		6.1	1.0	ug/L
Benzene	MW-15	10/05/2021		3.0	1.0	ug/L
Benzene	MW-15	4/04/2022		4.8	1.0	ug/L
Benzene	MW-15	10/05/2022		4.1	1.0	ug/L
Benzene	MW-15	4/14/2023		4.2	1.0	ug/L
Benzene	MW-15	10/18/2023		1.4	1.0	ug/L
Benzene	MW-15	4/08/2024		4.0	1.0	ug/L
Benzene	MW-15	10/08/2024		2.8	1.0	ug/L
Benzene	MW-15	4/03/2025		4.0	1.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-15	4/01/2013		10	8	ug/L
Bis(2-ethylhexyl) phthalate	MW-15	3/30/2014		85	8	ug/L
Bis(2-ethylhexyl) phthalate	MW-15	10/05/2015		10	10	ug/L
Bis(2-ethylhexyl) phthalate	MW-15	4/16/2019		10	6	ug/L
Chlorobenzene	MW-15	4/06/2006		7.70	1.00	ug/L
Chlorobenzene	MW-15	9/07/2006		9.10	1.00	ug/L
Chlorobenzene	MW-15	3/14/2007		7.80	1.00	ug/L
Chlorobenzene	MW-15	9/19/2007		7.00	1.00	ug/L
Chlorobenzene	MW-15	3/25/2008		6.90	1.00	ug/L
Chlorobenzene	MW-15	9/05/2008		9.00	1.00	ug/L
Chlorobenzene	MW-15	3/06/2009		9.69	1.00	ug/L
Chlorobenzene	MW-15	3/06/2009		9.60	1.00	ug/L
Chlorobenzene	MW-15	10/20/2009		10.80	1.00	ug/L
Chlorobenzene	MW-15	3/15/2010		9.50	1.00	ug/L
Chlorobenzene	MW-15	3/15/2010		9.50	1.00	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Chlorobenzene	MW-15	6/10/2010		9.40	1.00	ug/L
Chlorobenzene	MW-15	9/14/2010		8.60	1.00	ug/L
Chlorobenzene	MW-15	9/14/2010		8.60	1.00	ug/L
Chlorobenzene	MW-15	3/11/2011		17.40	1.00	ug/L
Chlorobenzene	MW-15	3/11/2011		17.40	1.00	ug/L
Chlorobenzene	MW-15	9/07/2011		14.30	1.00	ug/L
Chlorobenzene	MW-15	9/01/2012		17.00	1.00	ug/L
Chlorobenzene	MW-15	4/01/2013		8.50	1.00	ug/L
Chlorobenzene	MW-15	9/09/2013		17.50	1.00	ug/L
Chlorobenzene	MW-15	3/30/2014		15.40	1.00	ug/L
Chlorobenzene	MW-15	9/19/2014		14.20	1.00	ug/L
Chlorobenzene	MW-15	4/20/2015		13.50	1.00	ug/L
Chlorobenzene	MW-15	10/05/2015		12.80	1.00	ug/L
Chlorobenzene	MW-15	4/05/2016		11.20	1.00	ug/L
Chlorobenzene	MW-15	10/05/2016		14.40	1.00	ug/L
Chlorobenzene	MW-15	4/04/2017		10.40	1.00	ug/L
Chlorobenzene	MW-15	10/03/2017		12.60	1.00	ug/L
Chlorobenzene	MW-15	4/10/2018		11.10	1.00	ug/L
Chlorobenzene	MW-15	10/12/2018		8.70	1.00	ug/L
Chlorobenzene	MW-15	4/16/2019		9.60	1.00	ug/L
Chlorobenzene	MW-15	9/30/2019		9.40	1.00	ug/L
Chlorobenzene	MW-15	4/07/2020		9.00	1.00	ug/L
Chlorobenzene	MW-15	10/07/2020		8.30	1.00	ug/L
Chlorobenzene	MW-15	4/22/2021		7.40	1.00	ug/L
Chlorobenzene	MW-15	10/05/2021		8.10	1.00	ug/L
Chlorobenzene	MW-15	4/04/2022		7.80	1.00	ug/L
Chlorobenzene	MW-15	10/05/2022		6.90	1.00	ug/L
Chlorobenzene	MW-15	4/14/2023		6.50	1.00	ug/L
Chlorobenzene	MW-15	10/18/2023		4.20	1.00	ug/L
Chlorobenzene	MW-15	4/08/2024		6.10	1.00	ug/L
Chlorobenzene	MW-15	10/08/2024		4.70	1.00	ug/L
Chlorobenzene	MW-15	4/03/2025		5.70	1.00	ug/L
Chloroethane	MW-15	4/06/2006		21.5	1.0	ug/L
Chloroethane	MW-15	9/07/2006		23.1	1.0	ug/L
Chloroethane	MW-15	3/14/2007		20.2	1.0	ug/L
Chloroethane	MW-15	9/19/2007		15.6	1.0	ug/L
Chloroethane	MW-15	3/25/2008		12.7	1.0	ug/L
Chloroethane	MW-15	9/05/2008		19.1	1.0	ug/L
Chloroethane	MW-15	3/06/2009		16.6	1.0	ug/L
Chloroethane	MW-15	3/06/2009		16.6	1.0	ug/L
Chloroethane	MW-15	10/20/2009		18.9	1.0	ug/L
Chloroethane	MW-15	3/15/2010		17.9	1.0	ug/L
Chloroethane	MW-15	3/15/2010		17.9	1.0	ug/L
Chloroethane	MW-15	6/10/2010		21.2	1.0	ug/L
Chloroethane	MW-15	9/14/2010		14.0	1.0	ug/L
Chloroethane	MW-15	9/14/2010		14.0	1.0	ug/L
Chloroethane	MW-15	3/11/2011		20.7	1.0	ug/L
Chloroethane	MW-15	3/11/2011		20.7	1.0	ug/L
Chloroethane	MW-15	9/07/2011		19.3	1.0	ug/L
Chloroethane	MW-15	9/01/2012		16.4	1.0	ug/L
Chloroethane	MW-15	4/01/2013		11.2	1.0	ug/L
Chloroethane	MW-15	9/09/2013		20.3	1.0	ug/L
Chloroethane	MW-15	3/30/2014		15.4	1.0	ug/L
Chloroethane	MW-15	9/19/2014		16.3	1.0	ug/L
Chloroethane	MW-15	4/20/2015		14.1	1.0	ug/L
Chloroethane	MW-15	10/05/2015		10.2	1.0	ug/L
Chloroethane	MW-15	4/05/2016		12.9	1.0	ug/L
Chloroethane	MW-15	10/05/2016		10.6	1.0	ug/L
Chloroethane	MW-15	4/04/2017		12.0	1.0	ug/L
Chloroethane	MW-15	10/03/2017		8.4	1.0	ug/L
Chloroethane	MW-15	4/10/2018		12.3	1.0	ug/L
Chloroethane	MW-15	10/12/2018		8.6	1.0	ug/L
Chloroethane	MW-15	4/16/2019		8.5	1.0	ug/L
Chloroethane	MW-15	9/30/2019		8.8	1.0	ug/L
Chloroethane	MW-15	4/07/2020		9.0	1.0	ug/L
Chloroethane	MW-15	10/07/2020		9.4	1.0	ug/L
Chloroethane	MW-15	4/22/2021		9.8	1.0	ug/L
Chloroethane	MW-15	10/05/2021		6.3	1.0	ug/L
Chloroethane	MW-15	4/04/2022		8.3	1.0	ug/L
Chloroethane	MW-15	10/05/2022		7.5	1.0	ug/L
Chloroethane	MW-15	4/14/2023		4.6	1.0	ug/L
Chloroethane	MW-15	10/18/2023		3.8	1.0	ug/L
Chloroethane	MW-15	4/08/2024		4.4	1.0	ug/L
Chloroethane	MW-15	10/08/2024		4.2	1.0	ug/L
Chloroethane	MW-15	4/03/2025		5.4	1.0	ug/L
Dichlorodifluoromethane	MW-15	3/30/2014		2.5	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Dichlorodifluoromethane	MW-15	4/04/2017		1.0	1.0	ug/L
Ethylbenzene	MW-15	4/06/2006		37.2	1.0	ug/L
Ethylbenzene	MW-15	9/07/2006		16.7	1.0	ug/L
Ethylbenzene	MW-15	3/14/2007		31.2	1.0	ug/L
Ethylbenzene	MW-15	9/19/2007		9.7	1.0	ug/L
Ethylbenzene	MW-15	3/25/2008		31.2	1.0	ug/L
Ethylbenzene	MW-15	9/05/2008		22.3	1.0	ug/L
Ethylbenzene	MW-15	3/06/2009		67.6	1.0	ug/L
Ethylbenzene	MW-15	3/06/2009		67.6	1.0	ug/L
Ethylbenzene	MW-15	10/20/2009		83.0	1.0	ug/L
Ethylbenzene	MW-15	3/15/2010		60.6	1.0	ug/L
Ethylbenzene	MW-15	3/15/2010		60.6	1.0	ug/L
Ethylbenzene	MW-15	6/10/2010		16.2	1.0	ug/L
Ethylbenzene	MW-15	9/14/2010		22.4	1.0	ug/L
Ethylbenzene	MW-15	9/14/2010		22.4	1.0	ug/L
Ethylbenzene	MW-15	3/11/2011		90.8	1.0	ug/L
Ethylbenzene	MW-15	3/11/2011		90.8	1.0	ug/L
Ethylbenzene	MW-15	9/07/2011		21.8	1.0	ug/L
Ethylbenzene	MW-15	9/01/2012		19.3	1.0	ug/L
Ethylbenzene	MW-15	4/01/2013		31.6	1.0	ug/L
Ethylbenzene	MW-15	9/09/2013		9.0	1.0	ug/L
Ethylbenzene	MW-15	3/30/2014		39.0	1.0	ug/L
Ethylbenzene	MW-15	9/19/2014		15.3	1.0	ug/L
Ethylbenzene	MW-15	4/20/2015		6.5	1.0	ug/L
Ethylbenzene	MW-15	4/05/2016		10.5	1.0	ug/L
Ethylbenzene	MW-15	4/04/2017		4.9	1.0	ug/L
Ethylbenzene	MW-15	4/10/2018		5.1	1.0	ug/L
Toluene	MW-15	4/06/2006		1.1	1.0	ug/L
Toluene	MW-15	9/05/2008		1.0	1.0	ug/L
Toluene	MW-15	3/06/2009		2.6	1.0	ug/L
Toluene	MW-15	10/20/2009		3.3	1.0	ug/L
Toluene	MW-15	3/15/2010		1.1	1.0	ug/L
Toluene	MW-15	3/15/2010		1.1	1.0	ug/L
Toluene	MW-15	6/10/2010		1.2	1.0	ug/L
Toluene	MW-15	3/11/2011		1.8	1.0	ug/L
Toluene	MW-15	3/11/2011		1.8	1.0	ug/L
Xylenes, total	MW-15	4/06/2006		188.0	1.0	ug/L
Xylenes, total	MW-15	9/07/2006		84.6	1.0	ug/L
Xylenes, total	MW-15	3/14/2007		126.0	1.0	ug/L
Xylenes, total	MW-15	9/19/2007		50.8	1.0	ug/L
Xylenes, total	MW-15	3/25/2008		150.0	1.0	ug/L
Xylenes, total	MW-15	9/05/2008		91.4	1.0	ug/L
Xylenes, total	MW-15	3/06/2009		342.0	1.0	ug/L
Xylenes, total	MW-15	3/06/2009		342.0	2.0	ug/L
Xylenes, total	MW-15	10/20/2009		430.0	1.0	ug/L
Xylenes, total	MW-15	3/15/2010		302.0	1.0	ug/L
Xylenes, total	MW-15	3/15/2010		302.0	2.0	ug/L
Xylenes, total	MW-15	6/10/2010		117.0	2.0	ug/L
Xylenes, total	MW-15	9/14/2010		116.0	1.0	ug/L
Xylenes, total	MW-15	9/14/2010		116.0	2.0	ug/L
Xylenes, total	MW-15	3/11/2011		444.0	2.0	ug/L
Xylenes, total	MW-15	3/11/2011		444.0	1.0	ug/L
Xylenes, total	MW-15	9/07/2011		84.4	1.0	ug/L
Xylenes, total	MW-15	9/01/2012		93.1	2.0	ug/L
Xylenes, total	MW-15	4/01/2013		105.0	2.0	ug/L
Xylenes, total	MW-15	9/09/2013		70.0	2.0	ug/L
Xylenes, total	MW-15	3/30/2014		132.0	2.0	ug/L
Xylenes, total	MW-15	9/19/2014		89.8	2.0	ug/L
Xylenes, total	MW-15	4/20/2015		58.0	2.0	ug/L
Xylenes, total	MW-15	10/05/2015		11.8	2.0	ug/L
Xylenes, total	MW-15	4/05/2016		59.2	2.0	ug/L
Xylenes, total	MW-15	10/05/2016		19.2	2.0	ug/L
Xylenes, total	MW-15	4/04/2017		26.1	2.0	ug/L
Xylenes, total	MW-15	10/03/2017		6.3	2.0	ug/L
Xylenes, total	MW-15	4/10/2018		56.2	2.0	ug/L
Xylenes, total	MW-15	10/12/2018		3.5	2.0	ug/L
Xylenes, total	MW-15	4/16/2019		4.3	2.0	ug/L
Xylenes, total	MW-15	9/30/2019		3.1	2.0	ug/L
Xylenes, total	MW-15	4/07/2020		4.0	2.0	ug/L
Xylenes, total	MW-15	10/07/2020		10.3	2.0	ug/L
Xylenes, total	MW-15	4/22/2021		2.3	2.0	ug/L
Acetone	MW-16	10/03/2017		27.9	10.0	ug/L
Acetone	MW-20	10/03/2017		22.4	10.0	ug/L
Acetone	MW-22	10/03/2017		28.8	10.0	ug/L
1,1-dichloroethane	MW-6	9/09/2013		2.5	1.0	ug/L
Acetone	MW-6	10/03/2017		16.2	10.0	ug/L

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

Table 1**Historical Volatile Organic Compound Detections**

Constituent	Well	Date	Identifier	Result	Limit	Units
Bis(2-ethylhexyl) phthalate	MW-6	3/30/2014		36	8	ug/L
Bis(2-ethylhexyl) phthalate	MW-6	10/03/2017		10	6	ug/L
Bis(2-ethylhexyl) phthalate	MW-6	4/08/2024		32	6	ug/L
Dichlorodifluoromethane	MW-6	3/30/2014		3.5	1.0	ug/L
Dichlorodifluoromethane	MW-6	9/19/2014		1.3	1.0	ug/L
Dichlorodifluoromethane	MW-6	4/20/2015		1.0	1.0	ug/L
Dichlorodifluoromethane	MW-6	10/05/2016		1.0	1.0	ug/L

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

Attachment D

Assessment Statistics for Detected VOCs

Table 1

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

Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend
1,4-dichlorobenzene	ug/L	MW-15	4	1.775	0.222	1.176	1.514	2.036	75.000	dec
Benzene	ug/L	MW-15	4	3.050	1.237	1.176	1.595	4.505	5.000	dec
Chlorobenzene	ug/L	MW-15	4	5.175	0.877	1.176	4.143	6.207	100.000	dec
Chloroethane	ug/L	MW-15	4	4.450	0.681	1.176	3.649	5.251	2800.000	dec

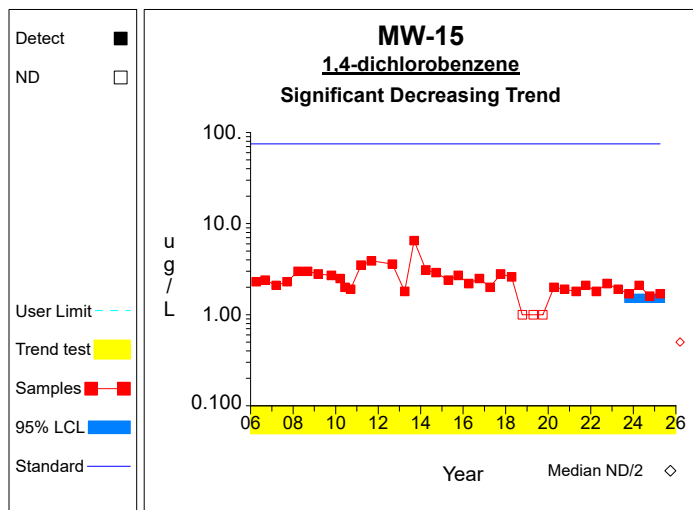
* - Insufficient Data

** - Significant Exceedance

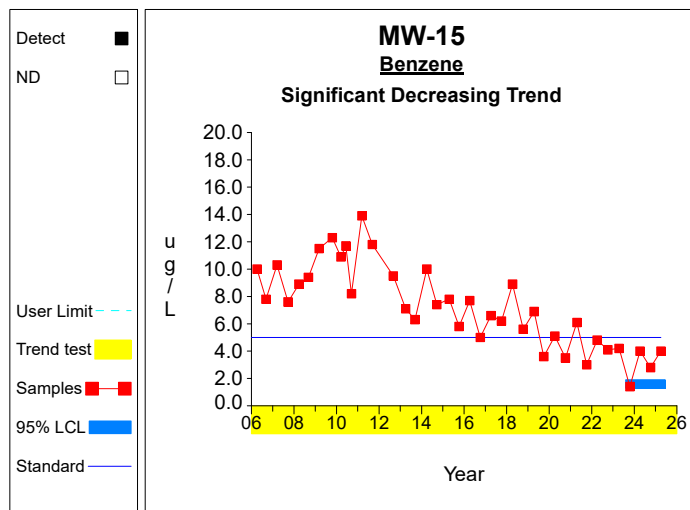
LCL = Lower Confidence Limit

UCL = Upper Confidence Limit

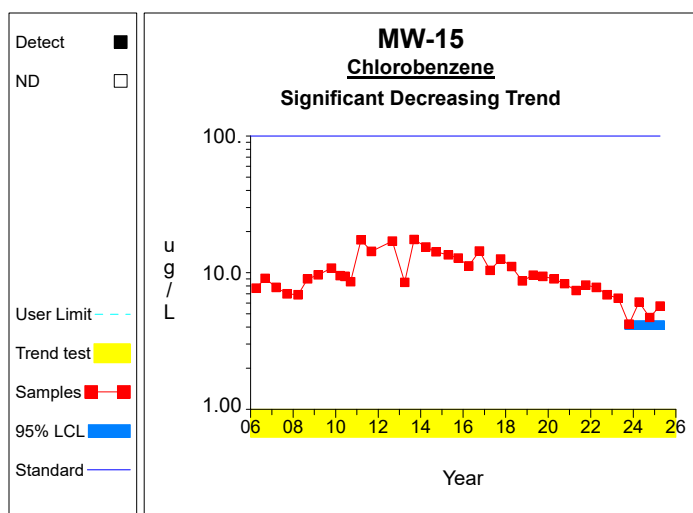
Confidence Limits (Assessment)



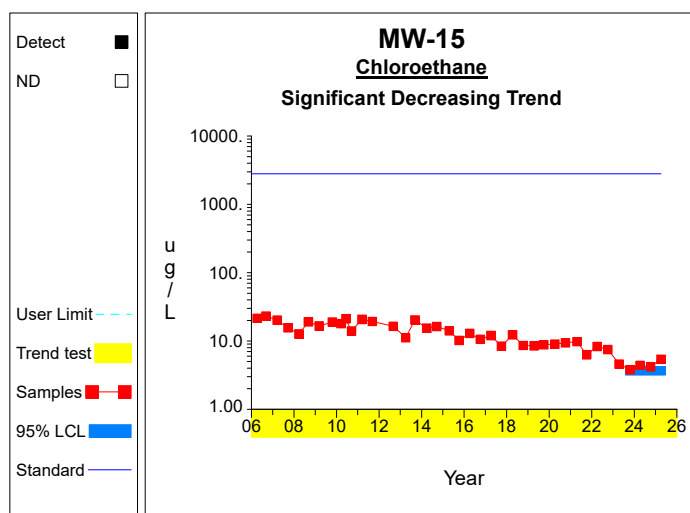
Graph 1



Graph 2



Graph 3



Graph 4

Appendix B.2 – Fall Statistical Evaluation Report

GROUND WATER STATISTICS

FOR THE

JONES COUNTY SANITARY LANDFILL

Second Semi-Annual Monitoring Event in 2025

Prepared for:
Jones County Solid Waste Management
13859 Edinburgh Road
Anamosa, IA

Prepared by:
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November 2025

INTRODUCTION

This report summarizes the results of the statistical analysis used to evaluate the ground water quality data obtained during the second semi-annual monitoring event in 2025 at the Jones County Sanitary Landfill in Anamosa, Iowa. The statistical plan was designed to detect a release from the facility at the earliest indication so that it is protective of human health and the environment. The interwell methodology is described and then applied to the Jones County Sanitary 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 Jones County Landfill includes upgradient well MW-12 and downgradient detection sample points MW-11, MW-15, MW-16, MW-20, MW-22, and MW-6. Each of the groundwater monitoring wells is to be sampled at least semiannually and analyzed for the detection monitoring parameters listed in 113.10(5), which includes 15 inorganic constituents and 47 organic compounds, summarized in Table 1 below.

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

Organic Compounds:

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

Inorganic constituents:

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

The ground water data obtained during the second semi-annual monitoring event in 2025 are summarized in Attachment A.

STATISTICAL METHODOLOGIES FOR DETECTION MONITORING

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

Interwell Statistics: Upgradient versus Downgradient Comparisons

Interwell statistics are appropriate when the upgradient and downgradient wells monitor the same ground water formation and there is similar variability in the upgradient and downgradient zones. Site prediction limits are determined by pooling the historical ground water data from hydraulically upgradient wells. This statistical method compares the current downgradient determinations to site prediction limits and checks for exceedances. The type of prediction limit utilized (e.g., parametric or nonparametric) is based on the detection frequency and the data distribution of each parameter in the background data. The distribution of the background data is tested for normality using the Shapiro-Wilk test (Gibbons, 1994 and USEPA 1992). If the constituent is normally distributed, a normal prediction limit is used. If normality is rejected by the Shapiro-Wilk test, the background data is transformed by taking the natural logarithm. The Shapiro-Wilk test is then reapplied on the transformed data. If it is not rejected, lognormal prediction limits are used. If after transforming the data, normality is still rejected, nonparametric prediction limits are used for that analyte. The nonparametric prediction limit is the largest determination in the background measurements. For constituents where the background detection frequency is greater than 0% but less than 50%, nonparametric prediction limits will be used. If the detection frequency is 0% after eight samples have been collected, the practical quantitation limit (PQL) becomes the nonparametric prediction limit. As an alternative to nonparametric prediction limits, Poisson prediction limits can be used for small data sets where the detection frequency is less than 25%.

Results of the Interwell Statistics

The background data used in this statistical analysis includes the ground water data collected from ground water well MW-12 during the period from 2015 through the current data. A summary of the background data from monitoring well MW-12 used to determine the site prediction limits, is listed in Attachment B, Table 1 “Upgradient Data”. This statistical method compares the current downgradient determinations to site prediction limits and checks for exceedances.

Table 2 “Most Current Downgradient Monitoring Data”, summarizes the current data from downgradient wells MW-11, MW-15, MW-16, MW-20, MW-22, and MW-6, 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.

Summary of Prediction Limit Exceedances for the Second Semi-Annual Monitoring Event in 2025

Well	Trace Metal	Result	Prediction Limit	Prediction Limit Type	Verified or Awaiting Verification
MW-11	Barium, µg/L	334	312.4586	Normal	Awaiting Verification
MW-15	Arsenic, µg/L	204	4.0000	Nonparametric	Verified
	Barium, µg/L	1640	312.4586	Normal	Verified
	Cobalt, µg/L	16.1	2.6000	Nonparametric	Verified
	Nickel, µg/L	87.3	13.4000	Nonparametric	Verified
MW-16	Zinc, µg/L	33.9	27.2000	Nonparametric	Verified
MW-6	Barium, µg/L	590	312.4586	Normal	Verified
	Cobalt, µg/L	3.3	2.6000	Nonparametric	Awaiting Verification

The detection frequencies of the parameters in the up and down gradient monitoring wells are summarized in Table 3. With the exception of barium, these constituents are rarely detected in the upgradient wells. With the detection frequencies being less than 50% for all but barium, nonparametric site prediction limits are used for those trace metals.

Table 4 summarizes the results of the Shapiro-Wilk test. Table 5 is a summary of the statistics and prediction limits determined for the metals. Table 8 is a historical summary of the data at those wells that have indicated an exceedance. 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 7% and the test becomes sensitive to 4 standard deviation unit increases over background.

The verified exceedances were evaluated against the ground water protection standards (GWPS) using confidence limits. The 95% lower confidence limit (LCL) for the mean of the historical data was used to evaluate whether the regulated unit is in compliance with the ground-water protection standards under 40 CFR 264 (e.g. whether the verified constituent is detected at a significant level above the GWPS). An exceedance is verified if the LCL is above the Regulatory GWPS.

The 95% LCL for arsenic at MW-15 (144.399 µg/L) exceeds the USEPA MCL of 10 µg/L. The 95% LCL for cobalt at MW-15 (13.033 µg/L) exceeds the Iowa Statewide Standard of 2.1 µg/L. The calculated LCLs for the remainder of the verified trace metals are below 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 Jones County Sanitary Landfill during the second semi-annual monitoring event in 2025 are summarized below. Historical VOC detections are summarized in Attachment C.

Organic compounds detected during the second semi-annual monitoring event in 2025

Well	VOC Detected	Result, µg/L	Reporting Limit, µg/L	Verified/ Awaiting Verification	Groundwater Standard, µg/L
MW-15	1,4-Dichlorobenzene	1.4	1	Verified	75 ^a
	Benzene	2.6	1	Verified	5 ^a
	Chlorobenzene	3.9	1	Verified	100 ^a
	Chloroethane	6.1	1	Verified	2,800 ^b

a - USEPA MCL

b – Iowa Statewide Standard

The verified VOC detections were evaluated against the GWPS using confidence limits (Attachment D). The calculated 95% LCLs of the verified VOCs are below GWPS.

CONCLUSIONS

This report summarizes the statistical analyses used to evaluate the ground water data obtained during the second semi-annual monitoring event in 2025 at Jones County Sanitary Landfill. The ground water data obtained during the second semi-annual monitoring event in 2025 was compared to background using prediction limits (interwell). For the most current data, there are verified site prediction limit exceedances detected for arsenic, barium, cobalt, and nickel at MW-15; zinc at MW-16; and barium at MW-6.

The VOCs were compared to MCLs or PQLs, in lieu of statistical comparisons to historical concentrations. There are verified detections of 1,4-dichlorobenzene, benzene, chlorobenzene, and chloroethane at MW-15.

Attachment A

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

Table 1

Analytical Data Summary for 10/14/2025

Constituents	Units	MW-11	MW-12	MW-15	MW-16	MW-20	MW-22	MW-6
(3,4)-methylphenol	ug/L				<8			
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene	ug/L				<1			
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	ug/L				<8			
1,2,4-trichlorobenzene	ug/L				<1			
1,2-dibromo-3-chloropropane	ug/L	<5	<5	<5	<1	<5	<5	<5
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene	ug/L				<8			
1,3,5-trinitrobenzene	ug/L				<8			
1,3-dichlorobenzene	ug/L				<1			
1,3-dichloropropane	ug/L				<1			
1,3-dinitrobenzene	ug/L				<8			
1,4-dichlorobenzene	ug/L	<1.0	<1.0	1.4	<1.0	<1.0	<1.0	<1.0
1,4-naphthoquinone	ug/L				<8			
1,4-phenylenediamine	ug/L				<8			
1-naphthylamine	ug/L				<8			
2,2-dichloropropane	ug/L				<1			
2,3,4,6-tetrachlorophenol	ug/L				<8			
2,4,5-t	ug/L				<5			
2,4,5-tp (silvex)	ug/L				<5			
2,4,5-trichlorophenol	ug/L				<8			
2,4,6-trichlorophenol	ug/L				<8			
2,4-d	ug/L				<2			
2,4-dichlorophenol	ug/L				<8			
2,4-dimethylphenol	ug/L				<8 *			
2,4-dinitrophenol	ug/L				<8			
2,4-dinitrotoluene	ug/L				<8			
2,6-dichlorophenol	ug/L				<8			
2,6-dinitrotoluene	ug/L				<8			
2-acetylaminofluorene	ug/L				<8			
2-butanone (mek)	ug/L	<10	<10	<10	<5	<10	<10	<10
2-chloronaphthalene	ug/L				<8			
2-chlorophenol	ug/L				<8			
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene	ug/L				<8			
2-naphthylamine	ug/L				<8			
2-nitroaniline	ug/L				<8			
2-nitrophenol	ug/L				<8			
3,3'-dichlorobenzidine	ug/L				<8			
3,3'-dimethylbenzidine	ug/L				<8			
3-methylcholanthrene	ug/L				<8			
3-nitroaniline	ug/L				<8			
4,4'-ddd	ug/L				<.05			
4,4'-dde	ug/L				<.05			
4,4'-ddt	ug/L				<.05			
4,6-dinitro-2-methylphenol	ug/L				<8			
4-aminobiphenyl	ug/L				<8			
4-bromophenyl phenyl ether	ug/L				<8			
4-chloro-3-methylphenol	ug/L				<8			
4-chloroaniline	ug/L				<8			
4-chlorophenyl phenyl ether	ug/L				<8			
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline	ug/L				<8			
4-nitrophenol	ug/L				<8			
5-nitro-o-toluidine	ug/L				<8			
7,12-dimethylbenz(a)anthracene	ug/L				<8			
Acenaphthene	ug/L				<8			
Acenaphthylene	ug/L				<8			
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10
Acetonitrile	ug/L				<10			
Acetophenone	ug/L				<8			
Acrolein	ug/L				<10			
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5
Aldrin	ug/L				<.05			
Allyl chloride	ug/L				<1			
Alpha-bhc	ug/L				<.05			
Anthracene	ug/L				<8			
Antimony, total	ug/L	<1	<1	<1	<1	<1	<1	<1

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

Table 1

Analytical Data Summary for 10/14/2025

Constituents	Units	MW-11	MW-12	MW-15	MW-16	MW-20	MW-22	MW-6
Arochlor 1016	ug/L				<.2			
Arochlor 1221	ug/L				<.2			
Arochlor 1232	ug/L				<.2			
Arochlor 1242	ug/L				<.2			
Arochlor 1248	ug/L				<.2			
Arochlor 1254	ug/L				<.2			
Arochlor 1260	ug/L				<.2			
Arsenic, total	ug/L	<2	<2	204	<2	<2	<2	<2
Azobenzene	ug/L				<8			
Barium, total	ug/L	334.0	258.0	1640.0	84.2	107.0	194.0	590.0
Benzene	ug/L	<1.0	<1.0	2.6	<1.0	<1.0	<1.0	<1.0
Benzo(a)anthracene	ug/L				<8			
Benzo(a)pyrene	ug/L				<8			
Benzo(b)fluoranthene	ug/L				<8			
Benzo(g,h,i)perylene	ug/L				<8			
Benzo(k)fluoranthene	ug/L				<8			
Benzyl alcohol	ug/L				<8			
Beryllium, total	ug/L	<.5	<.5	<.5	<.5	<.5	<.5	<.5
Beta-bhc	ug/L				<.05			
Bis (2-chloroethoxy) methane	ug/L				<8			
Bis(2-chloroethyl) ether	ug/L				<8			
Bis(2-chloroisopropyl) ether	ug/L				<8			
Bis(2-ethylhexyl) phthalate	ug/L				<6			
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate	ug/L				<8			
Cadmium, total	ug/L	<.2	<.2	<.2	<.2	<.2	<.2	<.2
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1
Chlordane	ug/L				<.1			
Chlorobenzene	ug/L	<1.0	<1.0	3.9	<1.0	<1.0	<1.0	<1.0
Chlorobenzilate	ug/L				<8			
Chloroethane	ug/L	<1.0	<1.0	6.1	<1.0	<1.0	<1.0	<1.0
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Chloroprene	ug/L				<1			
Chromium, total	ug/L	1.6	<1.0	1.2	<1.0	<1.0	2.7	<1.0
Chrysene	ug/L				<8			
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	<.5	<.5	16.1	<.5	<.5	<.5	3.3
Copper, total	ug/L	<5	<5	<5	<5	<5	<5	<5
Cyanide, total	mg/L				<.01			
Delta-bhc	ug/L				<.05			
Diallate	ug/L				<8			
Dibenzo(a,h)anthracene	ug/L				<8			
Dibenzofuran	ug/L				<8			
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L				<1			
Dieldrin	ug/L				<.05			
Diethyl phthalate	ug/L				<8			
Dimethoate	ug/L				<.4			
Dimethylphthalate	ug/L				<8			
Di-n-butyl phthalate	ug/L				<8			
Di-n-octyl phthalate	ug/L				<8			
Dinoseb	ug/L				<.5			
Diphenylamine	ug/L				<8			
Disulfoton	ug/L				<.4			
Endosulfan i	ug/L				<.05			
Endosulfan ii	ug/L				<.05			
Endosulfan sulfate	ug/L				<.05			
Endrin	ug/L				<.05			
Endrin aldehyde	ug/L				<.05			
Ethyl methacrylate	ug/L				<10			
Ethyl methanesulfonate	ug/L				<8			
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1
Famphur	ug/L				<.4			
Fluoranthene	ug/L				<8			
Fluorene	ug/L				<8			
Gamma-bhc (lindane)	ug/L				<.05			
Heptachlor	ug/L				<.05			
Heptachlor epoxide	ug/L				<.05			
Hexachlorobenzene	ug/L				<.05			
Hexachlorobutadiene	ug/L				<8			

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

Table 1

Analytical Data Summary for 10/14/2025

Constituents	Units	MW-11	MW-12	MW-15	MW-16	MW-20	MW-22	MW-6
Hexachlorocyclopentadiene	ug/L				<8			
Hexachloroethane	ug/L				<8			
Hexachloropropene	ug/L				<8			
Indeno(1,2,3-cd)pyrene	ug/L				<8			
Isobutanol	mg/L				<1			
Isodrin	ug/L				<8			
Isophorone	ug/L				<8			
Isosafrole	ug/L				<8			
Kepon	ug/L				<8			
Lead, total	ug/L	<1	<1	<1	<1	<1	<1	<1
Mercury, total	ug/L				<.5			
Methacrylonitrile	ug/L				<1			
Methapyrene	ug/L				<8			
Methoxychlor	ug/L				<.05			
Methyl iodide	ug/L	<1	<1	<1	<2	<1	<1	<1
Methyl methacrylate	ug/L				<1			
Methyl methanesulfonate	ug/L				<8			
Methyl parathion	ug/L				<.4			
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5
Naphthalene	ug/L				<8			
Nickel, total	ug/L	<5.0	<5.0	87.3	<5.0	<5.0	<5.0	9.7
Nitrobenzene	ug/L				<8			
N-nitrosodiethylamine	ug/L				<8			
N-nitrosodimethylamine	ug/L				<8			
N-nitrosodi-n-butylamine	ug/L				<8			
N-nitroso-di-n-propylamine	ug/L				<8			
N-nitrosodiphenylamine	ug/L				<8			
N-nitrosomethylethylamine	ug/L				<8			
N-nitrosopiperidine	ug/L				<8			
N-nitrosopyrrolidine	ug/L				<8			
O,o,o-triethyl phosphorothioate	ug/L				<.4			
O-toluidine	ug/L				<8			
Parathion	ug/L				<.4			
P-dimethylaminoazobenzene	ug/L				<8			
Pentachlorobenzene	ug/L				<8			
Pentachloronitrobenzene (pcnb)	ug/L				<8			
Pentachlorophenol	ug/L				<8			
Phenacetin	ug/L				<8			
Phenanthrene	ug/L				<8			
Phenol	ug/L				<8			
Phorate	ug/L				<.4			
Pronamide	ug/L				<8			
Propionitrile	ug/L				<10			
Pyrene	ug/L				<8			
Safrole	ug/L				<8			
Selenium, total	ug/L	<2.0	<2.0	3.3	<2.0	<2.0	<2.0	<2.0
Silver, total	ug/L	<5	<5	<5	<5	<5	<5	<5
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1
Sulfide, total	mg/L				<.1			
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<.5	<.5	<.5	<.5	<.5	<.5	<.5
Thionazin	ug/L				<.4			
Tin, total	ug/L				<5			
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1
Toxaphene	ug/L				<.2			
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<2	<2	<2	<2	<2	<2	<2
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<5.0	19.9	10.3	33.9	9.0	8.2	7.2

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

Attachment B

Summary Tables and Graphs for the Interwell Comparisons

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Antimony, total	ug/L	MW-12	04/20/2015	ND	2.0000		
Antimony, total	ug/L	MW-12	07/09/2015	ND	2.0000		
Antimony, total	ug/L	MW-12	10/05/2015	ND	2.0000		
Antimony, total	ug/L	MW-12	04/05/2016	ND	2.0000		
Antimony, total	ug/L	MW-12	10/05/2016	ND	2.0000		
Antimony, total	ug/L	MW-12	04/04/2017	ND	2.0000		
Antimony, total	ug/L	MW-12	10/03/2017	ND	2.0000		
Antimony, total	ug/L	MW-12	04/10/2018	ND	2.0000		
Antimony, total	ug/L	MW-12	10/12/2018	ND	2.0000		
Antimony, total	ug/L	MW-12	04/16/2019		3.5000		
Antimony, total	ug/L	MW-12	09/30/2019	ND	2.0000		
Antimony, total	ug/L	MW-12	04/07/2020	ND	2.0000		
Antimony, total	ug/L	MW-12	10/07/2020	ND	2.0000		
Antimony, total	ug/L	MW-12	04/22/2021	ND	2.0000		
Antimony, total	ug/L	MW-12	10/05/2021	ND	2.0000		
Antimony, total	ug/L	MW-12	04/04/2022	ND	2.0000		
Antimony, total	ug/L	MW-12	10/05/2022	ND	2.0000		
Antimony, total	ug/L	MW-12	04/14/2023	ND	2.0000		
Antimony, total	ug/L	MW-12	10/18/2023	ND	2.0000		
Antimony, total	ug/L	MW-12	04/08/2024	ND	2.0000		
Antimony, total	ug/L	MW-12	10/08/2024	ND	2.0000		
Antimony, total	ug/L	MW-12	04/03/2025	ND	1.0000	2.0000	**
Antimony, total	ug/L	MW-12	10/14/2025	ND	1.0000	2.0000	**
Arsenic, total	ug/L	MW-12	04/20/2015	ND	4.0000		
Arsenic, total	ug/L	MW-12	07/09/2015	ND	4.0000		
Arsenic, total	ug/L	MW-12	10/05/2015	ND	4.0000		
Arsenic, total	ug/L	MW-12	04/05/2016	ND	4.0000		
Arsenic, total	ug/L	MW-12	10/05/2016	ND	4.0000		
Arsenic, total	ug/L	MW-12	04/04/2017	ND	4.0000		
Arsenic, total	ug/L	MW-12	10/03/2017	ND	4.0000		
Arsenic, total	ug/L	MW-12	04/10/2018	ND	4.0000		
Arsenic, total	ug/L	MW-12	10/12/2018	ND	4.0000		
Arsenic, total	ug/L	MW-12	04/16/2019	ND	4.0000		
Arsenic, total	ug/L	MW-12	09/30/2019	ND	4.0000		
Arsenic, total	ug/L	MW-12	04/07/2020	ND	4.0000		
Arsenic, total	ug/L	MW-12	10/07/2020	ND	4.0000		
Arsenic, total	ug/L	MW-12	04/22/2021	ND	4.0000		
Arsenic, total	ug/L	MW-12	10/05/2021	ND	4.0000		
Arsenic, total	ug/L	MW-12	04/04/2022	ND	4.0000		
Arsenic, total	ug/L	MW-12	10/05/2022	ND	4.0000		
Arsenic, total	ug/L	MW-12	04/14/2023	ND	4.0000		
Arsenic, total	ug/L	MW-12	10/18/2023	ND	4.0000		
Arsenic, total	ug/L	MW-12	04/08/2024	ND	4.0000		
Arsenic, total	ug/L	MW-12	10/08/2024	ND	4.0000		
Arsenic, total	ug/L	MW-12	04/03/2025	ND	2.0000	4.0000	**
Arsenic, total	ug/L	MW-12	10/14/2025	ND	2.0000	4.0000	**
Barium, total	ug/L	MW-12	04/20/2015		264.0000		
Barium, total	ug/L	MW-12	07/09/2015		269.0000		
Barium, total	ug/L	MW-12	10/05/2015		293.0000		
Barium, total	ug/L	MW-12	04/05/2016		306.0000		
Barium, total	ug/L	MW-12	10/05/2016		274.0000		
Barium, total	ug/L	MW-12	04/04/2017		279.0000		
Barium, total	ug/L	MW-12	10/03/2017		268.0000		
Barium, total	ug/L	MW-12	04/10/2018		273.0000		
Barium, total	ug/L	MW-12	10/12/2018		243.0000		
Barium, total	ug/L	MW-12	04/16/2019		261.0000		
Barium, total	ug/L	MW-12	09/30/2019		253.0000		
Barium, total	ug/L	MW-12	04/07/2020		276.0000		
Barium, total	ug/L	MW-12	10/07/2020		256.0000		
Barium, total	ug/L	MW-12	04/22/2021		252.0000		
Barium, total	ug/L	MW-12	10/05/2021		216.0000		
Barium, total	ug/L	MW-12	04/04/2022		254.0000		
Barium, total	ug/L	MW-12	10/05/2022		219.0000		
Barium, total	ug/L	MW-12	04/14/2023		232.0000		
Barium, total	ug/L	MW-12	10/18/2023		255.0000		
Barium, total	ug/L	MW-12	04/08/2024		247.0000		
Barium, total	ug/L	MW-12	10/08/2024		253.0000		
Barium, total	ug/L	MW-12	04/03/2025		264.0000		
Barium, total	ug/L	MW-12	10/14/2025		258.0000		
Beryllium, total	ug/L	MW-12	04/20/2015	ND	4.0000		
Beryllium, total	ug/L	MW-12	07/09/2015	ND	4.0000		
Beryllium, total	ug/L	MW-12	10/05/2015	ND	4.0000		
Beryllium, total	ug/L	MW-12	04/05/2016	ND	4.0000		
Beryllium, total	ug/L	MW-12	10/05/2016	ND	4.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Beryllium, total	ug/L	MW-12	04/04/2017	ND	4.0000		
Beryllium, total	ug/L	MW-12	10/03/2017	ND	4.0000		
Beryllium, total	ug/L	MW-12	04/10/2018	ND	4.0000		
Beryllium, total	ug/L	MW-12	10/12/2018	ND	4.0000		
Beryllium, total	ug/L	MW-12	04/16/2019	ND	4.0000		
Beryllium, total	ug/L	MW-12	09/30/2019	ND	4.0000		
Beryllium, total	ug/L	MW-12	04/07/2020	ND	4.0000		
Beryllium, total	ug/L	MW-12	10/07/2020	ND	4.0000		
Beryllium, total	ug/L	MW-12	04/22/2021	ND	4.0000		
Beryllium, total	ug/L	MW-12	10/05/2021	ND	4.0000		
Beryllium, total	ug/L	MW-12	04/04/2022	ND	4.0000		
Beryllium, total	ug/L	MW-12	10/05/2022	ND	4.0000		
Beryllium, total	ug/L	MW-12	04/14/2023	ND	4.0000		
Beryllium, total	ug/L	MW-12	10/18/2023	ND	4.0000		
Beryllium, total	ug/L	MW-12	04/08/2024	ND	4.0000		
Beryllium, total	ug/L	MW-12	10/08/2024	ND	4.0000		
Beryllium, total	ug/L	MW-12	04/03/2025	ND	0.5000	4.0000	**
Beryllium, total	ug/L	MW-12	10/14/2025	ND	0.5000	4.0000	**
Cadmium, total	ug/L	MW-12	04/20/2015	ND	0.8000		
Cadmium, total	ug/L	MW-12	07/09/2015	ND	0.8000		
Cadmium, total	ug/L	MW-12	10/05/2015	ND	0.8000		
Cadmium, total	ug/L	MW-12	04/05/2016	ND	0.8000		
Cadmium, total	ug/L	MW-12	10/05/2016	ND	0.8000		
Cadmium, total	ug/L	MW-12	04/04/2017	ND	0.8000		
Cadmium, total	ug/L	MW-12	10/03/2017	ND	0.8000		
Cadmium, total	ug/L	MW-12	04/10/2018	ND	0.8000		
Cadmium, total	ug/L	MW-12	10/12/2018	ND	0.8000		
Cadmium, total	ug/L	MW-12	04/16/2019	ND	0.8000		
Cadmium, total	ug/L	MW-12	09/30/2019	ND	0.8000		
Cadmium, total	ug/L	MW-12	04/07/2020	ND	0.8000		
Cadmium, total	ug/L	MW-12	10/07/2020	ND	0.8000		
Cadmium, total	ug/L	MW-12	04/22/2021	ND	0.8000		
Cadmium, total	ug/L	MW-12	10/05/2021	ND	0.8000		
Cadmium, total	ug/L	MW-12	04/04/2022	ND	0.8000		
Cadmium, total	ug/L	MW-12	10/05/2022	ND	0.8000		
Cadmium, total	ug/L	MW-12	04/14/2023	ND	0.8000		
Cadmium, total	ug/L	MW-12	10/18/2023	ND	0.8000		
Cadmium, total	ug/L	MW-12	04/08/2024	ND	0.8000		
Cadmium, total	ug/L	MW-12	10/08/2024	ND	0.8000		
Cadmium, total	ug/L	MW-12	04/03/2025	ND	0.2000	0.8000	**
Cadmium, total	ug/L	MW-12	10/14/2025	ND	0.2000	0.8000	**
Chromium, total	ug/L	MW-12	04/20/2015	ND	8.0000		
Chromium, total	ug/L	MW-12	07/09/2015	ND	8.0000		
Chromium, total	ug/L	MW-12	10/05/2015	ND	8.0000		
Chromium, total	ug/L	MW-12	04/05/2016	ND	8.0000		
Chromium, total	ug/L	MW-12	10/05/2016	ND	8.0000		
Chromium, total	ug/L	MW-12	04/04/2017	ND	8.0000		
Chromium, total	ug/L	MW-12	10/03/2017	ND	8.0000		
Chromium, total	ug/L	MW-12	04/10/2018	ND	8.0000		
Chromium, total	ug/L	MW-12	10/12/2018	ND	8.0000		
Chromium, total	ug/L	MW-12	04/16/2019	ND	8.0000		
Chromium, total	ug/L	MW-12	09/30/2019	ND	8.0000		
Chromium, total	ug/L	MW-12	04/07/2020	ND	8.0000		
Chromium, total	ug/L	MW-12	10/07/2020	ND	8.0000		
Chromium, total	ug/L	MW-12	04/22/2021	ND	8.0000		
Chromium, total	ug/L	MW-12	10/05/2021	ND	8.0000		
Chromium, total	ug/L	MW-12	04/04/2022	ND	8.0000		
Chromium, total	ug/L	MW-12	10/05/2022	ND	8.0000		
Chromium, total	ug/L	MW-12	04/14/2023	ND	8.0000		
Chromium, total	ug/L	MW-12	10/18/2023	ND	8.0000		
Chromium, total	ug/L	MW-12	04/08/2024	ND	8.0000		
Chromium, total	ug/L	MW-12	10/08/2024	ND	8.0000		
Chromium, total	ug/L	MW-12	04/03/2025	ND	1.0000	8.0000	**
Chromium, total	ug/L	MW-12	10/14/2025	ND	1.0000	8.0000	**
Cobalt, total	ug/L	MW-12	04/20/2015	ND	0.8000		
Cobalt, total	ug/L	MW-12	07/09/2015	ND	0.8000		
Cobalt, total	ug/L	MW-12	10/05/2015	ND	0.8000		
Cobalt, total	ug/L	MW-12	04/05/2016	ND	0.8000		
Cobalt, total	ug/L	MW-12	10/05/2016	ND	0.8000		
Cobalt, total	ug/L	MW-12	04/04/2017	ND	0.8000		
Cobalt, total	ug/L	MW-12	10/03/2017	ND	0.8000		
Cobalt, total	ug/L	MW-12	04/10/2018	ND	0.8000		
Cobalt, total	ug/L	MW-12	10/12/2018	ND	0.8000		
Cobalt, total	ug/L	MW-12	04/16/2019	ND	0.8000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Cobalt, total	ug/L	MW-12	09/30/2019	ND	0.8000		
Cobalt, total	ug/L	MW-12	04/07/2020	ND	0.4000	0.8000	***
Cobalt, total	ug/L	MW-12	10/07/2020	ND	0.4000	0.8000	***
Cobalt, total	ug/L	MW-12	04/22/2021	ND	0.4000	0.8000	***
Cobalt, total	ug/L	MW-12	10/05/2021	ND	0.4000	0.8000	***
Cobalt, total	ug/L	MW-12	04/04/2022	ND	0.4000	0.8000	***
Cobalt, total	ug/L	MW-12	10/05/2022		2.6000		
Cobalt, total	ug/L	MW-12	04/14/2023	ND	0.4000	0.8000	***
Cobalt, total	ug/L	MW-12	10/18/2023	ND	0.4000	0.8000	***
Cobalt, total	ug/L	MW-12	04/08/2024	ND	0.4000	0.8000	***
Cobalt, total	ug/L	MW-12	10/08/2024	ND	0.4000	0.8000	***
Cobalt, total	ug/L	MW-12	04/03/2025	ND	0.5000	0.8000	***
Cobalt, total	ug/L	MW-12	10/14/2025	ND	0.5000	0.8000	***
Copper, total	ug/L	MW-12	04/20/2015	ND	4.0000		
Copper, total	ug/L	MW-12	07/09/2015	ND	4.0000		
Copper, total	ug/L	MW-12	10/05/2015	ND	4.0000		
Copper, total	ug/L	MW-12	04/05/2016	ND	4.0000		
Copper, total	ug/L	MW-12	10/05/2016	ND	4.0000		
Copper, total	ug/L	MW-12	04/04/2017	ND	4.0000		
Copper, total	ug/L	MW-12	10/03/2017	ND	4.0000		
Copper, total	ug/L	MW-12	04/10/2018	ND	4.0000		
Copper, total	ug/L	MW-12	10/12/2018	ND	4.0000		
Copper, total	ug/L	MW-12	04/16/2019	ND	4.0000		
Copper, total	ug/L	MW-12	09/30/2019	ND	4.0000		
Copper, total	ug/L	MW-12	04/07/2020	ND	4.0000		
Copper, total	ug/L	MW-12	10/07/2020	ND	4.0000		
Copper, total	ug/L	MW-12	04/22/2021	ND	4.0000		
Copper, total	ug/L	MW-12	10/05/2021	ND	4.0000		
Copper, total	ug/L	MW-12	04/04/2022	ND	4.0000		
Copper, total	ug/L	MW-12	10/05/2022	ND	4.0000		
Copper, total	ug/L	MW-12	04/14/2023	ND	4.0000		
Copper, total	ug/L	MW-12	10/18/2023	ND	4.0000		
Copper, total	ug/L	MW-12	04/08/2024	ND	4.0000		
Copper, total	ug/L	MW-12	10/08/2024	ND	4.0000		
Copper, total	ug/L	MW-12	04/03/2025	ND	5.0000	4.0000	**
Copper, total	ug/L	MW-12	10/14/2025	ND	5.0000	4.0000	**
Lead, total	ug/L	MW-12	04/20/2015	ND	4.0000		
Lead, total	ug/L	MW-12	07/09/2015	ND	4.0000		
Lead, total	ug/L	MW-12	10/05/2015	ND	4.0000		
Lead, total	ug/L	MW-12	04/05/2016	ND	4.0000		
Lead, total	ug/L	MW-12	10/05/2016	ND	4.0000		
Lead, total	ug/L	MW-12	04/04/2017	ND	4.0000		
Lead, total	ug/L	MW-12	10/03/2017	ND	4.0000		
Lead, total	ug/L	MW-12	04/10/2018	ND	4.0000		
Lead, total	ug/L	MW-12	10/12/2018	ND	4.0000		
Lead, total	ug/L	MW-12	04/16/2019	ND	4.0000		
Lead, total	ug/L	MW-12	09/30/2019	ND	4.0000		
Lead, total	ug/L	MW-12	04/07/2020	ND	4.0000		
Lead, total	ug/L	MW-12	10/07/2020	ND	4.0000		
Lead, total	ug/L	MW-12	04/22/2021	ND	4.0000		
Lead, total	ug/L	MW-12	10/05/2021	ND	4.0000		
Lead, total	ug/L	MW-12	04/04/2022	ND	4.0000		
Lead, total	ug/L	MW-12	10/05/2022	ND	4.0000		
Lead, total	ug/L	MW-12	04/14/2023	ND	4.0000		
Lead, total	ug/L	MW-12	10/18/2023	ND	4.0000		
Lead, total	ug/L	MW-12	04/08/2024	ND	4.0000		
Lead, total	ug/L	MW-12	10/08/2024	ND	4.0000		
Lead, total	ug/L	MW-12	04/03/2025	ND	1.0000	4.0000	**
Lead, total	ug/L	MW-12	10/14/2025	ND	1.0000	4.0000	**
Nickel, total	ug/L	MW-12	04/20/2015	ND	4.0000		
Nickel, total	ug/L	MW-12	07/09/2015	ND	4.0000		
Nickel, total	ug/L	MW-12	10/05/2015	ND	4.0000		
Nickel, total	ug/L	MW-12	04/05/2016	ND	4.0000		
Nickel, total	ug/L	MW-12	10/05/2016	ND	4.0000		
Nickel, total	ug/L	MW-12	04/04/2017	ND	4.0000		
Nickel, total	ug/L	MW-12	10/03/2017	ND	4.0000		
Nickel, total	ug/L	MW-12	04/10/2018		13.4000		
Nickel, total	ug/L	MW-12	10/12/2018	ND	4.0000		
Nickel, total	ug/L	MW-12	04/16/2019	ND	4.0000		
Nickel, total	ug/L	MW-12	09/30/2019	ND	4.0000		
Nickel, total	ug/L	MW-12	04/07/2020	ND	4.0000		
Nickel, total	ug/L	MW-12	10/07/2020	ND	4.0000		
Nickel, total	ug/L	MW-12	04/22/2021	ND	4.0000		
Nickel, total	ug/L	MW-12	10/05/2021	ND	4.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Nickel, total	ug/L	MW-12	04/04/2022		10.4000		
Nickel, total	ug/L	MW-12	10/05/2022		6.2000		
Nickel, total	ug/L	MW-12	04/14/2023	ND	4.0000		
Nickel, total	ug/L	MW-12	10/18/2023	ND	4.0000		
Nickel, total	ug/L	MW-12	04/08/2024	ND	4.0000		
Nickel, total	ug/L	MW-12	10/08/2024	ND	4.0000		
Nickel, total	ug/L	MW-12	04/03/2025	ND	5.0000	4.0000	**
Nickel, total	ug/L	MW-12	10/14/2025	ND	5.0000	4.0000	**
Selenium, total	ug/L	MW-12	04/20/2015	ND	4.0000		
Selenium, total	ug/L	MW-12	07/09/2015	ND	4.0000		
Selenium, total	ug/L	MW-12	10/05/2015	ND	4.0000		
Selenium, total	ug/L	MW-12	04/05/2016	ND	4.0000		
Selenium, total	ug/L	MW-12	10/05/2016	ND	4.0000		
Selenium, total	ug/L	MW-12	04/04/2017	ND	4.0000		
Selenium, total	ug/L	MW-12	10/03/2017	ND	4.0000		
Selenium, total	ug/L	MW-12	04/10/2018	ND	4.0000		
Selenium, total	ug/L	MW-12	10/12/2018	ND	4.0000		
Selenium, total	ug/L	MW-12	04/16/2019	ND	4.0000		
Selenium, total	ug/L	MW-12	09/30/2019	ND	4.0000		
Selenium, total	ug/L	MW-12	04/07/2020	ND	4.0000		
Selenium, total	ug/L	MW-12	10/07/2020	ND	4.0000		
Selenium, total	ug/L	MW-12	04/22/2021	ND	4.0000		
Selenium, total	ug/L	MW-12	10/05/2021	ND	4.0000		
Selenium, total	ug/L	MW-12	04/04/2022	ND	4.0000		
Selenium, total	ug/L	MW-12	10/05/2022	ND	4.0000		
Selenium, total	ug/L	MW-12	04/14/2023	ND	4.0000		
Selenium, total	ug/L	MW-12	10/18/2023	ND	4.0000		
Selenium, total	ug/L	MW-12	04/08/2024	ND	4.0000		
Selenium, total	ug/L	MW-12	10/08/2024	ND	4.0000		
Selenium, total	ug/L	MW-12	04/03/2025	ND	2.0000	4.0000	**
Selenium, total	ug/L	MW-12	10/14/2025	ND	2.0000	4.0000	**
Silver, total	ug/L	MW-12	04/20/2015	ND	4.0000		
Silver, total	ug/L	MW-12	07/09/2015	ND	4.0000		
Silver, total	ug/L	MW-12	10/05/2015	ND	4.0000		
Silver, total	ug/L	MW-12	04/05/2016	ND	4.0000		
Silver, total	ug/L	MW-12	10/05/2016	ND	4.0000		
Silver, total	ug/L	MW-12	04/04/2017	ND	4.0000		
Silver, total	ug/L	MW-12	10/03/2017	ND	4.0000		
Silver, total	ug/L	MW-12	04/10/2018	ND	4.0000		
Silver, total	ug/L	MW-12	10/12/2018	ND	8.0000	4.0000	**
Silver, total	ug/L	MW-12	04/16/2019	ND	4.0000		
Silver, total	ug/L	MW-12	09/30/2019	ND	4.0000		
Silver, total	ug/L	MW-12	04/07/2020	ND	4.0000		
Silver, total	ug/L	MW-12	10/07/2020	ND	4.0000		
Silver, total	ug/L	MW-12	04/22/2021	ND	4.0000		
Silver, total	ug/L	MW-12	10/05/2021	ND	4.0000		
Silver, total	ug/L	MW-12	04/04/2022	ND	4.0000		
Silver, total	ug/L	MW-12	10/05/2022	ND	4.0000		
Silver, total	ug/L	MW-12	04/14/2023	ND	4.0000		
Silver, total	ug/L	MW-12	10/18/2023	ND	4.0000		
Silver, total	ug/L	MW-12	04/08/2024	ND	4.0000		
Silver, total	ug/L	MW-12	10/08/2024	ND	4.0000		
Silver, total	ug/L	MW-12	04/03/2025	ND	5.0000	4.0000	**
Silver, total	ug/L	MW-12	10/14/2025	ND	5.0000	4.0000	**
Thallium, total	ug/L	MW-12	04/20/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	07/09/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	10/05/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	04/05/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	10/05/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	04/04/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	10/03/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	04/10/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	10/12/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-12	04/16/2019	ND	2.0000		
Thallium, total	ug/L	MW-12	09/30/2019	ND	2.0000		
Thallium, total	ug/L	MW-12	04/07/2020	ND	2.0000		
Thallium, total	ug/L	MW-12	10/07/2020	ND	2.0000		
Thallium, total	ug/L	MW-12	04/22/2021	ND	2.0000		
Thallium, total	ug/L	MW-12	10/05/2021	ND	2.0000		
Thallium, total	ug/L	MW-12	04/04/2022	ND	2.0000		
Thallium, total	ug/L	MW-12	10/05/2022	ND	2.0000		
Thallium, total	ug/L	MW-12	04/14/2023	ND	2.0000		
Thallium, total	ug/L	MW-12	10/18/2023	ND	2.0000		
Thallium, total	ug/L	MW-12	04/08/2024	ND	2.0000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Thallium, total	ug/L	MW-12	10/08/2024	ND	2.0000		
Thallium, total	ug/L	MW-12	04/03/2025	ND	0.5000	2.0000	**
Thallium, total	ug/L	MW-12	10/14/2025	ND	0.5000	2.0000	**
Vanadium, total	ug/L	MW-12	04/20/2015	ND	20.0000		
Vanadium, total	ug/L	MW-12	07/09/2015	ND	20.0000		
Vanadium, total	ug/L	MW-12	10/05/2015	ND	20.0000		
Vanadium, total	ug/L	MW-12	04/05/2016	ND	20.0000		
Vanadium, total	ug/L	MW-12	10/05/2016	ND	20.0000		
Vanadium, total	ug/L	MW-12	04/04/2017	ND	20.0000		
Vanadium, total	ug/L	MW-12	10/03/2017	ND	20.0000		
Vanadium, total	ug/L	MW-12	04/10/2018	ND	20.0000		
Vanadium, total	ug/L	MW-12	10/12/2018	ND	20.0000		
Vanadium, total	ug/L	MW-12	04/16/2019	ND	20.0000		
Vanadium, total	ug/L	MW-12	09/30/2019	ND	20.0000		
Vanadium, total	ug/L	MW-12	04/07/2020	ND	20.0000		
Vanadium, total	ug/L	MW-12	10/07/2020	ND	20.0000		
Vanadium, total	ug/L	MW-12	04/22/2021	ND	20.0000		
Vanadium, total	ug/L	MW-12	10/05/2021	ND	20.0000		
Vanadium, total	ug/L	MW-12	04/04/2022	ND	20.0000		
Vanadium, total	ug/L	MW-12	10/05/2022	ND	20.0000		
Vanadium, total	ug/L	MW-12	04/14/2023	ND	20.0000		
Vanadium, total	ug/L	MW-12	10/18/2023	ND	20.0000		
Vanadium, total	ug/L	MW-12	04/08/2024	ND	20.0000		
Vanadium, total	ug/L	MW-12	10/08/2024	ND	20.0000		
Vanadium, total	ug/L	MW-12	04/03/2025	ND	2.0000	20.0000	**
Vanadium, total	ug/L	MW-12	10/14/2025	ND	2.0000	20.0000	**
Zinc, total	ug/L	MW-12	04/20/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-12	07/09/2015		18.1000		
Zinc, total	ug/L	MW-12	10/05/2015		10.1000		
Zinc, total	ug/L	MW-12	04/05/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-12	10/05/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-12	04/04/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-12	10/03/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-12	04/10/2018		27.2000		
Zinc, total	ug/L	MW-12	10/12/2018	ND	20.0000		
Zinc, total	ug/L	MW-12	04/16/2019	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-12	09/30/2019		10.9000		
Zinc, total	ug/L	MW-12	04/07/2020	ND	20.0000		
Zinc, total	ug/L	MW-12	10/07/2020	ND	20.0000		
Zinc, total	ug/L	MW-12	04/22/2021	ND	20.0000		
Zinc, total	ug/L	MW-12	10/05/2021	ND	20.0000		
Zinc, total	ug/L	MW-12	04/04/2022		24.2000		
Zinc, total	ug/L	MW-12	10/05/2022	ND	20.0000		
Zinc, total	ug/L	MW-12	04/14/2023	ND	20.0000		
Zinc, total	ug/L	MW-12	10/18/2023		21.8000		
Zinc, total	ug/L	MW-12	04/08/2024	ND	20.0000		
Zinc, total	ug/L	MW-12	10/08/2024	ND	20.0000		
Zinc, total	ug/L	MW-12	04/03/2025		7.1000		
Zinc, total	ug/L	MW-12	10/14/2025		19.9000		

* - Outlier for that well and constituent.

** - ND value replaced with median RL.

*** - ND value replaced with manual RL.

ND = Not detected, Result = detection limit.

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Antimony, total	ug/L	MW-11	10/14/2025	ND	1.0000		3.5000
Arsenic, total	ug/L	MW-11	10/14/2025	ND	2.0000		4.0000
Barium, total	ug/L	MW-11	10/14/2025		334.0000	*	312.4586
Beryllium, total	ug/L	MW-11	10/14/2025	ND	0.5000		4.0000
Cadmium, total	ug/L	MW-11	10/14/2025	ND	0.2000		0.8000
Chromium, total	ug/L	MW-11	10/14/2025		1.6000		8.0000
Cobalt, total	ug/L	MW-11	10/14/2025	ND	0.5000		2.6000
Copper, total	ug/L	MW-11	10/14/2025	ND	5.0000		4.0000
Lead, total	ug/L	MW-11	10/14/2025	ND	1.0000		4.0000
Nickel, total	ug/L	MW-11	10/14/2025	ND	5.0000		13.4000
Selenium, total	ug/L	MW-11	10/14/2025	ND	2.0000		4.0000
Silver, total	ug/L	MW-11	10/14/2025	ND	5.0000		4.0000
Thallium, total	ug/L	MW-11	10/14/2025	ND	0.5000		2.0000
Vanadium, total	ug/L	MW-11	10/14/2025	ND	2.0000		20.0000
Zinc, total	ug/L	MW-11	10/14/2025	ND	5.0000		27.2000
Antimony, total	ug/L	MW-15	10/14/2025	ND	1.0000		3.5000
Arsenic, total	ug/L	MW-15	10/14/2025		204.0000	***	4.0000
Barium, total	ug/L	MW-15	10/14/2025		1640.0000	***	312.4586
Beryllium, total	ug/L	MW-15	10/14/2025	ND	0.5000		4.0000
Cadmium, total	ug/L	MW-15	10/14/2025	ND	0.2000		0.8000
Chromium, total	ug/L	MW-15	10/14/2025		1.2000		8.0000
Cobalt, total	ug/L	MW-15	10/14/2025		16.1000	***	2.6000
Copper, total	ug/L	MW-15	10/14/2025	ND	5.0000		4.0000
Lead, total	ug/L	MW-15	10/14/2025	ND	1.0000		4.0000
Nickel, total	ug/L	MW-15	10/14/2025		87.3000	***	13.4000
Selenium, total	ug/L	MW-15	10/14/2025		3.3000		4.0000
Silver, total	ug/L	MW-15	10/14/2025	ND	5.0000		4.0000
Thallium, total	ug/L	MW-15	10/14/2025	ND	0.5000		2.0000
Vanadium, total	ug/L	MW-15	10/14/2025	ND	2.0000		20.0000
Zinc, total	ug/L	MW-15	10/14/2025		10.3000		27.2000
Antimony, total	ug/L	MW-16	10/14/2025	ND	1.0000		3.5000
Arsenic, total	ug/L	MW-16	10/14/2025	ND	2.0000		4.0000
Barium, total	ug/L	MW-16	10/14/2025		84.2000		312.4586
Beryllium, total	ug/L	MW-16	10/14/2025	ND	0.5000		4.0000
Cadmium, total	ug/L	MW-16	10/14/2025	ND	0.2000		0.8000
Chromium, total	ug/L	MW-16	10/14/2025	ND	1.0000		8.0000
Cobalt, total	ug/L	MW-16	10/14/2025	ND	0.5000		2.6000
Copper, total	ug/L	MW-16	10/14/2025	ND	5.0000		4.0000
Lead, total	ug/L	MW-16	10/14/2025	ND	1.0000		4.0000
Nickel, total	ug/L	MW-16	10/14/2025	ND	5.0000		13.4000
Selenium, total	ug/L	MW-16	10/14/2025	ND	2.0000		4.0000
Silver, total	ug/L	MW-16	10/14/2025	ND	5.0000		4.0000
Thallium, total	ug/L	MW-16	10/14/2025	ND	0.5000		2.0000
Vanadium, total	ug/L	MW-16	10/14/2025	ND	2.0000		20.0000
Zinc, total	ug/L	MW-16	10/14/2025		33.9000	***	27.2000
Antimony, total	ug/L	MW-20	10/14/2025	ND	1.0000		3.5000
Arsenic, total	ug/L	MW-20	10/14/2025	ND	2.0000		4.0000
Barium, total	ug/L	MW-20	10/14/2025		107.0000		312.4586
Beryllium, total	ug/L	MW-20	10/14/2025	ND	0.5000		4.0000
Cadmium, total	ug/L	MW-20	10/14/2025	ND	0.2000		0.8000
Chromium, total	ug/L	MW-20	10/14/2025	ND	1.0000		8.0000
Cobalt, total	ug/L	MW-20	10/14/2025	ND	0.5000		2.6000
Copper, total	ug/L	MW-20	10/14/2025	ND	5.0000		4.0000
Lead, total	ug/L	MW-20	10/14/2025	ND	1.0000		4.0000
Nickel, total	ug/L	MW-20	10/14/2025	ND	5.0000		13.4000
Selenium, total	ug/L	MW-20	10/14/2025	ND	2.0000		4.0000
Silver, total	ug/L	MW-20	10/14/2025	ND	5.0000		4.0000
Thallium, total	ug/L	MW-20	10/14/2025	ND	0.5000		2.0000
Vanadium, total	ug/L	MW-20	10/14/2025	ND	2.0000		20.0000
Zinc, total	ug/L	MW-20	10/14/2025		9.0000		27.2000
Antimony, total	ug/L	MW-22	10/14/2025	ND	1.0000		3.5000
Arsenic, total	ug/L	MW-22	10/14/2025	ND	2.0000		4.0000
Barium, total	ug/L	MW-22	10/14/2025		194.0000		312.4586
Beryllium, total	ug/L	MW-22	10/14/2025	ND	0.5000		4.0000
Cadmium, total	ug/L	MW-22	10/14/2025	ND	0.2000		0.8000
Chromium, total	ug/L	MW-22	10/14/2025		2.7000		8.0000
Cobalt, total	ug/L	MW-22	10/14/2025	ND	0.5000		2.6000
Copper, total	ug/L	MW-22	10/14/2025	ND	5.0000		4.0000
Lead, total	ug/L	MW-22	10/14/2025	ND	1.0000		4.0000
Nickel, total	ug/L	MW-22	10/14/2025	ND	5.0000		13.4000
Selenium, total	ug/L	MW-22	10/14/2025	ND	2.0000		4.0000
Silver, total	ug/L	MW-22	10/14/2025	ND	5.0000		4.0000

* - Current value failed - awaiting verification.

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

*** - Current value failed - exceedance verified.

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

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

ND = Not Detected, Result = detection limit.

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Thallium, total	ug/L	MW-22	10/14/2025	ND	0.5000		2.0000
Vanadium, total	ug/L	MW-22	10/14/2025	ND	2.0000		20.0000
Zinc, total	ug/L	MW-22	10/14/2025		8.2000		27.2000
Antimony, total	ug/L	MW-6	10/14/2025	ND	1.0000		3.5000
Arsenic, total	ug/L	MW-6	10/14/2025	ND	2.0000		4.0000
Barium, total	ug/L	MW-6	10/14/2025		590.0000	***	312.4586
Beryllium, total	ug/L	MW-6	10/14/2025	ND	0.5000		4.0000
Cadmium, total	ug/L	MW-6	10/14/2025	ND	0.2000		0.8000
Chromium, total	ug/L	MW-6	10/14/2025	ND	1.0000		8.0000
Cobalt, total	ug/L	MW-6	10/14/2025		3.3000	*	2.6000
Copper, total	ug/L	MW-6	10/14/2025	ND	5.0000		4.0000
Lead, total	ug/L	MW-6	10/14/2025	ND	1.0000		4.0000
Nickel, total	ug/L	MW-6	10/14/2025		9.7000		13.4000
Selenium, total	ug/L	MW-6	10/14/2025	ND	2.0000		4.0000
Silver, total	ug/L	MW-6	10/14/2025	ND	5.0000		4.0000
Thallium, total	ug/L	MW-6	10/14/2025	ND	0.5000		2.0000
Vanadium, total	ug/L	MW-6	10/14/2025	ND	2.0000		20.0000
Zinc, total	ug/L	MW-6	10/14/2025		7.2000		27.2000

* - Current value failed - awaiting verification.

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

*** - Current value failed - exceedance verified.

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

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

ND = Not Detected, Result = detection limit.

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

Constituent	Detect	Upgradient N	Proportion	Detect	Downgradient N	Proportion
Antimony, total	1	23	0.043	0	160	0.000
Arsenic, total	0	23	0.000	48	185	0.259
Barium, total	23	23	1.000	202	202	1.000
Beryllium, total	0	23	0.000	0	160	0.000
Cadmium, total	0	23	0.000	24	190	0.126
Chromium, total	0	23	0.000	28	181	0.155
Cobalt, total	1	23	0.043	90	218	0.413
Copper, total	0	23	0.000	63	200	0.315
Lead, total	0	23	0.000	35	191	0.183
Nickel, total	3	23	0.130	113	201	0.562
Selenium, total	0	23	0.000	16	180	0.089
Silver, total	0	23	0.000	0	160	0.000
Thallium, total	0	23	0.000	0	160	0.000
Vanadium, total	0	23	0.000	23	189	0.122
Zinc, total	8	23	0.348	92	204	0.451

N = Total number of measurements in all wells.

Detect = Total number of detections in all wells.

Proportion = Detect/N.

Table 4

Shapiro-Wilk Multiple Group Test of Normality

Constituent	Detect	N	Detect Freq	G raw	G log	G cbrt	G sqrt	G sqr	G cub	Crit Value	Dist Form	Model Type
Antimony, total	1	23	0.043									nonpar
Arsenic, total	0	23	0.000									nonpar
Barium, total	23	23	1.000	0.237	0.161					2.326	normal	normal
Beryllium, total	0	23	0.000									nonpar
Cadmium, total	0	23	0.000									nonpar
Chromium, total	0	23	0.000									nonpar
Cobalt, total	1	23	0.043									nonpar
Copper, total	0	23	0.000									nonpar
Lead, total	0	23	0.000									nonpar
Nickel, total	3	23	0.130	0.903	0.321					2.326	normal	nonpar
Selenium, total	0	23	0.000									nonpar
Silver, total	0	23	0.000									nonpar
Thallium, total	0	23	0.000									nonpar
Vanadium, total	0	23	0.000									nonpar
Zinc, total	8	23	0.348	0.130	0.495					2.326	normal	nonpar

* - Distribution override for that constituent.

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

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

Table 5

Summary Statistics and Prediction Limits

Constituent	Units	Detect	N	Mean	SD	alpha	Factor	Pred Limit	Type		Conf
Antimony, total	ug/L	1	23	259.3478	20.7334	0.0100	2.5616	3.5000	nonpar		0.98
Arsenic, total	ug/L	0	23					4.0000	nonpar	***	0.98
Barium, total	ug/L	23	23					312.4586	normal		
Beryllium, total	ug/L	0	23					4.0000	nonpar	***	0.98
Cadmium, total	ug/L	0	23					0.8000	nonpar	***	0.98
Chromium, total	ug/L	0	23					8.0000	nonpar	***	0.98
Cobalt, total	ug/L	1	23					2.6000	nonpar		0.98
Copper, total	ug/L	0	23					4.0000	nonpar	***	0.98
Lead, total	ug/L	0	23					4.0000	nonpar	***	0.98
Nickel, total	ug/L	3	23					13.4000	nonpar		0.98
Selenium, total	ug/L	0	23					4.0000	nonpar	***	0.98
Silver, total	ug/L	0	23					4.0000	nonpar	***	0.98
Thallium, total	ug/L	0	23					2.0000	nonpar	***	0.98
Vanadium, total	ug/L	0	23					20.0000	nonpar	***	0.98
Zinc, total	ug/L	8	23					27.2000	nonpar		0.98

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 8

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

Constituent	Units	Well	Date		Result	Pred. Limit
Barium, total	ug/L	MW-11	09/01/2012		289.0000	312.4586
Barium, total	ug/L	MW-11	04/01/2013		315.0000	312.4586
Barium, total	ug/L	MW-11	09/09/2013		313.0000	312.4586
Barium, total	ug/L	MW-11	03/30/2014		327.0000	312.4586
Barium, total	ug/L	MW-11	09/19/2014		283.0000	312.4586
Barium, total	ug/L	MW-11	04/20/2015		293.0000	312.4586
Barium, total	ug/L	MW-11	10/05/2015		309.0000	312.4586
Barium, total	ug/L	MW-11	04/05/2016		239.0000	312.4586
Barium, total	ug/L	MW-11	10/05/2016		265.0000	312.4586
Barium, total	ug/L	MW-11	04/04/2017		265.0000	312.4586
Barium, total	ug/L	MW-11	10/03/2017		265.0000	312.4586
Barium, total	ug/L	MW-11	04/10/2018		310.0000	312.4586
Barium, total	ug/L	MW-11	10/12/2018		93.0000	312.4586
Barium, total	ug/L	MW-11	04/16/2019		254.0000	312.4586
Barium, total	ug/L	MW-11	09/30/2019		355.0000	312.4586
Barium, total	ug/L	MW-11	12/20/2019		245.0000	312.4586
Barium, total	ug/L	MW-11	04/07/2020		281.0000	312.4586
Barium, total	ug/L	MW-11	10/07/2020		284.0000	312.4586
Barium, total	ug/L	MW-11	04/22/2021		275.0000	312.4586
Barium, total	ug/L	MW-11	10/05/2021		300.0000	312.4586
Barium, total	ug/L	MW-11	04/04/2022		314.0000	312.4586
Barium, total	ug/L	MW-11	10/05/2022		234.0000	312.4586
Barium, total	ug/L	MW-11	04/14/2023		221.0000	312.4586
Barium, total	ug/L	MW-11	10/18/2023		269.0000	312.4586
Barium, total	ug/L	MW-11	04/08/2024		286.0000	312.4586
Barium, total	ug/L	MW-11	10/08/2024		249.0000	312.4586
Barium, total	ug/L	MW-11	04/03/2025		305.0000	312.4586
Barium, total	ug/L	MW-11	10/14/2025		334.0000	312.4586
Arsenic, total	ug/L	MW-15	03/06/2009	ND	87.6000	4.0000
Arsenic, total	ug/L	MW-15	06/16/2009	ND	4.0000	4.0000
Arsenic, total	ug/L	MW-15	07/13/2009	ND	151.0000	4.0000
Arsenic, total	ug/L	MW-15	08/31/2009	ND	54.6000	4.0000
Arsenic, total	ug/L	MW-15	10/20/2009	ND	184.0000	4.0000
Arsenic, total	ug/L	MW-15	03/15/2010	ND	78.4000	4.0000
Arsenic, total	ug/L	MW-15	06/10/2010	ND	204.0000	4.0000
Arsenic, total	ug/L	MW-15	09/14/2010	ND	209.0000	4.0000
Arsenic, total	ug/L	MW-15	03/11/2011	ND	87.3000	4.0000
Arsenic, total	ug/L	MW-15	09/07/2011	ND	267.0000	4.0000
Arsenic, total	ug/L	MW-15	03/14/2012	ND	117.0000	4.0000
Arsenic, total	ug/L	MW-15	09/01/2012	ND	282.0000	4.0000
Arsenic, total	ug/L	MW-15	04/01/2013	ND	43.3000	4.0000
Arsenic, total	ug/L	MW-15	09/09/2013	ND	187.0000	4.0000
Arsenic, total	ug/L	MW-15	03/30/2014	ND	99.5000	4.0000
Arsenic, total	ug/L	MW-15	09/19/2014	ND	21.9000	4.0000
Arsenic, total	ug/L	MW-15	04/20/2015	ND	178.0000	4.0000
Arsenic, total	ug/L	MW-15	10/05/2015	ND	208.0000	4.0000
Arsenic, total	ug/L	MW-15	04/05/2016	ND	183.0000	4.0000
Arsenic, total	ug/L	MW-15	10/05/2016	ND	153.0000	4.0000
Arsenic, total	ug/L	MW-15	04/04/2017	ND	177.0000	4.0000
Arsenic, total	ug/L	MW-15	10/03/2017	ND	233.0000	4.0000
Arsenic, total	ug/L	MW-15	04/10/2018	ND	142.0000	4.0000
Arsenic, total	ug/L	MW-15	10/12/2018	ND	128.0000	4.0000
Arsenic, total	ug/L	MW-15	04/16/2019	ND	125.0000	4.0000
Arsenic, total	ug/L	MW-15	09/30/2019	ND	212.0000	4.0000
Arsenic, total	ug/L	MW-15	04/07/2020	ND	149.0000	4.0000
Arsenic, total	ug/L	MW-15	10/07/2020	ND	168.0000	4.0000
Arsenic, total	ug/L	MW-15	04/22/2021	ND	177.0000	4.0000
Arsenic, total	ug/L	MW-15	10/05/2021	ND	200.0000	4.0000
Arsenic, total	ug/L	MW-15	04/04/2022	ND	143.0000	4.0000
Arsenic, total	ug/L	MW-15	10/05/2022	ND	250.0000	4.0000
Arsenic, total	ug/L	MW-15	04/14/2023	ND	168.0000	4.0000
Arsenic, total	ug/L	MW-15	10/18/2023	ND	166.0000	4.0000
Arsenic, total	ug/L	MW-15	04/08/2024	ND	151.0000	4.0000
Arsenic, total	ug/L	MW-15	10/08/2024	ND	209.0000	4.0000
Arsenic, total	ug/L	MW-15	04/03/2025	ND	157.0000	4.0000
Arsenic, total	ug/L	MW-15	10/14/2025	ND	204.0000	4.0000
Barium, total	ug/L	MW-15	03/06/2009		1390.0000	312.4586
Barium, total	ug/L	MW-15	06/16/2009		97.7000	312.4586
Barium, total	ug/L	MW-15	07/13/2009		1260.0000	312.4586
Barium, total	ug/L	MW-15	08/31/2009		1060.0000	312.4586
Barium, total	ug/L	MW-15	10/20/2009		1440.0000	312.4586

* - Significantly increased over background.

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

*** - Manual exclusion.

ND = Not Detected, Result = detection limit.

Table 8

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

Constituent	Units	Well	Date		Result	Pred. Limit
Barium, total	ug/L	MW-15	03/15/2010		752.0000 *	312.4586
Barium, total	ug/L	MW-15	06/10/2010		1880.0000 *	312.4586
Barium, total	ug/L	MW-15	09/14/2010		3550.0000 *	312.4586
Barium, total	ug/L	MW-15	03/11/2011		1010.0000 *	312.4586
Barium, total	ug/L	MW-15	09/07/2011		2300.0000 *	312.4586
Barium, total	ug/L	MW-15	03/14/2012		869.0000 *	312.4586
Barium, total	ug/L	MW-15	09/01/2012		2010.0000 *	312.4586
Barium, total	ug/L	MW-15	04/01/2013		596.0000 *	312.4586
Barium, total	ug/L	MW-15	09/09/2013		988.0000 *	312.4586
Barium, total	ug/L	MW-15	03/30/2014		1120.0000 *	312.4586
Barium, total	ug/L	MW-15	09/19/2014		694.0000 *	312.4586
Barium, total	ug/L	MW-15	04/20/2015		1160.0000 *	312.4586
Barium, total	ug/L	MW-15	10/05/2015		1030.0000 *	312.4586
Barium, total	ug/L	MW-15	04/05/2016		1080.0000 *	312.4586
Barium, total	ug/L	MW-15	10/05/2016		1160.0000 *	312.4586
Barium, total	ug/L	MW-15	04/04/2017		1130.0000 *	312.4586
Barium, total	ug/L	MW-15	10/03/2017		1160.0000 *	312.4586
Barium, total	ug/L	MW-15	04/10/2018		598.0000 *	312.4586
Barium, total	ug/L	MW-15	10/12/2018		1050.0000 *	312.4586
Barium, total	ug/L	MW-15	04/16/2019		1390.0000 *	312.4586
Barium, total	ug/L	MW-15	09/30/2019		1170.0000 *	312.4586
Barium, total	ug/L	MW-15	04/07/2020		1300.0000 *	312.4586
Barium, total	ug/L	MW-15	10/07/2020		881.0000 *	312.4586
Barium, total	ug/L	MW-15	04/22/2021		868.0000 *	312.4586
Barium, total	ug/L	MW-15	10/05/2021		1180.0000 *	312.4586
Barium, total	ug/L	MW-15	04/04/2022		1000.0000 *	312.4586
Barium, total	ug/L	MW-15	10/05/2022		1170.0000 *	312.4586
Barium, total	ug/L	MW-15	04/14/2023		783.0000 *	312.4586
Barium, total	ug/L	MW-15	10/18/2023		1350.0000 *	312.4586
Barium, total	ug/L	MW-15	04/08/2024		800.0000 *	312.4586
Barium, total	ug/L	MW-15	10/08/2024		1200.0000 *	312.4586
Barium, total	ug/L	MW-15	04/03/2025		963.0000 *	312.4586
Barium, total	ug/L	MW-15	10/14/2025		1640.0000 *	312.4586
Cobalt, total	ug/L	MW-15	04/06/2006	ND	27.0000 *	2.6000
Cobalt, total	ug/L	MW-15	09/07/2006		23.0000 *	2.6000
Cobalt, total	ug/L	MW-15	03/14/2007		23.0000 *	2.6000
Cobalt, total	ug/L	MW-15	09/19/2007		22.0000 *	2.6000
Cobalt, total	ug/L	MW-15	03/25/2008		21.0000 *	2.6000
Cobalt, total	ug/L	MW-15	09/05/2008		24.0000 *	2.6000
Cobalt, total	ug/L	MW-15	03/06/2009		24.7000 *	2.6000
Cobalt, total	ug/L	MW-15	06/16/2009		4.0000 *	2.6000
Cobalt, total	ug/L	MW-15	07/13/2009		54.0000 *	2.6000
Cobalt, total	ug/L	MW-15	08/31/2009		23.6000 *	2.6000
Cobalt, total	ug/L	MW-15	10/20/2009		23.9000 *	2.6000
Cobalt, total	ug/L	MW-15	03/15/2010		23.0000 *	2.6000
Cobalt, total	ug/L	MW-15	06/10/2010		78.4000 *	2.6000
Cobalt, total	ug/L	MW-15	09/14/2010		145.3667 *	2.6000
Cobalt, total	ug/L	MW-15	03/11/2011		22.2333 *	2.6000
Cobalt, total	ug/L	MW-15	09/07/2011		65.1000 *	2.6000
Cobalt, total	ug/L	MW-15	03/14/2012		21.2000 *	2.6000
Cobalt, total	ug/L	MW-15	09/01/2012		43.8000 *	2.6000
Cobalt, total	ug/L	MW-15	04/01/2013		14.9000 *	2.6000
Cobalt, total	ug/L	MW-15	09/09/2013		22.5000 *	2.6000
Cobalt, total	ug/L	MW-15	03/30/2014		30.0000 *	2.6000
Cobalt, total	ug/L	MW-15	09/19/2014		19.4000 *	2.6000
Cobalt, total	ug/L	MW-15	04/20/2015		22.3000 *	2.6000
Cobalt, total	ug/L	MW-15	10/05/2015		24.3000 *	2.6000
Cobalt, total	ug/L	MW-15	04/05/2016		21.3000 *	2.6000
Cobalt, total	ug/L	MW-15	10/05/2016		20.1000 *	2.6000
Cobalt, total	ug/L	MW-15	04/04/2017		19.8000 *	2.6000
Cobalt, total	ug/L	MW-15	10/03/2017		22.5000 *	2.6000
Cobalt, total	ug/L	MW-15	04/10/2018		12.3000 *	2.6000
Cobalt, total	ug/L	MW-15	10/12/2018		22.0000 *	2.6000
Cobalt, total	ug/L	MW-15	04/16/2019		23.7000 *	2.6000
Cobalt, total	ug/L	MW-15	09/30/2019		24.2000 *	2.6000
Cobalt, total	ug/L	MW-15	04/07/2020		19.6000 *	2.6000
Cobalt, total	ug/L	MW-15	10/07/2020		15.0000 *	2.6000
Cobalt, total	ug/L	MW-15	04/22/2021		15.1000 *	2.6000
Cobalt, total	ug/L	MW-15	10/05/2021		20.0000 *	2.6000
Cobalt, total	ug/L	MW-15	04/04/2022		18.4000 *	2.6000
Cobalt, total	ug/L	MW-15	10/05/2022		21.2000 *	2.6000

* - Significantly increased over background.

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

*** - Manual exclusion.

ND = Not Detected, Result = detection limit.

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Cobalt, total	ug/L	MW-15	04/14/2023		13.1000	*	2.6000
Cobalt, total	ug/L	MW-15	10/18/2023		15.9000	*	2.6000
Cobalt, total	ug/L	MW-15	04/08/2024		14.1000	*	2.6000
Cobalt, total	ug/L	MW-15	10/08/2024		15.5000	*	2.6000
Cobalt, total	ug/L	MW-15	04/03/2025		13.0000	*	2.6000
Cobalt, total	ug/L	MW-15	10/14/2025		16.1000	*	2.6000
Nickel, total	ug/L	MW-15	03/06/2009		88.9000	*	13.4000
Nickel, total	ug/L	MW-15	06/16/2009		9.7000		13.4000
Nickel, total	ug/L	MW-15	07/13/2009		161.0000	*	13.4000
Nickel, total	ug/L	MW-15	08/31/2009		64.8000	*	13.4000
Nickel, total	ug/L	MW-15	10/20/2009		71.9000	*	13.4000
Nickel, total	ug/L	MW-15	03/15/2010		70.5000	*	13.4000
Nickel, total	ug/L	MW-15	06/10/2010		211.0000	*	13.4000
Nickel, total	ug/L	MW-15	09/14/2010		536.0000	*	13.4000
Nickel, total	ug/L	MW-15	03/11/2011		86.4000	*	13.4000
Nickel, total	ug/L	MW-15	09/07/2011		261.0000	*	13.4000
Nickel, total	ug/L	MW-15	03/14/2012		78.1000	*	13.4000
Nickel, total	ug/L	MW-15	09/01/2012		137.0000	*	13.4000
Nickel, total	ug/L	MW-15	04/01/2013		45.2000	*	13.4000
Nickel, total	ug/L	MW-15	09/09/2013		88.9000	*	13.4000
Nickel, total	ug/L	MW-15	03/30/2014		97.0000	*	13.4000
Nickel, total	ug/L	MW-15	09/19/2014		67.0000	*	13.4000
Nickel, total	ug/L	MW-15	04/20/2015		73.3000	*	13.4000
Nickel, total	ug/L	MW-15	10/05/2015		102.0000	*	13.4000
Nickel, total	ug/L	MW-15	04/05/2016		70.3000	*	13.4000
Nickel, total	ug/L	MW-15	10/05/2016		59.8000	*	13.4000
Nickel, total	ug/L	MW-15	04/04/2017		71.0000	*	13.4000
Nickel, total	ug/L	MW-15	10/03/2017		101.0000	*	13.4000
Nickel, total	ug/L	MW-15	04/10/2018		57.8000	*	13.4000
Nickel, total	ug/L	MW-15	10/12/2018		52.9000	*	13.4000
Nickel, total	ug/L	MW-15	04/16/2019		70.3000	*	13.4000
Nickel, total	ug/L	MW-15	09/30/2019		92.8000	*	13.4000
Nickel, total	ug/L	MW-15	04/07/2020		60.1000	*	13.4000
Nickel, total	ug/L	MW-15	10/07/2020		65.1000	*	13.4000
Nickel, total	ug/L	MW-15	04/22/2021		61.8000	*	13.4000
Nickel, total	ug/L	MW-15	10/05/2021		86.1000	*	13.4000
Nickel, total	ug/L	MW-15	04/04/2022		63.4000	*	13.4000
Nickel, total	ug/L	MW-15	10/05/2022		93.6000	*	13.4000
Nickel, total	ug/L	MW-15	04/14/2023		67.5000	*	13.4000
Nickel, total	ug/L	MW-15	10/18/2023		72.1000	*	13.4000
Nickel, total	ug/L	MW-15	04/08/2024		58.3000	*	13.4000
Nickel, total	ug/L	MW-15	10/08/2024		85.1000	*	13.4000
Nickel, total	ug/L	MW-15	04/03/2025		58.2000	*	13.4000
Nickel, total	ug/L	MW-15	10/14/2025		87.3000	*	13.4000
Zinc, total	ug/L	MW-16	09/01/2012	ND	8.0000		27.2000
Zinc, total	ug/L	MW-16	04/01/2013	ND	8.0000		27.2000
Zinc, total	ug/L	MW-16	09/09/2013		66.5000	*	27.2000
Zinc, total	ug/L	MW-16	03/30/2014		31.9000	*	27.2000
Zinc, total	ug/L	MW-16	09/19/2014		11.0000		27.2000
Zinc, total	ug/L	MW-16	04/20/2015		12.2000		27.2000
Zinc, total	ug/L	MW-16	10/05/2015		9.5000		27.2000
Zinc, total	ug/L	MW-16	04/05/2016		12.1000		27.2000
Zinc, total	ug/L	MW-16	10/05/2016	ND	8.0000		27.2000
Zinc, total	ug/L	MW-16	04/04/2017	ND	8.0000		27.2000
Zinc, total	ug/L	MW-16	10/03/2017	ND	8.0000		27.2000
Zinc, total	ug/L	MW-16	04/10/2018	ND	20.0000		27.2000
Zinc, total	ug/L	MW-16	10/12/2018	ND	20.0000		27.2000
Zinc, total	ug/L	MW-16	04/16/2019	ND	8.0000		27.2000
Zinc, total	ug/L	MW-16	09/30/2019	ND	8.0000		27.2000
Zinc, total	ug/L	MW-16	04/07/2020	ND	20.0000		27.2000
Zinc, total	ug/L	MW-16	10/07/2020	ND	20.0000		27.2000
Zinc, total	ug/L	MW-16	04/22/2021	ND	20.0000		27.2000
Zinc, total	ug/L	MW-16	10/05/2021	ND	20.0000		27.2000
Zinc, total	ug/L	MW-16	04/04/2022	ND	20.0000		27.2000
Zinc, total	ug/L	MW-16	10/05/2022		30.7000	*	27.2000
Zinc, total	ug/L	MW-16	01/03/2023	ND	20.0000		27.2000
Zinc, total	ug/L	MW-16	04/14/2023	ND	20.0000		27.2000
Zinc, total	ug/L	MW-16	10/18/2023	ND	20.0000		27.2000
Zinc, total	ug/L	MW-16	04/08/2024		32.4000	*	27.2000
Zinc, total	ug/L	MW-16	06/13/2024		20.0000		27.2000
Zinc, total	ug/L	MW-16	10/08/2024		25.6000		27.2000

* - Significantly increased over background.

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

*** - Manual exclusion.

ND = Not Detected, Result = detection limit.

Table 8

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

Constituent	Units	Well	Date		Result	Pred. Limit
Zinc, total	ug/L	MW-16	04/03/2025		28.3000 *	27.2000
Zinc, total	ug/L	MW-16	07/14/2025		45.7000 *	27.2000
Zinc, total	ug/L	MW-16	10/14/2025		33.9000 *	27.2000
Barium, total	ug/L	MW-6	03/06/2009		626.0000 *	312.4586
Barium, total	ug/L	MW-6	06/16/2009		625.0000 *	312.4586
Barium, total	ug/L	MW-6	07/13/2009		636.0000 *	312.4586
Barium, total	ug/L	MW-6	08/31/2009		505.0000 *	312.4586
Barium, total	ug/L	MW-6	10/20/2009		665.0000 *	312.4586
Barium, total	ug/L	MW-6	03/15/2010		329.0000 *	312.4586
Barium, total	ug/L	MW-6	06/10/2010		644.0000 *	312.4586
Barium, total	ug/L	MW-6	09/14/2010		616.0000 *	312.4586
Barium, total	ug/L	MW-6	03/11/2011		653.0000 *	312.4586
Barium, total	ug/L	MW-6	09/07/2011		606.5000 *	312.4586
Barium, total	ug/L	MW-6	03/14/2012		519.0000 *	312.4586
Barium, total	ug/L	MW-6	09/01/2012		497.0000 *	312.4586
Barium, total	ug/L	MW-6	04/01/2013		665.0000 *	312.4586
Barium, total	ug/L	MW-6	09/09/2013		606.0000 *	312.4586
Barium, total	ug/L	MW-6	03/30/2014		612.0000 *	312.4586
Barium, total	ug/L	MW-6	09/19/2014		591.0000 *	312.4586
Barium, total	ug/L	MW-6	04/20/2015		717.0000 *	312.4586
Barium, total	ug/L	MW-6	10/05/2015		479.0000 *	312.4586
Barium, total	ug/L	MW-6	04/05/2016		408.0000 *	312.4586
Barium, total	ug/L	MW-6	10/05/2016		231.0000 *	312.4586
Barium, total	ug/L	MW-6	04/04/2017		154.0000 *	312.4586
Barium, total	ug/L	MW-6	10/03/2017		573.0000 *	312.4586
Barium, total	ug/L	MW-6	01/03/2018		613.0000 *	312.4586
Barium, total	ug/L	MW-6	04/10/2018		435.0000 *	312.4586
Barium, total	ug/L	MW-6	10/12/2018		289.0000 *	312.4586
Barium, total	ug/L	MW-6	04/16/2019		274.0000 *	312.4586
Barium, total	ug/L	MW-6	09/30/2019		409.0000 *	312.4586
Barium, total	ug/L	MW-6	04/07/2020		209.0000 *	312.4586
Barium, total	ug/L	MW-6	10/07/2020		226.0000 *	312.4586
Barium, total	ug/L	MW-6	04/22/2021		180.0000 *	312.4586
Barium, total	ug/L	MW-6	10/05/2021		497.0000 *	312.4586
Barium, total	ug/L	MW-6	04/04/2022		521.0000 *	312.4586
Barium, total	ug/L	MW-6	10/05/2022		551.0000 *	312.4586
Barium, total	ug/L	MW-6	04/14/2023		133.0000 *	312.4586
Barium, total	ug/L	MW-6	10/18/2023		431.0000 *	312.4586
Barium, total	ug/L	MW-6	04/08/2024		171.0000 *	312.4586
Barium, total	ug/L	MW-6	10/08/2024		519.0000 *	312.4586
Barium, total	ug/L	MW-6	04/03/2025		415.0000 *	312.4586
Barium, total	ug/L	MW-6	10/14/2025		590.0000 *	312.4586
Cobalt, total	ug/L	MW-6	03/06/2009		5.2000 *	2.6000
Cobalt, total	ug/L	MW-6	06/16/2009	ND	4.0000	2.6000
Cobalt, total	ug/L	MW-6	07/13/2009	ND	10.0000	2.6000
Cobalt, total	ug/L	MW-6	08/31/2009		5.8000 *	2.6000
Cobalt, total	ug/L	MW-6	10/20/2009	ND	4.0000	2.6000
Cobalt, total	ug/L	MW-6	03/15/2010	ND	4.0000	2.6000
Cobalt, total	ug/L	MW-6	06/10/2010	ND	4.0000	2.6000
Cobalt, total	ug/L	MW-6	09/14/2010	ND	4.0000	2.6000
Cobalt, total	ug/L	MW-6	03/11/2011	ND	4.0000	2.6000
Cobalt, total	ug/L	MW-6	09/07/2011		5.8000 *	2.6000
Cobalt, total	ug/L	MW-6	03/14/2012		4.4000 *	2.6000
Cobalt, total	ug/L	MW-6	09/01/2012	ND	4.0000	2.6000
Cobalt, total	ug/L	MW-6	04/01/2013		6.5000 *	2.6000
Cobalt, total	ug/L	MW-6	09/09/2013		4.2000 *	2.6000
Cobalt, total	ug/L	MW-6	03/30/2014	ND	4.0000	2.6000
Cobalt, total	ug/L	MW-6	09/19/2014	ND	0.8000	2.6000
Cobalt, total	ug/L	MW-6	04/20/2015		10.0000 *	2.6000
Cobalt, total	ug/L	MW-6	10/05/2015	ND	0.8000	2.6000
Cobalt, total	ug/L	MW-6	04/05/2016	ND	0.8000	2.6000
Cobalt, total	ug/L	MW-6	10/05/2016	ND	0.8000	2.6000
Cobalt, total	ug/L	MW-6	04/04/2017	ND	0.8000	2.6000
Cobalt, total	ug/L	MW-6	10/03/2017		1.7000	2.6000
Cobalt, total	ug/L	MW-6	01/03/2018		1.5000	2.6000
Cobalt, total	ug/L	MW-6	04/10/2018	ND	0.8000	2.6000
Cobalt, total	ug/L	MW-6	10/12/2018	ND	0.8000	2.6000
Cobalt, total	ug/L	MW-6	04/16/2019	ND	0.8000	2.6000
Cobalt, total	ug/L	MW-6	09/30/2019		0.8000	2.6000
Cobalt, total	ug/L	MW-6	04/07/2020		0.9000	2.6000
Cobalt, total	ug/L	MW-6	10/07/2020		0.5000	2.6000

* - Significantly increased over background.

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

*** - Manual exclusion.

ND = Not Detected, Result = detection limit.

Table 8

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

Constituent	Units	Well	Date		Result		Pred. Limit
Cobalt, total	ug/L	MW-6	04/22/2021		0.6000		2.6000
Cobalt, total	ug/L	MW-6	10/05/2021		4.1000	*	2.6000
Cobalt, total	ug/L	MW-6	04/04/2022		0.5000		2.6000
Cobalt, total	ug/L	MW-6	10/05/2022		5.3000	*	2.6000
Cobalt, total	ug/L	MW-6	04/14/2023	ND	0.4000		2.6000
Cobalt, total	ug/L	MW-6	10/18/2023		2.3000		2.6000
Cobalt, total	ug/L	MW-6	04/08/2024	ND	0.4000		2.6000
Cobalt, total	ug/L	MW-6	10/08/2024		2.2000		2.6000
Cobalt, total	ug/L	MW-6	04/03/2025		0.5000		2.6000
Cobalt, total	ug/L	MW-6	10/14/2025		3.3000	*	2.6000

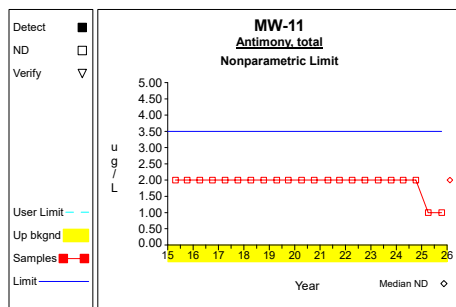
* - Significantly increased over background.

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

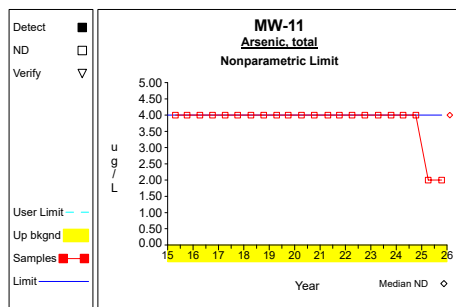
*** - Manual exclusion.

ND = Not Detected, Result = detection limit.

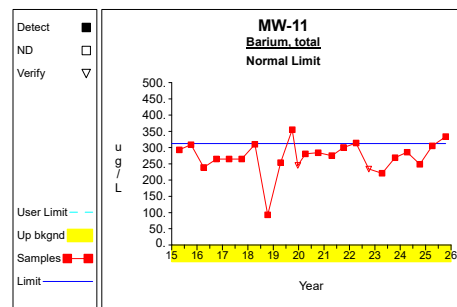
Up vs. Down Prediction Limits



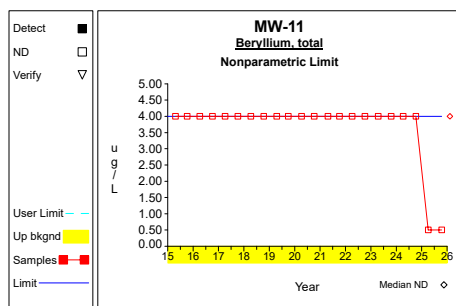
Graph 1



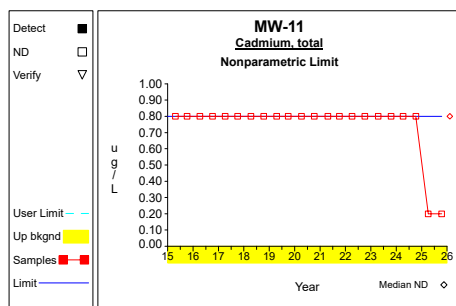
Graph 2



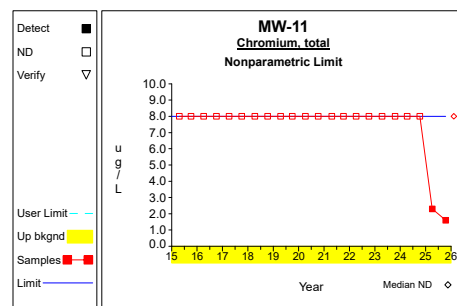
Graph 3



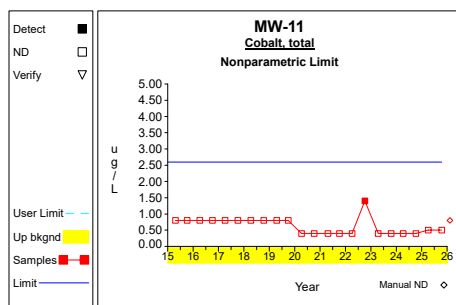
Graph 4



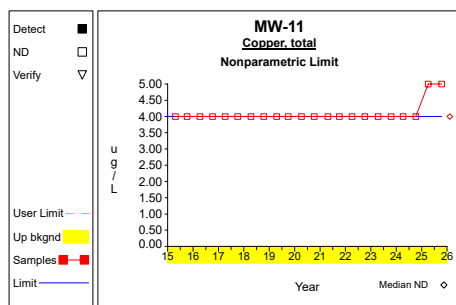
Graph 5



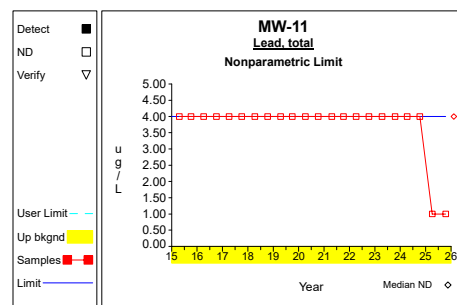
Graph 6



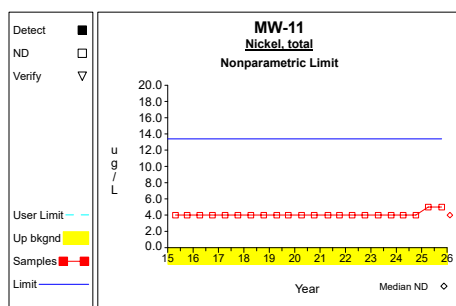
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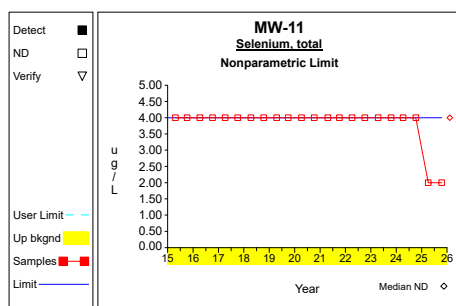
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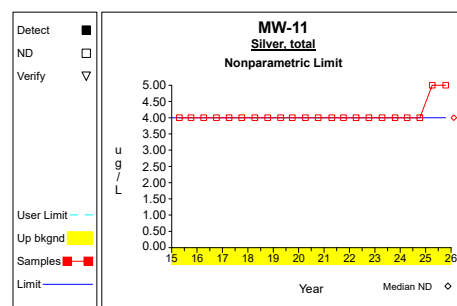
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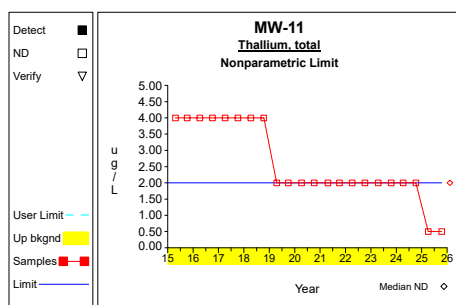
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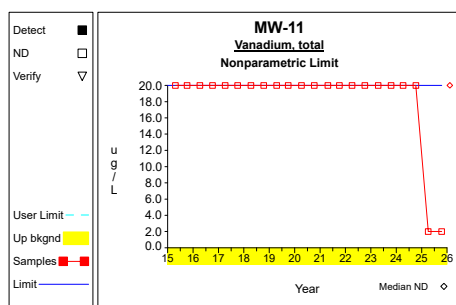
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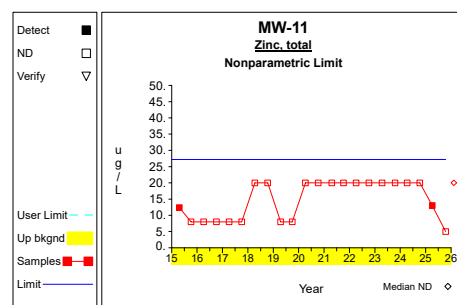
Graph 12



Graph 13

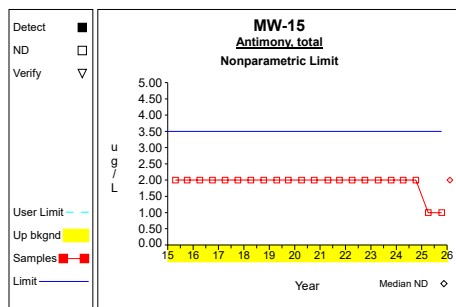


Graph 14

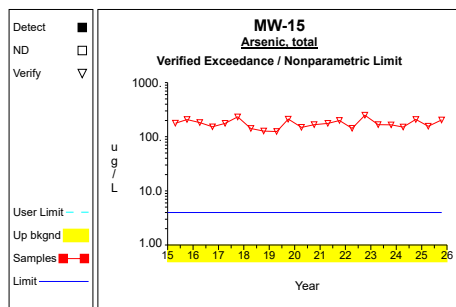


Graph 15

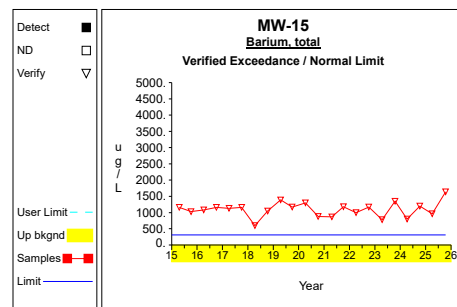
Up vs. Down Prediction Limits



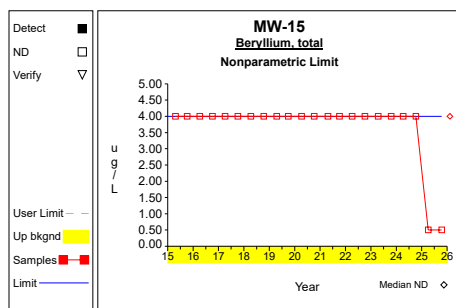
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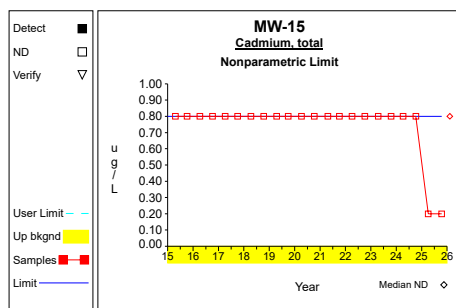
Graph 17



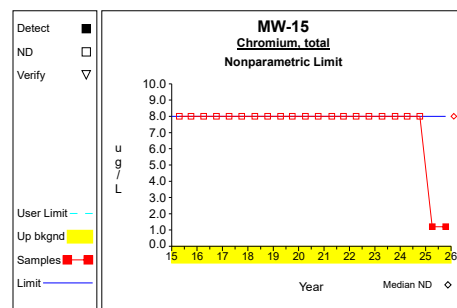
Graph 18



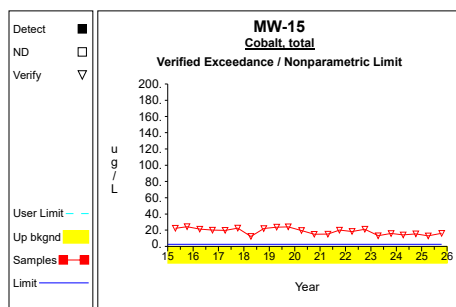
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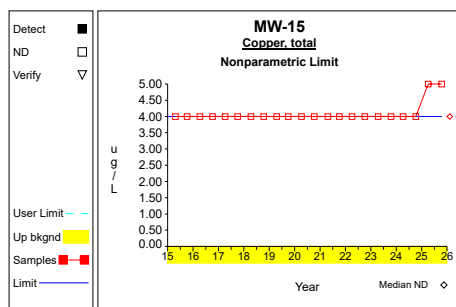
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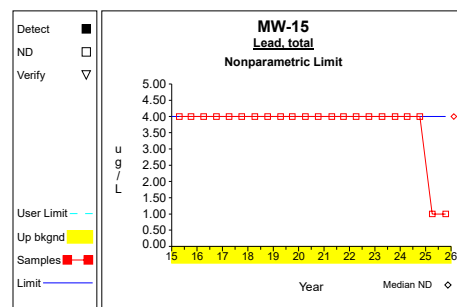
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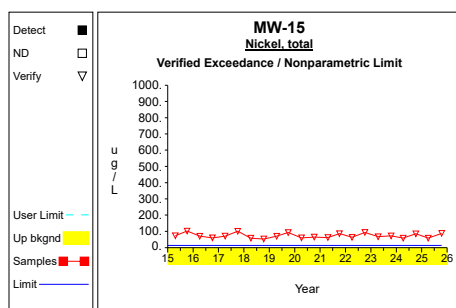
Graph 22



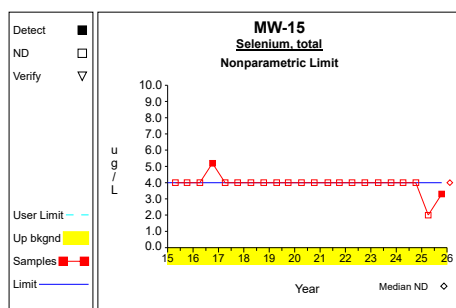
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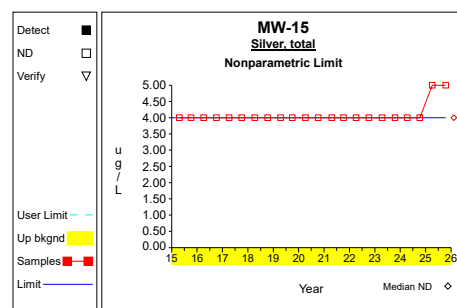
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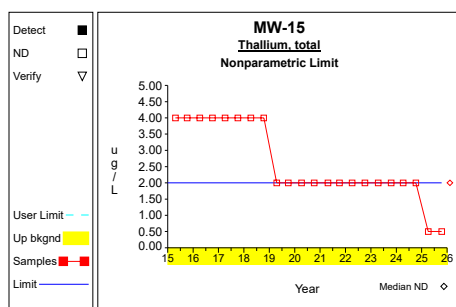
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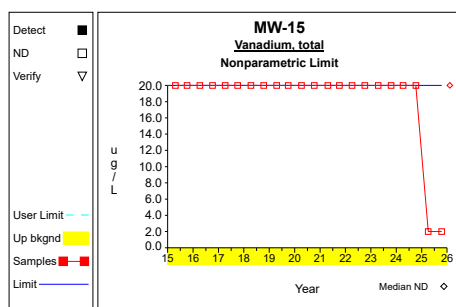
Graph 26



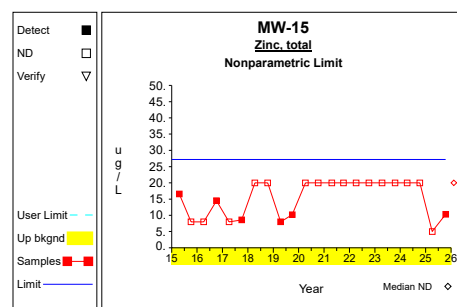
Graph 27



Graph 28

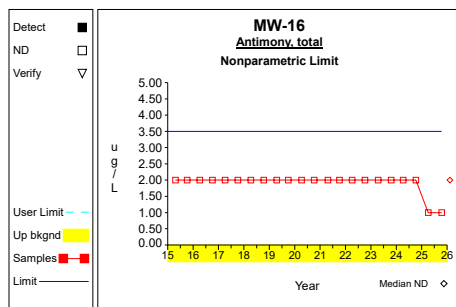


Graph 29

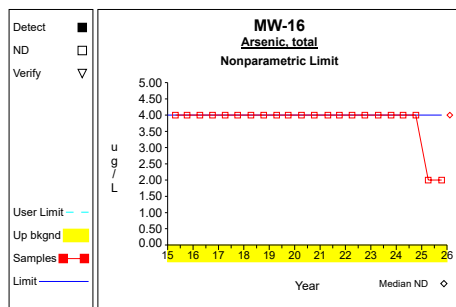


Graph 30

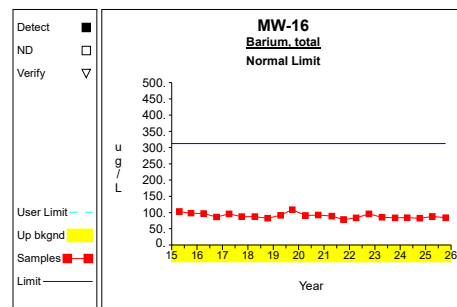
Up vs. Down Prediction Limits



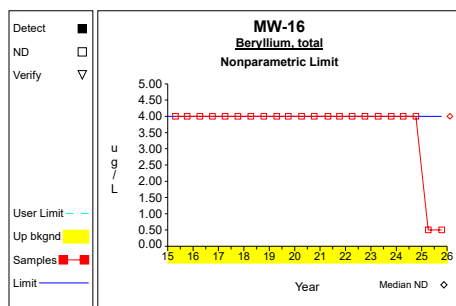
Graph 31



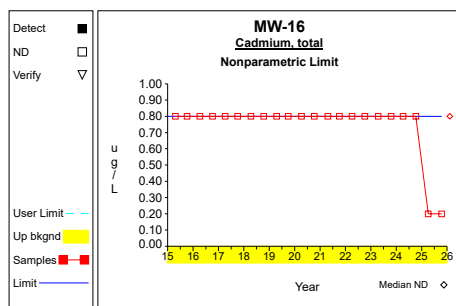
Graph 32



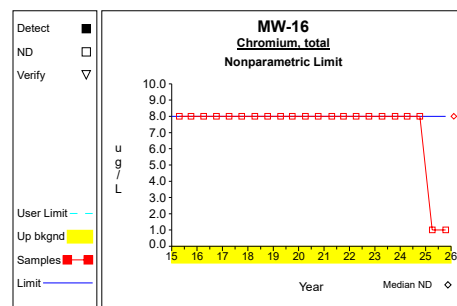
Graph 33



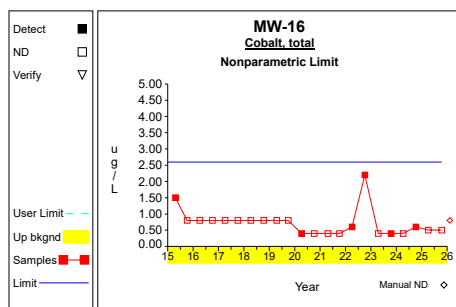
Graph 34



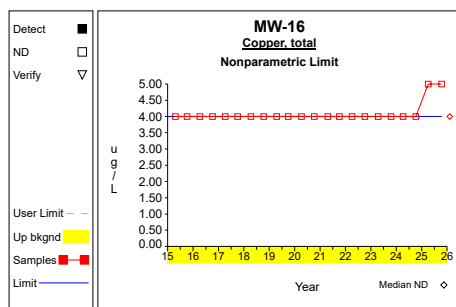
Graph 35



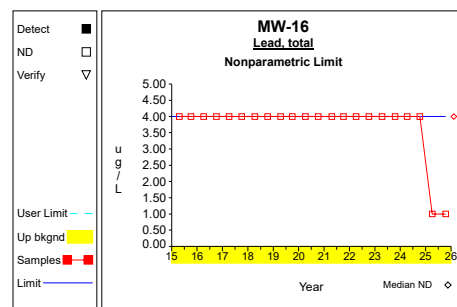
Graph 36



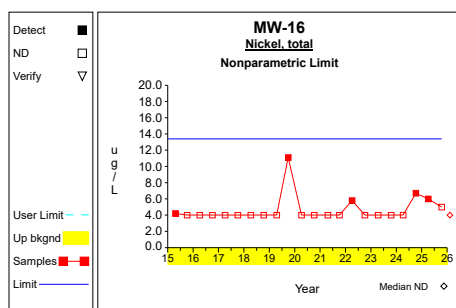
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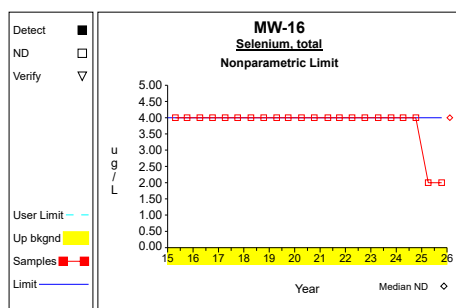
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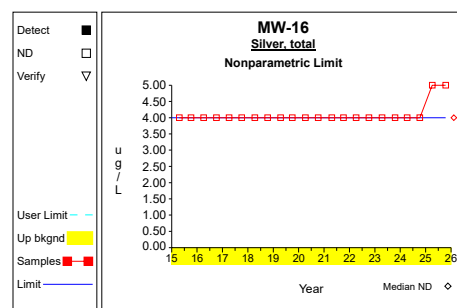
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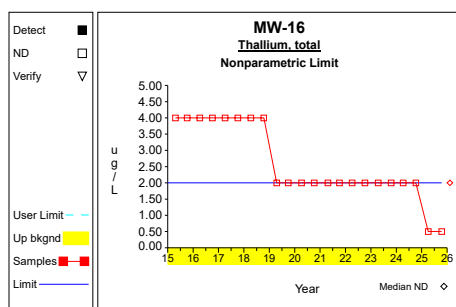
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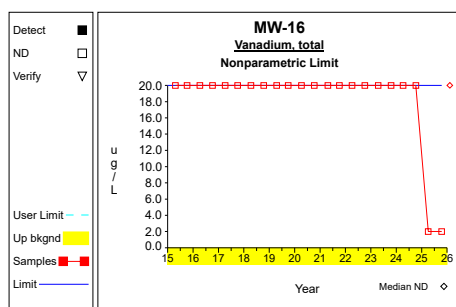
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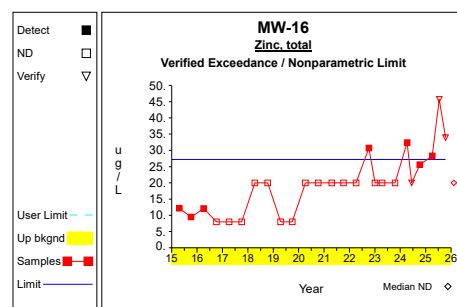
Graph 42



Graph 43

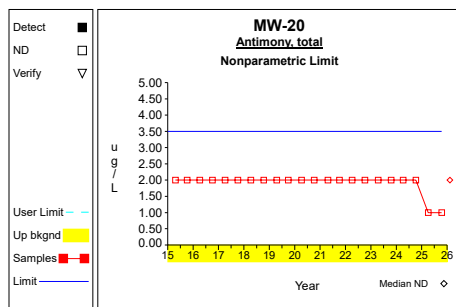


Graph 44

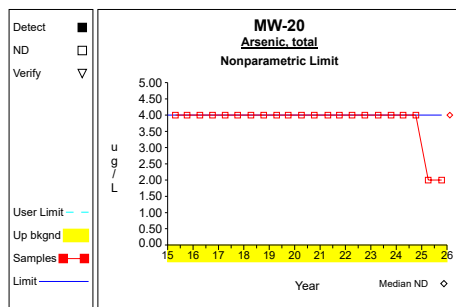


Graph 45

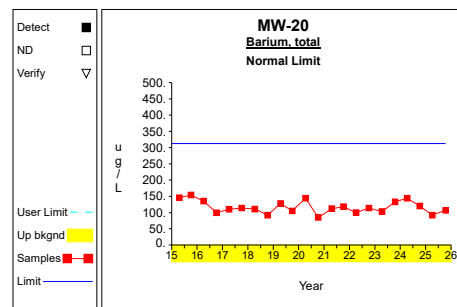
Up vs. Down Prediction Limits



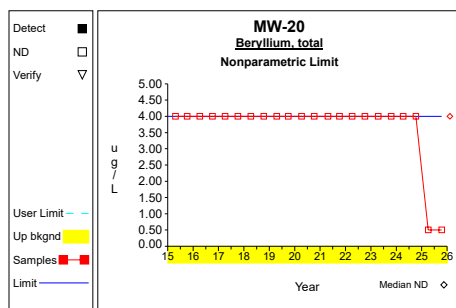
Graph 46



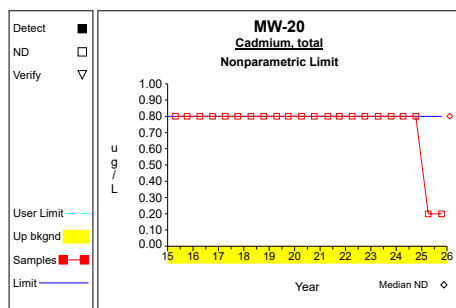
Graph 47



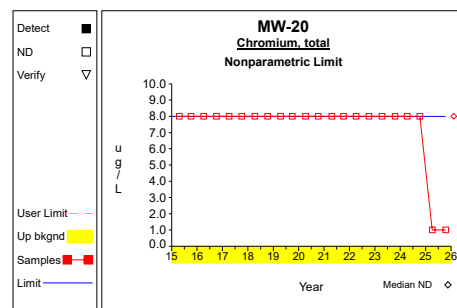
Graph 48



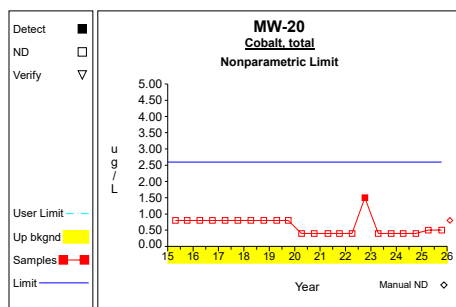
Graph 49



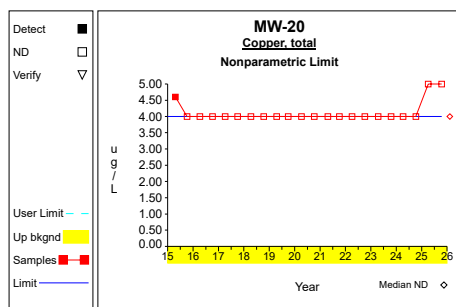
Graph 50



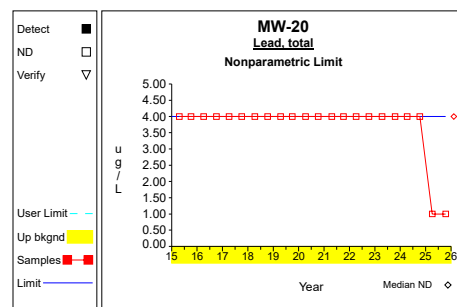
Graph 51



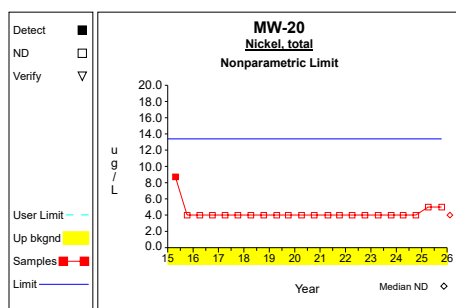
Graph 52



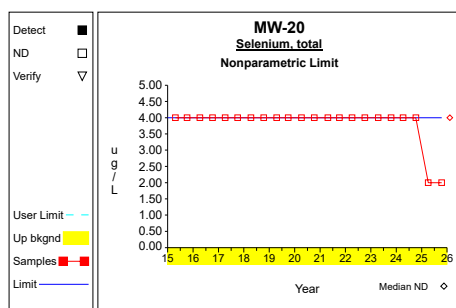
Graph 53



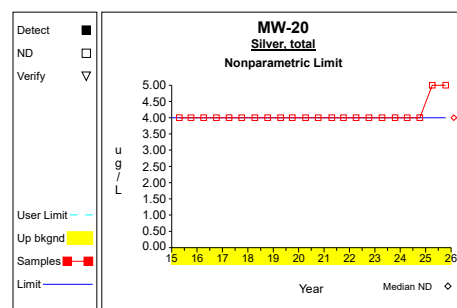
Graph 54



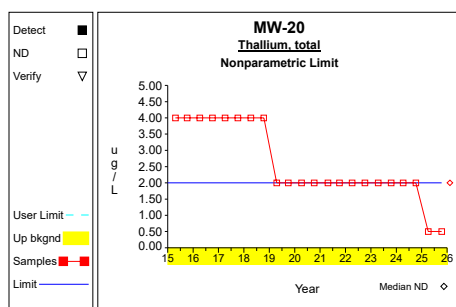
Graph 55



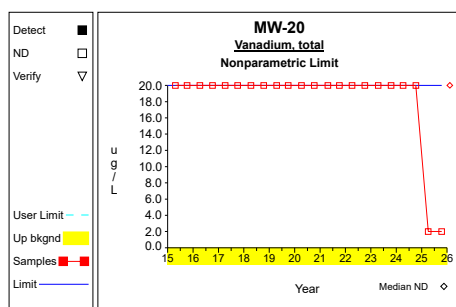
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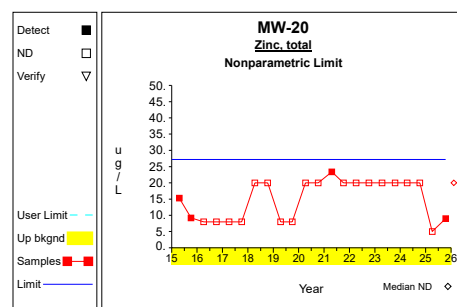
Graph 57



Graph 58

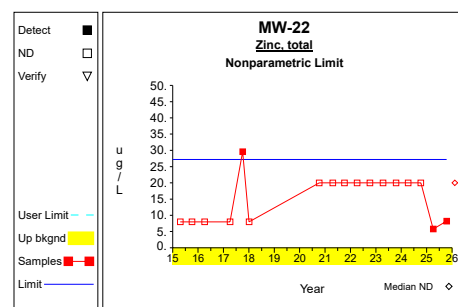
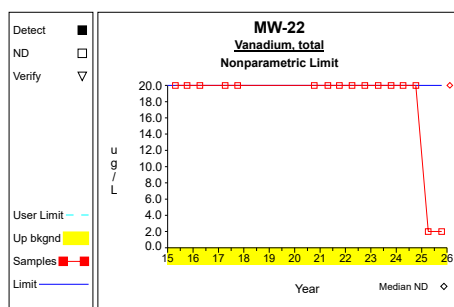
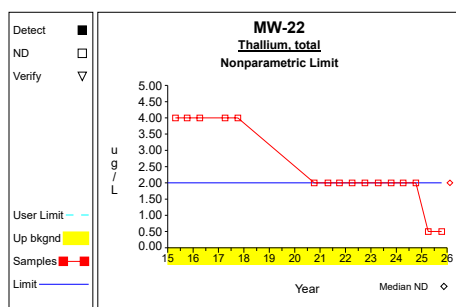
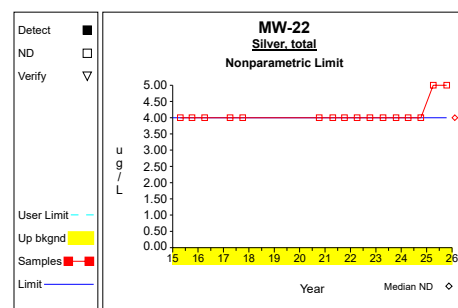
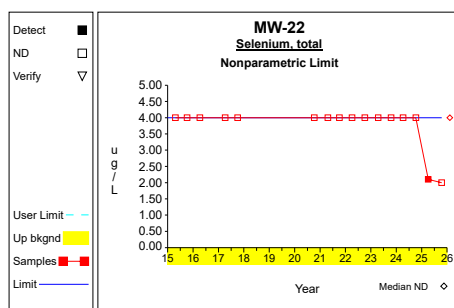
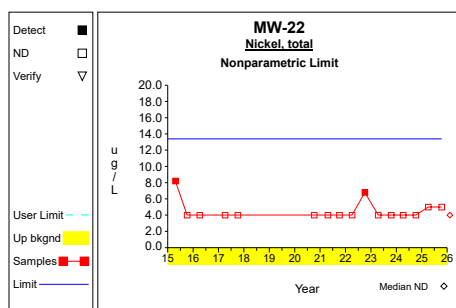
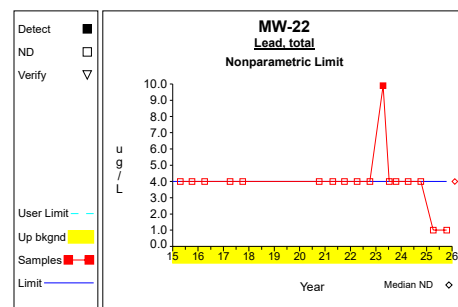
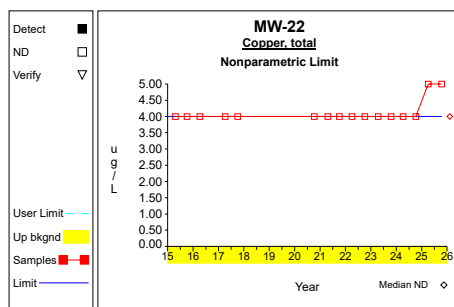
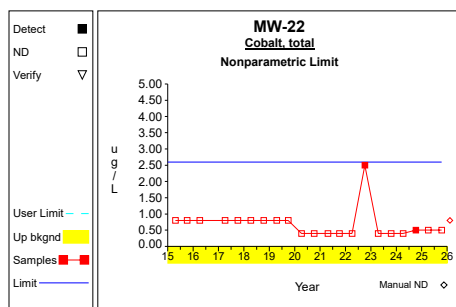
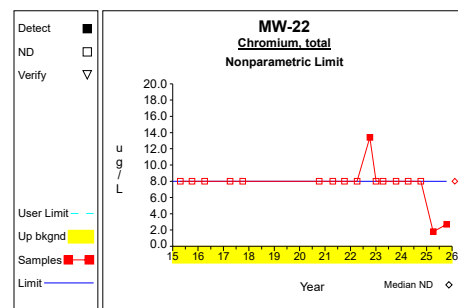
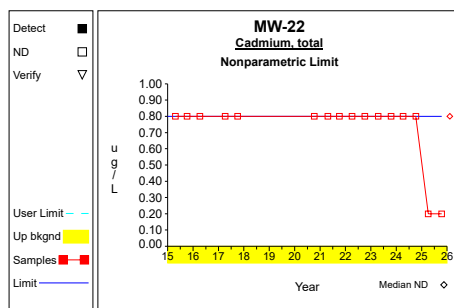
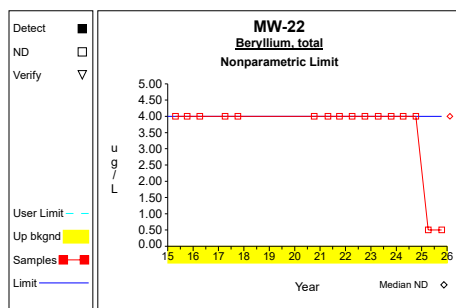
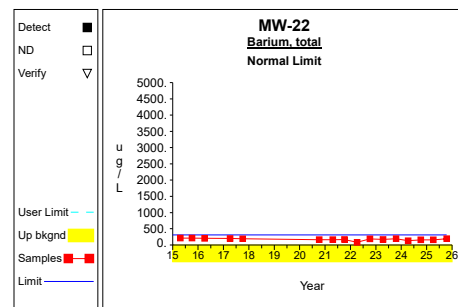
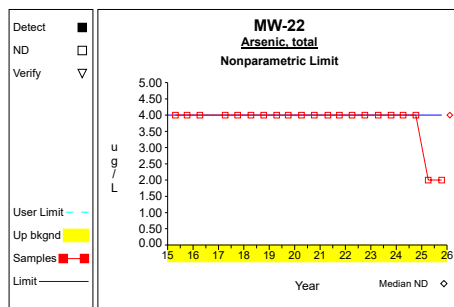
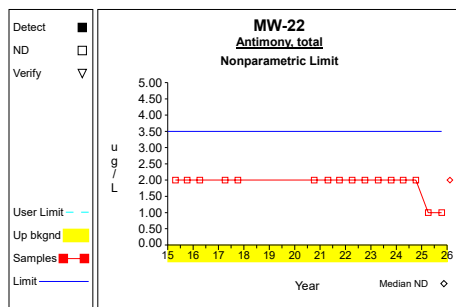


Graph 59

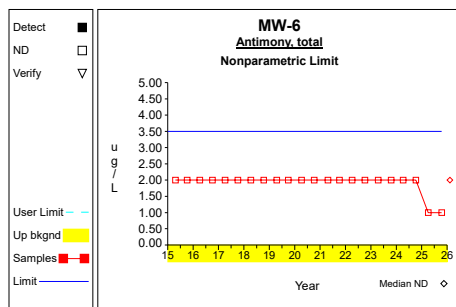


Graph 60

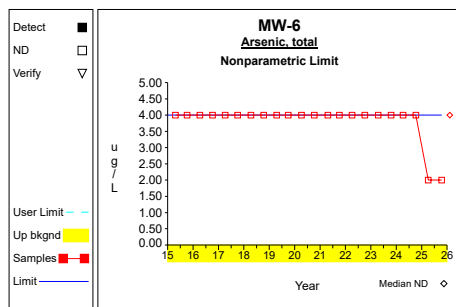
Up vs. Down Prediction Limits



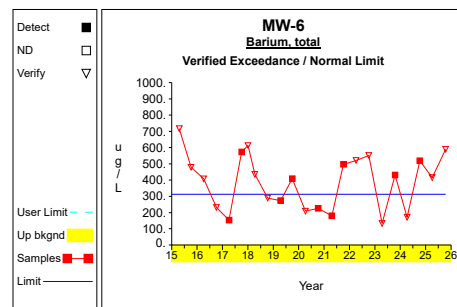
Up vs. Down Prediction Limits



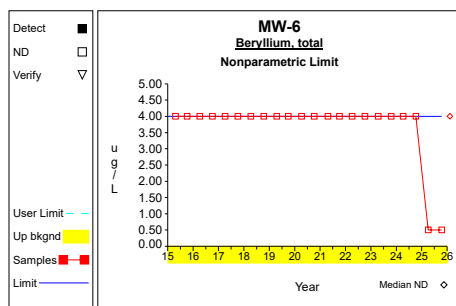
Graph 76



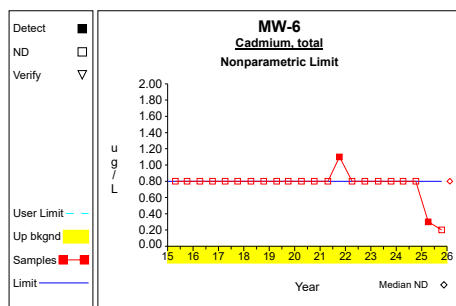
Graph 77



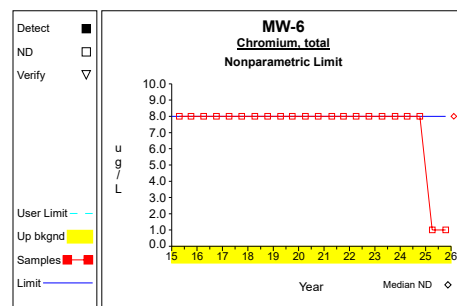
Graph 78



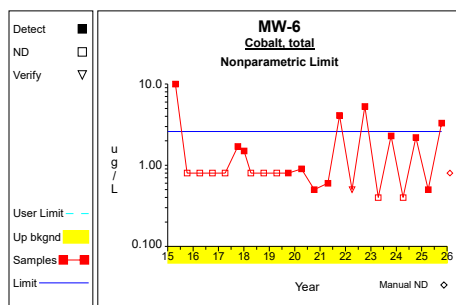
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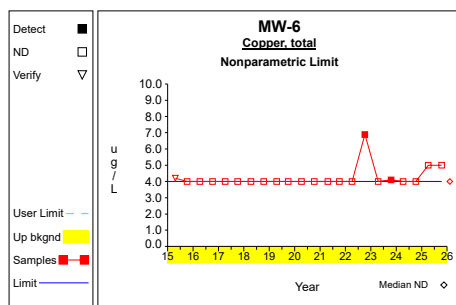
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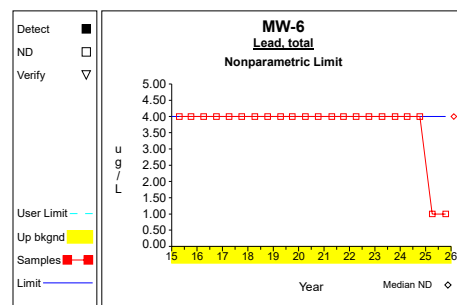
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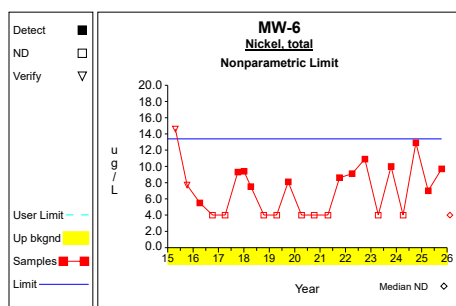
Graph 82



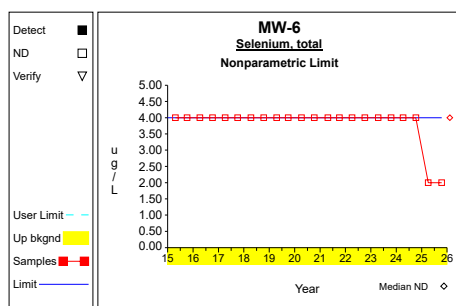
Graph 83



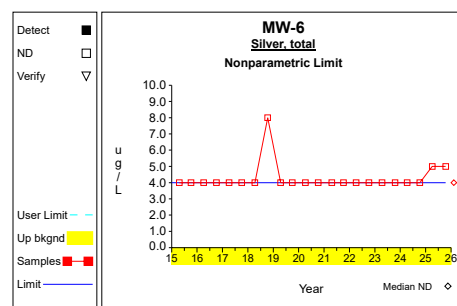
Graph 84



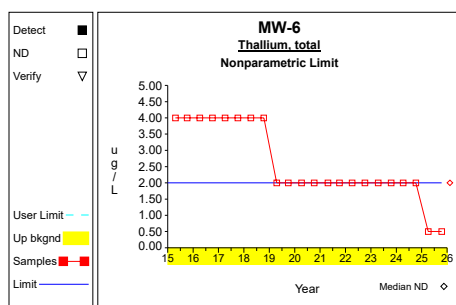
Graph 85



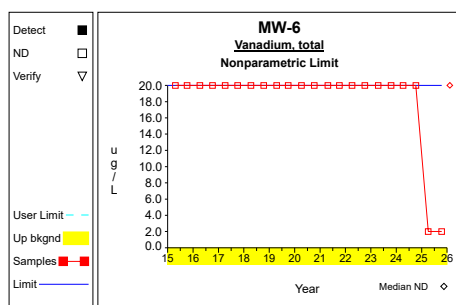
Graph 86



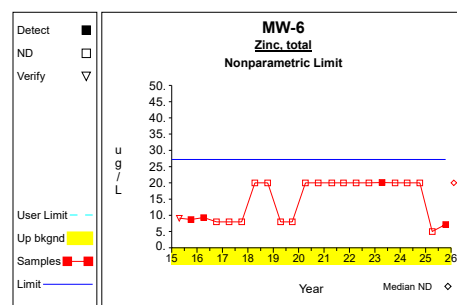
Graph 87



Graph 88



Graph 89



Graph 90

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

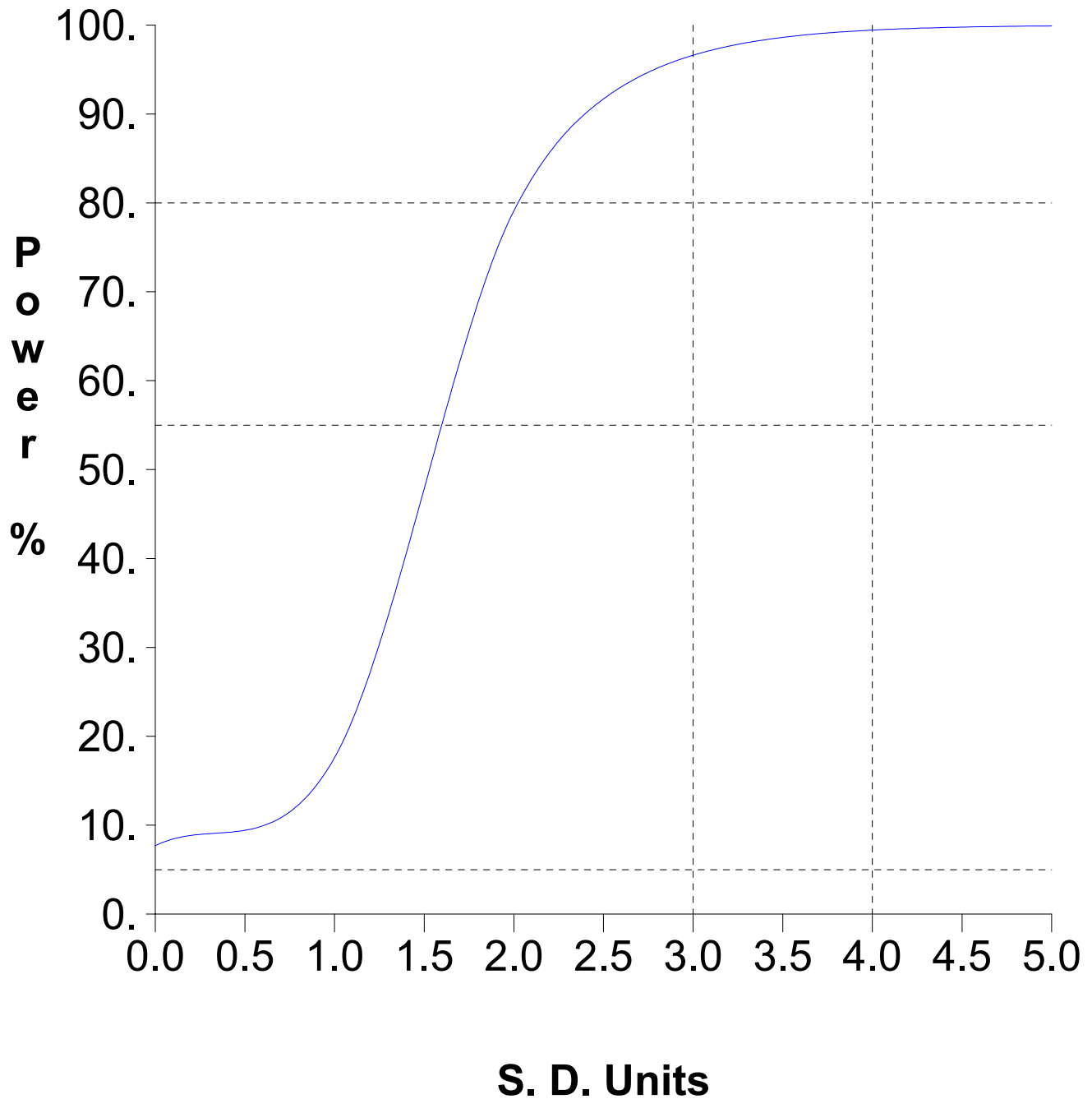


Table 1

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

Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend	
Arsenic, total	ug/L	MW-11	4	2.000	0.000	1.176	2.000	2.000	10.000		
Barium, total	ug/L	MW-11	4	293.500	35.632	1.176	251.586	335.414	2000.000		
Cobalt, total	ug/L	MW-11	4	0.400	0.000	1.176	0.400	0.400	2.100		
Nickel, total	ug/L	MW-11	4	2.000	0.000	1.176	2.000	2.000	100.000		
Zinc, total	ug/L	MW-11	4	10.750	1.500	1.176	8.986	12.514	2000.000		
Arsenic, total	ug/L	MW-15	4	180.250	30.478	1.176	144.399	216.101	10.000		**
Barium, total	ug/L	MW-15	4	1150.750	365.179	1.176	721.194	1580.306	2000.000		
Cobalt, total	ug/L	MW-15	4	14.675	1.396	1.176	13.033	16.317	2.100	dec	**
Nickel, total	ug/L	MW-15	4	72.225	16.162	1.176	53.214	91.236	100.000		
Zinc, total	ug/L	MW-15	4	10.075	0.150	1.176	9.899	10.251	2000.000	dec	
Arsenic, total	ug/L	MW-16	4	2.000	0.000	1.176	2.000	2.000	10.000		
Barium, total	ug/L	MW-16	4	84.775	2.208	1.176	82.178	87.372	2000.000	dec	
Cobalt, total	ug/L	MW-16	4	0.450	0.100	1.176	0.332	0.568	2.100		
Nickel, total	ug/L	MW-16	4	4.175	2.528	1.176	1.202	7.148	100.000		
Zinc, total	ug/L	MW-16	4	33.375	8.914	1.176	22.889	43.861	2000.000		
Arsenic, total	ug/L	MW-6	4	2.000	0.000	1.176	2.000	2.000	10.000		
Barium, total	ug/L	MW-6	4	423.750	183.185	1.176	208.271	639.229	2000.000	dec	
Cobalt, total	ug/L	MW-6	4	1.600	1.402	1.176	0.000	3.250	2.100		
Nickel, total	ug/L	MW-6	4	7.900	4.614	1.176	2.473	13.327	100.000	dec	
Zinc, total	ug/L	MW-6	4	9.300	1.400	1.176	7.653	10.947	2000.000		

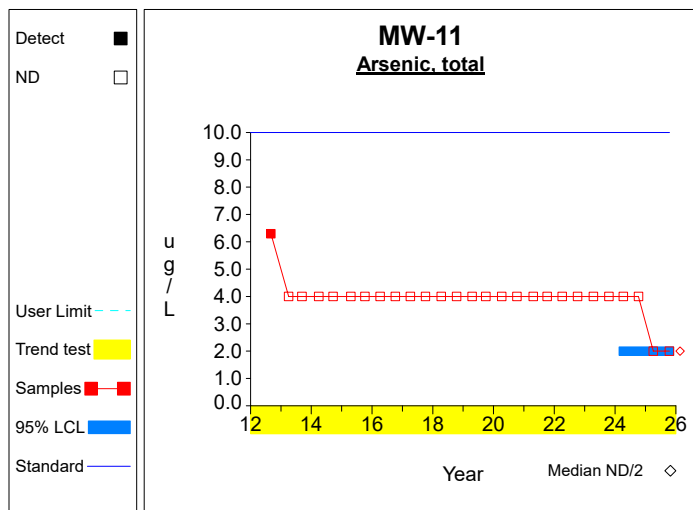
* - Insufficient Data

** - Significant Exceedance

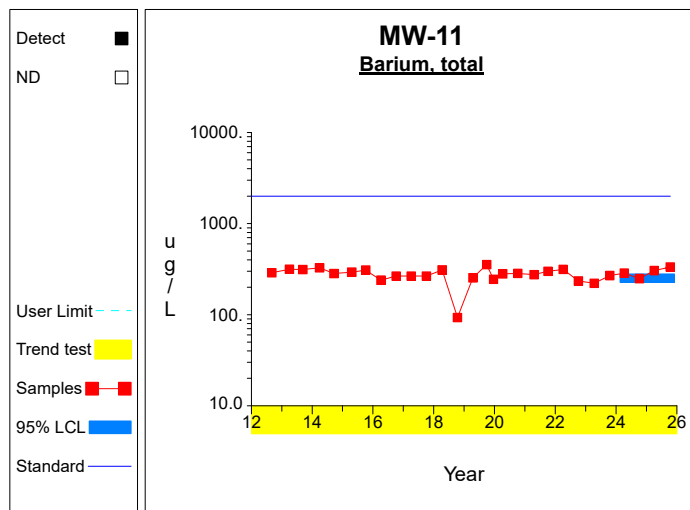
LCL = Lower Confidence Limit

UCL = Upper Confidence Limit

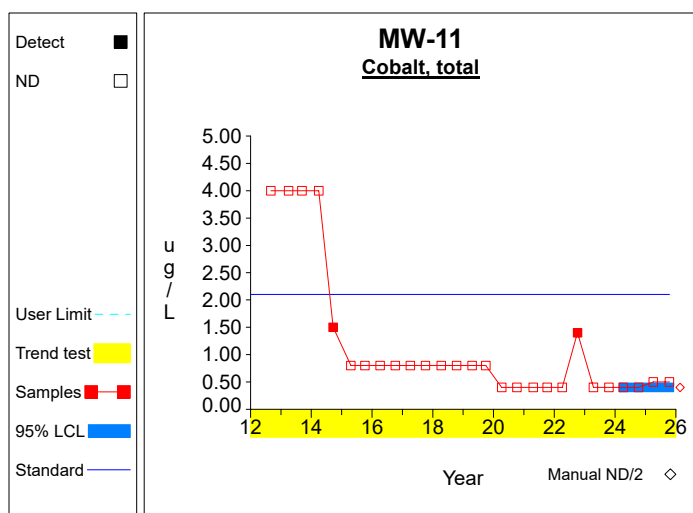
Confidence Limits (Assessment)



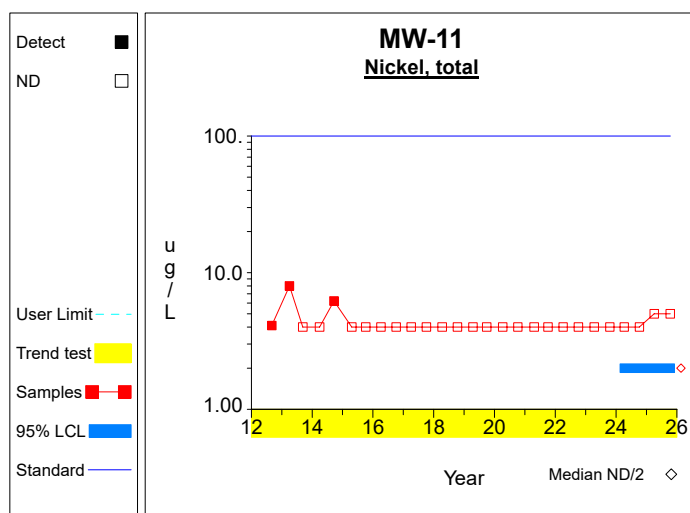
Graph 1



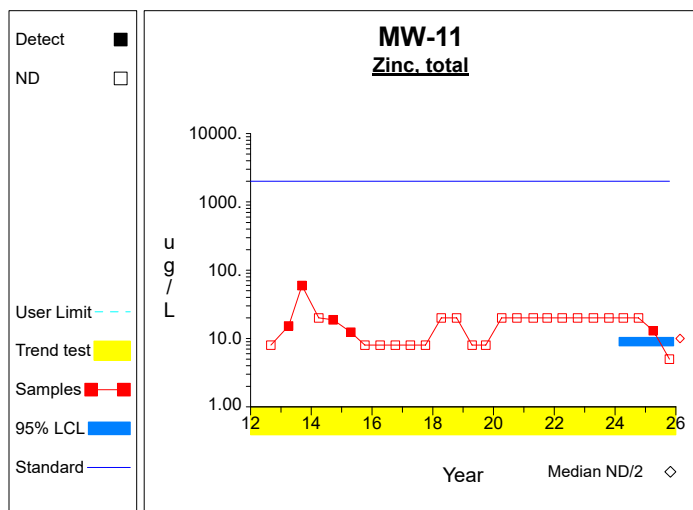
Graph 2



Graph 3

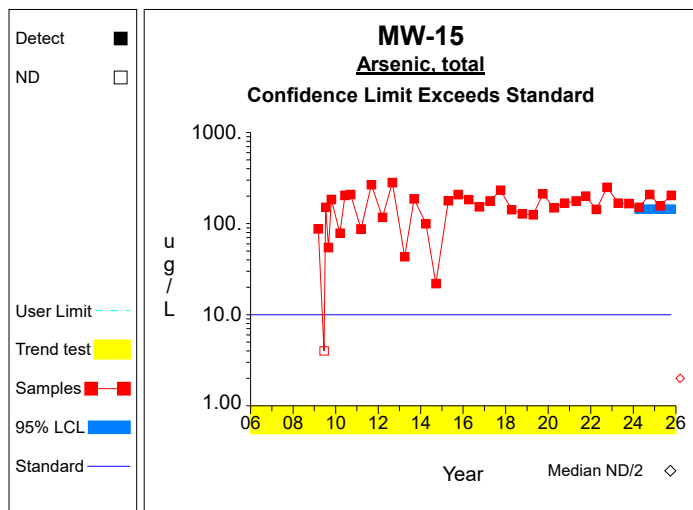


Graph 4

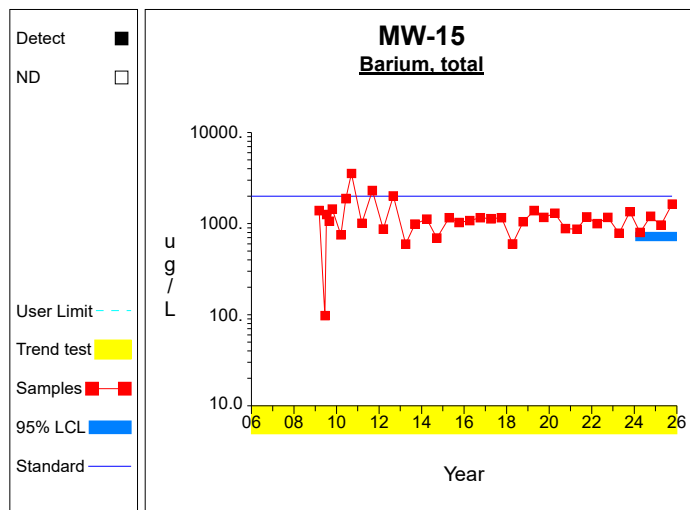


Graph 5

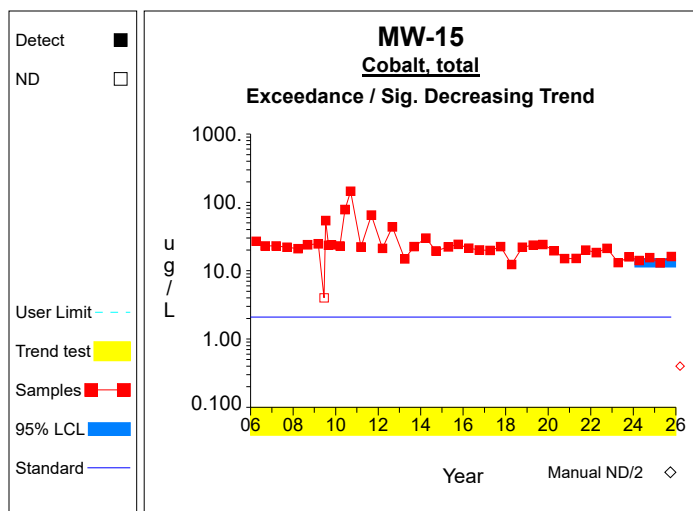
Confidence Limits (Assessment)



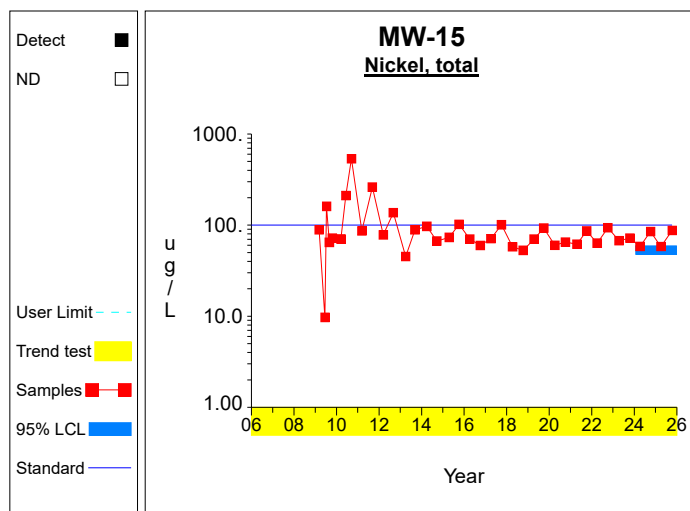
Graph 6



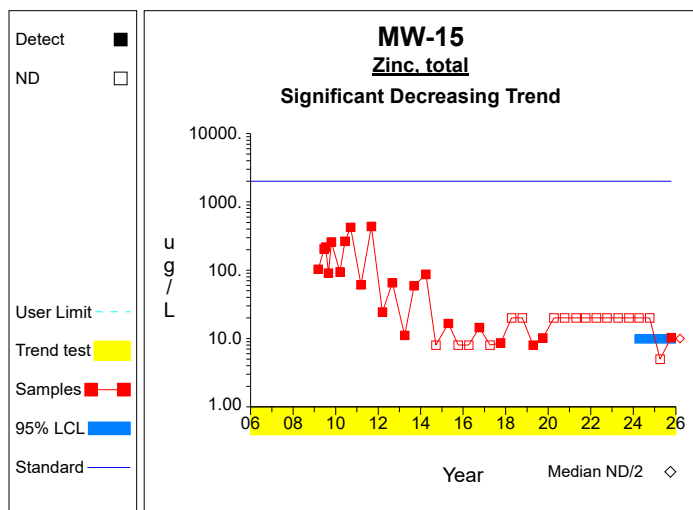
Graph 7



Graph 8

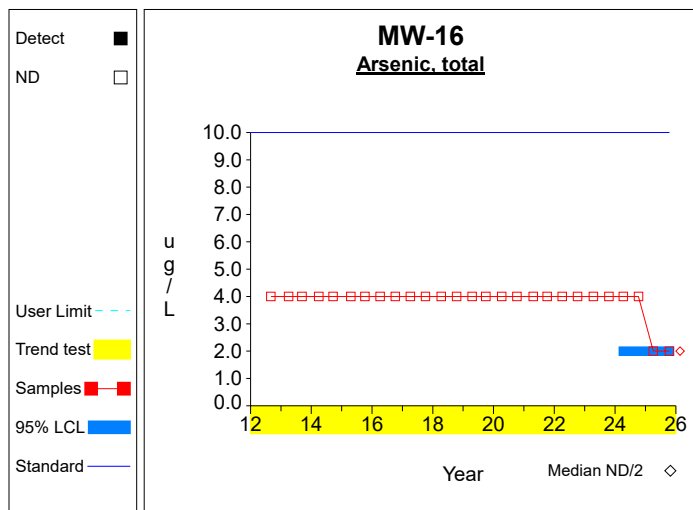


Graph 9

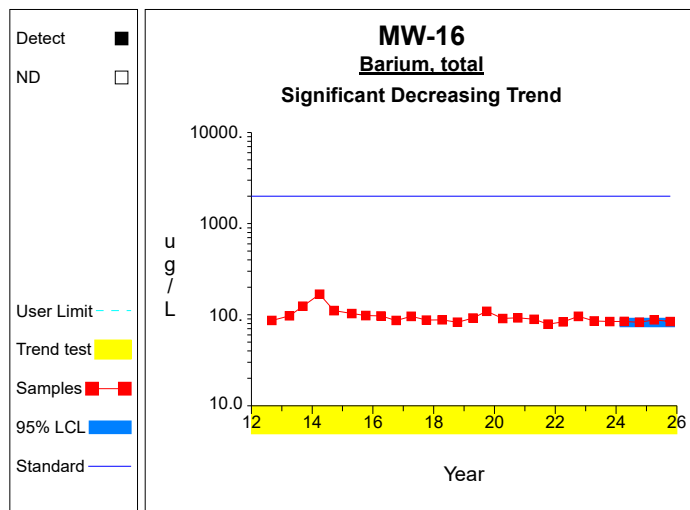


Graph 10

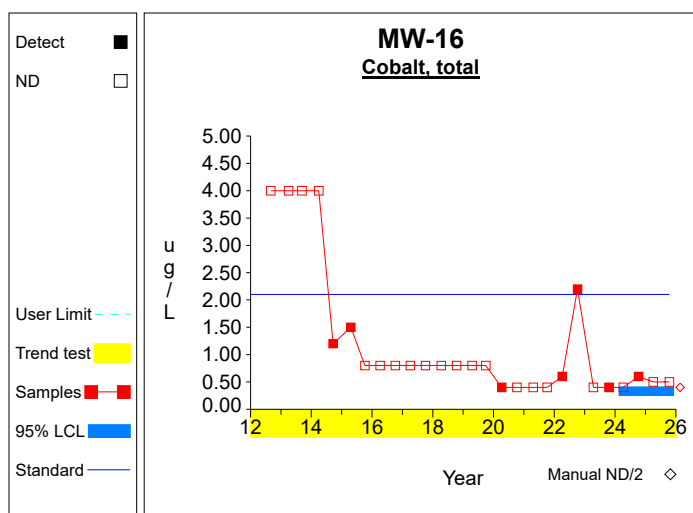
Confidence Limits (Assessment)



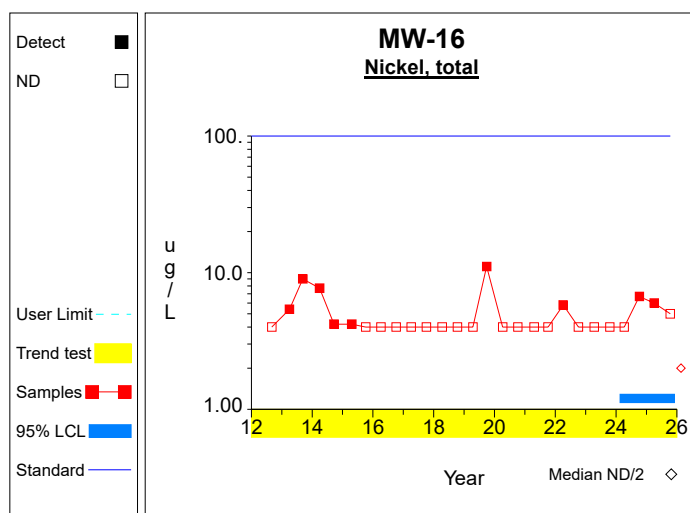
Graph 11



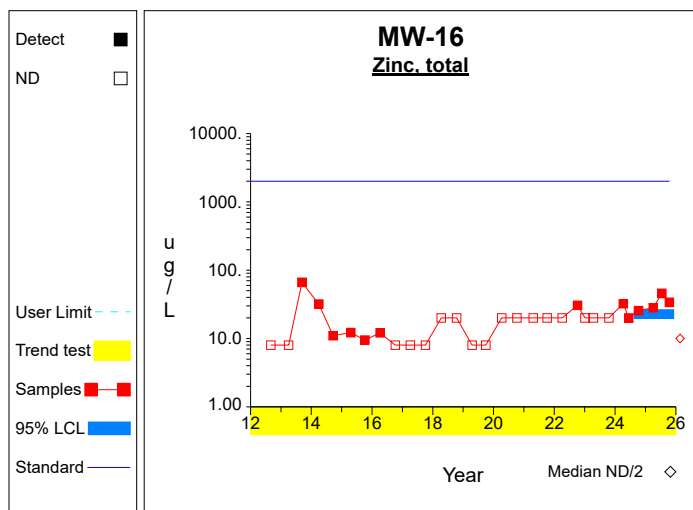
Graph 12



Graph 13

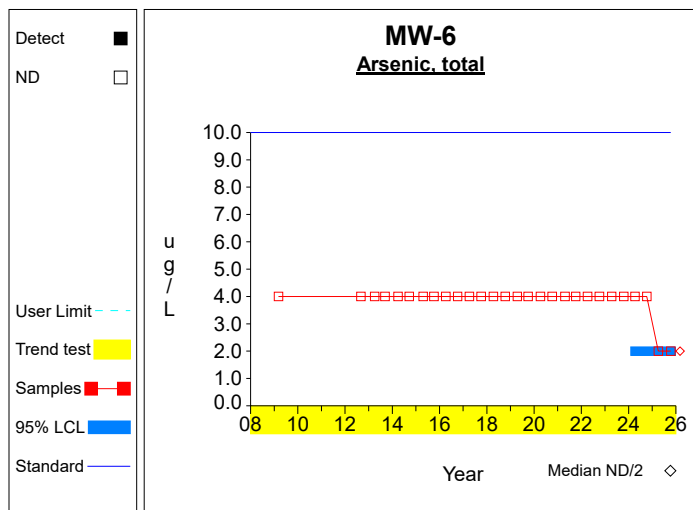


Graph 14

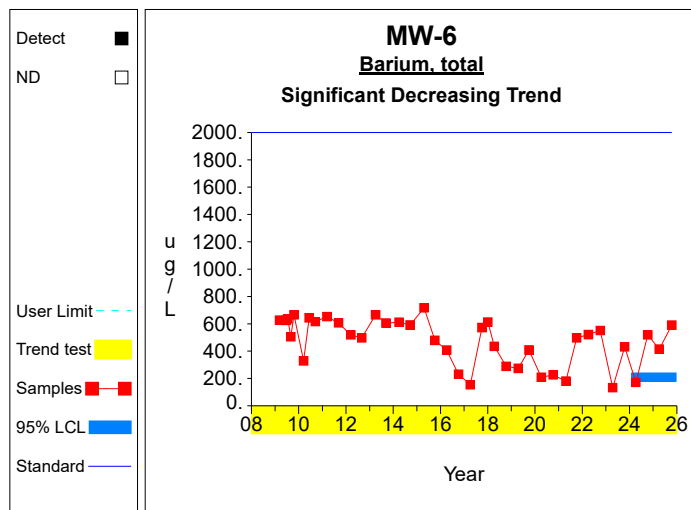


Graph 15

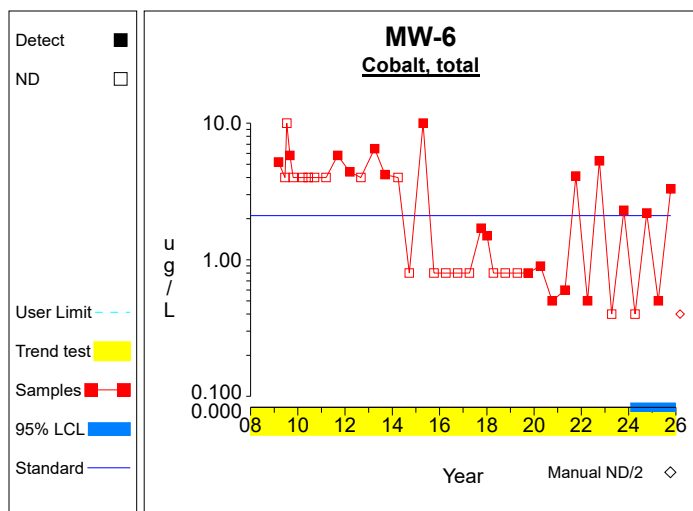
Confidence Limits (Assessment)



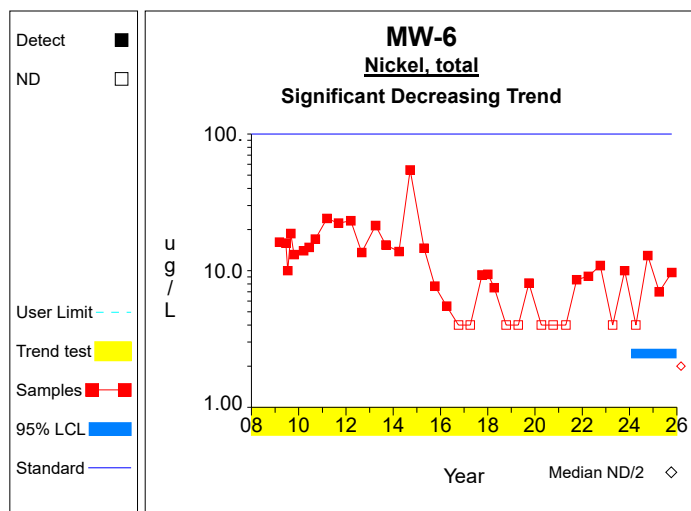
Graph 16



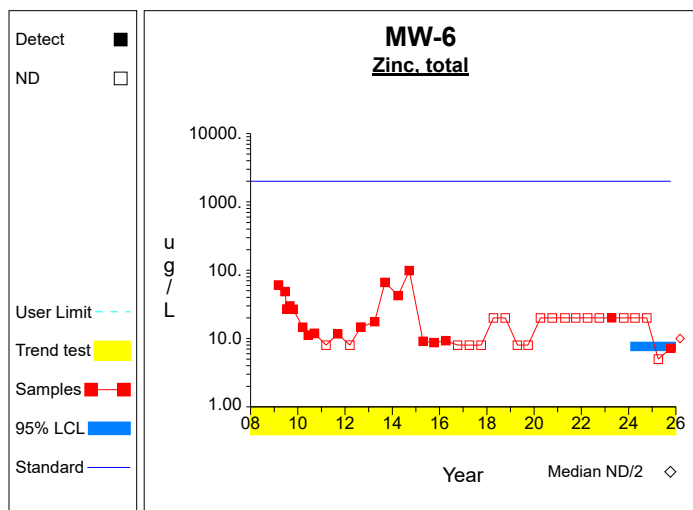
Graph 17



Graph 18



Graph 19



Graph 20

Attachment C

Summary Table of Historical VOC Detections

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,4-dichlorobenzene	LPZ-6	10/07/2020		6.5	1.0	ug/L
1,4-dichlorobenzene	LPZ-6	4/22/2021		6.4	1.0	ug/L
1,4-dichlorobenzene	LPZ-6	10/05/2021		6.0	1.0	ug/L
1,4-dichlorobenzene	LPZ-6	4/04/2022		2.2	1.0	ug/L
1,4-dichlorobenzene	LPZ-6	10/05/2022		6.0	1.0	ug/L
1,4-dichlorobenzene	LPZ-6	4/14/2023		5.3	1.0	ug/L
1,4-dichlorobenzene	LPZ-6	10/18/2023		2.4	1.0	ug/L
1,4-dichlorobenzene	LPZ-6	4/08/2024		9.2	1.0	ug/L
2-hexanone (mbk)	LPZ-6	4/08/2024		50.8	5.0	ug/L
Benzene	LPZ-6	4/16/2019		10.5	1.0	ug/L
Benzene	LPZ-6	10/07/2020		10.6	1.0	ug/L
Benzene	LPZ-6	4/22/2021		9.4	1.0	ug/L
Benzene	LPZ-6	10/05/2021		8.8	1.0	ug/L
Benzene	LPZ-6	4/04/2022		1.2	1.0	ug/L
Benzene	LPZ-6	10/05/2022		9.3	1.0	ug/L
Benzene	LPZ-6	4/14/2023		13.6	1.0	ug/L
Benzene	LPZ-6	4/08/2024		17.7	1.0	ug/L
Carbon disulfide	LPZ-6	10/05/2022		2	1	ug/L
Chlorobenzene	LPZ-6	4/16/2019		2.7	1.0	ug/L
Chlorobenzene	LPZ-6	10/07/2020		2.4	1.0	ug/L
Chlorobenzene	LPZ-6	4/22/2021		2.0	1.0	ug/L
Chlorobenzene	LPZ-6	10/05/2021		2.0	1.0	ug/L
Chlorobenzene	LPZ-6	10/05/2022		1.3	1.0	ug/L
Chlorobenzene	LPZ-6	4/14/2023		1.3	1.0	ug/L
Chlorobenzene	LPZ-6	4/08/2024		1.7	1.0	ug/L
Chloroethane	LPZ-6	4/22/2021		1.6	1.0	ug/L
Chloroethane	LPZ-6	10/18/2023		1.2	1.0	ug/L
Chloroethane	LPZ-6	4/08/2024		1.3	1.0	ug/L
Ethylbenzene	LPZ-6	4/16/2019		43.6	1.0	ug/L
Ethylbenzene	LPZ-6	10/07/2020		52.0	1.0	ug/L
Ethylbenzene	LPZ-6	4/22/2021		27.4	1.0	ug/L
Ethylbenzene	LPZ-6	10/05/2021		1.6	1.0	ug/L
Ethylbenzene	LPZ-6	4/04/2022		2.6	1.0	ug/L
Ethylbenzene	LPZ-6	10/05/2022		2.1	1.0	ug/L
Ethylbenzene	LPZ-6	4/14/2023		7.4	1.0	ug/L
Ethylbenzene	LPZ-6	4/08/2024		7.6	1.0	ug/L
Styrene	LPZ-6	4/08/2024		1.5	1.0	ug/L
Toluene	LPZ-6	10/07/2020		1.4	1.0	ug/L
Toluene	LPZ-6	10/05/2022		1.0	1.0	ug/L
Toluene	LPZ-6	4/08/2024		1.0	1.0	ug/L
Xylenes, total	LPZ-6	4/16/2019		9.5	2.0	ug/L
Xylenes, total	LPZ-6	10/07/2020		99.1	2.0	ug/L
Xylenes, total	LPZ-6	4/22/2021		27.5	2.0	ug/L
Xylenes, total	LPZ-6	10/05/2021		4.9	2.0	ug/L
Xylenes, total	LPZ-6	4/04/2022		2.4	2.0	ug/L
Xylenes, total	LPZ-6	10/05/2022		22.3	2.0	ug/L
Xylenes, total	LPZ-6	4/14/2023		22.6	2.0	ug/L
Xylenes, total	LPZ-6	10/18/2023		3.8	2.0	ug/L
Xylenes, total	LPZ-6	4/08/2024		95.0	2.0	ug/L
Acetone	MW-11	10/03/2017		20.6	10.0	ug/L
Acetone	MW-12	10/03/2017		19.6	10.0	ug/L
1,1-dichloroethylene	MW-15	4/08/2024		1	1	ug/L
1,4-dichlorobenzene	MW-15	4/06/2006		2.3	1.0	ug/L
1,4-dichlorobenzene	MW-15	9/07/2006		2.4	1.0	ug/L
1,4-dichlorobenzene	MW-15	3/14/2007		2.1	1.0	ug/L
1,4-dichlorobenzene	MW-15	9/19/2007		2.3	1.0	ug/L
1,4-dichlorobenzene	MW-15	3/25/2008		3.0	1.0	ug/L
1,4-dichlorobenzene	MW-15	9/05/2008		3.0	1.0	ug/L
1,4-dichlorobenzene	MW-15	3/06/2009		2.8	1.0	ug/L
1,4-dichlorobenzene	MW-15	3/06/2009		2.8	1.0	ug/L
1,4-dichlorobenzene	MW-15	10/20/2009		2.7	1.0	ug/L
1,4-dichlorobenzene	MW-15	3/15/2010		2.5	1.0	ug/L
1,4-dichlorobenzene	MW-15	3/15/2010		2.5	1.0	ug/L
1,4-dichlorobenzene	MW-15	6/10/2010		2.0	1.0	ug/L
1,4-dichlorobenzene	MW-15	9/14/2010		1.9	1.0	ug/L
1,4-dichlorobenzene	MW-15	9/14/2010		1.9	1.0	ug/L
1,4-dichlorobenzene	MW-15	3/11/2011		3.5	1.0	ug/L
1,4-dichlorobenzene	MW-15	3/11/2011		3.5	1.0	ug/L
1,4-dichlorobenzene	MW-15	9/07/2011		3.9	1.0	ug/L
1,4-dichlorobenzene	MW-15	9/01/2012		3.6	1.0	ug/L
1,4-dichlorobenzene	MW-15	4/01/2013		1.8	1.0	ug/L
1,4-dichlorobenzene	MW-15	9/09/2013		3.0	1.0	ug/L
1,4-dichlorobenzene	MW-15	3/30/2014		3.1	1.0	ug/L
1,4-dichlorobenzene	MW-15	9/19/2014		2.9	1.0	ug/L
1,4-dichlorobenzene	MW-15	4/20/2015		2.4	1.0	ug/L
1,4-dichlorobenzene	MW-15	10/05/2015		2.7	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
1,4-dichlorobenzene	MW-15	4/05/2016		2.2	1.0	ug/L
1,4-dichlorobenzene	MW-15	10/05/2016		2.5	1.0	ug/L
1,4-dichlorobenzene	MW-15	4/04/2017		2.0	1.0	ug/L
1,4-dichlorobenzene	MW-15	10/03/2017		2.8	1.0	ug/L
1,4-dichlorobenzene	MW-15	4/10/2018		2.6	1.0	ug/L
1,4-dichlorobenzene	MW-15	4/07/2020		2.0	1.0	ug/L
1,4-dichlorobenzene	MW-15	10/07/2020		1.9	1.0	ug/L
1,4-dichlorobenzene	MW-15	4/22/2021		1.8	1.0	ug/L
1,4-dichlorobenzene	MW-15	10/05/2021		2.1	1.0	ug/L
1,4-dichlorobenzene	MW-15	4/04/2022		1.8	1.0	ug/L
1,4-dichlorobenzene	MW-15	10/05/2022		2.2	1.0	ug/L
1,4-dichlorobenzene	MW-15	4/14/2023		1.9	1.0	ug/L
1,4-dichlorobenzene	MW-15	10/18/2023		1.7	1.0	ug/L
1,4-dichlorobenzene	MW-15	4/08/2024		2.1	1.0	ug/L
1,4-dichlorobenzene	MW-15	10/08/2024		1.6	1.0	ug/L
1,4-dichlorobenzene	MW-15	4/03/2025		1.7	1.0	ug/L
1,4-dichlorobenzene	MW-15	10/14/2025		1.4	1.0	ug/L
Acetone	MW-15	9/19/2014		13.1	10.0	ug/L
Acetone	MW-15	4/20/2015		51.3	10.0	ug/L
Acetone	MW-15	10/05/2016		26.3	10.0	ug/L
Benzene	MW-15	4/06/2006		10.0	1.0	ug/L
Benzene	MW-15	9/07/2006		7.8	1.0	ug/L
Benzene	MW-15	3/14/2007		10.3	1.0	ug/L
Benzene	MW-15	9/19/2007		7.6	1.0	ug/L
Benzene	MW-15	3/25/2008		8.9	1.0	ug/L
Benzene	MW-15	9/05/2008		9.4	1.0	ug/L
Benzene	MW-15	3/06/2009		11.5	1.0	ug/L
Benzene	MW-15	10/20/2009		12.3	1.0	ug/L
Benzene	MW-15	3/15/2010		10.9	1.0	ug/L
Benzene	MW-15	3/15/2010		10.9	1.0	ug/L
Benzene	MW-15	6/10/2010		11.7	1.0	ug/L
Benzene	MW-15	9/14/2010		8.2	1.0	ug/L
Benzene	MW-15	9/14/2010		8.2	1.0	ug/L
Benzene	MW-15	3/11/2011		13.9	1.0	ug/L
Benzene	MW-15	3/11/2011		13.9	1.0	ug/L
Benzene	MW-15	9/07/2011		11.8	1.0	ug/L
Benzene	MW-15	9/01/2012		9.5	1.0	ug/L
Benzene	MW-15	4/01/2013		7.1	1.0	ug/L
Benzene	MW-15	9/09/2013		6.3	1.0	ug/L
Benzene	MW-15	3/30/2014		10.0	1.0	ug/L
Benzene	MW-15	9/19/2014		7.4	1.0	ug/L
Benzene	MW-15	4/20/2015		7.8	1.0	ug/L
Benzene	MW-15	10/05/2015		5.8	1.0	ug/L
Benzene	MW-15	4/05/2016		7.7	1.0	ug/L
Benzene	MW-15	10/05/2016		5.0	1.0	ug/L
Benzene	MW-15	4/04/2017		6.6	1.0	ug/L
Benzene	MW-15	10/03/2017		6.2	1.0	ug/L
Benzene	MW-15	4/10/2018		8.9	1.0	ug/L
Benzene	MW-15	10/12/2018		5.6	1.0	ug/L
Benzene	MW-15	4/16/2019		6.9	1.0	ug/L
Benzene	MW-15	9/30/2019		3.6	1.0	ug/L
Benzene	MW-15	4/07/2020		5.1	1.0	ug/L
Benzene	MW-15	10/07/2020		3.5	1.0	ug/L
Benzene	MW-15	4/22/2021		6.1	1.0	ug/L
Benzene	MW-15	10/05/2021		3.0	1.0	ug/L
Benzene	MW-15	4/04/2022		4.8	1.0	ug/L
Benzene	MW-15	10/05/2022		4.1	1.0	ug/L
Benzene	MW-15	4/14/2023		4.2	1.0	ug/L
Benzene	MW-15	10/18/2023		1.4	1.0	ug/L
Benzene	MW-15	4/08/2024		4.0	1.0	ug/L
Benzene	MW-15	10/08/2024		2.8	1.0	ug/L
Benzene	MW-15	4/03/2025		4.0	1.0	ug/L
Benzene	MW-15	10/14/2025		2.6	1.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-15	4/01/2013		10	8	ug/L
Bis(2-ethylhexyl) phthalate	MW-15	3/30/2014		85	8	ug/L
Bis(2-ethylhexyl) phthalate	MW-15	10/05/2015		10	10	ug/L
Bis(2-ethylhexyl) phthalate	MW-15	4/16/2019		10	6	ug/L
Chlorobenzene	MW-15	4/06/2006		7.70	1.00	ug/L
Chlorobenzene	MW-15	9/07/2006		9.10	1.00	ug/L
Chlorobenzene	MW-15	3/14/2007		7.80	1.00	ug/L
Chlorobenzene	MW-15	9/19/2007		7.00	1.00	ug/L
Chlorobenzene	MW-15	3/25/2008		6.90	1.00	ug/L
Chlorobenzene	MW-15	9/05/2008		9.00	1.00	ug/L
Chlorobenzene	MW-15	3/06/2009		9.69	1.00	ug/L
Chlorobenzene	MW-15	3/06/2009		9.60	1.00	ug/L
Chlorobenzene	MW-15	10/20/2009		10.80	1.00	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Chlorobenzene	MW-15	3/15/2010		9.50	1.00	ug/L
Chlorobenzene	MW-15	3/15/2010		9.50	1.00	ug/L
Chlorobenzene	MW-15	6/10/2010		9.40	1.00	ug/L
Chlorobenzene	MW-15	9/14/2010		8.60	1.00	ug/L
Chlorobenzene	MW-15	9/14/2010		8.60	1.00	ug/L
Chlorobenzene	MW-15	3/11/2011		17.40	1.00	ug/L
Chlorobenzene	MW-15	3/11/2011		17.40	1.00	ug/L
Chlorobenzene	MW-15	9/07/2011		14.30	1.00	ug/L
Chlorobenzene	MW-15	9/01/2012		17.00	1.00	ug/L
Chlorobenzene	MW-15	4/01/2013		8.50	1.00	ug/L
Chlorobenzene	MW-15	9/09/2013		17.50	1.00	ug/L
Chlorobenzene	MW-15	3/30/2014		15.40	1.00	ug/L
Chlorobenzene	MW-15	9/19/2014		14.20	1.00	ug/L
Chlorobenzene	MW-15	4/20/2015		13.50	1.00	ug/L
Chlorobenzene	MW-15	10/05/2015		12.80	1.00	ug/L
Chlorobenzene	MW-15	4/05/2016		11.20	1.00	ug/L
Chlorobenzene	MW-15	10/05/2016		14.40	1.00	ug/L
Chlorobenzene	MW-15	4/04/2017		10.40	1.00	ug/L
Chlorobenzene	MW-15	10/03/2017		12.60	1.00	ug/L
Chlorobenzene	MW-15	4/10/2018		11.10	1.00	ug/L
Chlorobenzene	MW-15	10/12/2018		8.70	1.00	ug/L
Chlorobenzene	MW-15	4/16/2019		9.60	1.00	ug/L
Chlorobenzene	MW-15	9/30/2019		9.40	1.00	ug/L
Chlorobenzene	MW-15	4/07/2020		9.00	1.00	ug/L
Chlorobenzene	MW-15	10/07/2020		8.30	1.00	ug/L
Chlorobenzene	MW-15	4/22/2021		7.40	1.00	ug/L
Chlorobenzene	MW-15	10/05/2021		8.10	1.00	ug/L
Chlorobenzene	MW-15	4/04/2022		7.80	1.00	ug/L
Chlorobenzene	MW-15	10/05/2022		6.90	1.00	ug/L
Chlorobenzene	MW-15	4/14/2023		6.50	1.00	ug/L
Chlorobenzene	MW-15	10/18/2023		4.20	1.00	ug/L
Chlorobenzene	MW-15	4/08/2024		6.10	1.00	ug/L
Chlorobenzene	MW-15	10/08/2024		4.70	1.00	ug/L
Chlorobenzene	MW-15	4/03/2025		5.70	1.00	ug/L
Chlorobenzene	MW-15	10/14/2025		3.90	1.00	ug/L
Chloroethane	MW-15	4/06/2006		21.5	1.0	ug/L
Chloroethane	MW-15	9/07/2006		23.1	1.0	ug/L
Chloroethane	MW-15	3/14/2007		20.2	1.0	ug/L
Chloroethane	MW-15	9/19/2007		15.6	1.0	ug/L
Chloroethane	MW-15	3/25/2008		12.7	1.0	ug/L
Chloroethane	MW-15	9/05/2008		19.1	1.0	ug/L
Chloroethane	MW-15	3/06/2009		16.6	1.0	ug/L
Chloroethane	MW-15	3/06/2009		16.6	1.0	ug/L
Chloroethane	MW-15	10/20/2009		18.9	1.0	ug/L
Chloroethane	MW-15	3/15/2010		17.9	1.0	ug/L
Chloroethane	MW-15	3/15/2010		17.9	1.0	ug/L
Chloroethane	MW-15	6/10/2010		21.2	1.0	ug/L
Chloroethane	MW-15	9/14/2010		14.0	1.0	ug/L
Chloroethane	MW-15	9/14/2010		14.0	1.0	ug/L
Chloroethane	MW-15	3/11/2011		20.7	1.0	ug/L
Chloroethane	MW-15	3/11/2011		20.7	1.0	ug/L
Chloroethane	MW-15	9/07/2011		19.3	1.0	ug/L
Chloroethane	MW-15	9/01/2012		16.4	1.0	ug/L
Chloroethane	MW-15	4/01/2013		11.2	1.0	ug/L
Chloroethane	MW-15	9/09/2013		20.3	1.0	ug/L
Chloroethane	MW-15	3/30/2014		15.4	1.0	ug/L
Chloroethane	MW-15	9/19/2014		16.3	1.0	ug/L
Chloroethane	MW-15	4/20/2015		14.1	1.0	ug/L
Chloroethane	MW-15	10/05/2015		10.2	1.0	ug/L
Chloroethane	MW-15	4/05/2016		12.9	1.0	ug/L
Chloroethane	MW-15	10/05/2016		10.6	1.0	ug/L
Chloroethane	MW-15	4/04/2017		12.0	1.0	ug/L
Chloroethane	MW-15	10/03/2017		8.4	1.0	ug/L
Chloroethane	MW-15	4/10/2018		12.3	1.0	ug/L
Chloroethane	MW-15	10/12/2018		8.6	1.0	ug/L
Chloroethane	MW-15	4/16/2019		8.5	1.0	ug/L
Chloroethane	MW-15	9/30/2019		8.8	1.0	ug/L
Chloroethane	MW-15	4/07/2020		9.0	1.0	ug/L
Chloroethane	MW-15	10/07/2020		9.4	1.0	ug/L
Chloroethane	MW-15	4/22/2021		9.8	1.0	ug/L
Chloroethane	MW-15	10/05/2021		6.3	1.0	ug/L
Chloroethane	MW-15	4/04/2022		8.3	1.0	ug/L
Chloroethane	MW-15	10/05/2022		7.5	1.0	ug/L
Chloroethane	MW-15	4/14/2023		4.6	1.0	ug/L
Chloroethane	MW-15	10/18/2023		3.8	1.0	ug/L
Chloroethane	MW-15	4/08/2024		4.4	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Chloroethane	MW-15	10/08/2024		4.2	1.0	ug/L
Chloroethane	MW-15	4/03/2025		5.4	1.0	ug/L
Chloroethane	MW-15	10/14/2025		6.1	1.0	ug/L
Dichlorodifluoromethane	MW-15	3/30/2014		2.5	1.0	ug/L
Dichlorodifluoromethane	MW-15	4/04/2017		1.0	1.0	ug/L
Ethylbenzene	MW-15	4/06/2006		37.2	1.0	ug/L
Ethylbenzene	MW-15	9/07/2006		16.7	1.0	ug/L
Ethylbenzene	MW-15	3/14/2007		31.2	1.0	ug/L
Ethylbenzene	MW-15	9/19/2007		9.7	1.0	ug/L
Ethylbenzene	MW-15	3/25/2008		31.2	1.0	ug/L
Ethylbenzene	MW-15	9/05/2008		22.3	1.0	ug/L
Ethylbenzene	MW-15	3/06/2009		67.6	1.0	ug/L
Ethylbenzene	MW-15	3/06/2009		67.6	1.0	ug/L
Ethylbenzene	MW-15	10/20/2009		83.0	1.0	ug/L
Ethylbenzene	MW-15	3/15/2010		60.6	1.0	ug/L
Ethylbenzene	MW-15	3/15/2010		60.6	1.0	ug/L
Ethylbenzene	MW-15	6/10/2010		16.2	1.0	ug/L
Ethylbenzene	MW-15	9/14/2010		22.4	1.0	ug/L
Ethylbenzene	MW-15	9/14/2010		22.4	1.0	ug/L
Ethylbenzene	MW-15	3/11/2011		90.8	1.0	ug/L
Ethylbenzene	MW-15	3/11/2011		90.8	1.0	ug/L
Ethylbenzene	MW-15	9/07/2011		21.8	1.0	ug/L
Ethylbenzene	MW-15	9/01/2012		19.3	1.0	ug/L
Ethylbenzene	MW-15	4/01/2013		31.6	1.0	ug/L
Ethylbenzene	MW-15	9/09/2013		9.0	1.0	ug/L
Ethylbenzene	MW-15	3/30/2014		39.0	1.0	ug/L
Ethylbenzene	MW-15	9/19/2014		15.3	1.0	ug/L
Ethylbenzene	MW-15	4/20/2015		6.5	1.0	ug/L
Ethylbenzene	MW-15	4/05/2016		10.5	1.0	ug/L
Ethylbenzene	MW-15	4/04/2017		4.9	1.0	ug/L
Ethylbenzene	MW-15	4/10/2018		5.1	1.0	ug/L
Toluene	MW-15	4/06/2006		1.1	1.0	ug/L
Toluene	MW-15	9/05/2008		1.0	1.0	ug/L
Toluene	MW-15	3/06/2009		2.6	1.0	ug/L
Toluene	MW-15	10/20/2009		3.3	1.0	ug/L
Toluene	MW-15	3/15/2010		1.1	1.0	ug/L
Toluene	MW-15	3/15/2010		1.1	1.0	ug/L
Toluene	MW-15	6/10/2010		1.2	1.0	ug/L
Toluene	MW-15	3/11/2011		1.8	1.0	ug/L
Toluene	MW-15	3/11/2011		1.8	1.0	ug/L
Xylenes, total	MW-15	4/06/2006		188.0	1.0	ug/L
Xylenes, total	MW-15	9/07/2006		84.6	1.0	ug/L
Xylenes, total	MW-15	3/14/2007		126.0	1.0	ug/L
Xylenes, total	MW-15	9/19/2007		50.8	1.0	ug/L
Xylenes, total	MW-15	3/25/2008		150.0	1.0	ug/L
Xylenes, total	MW-15	9/05/2008		91.4	1.0	ug/L
Xylenes, total	MW-15	3/06/2009		342.0	1.0	ug/L
Xylenes, total	MW-15	3/06/2009		342.0	2.0	ug/L
Xylenes, total	MW-15	10/20/2009		430.0	1.0	ug/L
Xylenes, total	MW-15	3/15/2010		302.0	1.0	ug/L
Xylenes, total	MW-15	3/15/2010		302.0	2.0	ug/L
Xylenes, total	MW-15	6/10/2010		117.0	2.0	ug/L
Xylenes, total	MW-15	9/14/2010		116.0	1.0	ug/L
Xylenes, total	MW-15	9/14/2010		116.0	2.0	ug/L
Xylenes, total	MW-15	3/11/2011		444.0	2.0	ug/L
Xylenes, total	MW-15	3/11/2011		444.0	1.0	ug/L
Xylenes, total	MW-15	9/07/2011		84.4	1.0	ug/L
Xylenes, total	MW-15	9/01/2012		93.1	2.0	ug/L
Xylenes, total	MW-15	4/01/2013		105.0	2.0	ug/L
Xylenes, total	MW-15	9/09/2013		70.0	2.0	ug/L
Xylenes, total	MW-15	3/30/2014		132.0	2.0	ug/L
Xylenes, total	MW-15	9/19/2014		89.8	2.0	ug/L
Xylenes, total	MW-15	4/20/2015		58.0	2.0	ug/L
Xylenes, total	MW-15	10/05/2015		11.8	2.0	ug/L
Xylenes, total	MW-15	4/05/2016		59.2	2.0	ug/L
Xylenes, total	MW-15	10/05/2016		19.2	2.0	ug/L
Xylenes, total	MW-15	4/04/2017		26.1	2.0	ug/L
Xylenes, total	MW-15	10/03/2017		6.3	2.0	ug/L
Xylenes, total	MW-15	4/10/2018		56.2	2.0	ug/L
Xylenes, total	MW-15	10/12/2018		3.5	2.0	ug/L
Xylenes, total	MW-15	4/16/2019		4.3	2.0	ug/L
Xylenes, total	MW-15	9/30/2019		3.1	2.0	ug/L
Xylenes, total	MW-15	4/07/2020		4.0	2.0	ug/L
Xylenes, total	MW-15	10/07/2020		10.3	2.0	ug/L
Xylenes, total	MW-15	4/22/2021		2.3	2.0	ug/L
Acetone	MW-16	10/03/2017		27.9	10.0	ug/L

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

Table 1**Historical Volatile Organic Compound Detections**

Constituent	Well	Date	Identifier	Result	Limit	Units
Acetone	MW-20	10/03/2017		22.4	10.0	ug/L
Acetone	MW-22	10/03/2017		28.8	10.0	ug/L
1,1-dichloroethane	MW-6	9/09/2013		2.5	1.0	ug/L
Acetone	MW-6	10/03/2017		16.2	10.0	ug/L
Bis(2-ethylhexyl) phthalate	MW-6	3/30/2014		36	8	ug/L
Bis(2-ethylhexyl) phthalate	MW-6	10/03/2017		10	6	ug/L
Bis(2-ethylhexyl) phthalate	MW-6	4/08/2024		32	6	ug/L
Dichlorodifluoromethane	MW-6	3/30/2014		3.5	1.0	ug/L
Dichlorodifluoromethane	MW-6	9/19/2014		1.3	1.0	ug/L
Dichlorodifluoromethane	MW-6	4/20/2015		1.0	1.0	ug/L
Dichlorodifluoromethane	MW-6	10/05/2016		1.0	1.0	ug/L

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

Attachment D

Assessment Statistics for Detected VOCs

Table 1**Confidence Intervals for Comparing the Mean of the Last
4 Measurements to an Assessment Monitoring Standard**

Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend
1,4-dichlorobenzene	ug/L	MW-15	4	1.700	0.294	1.176	1.354	2.046	75.000	dec
Benzene	ug/L	MW-15	4	3.350	0.755	1.176	2.462	4.238	5.000	dec
Chlorobenzene	ug/L	MW-15	4	5.100	0.993	1.176	3.932	6.268	100.000	dec
Chloroethane	ug/L	MW-15	4	5.025	0.888	1.176	3.980	6.070	2800.000	dec

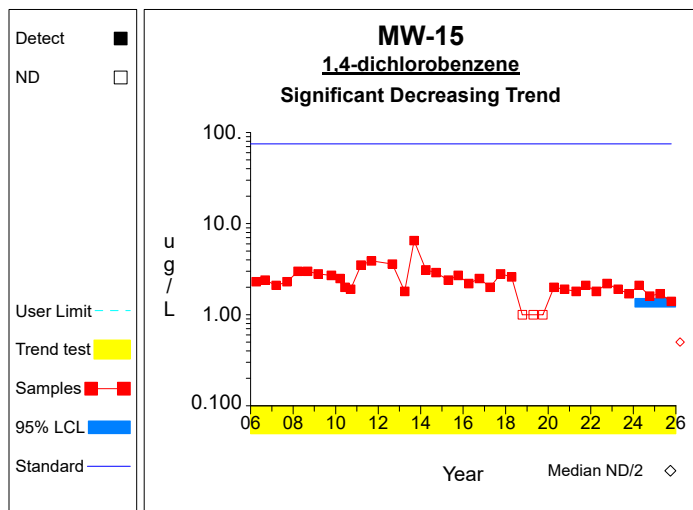
* - Insufficient Data

** - Significant Exceedance

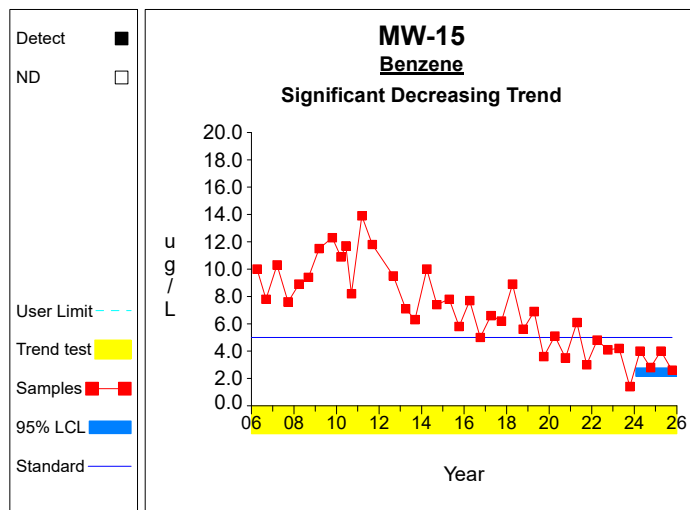
LCL = Lower Confidence Limit

UCL = Upper Confidence Limit

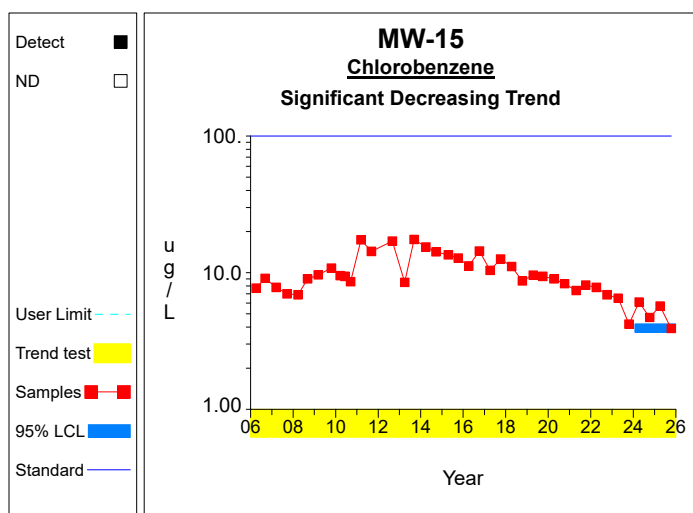
Confidence Limits (Assessment)



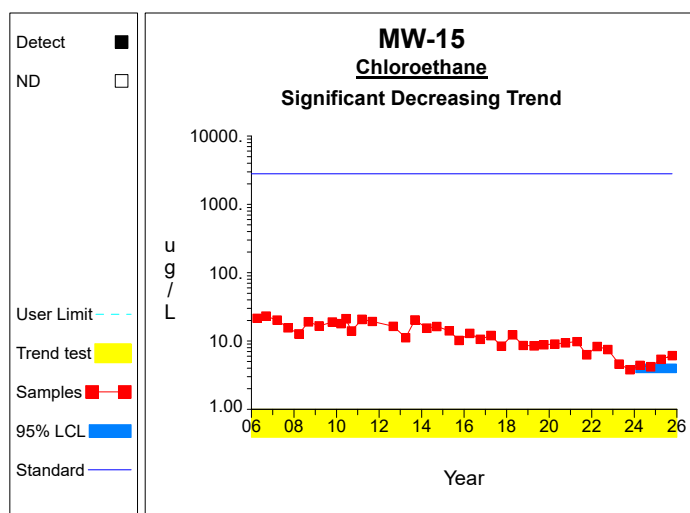
Graph 1



Graph 2



Graph 3



Graph 4

Appendix C

Laboratory Reports for Reporting Period *With Chain of Custody*



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1ID0775

Project Description

Jones Co. Landfill - New Regs

For:

Todd Whipple

HLW Engineering

204 West Broad St

Story City, IA 50248

Heather Murphy

Customer Relationship Specialist

Friday, June 20, 2025

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

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

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Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1ID0775

HLW Engineering

Todd Whipple
204 West Broad St
Story City, IA 50248

Project Name: Jones Co. Landfill - New Regs

Project / PO Number: N/A
Received: 04/04/2025
Reported: 06/20/2025

Sample Summary Report

<u>Sample Name</u>	<u>Laboratory ID</u>	<u>Client Matrix</u>	<u>Sample Type</u>	<u>Sample Begin</u>	<u>Sample Taken</u>	<u>Lab Received</u>
MW-12 (up)	1ID0775-01	Aqueous	GRAB		04/03/25 09:47	04/04/25 10:33
MW-6	1ID0775-02	Aqueous	GRAB		04/03/25 10:19	04/04/25 10:33
MW-11	1ID0775-03	Aqueous	GRAB		04/03/25 09:52	04/04/25 10:33
MW-15	1ID0775-04	Aqueous	GRAB		04/03/25 11:29	04/04/25 10:33
MW-16	1ID0775-05	Aqueous	GRAB		04/03/25 11:14	04/04/25 10:33
MW-20	1ID0775-06	Aqueous	GRAB		04/03/25 10:36	04/04/25 10:33
MW-22	1ID0775-07	Aqueous	GRAB		04/03/25 11:01	04/04/25 10:33
Duplicate	1ID0775-08	Aqueous	GRAB		04/03/25 00:00	04/04/25 10:33



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1ID0775

Analytical Testing Parameters

Client Sample ID:	MW-12 (up)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/03/2025 9:47
Lab Sample ID:	1ID0775-01		

Analyses Performed by: Microbac Laboratories, Inc., Newton

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D							
Chloromethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
Vinyl Chloride	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
Bromomethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
Chloroethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
Acetone	<10.0	10.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
Methyl Iodide	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
Carbon Disulfide	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
Methylene Chloride	<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
Acrylonitrile	<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
Vinyl Acetate	<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
Bromochloromethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
Chloroform	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
Benzene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
Trichloroethylene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
Dibromomethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
Bromodichloromethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
Toluene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
Tetrachloroethylene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
Dibromochloromethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
Chlorobenzene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
Ethylbenzene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
Xylenes, total	<2.0	2.0	ug/L		04/07/25 0000	04/07/25 1740	CSM

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Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1ID0775

Client Sample ID: MW-12 (up)
Sample Matrix: Aqueous
Lab Sample ID: 1ID0775-01

Collected By: Whipple, Todd
Collection Date: 04/03/2025 9:47

Determination of Volatile Organic Compounds		Result	RL	Units	Note	Prepared	Analyzed	Analyst
Styrene		<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
Bromoform		<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
1,2,3-Trichloropropane		<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
trans-1,4-Dichloro-2-butene		<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
1,1,2,2-Tetrachloroethane		<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
1,4-Dichlorobenzene		<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
1,2-Dichlorobenzene		<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
1,2-Dibromo-3-chloropropane		<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1740	CSM
Surrogate: Dibromofluoromethane	84.6	Limit: 57-134	% Rec			04/07/25 0000	04/07/25 1740	CSM
Surrogate: Dibromofluoromethane	84.6	Limit: 75-136	% Rec			04/07/25 0000	04/07/25 1740	CSM
Surrogate: 1,2-Dichloroethane-d4	79.5	Limit: 53-140	% Rec			04/07/25 0000	04/07/25 1740	CSM
Surrogate: 1,2-Dichloroethane-d4	79.5	Limit: 61-142	% Rec			04/07/25 0000	04/07/25 1740	CSM
Surrogate: Toluene-d8	108	Limit: 86-114	% Rec			04/07/25 0000	04/07/25 1740	CSM
Surrogate: Toluene-d8	108	Limit: 82-121	% Rec			04/07/25 0000	04/07/25 1740	CSM
Surrogate: 4-Bromofluorobenzene	90.4	Limit: 78-121	% Rec			04/07/25 0000	04/07/25 1740	CSM
Surrogate: 4-Bromofluorobenzene	90.4	Limit: 80-116	% Rec			04/07/25 0000	04/07/25 1740	CSM

Determination of Total Metals		Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total		<0.0010	0.0010	mg/L		04/18/25 1612	06/18/25 1821	RVV
Arsenic, total		<0.0020	0.0020	mg/L		04/18/25 1612	06/18/25 1821	RVV
Barium, total	0.264		0.0010	mg/L		04/18/25 1612	06/18/25 1821	RVV
Beryllium, total		<0.0005	0.0005	mg/L		04/18/25 1612	06/18/25 1821	RVV
Cadmium, total		<0.0002	0.0002	mg/L		04/18/25 1612	06/18/25 1821	RVV
Chromium, total		<0.0010	0.0010	mg/L		04/18/25 1612	06/18/25 1821	RVV
Cobalt, total		<0.0005	0.0005	mg/L		04/18/25 1612	06/18/25 1821	RVV
Copper, total		<0.0050	0.0050	mg/L		04/18/25 1612	06/18/25 1821	RVV
Lead, total		<0.0010	0.0010	mg/L		04/18/25 1612	06/18/25 1821	RVV
Nickel, total		<0.0050	0.0050	mg/L		04/18/25 1612	06/18/25 1821	RVV
Selenium, total		<0.0020	0.0020	mg/L		04/18/25 1612	06/18/25 1821	RVV
Silver, total		<0.0050	0.0050	mg/L		04/18/25 1612	06/18/25 1821	RVV
Thallium, total		<0.0005	0.0005	mg/L		04/18/25 1612	06/18/25 1821	RVV
Vanadium, total		<0.0020	0.0020	mg/L		04/18/25 1612	06/18/25 1821	RVV
Zinc, total	0.0071		0.0050	mg/L		04/18/25 1612	06/18/25 1821	RVV

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CERTIFICATE OF ANALYSIS

11D0775

Client Sample ID: MW-6
Sample Matrix: Aqueous
Lab Sample ID: 11D0775-02

Collected By: Whipple, Todd
Collection Date: 04/03/2025 10:19

Analyses Performed by: Microbac Laboratories, Inc., Newton

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D							
Chloromethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
Vinyl Chloride	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
Bromomethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
Chloroethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
Acetone	<10.0	10.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
Methyl Iodide	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
Carbon Disulfide	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
Methylene Chloride	<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
Acrylonitrile	<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
Vinyl Acetate	<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
Bromochloromethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
Chloroform	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
Benzene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
Trichloroethylene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
Dibromomethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
Bromodichloromethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
Toluene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
Tetrachloroethylene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
Dibromochloromethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
Chlorobenzene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
Ethylbenzene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
Xylenes, total	<2.0	2.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
Styrene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
Bromoform	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1803	CSM

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CERTIFICATE OF ANALYSIS

11D0775

Client Sample ID: MW-6
Sample Matrix: Aqueous
Lab Sample ID: 11D0775-02

Collected By: Whipple, Todd
Collection Date: 04/03/2025 10:19

Determination of Volatile Organic Compounds		Result	RL	Units	Note	Prepared	Analyzed	Analyst
1,2,3-Trichloropropane		<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
trans-1,4-Dichloro-2-butene		<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
1,1,2,2-Tetrachloroethane		<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
1,4-Dichlorobenzene		<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
1,2-Dichlorobenzene		<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
1,2-Dibromo-3-chloropropane		<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1803	CSM
Surrogate: Dibromofluoromethane	86.9	Limit: 75-136	% Rec			04/07/25 0000	04/07/25 1803	CSM
Surrogate: Dibromofluoromethane	86.9	Limit: 57-134	% Rec			04/07/25 0000	04/07/25 1803	CSM
Surrogate: 1,2-Dichloroethane-d4	80.3	Limit: 61-142	% Rec			04/07/25 0000	04/07/25 1803	CSM
Surrogate: 1,2-Dichloroethane-d4	80.3	Limit: 53-140	% Rec			04/07/25 0000	04/07/25 1803	CSM
Surrogate: Toluene-d8	106	Limit: 82-121	% Rec			04/07/25 0000	04/07/25 1803	CSM
Surrogate: Toluene-d8	106	Limit: 86-114	% Rec			04/07/25 0000	04/07/25 1803	CSM
Surrogate: 4-Bromofluorobenzene	87.9	Limit: 80-116	% Rec			04/07/25 0000	04/07/25 1803	CSM
Surrogate: 4-Bromofluorobenzene	87.9	Limit: 78-121	% Rec			04/07/25 0000	04/07/25 1803	CSM

Determination of Total Metals		Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total		<0.0010	0.0010	mg/L		04/18/25 1612	06/18/25 1831	RVV
Arsenic, total		<0.0020	0.0020	mg/L		04/18/25 1612	06/18/25 1831	RVV
Barium, total	0.415		0.0010	mg/L		04/18/25 1612	06/18/25 1831	RVV
Beryllium, total		<0.0005	0.0005	mg/L		04/18/25 1612	06/18/25 1831	RVV
Cadmium, total	0.0003		0.0002	mg/L		04/18/25 1612	06/18/25 1831	RVV
Chromium, total		<0.0010	0.0010	mg/L		04/18/25 1612	06/18/25 1831	RVV
Cobalt, total	0.0005		0.0005	mg/L		04/18/25 1612	06/18/25 1831	RVV
Copper, total		<0.0050	0.0050	mg/L		04/18/25 1612	06/18/25 1831	RVV
Lead, total		<0.0010	0.0010	mg/L		04/18/25 1612	06/18/25 1831	RVV
Nickel, total	0.0070		0.0050	mg/L		04/18/25 1612	06/18/25 1831	RVV
Selenium, total		<0.0020	0.0020	mg/L		04/18/25 1612	06/18/25 1831	RVV
Silver, total		<0.0050	0.0050	mg/L		04/18/25 1612	06/18/25 1831	RVV
Thallium, total		<0.0005	0.0005	mg/L		04/18/25 1612	06/18/25 1831	RVV
Vanadium, total		<0.0020	0.0020	mg/L		04/18/25 1612	06/18/25 1831	RVV
Zinc, total		<0.0050	0.0050	mg/L		04/18/25 1612	06/18/25 1831	RVV

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CERTIFICATE OF ANALYSIS

1ID0775

Client Sample ID: MW-11
Sample Matrix: Aqueous
Lab Sample ID: 1ID0775-03

Collected By: Whipple, Todd
Collection Date: 04/03/2025 9:52

Analyses Performed by: Microbac Laboratories, Inc., Newton

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D							
Chloromethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
Vinyl Chloride	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
Bromomethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
Chloroethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
Acetone	<10.0	10.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
Methyl Iodide	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
Carbon Disulfide	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
Methylene Chloride	<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
Acrylonitrile	<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
Vinyl Acetate	<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
Bromochloromethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
Chloroform	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
Benzene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
Trichloroethylene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
Dibromomethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
Bromodichloromethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
Toluene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
Tetrachloroethylene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
Dibromochloromethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
Chlorobenzene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
Ethylbenzene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
Xylenes, total	<2.0	2.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
Styrene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
Bromoform	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1825	CSM

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CERTIFICATE OF ANALYSIS

11D0775

Client Sample ID: MW-11
Sample Matrix: Aqueous
Lab Sample ID: 11D0775-03

Collected By: Whipple, Todd
Collection Date: 04/03/2025 9:52

Determination of Volatile Organic Compounds		Result	RL	Units	Note	Prepared	Analyzed	Analyst
1,2,3-Trichloropropane		<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
trans-1,4-Dichloro-2-butene		<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
1,1,2,2-Tetrachloroethane		<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
1,4-Dichlorobenzene		<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
1,2-Dichlorobenzene		<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
1,2-Dibromo-3-chloropropane		<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1825	CSM
Surrogate: Dibromofluoromethane	79.7	Limit: 57-134	% Rec			04/07/25 0000	04/07/25 1825	CSM
Surrogate: Dibromofluoromethane	79.7	Limit: 75-136	% Rec			04/07/25 0000	04/07/25 1825	CSM
Surrogate: 1,2-Dichloroethane-d4	77.3	Limit: 61-142	% Rec			04/07/25 0000	04/07/25 1825	CSM
Surrogate: 1,2-Dichloroethane-d4	77.3	Limit: 53-140	% Rec			04/07/25 0000	04/07/25 1825	CSM
Surrogate: Toluene-d8	110	Limit: 82-121	% Rec			04/07/25 0000	04/07/25 1825	CSM
Surrogate: Toluene-d8	110	Limit: 86-114	% Rec			04/07/25 0000	04/07/25 1825	CSM
Surrogate: 4-Bromofluorobenzene	89.5	Limit: 80-116	% Rec			04/07/25 0000	04/07/25 1825	CSM
Surrogate: 4-Bromofluorobenzene	89.5	Limit: 78-121	% Rec			04/07/25 0000	04/07/25 1825	CSM

Determination of Total Metals		Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total		<0.0010	0.0010	mg/L		04/18/25 1612	06/18/25 1833	RVV
Arsenic, total		<0.0020	0.0020	mg/L		04/18/25 1612	06/18/25 1833	RVV
Barium, total	0.305		0.0010	mg/L		04/18/25 1612	06/18/25 1833	RVV
Beryllium, total		<0.0005	0.0005	mg/L		04/18/25 1612	06/18/25 1833	RVV
Cadmium, total		<0.0002	0.0002	mg/L		04/18/25 1612	06/18/25 1833	RVV
Chromium, total	0.0023		0.0010	mg/L		04/18/25 1612	06/18/25 1833	RVV
Cobalt, total		<0.0005	0.0005	mg/L		04/18/25 1612	06/18/25 1833	RVV
Copper, total		<0.0050	0.0050	mg/L		04/18/25 1612	06/18/25 1833	RVV
Lead, total		<0.0010	0.0010	mg/L		04/18/25 1612	06/18/25 1833	RVV
Nickel, total		<0.0050	0.0050	mg/L		04/18/25 1612	06/18/25 1833	RVV
Selenium, total		<0.0020	0.0020	mg/L		04/18/25 1612	06/18/25 1833	RVV
Silver, total		<0.0050	0.0050	mg/L		04/18/25 1612	06/18/25 1833	RVV
Thallium, total		<0.0005	0.0005	mg/L		04/18/25 1612	06/18/25 1833	RVV
Vanadium, total		<0.0020	0.0020	mg/L		04/18/25 1612	06/18/25 1833	RVV
Zinc, total	0.0130		0.0050	mg/L		04/18/25 1612	06/18/25 1833	RVV

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CERTIFICATE OF ANALYSIS

1ID0775

Client Sample ID: MW-15
Sample Matrix: Aqueous
Lab Sample ID: 1ID0775-04

Collected By: Whipple, Todd
Collection Date: 04/03/2025 11:29

Analyses Performed by: Microbac Laboratories Inc., - Marietta, OH

Volatile Organic Compounds by GCMS	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA RSK-175							
Methane	2650	100	ug/L	D3	04/15/25 0954	04/15/25 1635	KJB
Ethene	<5.00	5.00	ug/L	Q2	04/15/25 0954	04/15/25 1340	KJB
Ethane	<5.00	5.00	ug/L	Q2	04/15/25 0954	04/15/25 1340	KJB

Analyses Performed by: Microbac Laboratories, Inc., Newton

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D							
Chloromethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
Vinyl Chloride	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
Bromomethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
Chloroethane	5.4	1.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
Acetone	<10.0	10.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
Methyl Iodide	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
Carbon Disulfide	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
Methylene Chloride	<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
Acrylonitrile	<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
Vinyl Acetate	<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
Bromochloromethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
Chloroform	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
Benzene	4.0	1.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
Trichloroethylene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
Dibromomethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
Bromodichloromethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
Toluene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
Tetrachloroethylene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1847	CSM

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CERTIFICATE OF ANALYSIS

1ID0775

Client Sample ID: MW-15
Sample Matrix: Aqueous
Lab Sample ID: 1ID0775-04

Collected By: Whipple, Todd
Collection Date: 04/03/2025 11:29

Determination of Volatile Organic Compounds		Result	RL	Units	Note	Prepared	Analyzed	Analyst
Dibromochloromethane		<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
1,2-Dibromoethane		<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
Chlorobenzene	5.7		1.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
1,1,1,2-Tetrachloroethane		<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
Ethylbenzene		<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
Xylenes, total		<2.0	2.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
Styrene		<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
Bromoform		<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
1,2,3-Trichloropropane		<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
trans-1,4-Dichloro-2-butene		<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
1,1,2,2-Tetrachloroethane		<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
1,4-Dichlorobenzene	1.7		1.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
1,2-Dichlorobenzene		<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
1,2-Dibromo-3-chloropropane		<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1847	CSM
Surrogate: Dibromofluoromethane	88.1	Limit: 57-134	% Rec			04/07/25 0000	04/07/25 1847	CSM
Surrogate: Dibromofluoromethane	88.1	Limit: 75-136	% Rec			04/07/25 0000	04/07/25 1847	CSM
Surrogate: 1,2-Dichloroethane-d4	87.9	Limit: 53-140	% Rec			04/07/25 0000	04/07/25 1847	CSM
Surrogate: 1,2-Dichloroethane-d4	87.9	Limit: 61-142	% Rec			04/07/25 0000	04/07/25 1847	CSM
Surrogate: Toluene-d8	106	Limit: 86-114	% Rec			04/07/25 0000	04/07/25 1847	CSM
Surrogate: Toluene-d8	106	Limit: 82-121	% Rec			04/07/25 0000	04/07/25 1847	CSM
Surrogate: 4-Bromofluorobenzene	91.2	Limit: 78-121	% Rec			04/07/25 0000	04/07/25 1847	CSM
Surrogate: 4-Bromofluorobenzene	91.2	Limit: 80-116	% Rec			04/07/25 0000	04/07/25 1847	CSM
Determination of Conventional Chemistry Parameters		Result	RL	Units	Note	Prepared	Analyzed	Analyst
SM 2320 B-2011								
Alkalinity, as CaCO3	438		10	mg/L		04/11/25 0825	04/11/25 1641	BSS
SM 4500-H+ B-2011								
pH	6.4		0.5	pH	H4	04/16/25 0833	04/16/25 1350	BSS
Determination of Total Metals		Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total		<0.0010	0.0010	mg/L		04/18/25 1612	06/18/25 1836	RVV
Arsenic, total	0.157		0.0020	mg/L		04/18/25 1612	06/18/25 1836	RVV
Barium, total	0.963		0.0010	mg/L		04/18/25 1612	06/18/25 1836	RVV
Beryllium, total		<0.0005	0.0005	mg/L		04/18/25 1612	06/18/25 1836	RVV
Cadmium, total		<0.0002	0.0002	mg/L		04/18/25 1612	06/18/25 1836	RVV
Chromium, total	0.0012		0.0010	mg/L		04/18/25 1612	06/18/25 1836	RVV
Cobalt, total	0.0130		0.0005	mg/L		04/18/25 1612	06/18/25 1836	RVV
Copper, total		<0.0050	0.0050	mg/L		04/18/25 1612	06/18/25 1836	RVV
Lead, total		<0.0010	0.0010	mg/L		04/18/25 1612	06/18/25 1836	RVV
Nickel, total	0.0582		0.0050	mg/L		04/18/25 1612	06/18/25 1836	RVV
Selenium, total		<0.0020	0.0020	mg/L		04/18/25 1612	06/18/25 1836	RVV

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CERTIFICATE OF ANALYSIS

1ID0775

Client Sample ID:	MW-15	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	04/03/2025 11:29
Lab Sample ID:	1ID0775-04		

Determination of Total Metals	Result	RL	Units	Note	Prepared	Analyzed	Analyst
Silver, total	<0.0050	0.0050	mg/L		04/18/25 1612	06/18/25 1836	RVV
Thallium, total	<0.0005	0.0005	mg/L		04/18/25 1612	06/18/25 1836	RVV
Vanadium, total	<0.0020	0.0020	mg/L		04/18/25 1612	06/18/25 1836	RVV
Zinc, total	<0.0050	0.0050	mg/L		04/18/25 1612	06/18/25 1836	RVV



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CERTIFICATE OF ANALYSIS

11D0775

Client Sample ID: MW-16
Sample Matrix: Aqueous
Lab Sample ID: 11D0775-05

Collected By: Whipple, Todd
Collection Date: 04/03/2025 11:14

Analyses Performed by: Microbac Laboratories, Inc., Newton

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D							
Chloromethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
Vinyl Chloride	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
Bromomethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
Chloroethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
Acetone	<10.0	10.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
Methyl Iodide	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
Carbon Disulfide	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
Methylene Chloride	<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
Acrylonitrile	<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
Vinyl Acetate	<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
Bromochloromethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
Chloroform	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
Benzene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
Trichloroethylene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
Dibromomethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
Bromodichloromethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
Toluene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
Tetrachloroethylene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
Dibromochloromethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
Chlorobenzene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
Ethylbenzene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
Xylenes, total	<2.0	2.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
Styrene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
Bromoform	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1910	CSM

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CERTIFICATE OF ANALYSIS

11D0775

Client Sample ID: MW-16
Sample Matrix: Aqueous
Lab Sample ID: 11D0775-05

Collected By: Whipple, Todd
Collection Date: 04/03/2025 11:14

Determination of Volatile Organic Compounds		Result	RL	Units	Note	Prepared	Analyzed	Analyst
1,2,3-Trichloropropane		<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
trans-1,4-Dichloro-2-butene		<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
1,1,2,2-Tetrachloroethane		<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
1,4-Dichlorobenzene		<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
1,2-Dichlorobenzene		<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
1,2-Dibromo-3-chloropropane		<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1910	CSM
Surrogate: Dibromofluoromethane	83.8	Limit: 57-134	% Rec			04/07/25 0000	04/07/25 1910	CSM
Surrogate: Dibromofluoromethane	83.8	Limit: 75-136	% Rec			04/07/25 0000	04/07/25 1910	CSM
Surrogate: 1,2-Dichloroethane-d4	75.8	Limit: 61-142	% Rec			04/07/25 0000	04/07/25 1910	CSM
Surrogate: 1,2-Dichloroethane-d4	75.8	Limit: 53-140	% Rec			04/07/25 0000	04/07/25 1910	CSM
Surrogate: Toluene-d8	106	Limit: 86-114	% Rec			04/07/25 0000	04/07/25 1910	CSM
Surrogate: Toluene-d8	106	Limit: 82-121	% Rec			04/07/25 0000	04/07/25 1910	CSM
Surrogate: 4-Bromofluorobenzene	87.5	Limit: 78-121	% Rec			04/07/25 0000	04/07/25 1910	CSM
Surrogate: 4-Bromofluorobenzene	87.5	Limit: 80-116	% Rec			04/07/25 0000	04/07/25 1910	CSM

Determination of Total Metals		Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total		<0.0010	0.0010	mg/L		04/18/25 1612	06/18/25 1843	RVV
Arsenic, total		<0.0020	0.0020	mg/L		04/18/25 1612	06/18/25 1843	RVV
Barium, total	0.0879		0.0010	mg/L		04/18/25 1612	06/18/25 1843	RVV
Beryllium, total		<0.0005	0.0005	mg/L		04/18/25 1612	06/18/25 1843	RVV
Cadmium, total		<0.0002	0.0002	mg/L		04/18/25 1612	06/18/25 1843	RVV
Chromium, total		<0.0010	0.0010	mg/L		04/18/25 1612	06/18/25 1843	RVV
Cobalt, total		<0.0005	0.0005	mg/L		04/18/25 1612	06/18/25 1843	RVV
Copper, total		<0.0050	0.0050	mg/L		04/18/25 1612	06/18/25 1843	RVV
Lead, total		<0.0010	0.0010	mg/L		04/18/25 1612	06/18/25 1843	RVV
Nickel, total	0.0060		0.0050	mg/L		04/18/25 1612	06/18/25 1843	RVV
Selenium, total		<0.0020	0.0020	mg/L		04/18/25 1612	06/18/25 1843	RVV
Silver, total		<0.0050	0.0050	mg/L		04/18/25 1612	06/18/25 1843	RVV
Thallium, total		<0.0005	0.0005	mg/L		04/18/25 1612	06/18/25 1843	RVV
Vanadium, total		<0.0020	0.0020	mg/L		04/18/25 1612	06/18/25 1843	RVV
Zinc, total	0.0283		0.0050	mg/L		04/18/25 1612	06/18/25 1843	RVV

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CERTIFICATE OF ANALYSIS

11D0775

Client Sample ID: MW-20
Sample Matrix: Aqueous
Lab Sample ID: 11D0775-06

Collected By: Whipple, Todd
Collection Date: 04/03/2025 10:36

Analyses Performed by: Microbac Laboratories, Inc., Newton

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D							
Chloromethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
Vinyl Chloride	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
Bromomethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
Chloroethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
Acetone	<10.0	10.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
Methyl Iodide	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
Carbon Disulfide	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
Methylene Chloride	<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
Acrylonitrile	<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
Vinyl Acetate	<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
Bromochloromethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
Chloroform	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
Benzene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
Trichloroethylene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
Dibromomethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
Bromodichloromethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
Toluene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
Tetrachloroethylene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
Dibromochloromethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
Chlorobenzene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
Ethylbenzene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
Xylenes, total	<2.0	2.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
Styrene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
Bromoform	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1932	CSM

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CERTIFICATE OF ANALYSIS

11D0775

Client Sample ID: MW-20
Sample Matrix: Aqueous
Lab Sample ID: 11D0775-06

Collected By: Whipple, Todd
Collection Date: 04/03/2025 10:36

Determination of Volatile Organic Compounds		Result	RL	Units	Note	Prepared	Analyzed	Analyst
1,2,3-Trichloropropane		<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
trans-1,4-Dichloro-2-butene		<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
1,1,2,2-Tetrachloroethane		<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
1,4-Dichlorobenzene		<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
1,2-Dichlorobenzene		<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
1,2-Dibromo-3-chloropropane		<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1932	CSM
Surrogate: Dibromofluoromethane	81.7	Limit: 57-134	% Rec			04/07/25 0000	04/07/25 1932	CSM
Surrogate: Dibromofluoromethane	81.7	Limit: 75-136	% Rec			04/07/25 0000	04/07/25 1932	CSM
Surrogate: 1,2-Dichloroethane-d4	75.9	Limit: 61-142	% Rec			04/07/25 0000	04/07/25 1932	CSM
Surrogate: 1,2-Dichloroethane-d4	75.9	Limit: 53-140	% Rec			04/07/25 0000	04/07/25 1932	CSM
Surrogate: Toluene-d8	110	Limit: 86-114	% Rec			04/07/25 0000	04/07/25 1932	CSM
Surrogate: Toluene-d8	110	Limit: 82-121	% Rec			04/07/25 0000	04/07/25 1932	CSM
Surrogate: 4-Bromofluorobenzene	90.2	Limit: 78-121	% Rec			04/07/25 0000	04/07/25 1932	CSM
Surrogate: 4-Bromofluorobenzene	90.2	Limit: 80-116	% Rec			04/07/25 0000	04/07/25 1932	CSM

Determination of Total Metals		Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total		<0.0010	0.0010	mg/L		04/18/25 1612	06/18/25 1846	RVV
Arsenic, total		<0.0020	0.0020	mg/L		04/18/25 1612	06/18/25 1846	RVV
Barium, total	0.0921		0.0010	mg/L		04/18/25 1612	06/18/25 1846	RVV
Beryllium, total		<0.0005	0.0005	mg/L		04/18/25 1612	06/18/25 1846	RVV
Cadmium, total		<0.0002	0.0002	mg/L		04/18/25 1612	06/18/25 1846	RVV
Chromium, total		<0.0010	0.0010	mg/L		04/18/25 1612	06/18/25 1846	RVV
Cobalt, total		<0.0005	0.0005	mg/L		04/18/25 1612	06/18/25 1846	RVV
Copper, total		<0.0050	0.0050	mg/L		04/18/25 1612	06/18/25 1846	RVV
Lead, total		<0.0010	0.0010	mg/L		04/18/25 1612	06/18/25 1846	RVV
Nickel, total		<0.0050	0.0050	mg/L		04/18/25 1612	06/18/25 1846	RVV
Selenium, total		<0.0020	0.0020	mg/L		04/18/25 1612	06/18/25 1846	RVV
Silver, total		<0.0050	0.0050	mg/L		04/18/25 1612	06/18/25 1846	RVV
Thallium, total		<0.0005	0.0005	mg/L		04/18/25 1612	06/18/25 1846	RVV
Vanadium, total		<0.0020	0.0020	mg/L		04/18/25 1612	06/18/25 1846	RVV
Zinc, total		<0.0050	0.0050	mg/L		04/18/25 1612	06/18/25 1846	RVV

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Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1ID0775

Client Sample ID: MW-22
Sample Matrix: Aqueous
Lab Sample ID: 1ID0775-07

Collected By: Whipple, Todd
Collection Date: 04/03/2025 11:01

Analyses Performed by: Microbac Laboratories, Inc., Newton

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D							
Chloromethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
Vinyl Chloride	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
Bromomethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
Chloroethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
Trichlorofluoromethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
1,1-Dichloroethylene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
Acetone	<10.0	10.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
Methyl Iodide	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
Carbon Disulfide	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
Methylene Chloride	<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
Acrylonitrile	<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
1,1-Dichloroethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
Vinyl Acetate	<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
2-Butanone (MEK)	<10.0	10.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
Bromochloromethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
Chloroform	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
1,1,1-Trichloroethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
Carbon Tetrachloride	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
Benzene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
1,2-Dichloroethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
Trichloroethylene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
1,2-Dichloropropane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
Dibromomethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
Bromodichloromethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
cis-1,3-Dichloropropene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
Toluene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
trans-1,3-Dichloropropene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
1,1,2-Trichloroethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
Tetrachloroethylene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
2-Hexanone (MBK)	<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
Dibromochloromethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
1,2-Dibromoethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
Chlorobenzene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
Ethylbenzene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
Xylenes, total	<2.0	2.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
Styrene	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
Bromoform	<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1954	CSM

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CERTIFICATE OF ANALYSIS

11D0775

Client Sample ID: MW-22
Sample Matrix: Aqueous
Lab Sample ID: 11D0775-07

Collected By: Whipple, Todd
Collection Date: 04/03/2025 11:01

Determination of Volatile Organic Compounds		Result	RL	Units	Note	Prepared	Analyzed	Analyst
1,2,3-Trichloropropane		<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
trans-1,4-Dichloro-2-butene		<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
1,1,2,2-Tetrachloroethane		<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
1,4-Dichlorobenzene		<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
1,2-Dichlorobenzene		<1.0	1.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
1,2-Dibromo-3-chloropropane		<5.0	5.0	ug/L		04/07/25 0000	04/07/25 1954	CSM
Surrogate: Dibromofluoromethane	77.0	Limit: 57-134	% Rec			04/07/25 0000	04/07/25 1954	CSM
Surrogate: Dibromofluoromethane	77.0	Limit: 75-136	% Rec			04/07/25 0000	04/07/25 1954	CSM
Surrogate: 1,2-Dichloroethane-d4	71.7	Limit: 53-140	% Rec			04/07/25 0000	04/07/25 1954	CSM
Surrogate: 1,2-Dichloroethane-d4	71.7	Limit: 61-142	% Rec			04/07/25 0000	04/07/25 1954	CSM
Surrogate: Toluene-d8	109	Limit: 82-121	% Rec			04/07/25 0000	04/07/25 1954	CSM
Surrogate: Toluene-d8	109	Limit: 86-114	% Rec			04/07/25 0000	04/07/25 1954	CSM
Surrogate: 4-Bromofluorobenzene	88.4	Limit: 78-121	% Rec			04/07/25 0000	04/07/25 1954	CSM
Surrogate: 4-Bromofluorobenzene	88.4	Limit: 80-116	% Rec			04/07/25 0000	04/07/25 1954	CSM

Determination of Total Metals		Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A								
Antimony, total		<0.0010	0.0010	mg/L		04/18/25 1612	06/18/25 1848	RVV
Arsenic, total		<0.0020	0.0020	mg/L		04/18/25 1612	06/18/25 1848	RVV
Barium, total	0.160		0.0010	mg/L		04/18/25 1612	06/18/25 1848	RVV
Beryllium, total		<0.0005	0.0005	mg/L		04/18/25 1612	06/18/25 1848	RVV
Cadmium, total		<0.0002	0.0002	mg/L		04/18/25 1612	06/18/25 1848	RVV
Chromium, total	0.0018		0.0010	mg/L		04/18/25 1612	06/18/25 1848	RVV
Cobalt, total		<0.0005	0.0005	mg/L		04/18/25 1612	06/18/25 1848	RVV
Copper, total		<0.0050	0.0050	mg/L		04/18/25 1612	06/18/25 1848	RVV
Lead, total		<0.0010	0.0010	mg/L		04/18/25 1612	06/18/25 1848	RVV
Nickel, total		<0.0050	0.0050	mg/L		04/18/25 1612	06/18/25 1848	RVV
Selenium, total	0.0021		0.0020	mg/L		04/18/25 1612	06/18/25 1848	RVV
Silver, total		<0.0050	0.0050	mg/L		04/18/25 1612	06/18/25 1848	RVV
Thallium, total		<0.0005	0.0005	mg/L		04/18/25 1612	06/18/25 1848	RVV
Vanadium, total		<0.0020	0.0020	mg/L		04/18/25 1612	06/18/25 1848	RVV
Zinc, total	0.0058		0.0050	mg/L		04/18/25 1612	06/18/25 1848	RVV

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CERTIFICATE OF ANALYSIS

11D0775

Client Sample ID: Duplicate
Sample Matrix: Aqueous
Lab Sample ID: 11D0775-08

Collected By: Whipple, Todd
Collection Date: 04/03/2025

Analyses Performed by: Microbac Laboratories, Inc., Newton

Determination of Total Metals	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A							
Antimony, total	<0.0010	0.0010	mg/L		04/18/25 1612	06/18/25 1851	RVV
Arsenic, total	<0.0020	0.0020	mg/L		04/18/25 1612	06/18/25 1851	RVV
Barium, total	0.527	0.0010	mg/L		04/18/25 1612	06/18/25 1851	RVV
Beryllium, total	<0.0005	0.0005	mg/L		04/18/25 1612	06/18/25 1851	RVV
Cadmium, total	0.0004	0.0002	mg/L		04/18/25 1612	06/18/25 1851	RVV
Chromium, total	<0.0010	0.0010	mg/L		04/18/25 1612	06/18/25 1851	RVV
Cobalt, total	0.0007	0.0005	mg/L		04/18/25 1612	06/18/25 1851	RVV
Copper, total	<0.0050	0.0050	mg/L		04/18/25 1612	06/18/25 1851	RVV
Lead, total	<0.0010	0.0010	mg/L		04/18/25 1612	06/18/25 1851	RVV
Nickel, total	0.0087	0.0050	mg/L		04/18/25 1612	06/18/25 1851	RVV
Selenium, total	<0.0020	0.0020	mg/L		04/18/25 1612	06/18/25 1851	RVV
Silver, total	<0.0050	0.0050	mg/L		04/18/25 1612	06/18/25 1851	RVV
Thallium, total	<0.0005	0.0005	mg/L		04/18/25 1612	06/18/25 1851	RVV
Vanadium, total	<0.0020	0.0020	mg/L		04/18/25 1612	06/18/25 1851	RVV
Zinc, total	<0.0050	0.0050	mg/L		04/18/25 1612	06/18/25 1851	RVV

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CERTIFICATE OF ANALYSIS

1ID0775

Batch Log Summary

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260D	1ID0340	1ID0340-BS1	
		1ID0340-BSD1	
		1ID0340-BLK1	
		1ID0775-01	MW-12 (up)
		1ID0775-02	MW-6
		1ID0775-03	MW-11
		1ID0775-04	MW-15
		1ID0775-05	MW-16
		1ID0775-06	MW-20
		1ID0775-07	MW-22
		1ID0340-MS1	1ID0773-01
		1ID0340-MSD1	1ID0773-01
Method	Batch	Laboratory ID	Client / Source ID
SM 2320 B-2011	1ID0588	1ID0588-BLK1	
		1ID0588-BS1	
		1ID0588-MS1	1ID0832-01
		1ID0775-04	MW-15
		1ID0588-MSD1	1ID0832-01
Method	Batch	Laboratory ID	Client / Source ID
SM 4500-H+ B-2011	1ID0826	1ID0826-SRM1	
		1ID0826-DUP1	3ID0051-01
		1ID0775-04	MW-15
		1ID0826-SRM3	
		1ID0826-DUP2	1ID0574-01
		1ID0826-SRM2	
Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	1ID1042	1ID1042-BLK1	
		1ID1042-BS1	
		1ID0775-01	MW-12 (up)
		1ID1042-MS1	1ID0775-01
		1ID1042-MSD1	1ID0775-01
		1ID0775-02	MW-6
		1ID0775-03	MW-11
		1ID0775-04	MW-15
		1ID0775-05	MW-16
		1ID0775-06	MW-20
		1ID0775-07	MW-22

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CERTIFICATE OF ANALYSIS

1ID0775

EPA 6020A	1ID1042	1ID0775-08	Duplicate
Method	Batch	Laboratory ID	Client / Source ID
EPA RSK-175	B5D0776	B5D0776-BLK1	
		B5D0776-BS1	
		B5D0776-BSD1	
		1ID0775-04	MW-15
		1ID0775-04RE1	MW-15

Batch Quality Control Summary: Microbac Laboratories, Inc., Newton

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1ID0340 - EPA 5030B - EPA 8260D

Blank (1ID0340-BLK1)

Prepared: 04/07/25 00:00 Analyzed: 04/07/25 15:48

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

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CERTIFICATE OF ANALYSIS

1ID0775

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1ID0340 - EPA 5030B - EPA 8260D										
Blank (1ID0340-BLK1)										
Prepared: 04/07/25 00:00 Analyzed: 04/07/25 15:48										
2-Hexanone (MBK)	<5.0	5.0	ug/L							
Dibromochloromethane	<1.0	1.0	ug/L							
1,2-Dibromoethane	<1.0	1.0	ug/L							
Chlorobenzene	<1.0	1.0	ug/L							
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L							
Ethylbenzene	<1.0	1.0	ug/L							
Xylenes, total	<2.0	2.0	ug/L							
Styrene	<1.0	1.0	ug/L							
Bromoform	<1.0	1.0	ug/L							
1,2,3-Trichloropropane	<1.0	1.0	ug/L							
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L							
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L							
1,4-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L							
Surrogate: Dibromofluoromethane	40.6		ug/L	50.2		80.9	57-134			
Surrogate: Dibromofluoromethane	40.6		ug/L	50.2		80.9	75-136			
Surrogate: 1,2-Dichloroethane-d4	39.4		ug/L	50.1		78.7	53-140			
Surrogate: 1,2-Dichloroethane-d4	39.4		ug/L	50.1		78.7	61-142			
Surrogate: Toluene-d8	53.2		ug/L	50.4		106	86-114			
Surrogate: Toluene-d8	53.2		ug/L	50.4		106	82-121			
Surrogate: 4-Bromofluorobenzene	45.5		ug/L	50.1		90.7	78-121			
Surrogate: 4-Bromofluorobenzene	45.5		ug/L	50.1		90.7	80-116			
LCS (1ID0340-BS1)										
Prepared: 04/07/25 00:00 Analyzed: 04/07/25 14:41										
Chloromethane	29.73	1.0	ug/L	30.3		98.1	63-155			
Vinyl Chloride	30.96	1.0	ug/L	30.2		102	70-154			
Bromomethane	29.38	1.0	ug/L	30.1		97.5	52-176			
Chloroethane	30.81	1.0	ug/L	30.3		102	72-148			
Trichlorofluoromethane	31.55	1.0	ug/L	30.3		104	70-152			
1,1-Dichloroethylene	59.01	1.0	ug/L	50.1		118	70-148			
Acetone	106.3	10.0	ug/L	100		106	43-172			
Methyl Iodide	102.2	1.0	ug/L	100		102	69-170			
Carbon Disulfide	111.5	1.0	ug/L	100		112	72-162			
Methylene Chloride	47.26	5.0	ug/L	50.1		94.3	68-142			
Acrylonitrile	43.38	5.0	ug/L	50.2		86.4	56-135			
trans-1,2-Dichloroethylene	56.44	1.0	ug/L	50.1		113	66-148			
1,1-Dichloroethane	54.12	1.0	ug/L	50.1		108	66-143			
Vinyl Acetate	142.2	5.0	ug/L	140		102	43-153			
cis-1,2-Dichloroethylene	51.81	1.0	ug/L	50.4		103	71-149			
2-Butanone (MEK)	88.82	10.0	ug/L	100		88.8	52-159			
Bromochloromethane	51.01	1.0	ug/L	50.4		101	69-143			
Chloroform	51.63	1.0	ug/L	50.1		103	69-144			
1,1,1-Trichloroethane	56.41	1.0	ug/L	50.1		113	62-129			

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CERTIFICATE OF ANALYSIS

11D0775

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 11D0340 - EPA 5030B - EPA 8260D										
LCS (11D0340-BS1)										
Prepared: 04/07/25 00:00 Analyzed: 04/07/25 14:41										
Carbon Tetrachloride	55.78	1.0	ug/L	50.1		111	63-141			
Benzene	48.86	1.0	ug/L	50.4		96.9	71-134			
1,2-Dichloroethane	49.23	1.0	ug/L	50.1		98.3	72-132			
Trichloroethylene	51.59	1.0	ug/L	50.1		103	71-135			
1,2-Dichloropropane	48.67	1.0	ug/L	50.1		97.2	69-136			
Dibromomethane	48.52	1.0	ug/L	50.4		96.3	73-147			
Bromodichloromethane	50.13	1.0	ug/L	50.1		100	68-129			
cis-1,3-Dichloropropene	47.35	1.0	ug/L	50.1		94.5	65-134			
4-Methyl-2-pentanone (MIBK)	90.02	5.0	ug/L	100		90.0	58-147			
Toluene	53.95	1.0	ug/L	50.5		107	72-133			
trans-1,3-Dichloropropene	46.04	1.0	ug/L	50.1		91.9	67-130			
1,1,2-Trichloroethane	42.31	1.0	ug/L	50.1		84.5	69-135			
Tetrachloroethylene	53.76	1.0	ug/L	50.1		107	69-130			
2-Hexanone (MBK)	95.65	5.0	ug/L	100		95.6	55-144			
Dibromochloromethane	48.23	1.0	ug/L	50.1		96.3	73-127			
1,2-Dibromoethane	48.95	1.0	ug/L	50.2		97.5	67-132			
Chlorobenzene	48.76	1.0	ug/L	50.1		97.4	72-123			
1,1,1,2-Tetrachloroethane	45.88	1.0	ug/L	50.3		91.1	73-127			
Ethylbenzene	54.95	1.0	ug/L	50.2		110	71-127			
Xylenes, total	161.1	2.0	ug/L	151		107	74-127			
Styrene	52.18	1.0	ug/L	50.4		104	66-126			
Bromoform	45.61	1.0	ug/L	50.1		91.0	68-130			
1,2,3-Trichloropropane	39.52	1.0	ug/L	50.3		78.5	63-136			
trans-1,4-Dichloro-2-butene	84.43	5.0	ug/L	100		84.4	54-134			
1,1,2,2-Tetrachloroethane	45.44	1.0	ug/L	50.1		90.7	61-131			
1,4-Dichlorobenzene	45.44	1.0	ug/L	50.1		90.7	70-129			
1,2-Dichlorobenzene	41.30	1.0	ug/L	50.1		82.4	69-126			
1,2-Dibromo-3-chloropropane	27.55	5.0	ug/L	50.1		55.0	50-143			
Surrogate: Dibromofluoromethane	49.4		ug/L	50.2		98.5	57-134			
Surrogate: Dibromofluoromethane	49.4		ug/L	50.2		98.5	75-136			
Surrogate: 1,2-Dichloroethane-d4	47.1		ug/L	50.1		94.0	53-140			
Surrogate: 1,2-Dichloroethane-d4	47.1		ug/L	50.1		94.0	61-142			
Surrogate: Toluene-d8	50.7		ug/L	50.4		101	86-114			
Surrogate: Toluene-d8	50.7		ug/L	50.4		101	82-121			
Surrogate: 4-Bromofluorobenzene	47.5		ug/L	50.1		94.6	78-121			
Surrogate: 4-Bromofluorobenzene	47.5		ug/L	50.1		94.6	80-116			
LCS Dup (11D0340-BSD1)										
Prepared: 04/07/25 00:00 Analyzed: 04/07/25 15:04										
Chloromethane	31.38	1.0	ug/L	30.3		103	63-155	5.40	24	
Vinyl Chloride	31.18	1.0	ug/L	30.2		103	70-154	0.708	25	
Bromomethane	31.05	1.0	ug/L	30.1		103	52-176	5.53	27	
Chloroethane	31.95	1.0	ug/L	30.3		105	72-148	3.63	25	
Trichlorofluoromethane	32.04	1.0	ug/L	30.3		106	70-152	1.54	26	
1,1-Dichloroethylene	59.88	1.0	ug/L	50.1		119	70-148	1.46	24	

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CERTIFICATE OF ANALYSIS

1ID0775

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1ID0340 - EPA 5030B - EPA 8260D										
LCS Dup (1ID0340-BSD1)										
Prepared: 04/07/25 00:00 Analyzed: 04/07/25 15:04										
Acetone	125.3	10.0	ug/L	100		125	43-172	16.4	30	
Methyl Iodide	110.0	1.0	ug/L	100		110	69-170	7.40	30	
Carbon Disulfide	111.6	1.0	ug/L	100		112	72-162	0.0359	24	
Methylene Chloride	54.41	5.0	ug/L	50.1		109	68-142	14.1	21	
Acrylonitrile	56.84	5.0	ug/L	50.2		113	56-135	26.9	16	R1
trans-1,2-Dichloroethylene	58.69	1.0	ug/L	50.1		117	66-148	3.91	27	
1,1-Dichloroethane	58.07	1.0	ug/L	50.1		116	66-143	7.04	24	
Vinyl Acetate	181.0	5.0	ug/L	140		129	43-153	24.0	30	
cis-1,2-Dichloroethylene	57.20	1.0	ug/L	50.4		114	71-149	9.89	26	
2-Butanone (MEK)	111.0	10.0	ug/L	100		111	52-159	22.2	27	
Bromochloromethane	58.74	1.0	ug/L	50.4		117	69-143	14.1	23	
Chloroform	57.16	1.0	ug/L	50.1		114	69-144	10.2	23	
1,1,1-Trichloroethane	58.67	1.0	ug/L	50.1		117	62-129	3.93	24	
Carbon Tetrachloride	56.49	1.0	ug/L	50.1		113	63-141	1.26	25	
Benzene	51.77	1.0	ug/L	50.4		103	71-134	5.78	24	
1,2-Dichloroethane	56.81	1.0	ug/L	50.1		113	72-132	14.3	24	
Trichloroethylene	53.33	1.0	ug/L	50.1		106	71-135	3.32	24	
1,2-Dichloropropane	54.36	1.0	ug/L	50.1		109	69-136	11.0	24	
Dibromomethane	57.19	1.0	ug/L	50.4		114	73-147	16.4	25	
Bromodichloromethane	58.16	1.0	ug/L	50.1		116	68-129	14.8	22	
cis-1,3-Dichloropropene	55.51	1.0	ug/L	50.1		111	65-134	15.9	23	
4-Methyl-2-pentanone (MIBK)	122.0	5.0	ug/L	100		122	58-147	30.1	27	R1
Toluene	57.23	1.0	ug/L	50.5		113	72-133	5.90	24	
trans-1,3-Dichloropropene	56.71	1.0	ug/L	50.1		113	67-130	20.8	24	
1,1,2-Trichloroethane	52.88	1.0	ug/L	50.1		106	69-135	22.2	23	
Tetrachloroethylene	51.99	1.0	ug/L	50.1		104	69-130	3.35	25	
2-Hexanone (MBK)	122.1	5.0	ug/L	100		122	55-144	24.3	25	
Dibromochloromethane	56.46	1.0	ug/L	50.1		113	73-127	15.7	22	
1,2-Dibromoethane	55.68	1.0	ug/L	50.2		111	67-132	12.9	24	
Chlorobenzene	53.17	1.0	ug/L	50.1		106	72-123	8.65	23	
1,1,1,2-Tetrachloroethane	51.04	1.0	ug/L	50.3		101	73-127	10.6	24	
Ethylbenzene	55.55	1.0	ug/L	50.2		111	71-127	1.09	26	
Xylenes, total	166.5	2.0	ug/L	151		110	74-127	3.27	25	
Styrene	57.45	1.0	ug/L	50.4		114	66-126	9.61	23	
Bromoform	55.63	1.0	ug/L	50.1		111	68-130	19.8	23	
1,2,3-Trichloropropane	53.01	1.0	ug/L	50.3		105	63-136	29.2	24	R1
trans-1,4-Dichloro-2-butene	114.0	5.0	ug/L	100		114	54-134	29.8	27	R1
1,1,2,2-Tetrachloroethane	57.53	1.0	ug/L	50.1		115	61-131	23.5	29	
1,4-Dichlorobenzene	51.16	1.0	ug/L	50.1		102	70-129	11.8	24	
1,2-Dichlorobenzene	51.49	1.0	ug/L	50.1		103	69-126	22.0	26	
1,2-Dibromo-3-chloropropane	44.69	5.0	ug/L	50.1		89.2	50-143	47.5	30	R1
Surrogate: Dibromofluoromethane	53.7		ug/L	50.2		107	57-134			

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CERTIFICATE OF ANALYSIS

11D0775

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 11D0340 - EPA 5030B - EPA 8260D									
LCS Dup (11D0340-BSD1)									
Prepared: 04/07/25 00:00 Analyzed: 04/07/25 15:04									
Surrogate: Dibromofluoromethane	53.7		ug/L	50.2		107	75-136		
Surrogate: 1,2-Dichloroethane-d4	52.9		ug/L	50.1		106	53-140		
Surrogate: 1,2-Dichloroethane-d4	52.9		ug/L	50.1		106	61-142		
Surrogate: Toluene-d8	50.8		ug/L	50.4		101	86-114		
Surrogate: Toluene-d8	50.8		ug/L	50.4		101	82-121		
Surrogate: 4-Bromofluorobenzene	49.3		ug/L	50.1		98.4	78-121		
Surrogate: 4-Bromofluorobenzene	49.3		ug/L	50.1		98.4	80-116		
Matrix Spike (11D0340-MS1) Source: 11D0773-01 Prepared: 04/07/25 00:00 Analyzed: 04/07/25 20:17									
Chloromethane	318.6	10.0	ug/L	303	ND	105	61-152		
Vinyl Chloride	330.7	10.0	ug/L	302	ND	109	66-149		
Bromomethane	309.4	10.0	ug/L	301	ND	103	43-171		
Chloroethane	329.7	10.0	ug/L	303	ND	109	69-148		
Trichlorofluoromethane	341.5	10.0	ug/L	303	ND	113	62-163		
1,1-Dichloroethylene	625.0	10.0	ug/L	501	ND	125	70-148		
Acetone	1193	100	ug/L	1000	ND	119	45-173		
Methyl Iodide	1079	10.0	ug/L	1000	ND	108	62-167		
Carbon Disulfide	1152	10.0	ug/L	1000	ND	115	71-163		
Methylene Chloride	527.4	50.0	ug/L	501	ND	105	69-140		
Acrylonitrile	517.0	50.0	ug/L	502	ND	103	38-147		
trans-1,2-Dichloroethylene	600.5	10.0	ug/L	501	ND	120	69-144		
1,1-Dichloroethane	594.2	10.0	ug/L	501	10.03	117	70-138		
Vinyl Acetate	1662	50.0	ug/L	1400	ND	119	58-142		
cis-1,2-Dichloroethylene	571.9	10.0	ug/L	504	15.74	110	68-151		
2-Butanone (MEK)	1089	100	ug/L	1000	ND	109	50-160		
Bromochloromethane	565.6	10.0	ug/L	504	ND	112	65-143		
Chloroform	567.2	10.0	ug/L	501	ND	113	71-143		
1,1,1-Trichloroethane	606.9	10.0	ug/L	501	ND	121	63-133		
Carbon Tetrachloride	602.8	10.0	ug/L	501	ND	120	63-142		
Benzene	510.3	10.0	ug/L	504	ND	101	69-133		
1,2-Dichloroethane	540.5	10.0	ug/L	501	ND	108	63-138		
Trichloroethylene	530.1	10.0	ug/L	501	ND	106	71-133		
1,2-Dichloropropane	519.8	10.0	ug/L	501	ND	104	69-132		
Dibromomethane	535.8	10.0	ug/L	504	ND	106	70-147		
Bromodichloromethane	558.9	10.0	ug/L	501	ND	112	67-130		
cis-1,3-Dichloropropene	515.6	10.0	ug/L	501	ND	103	61-126		
4-Methyl-2-pentanone (MIBK)	1130	50.0	ug/L	1000	ND	113	55-147		
Toluene	566.2	10.0	ug/L	505	ND	112	71-133		
trans-1,3-Dichloropropene	496.7	10.0	ug/L	501	ND	99.2	63-124		
1,1,2-Trichloroethane	495.5	10.0	ug/L	501	ND	98.9	69-133		
Tetrachloroethylene	525.3	10.0	ug/L	501	ND	105	70-124		
2-Hexanone (MBK)	1134	50.0	ug/L	1000	ND	113	53-141		
Dibromochloromethane	522.8	10.0	ug/L	501	ND	104	74-122		
1,2-Dibromoethane	518.9	10.0	ug/L	502	ND	103	66-127		

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CERTIFICATE OF ANALYSIS

1ID0775

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1ID0340 - EPA 5030B - EPA 8260D										
Matrix Spike (1ID0340-MS1)	Source: 1ID0773-01			Prepared: 04/07/25 00:00 Analyzed: 04/07/25 20:17						
Chlorobenzene	503.2	10.0	ug/L	501	ND	100	76-116			
1,1,1,2-Tetrachloroethane	499.1	10.0	ug/L	503	ND	99.1	77-121			
Ethylbenzene	553.5	10.0	ug/L	502	ND	110	73-124			
Xylenes, total	1636	20.0	ug/L	1510	ND	108	75-123			
Styrene	553.1	10.0	ug/L	504	ND	110	70-120			
Bromoform	504.0	10.0	ug/L	501	ND	101	70-124			
1,2,3-Trichloropropane	448.4	10.0	ug/L	503	ND	89.1	62-135			
trans-1,4-Dichloro-2-butene	1015	50.0	ug/L	1000	ND	102	50-120			
1,1,2,2-Tetrachloroethane	555.1	10.0	ug/L	501	ND	111	63-126			
1,4-Dichlorobenzene	520.9	10.0	ug/L	501	ND	104	72-119			
1,2-Dichlorobenzene	517.3	10.0	ug/L	501	ND	103	71-117			
1,2-Dibromo-3-chloropropane	465.5	50.0	ug/L	501	ND	92.9	49-134			
Surrogate: Dibromofluoromethane	545		ug/L	502		109	57-134			
Surrogate: Dibromofluoromethane	545		ug/L	502		109	75-136			
Surrogate: 1,2-Dichloroethane-d4	550		ug/L	501		110	53-140			
Surrogate: 1,2-Dichloroethane-d4	550		ug/L	501		110	61-142			
Surrogate: Toluene-d8	513		ug/L	504		102	86-114			
Surrogate: Toluene-d8	513		ug/L	504		102	82-121			
Surrogate: 4-Bromofluorobenzene	483		ug/L	501		96.3	78-121			
Surrogate: 4-Bromofluorobenzene	483		ug/L	501		96.3	80-116			
Matrix Spike Dup (1ID0340-MSD1)	Source: 1ID0773-01			Prepared: 04/07/25 00:00 Analyzed: 04/07/25 20:39						
Chloromethane	313.2	10.0	ug/L	303	ND	103	61-152	1.71	26	
Vinyl Chloride	317.9	10.0	ug/L	302	ND	105	66-149	3.95	23	
Bromomethane	304.0	10.0	ug/L	301	ND	101	43-171	1.76	29	
Chloroethane	318.2	10.0	ug/L	303	ND	105	69-148	3.55	25	
Trichlorofluoromethane	318.0	10.0	ug/L	303	ND	105	62-163	7.13	25	
1,1-Dichloroethylene	592.4	10.0	ug/L	501	ND	118	70-148	5.36	22	
Acetone	1166	100	ug/L	1000	ND	117	45-173	2.35	30	
Methyl Iodide	1060	10.0	ug/L	1000	ND	106	62-167	1.80	24	
Carbon Disulfide	1093	10.0	ug/L	1000	ND	109	71-163	5.29	22	
Methylene Chloride	506.1	50.0	ug/L	501	ND	101	69-140	4.12	19	
Acrylonitrile	526.8	50.0	ug/L	502	ND	105	38-147	1.88	30	
trans-1,2-Dichloroethylene	576.5	10.0	ug/L	501	ND	115	69-144	4.08	22	
1,1-Dichloroethane	564.0	10.0	ug/L	501	10.03	111	70-138	5.21	20	
Vinyl Acetate	1703	50.0	ug/L	1400	ND	122	58-142	2.43	24	
cis-1,2-Dichloroethylene	561.7	10.0	ug/L	504	15.74	108	68-151	1.80	22	
2-Butanone (MEK)	1139	100	ug/L	1000	ND	114	50-160	4.51	23	
Bromochloromethane	556.1	10.0	ug/L	504	ND	110	65-143	1.69	22	
Chloroform	554.5	10.0	ug/L	501	ND	111	71-143	2.26	21	
1,1,1-Trichloroethane	584.1	10.0	ug/L	501	ND	117	63-133	3.83	23	
Carbon Tetrachloride	576.2	10.0	ug/L	501	ND	115	63-142	4.51	22	
Benzene	505.2	10.0	ug/L	504	ND	100	69-133	1.00	18	
1,2-Dichloroethane	532.9	10.0	ug/L	501	ND	106	63-138	1.42	20	

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1ID0775

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1ID0340 - EPA 5030B - EPA 8260D										
Matrix Spike Dup (1ID0340-MSD1)		Source: 1ID0773-01		Prepared: 04/07/25 00:00 Analyzed: 04/07/25 20:39						
Trichloroethylene	514.8	10.0	ug/L	501	ND	103	71-133	2.93	23	
1,2-Dichloropropane	518.5	10.0	ug/L	501	ND	104	69-132	0.250	20	
Dibromomethane	531.8	10.0	ug/L	504	ND	106	70-147	0.749	22	
Bromodichloromethane	546.0	10.0	ug/L	501	ND	109	67-130	2.34	21	
cis-1,3-Dichloropropene	503.2	10.0	ug/L	501	ND	100	61-126	2.43	21	
4-Methyl-2-pentanone (MIBK)	1113	50.0	ug/L	1000	ND	111	55-147	1.47	23	
Toluene	563.9	10.0	ug/L	505	ND	112	71-133	0.407	19	
trans-1,3-Dichloropropene	500.9	10.0	ug/L	501	ND	100	63-124	0.842	21	
1,1,2-Trichloroethane	496.8	10.0	ug/L	501	ND	99.2	69-133	0.262	19	
Tetrachloroethylene	509.9	10.0	ug/L	501	ND	102	70-124	2.98	24	
2-Hexanone (MBK)	1108	50.0	ug/L	1000	ND	111	53-141	2.34	24	
Dibromochloromethane	507.0	10.0	ug/L	501	ND	101	74-122	3.07	21	
1,2-Dibromoethane	527.6	10.0	ug/L	502	ND	105	66-127	1.66	23	
Chlorobenzene	488.9	10.0	ug/L	501	ND	97.6	76-116	2.88	21	
1,1,1,2-Tetrachloroethane	485.0	10.0	ug/L	503	ND	96.3	77-121	2.87	25	
Ethylbenzene	534.5	10.0	ug/L	502	ND	107	73-124	3.49	20	
Xylenes, total	1587	20.0	ug/L	1510	ND	105	75-123	3.03	20	
Styrene	541.1	10.0	ug/L	504	ND	107	70-120	2.19	23	
Bromoform	501.6	10.0	ug/L	501	ND	100	70-124	0.477	22	
1,2,3-Trichloropropane	469.1	10.0	ug/L	503	ND	93.2	62-135	4.51	28	
trans-1,4-Dichloro-2-butene	948.8	50.0	ug/L	1000	ND	94.9	50-120	6.78	26	
1,1,2,2-Tetrachloroethane	506.5	10.0	ug/L	501	ND	101	63-126	9.16	24	
1,4-Dichlorobenzene	479.3	10.0	ug/L	501	ND	95.6	72-119	8.32	24	
1,2-Dichlorobenzene	470.6	10.0	ug/L	501	ND	93.9	71-117	9.45	24	
1,2-Dibromo-3-chloropropane	429.1	50.0	ug/L	501	ND	85.6	49-134	8.14	28	
Surrogate: Dibromofluoromethane	539		ug/L	502		107	57-134			
Surrogate: Dibromofluoromethane	539		ug/L	502		107	75-136			
Surrogate: 1,2-Dichloroethane-d4	525		ug/L	501		105	53-140			
Surrogate: 1,2-Dichloroethane-d4	525		ug/L	501		105	61-142			
Surrogate: Toluene-d8	519		ug/L	504		103	86-114			
Surrogate: Toluene-d8	519		ug/L	504		103	82-121			
Surrogate: 4-Bromofluorobenzene	496		ug/L	501		99.0	78-121			
Surrogate: 4-Bromofluorobenzene	496		ug/L	501		99.0	80-116			

Determination of Conventional Chemistry Parameters	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1ID0588 - Wet Chem Preparation - SM 2320 B-2011										
Blank (1ID0588-BLK1)		Prepared: 04/11/25 08:25 Analyzed: 04/11/25 16:41								
Alkalinity, as CaCO3	<10	10	mg/L							
LCS (1ID0588-BS1)		Prepared: 04/11/25 08:25 Analyzed: 04/11/25 16:41								



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CERTIFICATE OF ANALYSIS

1ID0775

Determination of Conventional Chemistry Parameters	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1ID0588 - Wet Chem Preparation - SM 2320 B-2011										
LCS (1ID0588-BS1)				Prepared: 04/11/25 08:25 Analyzed: 04/11/25 16:41						
Alkalinity, as CaCO ₃	50.3	10	mg/L	50.0		101	84-116			
Matrix Spike (1ID0588-MS1)				Source: 1ID0832-01 Prepared: 04/11/25 08:25 Analyzed: 04/11/25 16:41						
Alkalinity, as CaCO ₃	306	50	mg/L	250	43.5	105	70-130			
Matrix Spike Dup (1ID0588-MSD1)				Source: 1ID0832-01 Prepared: 04/11/25 08:25 Analyzed: 04/11/25 16:41						
Alkalinity, as CaCO ₃	304	50	mg/L	250	43.5	104	70-130	0.672	10	

Batch 1ID0826 - Wet Chem Preparation - SM 4500-H+ B-2011

Duplicate (1ID0826-DUP1)				Source: 3ID0051-01 Prepared: 04/16/25 08:33 Analyzed: 04/16/25 13:50						
pH	7.4	0.5	pH	7.4				0.608	10	
Duplicate (1ID0826-DUP2)				Source: 1ID0574-01 Prepared: 04/16/25 08:33 Analyzed: 04/16/25 13:50						
pH	7.9	0.5	pH	7.9				0.0254	10	
Reference (1ID0826-SRM1)				Prepared: 04/16/25 08:33 Analyzed: 04/16/25 13:50						
pH	7.0	0.5	pH	7.00		99.7	98.6-101.4			
Reference (1ID0826-SRM2)				Prepared: 04/16/25 08:33 Analyzed: 04/16/25 13:50						
pH	7.0	0.5	pH	7.00		99.6	98.6-101.4			
Reference (1ID0826-SRM3)				Prepared: 04/16/25 08:33 Analyzed: 04/16/25 13:50						
pH	1.6	0.5	pH	1.68		97.7	90-110			

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1ID1042 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1ID1042-BLK1)				Prepared: 04/18/25 16:12 Analyzed: 06/18/25 18:16						
Antimony, total	<0.0010	0.0010	mg/L							
Arsenic, total	<0.0020	0.0020	mg/L							
Barium, total	<0.0010	0.0010	mg/L							
Beryllium, total	<0.0005	0.0005	mg/L							
Cadmium, total	<0.0002	0.0002	mg/L							
Chromium, total	<0.0010	0.0010	mg/L							B
Cobalt, total	<0.0005	0.0005	mg/L							
Copper, total	<0.0050	0.0050	mg/L							
Lead, total	<0.0010	0.0010	mg/L							
Nickel, total	<0.0050	0.0050	mg/L							
Selenium, total	<0.0020	0.0020	mg/L							
Silver, total	<0.0050	0.0050	mg/L							
Thallium, total	<0.0005	0.0005	mg/L							
Vanadium, total	<0.0020	0.0020	mg/L							
Zinc, total	<0.0050	0.0050	mg/L							
LCS (1ID1042-BS1)				Prepared: 04/18/25 16:12 Analyzed: 06/18/25 18:18						
Antimony, total	0.115	0.0010	mg/L	0.100		115	80-120			



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1ID0775

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 1ID1042 - EPA 3005A Total Recoverable Metals - EPA 6020A									
LCS (1ID1042-BS1) Prepared: 04/18/25 16:12 Analyzed: 06/18/25 18:18									
Arsenic, total	0.0981	0.0020	mg/L	0.100		98.1 80-120			
Barium, total	0.116	0.0010	mg/L	0.100		116 80-120			
Beryllium, total	0.114	0.0005	mg/L	0.100		114 80-120			
Cadmium, total	0.103	0.0002	mg/L	0.100		103 80-120			
Chromium, total	0.114	0.0010	mg/L	0.100		114 80-120			
Cobalt, total	0.115	0.0005	mg/L	0.100		115 80-120			
Copper, total	0.0924	0.0050	mg/L	0.100		92.4 80-120			
Lead, total	0.106	0.0010	mg/L	0.100		106 80-120			
Nickel, total	0.0909	0.0050	mg/L	0.100		90.9 80-120			
Selenium, total	0.1013	0.0020	mg/L	0.100		101 80-120			
Silver, total	0.113	0.0050	mg/L	0.100		113 80-120			
Thallium, total	0.114	0.0005	mg/L	0.100		114 80-120			
Vanadium, total	0.118	0.0020	mg/L	0.100		118 80-120			
Zinc, total	0.0974	0.0050	mg/L	0.100		97.4 80-120			
Matrix Spike (1ID1042-MS1) Source: 1ID0775-01 Prepared: 04/18/25 16:12 Analyzed: 06/18/25 18:23									
Antimony, total	0.114	0.0010	mg/L	0.100	ND	114 75-125			
Arsenic, total	0.0943	0.0020	mg/L	0.100	ND	94.3 75-125			
Barium, total	0.372	0.0010	mg/L	0.100	0.264	107 75-125			
Beryllium, total	0.117	0.0005	mg/L	0.100	ND	117 75-125			
Cadmium, total	0.101	0.0002	mg/L	0.100	ND	101 75-125			
Chromium, total	0.111	0.0010	mg/L	0.100	0.0008	111 75-125			
Cobalt, total	0.107	0.0005	mg/L	0.100	0.0001	107 75-125			
Copper, total	0.0863	0.0050	mg/L	0.100	0.0017	84.6 75-125			
Lead, total	0.103	0.0010	mg/L	0.100	ND	103 75-125			
Nickel, total	0.0854	0.0050	mg/L	0.100	0.0009	84.5 75-125			
Selenium, total	0.0976	0.0020	mg/L	0.100	ND	97.6 75-125			
Silver, total	0.112	0.0050	mg/L	0.100	ND	112 75-125			
Thallium, total	0.109	0.0005	mg/L	0.100	ND	109 75-125			
Vanadium, total	0.119	0.0020	mg/L	0.100	ND	119 75-125			
Zinc, total	0.0966	0.0050	mg/L	0.100	0.0071	89.5 75-125			
Matrix Spike Dup (1ID1042-MSD1) Source: 1ID0775-01 Prepared: 04/18/25 16:12 Analyzed: 06/18/25 18:26									
Antimony, total	0.115	0.0010	mg/L	0.100	ND	115 75-125	0.152	20	
Arsenic, total	0.0958	0.0020	mg/L	0.100	ND	95.8 75-125	1.63	20	
Barium, total	0.391	0.0010	mg/L	0.100	0.264	127 75-125	5.12	20	M1
Beryllium, total	0.118	0.0005	mg/L	0.100	ND	118 75-125	0.696	20	
Cadmium, total	0.103	0.0002	mg/L	0.100	ND	103 75-125	1.95	20	
Chromium, total	0.112	0.0010	mg/L	0.100	0.0008	111 75-125	0.330	20	
Cobalt, total	0.107	0.0005	mg/L	0.100	0.0001	106 75-125	0.202	20	
Copper, total	0.0867	0.0050	mg/L	0.100	0.0017	84.9 75-125	0.449	20	
Lead, total	0.105	0.0010	mg/L	0.100	ND	105 75-125	2.15	20	
Nickel, total	0.0865	0.0050	mg/L	0.100	0.0009	85.6 75-125	1.24	20	
Selenium, total	0.0985	0.0020	mg/L	0.100	ND	98.5 75-125	0.978	20	
Silver, total	0.111	0.0050	mg/L	0.100	ND	111 75-125	1.35	20	

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Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1ID0775

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1ID1042 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Matrix Spike Dup (1ID1042-MSD1)		Source: 1ID0775-01		Prepared: 04/18/25 16:12 Analyzed: 06/18/25 18:26						
Thallium, total	0.111	0.0005	mg/L	0.100	ND	111	75-125	1.45	20	
Vanadium, total	0.119	0.0020	mg/L	0.100	ND	119	75-125	0.0293	20	
Zinc, total	0.0977	0.0050	mg/L	0.100	0.0071	90.6	75-125	1.14	20	

Batch Quality Control Summary: Microbac Laboratories Inc., - Marietta, OH

Volatile Organic Compounds by GCMS	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B5D0776 - 5021 - EPA RSK-175										
Blank (B5D0776-BLK1)		Prepared: 04/15/25 09:54 Analyzed: 04/15/25 11:50								
Methane	<5.00	5.00	ug/L							
Ethene	<5.00	5.00	ug/L							
Ethane	<5.00	5.00	ug/L							
Propane	<5.00	5.00	ug/L							
n-Butane	<5.00	5.00	ug/L							
LCS (B5D0776-BS1)		Prepared: 04/15/25 09:54 Analyzed: 04/15/25 12:06								
Methane	110	5.00	ug/L	114.1884		96.4	85-115			
Ethene	214	5.00	ug/L	199.6873		107	85-115			
Ethane	230	5.00	ug/L	213.9965		108	85-115			
Propane	335	5.00	ug/L	313.9185		107	85-115			
n-Butane	404	5.00	ug/L	413.7764		97.6	85-115			
LCS Dup (B5D0776-BSD1)		Prepared: 04/15/25 09:54 Analyzed: 04/15/25 12:21								
Methane	118	5.00	ug/L	114.1884		103	85-115	6.92	40	
Ethene	233	5.00	ug/L	199.6873		117	85-115	8.53	40	Q
Ethane	251	5.00	ug/L	213.9965		117	85-115	8.73	40	Q
Propane	364	5.00	ug/L	313.9185		116	85-115	8.40	40	Q
n-Butane	438	5.00	ug/L	413.7764		106	85-115	8.16	40	

Definitions

B:	The target analyte was detected in the blank at or above the method acceptance criteria.
D3:	Dilution was performed due to high target analyte concentration.
H4:	The test was performed outside of the EPA recommended holding time of 15 minutes.
M1:	Matrix spike recovery is above acceptance limits.
Q:	One or more quality control criteria failed.
Q2:	LCS recovery is above acceptance limits.
R1:	Duplicate RPD is outside acceptance criteria.
RL:	Reporting Limit
RPD:	Relative Percent Difference



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1ID0775

Cooler Receipt Log

Cooler ID: Default Cooler

Temp: 1.2°C

Cooler Inspection Checklist

Custody Seals	No	Containers Intact	Yes
COC/Labels Agree	Yes	Preservation Confirmed	No
Received On Ice	Yes		

Report Comments

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

Reviewed and Approved By:

Heather Murphy
Customer Relationship Specialist
heather.murphy@microbac.com
06/20/25 13:06



CHAIN OF CUS

600 East 17th Street South
Newton, IA 50208
641-792-8451



1 I D O 7 7 5

HLW Engineering
PM: Heather Murphy

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Printed: 3/24/2025 10:17:36A

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SITE INFORMATION

Sampler: TODD WHIPPLE
Project: Jones Co. Landfill - New Regs

REPORT TO

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

INVOICE TO

Karl Taylor
Jones County Solid Waste Management Co
PO Box 235
Anamosa, IA 52205

SPECIAL INSTRUCTIONS

None

Turn Around Time

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

LAB USE ONLY

Work Order 1200775
Temperature 1.2
Turn-Cooler: No

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

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses		Lab Sample Number
-001	MW-12 (up)	Aqueous	GRAB	<u>4/3/25</u>	<u>9:47</u>	<u>7</u>	Indfill-app1-voc-group	Indfill-app1-metals-6020	<u>01</u>
-001	MW-6	Aqueous	GRAB	<u>4/3/25</u>	<u>10:19</u>	<u>7</u>	Indfill-app1-voc-group	Indfill-app1-metals-6020	<u>02</u>
-001	MW-11	Aqueous	GRAB	<u>4/3/25</u>	<u>9:52</u>	<u>7</u>	Indfill-app1-voc-group	Indfill-app1-metals-6020	<u>03</u>
-001	MW-15	Aqueous	GRAB	<u>4/3/25</u>	<u>11:29</u>	<u>12</u>	alk-caco3-2320 Indfill-app1-metals-6020 plr-4500	Indfill-app1-voc-group perugas-rsk-175	<u>04</u>
-001	MW-16	Aqueous	GRAB	<u>4/3/25</u>	<u>11:14</u>	<u>7</u>	Indfill-app1-voc-group	Indfill-app1-metals-6020	<u>05</u>
-001	MW-20	Aqueous	GRAB	<u>4/3/25</u>	<u>10:36</u>	<u>7</u>	Indfill-app1-voc-group	Indfill-app1-metals-6020	<u>06</u>
-001	MW-22	Aqueous	GRAB	<u>4/3/25</u>	<u>11:01</u>	<u>7</u>	Indfill-app1-voc-group	Indfill-app1-metals-6020	<u>07</u>

Relinquished By

Date/Time

Relinquished By

Date/Time

Received By

Date/Time

Received for Lab By

Date/Time

Original - Lab Copy Yellow - Sampler Copy

Remarks:



600 East 17th Street South
Newton, IA 50208
641-792-8451

CHAIN OF CUSTODY RECORD



1 I D 0 7 7 5

HLW Engineering
PM: Heather Murphy

Page 2 of

Printed: 3/24/2025 10:17:36A

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Page 32 of 32

SITE INFORMATION

Sampler: TODD WHIPPLE
Project: Jones Co. Landfill - New Regs

REPORT TO

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

INVOICE TO

Karl Taylor
Jones County Solid Waste Management Co
PO Box 235
Anamosa, IA 52205

SPECIAL INSTRUCTIONS

None

Turn Around Time

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

LAB USE ONLY

Work Order 17D0775

Temperature 1.2

Turn-Cooler: No

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

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses	Lab Sample Number
-001	Duplicate	Aqueous	GRAB	4/3/25	✓	1	indfil-app1-metals-6020 indfil-app1-metals-6020	08

Relinquished By

Date/Time

Relinquished By

Date/Time

Received By

Date/Time

Received for Lab By

Date/Time

Original - Lab Copy Yellow - Sampler Copy

Remarks:



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1IG1854

Project Description

Jones Co. Landfill - New Regs

For:

Todd Whipple

HLW Engineering

204 West Broad St

Story City, IA 50248

Heather Murphy

Customer Relationship Specialist

Thursday, July 24, 2025

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

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

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Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1IG1854

HLW Engineering

Todd Whipple
204 West Broad St
Story City, IA 50248

Project Name: Jones Co. Landfill - New Regs

Project / PO Number: N/A
Received: 07/16/2025
Reported: 07/24/2025

Sample Summary Report

<u>Sample Name</u>	<u>Laboratory ID</u>	<u>Client Matrix</u>	<u>Sample Type</u>	<u>Sample Begin</u>	<u>Sample Taken</u>	<u>Lab Received</u>
MW-16	1IG1854-01	Aqueous	GRAB		07/14/25 08:16	07/16/25 09:37



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1IG1854

Analytical Testing Parameters

Client Sample ID:	MW-16	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	07/14/2025 8:16
Lab Sample ID:	1IG1854-01		

Determination of Total Metals	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A							
Zinc, total	0.0457	0.0050	mg/L		07/22/25 1525	07/23/25 1705	RVV



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1IG1854

Batch Log Summary

Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	1IG1243	1IG1243-BLK1	
		1IG1243-BS1	
		1IG1854-01	MW-16
		1IG1243-MS1	1IG1856-01
		1IG1243-MSD1	1IG1856-01
		1IG1243-PS1	1IG1856-01

Batch Quality Control Summary: Microbac Laboratories, Inc., Newton

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IG1243 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1IG1243-BLK1)				Prepared: 07/22/25 15:25 Analyzed: 07/23/25 16:55						
Zinc, total	<0.0050	0.0050	mg/L							
LCS (1IG1243-BS1)				Prepared: 07/22/25 15:25 Analyzed: 07/23/25 16:57						
Zinc, total	0.109	0.0050	mg/L	0.100		109	80-120			
Matrix Spike (1IG1243-MS1)				Source: 1IG1856-01 Prepared: 07/22/25 15:25 Analyzed: 07/23/25 17:12						
Zinc, total	0.106	0.0050	mg/L	0.100	ND	106	75-125			
Matrix Spike Dup (1IG1243-MSD1)				Source: 1IG1856-01 Prepared: 07/22/25 15:25 Analyzed: 07/23/25 17:14						
Zinc, total	0.105	0.0050	mg/L	0.100	ND	105	75-125	0.855	20	
Post Spike (1IG1243-PS1)				Source: 1IG1856-01 Prepared: 07/22/25 15:25 Analyzed: 07/23/25 17:17						
Zinc, total	0.0217		mg/L	0.0200	0.0022	97.5	80-120			

Definitions

RL:	Reporting Limit
RPD:	Relative Percent Difference

Cooler Receipt Log

Cooler ID:	Default Cooler	Temp:	0.0°C
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Cooler Inspection Checklist

Custody Seals	No	Containers Intact	Yes
COC/Labels Agree	Yes	Preservation Confirmed	No
Received On Ice	Yes		

Report Comments

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

Reviewed and Approved By:

Heather Murphy
Customer Relationship Specialist
heather.murphy@microbac.com
07/24/25 15:01

☐ 600 E. 17th St. S.
Newton, IA 50208
Phone: 641-792-8451
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☐ 3012 Ansborough
Waterloo, IA 5070
Phone: 319-235-4
Fax: 319-235-2



HLW Engineering
PM: Heather Murphy

05 E VanBuren St
Centerville, IA 52544
Phone: 641-437-7023
Fax: 641-437-7040

PAGE 1 OF 1

PRINT OR TYPE INFORMATION BELOW

SAMPLER: TODD WHIPPLE
SITE NAME: Jones Co SLF
ADDRESS: _____
CITY/ST/ZIP: Anamosa
PHONE: _____

REPORT TO:

NAME: TODD WHIPPLE
COMPANY NAME: HLW Group
ADDRESS: P.O. Box 314
CITY/ST/ZIP: Story City, IA 50248
PHONE: 515-733-4144
FAX: 4146

BILL TO:

NAME: Karl Taylor, Director
COMPANY NAME: Jones Co Solid Waste Mgt
ADDRESS: P.O. Box 235
CITY/ST/ZIP: Anamosa, IA 52205
PHONE: _____

Keystone Quote No: _____
(If Applicable)

CLIENT SAMPLE NUMBER	DATE	TIME	SAMPLE LOCATION	NO. OF CONTAINERS	MATRIX	GRAB/COMPOSITE	ANALYSES REQUIRED										LAB USE ONLY	
																	LABORATORY WORK ORDER NO.	LABORATORY SAMPLE NUMBER
MW-16	7/14/25	8:16	MW-16	1	W	G	X										1IG1854	01

Relinquished by: (Signature) <u>[Signature]</u>	Date <u>7-16-25</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>7-16-25</u>	Turn-Around: ☐ Standard ☐ Rush
Relinquished by: (Signature) <u>[Signature]</u>	Date <u>7-16-25</u>	Received for Lab by: (Signature) <u>[Signature]</u>	Date <u>7-16-25</u>	Remarks:
	Time		Time <u>9:37</u>	



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1IJ1461

Project Description

Jones Co. Landfill - New Regs

For:

Todd Whipple

HLW Engineering

204 West Broad St

Story City, IA 50248

Heather Murphy

Customer Relationship Specialist

Friday, October 31, 2025

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

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

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Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1IJ1461

HLW Engineering

Todd Whipple
204 West Broad St
Story City, IA 50248

Project Name: Jones Co. Landfill - New Regs

Project / PO Number: N/A
Received: 10/15/2025
Reported: 10/31/2025

Sample Summary Report

<u>Sample Name</u>	<u>Laboratory ID</u>	<u>Client Matrix</u>	<u>Sample Type</u>	<u>Sample Begin</u>	<u>Sample Taken</u>	<u>Lab Received</u>
MW-12 (up)	1IJ1461-01	Aqueous	GRAB		10/14/25 11:40	10/15/25 09:30
MW-6	1IJ1461-02	Aqueous	GRAB		10/14/25 11:58	10/15/25 09:30
MW-11	1IJ1461-03	Aqueous	GRAB		10/14/25 11:30	10/15/25 09:30
MW-15	1IJ1461-04	Aqueous	GRAB		10/14/25 13:17	10/15/25 09:30
MW-16	1IJ1461-05	Aqueous	GRAB		10/14/25 12:55	10/15/25 09:30
MW-20	1IJ1461-06	Aqueous	GRAB		10/14/25 12:15	10/15/25 09:30
MW-22	1IJ1461-07	Aqueous	GRAB		10/14/25 12:35	10/15/25 09:30
Duplicate	1IJ1461-08	Aqueous	GRAB		10/14/25 00:00	10/15/25 09:30



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CERTIFICATE OF ANALYSIS

1IJ1461

Analytical Testing Parameters

Client Sample ID:	MW-12 (up)	Collected By:	Whipple, Todd
Sample Matrix:	Aqueous	Collection Date:	10/14/2025 11:40
Lab Sample ID:	1IJ1461-01		

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D							
Chloromethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
Vinyl Chloride	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
Bromomethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
Chloroethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
Trichlorofluoromethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
1,1-Dichloroethylene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
Acetone	<10.0	10.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
Methyl Iodide	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
Carbon Disulfide	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
Methylene Chloride	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
Acrylonitrile	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
1,1-Dichloroethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
Vinyl Acetate	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
2-Butanone (MEK)	<10.0	10.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
Bromochloromethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
Chloroform	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
1,1,1-Trichloroethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
Carbon Tetrachloride	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
Benzene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
1,2-Dichloroethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
Trichloroethylene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
1,2-Dichloropropane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
Dibromomethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
Bromodichloromethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
Toluene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
1,1,2-Trichloroethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
Tetrachloroethylene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
2-Hexanone (MBK)	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
Dibromochloromethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
1,2-Dibromoethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
Chlorobenzene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
Ethylbenzene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
Xylenes, total	<2.0	2.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
Styrene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1431	RAF

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CERTIFICATE OF ANALYSIS

1IJ1461

Client Sample ID: MW-12 (up)
Sample Matrix: Aqueous
Lab Sample ID: 1IJ1461-01

Collected By: Whipple, Todd
Collection Date: 10/14/2025 11:40

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
Bromoform	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
1,2,3-Trichloropropane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
1,4-Dichlorobenzene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
1,2-Dichlorobenzene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1431	RAF
Surrogate: Dibromofluoromethane	102	Limit: 75-136	% Rec		10/20/25 0000	10/20/25 1431	RAF
Surrogate: Dibromofluoromethane	102	Limit: 57-128	% Rec		10/20/25 0000	10/20/25 1431	RAF
Surrogate: 1,2-Dichloroethane-d4	119	Limit: 61-142	% Rec		10/20/25 0000	10/20/25 1431	RAF
Surrogate: 1,2-Dichloroethane-d4	119	Limit: 49-135	% Rec		10/20/25 0000	10/20/25 1431	RAF
Surrogate: Toluene-d8	101	Limit: 82-116	% Rec		10/20/25 0000	10/20/25 1431	RAF
Surrogate: Toluene-d8	101	Limit: 82-121	% Rec		10/20/25 0000	10/20/25 1431	RAF
Surrogate: 4-Bromofluorobenzene	104	Limit: 80-116	% Rec		10/20/25 0000	10/20/25 1431	RAF
Surrogate: 4-Bromofluorobenzene	104	Limit: 77-114	% Rec		10/20/25 0000	10/20/25 1431	RAF

Determination of Total Metals	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A							
Antimony	<0.0010	0.0010	mg/L		10/16/25 1520	10/17/25 1958	RVV
Arsenic	<0.0020	0.0020	mg/L		10/16/25 1520	10/17/25 1958	RVV
Barium	0.258	0.0010	mg/L		10/16/25 1520	10/17/25 1958	RVV
Beryllium	<0.0005	0.0005	mg/L		10/16/25 1520	10/17/25 1958	RVV
Cadmium	<0.0002	0.0002	mg/L		10/16/25 1520	10/17/25 1958	RVV
Chromium	<0.0010	0.0010	mg/L		10/16/25 1520	10/17/25 1958	RVV
Cobalt	<0.0005	0.0005	mg/L		10/16/25 1520	10/17/25 1958	RVV
Copper	<0.0050	0.0050	mg/L		10/16/25 1520	10/17/25 1958	RVV
Lead	<0.0010	0.0010	mg/L		10/16/25 1520	10/17/25 1958	RVV
Nickel	<0.0050	0.0050	mg/L		10/16/25 1520	10/17/25 1958	RVV
Selenium	<0.0020	0.0020	mg/L		10/16/25 1520	10/17/25 1958	RVV
Silver	<0.0050	0.0050	mg/L		10/16/25 1520	10/17/25 1958	RVV
Thallium	<0.0005	0.0005	mg/L		10/16/25 1520	10/17/25 1958	RVV
Vanadium	<0.0020	0.0020	mg/L		10/16/25 1520	10/17/25 1958	RVV
Zinc	0.0199	0.0050	mg/L		10/16/25 1520	10/17/25 1958	RVV

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CERTIFICATE OF ANALYSIS

1IJ1461

Client Sample ID: MW-6
Sample Matrix: Aqueous
Lab Sample ID: 1IJ1461-02

Collected By: Whipple, Todd
Collection Date: 10/14/2025 11:58

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D							
Chloromethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
Vinyl Chloride	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
Bromomethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
Chloroethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
Trichlorofluoromethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
1,1-Dichloroethylene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
Acetone	<10.0	10.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
Methyl Iodide	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
Carbon Disulfide	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
Methylene Chloride	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
Acrylonitrile	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
1,1-Dichloroethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
Vinyl Acetate	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
2-Butanone (MEK)	<10.0	10.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
Bromochloromethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
Chloroform	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
1,1,1-Trichloroethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
Carbon Tetrachloride	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
Benzene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
1,2-Dichloroethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
Trichloroethylene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
1,2-Dichloropropane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
Dibromomethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
Bromodichloromethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
Toluene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
1,1,2-Trichloroethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
Tetrachloroethylene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
2-Hexanone (MBK)	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
Dibromochloromethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
1,2-Dibromoethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
Chlorobenzene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
Ethylbenzene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
Xylenes, total	<2.0	2.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
Styrene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
Bromoform	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
1,2,3-Trichloropropane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1454	RAF

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CERTIFICATE OF ANALYSIS

1IJ1461

Client Sample ID: MW-6
Sample Matrix: Aqueous
Lab Sample ID: 1IJ1461-02

Collected By: Whipple, Todd
Collection Date: 10/14/2025 11:58

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
1,4-Dichlorobenzene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
1,2-Dichlorobenzene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1454	RAF
Surrogate: Dibromofluoromethane	99.7	Limit: 75-136	% Rec		10/20/25 0000	10/20/25 1454	RAF
Surrogate: Dibromofluoromethane	99.7	Limit: 57-128	% Rec		10/20/25 0000	10/20/25 1454	RAF
Surrogate: 1,2-Dichloroethane-d4	118	Limit: 61-142	% Rec		10/20/25 0000	10/20/25 1454	RAF
Surrogate: 1,2-Dichloroethane-d4	118	Limit: 49-135	% Rec		10/20/25 0000	10/20/25 1454	RAF
Surrogate: Toluene-d8	103	Limit: 82-121	% Rec		10/20/25 0000	10/20/25 1454	RAF
Surrogate: Toluene-d8	103	Limit: 82-116	% Rec		10/20/25 0000	10/20/25 1454	RAF
Surrogate: 4-Bromofluorobenzene	102	Limit: 80-116	% Rec		10/20/25 0000	10/20/25 1454	RAF
Surrogate: 4-Bromofluorobenzene	102	Limit: 77-114	% Rec		10/20/25 0000	10/20/25 1454	RAF

Determination of Total Metals	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A							
Antimony	<0.0010	0.0010	mg/L		10/16/25 1520	10/17/25 2001	RVV
Arsenic	<0.0020	0.0020	mg/L		10/16/25 1520	10/17/25 2001	RVV
Barium	0.590	0.0010	mg/L		10/16/25 1520	10/17/25 2001	RVV
Beryllium	<0.0005	0.0005	mg/L		10/16/25 1520	10/17/25 2001	RVV
Cadmium	<0.0002	0.0002	mg/L		10/16/25 1520	10/17/25 2001	RVV
Chromium	<0.0010	0.0010	mg/L		10/16/25 1520	10/17/25 2001	RVV
Cobalt	0.0033	0.0005	mg/L		10/16/25 1520	10/17/25 2001	RVV
Copper	<0.0050	0.0050	mg/L		10/16/25 1520	10/17/25 2001	RVV
Lead	<0.0010	0.0010	mg/L		10/16/25 1520	10/17/25 2001	RVV
Nickel	0.0097	0.0050	mg/L		10/16/25 1520	10/17/25 2001	RVV
Selenium	<0.0020	0.0020	mg/L		10/16/25 1520	10/17/25 2001	RVV
Silver	<0.0050	0.0050	mg/L		10/16/25 1520	10/17/25 2001	RVV
Thallium	<0.0005	0.0005	mg/L		10/16/25 1520	10/17/25 2001	RVV
Vanadium	<0.0020	0.0020	mg/L		10/16/25 1520	10/17/25 2001	RVV
Zinc	0.0072	0.0050	mg/L		10/16/25 1520	10/17/25 2001	RVV

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CERTIFICATE OF ANALYSIS

1IJ1461

Client Sample ID: MW-11
Sample Matrix: Aqueous
Lab Sample ID: 1IJ1461-03

Collected By: Whipple, Todd
Collection Date: 10/14/2025 11:30

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D							
Chloromethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
Vinyl Chloride	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
Bromomethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
Chloroethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
Trichlorofluoromethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
1,1-Dichloroethylene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
Acetone	<10.0	10.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
Methyl Iodide	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
Carbon Disulfide	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
Methylene Chloride	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
Acrylonitrile	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
1,1-Dichloroethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
Vinyl Acetate	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
2-Butanone (MEK)	<10.0	10.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
Bromochloromethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
Chloroform	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
1,1,1-Trichloroethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
Carbon Tetrachloride	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
Benzene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
1,2-Dichloroethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
Trichloroethylene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
1,2-Dichloropropane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
Dibromomethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
Bromodichloromethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
Toluene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
1,1,2-Trichloroethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
Tetrachloroethylene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
2-Hexanone (MBK)	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
Dibromochloromethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
1,2-Dibromoethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
Chlorobenzene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
Ethylbenzene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
Xylenes, total	<2.0	2.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
Styrene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
Bromoform	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
1,2,3-Trichloropropane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1516	RAF

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CERTIFICATE OF ANALYSIS

1IJ1461

Client Sample ID: MW-11
Sample Matrix: Aqueous
Lab Sample ID: 1IJ1461-03

Collected By: Whipple, Todd
Collection Date: 10/14/2025 11:30

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
1,4-Dichlorobenzene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
1,2-Dichlorobenzene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1516	RAF
Surrogate: Dibromofluoromethane	98.3	Limit: 57-128	% Rec		10/20/25 0000	10/20/25 1516	RAF
Surrogate: Dibromofluoromethane	98.3	Limit: 75-136	% Rec		10/20/25 0000	10/20/25 1516	RAF
Surrogate: 1,2-Dichloroethane-d4	117	Limit: 49-135	% Rec		10/20/25 0000	10/20/25 1516	RAF
Surrogate: 1,2-Dichloroethane-d4	117	Limit: 61-142	% Rec		10/20/25 0000	10/20/25 1516	RAF
Surrogate: Toluene-d8	104	Limit: 82-116	% Rec		10/20/25 0000	10/20/25 1516	RAF
Surrogate: Toluene-d8	104	Limit: 82-121	% Rec		10/20/25 0000	10/20/25 1516	RAF
Surrogate: 4-Bromofluorobenzene	102	Limit: 77-114	% Rec		10/20/25 0000	10/20/25 1516	RAF
Surrogate: 4-Bromofluorobenzene	102	Limit: 80-116	% Rec		10/20/25 0000	10/20/25 1516	RAF

Determination of Total Metals	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A							
Antimony	<0.0010	0.0010	mg/L		10/16/25 1520	10/17/25 2003	RVV
Arsenic	<0.0020	0.0020	mg/L		10/16/25 1520	10/17/25 2003	RVV
Barium	0.334	0.0010	mg/L		10/16/25 1520	10/17/25 2003	RVV
Beryllium	<0.0005	0.0005	mg/L		10/16/25 1520	10/17/25 2003	RVV
Cadmium	<0.0002	0.0002	mg/L		10/16/25 1520	10/17/25 2003	RVV
Chromium	0.0016	0.0010	mg/L		10/16/25 1520	10/17/25 2003	RVV
Cobalt	<0.0005	0.0005	mg/L		10/16/25 1520	10/17/25 2003	RVV
Copper	<0.0050	0.0050	mg/L		10/16/25 1520	10/17/25 2003	RVV
Lead	<0.0010	0.0010	mg/L		10/16/25 1520	10/17/25 2003	RVV
Nickel	<0.0050	0.0050	mg/L		10/16/25 1520	10/17/25 2003	RVV
Selenium	<0.0020	0.0020	mg/L		10/16/25 1520	10/17/25 2003	RVV
Silver	<0.0050	0.0050	mg/L		10/16/25 1520	10/17/25 2003	RVV
Thallium	<0.0005	0.0005	mg/L		10/16/25 1520	10/17/25 2003	RVV
Vanadium	<0.0020	0.0020	mg/L		10/16/25 1520	10/17/25 2003	RVV
Zinc	<0.0050	0.0050	mg/L		10/16/25 1520	10/17/25 2003	RVV

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CERTIFICATE OF ANALYSIS

1IJ1461

Client Sample ID: MW-15
Sample Matrix: Aqueous
Lab Sample ID: 1IJ1461-04

Collected By: Whipple, Todd
Collection Date: 10/14/2025 13:17

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D							
Chloromethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
Vinyl Chloride	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
Bromomethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
Chloroethane	6.1	1.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
Trichlorofluoromethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
1,1-Dichloroethylene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
Acetone	<10.0	10.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
Methyl Iodide	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
Carbon Disulfide	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
Methylene Chloride	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
Acrylonitrile	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
1,1-Dichloroethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
Vinyl Acetate	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
2-Butanone (MEK)	<10.0	10.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
Bromochloromethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
Chloroform	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
1,1,1-Trichloroethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
Carbon Tetrachloride	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
Benzene	2.6	1.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
1,2-Dichloroethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
Trichloroethylene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
1,2-Dichloropropane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
Dibromomethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
Bromodichloromethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
Toluene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
1,1,2-Trichloroethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
Tetrachloroethylene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
2-Hexanone (MBK)	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
Dibromochloromethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
1,2-Dibromoethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
Chlorobenzene	3.9	1.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
Ethylbenzene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
Xylenes, total	<2.0	2.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
Styrene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
Bromoform	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
1,2,3-Trichloropropane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1539	RAF

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1IJ1461

Client Sample ID: MW-15
Sample Matrix: Aqueous
Lab Sample ID: 1IJ1461-04

Collected By: Whipple, Todd
Collection Date: 10/14/2025 13:17

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
1,4-Dichlorobenzene	1.4	1.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
1,2-Dichlorobenzene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1539	RAF
Surrogate: Dibromofluoromethane	97.8	Limit: 75-136	% Rec		10/20/25 0000	10/20/25 1539	RAF
Surrogate: Dibromofluoromethane	97.8	Limit: 57-128	% Rec		10/20/25 0000	10/20/25 1539	RAF
Surrogate: 1,2-Dichloroethane-d4	118	Limit: 61-142	% Rec		10/20/25 0000	10/20/25 1539	RAF
Surrogate: 1,2-Dichloroethane-d4	118	Limit: 49-135	% Rec		10/20/25 0000	10/20/25 1539	RAF
Surrogate: Toluene-d8	103	Limit: 82-121	% Rec		10/20/25 0000	10/20/25 1539	RAF
Surrogate: Toluene-d8	103	Limit: 82-116	% Rec		10/20/25 0000	10/20/25 1539	RAF
Surrogate: 4-Bromofluorobenzene	102	Limit: 77-114	% Rec		10/20/25 0000	10/20/25 1539	RAF
Surrogate: 4-Bromofluorobenzene	102	Limit: 80-116	% Rec		10/20/25 0000	10/20/25 1539	RAF

Determination of Total Metals	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A							
Antimony	<0.0010	0.0010	mg/L		10/16/25 1520	10/17/25 2006	RVV
Arsenic	0.204	0.0020	mg/L		10/16/25 1520	10/17/25 2006	RVV
Barium	1.64	0.0010	mg/L		10/16/25 1520	10/17/25 2006	RVV
Beryllium	<0.0005	0.0005	mg/L		10/16/25 1520	10/17/25 2006	RVV
Cadmium	<0.0002	0.0002	mg/L		10/16/25 1520	10/17/25 2006	RVV
Chromium	0.0012	0.0010	mg/L		10/16/25 1520	10/17/25 2006	RVV
Cobalt	0.0161	0.0005	mg/L		10/16/25 1520	10/17/25 2006	RVV
Copper	<0.0050	0.0050	mg/L		10/16/25 1520	10/17/25 2006	RVV
Lead	<0.0010	0.0010	mg/L		10/16/25 1520	10/17/25 2006	RVV
Nickel	0.0873	0.0050	mg/L		10/16/25 1520	10/17/25 2006	RVV
Selenium	0.0033	0.0020	mg/L		10/16/25 1520	10/17/25 2006	RVV
Silver	<0.0050	0.0050	mg/L		10/16/25 1520	10/17/25 2006	RVV
Thallium	<0.0005	0.0005	mg/L		10/16/25 1520	10/17/25 2006	RVV
Vanadium	<0.0020	0.0020	mg/L		10/16/25 1520	10/17/25 2006	RVV
Zinc	0.0103	0.0050	mg/L		10/16/25 1520	10/17/25 2006	RVV

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CERTIFICATE OF ANALYSIS

1IJ1461

Client Sample ID: MW-16
Sample Matrix: Aqueous
Lab Sample ID: 1IJ1461-05

Collected By: Whipple, Todd
Collection Date: 10/14/2025 12:55

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D							
Dichlorodifluoromethane	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
Chloromethane	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
Vinyl Chloride	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
Bromomethane	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
Chloroethane	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
Trichlorofluoromethane	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
Acrolein	<10.0	10.0	ug/L		10/20/25 0000	10/20/25 1602	RAF
1,1-Dichloroethylene	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
Acetone	<10.0	10.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
Methyl Iodide	<2.0	2.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
Carbon Disulfide	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
Acetonitrile	<10.0	10.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
Methylene Chloride	<5.0	5.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
Acrylonitrile	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1602	RAF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
1,1-Dichloroethane	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
Vinyl Acetate	<5.0	5.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
2,2-Dichloropropane	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
2-Butanone (MEK)	<5.0	5.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
Bromochloromethane	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
Chloroform	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
1,1,1-Trichloroethane	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
1,1-Dichloropropene	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
Carbon Tetrachloride	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
Benzene	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
1,2-Dichloroethane	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
Trichloroethylene	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
1,2-Dichloropropane	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
Dibromomethane	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
Bromodichloromethane	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
Toluene	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
Ethyl Methacrylate	<10.0	10.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
1,1,2-Trichloroethane	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
Tetrachloroethylene	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
1,3-Dichloropropane	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
2-Hexanone (MBK)	<5.0	5.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
Dibromochloromethane	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
1,2-Dibromoethane	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF

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CERTIFICATE OF ANALYSIS

1IJ1461

Client Sample ID: MW-16
Sample Matrix: Aqueous
Lab Sample ID: 1IJ1461-05

Collected By: Whipple, Todd
Collection Date: 10/14/2025 12:55

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
Chlorobenzene	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
Ethylbenzene	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
Xylenes, total	<2.0	2.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
Styrene	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
Bromoform	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
1,2,3-Trichloropropane	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
1,3-Dichlorobenzene	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
1,4-Dichlorobenzene	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
1,2-Dichlorobenzene	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
1,2-Dibromo-3-chloropropane	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
1,2,4-Trichlorobenzene	<1.0	1.0	ug/L		10/24/25 0000	10/24/25 1153	RAF
Allyl chloride	<1.0	1.0	ug/L		10/27/25 0000	10/27/25 1817	RAF
Chloroprene	<1.0	1.0	ug/L		10/27/25 0000	10/27/25 1817	RAF
Methacrylonitrile	<1.0	1.0	ug/L		10/27/25 0000	10/27/25 1817	RAF
Methyl Methacrylate	<1.0	1.0	ug/L		10/27/25 0000	10/27/25 1817	RAF
Propionitrile	<10.0	10.0	ug/L		10/27/25 0000	10/27/25 1817	RAF
Surrogate: Dibromofluoromethane	104	Limit: 57-128	% Rec		10/27/25 0000	10/27/25 1817	RAF
Surrogate: Dibromofluoromethane	90.9	Limit: 57-128	% Rec		10/24/25 0000	10/24/25 1153	RAF
Surrogate: 1,2-Dichloroethane-d4	118	Limit: 49-135	% Rec		10/20/25 0000	10/20/25 1602	RAF
Surrogate: 1,2-Dichloroethane-d4	112	Limit: 49-135	% Rec		10/27/25 0000	10/27/25 1817	RAF
Surrogate: 1,2-Dichloroethane-d4	101	Limit: 49-135	% Rec		10/24/25 0000	10/24/25 1153	RAF
Surrogate: Toluene-d8	106	Limit: 82-116	% Rec		10/20/25 0000	10/20/25 1602	RAF
Surrogate: Toluene-d8	104	Limit: 82-116	% Rec		10/27/25 0000	10/27/25 1817	RAF
Surrogate: Toluene-d8	97.1	Limit: 82-116	% Rec		10/24/25 0000	10/24/25 1153	RAF
Surrogate: 4-Bromofluorobenzene	102	Limit: 77-114	% Rec		10/20/25 0000	10/20/25 1602	RAF
Surrogate: 4-Bromofluorobenzene	97.0	Limit: 77-114	% Rec		10/27/25 0000	10/27/25 1817	RAF
Surrogate: 4-Bromofluorobenzene	105	Limit: 77-114	% Rec		10/24/25 0000	10/24/25 1153	RAF

Determination of General Solvents	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 8015C							
Isobutanol	<1.0	1.0	mg/L		10/24/25 1119	10/24/25 2243	PDS

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3520C/EPA 8270C							
N-Nitrosodimethylamine	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Methyl Methanesulfonate	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
N-Nitrosodiethylamine	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
N-Nitrosomethylethylamine	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Ethyl Methanesulfonate	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Phenol	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1IJ1461

Client Sample ID: MW-16
Sample Matrix: Aqueous
Lab Sample ID: 1IJ1461-05

Collected By: Whipple, Todd
Collection Date: 10/14/2025 12:55

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
Bis(2-Chloroethyl) Ether	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
2-Chlorophenol	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Benzyl Alcohol	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
2-Methylphenol (o-Cresol)	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Bis[2-Chloroisopropyl]ether	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
n-Nitroso-di-n-propylamine	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
N-Nitrosopyrrolidine	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Acetophenone	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
o-Toluidine	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
(3 & 4)-Methylphenol	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Hexachloroethane	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Nitrobenzene	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
N-Nitrosopiperidine	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Isophorone	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
2-Nitrophenol	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
2,4-Dimethylphenol	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Bis (2-Chloroethoxy) Methane	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
2,4-Dichlorophenol	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Naphthalene	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
4-Chloroaniline	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
2,6-Dichlorophenol	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Hexachloropropene	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Hexachlorobutadiene	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
N-Nitrosodi-n-butylamine	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
1,4-Phenylenediamine	<8	8	ug/L	Q3	10/20/25 0941	10/29/25 1153	EPP
4-Chloro-3-methylphenol	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
2-Methylnaphthalene	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Isosafrole	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
1,2,4,5-Tetrachlorobenzene	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Hexachlorocyclopentadiene	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
2,4,6-Trichlorophenol	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
2,4,5-Trichlorophenol	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Safrole	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
2-Chloronaphthalene	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
2-Nitroaniline	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
1,4-Naphthoquinone	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Dimethylphthalate	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
1,3-Dinitrobenzene	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
1,2-Dinitrobenzene	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
2,6-Dinitrotoluene	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Acenaphthylene	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
3-Nitroaniline	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Acenaphthene	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP

Microbac Laboratories, Inc., Newton

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Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1IJ1461

Client Sample ID: MW-16
Sample Matrix: Aqueous
Lab Sample ID: 1IJ1461-05

Collected By: Whipple, Todd
Collection Date: 10/14/2025 12:55

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
2,4-Dinitrophenol	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
4-Nitrophenol	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Dibenzofuran	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
2,4-Dinitrotoluene	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
2,3,4,6-Tetrachlorophenol	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Pentachlorobenzene	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
1-Naphthylamine	<8	8	ug/L	Q3	10/20/25 0941	10/29/25 1153	EPP
2-Naphthylamine	<8	8	ug/L	Q3	10/20/25 0941	10/29/25 1153	EPP
Diethyl Phthalate	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Fluorene	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
4-Chlorophenyl Phenyl Ether	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
4-Nitroaniline	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
5-Nitro-o-toluidine	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
4,6-Dinitro-2-methylphenol	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
N-Nitrosodiphenylamine	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Diphenylamine	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Azobenzene	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Diallate	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
1,3,5-Trinitrobenzene	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Phenacetin	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
4-Bromophenyl Phenyl Ether	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
4-Aminobiphenyl	<8	8	ug/L	Q3	10/20/25 0941	10/29/25 1153	EPP
Pentachlorophenol	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Pronamide	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Pentachloronitrobenzene (PCNB)	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Phenanthrene	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Anthracene	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Di-n-butyl Phthalate	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Methapyrilene	<8	8	ug/L	Q3	10/20/25 0941	10/29/25 1153	EPP
Fluoranthene	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Isodrin	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Chlorobenzilate	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Pyrene	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
p-(Dimethylamino)azobenzene	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
3,3-Dimethylbenzidine	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Butyl Benzyl Phthalate	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Benzo(a)anthracene	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Chrysene	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Bis(2-Ethylhexyl) Phthalate	<6	6	ug/L		10/20/25 0941	10/29/25 1153	EPP
Kepone	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
3,3'-Dichlorobenzidine	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
2-Acetylaminofluorene	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Di-n-octyl Phthalate	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP

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CERTIFICATE OF ANALYSIS

11J1461

Client Sample ID: MW-16
Sample Matrix: Aqueous
Lab Sample ID: 11J1461-05

Collected By: Whipple, Todd
Collection Date: 10/14/2025 12:55

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
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Benzo(b)Fluoranthene	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
7,12-Dimethylbenz [a] anthracene	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Benzo(k)Fluoranthene	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Benzo(a)Pyrene	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
3-Methylcholanthrene	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Dibenzo(a,h)anthracene	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Indeno(1,2,3-cd)Pyrene	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Benzo(g,h,i)perylene	<8	8	ug/L		10/20/25 0941	10/29/25 1153	EPP
Surrogate: 2-Fluorophenol	85.8	Limit: 10-159	% Rec		10/20/25 0941	10/29/25 1153	EPP
Surrogate: Phenol-d6	89.4	Limit: 10-162	% Rec		10/20/25 0941	10/29/25 1153	EPP
Surrogate: Nitrobenzene-d5	86.7	Limit: 17-154	% Rec		10/20/25 0941	10/29/25 1153	EPP
Surrogate: 2-Fluorobiphenyl	87.3	Limit: 15-150	% Rec		10/20/25 0941	10/29/25 1153	EPP
Surrogate: 2,4,6-Tribromophenol	89.5	Limit: 10-156	% Rec		10/20/25 0941	10/29/25 1153	EPP
Surrogate: Terphenyl-dl4	114	Limit: 10-179	% Rec		10/20/25 0941	10/29/25 1153	EPP

Determination of Organophosphorus Insecticides	Result	RL	Units	Note	Prepared	Analyzed	Analyst
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EPA 3510C/EPA 8141

O,O,O-Triethyl phosphorothioate	<0.4	0.4	ug/L		10/17/25 1204	10/27/25 1320	EPP
Thionazin	<0.4	0.4	ug/L		10/17/25 1204	10/27/25 1320	EPP
Phorate	<0.4	0.4	ug/L		10/17/25 1204	10/27/25 1320	EPP
Dimethoate	<0.4	0.4	ug/L		10/17/25 1204	10/27/25 1320	EPP
Disulfoton	<0.4	0.4	ug/L		10/17/25 1204	10/27/25 1320	EPP
Methyl Parathion	<0.4	0.4	ug/L		10/17/25 1204	10/27/25 1320	EPP
Parathion	<0.4	0.4	ug/L		10/17/25 1204	10/27/25 1320	EPP
Famphur	<0.4	0.4	ug/L		10/17/25 1204	10/27/25 1320	EPP
Surrogate: 2-Nitro-m-xylene	63.7	Limit: 32-110	% Rec		10/17/25 1204	10/27/25 1320	EPP

Determination of Chlorinated Phenoxy Herbicides	Result	RL	Units	Note	Prepared	Analyzed	Analyst
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EPA 8151A

2,4-D	<2.0	2.0	ug/L		10/17/25 1211	10/27/25 1328	EPP
2,4,5-TP (Silvex)	<0.5	0.5	ug/L		10/17/25 1211	10/27/25 1328	EPP
2,4,5-T	<0.5	0.5	ug/L		10/17/25 1211	10/27/25 1328	EPP
Dinoseb	<0.5	0.5	ug/L		10/17/25 1211	10/27/25 1328	EPP
Surrogate: 2,5-Dichlorobenzoic Acid	109	Limit: 49-174	% Rec		10/17/25 1211	10/27/25 1328	EPP

Determination of Organochlorine Insecticides & Metabolites	Result	RL	Units	Note	Prepared	Analyzed	Analyst
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EPA 3510C/EPA 8081A

Alpha-BHC	<0.05	0.05	ug/L		10/17/25 1202	10/22/25 1730	PDS
Gamma-BHC [Lindane]	<0.05	0.05	ug/L		10/17/25 1202	10/22/25 1730	PDS
Beta-BHC	<0.05	0.05	ug/L		10/17/25 1202	10/22/25 1730	PDS



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1IJ1461

Client Sample ID: MW-16
Sample Matrix: Aqueous
Lab Sample ID: 1IJ1461-05

Collected By: Whipple, Todd
Collection Date: 10/14/2025 12:55

Determination of Organochlorine Insecticides & Metabolites	Result	RL	Units	Note	Prepared	Analyzed	Analyst
Heptachlor	<0.05	0.05	ug/L		10/17/25 1202	10/22/25 1730	PDS
Delta-BHC	<0.05	0.05	ug/L		10/17/25 1202	10/22/25 1730	PDS
Aldrin	<0.05	0.05	ug/L		10/17/25 1202	10/22/25 1730	PDS
Heptachlor Epoxide	<0.05	0.05	ug/L		10/17/25 1202	10/22/25 1730	PDS
Endosulfan I	<0.05	0.05	ug/L		10/17/25 1202	10/22/25 1730	PDS
4,4'-DDE	<0.05	0.05	ug/L		10/17/25 1202	10/22/25 1730	PDS
Dieldrin	<0.05	0.05	ug/L		10/17/25 1202	10/22/25 1730	PDS
Endrin	<0.05	0.05	ug/L		10/17/25 1202	10/22/25 1730	PDS
4,4'-DDD	<0.05	0.05	ug/L		10/17/25 1202	10/22/25 1730	PDS
Endosulfan II	<0.05	0.05	ug/L		10/17/25 1202	10/22/25 1730	PDS
4,4'-DDT	<0.05	0.05	ug/L		10/17/25 1202	10/22/25 1730	PDS
Endrin Aldehyde	<0.05	0.05	ug/L		10/17/25 1202	10/22/25 1730	PDS
Endosulfan Sulfate	<0.05	0.05	ug/L		10/17/25 1202	10/22/25 1730	PDS
Methoxychlor	<0.05	0.05	ug/L		10/17/25 1202	10/22/25 1730	PDS
Chlordane	<0.10	0.10	ug/L		10/17/25 1202	10/22/25 1730	PDS
Toxaphene	<0.20	0.20	ug/L		10/17/25 1202	10/22/25 1730	PDS
Hexachlorobenzene	<0.05	0.05	ug/L		10/17/25 1202	10/22/25 1730	PDS
Surrogate: Tetrachloro-m-xylene	63.2	Limit: 45-111	% Rec		10/17/25 1202	10/22/25 1730	PDS

Determination of Polychlorinated Biphenyls (PCB)	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3510C/EPA 8082A							
Arochlor 1016	<0.20	0.20	ug/L		10/17/25 1200	10/22/25 1730	PDS
Arochlor 1221	<0.20	0.20	ug/L		10/17/25 1200	10/22/25 1730	PDS
Arochlor 1232	<0.20	0.20	ug/L		10/17/25 1200	10/22/25 1730	PDS
Arochlor 1242	<0.20	0.20	ug/L		10/17/25 1200	10/22/25 1730	PDS
Arochlor 1248	<0.20	0.20	ug/L		10/17/25 1200	10/22/25 1730	PDS
Arochlor 1254	<0.20	0.20	ug/L		10/17/25 1200	10/22/25 1730	PDS
Arochlor 1260	<0.20	0.20	ug/L		10/17/25 1200	10/22/25 1730	PDS
Surrogate: Tetrachloro-m-xylene	86.9	Limit: 50-116	% Rec		10/17/25 1200	10/22/25 1730	PDS
Surrogate: Decachlorobiphenyl	94.8	Limit: 38-122	% Rec		10/17/25 1200	10/22/25 1730	PDS

Determination of Conventional Chemistry Parameters	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 376.2							
Sulfide, total	<0.10	0.10	mg/L		10/20/25 1039	10/20/25 1648	AKK
EPA 9014							
Cyanide, total	<0.010	0.010	mg/L			10/21/25 1307	AKK

Determination of Total Metals	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A							
Antimony	<0.0010	0.0010	mg/L		10/16/25 1520	10/17/25 2008	RVV
Arsenic	<0.0020	0.0020	mg/L		10/16/25 1520	10/17/25 2008	RVV



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CERTIFICATE OF ANALYSIS

1IJ1461

Client Sample ID: MW-16
Sample Matrix: Aqueous
Lab Sample ID: 1IJ1461-05

Collected By: Whipple, Todd
Collection Date: 10/14/2025 12:55

Determination of Total Metals	Result	RL	Units	Note	Prepared	Analyzed	Analyst
Barium	0.0842	0.0010	mg/L		10/16/25 1520	10/17/25 2008	RVV
Beryllium	<0.0005	0.0005	mg/L		10/16/25 1520	10/17/25 2008	RVV
Cadmium	<0.0002	0.0002	mg/L		10/16/25 1520	10/17/25 2008	RVV
Chromium	<0.0010	0.0010	mg/L		10/16/25 1520	10/17/25 2008	RVV
Cobalt	<0.0005	0.0005	mg/L		10/16/25 1520	10/17/25 2008	RVV
Copper	<0.0050	0.0050	mg/L		10/16/25 1520	10/17/25 2008	RVV
Lead	<0.0010	0.0010	mg/L		10/16/25 1520	10/17/25 2008	RVV
Nickel	<0.0050	0.0050	mg/L		10/16/25 1520	10/17/25 2008	RVV
Selenium	<0.0020	0.0020	mg/L		10/16/25 1520	10/17/25 2008	RVV
Silver	<0.0050	0.0050	mg/L		10/16/25 1520	10/17/25 2008	RVV
Thallium	<0.0005	0.0005	mg/L		10/16/25 1520	10/17/25 2008	RVV
Tin	<0.0050	0.0050	mg/L		10/16/25 1520	10/17/25 2008	RVV
Vanadium	<0.0020	0.0020	mg/L		10/16/25 1520	10/17/25 2008	RVV
Zinc	0.0339	0.0050	mg/L		10/16/25 1520	10/17/25 2008	RVV
EPA 7470A							
Mercury	<0.00050	0.00050	mg/L		10/27/25 1536	10/28/25 1626	JAR

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Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1IJ1461

Client Sample ID: MW-20
Sample Matrix: Aqueous
Lab Sample ID: 1IJ1461-06

Collected By: Whipple, Todd
Collection Date: 10/14/2025 12:15

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D							
Chloromethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
Vinyl Chloride	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
Bromomethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
Chloroethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
Trichlorofluoromethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
1,1-Dichloroethylene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
Acetone	<10.0	10.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
Methyl Iodide	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
Carbon Disulfide	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
Methylene Chloride	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
Acrylonitrile	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
1,1-Dichloroethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
Vinyl Acetate	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
2-Butanone (MEK)	<10.0	10.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
Bromochloromethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
Chloroform	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
1,1,1-Trichloroethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
Carbon Tetrachloride	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
Benzene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
1,2-Dichloroethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
Trichloroethylene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
1,2-Dichloropropane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
Dibromomethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
Bromodichloromethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
Toluene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
1,1,2-Trichloroethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
Tetrachloroethylene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
2-Hexanone (MBK)	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
Dibromochloromethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
1,2-Dibromoethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
Chlorobenzene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
Ethylbenzene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
Xylenes, total	<2.0	2.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
Styrene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
Bromoform	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
1,2,3-Trichloropropane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1625	RAF

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CERTIFICATE OF ANALYSIS

1IJ1461

Client Sample ID: MW-20
Sample Matrix: Aqueous
Lab Sample ID: 1IJ1461-06

Collected By: Whipple, Todd
Collection Date: 10/14/2025 12:15

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
1,4-Dichlorobenzene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
1,2-Dichlorobenzene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1625	RAF
Surrogate: Dibromofluoromethane	100	Limit: 57-128	% Rec		10/20/25 0000	10/20/25 1625	RAF
Surrogate: Dibromofluoromethane	100	Limit: 75-136	% Rec		10/20/25 0000	10/20/25 1625	RAF
Surrogate: 1,2-Dichloroethane-d4	117	Limit: 49-135	% Rec		10/20/25 0000	10/20/25 1625	RAF
Surrogate: 1,2-Dichloroethane-d4	117	Limit: 61-142	% Rec		10/20/25 0000	10/20/25 1625	RAF
Surrogate: Toluene-d8	103	Limit: 82-116	% Rec		10/20/25 0000	10/20/25 1625	RAF
Surrogate: Toluene-d8	103	Limit: 82-121	% Rec		10/20/25 0000	10/20/25 1625	RAF
Surrogate: 4-Bromofluorobenzene	100	Limit: 77-114	% Rec		10/20/25 0000	10/20/25 1625	RAF
Surrogate: 4-Bromofluorobenzene	100	Limit: 80-116	% Rec		10/20/25 0000	10/20/25 1625	RAF

Determination of Total Metals	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A							
Antimony	<0.0010	0.0010	mg/L		10/16/25 1520	10/17/25 2011	RVV
Arsenic	<0.0020	0.0020	mg/L		10/16/25 1520	10/17/25 2011	RVV
Barium	0.107	0.0010	mg/L		10/16/25 1520	10/17/25 2011	RVV
Beryllium	<0.0005	0.0005	mg/L		10/16/25 1520	10/17/25 2011	RVV
Cadmium	<0.0002	0.0002	mg/L		10/16/25 1520	10/17/25 2011	RVV
Chromium	<0.0010	0.0010	mg/L		10/16/25 1520	10/17/25 2011	RVV
Cobalt	<0.0005	0.0005	mg/L		10/16/25 1520	10/17/25 2011	RVV
Copper	<0.0050	0.0050	mg/L		10/16/25 1520	10/17/25 2011	RVV
Lead	<0.0010	0.0010	mg/L		10/16/25 1520	10/17/25 2011	RVV
Nickel	<0.0050	0.0050	mg/L		10/16/25 1520	10/17/25 2011	RVV
Selenium	<0.0020	0.0020	mg/L		10/16/25 1520	10/17/25 2011	RVV
Silver	<0.0050	0.0050	mg/L		10/16/25 1520	10/17/25 2011	RVV
Thallium	<0.0005	0.0005	mg/L		10/16/25 1520	10/17/25 2011	RVV
Vanadium	<0.0020	0.0020	mg/L		10/16/25 1520	10/17/25 2011	RVV
Zinc	0.0090	0.0050	mg/L		10/16/25 1520	10/17/25 2011	RVV

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CERTIFICATE OF ANALYSIS

1IJ1461

Client Sample ID: MW-22
Sample Matrix: Aqueous
Lab Sample ID: 1IJ1461-07

Collected By: Whipple, Todd
Collection Date: 10/14/2025 12:35

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D							
Chloromethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
Vinyl Chloride	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
Bromomethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
Chloroethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
Trichlorofluoromethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
1,1-Dichloroethylene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
Acetone	<10.0	10.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
Methyl Iodide	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
Carbon Disulfide	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
Methylene Chloride	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
Acrylonitrile	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
1,1-Dichloroethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
Vinyl Acetate	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
2-Butanone (MEK)	<10.0	10.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
Bromochloromethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
Chloroform	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
1,1,1-Trichloroethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
Carbon Tetrachloride	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
Benzene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
1,2-Dichloroethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
Trichloroethylene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
1,2-Dichloropropane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
Dibromomethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
Bromodichloromethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
Toluene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
1,1,2-Trichloroethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
Tetrachloroethylene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
2-Hexanone (MBK)	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
Dibromochloromethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
1,2-Dibromoethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
Chlorobenzene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
Ethylbenzene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
Xylenes, total	<2.0	2.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
Styrene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
Bromoform	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
1,2,3-Trichloropropane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1648	RAF

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CERTIFICATE OF ANALYSIS

1IJ1461

Client Sample ID: MW-22
Sample Matrix: Aqueous
Lab Sample ID: 1IJ1461-07

Collected By: Whipple, Todd
Collection Date: 10/14/2025 12:35

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
1,4-Dichlorobenzene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
1,2-Dichlorobenzene	<1.0	1.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L		10/20/25 0000	10/20/25 1648	RAF
Surrogate: Dibromofluoromethane	99.6	Limit: 75-136	% Rec		10/20/25 0000	10/20/25 1648	RAF
Surrogate: Dibromofluoromethane	99.6	Limit: 57-128	% Rec		10/20/25 0000	10/20/25 1648	RAF
Surrogate: 1,2-Dichloroethane-d4	118	Limit: 61-142	% Rec		10/20/25 0000	10/20/25 1648	RAF
Surrogate: 1,2-Dichloroethane-d4	118	Limit: 49-135	% Rec		10/20/25 0000	10/20/25 1648	RAF
Surrogate: Toluene-d8	102	Limit: 82-121	% Rec		10/20/25 0000	10/20/25 1648	RAF
Surrogate: Toluene-d8	102	Limit: 82-116	% Rec		10/20/25 0000	10/20/25 1648	RAF
Surrogate: 4-Bromofluorobenzene	101	Limit: 80-116	% Rec		10/20/25 0000	10/20/25 1648	RAF
Surrogate: 4-Bromofluorobenzene	101	Limit: 77-114	% Rec		10/20/25 0000	10/20/25 1648	RAF

Determination of Total Metals	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A							
Antimony	<0.0010	0.0010	mg/L		10/16/25 1520	10/17/25 2013	RVV
Arsenic	<0.0020	0.0020	mg/L		10/16/25 1520	10/17/25 2013	RVV
Barium	0.194	0.0010	mg/L		10/16/25 1520	10/17/25 2013	RVV
Beryllium	<0.0005	0.0005	mg/L		10/16/25 1520	10/17/25 2013	RVV
Cadmium	<0.0002	0.0002	mg/L		10/16/25 1520	10/17/25 2013	RVV
Chromium	0.0027	0.0010	mg/L		10/16/25 1520	10/17/25 2013	RVV
Cobalt	<0.0005	0.0005	mg/L		10/16/25 1520	10/17/25 2013	RVV
Copper	<0.0050	0.0050	mg/L		10/16/25 1520	10/17/25 2013	RVV
Lead	<0.0010	0.0010	mg/L		10/16/25 1520	10/17/25 2013	RVV
Nickel	<0.0050	0.0050	mg/L		10/16/25 1520	10/17/25 2013	RVV
Selenium	<0.0020	0.0020	mg/L		10/16/25 1520	10/17/25 2013	RVV
Silver	<0.0050	0.0050	mg/L		10/16/25 1520	10/17/25 2013	RVV
Thallium	<0.0005	0.0005	mg/L		10/16/25 1520	10/17/25 2013	RVV
Vanadium	<0.0020	0.0020	mg/L		10/16/25 1520	10/17/25 2013	RVV
Zinc	0.0082	0.0050	mg/L		10/16/25 1520	10/17/25 2013	RVV

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CERTIFICATE OF ANALYSIS

1IJ1461

Client Sample ID: Duplicate
Sample Matrix: Aqueous
Lab Sample ID: 1IJ1461-08

Collected By: Whipple, Todd
Collection Date: 10/14/2025

Determination of Total Metals	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A							
Antimony	<0.0010	0.0010	mg/L		10/16/25 1520	10/17/25 2016	RVV
Arsenic	<0.0020	0.0020	mg/L		10/16/25 1520	10/17/25 2016	RVV
Barium	0.333	0.0010	mg/L		10/16/25 1520	10/17/25 2016	RVV
Beryllium	<0.0005	0.0005	mg/L		10/16/25 1520	10/17/25 2016	RVV
Cadmium	<0.0002	0.0002	mg/L		10/16/25 1520	10/17/25 2016	RVV
Chromium	0.0017	0.0010	mg/L		10/16/25 1520	10/17/25 2016	RVV
Cobalt	<0.0005	0.0005	mg/L		10/16/25 1520	10/17/25 2016	RVV
Copper	<0.0050	0.0050	mg/L		10/16/25 1520	10/17/25 2016	RVV
Lead	<0.0010	0.0010	mg/L		10/16/25 1520	10/17/25 2016	RVV
Nickel	<0.0050	0.0050	mg/L		10/16/25 1520	10/17/25 2016	RVV
Selenium	0.0020	0.0020	mg/L		10/16/25 1520	10/17/25 2016	RVV
Silver	<0.0050	0.0050	mg/L		10/16/25 1520	10/17/25 2016	RVV
Thallium	<0.0005	0.0005	mg/L		10/16/25 1520	10/17/25 2016	RVV
Vanadium	<0.0020	0.0020	mg/L		10/16/25 1520	10/17/25 2016	RVV
Zinc	<0.0050	0.0050	mg/L		10/16/25 1520	10/17/25 2016	RVV

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CERTIFICATE OF ANALYSIS

1IJ1461

Batch Log Summary

Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	1IJ1024	1IJ1024-BLK1	
		1IJ1024-BS1	
		1IJ1024-MS1	1IJ1387-05
		1IJ1024-MSD1	1IJ1387-05
		1IJ1024-PS1	1IJ1387-05
		1IJ1461-01	MW-12 (up)
		1IJ1461-02	MW-6
		1IJ1461-03	MW-11
		1IJ1461-04	MW-15
		1IJ1461-05	MW-16
		1IJ1461-06	MW-20
		1IJ1461-07	MW-22
		1IJ1461-08	Duplicate
Method	Batch	Laboratory ID	Client / Source ID
EPA 8082A	1IJ1061	1IJ1061-BLK1	
		1IJ1461-05	MW-16
		1IJ1061-BS1	
		1IJ1061-BSD1	
		1IJ1061-SRM1	
Method	Batch	Laboratory ID	Client / Source ID
EPA 8081A	1IJ1062	1IJ1062-BLK1	
		1IJ1461-05	MW-16
		1IJ1062-BS1	
		1IJ1062-BSD1	
		1IJ1062-SRM1	
Method	Batch	Laboratory ID	Client / Source ID
EPA 8141	1IJ1063	1IJ1063-BLK1	
		1IJ1461-05	MW-16
		1IJ1063-BS1	
		1IJ1063-BSD1	
		1IJ1063-SRM1	
Method	Batch	Laboratory ID	Client / Source ID
EPA 8151A	1IJ1064	1IJ1064-BLK1	
		1IJ1461-05	MW-16
		1IJ1064-BS1	
		1IJ1064-BSD1	
Method	Batch	Laboratory ID	Client / Source ID
EPA 8270C	1IJ1125	1IJ1125-BLK1	
		1IJ1125-BS1	
		1IJ1125-BSD1	
		1IJ1461-05	MW-16
Method	Batch	Laboratory ID	Client / Source ID
EPA 376.2	1IJ1132	1IJ1132-BS1	
		1IJ1132-BLK1	
		1IJ1461-05	MW-16
		1IJ1132-MSD1	1IJ1239-01
		1IJ1132-MS1	1IJ1239-01
Method	Batch	Laboratory ID	Client / Source ID

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CERTIFICATE OF ANALYSIS

1IJ1461

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260D	1IJ1171	1IJ1171-BS1	
		1IJ1171-BSD1	
		1IJ1171-BLK1	
		1IJ1461-01	MW-12 (up)
		1IJ1461-02	MW-6
		1IJ1461-03	MW-11
		1IJ1461-04	MW-15
		1IJ1461-05	MW-16
		1IJ1461-06	MW-20
		1IJ1461-07	MW-22
		1IJ1171-MS1	1IJ1462-01
		1IJ1171-MSD1	1IJ1462-01
Method	Batch	Laboratory ID	Client / Source ID
EPA 9014	1IJ1215	1IJ1215-BLK1	
		1IJ1215-BS1	
		1IJ1461-05	MW-16
		1IJ1215-MS1	1IJ1387-04
		1IJ1215-MSD1	1IJ1387-04
Method	Batch	Laboratory ID	Client / Source ID
EPA 8015C	1IJ1478	1IJ1478-BS1	
		1IJ1478-BLK1	
		1IJ1461-05	MW-16
		1IJ1478-MS1	1IJ1904-01
		1IJ1478-MSD1	1IJ1904-01
Method	Batch	Laboratory ID	Client / Source ID
EPA 8260D	1IJ1499	1IJ1499-BLK1	
		1IJ1461-05	MW-16
		1IJ1499-BS1	
		1IJ1499-BSD1	
		1IJ1499-MS1	1IJ1987-01
		1IJ1499-MSD1	1IJ1987-01
Method	Batch	Laboratory ID	Client / Source ID
EPA 7470A	1IJ1552	1IJ1552-BLK1	
		1IJ1552-BS1	
		1IJ1552-MS1	1IJ1317-01
		1IJ1552-MSD1	1IJ1317-01
		1IJ1461-05	MW-16
Method	Batch	Laboratory ID	Client / Source ID
EPA 8260D	1IJ1564	1IJ1564-BS1	
		1IJ1564-BSD1	
		1IJ1564-BLK1	
		1IJ1461-05	MW-16
		1IJ1564-MS1	1IJ1387-05
		1IJ1564-MSD1	1IJ1387-05

Batch Quality Control Summary: Microbac Laboratories, Inc., Newton

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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CERTIFICATE OF ANALYSIS

1IJ1461

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ1171 - EPA 5030B - EPA 8260D										
Blank (1IJ1171-BLK1)				Prepared: 10/20/25 00:00 Analyzed: 10/20/25 11:05						
Chloromethane	<1.0	1.0	ug/L							
Vinyl Chloride	<1.0	1.0	ug/L							
Bromomethane	<1.0	1.0	ug/L							
Chloroethane	<1.0	1.0	ug/L							
Trichlorofluoromethane	<1.0	1.0	ug/L							
Acrolein	<10.0	10.0	ug/L							
1,1-Dichloroethylene	<1.0	1.0	ug/L							
Acetone	<10.0	10.0	ug/L							
Methyl Iodide	<1.0	1.0	ug/L							
Carbon Disulfide	<1.0	1.0	ug/L							
Methylene Chloride	<5.0	5.0	ug/L							
Acrylonitrile	<5.0	5.0	ug/L							
Acrylonitrile	<5.0	5.0	ug/L							
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L							
1,1-Dichloroethane	<1.0	1.0	ug/L							
Vinyl Acetate	<5.0	5.0	ug/L							
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L							
2-Butanone (MEK)	<10.0	10.0	ug/L							
Bromochloromethane	<1.0	1.0	ug/L							
Chloroform	<1.0	1.0	ug/L							
1,1,1-Trichloroethane	<1.0	1.0	ug/L							
Carbon Tetrachloride	<1.0	1.0	ug/L							
Benzene	<1.0	1.0	ug/L							
1,2-Dichloroethane	<1.0	1.0	ug/L							
Trichloroethylene	<1.0	1.0	ug/L							
1,2-Dichloropropane	<1.0	1.0	ug/L							
Dibromomethane	<1.0	1.0	ug/L							
Bromodichloromethane	<1.0	1.0	ug/L							
cis-1,3-Dichloropropene	<1.0	1.0	ug/L							
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L							
Toluene	<1.0	1.0	ug/L							
trans-1,3-Dichloropropene	<1.0	1.0	ug/L							
1,1,2-Trichloroethane	<1.0	1.0	ug/L							
Tetrachloroethylene	<1.0	1.0	ug/L							
2-Hexanone (MBK)	<5.0	5.0	ug/L							
Dibromochloromethane	<1.0	1.0	ug/L							
1,2-Dibromoethane	<1.0	1.0	ug/L							
Chlorobenzene	<1.0	1.0	ug/L							
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L							
Ethylbenzene	<1.0	1.0	ug/L							
Xylenes, total	<2.0	2.0	ug/L							
Styrene	<1.0	1.0	ug/L							
Bromoform	<1.0	1.0	ug/L							

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CERTIFICATE OF ANALYSIS

1IJ1461

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ1171 - EPA 5030B - EPA 8260D										
Blank (1IJ1171-BLK1)				Prepared: 10/20/25 00:00 Analyzed: 10/20/25 11:05						
1,2,3-Trichloropropane	<1.0	1.0	ug/L							
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L							
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L							
1,4-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L							
Surrogate: Dibromofluoromethane	47.7		ug/L	50.2		95.1	57-128			
Surrogate: Dibromofluoromethane	47.7		ug/L	50.2		95.1	75-136			
Surrogate: 1,2-Dichloroethane-d4	58.2		ug/L	50.4		116	49-135			
Surrogate: 1,2-Dichloroethane-d4	58.2		ug/L	50.4		116	49-135			
Surrogate: 1,2-Dichloroethane-d4	58.2		ug/L	50.4		116	61-142			
Surrogate: Toluene-d8	51.0		ug/L	50.5		101	82-116			
Surrogate: Toluene-d8	51.0		ug/L	50.5		101	82-116			
Surrogate: Toluene-d8	51.0		ug/L	50.5		101	82-121			
Surrogate: 4-Bromofluorobenzene	51.4		ug/L	50.2		102	77-114			
Surrogate: 4-Bromofluorobenzene	51.4		ug/L	50.2		102	77-114			
Surrogate: 4-Bromofluorobenzene	51.4		ug/L	50.2		102	80-116			
LCS (1IJ1171-BS1)				Prepared: 10/20/25 00:00 Analyzed: 10/20/25 09:56						
Chloromethane	27.64	1.0	ug/L	30.3		91.2	63-155			
Vinyl Chloride	31.30	1.0	ug/L	30.2		103	70-154			
Bromomethane	24.06	1.0	ug/L	30.1		79.9	52-176			
Chloroethane	26.47	1.0	ug/L	30.3		87.3	72-148			
Trichlorofluoromethane	30.53	1.0	ug/L	30.3		101	70-152			
Acrolein	57.63	10.0	ug/L	50.3		114	10-178			
1,1-Dichloroethylene	60.39	1.0	ug/L	50.1		120	70-148			
Acetone	116.4	10.0	ug/L	100		116	43-172			
Methyl Iodide	110.4	1.0	ug/L	100		110	69-170			
Carbon Disulfide	105.4	1.0	ug/L	100		105	72-162			
Methylene Chloride	48.67	5.0	ug/L	50.1		97.1	68-142			
Acrylonitrile	56.52	5.0	ug/L	50.4		112	33-163			
Acrylonitrile	56.52	5.0	ug/L	50.4		112	33-163			
trans-1,2-Dichloroethylene	62.15	1.0	ug/L	50.1		124	66-148			
1,1-Dichloroethane	60.62	1.0	ug/L	50.1		121	66-143			
Vinyl Acetate	150.2	5.0	ug/L	142		105	43-153			
cis-1,2-Dichloroethylene	52.34	1.0	ug/L	50.4		104	71-149			
2-Butanone (MEK)	123.8	10.0	ug/L	100		124	52-159			
Bromochloromethane	61.40	1.0	ug/L	50.4		122	69-143			
Chloroform	53.34	1.0	ug/L	50.1		107	69-144			
1,1,1-Trichloroethane	55.45	1.0	ug/L	50.1		111	62-129			
Carbon Tetrachloride	56.87	1.0	ug/L	50.1		114	63-141			
Benzene	56.47	1.0	ug/L	50.4		112	71-134			
1,2-Dichloroethane	64.01	1.0	ug/L	50.1		128	72-132			
Trichloroethylene	57.57	1.0	ug/L	50.1		115	71-135			

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CERTIFICATE OF ANALYSIS

1IJ1461

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ1171 - EPA 5030B - EPA 8260D										
LCS (1IJ1171-BS1)				Prepared: 10/20/25 00:00 Analyzed: 10/20/25 09:56						
1,2-Dichloropropane	57.64	1.0	ug/L	50.1		115	69-136			
Dibromomethane	47.83	1.0	ug/L	50.4		95.0	73-147			
Bromodichloromethane	56.79	1.0	ug/L	50.1		113	68-129			
cis-1,3-Dichloropropene	47.10	1.0	ug/L	50.1		94.0	65-134			
4-Methyl-2-pentanone (MIBK)	124.0	5.0	ug/L	100		124	58-147			
Toluene	56.27	1.0	ug/L	50.5		111	72-133			
trans-1,3-Dichloropropene	55.07	1.0	ug/L	50.1		110	67-130			
1,1,2-Trichloroethane	54.61	1.0	ug/L	50.1		109	69-135			
Tetrachloroethylene	54.73	1.0	ug/L	50.1		109	69-130			
2-Hexanone (MBK)	124.4	5.0	ug/L	100		124	55-144			
Dibromochloromethane	45.14	1.0	ug/L	50.1		90.2	73-127			
1,2-Dibromoethane	50.90	1.0	ug/L	50.2		101	67-132			
Chlorobenzene	52.31	1.0	ug/L	50.1		104	72-123			
1,1,1,2-Tetrachloroethane	49.61	1.0	ug/L	50.3		98.5	73-127			
Ethylbenzene	56.16	1.0	ug/L	50.2		112	71-127			
Xylenes, total	174.7	2.0	ug/L	151		116	74-127			
Styrene	55.04	1.0	ug/L	50.4		109	66-126			
Bromoform	52.11	1.0	ug/L	50.1		104	68-130			
1,2,3-Trichloropropane	53.13	1.0	ug/L	50.3		106	63-136			
trans-1,4-Dichloro-2-butene	118.1	5.0	ug/L	100		118	54-134			
1,1,2,2-Tetrachloroethane	51.31	1.0	ug/L	50.1		102	61-131			
1,4-Dichlorobenzene	50.46	1.0	ug/L	50.1		101	70-129			
1,2-Dichlorobenzene	49.48	1.0	ug/L	50.1		98.8	69-126			
1,2-Dibromo-3-chloropropane	43.55	5.0	ug/L	50.1		86.9	50-143			
Surrogate: Dibromofluoromethane	47.0		ug/L	50.2		93.7	57-128			
Surrogate: Dibromofluoromethane	47.0		ug/L	50.2		93.7	75-136			
Surrogate: 1,2-Dichloroethane-d4	58.5		ug/L	50.4		116	49-135			
Surrogate: 1,2-Dichloroethane-d4	58.5		ug/L	50.4		116	49-135			
Surrogate: 1,2-Dichloroethane-d4	58.5		ug/L	50.4		116	61-142			
Surrogate: Toluene-d8	51.0		ug/L	50.5		101	82-116			
Surrogate: Toluene-d8	51.0		ug/L	50.5		101	82-116			
Surrogate: Toluene-d8	51.0		ug/L	50.5		101	82-121			
Surrogate: 4-Bromofluorobenzene	58.1		ug/L	50.2		116	77-114			S1
Surrogate: 4-Bromofluorobenzene	58.1		ug/L	50.2		116	77-114			S1
Surrogate: 4-Bromofluorobenzene	58.1		ug/L	50.2		116	80-116			
LCS Dup (1IJ1171-BS1)				Prepared: 10/20/25 00:00 Analyzed: 10/20/25 10:19						
Chloromethane	26.59	1.0	ug/L	30.3		87.7	63-155	3.87	24	
Vinyl Chloride	34.52	1.0	ug/L	30.2		114	70-154	9.78	25	
Bromomethane	24.98	1.0	ug/L	30.1		82.9	52-176	3.75	27	
Chloroethane	24.96	1.0	ug/L	30.3		82.3	72-148	5.87	25	
Trichlorofluoromethane	29.07	1.0	ug/L	30.3		95.9	70-152	4.90	26	
Acrolein	58.23	10.0	ug/L	50.3		116	10-178	1.04	30	
1,1-Dichloroethylene	59.52	1.0	ug/L	50.1		119	70-148	1.45	24	

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CERTIFICATE OF ANALYSIS

1IJ1461

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ1171 - EPA 5030B - EPA 8260D										
LCS Dup (1IJ1171-BSD1)				Prepared: 10/20/25 00:00 Analyzed: 10/20/25 10:19						
Acetone	118.1	10.0	ug/L	100		118	43-172	1.44	30	
Methyl Iodide	109.4	1.0	ug/L	100		109	69-170	0.928	30	
Carbon Disulfide	101.4	1.0	ug/L	100		101	72-162	3.86	24	
Methylene Chloride	48.74	5.0	ug/L	50.1		97.3	68-142	0.144	21	
Acrylonitrile	58.58	5.0	ug/L	50.4		116	33-163	3.58	28	
Acrylonitrile	58.58	5.0	ug/L	50.4		116	33-163	3.58	28	
trans-1,2-Dichloroethylene	61.19	1.0	ug/L	50.1		122	66-148	1.56	27	
1,1-Dichloroethane	59.18	1.0	ug/L	50.1		118	66-143	2.40	24	
Vinyl Acetate	149.6	5.0	ug/L	142		105	43-153	0.347	30	
cis-1,2-Dichloroethylene	51.29	1.0	ug/L	50.4		102	71-149	2.03	26	
2-Butanone (MEK)	125.6	10.0	ug/L	100		126	52-159	1.40	27	
Bromochloromethane	61.93	1.0	ug/L	50.4		123	69-143	0.859	23	
Chloroform	53.62	1.0	ug/L	50.1		107	69-144	0.524	23	
1,1,1-Trichloroethane	54.57	1.0	ug/L	50.1		109	62-129	1.60	24	
Carbon Tetrachloride	56.81	1.0	ug/L	50.1		113	63-141	0.106	25	
Benzene	55.83	1.0	ug/L	50.4		111	71-134	1.14	24	
1,2-Dichloroethane	64.74	1.0	ug/L	50.1		129	72-132	1.13	24	
Trichloroethylene	56.68	1.0	ug/L	50.1		113	71-135	1.56	24	
1,2-Dichloropropane	58.62	1.0	ug/L	50.1		117	69-136	1.69	24	
Dibromomethane	48.54	1.0	ug/L	50.4		96.4	73-147	1.47	25	
Bromodichloromethane	56.14	1.0	ug/L	50.1		112	68-129	1.15	22	
cis-1,3-Dichloropropene	47.83	1.0	ug/L	50.1		95.5	65-134	1.54	23	
4-Methyl-2-pentanone (MIBK)	126.9	5.0	ug/L	100		127	58-147	2.31	27	
Toluene	54.94	1.0	ug/L	50.5		109	72-133	2.39	24	
trans-1,3-Dichloropropene	55.65	1.0	ug/L	50.1		111	67-130	1.05	24	
1,1,2-Trichloroethane	54.91	1.0	ug/L	50.1		110	69-135	0.548	23	
Tetrachloroethylene	51.04	1.0	ug/L	50.1		102	69-130	6.98	25	
2-Hexanone (MBK)	122.8	5.0	ug/L	100		123	55-144	1.28	25	
Dibromochloromethane	45.22	1.0	ug/L	50.1		90.3	73-127	0.177	22	
1,2-Dibromoethane	49.24	1.0	ug/L	50.2		98.0	67-132	3.32	24	
Chlorobenzene	50.27	1.0	ug/L	50.1		100	72-123	3.98	23	
1,1,1,2-Tetrachloroethane	49.03	1.0	ug/L	50.3		97.4	73-127	1.18	24	
Ethylbenzene	54.97	1.0	ug/L	50.2		110	71-127	2.14	26	
Xylenes, total	168.7	2.0	ug/L	151		112	74-127	3.50	25	
Styrene	52.63	1.0	ug/L	50.4		104	66-126	4.48	23	
Bromoform	50.22	1.0	ug/L	50.1		100	68-130	3.69	23	
1,2,3-Trichloropropane	53.49	1.0	ug/L	50.3		106	63-136	0.675	24	
trans-1,4-Dichloro-2-butene	115.5	5.0	ug/L	100		116	54-134	2.23	27	
1,1,2,2-Tetrachloroethane	52.64	1.0	ug/L	50.1		105	61-131	2.56	29	
1,4-Dichlorobenzene	51.64	1.0	ug/L	50.1		103	70-129	2.31	24	
1,2-Dichlorobenzene	50.34	1.0	ug/L	50.1		100	69-126	1.72	26	
1,2-Dibromo-3-chloropropane	44.67	5.0	ug/L	50.1		89.1	50-143	2.54	30	

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CERTIFICATE OF ANALYSIS

1IJ1461

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ1171 - EPA 5030B - EPA 8260D										

LCS Dup (1IJ1171-BSD1)

Prepared: 10/20/25 00:00 Analyzed: 10/20/25 10:19

Surrogate: Dibromofluoromethane	47.9		ug/L	50.2		95.4	57-128
Surrogate: Dibromofluoromethane	47.9		ug/L	50.2		95.4	75-136
Surrogate: 1,2-Dichloroethane-d4	58.6		ug/L	50.4		116	49-135
Surrogate: 1,2-Dichloroethane-d4	58.6		ug/L	50.4		116	49-135
Surrogate: 1,2-Dichloroethane-d4	58.6		ug/L	50.4		116	61-142
Surrogate: Toluene-d8	51.6		ug/L	50.5		102	82-116
Surrogate: Toluene-d8	51.6		ug/L	50.5		102	82-116
Surrogate: Toluene-d8	51.6		ug/L	50.5		102	82-121
Surrogate: 4-Bromofluorobenzene	57.1		ug/L	50.2		114	77-114
Surrogate: 4-Bromofluorobenzene	57.1		ug/L	50.2		114	77-114
Surrogate: 4-Bromofluorobenzene	57.1		ug/L	50.2		114	80-116

Matrix Spike (1IJ1171-MS1)

Source: 1IJ1462-01

Prepared: 10/20/25 00:00 Analyzed: 10/20/25 19:05

Chloromethane	272.9	10.0	ug/L	303	ND	90.0	61-152	M1
Vinyl Chloride	531.5	10.0	ug/L	302	ND	176	66-149	
Bromomethane	247.2	10.0	ug/L	301	ND	82.1	43-171	
Chloroethane	284.5	10.0	ug/L	303	ND	93.8	69-148	
Trichlorofluoromethane	318.7	10.0	ug/L	303	ND	105	62-163	
Acrolein	623.5	100	ug/L	503	ND	124	10-170	
1,1-Dichloroethylene	633.3	10.0	ug/L	501	ND	126	70-148	
Acetone	1527	100	ug/L	1000	ND	153	45-173	
Methyl Iodide	1025	10.0	ug/L	1000	ND	102	62-167	
Carbon Disulfide	1014	10.0	ug/L	1000	ND	101	71-163	
Methylene Chloride	493.8	50.0	ug/L	501	ND	98.6	69-140	
Acrylonitrile	614.3	50.0	ug/L	504	ND	122	32-159	
Acrylonitrile	614.3	50.0	ug/L	504	ND	122	32-159	
trans-1,2-Dichloroethylene	632.8	10.0	ug/L	501	ND	126	69-144	
1,1-Dichloroethane	628.5	10.0	ug/L	501	ND	125	70-138	
Vinyl Acetate	1571	50.0	ug/L	1420	ND	110	58-142	
cis-1,2-Dichloroethylene	535.9	10.0	ug/L	504	ND	106	68-151	
2-Butanone (MEK)	1369	100	ug/L	1000	ND	137	50-160	
Bromochloromethane	654.8	10.0	ug/L	504	ND	130	65-143	
Chloroform	553.2	10.0	ug/L	501	ND	110	71-143	
1,1,1-Trichloroethane	574.3	10.0	ug/L	501	ND	115	63-133	
Carbon Tetrachloride	569.7	10.0	ug/L	501	ND	114	63-142	
Benzene	561.6	10.0	ug/L	504	ND	111	69-133	
1,2-Dichloroethane	632.3	10.0	ug/L	501	ND	126	63-138	
Trichloroethylene	559.6	10.0	ug/L	501	ND	112	71-133	
1,2-Dichloropropane	575.5	10.0	ug/L	501	ND	115	69-132	
Dibromomethane	499.5	10.0	ug/L	504	ND	99.2	70-147	
Bromodichloromethane	560.5	10.0	ug/L	501	ND	112	67-130	
cis-1,3-Dichloropropene	459.9	10.0	ug/L	501	ND	91.8	61-126	
4-Methyl-2-pentanone (MIBK)	1259	50.0	ug/L	1000	ND	126	55-147	
Toluene	561.8	10.0	ug/L	505	ND	111	71-133	

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CERTIFICATE OF ANALYSIS

1IJ1461

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ1171 - EPA 5030B - EPA 8260D										
Matrix Spike (1IJ1171-MS1)	Source: 1IJ1462-01			Prepared: 10/20/25 00:00 Analyzed: 10/20/25 19:05						
trans-1,3-Dichloropropene	531.6	10.0	ug/L	501	ND	106	63-124			
1,1,2-Trichloroethane	542.6	10.0	ug/L	501	ND	108	69-133			
Tetrachloroethylene	521.3	10.0	ug/L	501	ND	104	70-124			
2-Hexanone (MBK)	1209	50.0	ug/L	1000	ND	121	53-141			
Dibromochloromethane	437.4	10.0	ug/L	501	ND	87.4	74-122			
1,2-Dibromoethane	494.6	10.0	ug/L	502	ND	98.5	66-127			
Chlorobenzene	516.9	10.0	ug/L	501	ND	103	76-116			
1,1,1,2-Tetrachloroethane	480.4	10.0	ug/L	503	ND	95.4	77-121			
Ethylbenzene	549.5	10.0	ug/L	502	ND	110	73-124			
Xylenes, total	1733	20.0	ug/L	1510	ND	115	75-123			
Styrene	532.3	10.0	ug/L	504	ND	106	70-120			
Bromoform	500.2	10.0	ug/L	501	ND	99.8	70-124			
1,2,3-Trichloropropane	539.1	10.0	ug/L	503	ND	107	62-135			
trans-1,4-Dichloro-2-butene	1123	50.0	ug/L	1000	ND	112	50-120			
1,1,2,2-Tetrachloroethane	527.3	10.0	ug/L	501	ND	105	63-126			
1,4-Dichlorobenzene	521.7	10.0	ug/L	501	ND	104	72-119			
1,2-Dichlorobenzene	508.4	10.0	ug/L	501	ND	101	71-117			
1,2-Dibromo-3-chloropropane	434.5	50.0	ug/L	501	ND	86.7	49-134			
Surrogate: Dibromofluoromethane	516		ug/L	502		103	57-128			
Surrogate: Dibromofluoromethane	516		ug/L	502		103	75-136			
Surrogate: 1,2-Dichloroethane-d4	610		ug/L	504		121	49-135			
Surrogate: 1,2-Dichloroethane-d4	610		ug/L	504		121	49-135			
Surrogate: 1,2-Dichloroethane-d4	610		ug/L	504		121	61-142			
Surrogate: Toluene-d8	525		ug/L	505		104	82-116			
Surrogate: Toluene-d8	525		ug/L	505		104	82-116			
Surrogate: Toluene-d8	525		ug/L	505		104	82-121			
Surrogate: 4-Bromofluorobenzene	570		ug/L	502		114	77-114			
Surrogate: 4-Bromofluorobenzene	570		ug/L	502		114	77-114			
Surrogate: 4-Bromofluorobenzene	570		ug/L	502		114	80-116			
Matrix Spike Dup (1IJ1171-MSD1)	Source: 1IJ1462-01			Prepared: 10/20/25 00:00 Analyzed: 10/20/25 19:28						
Chloromethane	274.0	10.0	ug/L	303	ND	90.4	61-152	0.402	26	
Vinyl Chloride	499.3	10.0	ug/L	302	ND	165	66-149	6.25	23	M1
Bromomethane	236.0	10.0	ug/L	301	ND	78.3	43-171	4.64	29	
Chloroethane	278.4	10.0	ug/L	303	ND	91.8	69-148	2.17	25	
Trichlorofluoromethane	302.0	10.0	ug/L	303	ND	99.7	62-163	5.38	25	
Acrolein	602.2	100	ug/L	503	ND	120	10-170	3.48	30	
1,1-Dichloroethylene	614.8	10.0	ug/L	501	ND	123	70-148	2.96	22	
Acetone	1549	100	ug/L	1000	ND	155	45-173	1.44	30	
Methyl Iodide	1063	10.0	ug/L	1000	ND	106	62-167	3.62	24	
Carbon Disulfide	1007	10.0	ug/L	1000	ND	101	71-163	0.663	22	
Methylene Chloride	495.6	50.0	ug/L	501	ND	98.9	69-140	0.364	19	
Acrylonitrile	613.8	50.0	ug/L	504	ND	122	32-159	0.0814	30	
Acrylonitrile	613.8	50.0	ug/L	504	ND	122	32-159	0.0814	30	

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CERTIFICATE OF ANALYSIS

1IJ1461

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ1171 - EPA 5030B - EPA 8260D										
Matrix Spike Dup (1IJ1171-MSD1)										
Source: 1IJ1462-01			Prepared: 10/20/25 00:00 Analyzed: 10/20/25 19:28							
trans-1,2-Dichloroethylene	611.9	10.0	ug/L	501	ND	122	69-144	3.36	22	
1,1-Dichloroethane	604.1	10.0	ug/L	501	ND	121	70-138	3.96	20	
Vinyl Acetate	1626	50.0	ug/L	1420	ND	114	58-142	3.41	24	
cis-1,2-Dichloroethylene	520.4	10.0	ug/L	504	ND	103	68-151	2.93	22	
2-Butanone (MEK)	1287	100	ug/L	1000	ND	129	50-160	6.12	23	
Bromochloromethane	651.6	10.0	ug/L	504	ND	129	65-143	0.490	22	
Chloroform	557.8	10.0	ug/L	501	ND	111	71-143	0.828	21	
1,1,1-Trichloroethane	557.1	10.0	ug/L	501	ND	111	63-133	3.04	23	
Carbon Tetrachloride	565.9	10.0	ug/L	501	ND	113	63-142	0.669	22	
Benzene	552.0	10.0	ug/L	504	ND	109	69-133	1.72	18	
1,2-Dichloroethane	650.8	10.0	ug/L	501	ND	130	63-138	2.88	20	
Trichloroethylene	553.6	10.0	ug/L	501	ND	111	71-133	1.08	23	
1,2-Dichloropropane	568.3	10.0	ug/L	501	ND	113	69-132	1.26	20	
Dibromomethane	485.5	10.0	ug/L	504	ND	96.4	70-147	2.84	22	
Bromodichloromethane	560.3	10.0	ug/L	501	ND	112	67-130	0.0357	21	
cis-1,3-Dichloropropene	465.3	10.0	ug/L	501	ND	92.9	61-126	1.17	21	
4-Methyl-2-pentanone (MIBK)	1268	50.0	ug/L	1000	ND	127	55-147	0.712	23	
Toluene	547.9	10.0	ug/L	505	ND	109	71-133	2.51	19	
trans-1,3-Dichloropropene	528.8	10.0	ug/L	501	ND	106	63-124	0.528	21	
1,1,2-Trichloroethane	555.7	10.0	ug/L	501	ND	111	69-133	2.39	19	
Tetrachloroethylene	496.5	10.0	ug/L	501	ND	99.1	70-124	4.87	24	
2-Hexanone (MBK)	1228	50.0	ug/L	1000	ND	123	53-141	1.53	24	
Dibromochloromethane	444.0	10.0	ug/L	501	ND	88.7	74-122	1.50	21	
1,2-Dibromoethane	492.8	10.0	ug/L	502	ND	98.1	66-127	0.365	23	
Chlorobenzene	499.3	10.0	ug/L	501	ND	99.7	76-116	3.46	21	
1,1,1,2-Tetrachloroethane	474.9	10.0	ug/L	503	ND	94.3	77-121	1.15	25	
Ethylbenzene	546.8	10.0	ug/L	502	ND	109	73-124	0.493	20	
Xylenes, total	1679	20.0	ug/L	1510	ND	111	75-123	3.15	20	
Styrene	525.3	10.0	ug/L	504	ND	104	70-120	1.32	23	
Bromoform	482.1	10.0	ug/L	501	ND	96.2	70-124	3.69	22	
1,2,3-Trichloropropane	519.6	10.0	ug/L	503	ND	103	62-135	3.68	28	
trans-1,4-Dichloro-2-butene	1122	50.0	ug/L	1000	ND	112	50-120	0.107	26	
1,1,2,2-Tetrachloroethane	530.9	10.0	ug/L	501	ND	106	63-126	0.680	24	
1,4-Dichlorobenzene	506.8	10.0	ug/L	501	ND	101	72-119	2.90	24	
1,2-Dichlorobenzene	499.7	10.0	ug/L	501	ND	99.8	71-117	1.73	24	
1,2-Dibromo-3-chloropropane	439.4	50.0	ug/L	501	ND	87.7	49-134	1.12	28	
Surrogate: Dibromofluoromethane	515		ug/L	502		103	57-128			
Surrogate: Dibromofluoromethane	515		ug/L	502		103	75-136			
Surrogate: 1,2-Dichloroethane-d4	622		ug/L	504		123	49-135			
Surrogate: 1,2-Dichloroethane-d4	622		ug/L	504		123	49-135			
Surrogate: 1,2-Dichloroethane-d4	622		ug/L	504		123	61-142			
Surrogate: Toluene-d8	524		ug/L	505		104	82-116			
Surrogate: Toluene-d8	524		ug/L	505		104	82-116			

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CERTIFICATE OF ANALYSIS

1IJ1461

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ1171 - EPA 5030B - EPA 8260D										
Matrix Spike Dup (1IJ1171-MSD1)		Source: 1IJ1462-01		Prepared: 10/20/25 00:00 Analyzed: 10/20/25 19:28						
Surrogate: Toluene-d8	524		ug/L	505		104	82-121			
Surrogate: 4-Bromofluorobenzene	566		ug/L	502		113	77-114			
Surrogate: 4-Bromofluorobenzene	566		ug/L	502		113	77-114			
Surrogate: 4-Bromofluorobenzene	566		ug/L	502		113	80-116			

Batch 1IJ1499 - EPA 5030B - EPA 8260D

Blank (1IJ1499-BLK1) Prepared: 10/24/25 00:00 Analyzed: 10/24/25 10:44

Dichlorodifluoromethane	<1.0	1.0	ug/L
Chloromethane	<1.0	1.0	ug/L
Vinyl Chloride	<1.0	1.0	ug/L
Bromomethane	<1.0	1.0	ug/L
Chloroethane	<1.0	1.0	ug/L
Trichlorofluoromethane	<1.0	1.0	ug/L
1,1-Dichloroethylene	<1.0	1.0	ug/L
Acetone	<10.0	10.0	ug/L
Methyl Iodide	<2.0	2.0	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
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L
1,1-Dichloroethane	<1.0	1.0	ug/L
Vinyl Acetate	<5.0	5.0	ug/L
2,2-Dichloropropane	<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
Bromochloromethane	<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-Dichloropropene	<1.0	1.0	ug/L
Carbon Tetrachloride	<1.0	1.0	ug/L
Benzene	<1.0	1.0	ug/L
1,2-Dichloroethane	<1.0	1.0	ug/L
Trichloroethylene	<1.0	1.0	ug/L
1,2-Dichloropropane	<1.0	1.0	ug/L
Dibromomethane	<1.0	1.0	ug/L
Bromodichloromethane	<1.0	1.0	ug/L
cis-1,3-Dichloropropene	<1.0	1.0	ug/L
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L
Toluene	<1.0	1.0	ug/L
trans-1,3-Dichloropropene	<1.0	1.0	ug/L
Ethyl Methacrylate	<10.0	10.0	ug/L
1,1,2-Trichloroethane	<1.0	1.0	ug/L

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CERTIFICATE OF ANALYSIS

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Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ1499 - EPA 5030B - EPA 8260D										
Blank (1IJ1499-BLK1)				Prepared: 10/24/25 00:00 Analyzed: 10/24/25 10:44						
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							
Dibromochloromethane	<1.0	1.0	ug/L							
1,2-Dibromoethane	<1.0	1.0	ug/L							
Chlorobenzene	<1.0	1.0	ug/L							
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L							
Ethylbenzene	<1.0	1.0	ug/L							
Xylenes, total	<2.0	2.0	ug/L							
Styrene	<1.0	1.0	ug/L							
Bromoform	<1.0	1.0	ug/L							
1,2,3-Trichloropropane	<1.0	1.0	ug/L							
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L							
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L							
1,3-Dichlorobenzene	<1.0	1.0	ug/L							
1,4-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dibromo-3-chloropropane	<1.0	1.0	ug/L							
1,2,4-Trichlorobenzene	<1.0	1.0	ug/L							
Surrogate: Dibromofluoromethane	47.2		ug/L	50.2		94.0	57-128			
Surrogate: 1,2-Dichloroethane-d4	55.3		ug/L	50.4		110	49-135			
Surrogate: Toluene-d8	52.2		ug/L	50.5		103	82-116			
Surrogate: 4-Bromofluorobenzene	52.0		ug/L	50.2		104	77-114			
LCS (1IJ1499-BS1)				Prepared: 10/24/25 00:00 Analyzed: 10/24/25 17:12						
Dichlorodifluoromethane	28.06	1.0	ug/L	30.3		92.6	55-141			
Chloromethane	31.27	1.0	ug/L	30.3		103	45-170			
Vinyl Chloride	52.67	1.0	ug/L	30.2		174	51-157			Q2
Bromomethane	28.33	1.0	ug/L	30.1		94.1	51-161			
Chloroethane	28.30	1.0	ug/L	30.3		93.3	68-134			
Trichlorofluoromethane	31.80	1.0	ug/L	30.3		105	54-146			
1,1-Dichloroethylene	63.20	1.0	ug/L	50.1		126	63-137			
Acetone	147.2	10.0	ug/L	100		147	50-156			
Methyl Iodide	85.45	2.0	ug/L	100		85.4	62-147			
Carbon Disulfide	107.3	1.0	ug/L	100		107	60-129			
Acetonitrile	131.8	10.0	ug/L	100		132	53-151			
Methylene Chloride	49.56	5.0	ug/L	50.1		98.9	66-126			
trans-1,2-Dichloroethylene	62.81	1.0	ug/L	50.1		125	68-134			
1,1-Dichloroethane	60.78	1.0	ug/L	50.1		121	69-133			
Vinyl Acetate	151.3	5.0	ug/L	142		106	69-151			
2,2-Dichloropropane	58.30	1.0	ug/L	50.3		116	59-141			
cis-1,2-Dichloroethylene	52.74	1.0	ug/L	50.4		105	70-132			
2-Butanone (MEK)	131.2	5.0	ug/L	100		131	57-136			

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CERTIFICATE OF ANALYSIS

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Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ1499 - EPA 5030B - EPA 8260D										
LCS (1IJ1499-BS1)										
Prepared: 10/24/25 00:00 Analyzed: 10/24/25 17:12										
Bromochloromethane	64.55	1.0	ug/L	50.4		128	73-127			Q2
Chloroform	54.50	1.0	ug/L	50.1		109	67-130			
1,1,1-Trichloroethane	56.69	1.0	ug/L	50.1		113	63-135			
1,1-Dichloropropene	57.66	1.0	ug/L	50.5		114	66-134			
Carbon Tetrachloride	55.93	1.0	ug/L	50.1		112	67-134			
Benzene	57.32	1.0	ug/L	50.4		114	80-118			
1,2-Dichloroethane	65.63	1.0	ug/L	50.1		131	77-126			Q2
Trichloroethylene	58.90	1.0	ug/L	50.1		118	79-120			
1,2-Dichloropropane	59.31	1.0	ug/L	50.1		118	80-121			
Dibromomethane	50.32	1.0	ug/L	50.4		99.9	75-122			
Bromodichloromethane	58.54	1.0	ug/L	50.1		117	79-123			
cis-1,3-Dichloropropene	48.70	1.0	ug/L	50.1		97.2	77-116			
4-Methyl-2-pentanone (MIBK)	128.8	5.0	ug/L	100		129	64-138			
Toluene	57.92	1.0	ug/L	50.5		115	79-118			
trans-1,3-Dichloropropene	56.89	1.0	ug/L	50.1		114	77-116			
Ethyl Methacrylate	98.97	10.0	ug/L	100		99.0	63-130			
1,1,2-Trichloroethane	57.34	1.0	ug/L	50.1		114	80-117			
Tetrachloroethylene	53.76	1.0	ug/L	50.1		107	77-126			
1,3-Dichloropropane	55.68	1.0	ug/L	50.4		110	79-131			
2-Hexanone (MBK)	122.2	5.0	ug/L	100		122	60-149			
Dibromochloromethane	44.46	1.0	ug/L	50.1		88.8	86-121			
1,2-Dibromoethane	50.37	1.0	ug/L	50.2		100	77-124			
Chlorobenzene	51.83	1.0	ug/L	50.1		103	77-124			
1,1,1,2-Tetrachloroethane	48.81	1.0	ug/L	50.3		97.0	84-117			
Ethylbenzene	56.81	1.0	ug/L	50.2		113	79-128			
Xylenes, total	176.7	2.0	ug/L	151		117	81-124			
Styrene	54.90	1.0	ug/L	50.4		109	83-124			
Bromoform	49.01	1.0	ug/L	50.1		97.8	81-121			
1,2,3-Trichloropropane	56.03	1.0	ug/L	50.3		111	76-120			
trans-1,4-Dichloro-2-butene	115.2	5.0	ug/L	100		115	55-128			
1,1,2,2-Tetrachloroethane	52.48	1.0	ug/L	50.1		105	65-138			
1,3-Dichlorobenzene	54.53	1.0	ug/L	50.1		109	78-122			
1,4-Dichlorobenzene	51.69	1.0	ug/L	50.1		103	72-125			
1,2-Dichlorobenzene	50.25	1.0	ug/L	50.1		100	76-124			
1,2-Dibromo-3-chloropropane	44.24	1.0	ug/L	50.1		88.3	28-160			
1,2,4-Trichlorobenzene	52.03	1.0	ug/L	50.4		103	34-154			
Surrogate: Dibromofluoromethane	47.8		ug/L	50.2		95.1	57-128			
Surrogate: 1,2-Dichloroethane-d4	58.6		ug/L	50.4		116	49-135			
Surrogate: Toluene-d8	52.5		ug/L	50.5		104	82-116			
Surrogate: 4-Bromofluorobenzene	57.9		ug/L	50.2		115	77-114			S1
LCS Dup (1IJ1499-BSD1)										
Prepared: 10/24/25 00:00 Analyzed: 10/24/25 17:35										
Dichlorodifluoromethane	28.81	1.0	ug/L	30.3		95.1	55-141	2.64	24	

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CERTIFICATE OF ANALYSIS

1IJ1461

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ1499 - EPA 5030B - EPA 8260D										
LCS Dup (1IJ1499-BSD1)				Prepared: 10/24/25 00:00 Analyzed: 10/24/25 17:35						
Chloromethane	32.44	1.0	ug/L	30.3		107	45-170	3.67	25	
Vinyl Chloride	50.05	1.0	ug/L	30.2		165	51-157	5.10	23	Q2
Bromomethane	49.70	1.0	ug/L	30.1		165	51-161	54.8	22	Q2, R1
Chloroethane	28.15	1.0	ug/L	30.3		92.8	68-134	0.531	21	
Trichlorofluoromethane	31.75	1.0	ug/L	30.3		105	54-146	0.157	23	
1,1-Dichloroethylene	61.83	1.0	ug/L	50.1		123	63-137	2.19	23	
Acetone	138.2	10.0	ug/L	100		138	50-156	6.32	30	
Methyl Iodide	96.53	2.0	ug/L	100		96.5	62-147	12.2	17	
Carbon Disulfide	107.3	1.0	ug/L	100		107	60-129	0.0559	20	
Acetonitrile	123.8	10.0	ug/L	100		124	53-151	6.31	30	
Methylene Chloride	52.02	5.0	ug/L	50.1		104	66-126	4.84	14	
trans-1,2-Dichloroethylene	62.04	1.0	ug/L	50.1		124	68-134	1.23	17	
1,1-Dichloroethane	62.56	1.0	ug/L	50.1		125	69-133	2.89	14	
Vinyl Acetate	160.4	5.0	ug/L	142		113	69-151	5.81	30	
2,2-Dichloropropane	58.06	1.0	ug/L	50.3		115	59-141	0.413	30	
cis-1,2-Dichloroethylene	52.27	1.0	ug/L	50.4		104	70-132	0.895	13	
2-Butanone (MEK)	126.5	5.0	ug/L	100		127	57-136	3.65	30	
Bromochloromethane	65.26	1.0	ug/L	50.4		129	73-127	1.09	30	Q2
Chloroform	54.96	1.0	ug/L	50.1		110	67-130	0.840	13	
1,1,1-Trichloroethane	55.76	1.0	ug/L	50.1		111	63-135	1.65	15	
1,1-Dichloropropene	58.84	1.0	ug/L	50.5		117	66-134	2.03	30	
Carbon Tetrachloride	55.93	1.0	ug/L	50.1		112	67-134	0.00	16	
Benzene	56.52	1.0	ug/L	50.4		112	80-118	1.41	13	
1,2-Dichloroethane	63.94	1.0	ug/L	50.1		128	77-126	2.61	16	Q2
Trichloroethylene	56.55	1.0	ug/L	50.1		113	79-120	4.07	16	
1,2-Dichloropropane	58.69	1.0	ug/L	50.1		117	80-121	1.05	13	
Dibromomethane	48.89	1.0	ug/L	50.4		97.1	75-122	2.88	30	
Bromodichloromethane	56.74	1.0	ug/L	50.1		113	79-123	3.12	12	
cis-1,3-Dichloropropene	47.96	1.0	ug/L	50.1		95.8	77-116	1.53	13	
4-Methyl-2-pentanone (MIBK)	125.3	5.0	ug/L	100		125	64-138	2.76	30	
Toluene	55.76	1.0	ug/L	50.5		110	79-118	3.80	14	
trans-1,3-Dichloropropene	56.24	1.0	ug/L	50.1		112	77-116	1.15	17	
Ethyl Methacrylate	98.30	10.0	ug/L	100		98.3	63-130	0.679	30	
1,1,2-Trichloroethane	54.54	1.0	ug/L	50.1		109	80-117	5.01	18	
Tetrachloroethylene	51.58	1.0	ug/L	50.1		103	77-126	4.14	15	
1,3-Dichloropropane	55.29	1.0	ug/L	50.4		110	79-131	0.703	30	
2-Hexanone (MBK)	118.2	5.0	ug/L	100		118	60-149	3.32	30	
Dibromochloromethane	44.80	1.0	ug/L	50.1		89.5	86-121	0.762	14	
1,2-Dibromoethane	50.65	1.0	ug/L	50.2		101	77-124	0.554	30	
Chlorobenzene	50.62	1.0	ug/L	50.1		101	77-124	2.36	14	
1,1,1,2-Tetrachloroethane	48.09	1.0	ug/L	50.3		95.5	84-117	1.49	30	
Ethylbenzene	54.93	1.0	ug/L	50.2		109	79-128	3.36	14	
Xylenes, total	170.9	2.0	ug/L	151		113	81-124	3.32	16	

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CERTIFICATE OF ANALYSIS

1IJ1461

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ1499 - EPA 5030B - EPA 8260D										
LCS Dup (1IJ1499-BSD1)				Prepared: 10/24/25 00:00 Analyzed: 10/24/25 17:35						
Styrene	53.11	1.0	ug/L	50.4		105	83-124	3.31	30	
Bromoform	49.27	1.0	ug/L	50.1		98.3	81-121	0.529	21	
1,2,3-Trichloropropane	52.59	1.0	ug/L	50.3		104	76-120	6.33	30	
trans-1,4-Dichloro-2-butene	116.8	5.0	ug/L	100		117	55-128	1.36	30	
1,1,2,2-Tetrachloroethane	53.45	1.0	ug/L	50.1		107	65-138	1.83	27	
1,3-Dichlorobenzene	52.88	1.0	ug/L	50.1		106	78-122	3.07	13	
1,4-Dichlorobenzene	51.73	1.0	ug/L	50.1		103	72-125	0.0774	11	
1,2-Dichlorobenzene	51.01	1.0	ug/L	50.1		102	76-124	1.50	13	
1,2-Dibromo-3-chloropropane	43.21	1.0	ug/L	50.1		86.2	28-160	2.36	30	
1,2,4-Trichlorobenzene	52.84	1.0	ug/L	50.4		105	34-154	1.54	30	
Surrogate: Dibromofluoromethane	49.5		ug/L	50.2		98.6	57-128			
Surrogate: 1,2-Dichloroethane-d4	60.1		ug/L	50.4		119	49-135			
Surrogate: Toluene-d8	51.5		ug/L	50.5		102	82-116			
Surrogate: 4-Bromofluorobenzene	58.6		ug/L	50.2		117	77-114			S1
Matrix Spike (1IJ1499-MS1)				Source: 1IJ1987-01 Prepared: 10/24/25 00:00 Analyzed: 10/24/25 17:58						
Dichlorodifluoromethane	303.8	10.0	ug/L	303	ND	100	58-130			
Chloromethane	325.2	10.0	ug/L	303	ND	107	40-170			
Vinyl Chloride	534.3	10.0	ug/L	302	ND	177	49-154			M1
Bromomethane	501.0	10.0	ug/L	301	ND	166	44-159			M1
Chloroethane	532.9	10.0	ug/L	303	ND	176	67-132			M1
Trichlorofluoromethane	653.4	10.0	ug/L	303	ND	216	56-142			M1
1,1-Dichloroethylene	1139	10.0	ug/L	501	ND	227	63-136			M1
Acetone	3087	100	ug/L	1000	ND	309	42-165			M1
Methyl Iodide	1826	20.0	ug/L	1000	ND	183	67-133			M1
Carbon Disulfide	1981	10.0	ug/L	1000	ND	198	56-129			M1
Acetonitrile	1367	100	ug/L	1000	ND	137	61-141			
Methylene Chloride	506.0	50.0	ug/L	501	ND	101	62-129			
trans-1,2-Dichloroethylene	616.1	10.0	ug/L	501	ND	123	65-136			
1,1-Dichloroethane	611.6	10.0	ug/L	501	ND	122	64-137			
Vinyl Acetate	1575	50.0	ug/L	1420	ND	111	69-148			
2,2-Dichloropropane	570.9	10.0	ug/L	503	ND	113	52-123			
cis-1,2-Dichloroethylene	534.9	10.0	ug/L	504	ND	106	65-136			
2-Butanone (MEK)	1314	50.0	ug/L	1000	ND	131	56-147			
Bromochloromethane	644.2	10.0	ug/L	504	ND	128	78-121			M1
Chloroform	550.1	10.0	ug/L	501	ND	110	64-133			
1,1,1-Trichloroethane	567.3	10.0	ug/L	501	ND	113	61-138			
1,1-Dichloropropene	577.2	10.0	ug/L	505	ND	114	69-130			
Carbon Tetrachloride	570.9	10.0	ug/L	501	ND	114	62-140			
Benzene	574.8	10.0	ug/L	504	ND	114	62-137			
1,2-Dichloroethane	658.8	10.0	ug/L	501	ND	132	69-135			
Trichloroethylene	570.7	10.0	ug/L	501	ND	114	77-123			
1,2-Dichloropropane	592.9	10.0	ug/L	501	ND	118	77-126			

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CERTIFICATE OF ANALYSIS

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Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ1499 - EPA 5030B - EPA 8260D										
Matrix Spike (1IJ1499-MS1)	Source: 1IJ1987-01			Prepared: 10/24/25 00:00 Analyzed: 10/24/25 17:58						
Dibromomethane	508.4	10.0	ug/L	504	ND	101	83-116			
Bromodichloromethane	581.5	10.0	ug/L	501	ND	116	73-131			
cis-1,3-Dichloropropene	494.1	10.0	ug/L	501	ND	98.7	71-115			
4-Methyl-2-pentanone (MIBK)	1282	50.0	ug/L	1000	ND	128	71-138			
Toluene	566.8	10.0	ug/L	505	ND	112	76-121			
trans-1,3-Dichloropropene	577.8	10.0	ug/L	501	ND	115	76-113			M1
Ethyl Methacrylate	1017	100	ug/L	1000	ND	102	74-121			
1,1,2-Trichloroethane	553.4	10.0	ug/L	501	ND	110	80-122			
Tetrachloroethylene	512.6	10.0	ug/L	501	ND	102	76-125			
1,3-Dichloropropane	572.3	10.0	ug/L	504	ND	113	79-133			
2-Hexanone (MBK)	1337	50.0	ug/L	1000	ND	134	64-154			
Dibromochloromethane	453.3	10.0	ug/L	501	ND	90.5	84-122			
1,2-Dibromoethane	518.8	10.0	ug/L	502	ND	103	81-120			
Chlorobenzene	519.6	10.0	ug/L	501	ND	104	78-123			
1,1,1,2-Tetrachloroethane	498.0	10.0	ug/L	503	ND	98.9	83-117			
Ethylbenzene	563.9	10.0	ug/L	502	ND	112	76-130			
Xylenes, total	1779	20.0	ug/L	1510	ND	118	77-129			
Styrene	549.3	10.0	ug/L	504	ND	109	84-122			
Bromoform	503.1	10.0	ug/L	501	ND	100	83-120			
1,2,3-Trichloropropane	529.2	10.0	ug/L	503	ND	105	74-126			
trans-1,4-Dichloro-2-butene	1154	50.0	ug/L	1000	ND	115	63-114			M1
1,1,2,2-Tetrachloroethane	546.4	10.0	ug/L	501	ND	109	66-143			
1,3-Dichlorobenzene	537.7	10.0	ug/L	501	ND	107	77-120			
1,4-Dichlorobenzene	520.4	10.0	ug/L	501	ND	104	71-123			
1,2-Dichlorobenzene	516.3	10.0	ug/L	501	ND	103	76-122			
1,2-Dibromo-3-chloropropane	432.2	10.0	ug/L	501	ND	86.2	38-161			
1,2,4-Trichlorobenzene	538.2	10.0	ug/L	504	ND	107	33-150			
Surrogate: Dibromofluoromethane	476		ug/L	502		94.8	57-128			
Surrogate: 1,2-Dichloroethane-d4	592		ug/L	504		118	49-135			
Surrogate: Toluene-d8	516		ug/L	505		102	82-116			
Surrogate: 4-Bromofluorobenzene	577		ug/L	502		115	77-114			S1
Matrix Spike Dup (1IJ1499-MSD1)	Source: 1IJ1987-01			Prepared: 10/24/25 00:00 Analyzed: 10/24/25 18:21						
Dichlorodifluoromethane	319.5	10.0	ug/L	303	ND	105	58-130	5.04	30	
Chloromethane	320.1	10.0	ug/L	303	ND	106	40-170	1.58	16	
Vinyl Chloride	506.1	10.0	ug/L	302	ND	167	49-154	5.42	17	M1
Bromomethane	255.1	10.0	ug/L	301	ND	84.7	44-159	65.0	15	R1
Chloroethane	274.4	10.0	ug/L	303	ND	90.5	67-132	64.0	15	R1
Trichlorofluoromethane	309.1	10.0	ug/L	303	ND	102	56-142	71.5	18	R1
1,1-Dichloroethylene	622.1	10.0	ug/L	501	ND	124	63-136	58.7	16	R1
Acetone	1734	100	ug/L	1000	ND	173	42-165	56.1	30	M1, R1
Methyl Iodide	996.2	20.0	ug/L	1000	ND	99.6	67-133	58.8	14	R1
Carbon Disulfide	1056	10.0	ug/L	1000	ND	106	56-129	60.9	16	R1

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Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ1499 - EPA 5030B - EPA 8260D										
Matrix Spike Dup (1IJ1499-MSD1)	Source: 1IJ1987-01			Prepared: 10/24/25 00:00 Analyzed: 10/24/25 18:21						
Acetonitrile	1307	100	ug/L	1000	ND	131	61-141	4.49	10	
Methylene Chloride	510.8	50.0	ug/L	501	ND	102	62-129	0.944	14	
trans-1,2-Dichloroethylene	618.0	10.0	ug/L	501	ND	123	65-136	0.308	14	
1,1-Dichloroethane	614.4	10.0	ug/L	501	ND	123	64-137	0.457	15	
Vinyl Acetate	1601	50.0	ug/L	1420	ND	112	69-148	1.62	16	
2,2-Dichloropropane	568.0	10.0	ug/L	503	ND	113	52-123	0.509	18	
cis-1,2-Dichloroethylene	513.9	10.0	ug/L	504	ND	102	65-136	4.00	16	
2-Butanone (MEK)	1334	50.0	ug/L	1000	ND	133	56-147	1.57	19	
Bromochloromethane	640.2	10.0	ug/L	504	ND	127	78-121	0.623	16	M1
Chloroform	542.3	10.0	ug/L	501	ND	108	64-133	1.43	14	
1,1,1-Trichloroethane	560.5	10.0	ug/L	501	ND	112	61-138	1.21	15	
1,1-Dichloropropene	571.9	10.0	ug/L	505	ND	113	69-130	0.922	16	
Carbon Tetrachloride	557.3	10.0	ug/L	501	ND	111	62-140	2.41	15	
Benzene	568.7	10.0	ug/L	504	ND	113	62-137	1.07	16	
1,2-Dichloroethane	661.8	10.0	ug/L	501	ND	132	69-135	0.454	15	
Trichloroethylene	565.7	10.0	ug/L	501	ND	113	77-123	0.880	14	
1,2-Dichloropropane	595.8	10.0	ug/L	501	ND	119	77-126	0.488	13	
Dibromomethane	488.5	10.0	ug/L	504	ND	97.0	83-116	3.99	13	
Bromodichloromethane	590.6	10.0	ug/L	501	ND	118	73-131	1.55	16	
cis-1,3-Dichloropropene	505.5	10.0	ug/L	501	ND	101	71-115	2.28	15	
4-Methyl-2-pentanone (MIBK)	1292	50.0	ug/L	1000	ND	129	71-138	0.839	10	
Toluene	558.6	10.0	ug/L	505	ND	111	76-121	1.46	16	
trans-1,3-Dichloropropene	564.9	10.0	ug/L	501	ND	113	76-113	2.26	10	
Ethyl Methacrylate	1027	100	ug/L	1000	ND	103	74-121	0.959	10	
1,1,2-Trichloroethane	569.4	10.0	ug/L	501	ND	114	80-122	2.85	11	
Tetrachloroethylene	504.7	10.0	ug/L	501	ND	101	76-125	1.55	15	
1,3-Dichloropropane	563.5	10.0	ug/L	504	ND	112	79-133	1.55	13	
2-Hexanone (MBK)	1327	50.0	ug/L	1000	ND	133	64-154	0.766	12	
Dibromochloromethane	455.1	10.0	ug/L	501	ND	90.9	84-122	0.396	13	
1,2-Dibromoethane	507.0	10.0	ug/L	502	ND	101	81-120	2.30	13	
Chlorobenzene	509.1	10.0	ug/L	501	ND	102	78-123	2.04	12	
1,1,1,2-Tetrachloroethane	494.7	10.0	ug/L	503	ND	98.3	83-117	0.665	16	
Ethylbenzene	553.6	10.0	ug/L	502	ND	110	76-130	1.84	13	
Xylenes, total	1718	20.0	ug/L	1510	ND	114	77-129	3.52	13	
Styrene	534.8	10.0	ug/L	504	ND	106	84-122	2.68	14	
Bromoform	492.7	10.0	ug/L	501	ND	98.3	83-120	2.09	10	
1,2,3-Trichloropropane	535.3	10.0	ug/L	503	ND	106	74-126	1.15	13	
trans-1,4-Dichloro-2-butene	1151	50.0	ug/L	1000	ND	115	63-114	0.226	14	M1
1,1,2,2-Tetrachloroethane	536.6	10.0	ug/L	501	ND	107	66-143	1.81	16	
1,3-Dichlorobenzene	535.3	10.0	ug/L	501	ND	107	77-120	0.447	18	
1,4-Dichlorobenzene	516.8	10.0	ug/L	501	ND	103	71-123	0.694	16	
1,2-Dichlorobenzene	506.5	10.0	ug/L	501	ND	101	76-122	1.92	17	
1,2-Dibromo-3-chloropropane	456.7	10.0	ug/L	501	ND	91.1	38-161	5.51	27	

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CERTIFICATE OF ANALYSIS

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Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ1499 - EPA 5030B - EPA 8260D										
Matrix Spike Dup (1IJ1499-MSD1)		Source: 1IJ1987-01		Prepared: 10/24/25 00:00 Analyzed: 10/24/25 18:21						
1,2,4-Trichlorobenzene	513.2	10.0	ug/L	504	ND	102	33-150	4.76	29	
Surrogate: Dibromofluoromethane	492		ug/L	502		98.0	57-128			
Surrogate: 1,2-Dichloroethane-d4	589		ug/L	504		117	49-135			
Surrogate: Toluene-d8	522		ug/L	505		103	82-116			
Surrogate: 4-Bromofluorobenzene	583		ug/L	502		116	77-114			S1
Batch 1IJ1564 - EPA 5030B - EPA 8260D										
Blank (1IJ1564-BLK1)		Prepared: 10/27/25 00:00 Analyzed: 10/27/25 17:09								
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	51.7		ug/L	50.2		103	57-128			
Surrogate: 1,2-Dichloroethane-d4	104		ug/L	50.4		206	49-135			S1
Surrogate: Toluene-d8	51.7		ug/L	50.5		102	82-116			
Surrogate: 4-Bromofluorobenzene	49.4		ug/L	50.2		98.5	77-114			
LCS (1IJ1564-BS1)		Prepared: 10/27/25 00:00 Analyzed: 10/27/25 16:00								
Allyl chloride	53.15	1.0	ug/L	50.0		106	56-152			
Chloroprene	56.92	1.0	ug/L	50.0		114	58-152			
Methacrylonitrile	49.78	1.0	ug/L	50.0		99.6	67-129			
Methyl Methacrylate	50.41	1.0	ug/L	50.0		101	73-122			
Propionitrile	48.09	10.0	ug/L	50.0		96.2	57-157			
Surrogate: Dibromofluoromethane	49.8		ug/L	50.2		99.2	57-128			
Surrogate: 1,2-Dichloroethane-d4	46.6		ug/L	50.4		92.5	49-135			
Surrogate: Toluene-d8	49.0		ug/L	50.5		97.2	82-116			
Surrogate: 4-Bromofluorobenzene	50.3		ug/L	50.2		100	77-114			
LCS Dup (1IJ1564-BSD1)		Prepared: 10/27/25 00:00 Analyzed: 10/27/25 16:23								
Allyl chloride	51.38	1.0	ug/L	50.0		103	56-152	3.39	16	
Chloroprene	55.11	1.0	ug/L	50.0		110	58-152	3.23	30	
Methacrylonitrile	52.19	1.0	ug/L	50.0		104	67-129	4.73	30	
Methyl Methacrylate	49.95	1.0	ug/L	50.0		99.9	73-122	0.917	17	
Propionitrile	52.55	10.0	ug/L	50.0		105	57-157	8.86	30	
Surrogate: Dibromofluoromethane	51.2		ug/L	50.2		102	57-128			
Surrogate: 1,2-Dichloroethane-d4	47.4		ug/L	50.4		94.1	49-135			
Surrogate: Toluene-d8	49.0		ug/L	50.5		97.1	82-116			
Surrogate: 4-Bromofluorobenzene	51.3		ug/L	50.2		102	77-114			
Matrix Spike (1IJ1564-MS1)		Source: 1IJ1387-05		Prepared: 10/27/25 00:00 Analyzed: 10/27/25 19:03						
Allyl chloride	549.0	10.0	ug/L	500	ND	110	66-136			
Chloroprene	635.4	10.0	ug/L	500	ND	127	67-139			

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CERTIFICATE OF ANALYSIS

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Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ1564 - EPA 5030B - EPA 8260D										

Matrix Spike (1IJ1564-MS1)	Source: 1IJ1387-05			Prepared: 10/27/25 00:00 Analyzed: 10/27/25 19:03						
Methacrylonitrile	576.4	10.0	ug/L	500	ND	115	60-140			
Methyl Methacrylate	576.2	10.0	ug/L	500	ND	115	86-112			M1
Propionitrile	571.5	100	ug/L	500	ND	114	52-182			
Surrogate: Dibromofluoromethane	510		ug/L	502		102	57-128			
Surrogate: 1,2-Dichloroethane-d4	559		ug/L	504		111	49-135			
Surrogate: Toluene-d8	524		ug/L	505		104	82-116			
Surrogate: 4-Bromofluorobenzene	496		ug/L	502		98.9	77-114			

Matrix Spike Dup (1IJ1564-MSD1)	Source: 1IJ1387-05			Prepared: 10/27/25 00:00 Analyzed: 10/27/25 19:26						
Allyl chloride	538.9	10.0	ug/L	500	ND	108	66-136	1.86	30	
Chloroprene	628.1	10.0	ug/L	500	ND	126	67-139	1.16	30	
Methacrylonitrile	576.3	10.0	ug/L	500	ND	115	60-140	0.0174	30	
Methyl Methacrylate	579.5	10.0	ug/L	500	ND	116	86-112	0.571	30	M1
Propionitrile	599.5	100	ug/L	500	ND	120	52-182	4.78	30	
Surrogate: Dibromofluoromethane	511		ug/L	502		102	57-128			
Surrogate: 1,2-Dichloroethane-d4	566		ug/L	504		112	49-135			
Surrogate: Toluene-d8	529		ug/L	505		105	82-116			
Surrogate: 4-Bromofluorobenzene	959		ug/L	502		191	77-114			S1

Determination of General Solvents	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ1478 - Semi-Vol GC - EPA 8015C										

Blank (1IJ1478-BLK1)	Prepared: 10/24/25 11:19 Analyzed: 10/24/25 17:37									
Isobutanol	<1.0	1.0	mg/L							
LCS (1IJ1478-BS1)	Prepared: 10/24/25 11:19 Analyzed: 10/24/25 14:55									
Isobutanol	22.35	1.0	mg/L	24.0		93.1	77-128			
Matrix Spike (1IJ1478-MS1)	Source: 1IJ1904-01			Prepared: 10/24/25 11:19 Analyzed: 10/25/25 01:40						
Isobutanol	25.28	1.0	mg/L	24.0	ND	105	68-127			
Matrix Spike Dup (1IJ1478-MSD1)	Source: 1IJ1904-01			Prepared: 10/24/25 11:19 Analyzed: 10/25/25 02:17						
Isobutanol	28.62	1.0	mg/L	24.0	ND	119	68-127	12.4	30	

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ1125 - 3520C BNA Cont Liq - EPA 8270C										

Blank (1IJ1125-BLK1)	Prepared: 10/20/25 09:41 Analyzed: 10/29/25 09:48									
N-Nitrosodimethylamine	<8	8	ug/L							
Methyl Methanesulfonate	<8	8	ug/L							
N-Nitrosodiethylamine	<8	8	ug/L							



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Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ1125 - 3520C BNA Cont Liq - EPA 8270C									
Blank (1IJ1125-BLK1)				Prepared: 10/20/25 09:41 Analyzed: 10/29/25 09:48					
N-Nitrosomethylethylamine	<8	8	ug/L						
Ethyl Methanesulfonate	<8	8	ug/L						
Phenol	<8	8	ug/L						
Bis(2-Chloroethyl) Ether	<8	8	ug/L						
2-Chlorophenol	<8	8	ug/L						
Benzyl Alcohol	<8	8	ug/L						
2-Methylphenol (o-Cresol)	<8	8	ug/L						
Bis[2-Chloroisopropyl]ether	<8	8	ug/L						
n-Nitroso-di-n-propylamine	<8	8	ug/L						
N-Nitrosopyrrolidine	<8	8	ug/L						
Acetophenone	<8	8	ug/L						
o-Toluidine	<8	8	ug/L						
(3 & 4)-Methylphenol	<8	8	ug/L						
Hexachloroethane	<8	8	ug/L						
Nitrobenzene	<8	8	ug/L						
N-Nitrosopiperidine	<8	8	ug/L						
Isophorone	<8	8	ug/L						
2-Nitrophenol	<8	8	ug/L						
2,4-Dimethylphenol	<8	8	ug/L						
Bis (2-Chloroethoxy) Methane	<8	8	ug/L						
2,4-Dichlorophenol	<8	8	ug/L						
Naphthalene	<8	8	ug/L						
4-Chloroaniline	<8	8	ug/L						
2,6-Dichlorophenol	<8	8	ug/L						
Hexachloropropene	<8	8	ug/L						
Hexachlorobutadiene	<8	8	ug/L						
N-Nitrosodi-n-butylamine	<8	8	ug/L						
1,4-Phenylenediamine	<8	8	ug/L						
4-Chloro-3-methylphenol	<8	8	ug/L						
2-Methylnaphthalene	<8	8	ug/L						
Isosafrole	<8	8	ug/L						
1,2,4,5-Tetrachlorobenzene	<8	8	ug/L						
Hexachlorocyclopentadiene	<8	8	ug/L						
2,4,6-Trichlorophenol	<8	8	ug/L						
2,4,5-Trichlorophenol	<8	8	ug/L						
Safrole	<8	8	ug/L						
2-Chloronaphthalene	<8	8	ug/L						
2-Nitroaniline	<8	8	ug/L						
1,4-Naphthoquinone	<8	8	ug/L						
Dimethylphthalate	<8	8	ug/L						
1,3-Dinitrobenzene	<8	8	ug/L						
1,2-Dinitrobenzene	<8	8	ug/L						

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1IJ1461

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ1125 - 3520C BNA Cont Liq - EPA 8270C									
Blank (1IJ1125-BLK1)				Prepared: 10/20/25 09:41 Analyzed: 10/29/25 09:48					
2,6-Dinitrotoluene	<8	8	ug/L						
Acenaphthylene	<8	8	ug/L						
3-Nitroaniline	<8	8	ug/L						
Acenaphthene	<8	8	ug/L						
2,4-Dinitrophenol	<8	8	ug/L						
4-Nitrophenol	<8	8	ug/L						
Dibenzofuran	<8	8	ug/L						
2,4-Dinitrotoluene	<8	8	ug/L						
2,3,4,6-Tetrachlorophenol	<8	8	ug/L						
Pentachlorobenzene	<8	8	ug/L						
1-Naphthylamine	<8	8	ug/L						
2-Naphthylamine	<8	8	ug/L						
Diethyl Phthalate	<8	8	ug/L						
Fluorene	<8	8	ug/L						
4-Chlorophenyl Phenyl Ether	<8	8	ug/L						
4-Nitroaniline	<8	8	ug/L						
5-Nitro-o-toluidine	<8	8	ug/L						
4,6-Dinitro-2-methylphenol	<8	8	ug/L						
N-Nitrosodiphenylamine	<8	8	ug/L						
Diphenylamine	<8	8	ug/L						
Azobenzene	<8	8	ug/L						
Diallate	<8	8	ug/L						
1,3,5-Trinitrobenzene	<8	8	ug/L						
Phenacetin	<8	8	ug/L						
4-Bromophenyl Phenyl Ether	<8	8	ug/L						
4-Aminobiphenyl	<8	8	ug/L						
Pentachlorophenol	<8	8	ug/L						
Pronamide	<8	8	ug/L						
Pentachloronitrobenzene (PCNB)	<8	8	ug/L						
Phenanthrene	<8	8	ug/L						
Anthracene	<8	8	ug/L						
Di-n-butyl Phthalate	<8	8	ug/L						
Methapyrilene	<8	8	ug/L						
Fluoranthene	<8	8	ug/L						
Isodrin	<8	8	ug/L						
Chlorobenzilate	<8	8	ug/L						
Pyrene	<8	8	ug/L						
p-(Dimethylamino)azobenzene	<8	8	ug/L						
3,3-Dimethylbenzidine	<8	8	ug/L						
Butyl Benzyl Phthalate	<8	8	ug/L						
Benzo(a)anthracene	<8	8	ug/L						

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Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ1125 - 3520C BNA Cont Liq - EPA 8270C									
Blank (1IJ1125-BLK1)									
				Prepared: 10/20/25 09:41 Analyzed: 10/29/25 09:48					
Chrysene	<8	8	ug/L						
Bis(2-Ethylhexyl) Phthalate	<6	6	ug/L						
Kepon	<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	18.7		ug/L	20.2		92.2	10-159		
Surrogate: Phenol-d6	19.2		ug/L	19.8		97.0	10-162		
Surrogate: Nitrobenzene-d5	16.8		ug/L	19.5		86.3	17-154		
Surrogate: 2-Fluorobiphenyl	17.3		ug/L	19.4		89.3	15-150		
Surrogate: 2,4,6-Tribromophenol	20.3		ug/L	20.5		99.1	10-156		
Surrogate: Terphenyl-d14	12.1		ug/L	12.2		99.6	10-179		
LCS (1IJ1125-BS1)									
				Prepared: 10/20/25 09:41 Analyzed: 10/29/25 10:13					
N-Nitrosodimethylamine	<8	8	ug/L	12.0		50.9	12-122		
Methyl Methanesulfonate	<8	8	ug/L	12.0		59.6	49-110		
N-Nitrosodiethylamine	9.8	8	ug/L	12.0		81.6	19-139		
N-Nitrosomethylethylamine	8.9	8	ug/L	12.0		74.2	13-158		
Ethyl Methanesulfonate	9.9	8	ug/L	12.0		82.2	50-110		
Phenol	11.7	8	ug/L	12.0		97.3	15-130		
Bis(2-Chloroethyl) Ether	10.6	8	ug/L	12.0		88.8	28-128		
2-Chlorophenol	11.5	8	ug/L	12.0		95.9	12-155		
Benzyl Alcohol	8.5	8	ug/L	12.0		70.7	13-143		
2-Methylphenol (o-Cresol)	13.0	8	ug/L	12.0		108	37-125		
Bis[2-Chloroisopropyl]ether	10.9	8	ug/L	12.0		90.7	31-130		
n-Nitroso-di-n-propylamine	12.4	8	ug/L	12.0		103	38-128		
N-Nitrosopyrrolidine	10.6	8	ug/L	12.0		88.2	22-143		
Acetophenone	10.5	8	ug/L	12.0		87.2	52-120		
o-Toluidine	<8	8	ug/L	12.0		28.7	10-110		
(3 & 4)-Methylphenol	12.3	8	ug/L	12.0		103	35-129		
Hexachloroethane	8.6	8	ug/L	12.0		71.8	19-110		
Nitrobenzene	11.5	8	ug/L	12.0		95.9	26-148		
N-Nitrosopiperidine	10.0	8	ug/L	12.0		83.4	23-140		
Isophorone	12.0	8	ug/L	12.0		99.8	37-134		

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CERTIFICATE OF ANALYSIS

1IJ1461

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ1125 - 3520C BNA Cont Liq - EPA 8270C									
LCS (1IJ1125-BS1)				Prepared: 10/20/25 09:41 Analyzed: 10/29/25 10:13					
2-Nitrophenol	12.0	8	ug/L	12.0		99.7	37-127		
2,4-Dimethylphenol	11.9	8	ug/L	12.0		99.5	36-131		
Bis (2-Chloroethoxy) Methane	11.7	8	ug/L	12.0		97.2	31-119		
2,4-Dichlorophenol	12.6	8	ug/L	12.0		105	32-148		
Naphthalene	10.7	8	ug/L	12.0		88.8	37-110		
4-Chloroaniline	<8	8	ug/L	12.0		18.8	10-110		
2,6-Dichlorophenol	11.4	8	ug/L	12.0		94.8	28-154		
Hexachloropropene	8.4	8	ug/L	12.0		69.7	10-110		
Hexachlorobutadiene	<8	8	ug/L	12.0		59.5	21-110		
N-Nitrosodi-n-butylamine	10.4	8	ug/L	12.0		86.6	24-135		
1,4-Phenylenediamine	<8	8	ug/L	12.0			10-103		Q3
4-Chloro-3-methylphenol	13.2	8	ug/L	12.0		110	32-146		
2-Methylnaphthalene	10.9	8	ug/L	12.0		90.8	36-113		
Isosafrole	10.1	8	ug/L	12.0		83.9	43-117		
1,2,4,5-Tetrachlorobenzene	8.9	8	ug/L	12.0		74.0	34-110		
Hexachlorocyclopentadiene	8.3	8	ug/L	12.0		68.8	10-110		
2,4,6-Trichlorophenol	12.4	8	ug/L	12.0		103	32-159		
2,4,5-Trichlorophenol	13.2	8	ug/L	12.0		110	35-164		
Safrole	10.4	8	ug/L	12.0		86.2	34-122		
2-Chloronaphthalene	10.9	8	ug/L	12.0		90.9	18-136		
2-Nitroaniline	12.9	8	ug/L	12.0		108	35-151		
1,4-Naphthoquinone	11.8	8	ug/L	12.0		98.2	32-188		
Dimethylphthalate	11.8	8	ug/L	12.0		98.8	39-147		
1,3-Dinitrobenzene	12.3	8	ug/L	12.0		102	30-163		
1,2-Dinitrobenzene	13.2	8	ug/L	12.0		110	31-159		
2,6-Dinitrotoluene	12.1	8	ug/L	12.0		101	42-144		
Acenaphthylene	11.2	8	ug/L	12.0		93.5	35-122		
3-Nitroaniline	<8	8	ug/L	12.0		60.8	10-135		
Acenaphthene	10.9	8	ug/L	12.0		91.2	37-128		
2,4-Dinitrophenol	16.1	8	ug/L	12.0		134	31-164		
4-Nitrophenol	14.4	8	ug/L	12.0		120	11-175		
Dibenzofuran	11.0	8	ug/L	12.0		91.8	36-132		
2,4-Dinitrotoluene	12.1	8	ug/L	12.0		101	45-142		
2,3,4,6-Tetrachlorophenol	14.4	8	ug/L	12.0		120	22-159		
Pentachlorobenzene	9.7	8	ug/L	12.0		80.8	45-125		
1-Naphthylamine	<8	8	ug/L	12.0			10-152		Q3
2-Naphthylamine	<8	8	ug/L	12.0			19-128		Q3
Diethyl Phthalate	12.7	8	ug/L	12.0		106	38-155		
Fluorene	11.5	8	ug/L	12.0		95.8	40-131		
4-Chlorophenyl Phenyl Ether	11.0	8	ug/L	12.0		91.3	36-130		
4-Nitroaniline	9.6	8	ug/L	12.0		80.1	10-142		
5-Nitro-o-toluidine	<8	8	ug/L	12.0		62.2	10-172		

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CERTIFICATE OF ANALYSIS

1IJ1461

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ1125 - 3520C BNA Cont Liq - EPA 8270C									
LCS (1IJ1125-BS1)				Prepared: 10/20/25 09:41 Analyzed: 10/29/25 10:13					
4,6-Dinitro-2-methylphenol	13.5	8	ug/L	12.0	113	32-150			
N-Nitrosodiphenylamine	12.1	8	ug/L	12.0	101	10-154			
Diphenylamine	12.1	8	ug/L	12.0	101	10-166			
Azobenzene	12.2	8	ug/L	12.0	102	33-144			
Diallate	12.4	8	ug/L	12.0	103	47-152			
1,3,5-Trinitrobenzene	10.3	8	ug/L	12.0	85.6	51-151			
Phenacetin	11.4	8	ug/L	12.0	94.7	58-143			
4-Bromophenyl Phenyl Ether	11.7	8	ug/L	12.0	97.2	38-141			
4-Aminobiphenyl	<8	8	ug/L	12.0		10-178			Q3
Pentachlorophenol	15.4	8	ug/L	12.0	128	21-154			
Pronamide	10.6	8	ug/L	12.0	88.0	27-143			
Pentachloronitrobenzene (PCNB)	11.4	8	ug/L	12.0	95.4	51-163			
Phenanthrene	11.6	8	ug/L	12.0	97.0	42-141			
Anthracene	12.0	8	ug/L	12.0	100	43-136			
Di-n-butyl Phthalate	13.0	8	ug/L	12.0	108	44-158			
Methapyriline	<8	8	ug/L	13.0	24.2	60-140			Q3
Fluoranthene	11.7	8	ug/L	12.0	97.2	44-145			
Isodrin	12.5	8	ug/L	12.0	104	54-126			
Chlorobenzilate	11.9	8	ug/L	12.0	99.4	25-164			
Pyrene	13.4	8	ug/L	12.0	112	37-155			
p-(Dimethylamino)azobenzene	10.7	8	ug/L	12.0	89.1	10-175			
Butyl Benzyl Phthalate	13.8	8	ug/L	12.0	115	35-163			
Benzo(a)anthracene	11.7	8	ug/L	12.0	97.2	40-142			
Chrysene	11.9	8	ug/L	12.0	99.1	45-142			
Bis(2-Ethylhexyl) Phthalate	14.7	6	ug/L	12.0	122	32-180			
Kepone	10.0	8	ug/L	12.0	83.3	10-147			
2-Acetylaminofluorene	12.4	8	ug/L	12.0	104	27-177			
Di-n-octyl Phthalate	14.3	8	ug/L	12.0	119	32-181			
Benzo(b)Fluoranthene	11.8	8	ug/L	12.0	98.8	40-160			
7,12-Dimethylbenz [a] anthracene	11.2	8	ug/L	12.0	93.8	46-128			
Benzo(k)Fluoranthene	12.1	8	ug/L	12.0	101	42-159			
Benzo(a)Pyrene	11.7	8	ug/L	12.0	97.8	45-143			
3-Methylcholanthrene	10.4	8	ug/L	12.0	86.2	10-164			
Dibenzo(a,h)anthracene	10.5	8	ug/L	12.0	87.2	30-159			
Indeno(1,2,3-cd)Pyrene	10.6	8	ug/L	12.0	88.0	31-156			
Benzo(g,h,i)perylene	10.5	8	ug/L	12.0	87.2	26-158			
Surrogate: 2-Fluorophenol	19.6		ug/L	20.2	96.9	10-159			
Surrogate: Phenol-d6	19.9		ug/L	19.8	100	10-162			
Surrogate: Nitrobenzene-d5	18.8		ug/L	19.5	96.3	34-138			
Surrogate: 2-Fluorobiphenyl	17.4		ug/L	19.4	89.9	42-129			

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CERTIFICATE OF ANALYSIS

1I11461

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 1I1125 - 3520C BNA Cont Liq - EPA 8270C									
LCS (1I1125-BS1)				Prepared: 10/20/25 09:41 Analyzed: 10/29/25 10:13					
Surrogate: 2,4,6-Tribromophenol	20.9		ug/L	20.5		102 10-156			
Surrogate: Terphenyl-d14	13.4		ug/L	12.2		110 46-154			
LCS Dup (1I1125-BS1)				Prepared: 10/20/25 09:41 Analyzed: 10/29/25 10:38					
N-Nitrosodimethylamine	8.0	8	ug/L	12.0	67.1	12-122	27.4	27	R1
Methyl Methanesulfonate	8.3	8	ug/L	12.0	69.4	49-110	15.2	16	
N-Nitrosodiethylamine	9.9	8	ug/L	12.0	82.2	19-139	0.712	30	
N-Nitrosomethylethylamine	9.4	8	ug/L	12.0	78.5	13-158	5.56	30	
Ethyl Methanesulfonate	10.2	8	ug/L	12.0	84.8	50-110	3.19	17	
Phenol	11.9	8	ug/L	12.0	99.2	15-130	1.95	30	
Bis(2-Chloroethyl) Ether	10.9	8	ug/L	12.0	90.9	28-128	2.41	24	
2-Chlorophenol	11.7	8	ug/L	12.0	97.7	12-155	1.81	30	
Benzyl Alcohol	10.6	8	ug/L	12.0	88.1	13-143	21.9	30	
2-Methylphenol (o-Cresol)	12.1	8	ug/L	12.0	101	37-125	7.50	30	
Bis[2-Chloroisopropyl]ether	11.0	8	ug/L	12.0	91.3	31-130	0.733	26	
n-Nitroso-di-n-propylamine	11.5	8	ug/L	12.0	96.0	38-128	6.95	21	
N-Nitrosopyrrolidine	9.1	8	ug/L	12.0	76.1	22-143	14.8	30	
Acetophenone	10.7	8	ug/L	12.0	88.9	52-120	1.89	22	
o-Toluidine	<8	8	ug/L	12.0		10-110		30	Q3
(3 & 4)-Methylphenol	11.9	8	ug/L	12.0	99.1	35-129	3.47	30	
Hexachloroethane	9.4	8	ug/L	12.0	78.3	19-110	8.66	30	
Nitrobenzene	11.3	8	ug/L	12.0	94.2	26-148	1.75	30	
N-Nitrosopiperidine	9.0	8	ug/L	12.0	74.7	23-140	11.1	30	
Isophorone	12.7	8	ug/L	12.0	106	37-134	6.00	26	
2-Nitrophenol	11.5	8	ug/L	12.0	95.8	37-127	3.92	30	
2,4-Dimethylphenol	11.6	8	ug/L	12.0	96.8	36-131	2.72	30	
Bis (2-Chloroethoxy) Methane	11.5	8	ug/L	12.0	95.8	31-119	1.47	30	
2,4-Dichlorophenol	12.3	8	ug/L	12.0	103	32-148	2.01	30	
Naphthalene	10.4	8	ug/L	12.0	86.7	37-110	2.47	30	
4-Chloroaniline	<8	8	ug/L	12.0		10-110		30	Q3
2,6-Dichlorophenol	11.2	8	ug/L	12.0	93.2	28-154	1.60	30	
Hexachloropropene	<8	8	ug/L	12.0	66.0	10-110	5.41	30	
Hexachlorobutadiene	8.2	8	ug/L	12.0	68.3	21-110	13.8	30	
N-Nitrosodi-n-butylamine	<8	8	ug/L	12.0	45.5	24-135	62.2	30	R1
1,4-Phenylenediamine	<8	8	ug/L	12.0		10-103		30	Q3
4-Chloro-3-methylphenol	12.8	8	ug/L	12.0	107	32-146	3.00	30	
2-Methylnaphthalene	11.1	8	ug/L	12.0	92.2	36-113	1.55	26	
Isosafrole	10.0	8	ug/L	12.0	83.6	43-117	0.398	29	
1,2,4,5-Tetrachlorobenzene	8.6	8	ug/L	12.0	71.8	34-110	3.09	30	
Hexachlorocyclopentadiene	8.4	8	ug/L	12.0	70.1	10-110	1.80	30	
2,4,6-Trichlorophenol	12.3	8	ug/L	12.0	103	32-159	0.647	30	
2,4,5-Trichlorophenol	12.5	8	ug/L	12.0	104	35-164	5.51	30	

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CERTIFICATE OF ANALYSIS

1IJ1461

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD RPD	RPD Limit	Notes
Batch 1IJ1125 - 3520C BNA Cont Liq - EPA 8270C									
LCS Dup (1IJ1125-BSD1)				Prepared: 10/20/25 09:41 Analyzed: 10/29/25 10:38					
Safrole	10.0	8	ug/L	12.0		83.5 34-122	3.24	30	
2-Chloronaphthalene	10.9	8	ug/L	12.0		90.8 18-136	0.183	30	
2-Nitroaniline	12.0	8	ug/L	12.0		100 35-151	7.30	21	
1,4-Naphthoquinone	10.9	8	ug/L	12.0		90.8 32-188	7.84	30	
Dimethylphthalate	11.6	8	ug/L	12.0		96.3 39-147	2.48	22	
1,3-Dinitrobenzene	12.3	8	ug/L	12.0		102 30-163	0.163	26	
1,2-Dinitrobenzene	12.9	8	ug/L	12.0		108 31-159	2.14	26	
2,6-Dinitrotoluene	11.5	8	ug/L	12.0		96.0 42-144	4.91	20	
Acenaphthylene	10.9	8	ug/L	12.0		90.6 35-122	3.17	30	
3-Nitroaniline	<8	8	ug/L	12.0		25.1 10-135	83.1	30	R1
Acenaphthene	10.7	8	ug/L	12.0		89.4 37-128	1.94	30	
2,4-Dinitrophenol	15.7	8	ug/L	12.0		131 31-164	2.83	30	
4-Nitrophenol	13.5	8	ug/L	12.0		112 11-175	6.88	30	
Dibenzofuran	10.8	8	ug/L	12.0		90.0 36-132	2.02	30	
2,4-Dinitrotoluene	11.6	8	ug/L	12.0		97.0 45-142	3.96	20	
2,3,4,6-Tetrachlorophenol	14.5	8	ug/L	12.0		121 22-159	1.18	30	
Pentachlorobenzene	9.2	8	ug/L	12.0		76.9 45-125	4.86	30	
1-Naphthylamine	<8	8	ug/L	12.0				30	Q3
2-Naphthylamine	<8	8	ug/L	12.0				30	Q3
Diethyl Phthalate	12.4	8	ug/L	12.0		103 38-155	2.63	30	
Fluorene	11.0	8	ug/L	12.0		91.6 40-131	4.54	30	
4-Chlorophenyl Phenyl Ether	10.8	8	ug/L	12.0		89.9 36-130	1.56	22	
4-Nitroaniline	<8	8	ug/L	12.0		46.4 10-142	53.2	30	R1
5-Nitro-o-toluidine	<8	8	ug/L	12.0		34.6 10-172	57.1	30	R1
4,6-Dinitro-2-methylphenol	12.9	8	ug/L	12.0		108 32-150	4.84	30	
N-Nitrosodiphenylamine	11.0	8	ug/L	12.0		91.8 10-154	9.34	30	
Diphenylamine	11.0	8	ug/L	12.0		91.8 10-166	9.34	30	
Azobenzene	12.0	8	ug/L	12.0		100 33-144	1.49	27	
Diallate	11.3	8	ug/L	12.0		94.5 47-152	8.61	30	
1,3,5-Trinitrobenzene	9.7	8	ug/L	12.0		80.8 51-151	5.81	30	
Phenacetin	10.2	8	ug/L	12.0		85.2 58-143	10.5	24	
4-Bromophenyl Phenyl Ether	11.3	8	ug/L	12.0		94.5 38-141	2.78	17	
4-Aminobiphenyl	<8	8	ug/L	12.0				30	Q3
Pentachlorophenol	15.3	8	ug/L	12.0		127 21-154	0.652	30	
Pronamide	<8	8	ug/L	12.0				30	Q3
Pentachloronitrobenzene (PCNB)	10.9	8	ug/L	12.0		91.2 51-163	4.56	30	
Phenanthrene	11.2	8	ug/L	12.0		93.2 42-141	3.94	30	
Anthracene	11.4	8	ug/L	12.0		95.1 43-136	5.29	30	
Di-n-butyl Phthalate	12.2	8	ug/L	12.0		101 44-158	6.84	23	
Methapyrilene	<8	8	ug/L	13.0		12.6 60-140	62.8	30	Q3
Fluoranthene	10.8	8	ug/L	12.0		89.7 44-145	8.03	26	

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CERTIFICATE OF ANALYSIS

11J1461

Determination of Base/Neutral/Acid Extractable Compounds	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD Limit	Notes
Batch 11J1125 - 3520C BNA Cont Liq - EPA 8270C								

LCS Dup (11J1125-BSD1)

Prepared: 10/20/25 09:41 Analyzed: 10/29/25 10:38

Isodrin	11.6	8	ug/L	12.0	96.4	54-126	7.65	30	
Chlorobenzilate	10.6	8	ug/L	12.0	88.2	25-164	12.0	30	
Pyrene	13.0	8	ug/L	12.0	109	37-155	2.87	24	
p-(Dimethylamino)azobenzene	<8	8	ug/L	12.0	61.1	10-175	37.3	30	R1
Butyl Benzyl Phthalate	13.2	8	ug/L	12.0	110	35-163	4.96	21	
Benzo(a)anthracene	11.0	8	ug/L	12.0	91.3	40-142	6.27	20	
Chrysene	11.1	8	ug/L	12.0	92.6	45-142	6.78	30	
Bis(2-Ethylhexyl) Phthalate	15.9	6	ug/L	12.0	132	32-180	7.86	30	
Kepone	9.6	8	ug/L	12.0	80.3	10-147	3.67	30	
2-Acetylaminofluorene	11.5	8	ug/L	12.0	96.1	27-177	7.43	30	
Di-n-octyl Phthalate	13.9	8	ug/L	12.0	116	32-181	2.77	16	
Benzo(b)Fluoranthene	10.6	8	ug/L	12.0	88.8	40-160	10.7	24	
7,12-Dimethylbenz [a] anthracene	10.9	8	ug/L	12.0	91.2	46-128	2.79	30	
Benzo(k)Fluoranthene	10.8	8	ug/L	12.0	90.2	42-159	11.1	20	
Benzo(a)Pyrene	10.2	8	ug/L	12.0	85.2	45-143	13.8	30	
3-Methylcholanthrene	8.9	8	ug/L	12.0	73.8	10-164	15.5	30	
Dibenzo(a,h)anthracene	8.3	8	ug/L	12.0	69.2	30-159	22.9	26	
Indeno(1,2,3-cd)Pyrene	8.4	8	ug/L	12.0	69.8	31-156	23.0	30	
Benzo(g,h,i)perylene	8.2	8	ug/L	12.0	68.5	26-158	24.0	30	
Surrogate: 2-Fluorophenol	18.8		ug/L	20.2	92.8	10-159			
Surrogate: Phenol-d6	18.6		ug/L	19.8	94.2	10-162			
Surrogate: Nitrobenzene-d5	18.4		ug/L	19.5	94.6	34-138			
Surrogate: 2-Fluorobiphenyl	16.4		ug/L	19.4	84.7	42-129			
Surrogate: 2,4,6-Tribromophenol	19.5		ug/L	20.5	95.1	10-156			
Surrogate: Terphenyl-d14	12.7		ug/L	12.2	104	46-154			

Determination of Organophosphorus Insecticides	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD Limit	Notes
Batch 11J1063 - 3510C NP/OC Sep Fnl - EPA 8141								

Blank (11J1063-BLK1)

Prepared: 10/17/25 12:04 Analyzed: 10/27/25 11:07

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					



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Determination of Organophosphorus Insecticides	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ1063 - 3510C NP/OC Sep Fnl - EPA 8141									
Blank (1IJ1063-BLK1)				Prepared: 10/17/25 12:04 Analyzed: 10/27/25 11:07					
Surrogate: 2-Nitro-m-xylene	9.00		ug/L	13.9		64.6 32-110			
LCS (1IJ1063-BS1)				Prepared: 10/17/25 12:04 Analyzed: 10/27/25 14:49					
O,O,O-Triethyl phosphorothioate	3.16	0.4	ug/L	4.00		79.1 31-156			
Thionazin	3.34	0.4	ug/L	4.00		83.5 60-128			
Phorate	2.96	0.4	ug/L	4.00		74.0 33-143			
Dimethoate	4.04	0.4	ug/L	4.00		101 60-172			
Disulfoton	2.54	0.4	ug/L	4.00		63.5 51-134			
Methyl Parathion	3.14	0.4	ug/L	4.00		78.6 65-121			
Parathion	2.97	0.4	ug/L	4.00		74.2 60-113			
Famphur	3.14	0.4	ug/L	4.00		78.6 65-133			
Surrogate: 2-Nitro-m-xylene	10.0		ug/L	13.9		72.2 32-110			
LCS Dup (1IJ1063-BSD1)				Prepared: 10/17/25 12:04 Analyzed: 10/27/25 15:33					
O,O,O-Triethyl phosphorothioate	3.41	0.4	ug/L	4.00		85.2 31-156	7.45	30	
Thionazin	3.68	0.4	ug/L	4.00		91.9 60-128	9.55	30	
Phorate	3.30	0.4	ug/L	4.00		82.4 33-143	10.7	30	
Dimethoate	4.91	0.4	ug/L	4.00		123 60-172	19.3	30	
Disulfoton	2.74	0.4	ug/L	4.00		68.5 51-134	7.58	30	
Methyl Parathion	3.54	0.4	ug/L	4.00		88.4 65-121	11.7	30	
Parathion	3.29	0.4	ug/L	4.00		82.2 60-113	10.2	26	
Famphur	3.54	0.4	ug/L	4.00		88.5 65-133	11.8	30	
Surrogate: 2-Nitro-m-xylene	10.8		ug/L	13.9		77.9 32-110			
Reference (1IJ1063-SRM1)				Prepared: 10/17/25 12:04 Analyzed: 10/27/25 16:18					
O,O,O-Triethyl phosphorothioate	3.90	0.4	ug/L	4.00		97.5 80-120			
Thionazin	3.81	0.4	ug/L	4.00		95.2 80-120			
Phorate	3.83	0.4	ug/L	4.00		95.8 80-120			
Dimethoate	5.40	0.4	ug/L	4.00		135 80-120			S
Disulfoton	3.63	0.4	ug/L	4.00		90.8 80-120			
Methyl Parathion	4.08	0.4	ug/L	4.00		102 80-120			
Parathion	3.68	0.4	ug/L	4.00		91.9 80-120			
Famphur	3.20	0.4	ug/L	4.00		80.0 80-120			
Surrogate: 2-Nitro-m-xylene	12.3		ug/L	13.9		88.7 32-110			
Determination of Chlorinated Phenoxy Herbicides	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ1064 - EPA 8151A - EPA 8151A									
Blank (1IJ1064-BLK1)				Prepared: 10/17/25 12:11 Analyzed: 10/27/25 11:57					
2,4-D	<2.0	2.0	ug/L						

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Determination of Chlorinated Phenoxy Herbicides	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ1064 - EPA 8151A - EPA 8151A									
Blank (1IJ1064-BLK1) Prepared: 10/17/25 12:11 Analyzed: 10/27/25 11:57									
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	1.70		ug/L	1.81		93.8 49-174			
LCS (1IJ1064-BS1) Prepared: 10/17/25 12:11 Analyzed: 10/27/25 14:28									
2,4-D	<2.0	2.0	ug/L	1.00		71.4 38-135			
2,4,5-TP (Silvex)	0.50	0.5	ug/L	0.500		100 50-137			
2,4,5-T	<0.5	0.5	ug/L	0.500		95.9 49-157			
Dinoseb	1.11	0.5	ug/L	1.00		111 10-129			
Surrogate: 2,5-Dichlorobenzoic Acid	1.84		ug/L	1.81		102 49-174			
LCS Dup (1IJ1064-BSD1) Prepared: 10/17/25 12:11 Analyzed: 10/27/25 14:58									
2,4-D	<2.0	2.0	ug/L	1.00		86.7 38-135	19.4	30	
2,4,5-TP (Silvex)	0.56	0.5	ug/L	0.500		112 50-137	10.8	30	
2,4,5-T	0.54	0.5	ug/L	0.500		109 49-157	12.4	30	
Dinoseb	1.28	0.5	ug/L	1.00		128 10-129	13.9	30	
Surrogate: 2,5-Dichlorobenzoic Acid	1.87		ug/L	1.81		103 49-174			
Determination of Organochlorine Insecticides & Metabolites	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ1062 - 3510C NP/OC Sep Fnl - EPA 8081A									
Blank (1IJ1062-BLK1) Prepared: 10/17/25 12:02 Analyzed: 10/22/25 16:48									
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						

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Determination of Organochlorine Insecticides & Metabolites	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ1062 - 3510C NP/OC Sep Fnl - EPA 8081A									
Blank (1IJ1062-BLK1)									
Prepared: 10/17/25 12:02 Analyzed: 10/22/25 16:48									
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	0.370		ug/L	0.600		61.7 45-111			
LCS (1IJ1062-BS1)									
Prepared: 10/17/25 12:02 Analyzed: 10/22/25 17:59									
Alpha-BHC	0.231	0.05	ug/L	0.250		92.5 60-125			
Gamma-BHC [Lindane]	0.240	0.05	ug/L	0.250		96.0 60-130			
Beta-BHC	0.250	0.05	ug/L	0.250		100 63-118			
Heptachlor	0.493	0.05	ug/L	0.250		197 67-130			Q2
Delta-BHC	0.230	0.05	ug/L	0.250		92.0 65-143			
Aldrin	0.203	0.05	ug/L	0.250		81.3 59-114			
Heptachlor Epoxide	0.241	0.05	ug/L	0.250		96.3 56-129			
Endosulfan I	0.256	0.05	ug/L	0.250		102 64-134			
4,4'-DDE	0.249	0.05	ug/L	0.250		99.4 66-128			
Dieldrin	0.255	0.05	ug/L	0.250		102 62-121			
Endrin	0.272	0.05	ug/L	0.250		109 27-177			
4,4'-DDD	0.253	0.05	ug/L	0.250		101 64-131			
Endosulfan II	0.257	0.05	ug/L	0.250		103 68-130			
4,4'-DDT	0.236	0.05	ug/L	0.250		94.6 64-145			
Endrin Aldehyde	0.233	0.05	ug/L	0.250		93.1 50-135			
Endosulfan Sulfate	0.251	0.05	ug/L	0.250		100 72-121			
Methoxychlor	0.240	0.05	ug/L	0.250		96.1 60-157			
Surrogate: Tetrachloro-m-xylene	0.382		ug/L	0.600		63.7 45-111			
LCS Dup (1IJ1062-BSD1)									
Prepared: 10/17/25 12:02 Analyzed: 10/22/25 18:13									
Alpha-BHC	0.202	0.05	ug/L	0.250		80.9 60-125	13.3	30	
Gamma-BHC [Lindane]	0.212	0.05	ug/L	0.250		84.8 60-130	12.4	30	
Beta-BHC	0.223	0.05	ug/L	0.250		89.0 63-118	11.7	30	
Heptachlor	0.452	0.05	ug/L	0.250		181 67-130	8.73	30	Q2
Delta-BHC	0.199	0.05	ug/L	0.250		79.7 65-143	14.3	30	
Aldrin	0.182	0.05	ug/L	0.250		72.8 59-114	11.0	30	
Heptachlor Epoxide	0.212	0.05	ug/L	0.250		84.9 56-129	12.6	30	
Endosulfan I	0.223	0.05	ug/L	0.250		89.1 64-134	13.8	30	
4,4'-DDE	0.221	0.05	ug/L	0.250		88.4 66-128	11.8	30	
Dieldrin	0.223	0.05	ug/L	0.250		89.1 62-121	13.7	30	
Endrin	0.235	0.05	ug/L	0.250		94.1 27-177	14.3	30	
4,4'-DDD	0.222	0.05	ug/L	0.250		88.6 64-131	13.1	30	
Endosulfan II	0.223	0.05	ug/L	0.250		89.1 68-130	14.3	30	
4,4'-DDT	0.206	0.05	ug/L	0.250		82.5 64-145	13.7	30	
Endrin Aldehyde	0.202	0.05	ug/L	0.250		80.8 50-135	14.2	30	
Endosulfan Sulfate	0.225	0.05	ug/L	0.250		89.9 72-121	11.1	30	

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CERTIFICATE OF ANALYSIS

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Determination of Organochlorine Insecticides & Metabolites	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 11J1062 - 3510C NP/OC Sep Fnl - EPA 8081A									

LCS Dup (11J1062-BSD1)				Prepared: 10/17/25 12:02 Analyzed: 10/22/25 18:13					
Methoxychlor	0.212	0.05	ug/L	0.250	84.8	60-157	12.5	30	

Surrogate: Tetrachloro-m-xylene	0.360		ug/L	0.600	59.9	45-111			
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Reference (11J1062-SRM1)				Prepared: 10/17/25 12:02 Analyzed: 10/22/25 18:27					
Alpha-BHC	0.261	0.05	ug/L	0.250	105	80-120			
Gamma-BHC [Lindane]	0.266	0.05	ug/L	0.250	106	80-120			
Beta-BHC	0.262	0.05	ug/L	0.250	105	80-120			
Heptachlor	0.273	0.05	ug/L	0.250	109	80-120			
Delta-BHC	0.248	0.05	ug/L	0.250	99.3	80-120			
Aldrin	0.257	0.05	ug/L	0.250	103	80-120			
Heptachlor Epoxide	0.245	0.05	ug/L	0.250	97.9	80-120			
Endosulfan I	0.259	0.05	ug/L	0.250	103	80-120			
4,4'-DDE	0.263	0.05	ug/L	0.250	105	80-120			
Dieldrin	0.253	0.05	ug/L	0.250	101	80-120			
Endrin	0.252	0.05	ug/L	0.250	101	80-120			
4,4'-DDD	0.275	0.05	ug/L	0.250	110	80-120			
Endosulfan II	0.250	0.05	ug/L	0.250	99.9	80-120			
4,4'-DDT	0.210	0.05	ug/L	0.250	83.9	80-120			
Endrin Aldehyde	0.263	0.05	ug/L	0.250	105	80-120			
Endosulfan Sulfate	0.249	0.05	ug/L	0.250	99.6	80-120			
Methoxychlor	0.204	0.05	ug/L	0.250	81.5	80-120			
Hexachlorobenzene	0.246	0.05	ug/L	0.250	98.5	80-120			
Surrogate: Tetrachloro-m-xylene	0.542		ug/L	0.600	90.4	45-111			

Determination of Polychlorinated Biphenyls (PCB)	Result	RL	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 11J1061 - 3510C NP/OC Sep Fnl - EPA 8082A									

Blank (11J1061-BLK1)				Prepared: 10/17/25 12:00 Analyzed: 10/22/25 16:48					
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	0.513		ug/L	0.600	85.6	50-116			
Surrogate: Decachlorobiphenyl	0.635		ug/L	0.600	106	38-122			

LCS (11J1061-BS1)				Prepared: 10/17/25 12:00 Analyzed: 10/22/25 18:41					
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1IJ1461

Determination of	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Polychlorinated Biphenyls (PCB)										
Batch 1IJ1061 - 3510C NP/OC Sep Fnl - EPA 8082A										
LCS (1IJ1061-BS1)				Prepared: 10/17/25 12:00 Analyzed: 10/22/25 18:41						
Arochlor 1016	2.753	0.20	ug/L	2.60		106	54-124			
Arochlor 1260	2.668	0.20	ug/L	2.60		103	66-138			
Surrogate: Tetrachloro-m-xylene	0.519		ug/L	0.600		86.5	50-116			
Surrogate: Decachlorobiphenyl	0.557		ug/L	0.600		92.8	38-122			
LCS Dup (1IJ1061-BSD1)				Prepared: 10/17/25 12:00 Analyzed: 10/22/25 18:55						
Arochlor 1016	2.855	0.20	ug/L	2.60		110	54-124	3.63	20	
Arochlor 1260	2.927	0.20	ug/L	2.60		113	66-138	9.25	24	
Surrogate: Tetrachloro-m-xylene	0.536		ug/L	0.600		89.3	50-116			
Surrogate: Decachlorobiphenyl	0.620		ug/L	0.600		103	38-122			
Reference (1IJ1061-SRM1)				Prepared: 10/17/25 12:00 Analyzed: 10/22/25 19:09						
Arochlor 1016	3.011	0.20	ug/L	2.60		116	80-120			
Arochlor 1260	3.064	0.20	ug/L	2.60		118	80-120			
Surrogate: Tetrachloro-m-xylene	0.564		ug/L	0.600		94.0	50-116			
Surrogate: Decachlorobiphenyl	0.576		ug/L	0.600		96.0	38-122			
Determination of	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Conventional Chemistry Parameters										
Batch 1IJ1132 - Wet Chem Preparation - EPA 376.2										
Blank (1IJ1132-BLK1)				Prepared: 10/20/25 10:39 Analyzed: 10/20/25 16:48						
Sulfide, total	<0.10	0.10	mg/L							
LCS (1IJ1132-BS1)				Prepared: 10/20/25 10:39 Analyzed: 10/20/25 16:48						
Sulfide, total	<0.10	0.10	mg/L	0.061		115	56-118			
Matrix Spike (1IJ1132-MS1)				Source: 1IJ1239-01 Prepared: 10/20/25 10:39 Analyzed: 10/20/25 16:48						
Sulfide, total	<0.10	0.10	mg/L	0.061	ND	144	50-150			
Matrix Spike Dup (1IJ1132-MSD1)				Source: 1IJ1239-01 Prepared: 10/20/25 10:39 Analyzed: 10/20/25 16:48						
Sulfide, total	0.114	0.10	mg/L	0.061	ND	186	50-150	25.5	30	M1
Batch 1IJ1215 - Wet Chem Preparation - EPA 9014										
Blank (1IJ1215-BLK1)				Prepared & Analyzed: 10/21/25 13:07						
Cyanide, total	<0.010	0.010	mg/L							
LCS (1IJ1215-BS1)				Prepared & Analyzed: 10/21/25 13:07						
Cyanide, total	0.0705	0.020	mg/L	0.0600		118	64-125			
Matrix Spike (1IJ1215-MS1)				Source: 1IJ1387-04 Prepared: 10/21/25 13:07 Analyzed: 10/30/25 10:39						
Cyanide, total	0.0341	0.010	mg/L	0.0600	ND	56.8	64-134			M2
Matrix Spike Dup (1IJ1215-MSD1)				Source: 1IJ1387-04 Prepared: 10/21/25 13:07 Analyzed: 10/30/25 10:39						



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1IJ1461

Determination of Conventional Chemistry Parameters	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ1215 - Wet Chem Preparation - EPA 9014										
Matrix Spike Dup (1IJ1215-MSD1)	Source: 1IJ1387-04			Prepared: 10/21/25 13:07 Analyzed: 10/30/25 10:39						
Cyanide, total	0.0382	0.010	mg/L	0.0600	ND	63.6	64-134	11.3	25	M2
Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ1024 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1IJ1024-BLK1)	Prepared: 10/16/25 15:20 Analyzed: 10/17/25 19:13									
Antimony	<0.0010	0.0010	mg/L							B
Arsenic	<0.0020	0.0020	mg/L							
Barium	<0.0010	0.0010	mg/L							
Beryllium	<0.0005	0.0005	mg/L							
Cadmium	<0.0002	0.0002	mg/L							
Chromium	<0.0010	0.0010	mg/L							B
Cobalt	<0.0005	0.0005	mg/L							
Copper	<0.0050	0.0050	mg/L							
Lead	<0.0010	0.0010	mg/L							
Nickel	<0.0050	0.0050	mg/L							
Selenium	<0.0020	0.0020	mg/L							
Silver	<0.0050	0.0050	mg/L							
Thallium	<0.0005	0.0005	mg/L							
Tin	<0.0050	0.0050	mg/L							
Vanadium	<0.0020	0.0020	mg/L							
Zinc	<0.0050	0.0050	mg/L							B
LCS (1IJ1024-BS1)	Prepared: 10/16/25 15:20 Analyzed: 10/17/25 19:16									
Antimony	0.108	0.0010	mg/L	0.100		108	80-120			
Arsenic	0.103	0.0020	mg/L	0.100		103	80-120			
Barium	0.113	0.0010	mg/L	0.100		113	80-120			
Beryllium	0.104	0.0005	mg/L	0.100		104	80-120			
Cadmium	0.105	0.0002	mg/L	0.100		105	80-120			
Chromium	0.111	0.0010	mg/L	0.100		111	80-120			
Cobalt	0.116	0.0005	mg/L	0.100		116	80-120			
Copper	0.103	0.0050	mg/L	0.100		103	80-120			
Lead	0.111	0.0010	mg/L	0.100		111	80-120			
Nickel	0.105	0.0050	mg/L	0.100		105	80-120			
Selenium	0.1118	0.0020	mg/L	0.100		112	80-120			
Silver	0.115	0.0050	mg/L	0.100		115	80-120			
Thallium	0.117	0.0005	mg/L	0.100		117	80-120			
Tin	0.109	0.0050	mg/L	0.100		109	80-120			
Vanadium	0.117	0.0020	mg/L	0.100		117	80-120			
Zinc	0.111	0.0050	mg/L	0.100		111	80-120			
Matrix Spike (1IJ1024-MS1)	Source: 1IJ1387-05			Prepared: 10/16/25 15:20 Analyzed: 10/17/25 19:21						
Antimony	0.112	0.0010	mg/L	0.100	0.0009	111	75-125			

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Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ1024 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Matrix Spike (1IJ1024-MS1) Source: 1IJ1387-05 Prepared: 10/16/25 15:20 Analyzed: 10/17/25 19:21										
Arsenic	0.102	0.0020	mg/L	0.100	ND	102	75-125			
Barium	0.158	0.0010	mg/L	0.100	0.0405	118	75-125			
Beryllium	0.102	0.0005	mg/L	0.100	ND	102	75-125			
Cadmium	0.105	0.0002	mg/L	0.100	0.0002	105	75-125			
Chromium	0.110	0.0010	mg/L	0.100	0.0007	109	75-125			
Cobalt	0.113	0.0005	mg/L	0.100	0.0010	112	75-125			
Copper	0.101	0.0050	mg/L	0.100	0.0023	98.7	75-125			
Lead	0.112	0.0010	mg/L	0.100	ND	112	75-125			
Nickel	0.112	0.0050	mg/L	0.100	0.0132	98.7	75-125			
Selenium	0.1089	0.0020	mg/L	0.100	ND	109	75-125			
Silver	0.117	0.0050	mg/L	0.100	ND	117	75-125			
Thallium	0.119	0.0005	mg/L	0.100	0.00007	119	75-125			
Tin	0.114	0.0050	mg/L	0.100	ND	114	75-125			
Vanadium	0.119	0.0020	mg/L	0.100	ND	119	75-125			
Zinc	0.122	0.0050	mg/L	0.100	0.0232	98.9	75-125			
Matrix Spike Dup (1IJ1024-MSD1) Source: 1IJ1387-05 Prepared: 10/16/25 15:20 Analyzed: 10/17/25 19:28										
Antimony	0.108	0.0010	mg/L	0.100	0.0009	107	75-125	4.28	20	
Arsenic	0.0996	0.0020	mg/L	0.100	ND	99.6	75-125	2.38	20	
Barium	0.153	0.0010	mg/L	0.100	0.0405	113	75-125	3.21	20	
Beryllium	0.0995	0.0005	mg/L	0.100	ND	99.5	75-125	2.31	20	
Cadmium	0.102	0.0002	mg/L	0.100	0.0002	101	75-125	3.42	20	
Chromium	0.106	0.0010	mg/L	0.100	0.0007	105	75-125	3.45	20	
Cobalt	0.106	0.0005	mg/L	0.100	0.0010	105	75-125	6.54	20	
Copper	0.0978	0.0050	mg/L	0.100	0.0023	95.4	75-125	3.32	20	
Lead	0.108	0.0010	mg/L	0.100	ND	108	75-125	3.32	20	
Nickel	0.108	0.0050	mg/L	0.100	0.0132	95.1	75-125	3.24	20	
Selenium	0.1075	0.0020	mg/L	0.100	ND	108	75-125	1.31	20	
Silver	0.111	0.0050	mg/L	0.100	ND	111	75-125	4.55	20	
Thallium	0.115	0.0005	mg/L	0.100	0.00007	115	75-125	3.11	20	
Tin	0.109	0.0050	mg/L	0.100	ND	109	75-125	4.03	20	
Vanadium	0.117	0.0020	mg/L	0.100	ND	117	75-125	1.98	20	
Zinc	0.120	0.0050	mg/L	0.100	0.0232	96.9	75-125	1.67	20	
Post Spike (1IJ1024-PS1) Source: 1IJ1387-05 Prepared: 10/16/25 15:20 Analyzed: 10/17/25 19:31										
Antimony	0.0189		mg/L	0.0200	0.0009	90.1	80-120			
Arsenic	0.0170		mg/L	0.0200	0.0004	83.3	80-120			
Barium	0.0571		mg/L	0.0200	0.0405	83.3	80-120			
Beryllium	0.0187		mg/L	0.0200	0.000002	93.5	80-120			
Cadmium	0.0186		mg/L	0.0200	0.0002	91.6	80-120			
Chromium	0.0194		mg/L	0.0200	0.0007	93.7	80-120			
Cobalt	0.0191		mg/L	0.0200	0.0010	90.7	80-120			
Copper	0.0194		mg/L	0.0200	0.0023	85.4	80-120			
Lead	0.0194		mg/L	0.0200	0.00005	97.0	80-120			
Nickel	0.0302		mg/L	0.0200	0.0132	85.0	80-120			

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1IJ1461

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ1024 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Post Spike (1IJ1024-PS1)		Source: 1IJ1387-05		Prepared: 10/16/25 15:20 Analyzed: 10/17/25 19:31						
Selenium	0.0202		mg/L	0.0200	0.000007	101	80-120			M2
Silver	0.0153		mg/L	0.0200	0.0002	75.6	80-120			
Thallium	0.0199		mg/L	0.0200	0.00007	98.9	80-120			
Tin	0.0203		mg/L	0.0200	0.0003	99.5	75-125			
Vanadium	0.0195		mg/L	0.0200	-0.00001	97.5	80-120			
Zinc	0.0398		mg/L	0.0200	0.0232	82.9	80-120			

Batch 1IJ1552 - EPA 7470A Hg Water - EPA 7470A

Blank (1IJ1552-BLK1)		Prepared: 10/27/25 15:36 Analyzed: 10/28/25 16:06								
Mercury	<0.00050	0.00050	mg/L							
LCS (1IJ1552-BS1)		Prepared: 10/27/25 15:36 Analyzed: 10/28/25 16:08								
Mercury	0.00240	0.00050	mg/L	0.00250		96.1	80-120			
Matrix Spike (1IJ1552-MS1)		Source: 1IJ1317-01		Prepared: 10/27/25 15:36 Analyzed: 10/28/25 16:13						
Mercury	0.00425	0.00200	mg/L	0.00250	0.00118	123	75-125			
Matrix Spike Dup (1IJ1552-MSD1)		Source: 1IJ1317-01		Prepared: 10/27/25 15:36 Analyzed: 10/28/25 16:15						
Mercury	0.00450	0.00200	mg/L	0.00250	0.00118	133	75-125	5.60	20	M1

Definitions

B:	The target analyte was detected in the blank at or above the method acceptance criteria.
M1:	Matrix spike recovery is above acceptance limits.
M2:	Matrix spike recovery is below acceptance limits.
Q2:	LCS recovery is above acceptance limits.
Q3:	LCS recovery is below acceptance limits. The reported value is estimated.
R1:	Duplicate RPD is outside acceptance criteria.
RL:	Reporting Limit
RPD:	Relative Percent Difference
S:	Spike recovery outside of acceptance limits.
S1:	Surrogate recovery is above acceptance limits.

Cooler Receipt Log

Cooler ID:	Default Cooler	Temp:	5.9°C	Cooler ID:	New Cooler	Temp:	5.0°C
Cooler ID:	New Cooler [1]	Temp:	6.6°C	Cooler ID:	New Cooler [2]	Temp:	5.5°C

Cooler Inspection Checklist

Custody Seals	No	Containers Intact	Yes
COC/Labels Agree	Yes	Preservation Confirmed	No
Received On Ice	Yes		



Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1IJ1461

Report Comments

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

Reviewed and Approved By:

Heather Murphy

Customer Relationship Specialist

heather.murphy@microbac.com

10/31/25 10:25

CHAIN OF CUSTODY RECORD



600 East 17th Street South
Newton, IA 50208
Phone: 641-792-8451

Page 1 of 1

Printed: 9/24/2025 2:38:14PM

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SITE INFORMATION

Sampler: TODD WHIPPLE

Project: Jones Co. Landfill - New Regs

REPORT TO

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

INVOICE TO

~~Karl Taylor~~ Andy Jamison
Jones County Solid Waste Management Corr
PO Box 235
Anamosa, IA 52205

SPECIAL INSTRUCTIONS

None

Turn Around Time

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

LAB USE ONLY



HLW Engineering
PM: Heather Murphy

Temperature: 5.9°/5.0° °C

6.6° - 5.5°

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	# Containers	Analyses	Lab Sample Number
01-001	MW-12 (up)	Aqueous	GRAB	10/14/25	11:40	7	Indfil-app1-metals-6020dfill-app1-voc-group	01
02-001	MW-6	Aqueous	GRAB	10/14/25	11:58	7	Indfil-app1-metals-6020dfill-app1-voc-group	02
03-001	MW-11	Aqueous	GRAB	10/14/25	11:30	7	Indfil-app1-metals-6020dfill-app1-voc-group	03
04-001	MW-15	Aqueous	GRAB	10/14/25	13:17	7	Indfil-app1-metals-6020dfill-app1-voc-group	04
05-001	MW-16	Aqueous	GRAB	10/14/25	12:55	18	Indfil-app2-org Indfil-app2-inorg-6020	05
06-001	MW-20	Aqueous	GRAB	10/14/25	12:15	7	Indfil-app1-metals-6020dfill-app1-voc-group	06
07-001	MW-22	Aqueous	GRAB	10/14/25	12:35	7	Indfil-app1-metals-6020dfill-app1-voc-group	07
08-001	Duplicate	Aqueous	GRAB	10/14/25	✓	1	Indfil-app1-metals-6020dfill-app1-voc-group	08

Relinquished By

Date/Time

Relinquished By

Date/Time

Received By

Date/Time

Received for Lab By

Date/Time

Remarks:



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CERTIFICATE OF ANALYSIS

11L1456

Project Description

Jones Co. Landfill - New Regs

For:

Todd Whipple

HLW Engineering

204 West Broad St

Story City, IA 50248

Heather Murphy

Customer Relationship Specialist

Wednesday, December 24, 2025

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

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

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CERTIFICATE OF ANALYSIS

1IL1456

HLW Engineering

Todd Whipple
204 West Broad St
Story City, IA 50248

Project Name: Jones Co. Landfill - New Regs

Project / PO Number: N/A
Received: 12/18/2025
Reported: 12/24/2025

Sample Summary Report

<u>Sample Name</u>	<u>Laboratory ID</u>	<u>Client Matrix</u>	<u>Sample Type</u>	<u>Sample Begin</u>	<u>Sample Taken</u>	<u>Lab Received</u>
MW-11	1IL1456-01	Aqueous	GRAB		12/16/25 12:07	12/18/25 09:39



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CERTIFICATE OF ANALYSIS

1IL1456

Analytical Testing Parameters

Client Sample ID:	MW-11	Collected By:	JGH
Sample Matrix:	Aqueous	Collection Date:	12/16/2025 12:07
Lab Sample ID:	1IL1456-01		

Metals Total by ICPMS	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A							
Barium	0.324	0.0010	mg/L		12/19/25 0925	12/19/25 1930	RVV



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CERTIFICATE OF ANALYSIS

1IL1456

Batch Log Summary

Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	1IL1106	1IL1106-BLK1	
		1IL1106-BS1	
		1IL1106-MS1	1IL1455-01
		1IL1106-MSD1	1IL1455-01
		1IL1106-PS1	1IL1455-01
		1IL1456-01	MW-11

Batch Quality Control Summary: Microbac Laboratories, Inc., Newton

Metals Total by ICPMS	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IL1106 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1IL1106-BLK1)				Prepared: 12/19/25 09:25 Analyzed: 12/19/25 18:59						
Barium	<0.0010	0.0010	mg/L							
LCS (1IL1106-BS1)				Prepared: 12/19/25 09:25 Analyzed: 12/19/25 19:02						
Barium	0.101	0.0040	mg/L	0.100		101	80-120			
Matrix Spike (1IL1106-MS1)				Source: 1IL1455-01 Prepared: 12/19/25 09:25 Analyzed: 12/19/25 19:07						
Barium	0.836	0.0040	mg/L	0.100	0.976	NR	75-125			M6
Matrix Spike Dup (1IL1106-MSD1)				Source: 1IL1455-01 Prepared: 12/19/25 09:25 Analyzed: 12/19/25 19:10						
Barium	0.892	0.0040	mg/L	0.100	0.976	NR	75-125	6.49	20	M6
Post Spike (1IL1106-PS1)				Source: 1IL1455-01 Prepared: 12/19/25 09:25 Analyzed: 12/19/25 19:12						
Barium	0.993		mg/L	0.0200	0.957	184	80-120			M6

Definitions

M6:	Matrix spike recovery is outside of acceptance limits. The analyte concentration is greater than 4X the spiking level.
RL:	Reporting Limit
RPD:	Relative Percent Difference

Cooler Receipt Log

Cooler ID:	Default Cooler	Temp:	4.8°C
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Cooler Inspection Checklist

Custody Seals	No	Containers Intact	Yes
COC/Labels Agree	Yes	Preservation Confirmed	No
Received On Ice	Yes		

Report Comments

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

Reviewed and Approved By:

Heather Murphy
Customer Relationship Specialist
heather.murphy@microbac.com
12/24/25 10:15

600 E. 17th St. S.
Newton, IA 50208
Phone: 641-792-8451
Fax: 641-792-7989



HLW Engineering
PM: Heather Murphy

Paul
ity, KS 66105
3-321-7856
13-831-6778

205 E VanBuren St
Centerville, IA 52544
Phone: 641-437-7023
Fax: 641-437-7040

PAGE _____ OF _____

Page 5 of 5

PRINT OR TYPE INFORMATION BELOW

SAMPLER: JG14

SITE NAME: JONES CO SWF

ADDRESS: _____

CITY/ST/ZIP: _____

PHONE: _____

REPORT TO:

REPORT TO: _____
NAME: TODD WHIPPLE
COMPANY NAME: HLW ENG
ADDRESS: PO Box 314
CITY/ST/ZIP: STORY CITY, IA 50248
PHONE: 515-733-4144
FAX: 515-733-4146

BILL TO:

NAME: JONES Co AUDITOR
COMPANY NAME: JONES Co SOLID WASTE
ADDRESS: PO Box 609
CITY/ST/ZIP: ANAMOSA, IA 52205
PHONE: _____
Keystone Quote No: _____

[illegible]

Relinquished by: (Signature)

T. COULT

Date

Time

Received by: (Signature)

Received for Lab by: (Signature)

Date _____

Time

Turn-Around:

 Standard

4

 Rush

Contact Lab Prior to Submission

Date /

Time

Remarks:

Appendix D

Field Turbidity Summary

Jones County Sanitary Landfill

Field Turbidity Over Time

No-Purge Sampling

	4/20/15	7/9/15	10/5/15	4/5/16	10/5/16	4/4/17	10/3/17	4/10/18	10/12/18	4/16/19	9/30/19	12/20/19
<u>Well</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>
6	36.3		18.47	2.31	3.93	2.14	4.39	1.01	3.00	1.14	1.41	
11	5.05		0.06	0.21	0.12	0.57	0.08	1.8	0.69	0.83	0.94	0.88
12	3.19	1.08	0.33	1.04	0.4	2.88	0.18	0.37	0.79	0.62	1.51	
15	53.1		0.61	3.45	72.1	27.63	2.58	16.92	2.6	13.41	6.76	
16	9.1		4.22	5.94	4.76	5.03	1.02	1.16	4.1	1.44	2.26	
20	3.91		0.78	0.23	0.17	0.39	0.16	0.41	0.65	0.48	0.86	
22	6.41		0.13	0.87	---	119.1	0.16	0.63	0.71	1.38	1.68	
Max	53.10	1.08	18.47	5.94	72.10	119.10	4.39	16.92	4.10	13.41	6.76	0.88
Min	3.19	1.08	0.06	0.21	0.12	0.39	0.08	0.37	0.65	0.48	0.86	0.88
Median	6.41	1.08	0.61	1.04	2.17	2.88	0.18	1.01	0.79	1.14	1.51	0.88
Average	16.72	1.08	3.51	2.01	13.58	22.53	1.22	3.19	1.79	2.76	2.20	0.88

Jones Co

Field Turbic

No-Purge S

	4/7/20	10/7/20	4/22/21	10/5/21	4/4/22	10/5/22	1/3/23	4/14/23	7/10/23	10/18/23	4/8/24	6/13/24
<u>Well</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>
6	1.67	2.62	1.72	2.36	0.79	3.94		1.17		6.24	5.82	
11	0.81	1.1	0.88	1.21	1.2	1.05		0.84		2.9	1.67	
12	1.01	1.3	1.47	0.93	4.46	1.09		2.53		1.82	2.69	
15	8.8	2.08	4.29	11.18	9.64	2.07		11.33		1.91	8.02	
16	1.18	1.58	4.27	1.45	0.69	1.2	4.97	2.35		2.1	2.5	2.95
20	0.77	1.53	0.85	1.28	24.09	1.28		1.27		58.82	3.03	
22	31.48	1.31	0.98	1.74	1.4	5.94	13.9	1.23	1.46	1.51	2.54	
Max	31.48	2.62	4.29	11.18	24.09	5.94	13.90	11.33	1.46	58.82	8.02	2.95
Min	0.77	1.10	0.85	0.93	0.69	1.05	4.97	0.84	1.46	1.51	1.67	2.95
Median	1.18	1.53	1.47	1.45	1.40	1.28	9.44	1.27	1.46	2.10	2.69	2.95
Average	6.53	1.65	2.07	2.88	6.04	2.37	9.44	2.96	1.46	10.76	3.75	2.95

Jones Co

Field Turbic

No-Purge S

	10/8/24	4/3/25	10/14/25	Max	Min	Ave	Std Dev
<u>Well</u>	<u>NTU</u>	<u>NTU</u>	<u>NTU</u>				
6	3.36	2.14	1.91	36.30	0.79	4.90	7.73
11	3.11	2.77	9	9.00	0.06	1.64	1.94
12	2.00	2.04	1.16	4.46	0.18	1.52	1.04
15	2.79	3.83	3.36	72.10	0.61	12.20	17.31
16	3.21	2.99	1.47	9.10	0.69	3.00	1.96
20	2.4	1.95	0.96	58.82	0.16	4.83	12.74
22	2.83	1.87	1.72	119.10	0.13	8.74	24.43
Max	3.36	3.83	9.00				
Min	2.00	1.87	0.96				
Median	2.83	2.14	1.72				
Average	2.81	2.51	2.80				

Appendix E

Running Summary of Prediction Limit Exceedances

Spring 2014		Fall 2014	
MW-6**	Barium	MW-6**	Barium
	Bis (2-ethylhexyl)phthalate		Nickel
	Dichlorodifluoromethane		Zinc
			Dichlorodifluoromethane
MW-15**	Arsenic	MW-15**	Arsenic
	Barium		Barium
	Chromium		Cobalt
	Cobalt		Nickel
	Copper		1,4-dichlorobenzene
	Lead		Acetone
	Nickel		Benzene
	Zinc		Chlorobenzene
	1,4-dichlorobenzene		Chloroethane
	Benzene		Ethylbenzene
	Bis (2-ethylhexyl)phthalate		Xylenes
	Chlorobenzene		
	Chloroethane		
	Dichlorodifluoromethane		
	Ethylbenzene		
	Xylenes		

Spring 2015		Fall 2015	
MW-6**	Barium	MW-6**	Barium
	Cobalt		
	Dichlorodifluoromethane		
MW-15**	Arsenic	MW-15**	Arsenic
	Barium		Barium
	Cobalt		Cobalt
	Nickel		Nickel
	Acetone		1,4-dichlorobenzene
	Benzene		Benzene
	Chlorobenzene		Chlorobenzene
	Chloroethane		Chloroethane
	Ethylbenzene		Xylenes
	Xylenes		Bis (2-ethylhexyl)phthalate

Spring 2016		Fall 2016	
MW-6**	Barium	MW-6**	Dichlorodifluoromethane
MW-15**	Arsenic	MW-15**	Arsenic
	Barium		Barium
	Cobalt		Cobalt
	Nickel		Nickel
	1,4-dichlorobenzene		Selenium
	Benzene		1,4-dichlorobenzene
	Chlorobenzene		Acetone
	Chloroethane		Benzene
	Ethyl Benzene		Chlorobenzene
	Xylenes		Chloroethane
			Xylenes

Spring 2017		Fall 2017	
MW-6**	None	MW-6**	Barium
			Cobalt
			Nickel
			Bis(2-ethylhexyl)phthalate
MW-15**	Arsenic	MW-15**	Arsenic
	Barium		Barium
	Cobalt		Cobalt
	Nickel		Nickel
	1,4-dichlorobenzene		Selenium
	Benzene		1,4-dichlorobenzene
	Chlorobenzene		Benzene
	Chloroethane		Chlorobenzene
	Dichlorodifluoromethane		Chloroethane
	Ethyl Benzene		Xylenes
	Xylenes		

Spring 2018		Fall 2018	
MW-6**	Barium	MW-6**	None
MW-15**	Arsenic	MW-15**	Arsenic
	Barium		Barium
	Cobalt		Cobalt
	Nickel		Nickel
	1,4-dichlorobenzene		Benzene
	Benzene		Chlorobenzene
	Chlorobenzene		Chloroethane
	Chloroethane		Xylenes
	Ethyl Benzene		
	Xylenes		

Spring 2019		Fall 2019	
MW-6**	None	MW-6**	Barium
MW-15**	Arsenic	MW-15**	Arsenic
	Barium		Barium
	Cobalt		Cobalt
	Nickel		Nickel
	Benzene		Benzene
	Chlorobenzene		Chlorobenzene
	Chloroethane		Chloroethane
	Xylenes		Xylenes

Spring 2020		Fall 2020	
MW-6**	Cobalt	MW-6**	None
MW-15**	Arsenic	MW-15**	Arsenic
	Barium		Barium
	Cobalt		Cobalt
	Nickel		Nickel
	1,4-dichlorobenzene		1,4-dichlorobenzene
	Benzene		Benzene
	Chlorobenzene		Chlorobenzene
	Chloroethane		Chloroethane
	Xylenes		Xylenes

Spring 2021		Fall 2021	
MW-6**	None	MW-6**	Barium
			Cadmium
			Cobalt
MW-15**	Arsenic	MW-15**	Arsenic
	Barium		Barium
	Cobalt		Cobalt
	Nickel		Nickel
	1,4-dichlorobenzene		1,4-dichlorobenzene
	Benzene		Benzene
	Chlorobenzene		Chlorobenzene
	Chloroethane		Chloroethane
	Xylenes		

Spring 2022		Fall 2022	
MW-6**	Barium	MW-6**	Barium
			Cobalt
			Copper
MW-15**	Arsenic	MW-15**	Arsenic
	Barium		Barium
	Cobalt		Cobalt
	Nickel		Nickel
	1,4-dichlorobenzene		1,4-dichlorobenzene
	Benzene		Benzene
	Chlorobenzene		Chlorobenzene
	Chloroethane		Chloroethane

*** Monitoring well is an Assessment or Supplemental monitoring point and water quality is compared to GWPS, rather than site prediction limits.*

Spring 2023		Fall 2023	
MW-6**	None	MW-6**	Barium
			Copper
MW-15**	Arsenic	MW-15**	Arsenic
	Barium		Barium
	Cobalt		Cobalt
	Nickel		Nickel
	1,4-dichlorobenzene		1,4-dichlorobenzene
	Benzene		Benzene
	Chlorobenzene		Chlorobenzene
	Chloroethane		Chloroethane

*** Monitoring well is an Assessment or Supplemental monitoring point and water quality is compared to GWPS, rather than site prediction limits.*

Spring 2024		Fall 2024	
MW-6**	Bis(2-ethylhexyl)phthalate	MW-6**	Barium
MW-15**	Arsenic	MW-15**	Arsenic
	Barium		Barium
	Cobalt		Cobalt
	Nickel		Nickel
	1,1-dichloroethene		1,4-dichlorobenzene
	1,4-dichlorobenzene		Benzene
	Benzene		Chlorobenzene
	Chlorobenzene		Chloroethane
	Chloroethane		

*** Monitoring well is an Assessment or Supplemental monitoring point and water quality is compared to GWPS, rather than site prediction limits.*

Spring 2025		Fall 2025	
MW-6**	Barium	MW-6**	Barium
			Cobalt
MW-16	Zinc	MW-16**	Zinc
MW-15**	Arsenic	MW-15**	Arsenic
	Barium		Barium
	Cobalt		Cobalt
	Nickel		Nickel
	1,4-dichlorobenzene		1,4-dichlorobenzene
	Benzene		Benzene
	Chlorobenzene		Chlorobenzene
	Chloroethane		Chloroethane

*** Monitoring well is an Assessment or Supplemental monitoring point and water quality is compared to GWPS, rather than site prediction limits.*

Appendix F

Summary of On-Going Assessment Monitoring

Bis(2-ethylhexyl)phthalate (ug/L)**GWPS = 6.0 ug/L**

Date	MW-6	MW-15	MW-16	MW-22
3/6/2009	<8	<8	NT	<8
4/1/2013	NT	10.0	NT	NT
9/9/2013	NT	<10	NT	NT
3/30/2014	36.0	85.0	NT	NT
9/19/2014	NT	<10	NT	NT
4/20/2015	<10	<10	NT	NT
7/9/2015	<10	NT	NT	NT
10/5/2015	<10	10.0	NT	NT
4/5/2016	<10	<10	NT	<10
10/5/2016	<10	<10	NT	No Sample
4/4/2017	<10	<10	NT	<10
10/3/2017	10.0	<6	NT	<6
4/10/2018	<6	<6	NT	NT
10/12/2018	<6	<6	NT	NT
4/16/2019	<6	10.0	NT	NT
9/30/2019	<6	<6	NT	NT
4/7/2020	<6	<6	NT	NT
10/7/2020	<6	<6	NT	NT
4/22/2021	NT	NT	NT	NT
10/5/2021	NT	NT	NT	NT
4/4/2022	NT	NT	NT	NT
10/5/2022	NT	NT	NT	NT
4/14/2023	NT	NT	NT	NT
10/18/2023	NT	NT	NT	NT
4/8/2024	32.0	NT	NT	NT
10/8/2024	<13	NT	NT	NT
4/3/2025	NT	NT	NT	NT
10/14/2025	NT	NT	<6	NT

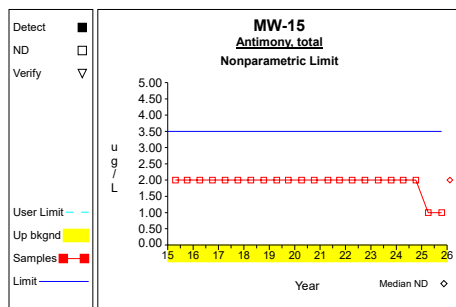
Dichlorodifluoromethane (ug/L)**GWPS = 1,000.0 ug/L**

Date	MW-6	MW-15	MW-16	MW-22
3/6/2009	<1	<1	NT	<1
4/1/2013	NT	<1	NT	NT
9/9/2013	NT	NT	NT	NT
3/30/2014	3.5	2.5	NT	NT
9/19/2014	1.3	<1	NT	NT
4/20/2015	1.0	<1	NT	NT
7/9/2015	NT	NT	NT	NT
10/5/2015	<1	<1	NT	NT
4/5/2016	<1	<1	NT	<1
10/5/2016	1.0	<1	NT	No Sample
4/4/2017	<1	1.0	NT	<1
10/3/2017	<1	<1	NT	<1
4/10/2018	<1	<1	NT	NT
10/12/2018	<1	<1	NT	NT
4/16/2019	<1	<1	NT	NT
9/30/2019	<1	<1	NT	NT
4/7/2020	<1	<1	NT	NT
10/7/2020	<1	<1	NT	NT
4/22/2021	NT	NT	NT	NT
10/5/2021	NT	NT	NT	NT
4/4/2022	NT	NT	NT	NT
10/5/2022	NT	NT	NT	NT
4/14/2023	NT	NT	NT	NT
10/18/2023	NT	NT	NT	NT
4/4/2024	<1	NT	NT	NT
10/8/2024	NT	NT	NT	NT
4/3/2025	NT	NT	NT	NT
10/14/2025	NT	NT	<1	NT

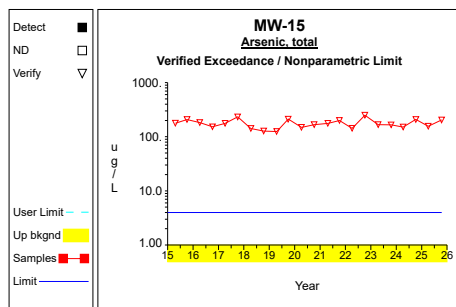
Appendix G

Time Series Plots – MW-15

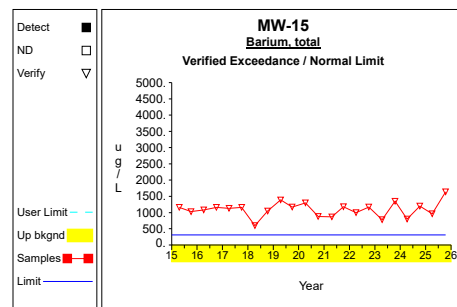
Up vs. Down Prediction Limits



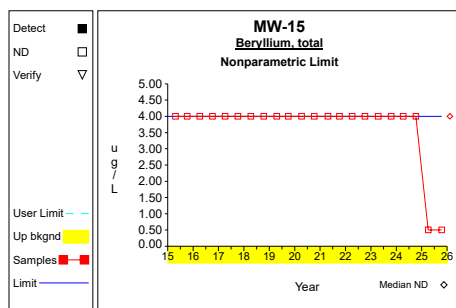
Graph 16



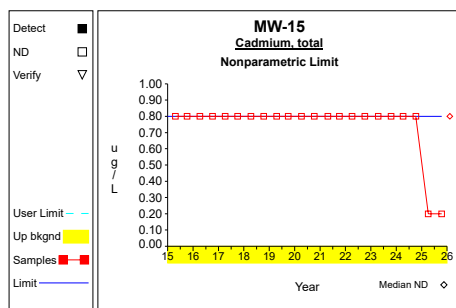
Graph 17



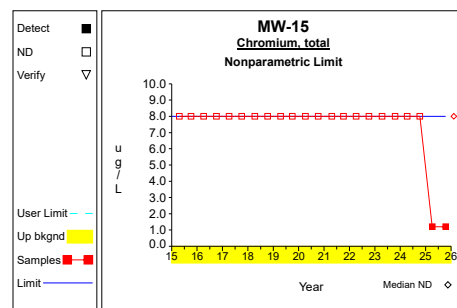
Graph 18



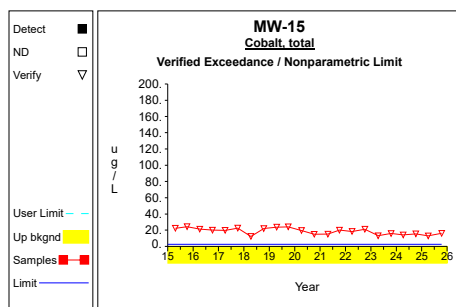
Graph 19



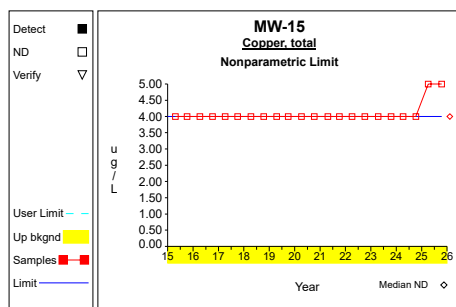
Graph 20



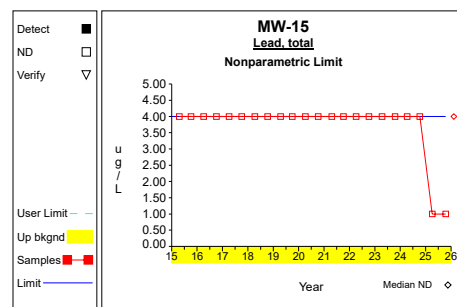
Graph 21



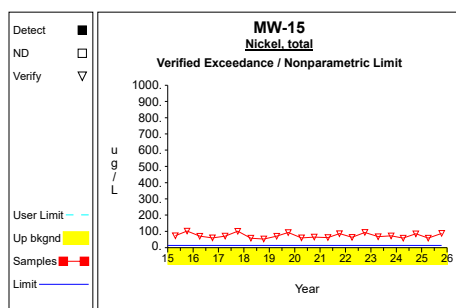
Graph 22



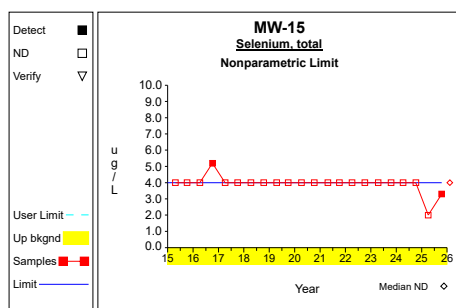
Graph 23



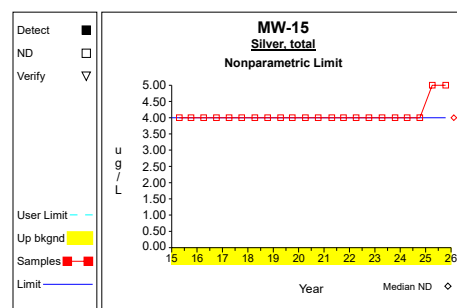
Graph 24



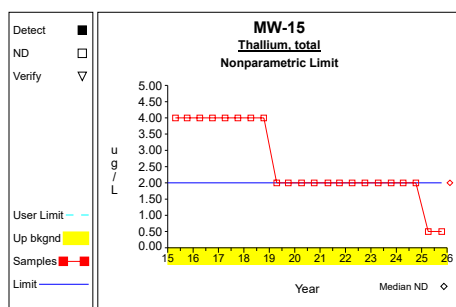
Graph 25



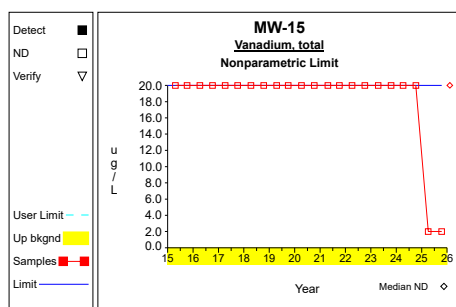
Graph 26



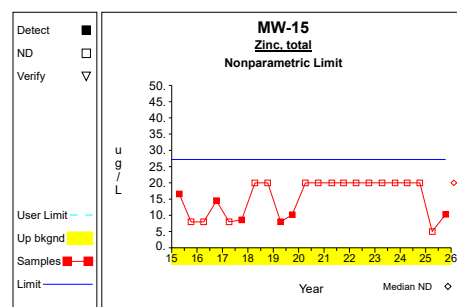
Graph 27



Graph 28

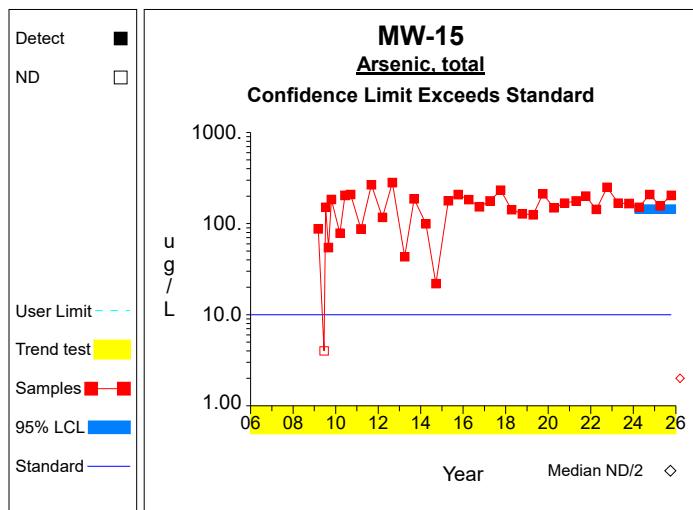


Graph 29

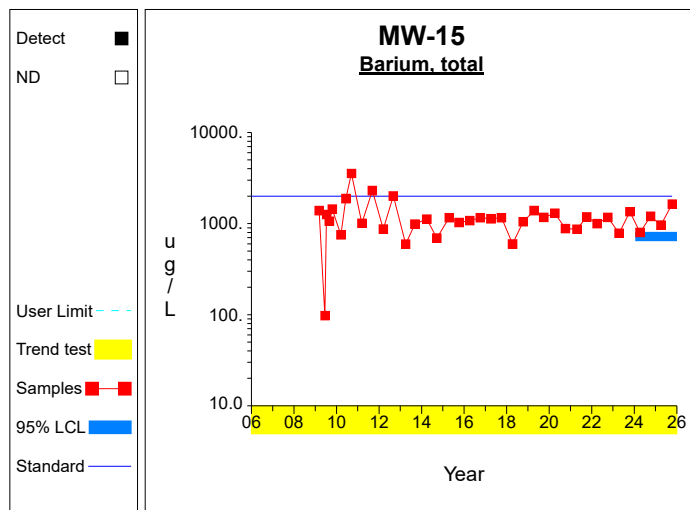


Graph 30

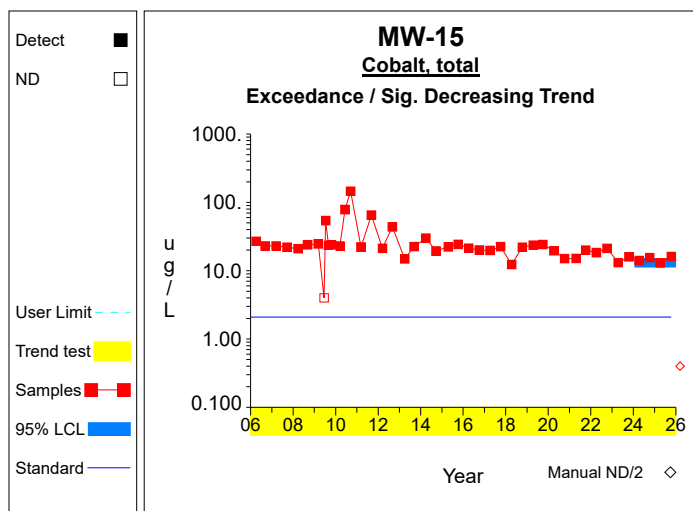
Confidence Limits (Assessment)



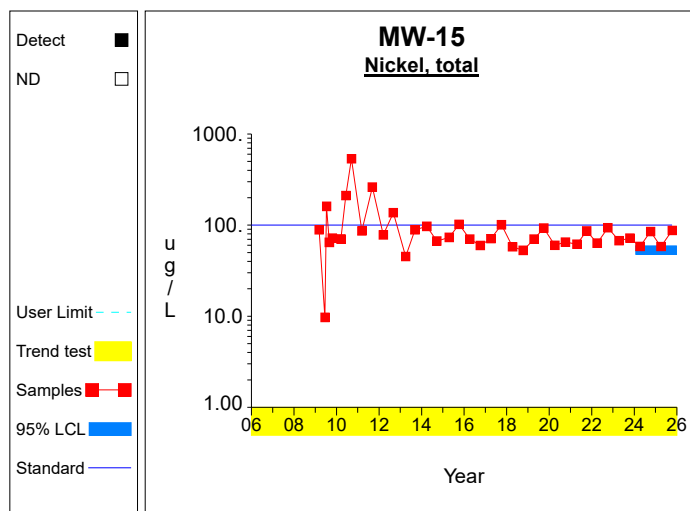
Graph 6



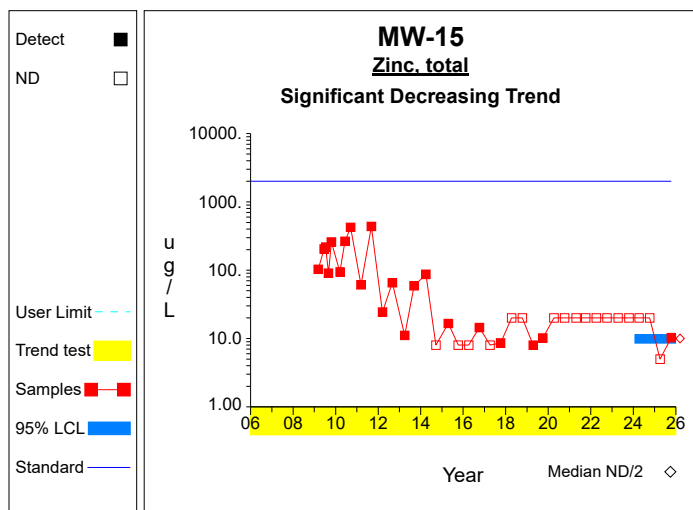
Graph 7



Graph 8

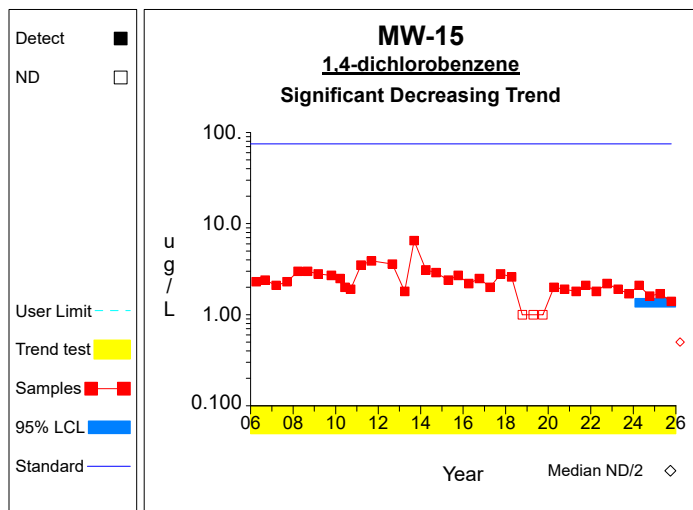


Graph 9

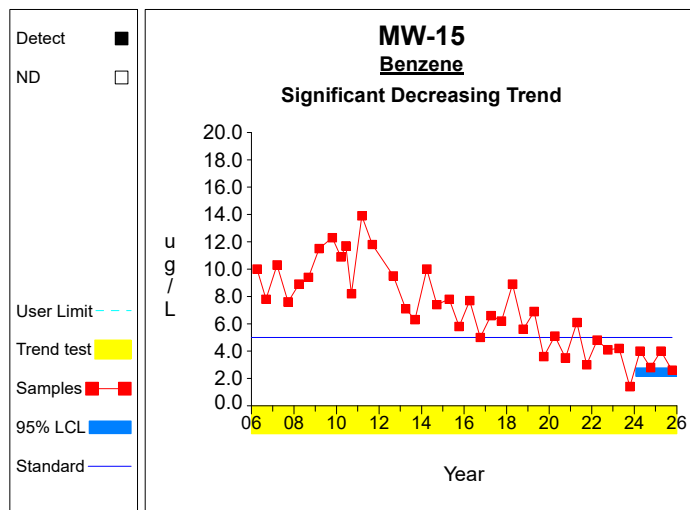


Graph 10

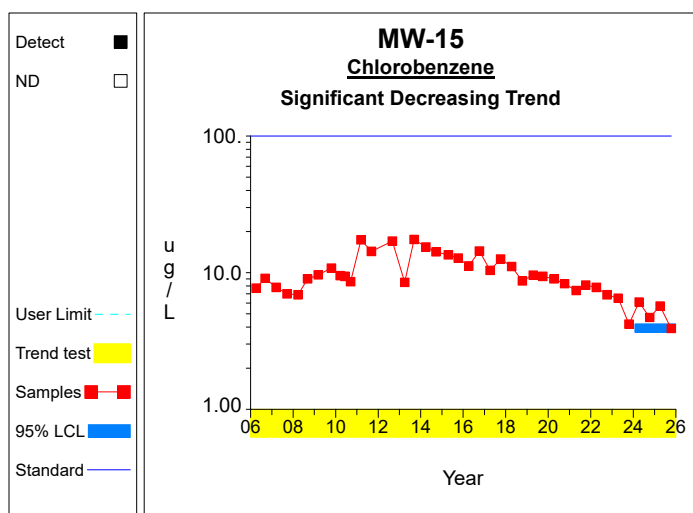
Confidence Limits (Assessment)



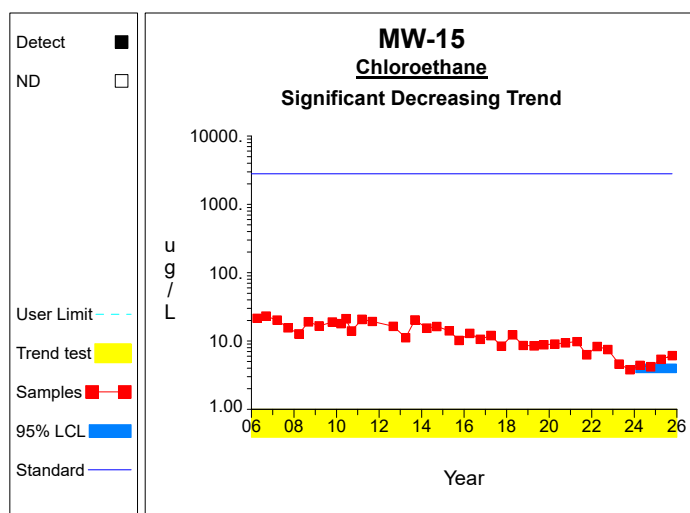
Graph 1



Graph 2



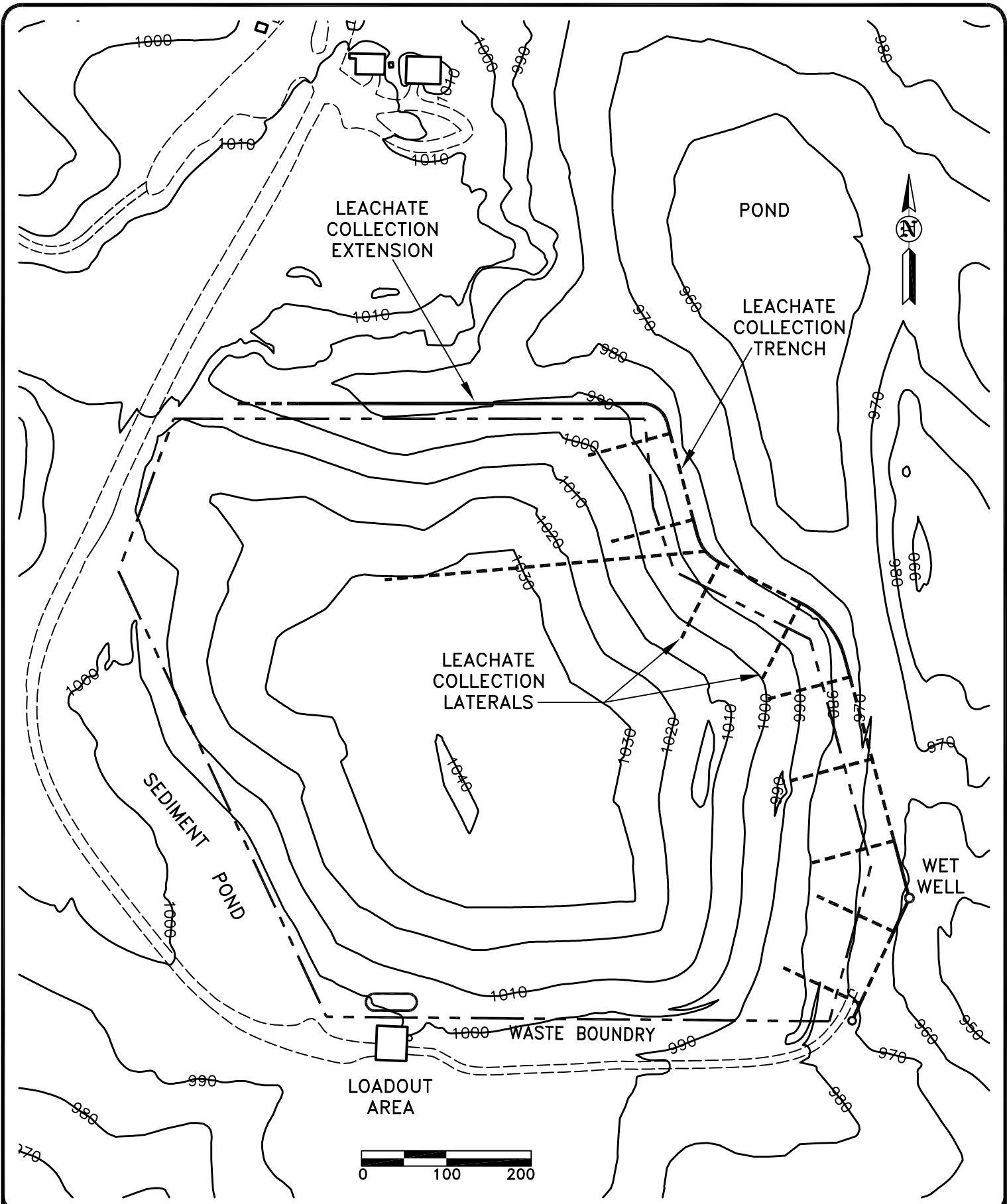
Graph 3



Graph 4

Appendix H

Leachate Collection System Map



LEACHATE COLLECTION EXTENSION

JONES COUNTY SANITARY LANDFILL
ANAMOSA, IOWA

FIGURE: **1**

REVISION	NO.	DATE
DRAWN DRA	PROJECT NO. 6038	DATE 1-17-16