2025
ANNUAL GROUNDWATER QUALITY REPORT

OF

THE IDA COUNTY SANITARY LANDFILL
47-SDP-01-76C
IDA GROVE, IOWA

by:
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January, 2026

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Narrative

Figures

Tables

Appendices

Certification

Prepared by:  Date: 1-13-2026

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Section 1.0 Background Information

1.1 Report Format

Table 1 through Table 13 are attached to this report and satisfy the IDNR requirement to provide the tables to meet the IDNR format requirements.

1.2 Report Priority

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

1.3 Period of Report Coverage

Water quality data evaluation is based on a running compilation of data beginning in March 31, 2010. Statistical evaluations herein are based on the most recent water quality data collected through October 10, 2025.

1.4 Current Site Maps

Figure 1 is attached illustrating the current site features, monitoring well locations, buildings, and leachate piezometer locations.

Figure 2 represents the groundwater contour map.

1.5 Site Status and Applicable Rules

Site Location & Status

The landfill site occupies about 50 acres in the NW 1/4 NW 1/4 and W 1/2 NE 1/4 NW 1/4 sec. 3, T87N, R40W, Ida County, Iowa. The site has a physical address of 2202 Indian Avenue, Ida Grove, Iowa 51145. The facility operates under the Iowa Department of Natural Resources (IDNR) Permit Number 49-SDP-01-76C.

On October 1, 2007, the landfill ceased accepting waste and began closure activities. A closure permit application was issued by IDNR on April 16, 2008. Final cover was installed during August 2008 and certification documents submitted to IDNR on September 25, 2008. Retesting of the closure cap was conducted during the fall of 2016 and IDNR approved the closure documentation in permit amendment #4 dated April 28, 2017. When operating, household and municipal waste were the chief refuse materials, but the permit also provided for the acceptance of asbestos and petroleum-contaminated soil.

Site Geology/Hydrogeology

An intermittent stream flows from south to north in the eastern part of the landfill property. A drainage-way extends eastward from the toe of the landfill to the intermittent stream. Deposits of alluvial and colluvial silts were found along the intermittent stream (MW-17).

The site is underlain by Wisconsinan loess and underlying pre-Illinoian glacial till. The glacial till is about 300 ft. thick; the overlying loess is as much as 25 ft. thick in the upland parts of the site (Green Environmental Services, 1991). In places (MW-4), lenses of fine-grained sand as much as 5 ft. thick are enclosed by the loess (Green Environmental Services, 1991). Elsewhere,

the drilling (MW-7) penetrated lenses of very fine-grained sand that is as much as 14 ft. thick and separates the loess from the underlying till. Cross-sections prepared by Green Environmental Services (1991) indicate that the sand lenses along the loess-till contact finger out into the till section. Other lenses of silty sand as much as two feet thick are enclosed by the till (MW-9).

Monitoring wells in the sampling program at the Ida County Sanitary Landfill

Monitoring Well	Screened Interval (ft bgs)	Screened Across
MW-3	27.0-32.0	Loess on oxidized glacial till
MW-7	15.0-25.0	Loess on very fine sand
MW-10	20.0-30.0	Oxidized glacial till
PZ-11	10.0-20.0	Loess on glacial till
MW-13	15.0-25.0	Loess on oxidized glacial till

Landfill Layout

According to the Green report, the landfill was developed partly as a valley fill between two east-trending topographic noses that act as groundwater divides. The flow of shallow groundwater is generally east.

The existing down-gradient monitoring wells are located to intercept any groundwater flow exiting the landfill. There are no potential receptors for the groundwater in the surficial deposits.

Groundwater collection and diversion piping does not exist below the filled portions of this facility.

Applicable Rules

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

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". Water elevation information is summarized in Table 4 and Table 4A.

High & Low Water Levels
Current water elevation data is included on Table 4. Historic water elevation data (1989 to present) is included in Table 4A. The high and low water elevations in 2025 are summarized in Table 4.

A Water Table Contour Map (Figure 2) dated October 10, 2025, is included with this report and illustrates the water surfaces and the effects of the topography.

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

Well Depth & Sedimentation
Well depth measurements were made October 10, 2025. Review of the well depth data included on Table 4 do not indicate that significant well sedimentation is occurring at any site monitoring wells (0 to 0.75 feet of sedimentation).

Well Recharge Rates & Chemistry
The general in-situ permeability was defined in the 1991 Hydrogeologic Investigation Report - Hydrologic Monitoring System Plan for the Ida County Landfill (Doc #62479). The summary information is included in Appendix A.

Table 4B is included summarizing the original measured hydraulic conductivities and well recovery information collected in 2020, 2022, and 2024. No significant trends are noted in the well recovery data to date. The well recovery rate is sufficient in all cases to collect an appropriate sample and the wells are functioning as intended. Monitoring well recovery rate reevaluation is due every other year and should be evaluated again in 2026.

Based on the apparent static conditions across the site, it appears that the semi-annual water elevation data is sufficient to adequately monitor the hydrologic condition of the site. Review of the water elevation data for 2025 does not indicate excessive variability compared to historic water elevation data. The wells are interpreted to be appropriately located to detect any impact, should it occur.

Section 2.0 Reporting Period Monitoring Activities

The Hydrologic Monitoring for the site is approved by Special Provision 5 of Permit Amendment #2, dated October 26, 2010 (Doc# 60921). The current HMSP is summarized in Table 1. The HMSP Implementation Schedule for 2026 is itemized in Table 2.

Background monitoring wells are restricted to a single well (MW-3). The background monitoring well is functioning as valid sampling point based on the hydrogeology and the water quality results.

Downgradient monitoring points include MW-7, MW-10, PZ-11, and MW-13. A variance approved on October 25, 2010 (see Permit Amendment #2) allows Appendix I and Appendix II sampling in accordance with IAC 567, Chapter 113.10(4) and 113.10(5) (2007 version).

A summary of the planned 2026 sample collection events at each well is included on Table 2.

Field sampling information for April 1, 2025 and October 10, 2025 sampling episodes is included on the field forms (IDNR Form 542-1322) in Appendix B.

A comprehensive summary of Analytical Data for the episodes between March 31, 2010 and October 10, 2025 is included on Table 9.

2.1 Current Detection Monitoring Activities

The background well is currently MW-3.

Downgradient detection monitoring points include MW-10 and MW-13.

2.2 Current Assessment Monitoring Activities

Monitoring wells MW-7 and PZ-11 are included in the assessment monitoring program. To date, bis(2-ethylhexyl)phthalate and dichlorodifluoromethane are the only Appendix II compounds detected.

The full Appendix II parameter list is analyzed on an approved five (5) year frequency at all assessment wells. Approval of the five (5) year frequency is included in an IDNR Comment Letter dated March 22, 2013 (Doc #76247).

The most recent full Appendix II sampling was completed on October 7, 2022 at MW-7 and April 12, 2021 at PZ-11. Table 2 lists the next required full Appendix II sample collection episodes.

Section 3.0 Data Evaluation and Summary

Field Sampling Forms for April 1, 2025 and October 10, 2025 sample collection episodes are included in Appendix B. Chemical analytical results for the April 1, 2025 and October 10, 2025 sample collection episodes are included in Appendix C. The cumulative chemical analytical data is also presented in summary form in Table 9.

Statistical Evaluations are prepared by Otter Creek Environmental Services for the Spring and Fall monitoring episodes. The Groundwater Statistics Report for the Ida County Sanitary Landfill, First Semi-Annual Monitoring Event in 2025, dated June, 2025 is included in Appendix D. The Groundwater Statistics Report for the Ida County Sanitary Landfill, Second Semi-Annual Monitoring Event in 2025, dated October, 2025 is also included in Appendix D.

QUALITY ASSURANCE/QUALITY CONTROL

A blind duplicate sample was collected at PZ-11 during the April 1, 2025 sampling episode. A blind duplicate was collected at MW-13 during the October 10, 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 (April 1, 2025 and October 10, 2025) were within the limits established and indicate that the data quality is acceptable without restriction.

SITE SPECIFIC GWPS

There are no Site-Specific GWPS established for this facility, *with the exception of cobalt*. GWPS are as listed in the Statewide Standards published in Iowa Administrative Code (IAC) 567, Chapter 137. The prediction limit for cobalt (3.6 ug/L) in the site background well exceeds the Statewide Standard (2.1 ug/L) published in Iowa Administrative Code (IAC) 567, Chapter 137. Therefore, a site-Specific GWPS for cobalt is established herein at the value equal to the Prediction Limit (3.6 ug/L). All GWPS are listed on Table 5.

STATISTICALLY SIGNIFICANT INCREASES (SSI)

Test results from background monitoring well MW-3 (Table 5) are utilized to establish background conditions of site groundwater.

All downgradient data collected since March 31, 2010 is evaluated herein. In the downgradient wells, compounds that have exceeded a calculated prediction limit in 2025 (spring and/or fall) are summarized in Table 1 and Table 6.

The water quality data at each downgradient well is also evaluated over time in Table 7 which summarizes compounds in downgradient wells that have exceeded a control limit since March 31, 2010. Note that exceedances are only documented at MW-7 and PZ-11.

ASSESSMENT MONITORING SUMMARY

The full Appendix II (assessment) monitoring events have historically been completed at MW-7 and PZ-11. Bis (2-ethylhexyl)phthalate and dichlorodifluoromethane are the only Appendix II compound detected (beyond the Appendix I list).

Full Appendix II List Assessment Monitoring is required on a five (5) year frequency as approved by the IDNR Comment Letter dated March 22, 2013 (Doc #76247).

The most recent full Appendix II sampling was completed on October 7, 2022 at MW-7 and April 12, 2021 at PZ-11.

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

STATISTICALLY SIGNIFICANT LEVELS (SSL)

The detections that exceed site prediction limits (brown highlights on 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.

The Confidence Intervals (95% LCL and 95% UCL) are calculated during each statistical evaluation based on the most recent four (4) data points. Recorded SSL are highlighted in yellow in Table 7.

SSL are summarized as:

MW-7 – vinyl chloride (2013-2019)

Note that the SSL was never addressed through corrective action, rather the issue resolved without action years ago. Further, vinyl chloride has not been detected (reported as less than the MRL) at MW-7 in the past five (5) years.

Table 7 for MW-7 is modified to illustrate the 95% UCL (highlighted in green for vinyl chloride) in addition to the 95% LCL. Rule dictates that a remedy is considered complete when the 95% UCL is below the GWPS for three (3) consecutive years. As illustrated on Table 7, the 95% UCL for vinyl chloride at MW-7 has been below the GWPS since April 8, 2020.

CORRECTIVE MEASURES MONITORING RESULTS

Not applicable at this time.

Section 4.0 Leachate Collection System Performance Evaluation

General – The Ida County Landfill is a closed landfill that stopped accepting waste October 1, 2007 and received final cover during August 2008. The original design and construction of the site was approved under previous rules prior to the requirement for liners. Historic documents

suggest that portions of the site are underlain by a "liner" consisting of two feet of compacted on-site soils. No wastes were placed outside of the original "footprint" after the rules were revised requiring liners and leachate collection.

The Landfill does not currently have a leachate control system. In June 1995, a Risk Assessment and a *Certification of Landfill Risk Assessment* document were provided by H. R. Green staff. A letter dated September 26, 1995, from the IDNR accepts the Certification and granted an exemption from installation of the leachate control system.

A DNR review letter dated March 5, 2020 (#97158) approved the reduction of leachate piezometer monitoring from quarterly to semi-annually.

Leachate Line Cleaning – Not Applicable.

Leachate Head Measurements - Eight leachate piezometers were installed in the waste early in 1991. Since that time, IDNR approved the vertical expansion of the landfill that resulted in the extension of the casing on most of the piezometers. After the placement of the final cover during August 2008, the site was surveyed, and the current elevations of the leachate piezometers verified. Through the course of time LPZ-4, LPZ-6, and LPZ-8 have been broken, destroyed, or no longer exist. We do not recommend the replacement of any leachate piezometers at this time. Table 12 is a summary of the 2025 measurements. Leachate varies in thickness from 0.0 feet to 6.20 feet in 2025 and is typically greatest at piezometer LPZ-5. Current rule does not limit leachate head on those landfills constructed prior to regulation to incorporate leachate collection systems. Leachate seeps are not evident.

Table 12A is also included and summarizes leachate levels over time at LPZ-1 through LPZ-7.

Section 5.0 Gas Monitoring

Explosive gas monitoring was performed semi-annually during monitoring well sampling events. The results are summarized in Table 13.

Review of Table 13 indicates that all recorded readings in 2025 were reported to be below actionable levels.

Section 6.0 Update on Environmental Covenant Progress

A letter was submitted to IDNR on January 20, 2025 (Doc #111904) requesting initiation of the Environmental Covenant process to terminate the closure permit and end regulation of the landfill under IAC 567-113. The IDNR site visit on March 28, 2025, was in conjunction with that request. Verbal communications with IDNR indicate that the site will not be considered for an Environmental Covenant until the areas of sparse vegetation are mitigated and the trees are removed from the landfill cap, the cap terraces, and the letdown outlet.

Section 7.0 Recommendations

a. Continue to perform sampling in accordance with Special Provision 5 of the Permit.
b. Continue to evaluate water quality in the Annual Water Quality Report, due January 31 of each year.
c. Continue to perform semi-annual water level measurements in the Spring & Fall of each year and reevaluate the data in the Annual Water Quality Report.
d. The Well Recharge Rate Evaluation should be performed again in 2026.
e. Continue to perform *semi-annual* leachate level measurements at LW-1, LW-2, LW-3, LW-5, and LW-7. Continue to re-evaluate leachate levels in the Annual Groundwater Quality Report/Leachate Control System Performance Evaluation.
f. Continue to perform semi-annual explosive gas monitoring and report the results in the Annual Groundwater Quality Report.
g. Continue to address those items required at the site in order to pursue the issuance of an Environmental Covenant in lieu of IDNR oversight through the current Closure Permit. IDNR requires repair of the sparsely vegetated areas, and the removal of trees from the landfill cap, the cap terraces, and the letdown outlet.

Figures

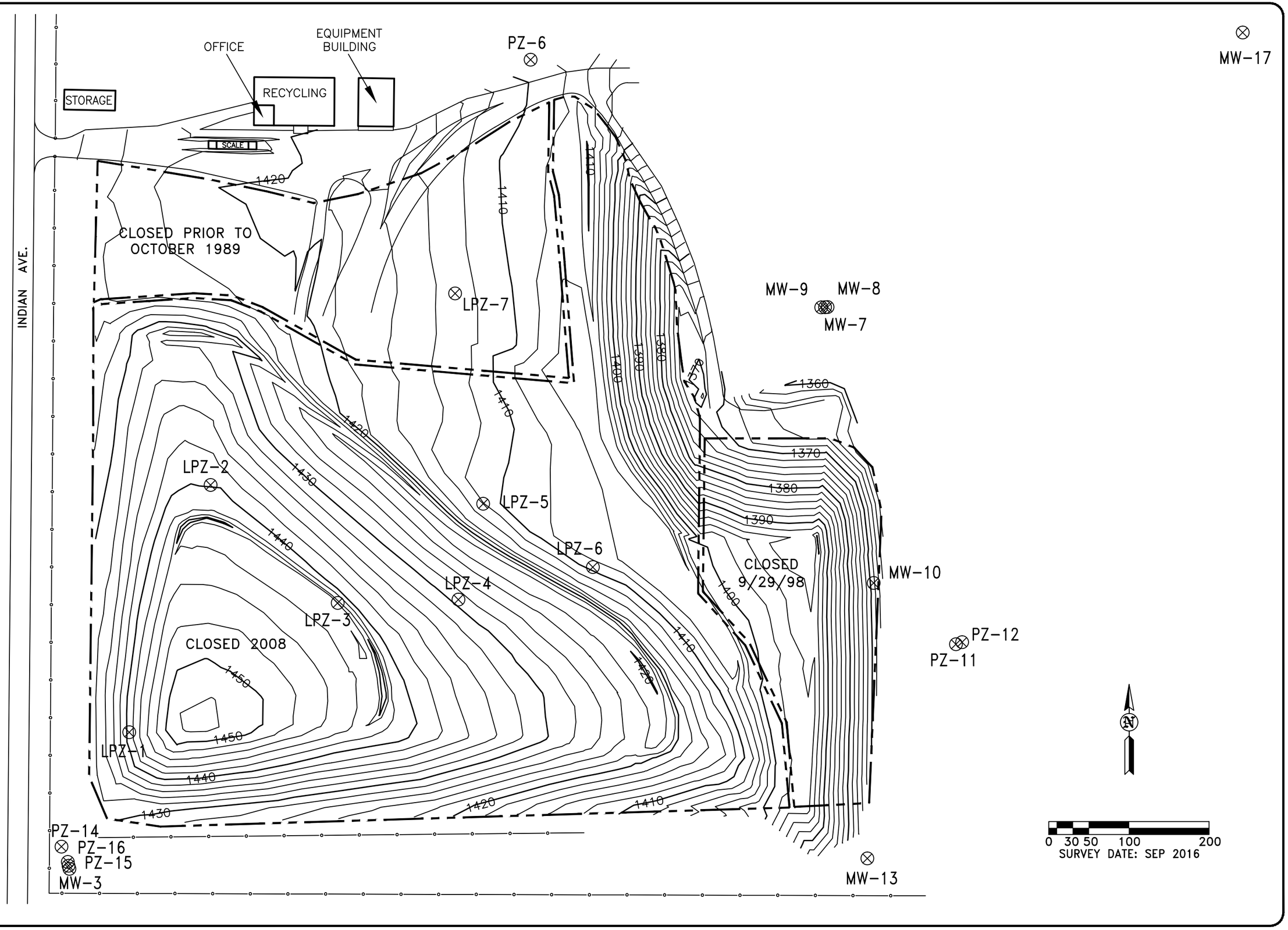

FIGURE: 1

REVISION	NO.	DATE
DRAWN DRA	PROJECT NO. 6049	DATE 12-11-24

SITE PLAN

IDA COUNTY SANITARY LANDFILL
IDA GROVE, IOWA

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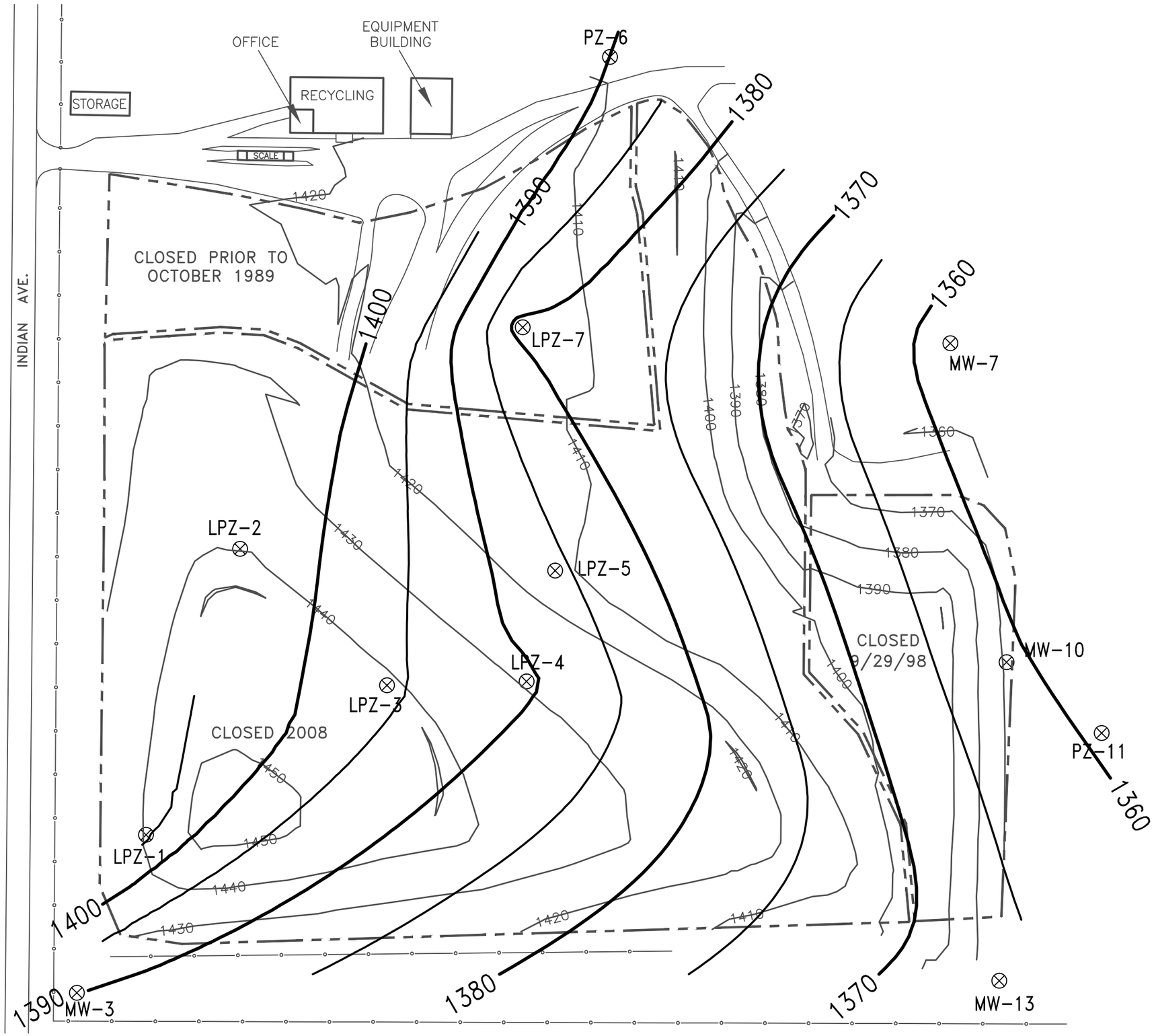

WATER ELEVATION OCTOBER 10, 2025	
WELL	ELEV.
MW-3	1390.14
MW-7	1357.35
MW-10	1360.60
MW-13	1366.70
PZ-6	1389.96
PZ-11	1359.40
LPZ-1	1406.06
LPZ-2	1404.13
LPZ-3	1395.86
LPZ-4	1390.89
LPZ-5	1385.98
LPZ-7	1379.19

TABLE NOTE:
ELEVATIONS OF LPZ-1, LPZ-2 AND LPZ-3 REPRESENT THE BOTTOMS OF DRY WELLS. LPZ-4 WAS DESTROYED BEFORE 10/10/25. THE ELEVATION OF LPZ-4 REPRESENTS THE BOTTOM OF A DRY WELL ON 4/1/25.

FIGURE: 2

REVISION	NO.	DATE
DRAWN DRA	PROJECT NO. 6049	DATE 10-25-25

GROUNDWATER CONTOURS

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Tables

Table 1 – Monitoring Program Summary

Table 1
Monitoring Program Summary
Annual Water Quality Report
Ida County Sanitary Landfill
Permit No. 47-SDP-01-76C

2025

Monitoring Well	Formation	Current Monitoring Program	Change for next sampling event	Historic - Constituents w/ SSI	Spring - Constituents w/ SSI	Fall - Constituents w/ SSI	Historic - Constituents w/ SSL	Spring - Constituents w/ SSL	Fall - Constituents w/ SSL	Total # of Samples in each monitoring program since March 31, 2010		
										Detection	Assessment	Corrective Action
MW-3	Loess	Background	No Change	None	None	None	None	None	None	32	0	0
MW-7	Loess	Assessment	No Change	**chlorobenzene, chloroethane, cis-1,2-dichloroethylene, dichlorofluoromethane,vinyl chloride, cobalt, nickel**	**nickel**	**chlorobenzene, chloroethane, cis-1,2-dichloroethylene, dichlorofluoromethane,cobalt, nickel**	**vinyl chloride (before 2020)**	None	None	0	32	0
MW-10	Glacial Till	Detection	No Change	None	None	None	None	None	None	32	0	0
PZ-11	Loess	Assessment	No Change	**1,1-dichloroethane, chloroethane, nickel**	**1,1-dichloroethane**	**1,1-dichloroethane**	None	None	None	0	32	0
MW-13	Loess	Detection	No Change	None	None	None	None	None	None	32	0	0

Table 2 – Monitoring Program Implementation Schedule

Table 2
Monitoring Program Implementation Schedule
Annual Water Quality Report
Ida County Sanitary Landfill
Permit No. 49-SDP-01-76C

2025

Monitoring Well	Recent Sampling Dates and Constituents	Upcoming Sampling Dates and Constituents		Full Appendix II Sample Dates	
		April, 2026	October, 2026	Previously Collected	Next Event
MW-3	See Table 9	Appendix I	Appendix I		N/A
MW-7	See Table 9	Appendix I + dichlorofluoromethane	Appendix I + dichlorofluoromethane	4/11/11, 4/1/12, 410/17, 10/7/22	October 2027
MW-10	See Table 9	Appendix I	Appendix I		N/A
PZ-11	See Table 9	**Appendix II**	Appendix I	4/12/13, 4/8/20, 4/12/21	April 2026
MW-13	See Table 9	Appendix I	Appendix I		N/A
					N/A

Table 3 – Monitoring Well Maintenance Performance Reevaluation Schedule

Table 3
Monitoring Well Maintenance and Performance Revaluation Schedule
Annual Water Quality Report
Ida County Sanitary Landfill
Permit No.49-SDP-01-76C

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

Table 4 – Monitoring Well Maintenance Performance Reevaluation Summary

Table 4
Monitoring Well Maintenance and Performance Summary
Annual Water Quality Report
Ida County Sanitary Landfill
Permit No. 47-SDP-01-76C

Well	Top of casing	Top of Screen	Total Depth		Date of Measurements		Maximum Depth Discrepancy (ft)
					4/1/2025	10/10/2025	
MW-3	1419.29	1384.89	39.4	Groundwater Level (ft)	30.65	29.15	0.35
				Groundwater Elevation (Ft MSL)	1388.64	1390.14	
				Measured Well Depth (ft)	39.05	39.05	
				Submerged (+) or Exposed screen (-)	3.75	5.25	
MW-7	1367.8	1351.65	26.15	Groundwater Level (ft)	8.92	10.45	0.75
				Groundwater Elevation (Ft MSL)	1358.88	1357.35	
				Measured Well Depth (ft)	25.4	25.4	
				Submerged (+) or Exposed screen (-)	7.23	5.7	
MW-10	1377.05	1354.35	32.7	Groundwater Level (ft)	13.93	16.45	0.25
				Groundwater Elevation (Ft MSL)	1363.12	1360.6	
				Measured Well Depth (ft)	32.45	32.45	
				Submerged (+) or Exposed screen (-)	8.77	6.25	
PZ-11	1366.7	1354.05	22.65	Groundwater Level (ft)	6.6	7.3	0
				Groundwater Elevation (Ft MSL)	1360.1	1359.4	
				Measured Well Depth (ft)	22.65	22.65	
				Submerged (+) or Exposed screen (-)	6.05	5.35	
MW-13	1381.39	1363.72	27.67	Groundwater Level (ft)	14.28	14.69	0
				Groundwater Elevation (Ft MSL)	1367.11	1366.7	
				Measured Well Depth (ft)	27.67	27.67	
				Submerged (+) or Exposed screen (-)	3.39	2.98	

Table 4A – Water Elevation Summary Over Time

Table 4A--- Water-level data, Ida County Sanitary Landfill.

Monitor Well/ TOC Elev. (ft)	Screened Interval Depth (ft)	Screened Interval Elev. (ft)	Water Level	Date								Mean/ Std. Dev.
				4/4/2005	9/8/2005	4/22/2006	9/19/2006	4/30/2007	9/13/2007	4/21/2008	9/16/2008	
MW-3	34.0	1385.3	Depth (ft)	30.33	30.24	30.41	30.05	28.04	28.35	30.30	27.36	
1419.29	37.0	1382.3	Elev. (ft)	1388.96	1389.05	1388.88	1389.24	1391.25	1390.94	1388.99	1391.93	
				3/21/2009	9/10/2009	3/31/2010	9/16/2010	4/11/2011	9/26/2011	4/1/2012	8/23/2012	
			Depth (ft)	29.23	27.68	20.74	25.26	28.60	28.82	30.43	30.53	
			Elev. (ft)	1390.06	1391.61	1398.55	1394.03	1390.69	1390.47	1388.86	1388.76	
				4/13/2013	9/14/2013	4/11/2014	9/27/2014	3/16/2015	9/28/2015	3/14/2016	9/3/2016	
			Depth (ft)	30.90	29.49	30.59	27.46	29.27	26.72	25.54	28.32	
			Elev. (ft)	1388.39	1389.80	1388.70	1391.83	1390.02	1392.57	1393.75	1390.97	
				4/10/2017	9/1/2017	4/23/2018	9/14/2018	4/15/2019	9/17/2019	4/8/2020	10/2/2020	
			Depth (ft)	30.33	29.21	29.00	28.89	26.13	28.86	28.56	30.30	29.14
			Elev. (ft)	1388.96	1390.08	1390.29	1390.40	1393.16	1390.43	1390.73	1388.99	2.16
				4/12/2021	10/26/2021	4/4/2022	10/7/2022	4/19/2023	10/25/2023	4/17/2024	10/17/2024	
			Depth (ft)	30.41	30.56	31.02	31.39	31.68	32.42	32.00	30.36	
			Elev. (ft)	1388.88	1388.73	1388.27	1387.90	1387.61	1386.87	1387.29	1388.93	
				4/1/2025	10/10/2025							
			Depth (ft)	30.65	29.15							
			Elev. (ft)	1388.64	1390.14							
				11/1990	1/1991	2/1991	3/1991	4/10/1991	10/29/1991	4/27/1992	10/27/1992	
MW-7	17.8	1350.0	Depth (ft)	12.77	12.74	12.68	12.00	12.27	12.42	11.13	11.84	
1367.80	27.8	1340.0	Elev. (ft)	1355.03	1355.06	1355.12	1355.80	1355.53	1355.38	1356.67	1355.96	
				4/27/1993	10/27/1993	4/27/1994	10/28/1994	4/27/1995	10/28/1995	4/29/1996	10/28/1996	
			Depth (ft)	10.06	11.37	11.57	11.96	10.69	11.98	11.96	11.77	
			Elev. (ft)	1357.74	1356.43	1356.23	1355.84	1357.11	1355.82	1355.84	1356.03	
				4/28/1997	9/29/1997	4/28/1998	10/15/1998	4/13/1999	10/4/1999	3/22/2000	9/13/2000	
			Depth (ft)	11.49	11.95	10.63	11.56	11.39	11.80	11.76	12.88	
			Elev. (ft)	1356.31	1355.85	1357.17	1356.24	1356.41	1356.00	1356.04	1354.92	
				4/18/2001	9/26/2001	4/9/2002	9/11/2002	4/10/2003	9/9/2003	4/6/2004	9/16/2004	
			Depth (ft)	10.44	11.78	11.41	11.90	11.09	11.98	10.42	11.52	
			Elev. (ft)	1357.36	1356.02	1356.39	1355.90	1356.71	1355.82	1357.38	1356.28	
				4/4/2005	9/8/2005	4/22/2006	9/19/2006	4/30/2007	9/13/2007	4/21/2008	9/16/2008	
			Depth (ft)	11.58	12.24	10.55	12.00	9.52	10.80	9.96	10.65	
			Elev. (ft)	1356.22	1355.56	1357.25	1355.80	1358.28	1357.00	1357.84	1357.15	
				3/21/2009	9/10/2009	3/31/2010	9/16/2010	4/11/2011	9/26/2011	4/1/2012	8/2382012	
			Depth (ft)	10.49	11.22	9.07	9.76	9.44	10.90	10.58	12.06	
			Elev. (ft)	1357.31	1356.58	1358.73	1358.04	1358.36	1356.90	1357.22	1355.74	
				4/13/2013	9/14/2013	4/11/2014	9/27/2014	3/16/2015	9/28/2015	3/14/2016	9/3/2016	
			Depth (ft)	9.31	11.51	11.44	9.29	9.95	9.68	8.79	9.99	
			Elev. (ft)	1358.49	1356.29	1356.36	1358.51	1357.85	1358.12	1359.01	1357.81	
				4/10/2017	9/1/2017	4/23/2018	9/14/2018	4/15/2019	9/17/2019	4/8/2020	10/2/2020	
			Depth (ft)	9.20	9.45	8.56	9.27	8.70	9.35	8.63	10.98	10.88
			Elev. (ft)	1358.60	1358.35	1359.24	1358.53	1359.10	1358.45	1359.17	1356.82	1.17
				4/12/2021	10/26/2021	4/4/2022	10/7/2022	4/19/2023	10/25/2023	4/17/2024	10/17/2024	
			Depth (ft)	8.88	11.01	10.35	12.06	10.03	11.55	9.49	11.81	
			Elev. (ft)	1358.92	1356.79	1357.45	1355.74	1357.77	1356.25	1358.31	1355.99	
				4/1/2025	10/10/2025							
			Depth (ft)	8.92	10.45							
			Elev. (ft)	1358.88	1357.35							

Table 4A--- Water-level data, Ida County Sanitary Landfill.

Monitor Well/ TOC Elev. (ft)	Screened Interval Depth (ft)	Screened Interval Elev. (ft)	Water Level	Date								Mean/ Std. Dev.
				11/1990	1/1991	2/1991	3/1991	4/10/1991	10/29/1991	4/27/1992	10/27/1992	
MW-10	22.3	1354.8	Depth (ft)	---	---	---	---	16.29	18.91	15.83	17.96	
1377.05	32.3	1344.8	Elev. (ft)	---	---	---	---	1360.76	1358.14	1361.22	1359.09	
				4/27/1993	10/27/1993	4/27/1994	10/28/1994	4/27/1995	10/28/1995	4/29/1996	10/28/1996	
			Depth (ft)	15.22	17.45	16.83	18.76	15.41	18.16	17.61	17.16	
			Elev. (ft)	1361.83	1359.60	1360.22	1358.29	1361.64	1358.89	1359.44	1359.89	
				4/28/1997	9/29/1997	4/28/1998	10/15/1998	4/13/1999	10/4/1999	3/22/2000	9/13/2000	
			Depth (ft)	16.39	18.25	15.09	17.89	15.62	19.04	17.36	20.88	
			Elev. (ft)	1360.66	1358.80	1361.96	1359.16	1361.43	1358.01	1359.69	1356.17	
				4/18/2001	9/26/2001	4/9/2002	9/11/2002	4/10/2003	9/9/2003	4/6/2004	9/16/2004	
			Depth (ft)	14.61	17.66	17.05	18.81	16.07	19.49	14.81	18.25	
			Elev. (ft)	1362.44	1359.39	1360.00	1358.24	1360.98	1357.56	1362.24	1358.80	
				4/4/2005	9/8/2005	4/22/2006	9/19/2006	4/30/2007	9/13/2007	4/21/2008	9/16/2008	
			Depth (ft)	18.06	20.07	15.68	18.22	1/13/1900	16.45	15.38	16.99	
			Elev. (ft)	1358.99	1356.98	1361.37	1358.83	1363.70	1360.60	1361.67	1360.06	
				3/21/2009	9/10/2009	3/31/2010	9/16/2010	4/11/2011	9/26/2011	4/1/2012	8/23/2012	
			Depth (ft)	13.36	17.59	13.13	16.22	15.80	19.06	17.01	20.90	
			Elev. (ft)	1363.69	1359.46	1363.92	1360.83	1361.25	1357.99	1360.04	1356.15	
				4/13/2013	9/14/2013	4/11/2014	9/27/2014	3/16/2015	9/28/2015	3/14/2016	9/3/2016	
			Depth (ft)	13.89	19.46	17.22	14.75	16.93	15.25	14.85	17.80	
			Elev. (ft)	1363.16	1357.59	1359.83	1362.30	1360.12	1361.80	1362.20	1359.25	
				4/10/2017	9/1/2017	4/23/2018	9/14/2018	4/15/2019	9/17/2019	4/8/2020	10/2/2020	
			Depth (ft)	16.36	15.26	14.04	15.40	14.86	15.74	14.96	19.20	16.77
			Elev. (ft)	1360.69	1361.79	1363.01	1361.65	1362.19	1361.31	1362.09	1357.85	1.83
				4/12/2021	10/26/2021	4/4/2022	10/7/2022	4/19/2023	10/25/2023	4/17/2024	10/17/2024	
			Depth (ft)	14.56	17.07	16.4	19.87	16.43	16.89	14.58	18.24	
			Elev. (ft)	1362.49	1359.98	1360.65	1357.18	1360.62	1360.16	1362.47	1358.81	
				4/1/2025	10/10/2025							
			Depth (ft)	13.93	16.45							
			Elev. (ft)	1363.12	1360.60							
				11/1990	1/1991	2/1991	3/1991	4/10/1991	10/29/1991	4/27/1992	10/27/1992	
PZ-11	13.0	1353.8	Depth (ft)	10.61	10.80	8.92	6.76	7.16	10.56	7.74	10.08	
1366.70	23.0	1343.8	Elev. (ft)	1356.09	1355.90	1357.78	1359.94	1359.54	1356.14	1358.96	1356.62	
				4/27/1993	10/27/1993	4/27/1994	10/28/1994	4/27/1995	10/28/1995	4/29/1996	10/28/1996	
			Depth (ft)	6.64	8.93	8.04	10.35	7.38	10.38	10.21	8.14	
			Elev. (ft)	1360.06	1357.77	1358.66	1356.35	1359.32	1356.32	1356.49	1358.56	
				4/28/1997	9/29/1997	4/28/1998	10/15/1998	4/13/1999	10/4/1999	3/22/2000	9/13/2000	
			Depth (ft)	7.65	10.13	7.33	9.52	7.95	10.65	10.51	11.42	
			Elev. (ft)	1359.05	1356.57	1359.37	1357.18	1358.75	1356.05	1356.19	1355.28	
				4/18/2001	9/26/2001	4/9/2002	9/11/2002	4/10/2003	9/9/2003	4/6/2004	9/16/2004	
			Depth (ft)	7.19	10.43	8.28	10.55	9	10.49	7.09	10.38	
			Elev. (ft)	1359.51	1356.27	1358.42	1356.15	1357.70	1356.21	1359.61	1356.32	
				4/4/2005	9/8/2005	4/22/2006	9/19/2006	4/30/2007	9/13/2007	4/21/2008	9/16/2008	
			Depth (ft)	10.44	10.41	8.96	10.48	7.11	9.32	8.13	8.99	
			Elev. (ft)	1356.26	1356.29	1357.74	1356.22	1359.59	1357.38	1358.57	1357.71	
				3/21/2009	9/10/2009	3/31/2010	9/16/2010	4/11/2011	9/26/2011	4/1/2012	8/23/2012	
			Depth (ft)	9.28	9.55	6.04	7.13	8.15	10.13	9.25	10.80	
			Elev. (ft)	1357.42	1357.15	1360.66	1359.57	1358.55	1356.57	1357.45	1355.90	
				4/13/2013	9/14/2013	4/11/2014	9/27/2014	3/16/2015	9/28/2015	3/14/2016	9/3/2016	
			Depth (ft)	6.04	10.41	10.31	6.69	8.19	6.94	6.39	9.02	
			Elev. (ft)	1360.66	1356.29	1356.39	1360.01	1358.51	1359.76	1360.31	1357.68	
				4/10/2017	9/1/2017	4/23/2018	9/14/2018	4/15/2019	9/17/2019	4/8/2020	10/2/2020	
			Depth (ft)	8.37	7.06	6.50	7.02	6.61	8.24	6.69	10.18	8.77
			Elev. (ft)	1358.33	1359.64	1360.20	1359.68	1360.09	1358.46	1360.01	1356.52	1.53
				4/12/2021	10/26/2021	4/4/2022	10/7/2022	4/19/2023	10/25/2023	4/17/2024	10/17/2024	
			Depth (ft)	6.85	10.20	10.02	10.35	7.81	9.41	6.98	9.90	
			Elev. (ft)	1359.85	1356.50	1356.68	1356.35	1358.89	1357.29	1359.72	1356.80	
				4/1/2025	10/10/2025							
			Depth (ft)	6.60	7.30							
			Elev. (ft)	1360.10	1359.40							

Table 4A--- Water-level data, Ida County Sanitary Landfill.

Monitor Well/ TOC Elev. (ft)	Screened Interval Depth (ft)	Screened Interval Elev. (ft)	Water Level	Date								Mean/ Std. Dev.
				11/1990	1/1991	2/1991	3/1991	4/10/1991	10/29/1991	4/27/1992	10/27/1992	
MW-13	17.4	1364.0	Depth (ft)	---	---	---	---	14.71	18.65	15.53	17.11	
1381.39	27.4	1354.0	Elev. (ft)	---	---	---	---	1366.68	1362.74	1365.86	1364.28	
				4/27/1993	10/27/1993	4/27/1994	10/28/1994	4/27/1995	10/28/1995	4/29/1996	10/28/1996	
			Depth (ft)	11.26	16.89	16.81	18.10	15.80	18.26	18.04	16.61	
			Elev. (ft)	1370.13	1364.50	1364.58	1363.29	1365.59	1363.13	1363.35	1364.78	
				4/28/1997	9/29/1997	4/28/1998	10/15/1998	4/13/1999	10/4/1999	3/22/2000	9/13/2000	
			Depth (ft)	16.28	17.49	15.65	16.96	16.17	17.48	17.61	19.59	
			Elev. (ft)	1365.11	1363.90	1365.74	1364.43	1365.22	1363.91	1363.78	1361.80	
				4/18/2001	9/26/2001	4/9/2002	9/11/2002	4/10/2003	9/9/2003	4/6/2004	9/16/2004	
			Depth (ft)	11.56	17.99	15.52	18.13	16.5	17.84	13.60	17.64	
			Elev. (ft)	1369.83	1363.40	1365.87	1363.26	1364.89	1363.55	1367.79	1363.75	
				4/4/2005	9/8/2005	4/22/2006	9/19/2006	4/30/2007	9/13/2007	4/21/2008	9/16/2008	
			Depth (ft)	18.51	19.06	16.59	18.58	13.99	16.83	16.68	14.60	
			Elev. (ft)	1362.88	1362.33	1364.80	1362.81	1367.40	1364.56	1364.71	1366.79	
				3/21/2009	9/10/2009	3/31/2010	9/16/2010	4/11/2011	9/26/2011	4/1/2012	8/23/2012	
			Depth (ft)	16.78	16.63	9.55	13.40	16.22	16.51	17.05	19.08	
			Elev. (ft)	1364.61	1364.76	1371.84	1367.99	1365.17	1364.88	1364.34	1362.31	
				4/13/2013	9/14/2013	4/11/2014	9/27/2014	3/16/2015	9/28/2015	3/14/2016	9/3/2016	
			Depth (ft)	12.09	17.68	18.59	13.70	16.23	14.17	12.45	15.74	
			Elev. (ft)	1369.30	1363.71	1362.80	1367.69	1365.16	1367.22	1368.94	1365.65	
				4/10/2017	9/1/2017	4/23/2018	9/14/2018	4/15/2019	9/17/2019	4/8/2020	10/2/2020	
			Depth (ft)	16.27	13.98	13.68	14.20	13.64	15.75	13.78	17.07	16.13
			Elev. (ft)	1365.12	1367.41	1367.71	1367.19	1367.75	1365.64	1367.61	1364.32	2.05
				4/12/2021	10/26/2021	4/4/2022	10/7/2022	4/19/2023	10/25/2023	4/17/2024	10/17/2024	
			Depth (ft)	15.22	17.97	17.25	18.05	17.00	15.96	15.33	17.28	
			Elev. (ft)	1366.17	1363.42	1364.14	1363.34	1364.39	1365.43	1366.06	1364.11	
				4/12/2021	10/26/2021							
			Depth (ft)	14.28	14.69							
			Elev. (ft)	1367.11	1366.70							

Table 4B – Well Recharge Rate Evaluation

Table 4B - Well Recovery Evaluation over Time
Monitoring Well Maintenance and Performance Summary
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Monitoring Well	1991 Hydraulic Conductivity (cm/Sec)	2020 Well Recharge (ft/min)	2022 Well Recharge (ft/min)	2024 Well Recharge (ft/min)
MW-3	NM	0.0059	0.0055	0.0061
MW-7	$3x10^{-4}$	0.1384	0.0788	0.2510
MW-10	$1x10^{-6}$	0.0250	0.0307	0.0851
PZ-11	$1x10^{-4}$	0.0267	0.0117	0.0104
MW-13	$4x10^{-5}$	0.0180	0.0264	0.0272

Table 5 – Background and GWPS Summary

Table 5
Background and GWPS Summary
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Ida County Sanitary Landfill
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Interwell Background Wells (MW-3)

Inorganics - Appendix I										
Constituent	**Units**	**Model Type**	**Samples - N**	**Detections**	**Mean**	**SD**	**Prediction Limit**	**Confidence**	**GWPS**	**Source**
Antimony (Sb)	µg/l	nonparametric	32	0			2.0000	0.99	6	SS
Arsenic (As)	µg/l	nonparametric	32	1			4.1000	0.99	10	SS
Barium (Ba)	µg/l	normal	32	**32**	315.8125	100.5506	566.2457		2000	SS
Beryllium (Be)	µg/l	nonparametric	30	0			4.0000	0.99	4	SS
Cadmium (Cd)	µg/l	nonparametric	32	6			1.5000	0.99	5	SS
Chromium (Cr)	µg/l	nonparametric	30	0			8.0000	0.99	100	SS
Cobalt (Co)	µg/l	nonparametric	32	10			3.6000	0.99	**3.6**	**Site**
Copper (Cu)	µg/l	nonparametric	32	3			5.5000	0.99	1300	SS
Lead (Pb)	µg/l	nonparametric	30	0			4.0000	0.99	15	SS
Nickel (Ni)	µg/l	nonparametric	32	11			15.6000	0.99	100	SS
Selenium (Se)	µg/l	nonparametric	32	0			4.0000	0.99	50	SS
Silver (Ag)	µg/l	nonparametric	32	0			4.0000	0.99	100	SS
Thallium (Tl)	µg/l	nonparametric	30	0			2.0000	0.99	2	SS
Vanadium (V)	µg/l	nonparametric	30	2			21.8000	0.99	35	SS
Zinc (Zn)	µg/l	nonparametric	32	10			30.3000	0.99	2000	SS

VOC - Appendix I										
Constituent	**Units**	**Model Type**	**Samples - N**	**Detections**	**Mean**	**SD**	**Prediction Limit**	**Confidence**	**GWPS**	**Source**
All	µg/l	DQR	32	0	<1	<1	<1	<1	various	SS

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

Table 6 – Summary of Current Year Exceedances

Table 6
Summary of Well/Detected Constituent Pairs that Exceed the Background Standard
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Ida County Sanitary Landfill
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2025

Interwell Statistics

Well	System	Constituent	Date	Units	Result	Prediction Limit	GWPS
MW-7	Water Table	chlorobenzene	10/10/2025	ug/L	1.2	1	**100**
MW-7	Water Table	chloroethane	10/10/2025	ug/L	1.6	1	**2800**
MW-7	Water Table	cis-1,2-dichloroethene	10/10/2025	ug/L	7.2	1	**70**
MW-7	Water Table	dichlorodifluoromethane	10/10/2025	ug/L	1.1	1	**1000**
MW-7	Water Table	cobalt	10/10/2025	ug/L	4.5	3.6	**3.6**
MW-7	Water Table	Nickel	4/1/2025	ug/L	29.3	15.6	**100**
MW-7	Water Table	Nickel	10/10/2025	ug/L	42.6	15.6	**100**
PZ-11	Water Table	1,1-dichloroethane	4/1/2025	ug/L	1.6	1	**140**
PZ-11	Water Table	1,1-dichloroethane	10/10/2025	ug/L	1.2	1	**140**

Table 7 – Summary of Ongoing and Newly Identified SSI & SSL

Table 7
Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
Ida County Sanitary Landfill
Permit No. 47-SDP-01-76C

KEY: SSI | SSL LCL>GWPS | SSL UCL>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)	95% UCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-7	chlorobenzene	3/31/2010	<1	1	---	---	100	3/31/2010	NA	4/1/2012
MW-7	chlorobenzene	9/16/2010	<1	1	---	---	100	3/31/2010	NA	4/1/2012
MW-7	chlorobenzene	4/11/2011	<1	1	---	---	100	3/31/2010	NA	4/1/2012
MW-7	chlorobenzene	9/26/2011	<1	1	0.500	0.500	100	3/31/2010	NA	4/1/2012
MW-7	chlorobenzene	4/1/2012	<1	1	0.500	0.500	100	3/31/2010	NA	4/1/2012
MW-7	chlorobenzene	8/23/2012	<1	1	0.500	0.500	100	3/31/2010	NA	4/1/2012
MW-7	chlorobenzene	4/13/2013	<1	1	0.500	0.500	100	3/31/2010	NA	4/1/2012
MW-7	chlorobenzene	9/14/2013	<1	1	0.500	0.500	100	3/31/2010	NA	4/1/2012
MW-7	chlorobenzene	4/11/2014	<1	1	0.500	0.500	100	3/31/2010	NA	4/1/2012
MW-7	chlorobenzene	9/27/2014	<1	1	0.500	0.500	100	3/31/2010	NA	4/1/2012
MW-7	chlorobenzene	3/16/2015	<1	1	0.500	0.500	100	3/31/2010	NA	4/1/2012
MW-7	chlorobenzene	9/28/2015	**1.0**	1	0.408	0.842	100	3/31/2010	NA	4/1/2012
MW-7	chlorobenzene	3/14/2016	<1	1	0.408	0.842	100	3/31/2010	NA	4/1/2012
MW-7	chlorobenzene	9/3/2016	<1	1	0.408	0.842	100	3/31/2010	NA	4/1/2012
MW-7	chlorobenzene	4/10/2017	**1.0**	1	0.500	1.000	100	3/31/2010	NA	4/1/2012
MW-7	chlorobenzene	9/1/2017	**1.5**	1	0.460	1.290	100	3/31/2010	NA	4/1/2012
MW-7	chlorobenzene	4/23/2018	**1.7**	1	0.709	1.641	100	3/31/2010	NA	4/1/2012
MW-7	chlorobenzene	9/14/2018	**1.2**	1	1.081	1.619	100	3/31/2010	NA	4/1/2012
MW-7	chlorobenzene	4/15/2019	**1.6**	1	1.313	1.687	100	3/31/2010	NA	4/1/2012
MW-7	chlorobenzene	9/17/2019	**2.4**	1	1.293	2.157	100	3/31/2010	NA	4/1/2012
MW-7	chlorobenzene	4/8/2020	**2.0**	1	1.353	2.247	100	3/31/2010	NA	4/1/2012
MW-7	chlorobenzene	10/2/2020	**2.8**	1	1.753	2.647	100	3/31/2010	NA	4/1/2012
MW-7	chlorobenzene	4/12/2021	**1.7**	1	1.810	2.640	100	3/31/2010	NA	4/1/2012
MW-7	chlorobenzene	10/26/2021	**2.4**	1	1.810	2.640	100	3/31/2010	NA	4/1/2012
MW-7	chlorobenzene	4/4/2022	**1.1**	1	1.115	2.885	100	3/31/2010	NA	4/1/2012
MW-7	chlorobenzene	10/7/2022	**1.8**	1	1.124	2.376	100	3/31/2010	NA	4/1/2012
MW-7	chlorobenzene	4/19/2023	<1	1	0.478	2.422	100	3/31/2010	NA	4/1/2012
MW-7	chlorobenzene	10/25/2023	<1	1	0.248	1.702	100	3/31/2010	NA	4/1/2012
MW-7	chlorobenzene	4/17/2024	<1	1	0.060	1.590	100	3/31/2010	NA	4/1/2012
MW-7	chlorobenzene	10/17/2024	**1.2**	1	0.263	1.087	100	3/31/2010	NA	4/1/2012
MW-7	chlorobenzene	4/1/2025	<1	1	0.263	1.087	100	3/31/2010	NA	4/1/2012
MW-7	chlorobenzene	10/10/2025	**1.2**	1	0.375	1.325	100	3/31/2010	NA	4/1/2012

Table 7
Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
Ida County Sanitary Landfill
Permit No. 47-SDP-01-76C

KEY:	SSI	SSL LCL>GWPS	SSL UCL>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)	95% UCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-7	chloroethane	3/31/2010	**1.5**	1	---	---	2800	3/31/2010	NA	4/1/2012
MW-7	chloroethane	9/16/2010	<1	1	---	---	2800	3/31/2010	NA	4/1/2012
MW-7	chloroethane	4/11/2011	<1	1	---	---	2800	3/31/2010	NA	4/1/2012
MW-7	chloroethane	9/26/2011	**1.0**	1	0.460	1.290	2800	3/31/2010	NA	4/1/2012
MW-7	chloroethane	4/1/2012	**1.6**	1	0.447	1.353	2800	3/31/2010	NA	4/1/2012
MW-7	chloroethane	8/23/2012	**1.5**	1	0.711	1.589	2800	3/31/2010	NA	4/1/2012
MW-7	chloroethane	4/13/2013	**1.8**	1	1.180	1.770	2800	3/31/2010	NA	4/1/2012
MW-7	chloroethane	9/14/2013	**1.3**	1	1.370	1.730	2800	3/31/2010	NA	4/1/2012
MW-7	chloroethane	4/11/2014	**2.3**	1	1.348	2.102	2800	3/31/2010	NA	4/1/2012
MW-7	chloroethane	9/27/2014	**2.6**	1	1.505	2.495	2800	3/31/2010	NA	4/1/2012
MW-7	chloroethane	3/16/2015	<1	1	0.843	2.507	2800	3/31/2010	NA	4/1/2012
MW-7	chloroethane	9/28/2015	**1.4**	1	0.878	2.522	2800	3/31/2010	NA	4/1/2012
MW-7	chloroethane	3/14/2016	**1.6**	1	0.779	2.271	2800	3/31/2010	NA	4/1/2012
MW-7	chloroethane	9/3/2016	<1	1	0.495	1.505	2800	3/31/2010	NA	4/1/2012
MW-7	chloroethane	4/10/2017	**1.2**	1	0.760	1.590	2800	3/31/2010	NA	4/1/2012
MW-7	chloroethane	9/1/2017	**1.7**	1	0.778	1.722	2800	3/31/2010	NA	4/1/2012
MW-7	chloroethane	4/23/2018	**1.7**	1	0.783	1.767	2800	3/31/2010	NA	4/1/2012
MW-7	chloroethane	9/14/2018	**1.2**	1	1.200	1.700	2800	3/31/2010	NA	4/1/2012
MW-7	chloroethane	4/15/2019	**1.6**	1	1.344	1.756	2800	3/31/2010	NA	4/1/2012
MW-7	chloroethane	9/17/2019	**1.1**	1	1.145	1.655	2800	3/31/2010	NA	4/1/2012
MW-7	chloroethane	4/8/2020	**1.5**	1	1.144	1.556	2800	3/31/2010	NA	4/1/2012
MW-7	chloroethane	10/2/2020	**1.3**	1	1.183	1.567	2800	3/31/2010	NA	4/1/2012
MW-7	chloroethane	4/12/2021	<1	1	0.726	1.474	2800	3/31/2010	NA	4/1/2012
MW-7	chloroethane	10/26/2021	**1.2**	1	0.748	1.502	2800	3/31/2010	NA	4/1/2012
MW-7	chloroethane	4/4/2022	**1.7**	1	0.588	1.762	2800	3/31/2010	NA	4/1/2012
MW-7	chloroethane	10/7/2022	**1.9**	1	0.591	2.059	2800	3/31/2010	NA	4/1/2012
MW-7	chloroethane	4/19/2023	<1	1	0.591	2.059	2800	3/31/2010	NA	4/1/2012
MW-7	chloroethane	10/25/2023	**1.3**	1	0.622	2.078	2800	3/31/2010	NA	4/1/2012
MW-7	chloroethane	4/17/2024	<1	1	0.249	1.851	2800	3/31/2010	NA	4/1/2012
MW-7	chloroethane	10/17/2024	<1	1	0.229	1.171	2800	3/31/2010	NA	4/1/2012
MW-7	chloroethane	4/1/2025	<1	1	0.229	1.171	2800	3/31/2010	NA	4/1/2012
MW-7	chloroethane	10/10/2025	**1.6**	1	0.128	1.422	2800	3/31/2010	NA	4/1/2012

Table 7
Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
Ida County Sanitary Landfill
Permit No. 47-SDP-01-76C

KEY: | SSI | SSL LCL>GWPS | SSL UCL>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)	95% UCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-7	cis-1,2-dichloroethylene	3/31/2010	**36.4**	1	---	---	70	3/31/2010	NA	4/1/2012
MW-7	cis-1,2-dichloroethylene	9/16/2010	**1.3**	1	---	---	70	3/31/2010	NA	4/1/2012
MW-7	cis-1,2-dichloroethylene	4/11/2011	**4.8**	1	---	---	70	3/31/2010	NA	4/1/2012
MW-7	cis-1,2-dichloroethylene	9/26/2011	**19.2**	1	1.581	29.269	70	3/31/2010	NA	4/1/2012
MW-7	cis-1,2-dichloroethylene	4/1/2012	**69.1**	1	0.000	50.712	70	3/31/2010	NA	4/1/2012
MW-7	cis-1,2-dichloroethylene	8/23/2012	**124.0**	1	7.479	101.071	70	3/31/2010	NA	4/1/2012
MW-7	cis-1,2-dichloroethylene	4/13/2013	**17.7**	1	13.889	101.111	70	3/31/2010	NA	4/1/2012
MW-7	cis-1,2-dichloroethylene	9/14/2013	**95.0**	1	37.365	115.536	70	3/31/2010	NA	4/1/2012
MW-7	cis-1,2-dichloroethylene	4/11/2014	**92.3**	1	42.965	121.535	70	3/31/2010	NA	4/1/2012
MW-7	cis-1,2-dichloroethylene	9/27/2014	**24.4**	1	20.960	93.740	70	3/31/2010	NA	4/1/2012
MW-7	cis-1,2-dichloroethylene	3/16/2015	**58.2**	1	38.685	96.265	70	3/31/2010	NA	4/1/2012
MW-7	cis-1,2-dichloroethylene	9/28/2015	**62.8**	1	35.340	83.510	70	3/31/2010	NA	4/1/2012
MW-7	cis-1,2-dichloroethylene	3/14/2016	**20.8**	1	22.488	60.612	70	3/31/2010	NA	4/1/2012
MW-7	cis-1,2-dichloroethylene	9/3/2016	**3.4**	1	11.277	61.323	70	3/31/2010	NA	4/1/2012
MW-7	cis-1,2-dichloroethylene	4/10/2017	**4.8**	1	0.000	46.951	70	3/31/2010	NA	4/1/2012
MW-7	cis-1,2-dichloroethylene	9/1/2017	**18.3**	1	4.034	19.616	70	3/31/2010	NA	4/1/2012
MW-7	cis-1,2-dichloroethylene	4/23/2018	**10.2**	1	3.327	15.023	70	3/31/2010	NA	4/1/2012
MW-7	cis-1,2-dichloroethylene	9/14/2018	**10.4**	1	6.111	15.739	70	3/31/2010	NA	4/1/2012
MW-7	cis-1,2-dichloroethylene	4/15/2019	**5.9**	1	6.724	15.676	70	3/31/2010	NA	4/1/2012
MW-7	cis-1,2-dichloroethylene	9/17/2019	**7.7**	1	6.687	10.413	70	3/31/2010	NA	4/1/2012
MW-7	cis-1,2-dichloroethylene	4/8/2020	**6.6**	1	5.938	9.362	70	3/31/2010	NA	4/1/2012
MW-7	cis-1,2-dichloroethylene	10/2/2020	**22.5**	1	3.818	17.532	70	3/31/2010	NA	4/1/2012
MW-7	cis-1,2-dichloroethylene	4/12/2021	**14.9**	1	6.543	19.306	70	3/31/2010	NA	4/1/2012
MW-7	cis-1,2-dichloroethylene	10/26/2021	**5.9**	1	5.690	19.260	70	3/31/2010	NA	4/1/2012
MW-7	cis-1,2-dichloroethylene	4/4/2022	<1	1	0.000	22.389	70	3/31/2010	NA	4/1/2012
MW-7	cis-1,2-dichloroethylene	10/7/2022	**1.0**	1	0.000	13.429	70	3/31/2010	NA	4/1/2012
MW-7	cis-1,2-dichloroethylene	4/19/2023	**1.4**	1	0.000	5.134	70	3/31/2010	NA	4/1/2012
MW-7	cis-1,2-dichloroethylene	10/25/2023	**5.0**	1	0.000	4.386	70	3/31/2010	NA	4/1/2012
MW-7	cis-1,2-dichloroethylene	4/17/2024	**2.3**	1	0.307	4.543	70	3/31/2010	NA	4/1/2012
MW-7	cis-1,2-dichloroethylene	10/17/2024	**6.1**	1	1.096	6.304	70	3/31/2010	NA	4/1/2012
MW-7	cis-1,2-dichloroethylene	4/1/2025	<1	1	0.480	6.470	70	3/31/2010	NA	4/1/2012
MW-7	cis-1,2-dichloroethylene	10/10/2025	**7.2**	1	0.318	7.732	70	3/31/2010	NA	4/1/2012

Table 7
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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)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-7	dichlorodifluoromethane	3/31/2010	---	1	---	---	1000	3/31/2010	NA	4/1/2012
MW-7	dichlorodifluoromethane	9/16/2010	---	1	---	---	1000	3/31/2010	NA	4/1/2012
MW-7	dichlorodifluoromethane	4/11/2011	---	1	---	---	1000	3/31/2010	NA	4/1/2012
MW-7	dichlorodifluoromethane	9/26/2011	---	1	---	---	1000	3/31/2010	NA	4/1/2012
MW-7	dichlorodifluoromethane	4/1/2012	**1.4**	1	---	---	1000	3/31/2010	NA	4/1/2012
MW-7	dichlorodifluoromethane	8/23/2012	**2.3**	1	---	---	1000	3/31/2010	NA	4/1/2012
MW-7	dichlorodifluoromethane	4/13/2013	**3.5**	1	---	---	1000	3/31/2010	NA	4/1/2012
MW-7	dichlorodifluoromethane	9/14/2013	**3.0**	1	1.761	3.339	1000	3/31/2010	NA	4/1/2012
MW-7	dichlorodifluoromethane	4/11/2014	**2.1**	1	2.167	3.283	1000	3/31/2010	NA	4/1/2012
MW-7	dichlorodifluoromethane	9/27/2014	**2.6**	1	2.285	3.315	1000	3/31/2010	NA	4/1/2012
MW-7	dichlorodifluoromethane	3/16/2015	<1	1	1.100	3.000	1000	3/31/2010	NA	4/1/2012
MW-7	dichlorodifluoromethane	9/28/2015	<1	1	0.483	2.367	1000	3/31/2010	NA	4/1/2012
MW-7	dichlorodifluoromethane	3/14/2016	<1	1	0.116	1.934	1000	3/31/2010	NA	4/1/2012
MW-7	dichlorodifluoromethane	9/3/2016	<1	1	0.500	0.500	1000	3/31/2010	NA	4/1/2012
MW-7	dichlorodifluoromethane	4/10/2017	**1.4**	1	0.335	1.115	1000	3/31/2010	NA	4/1/2012
MW-7	dichlorodifluoromethane	9/1/2017	<1	1	0.335	1.115	1000	3/31/2010	NA	4/1/2012
MW-7	dichlorodifluoromethane	4/23/2018	**1.4**	1	0.500	1.400	1000	3/31/2010	NA	4/1/2012
MW-7	dichlorodifluoromethane	9/14/2018	**1.2**	1	0.755	1.495	1000	3/31/2010	NA	4/1/2012
MW-7	dichlorodifluoromethane	4/15/2019	**1.4**	1	0.755	1.495	1000	3/31/2010	NA	4/1/2012
MW-7	dichlorodifluoromethane	9/17/2019	<1	1	0.755	1.495	1000	3/31/2010	NA	4/1/2012
MW-7	dichlorodifluoromethane	4/8/2020	**1.6**	1	0.760	1.590	1000	3/31/2010	NA	4/1/2012
MW-7	dichlorodifluoromethane	10/2/2020	**1.0**	1	0.704	1.546	1000	3/31/2010	NA	4/1/2012
MW-7	dichlorodifluoromethane	4/12/2021	<1	1	0.447	1.353	1000	3/31/2010	NA	4/1/2012
MW-7	dichlorodifluoromethane	10/26/2021	**1.4**	1	0.704	1.545	1000	3/31/2010	NA	4/1/2012
MW-7	dichlorodifluoromethane	4/4/2022	<1	1	0.337	1.363	1000	3/31/2010	NA	4/1/2012
MW-7	dichlorodifluoromethane	10/7/2022	**1.3**	1	0.346	1.504	1000	3/31/2010	NA	4/1/2012
MW-7	dichlorodifluoromethane	4/19/2023	<1	1	0.346	1.504	1000	3/31/2010	NA	4/1/2012
MW-7	dichlorodifluoromethane	10/25/2023	**1.0**	1	0.361	1.289	1000	3/31/2010	NA	4/1/2012
MW-7	dichlorodifluoromethane	4/17/2024	**1.0**	1	0.560	1.340	1000	3/31/2010	NA	4/1/2012
MW-7	dichlorodifluoromethane	10/17/2024	<1	1	0.410	1.090	1000	3/31/2010	NA	4/1/2012
MW-7	dichlorodifluoromethane	4/1/2025	<1	1	0.410	1.090	1000	3/31/2010	NA	4/1/2012
MW-7	dichlorodifluoromethane	10/10/2025	**1.1**	1	0.398	1.152	1000	3/31/2010	NA	4/1/2012

Table 7
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KEY: SSI | SSL LCL>GWPS | SSL UCL>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)	95% UCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-7	vinyl chloride	3/31/2010	**1.3**	1	---	---	2	3/31/2010	NA	4/1/2012
MW-7	vinyl chloride	9/16/2010	<1	1	---	---	2	3/31/2010	NA	4/1/2012
MW-7	vinyl chloride	4/11/2011	<1	1	---	---	2	3/31/2010	NA	4/1/2012
MW-7	vinyl chloride	9/26/2011	<1	1	0.354	1.046	2	3/31/2010	NA	4/1/2012
MW-7	vinyl chloride	4/1/2012	**2.4**	1	0.152	1.800	2	3/31/2010	NA	4/1/2012
MW-7	vinyl chloride	8/23/2012	**6.2**	1	0.073	4.727	2	3/31/2010	NA	4/1/2012
MW-7	vinyl chloride	4/13/2013	**3.6**	1	1.108	5.242	2	3/31/2010	NA	4/1/2012
MW-7	vinyl chloride	9/14/2013	**6.4**	1	2.945	6.355	2	3/31/2010	NA	4/1/2012
MW-7	vinyl chloride	4/11/2014	**4.4**	1	3.964	6.336	2	3/31/2010	NA	4/1/2012
MW-7	vinyl chloride	9/27/2014	**3.1**	1	3.117	5.633	2	3/31/2010	NA	4/1/2012
MW-7	vinyl chloride	3/16/2015	<1	1	1.459	5.741	2	3/31/2010	NA	4/1/2012
MW-7	vinyl chloride	9/28/2015	**3.0**	1	1.338	4.160	2	3/31/2010	NA	4/1/2012
MW-7	vinyl chloride	3/14/2016	**1.2**	1	0.822	3.078	2	3/31/2010	NA	4/1/2012
MW-7	vinyl chloride	9/3/2016	<1	1	0.278	2.322	2	3/31/2010	NA	4/1/2012
MW-7	vinyl chloride	4/10/2017	**1.7**	1	0.686	2.514	2	3/31/2010	NA	4/1/2012
MW-7	vinyl chloride	9/1/2017	**3.2**	1	0.659	2.641	2	3/31/2010	NA	4/1/2012
MW-7	vinyl chloride	4/23/2018	**2.1**	1	0.910	2.840	2	3/31/2010	NA	4/1/2012
MW-7	vinyl chloride	9/14/2018	**2.1**	1	1.717	2.833	2	3/31/2010	NA	4/1/2012
MW-7	vinyl chloride	4/15/2019	**1.1**	1	1.382	2.868	2	3/31/2010	NA	4/1/2012
MW-7	vinyl chloride	9/17/2019	**1.0**	1	1.049	2.101	2	3/31/2010	NA	4/1/2012
MW-7	vinyl chloride	4/8/2020	**1.7**	1	1.026	1.924	2	3/31/2010	NA	4/1/2012
MW-7	vinyl chloride	10/2/2020	**2.5**	1	0.978	2.172	2	3/31/2010	NA	4/1/2012
MW-7	vinyl chloride	4/12/2021	<1	1	0.672	2.178	2	3/31/2010	NA	4/1/2012
MW-7	vinyl chloride	10/26/2021	<1	1	0.451	2.149	2	3/31/2010	NA	4/1/2012
MW-7	vinyl chloride	4/4/2022	<1	1	0.000	2.176	2	3/31/2010	NA	4/1/2012
MW-7	vinyl chloride	10/7/2022	<1	1	0.500	0.500	2	3/31/2010	NA	4/1/2012
MW-7	vinyl chloride	4/19/2023	<1	1	0.500	0.500	2	3/31/2010	NA	4/1/2012
MW-7	vinyl chloride	10/25/2023	<1	1	0.500	0.500	2	3/31/2010	NA	4/1/2012
MW-7	vinyl chloride	4/17/2024	<1	1	0.500	0.500	2	3/31/2010	NA	4/1/2012
MW-7	vinyl chloride	10/17/2024	<1	1	0.500	0.500	2	3/31/2010	NA	4/1/2012
MW-7	vinyl chloride	4/1/2025	<1	1	0.500	0.500	2	3/31/2010	NA	4/1/2012
MW-7	vinyl chloride	10/10/2025	<1	1	0.500	0.500	2	3/31/2010	NA	4/1/2012

Table 7
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KEY:	SSI	SSL LCL>GWPS	SSL UCL>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)	95% UCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-7	cobalt	3/31/2010	<4	3.6	---	---	**3.6**	3/31/2010	NA	4/1/2012
MW-7	cobalt	9/16/2010	<4	3.6	---	---	**3.6**	3/31/2010	NA	4/1/2012
MW-7	cobalt	4/11/2011	<4	3.6	---	---	**3.6**	3/31/2010	NA	4/1/2012
MW-7	cobalt	9/26/2011	<4	3.6	2.000	2.000	**3.6**	3/31/2010	NA	4/1/2012
MW-7	cobalt	4/1/2012	<4	3.6	2.000	2.000	**3.6**	3/31/2010	NA	4/1/2012
MW-7	cobalt	8/23/2012	<4	3.6	2.000	2.000	**3.6**	3/31/2010	NA	4/1/2012
MW-7	cobalt	4/13/2013	<4	3.6	2.000	2.000	**3.6**	3/31/2010	NA	4/1/2012
MW-7	cobalt	9/14/2013	<4	3.6	2.000	2.000	**3.6**	3/31/2010	NA	4/1/2012
MW-7	cobalt	4/11/2014	<4	3.6	2.000	2.000	**3.6**	3/31/2010	NA	4/1/2012
MW-7	cobalt	9/27/2014	**1.6**	3.6	1.727	2.073	**3.6**	3/31/2010	NA	4/1/2012
MW-7	cobalt	3/16/2015	**2.6**	3.6	1.693	2.407	**3.6**	3/31/2010	NA	4/1/2012
MW-7	cobalt	9/28/2015	<0.8	3.6	0.845	2.455	**3.6**	3/31/2010	NA	4/1/2012
MW-7	cobalt	3/14/2016	<0.8	3.6	0.329	2.171	**3.6**	3/31/2010	NA	4/1/2012
MW-7	cobalt	9/3/2016	<0.8	3.6	0.000	1.903	**3.6**	3/31/2010	NA	4/1/2012
MW-7	cobalt	4/10/2017	<0.8	3.6	0.400	0.400	**3.6**	3/31/2010	NA	4/1/2012
MW-7	cobalt	9/1/2017	**2.0**	3.6	0.107	1.490	**3.6**	3/31/2010	NA	4/1/2012
MW-7	cobalt	4/23/2018	**1.7**	3.6	0.392	1.858	**3.6**	3/31/2010	NA	4/1/2012
MW-7	cobalt	9/14/2018	**3.6**	3.6	0.786	3.064	**3.6**	3/31/2010	NA	4/1/2012
MW-7	cobalt	4/15/2019	**2.8**	3.6	1.785	3.265	**3.6**	3/31/2010	NA	4/1/2012
MW-7	cobalt	9/17/2019	**6.1**	3.6	1.931	5.170	**3.6**	3/31/2010	NA	4/1/2012
MW-7	cobalt	4/8/2020	**4.3**	3.6	2.981	5.419	**3.6**	3/31/2010	NA	4/1/2012
MW-7	cobalt	10/2/2020	**8.5**	3.6	3.300	7.550	**3.6**	3/31/2010	NA	4/1/2012
MW-7	cobalt	4/12/2021	**2.7**	3.6	3.244	7.556	**3.6**	3/31/2010	NA	4/1/2012
MW-7	cobalt	10/26/2021	**8.6**	3.6	3.437	8.613	**3.6**	3/31/2010	NA	4/1/2012
MW-7	cobalt	4/4/2022	**1.1**	3.6	0.644	9.806	**3.6**	3/31/2010	NA	4/1/2012
MW-7	cobalt	10/7/2022	**9.4**	3.6	0.055	10.348	**3.6**	3/31/2010	NA	4/1/2012
MW-7	cobalt	4/19/2023	**0.7**	3.6	0.000	10.468	**3.6**	3/31/2010	NA	4/1/2012
MW-7	cobalt	10/25/2023	**1.9**	3.6	0.000	8.114	**3.6**	3/31/2010	NA	4/1/2012
MW-7	cobalt	4/17/2024	**1.0**	3.6	0.000	8.110	**3.6**	3/31/2010	NA	4/1/2012
MW-7	cobalt	10/17/2024	**2.8**	3.6	0.484	2.716	**3.6**	3/31/2010	NA	4/1/2012
MW-7	cobalt	4/1/2025	**2.4**	3.6	1.112	2.938	**3.6**	3/31/2010	NA	4/1/2012
MW-7	cobalt	10/10/2025	**4.5**	3.6	0.980	4.370	**3.6**	3/31/2010	NA	4/1/2012

Table 7
Summary of Ongoing & Newly Identified SSI
Annual Water Quality Report
Ida County Sanitary Landfill
Permit No. 47-SDP-01-76C

KEY: | SSI | SSL LCL>GWPS | SSL UCL>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)	95% UCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
MW-7	Nickel	3/31/2010	**21.3**	15.6	---	---	100	3/31/2010	NA	4/1/2012
MW-7	Nickel	9/16/2010	**8.6**	15.6	---	---	100	3/31/2010	NA	4/1/2012
MW-7	Nickel	4/11/2011	**20.4**	15.6	---	---	100	3/31/2010	NA	4/1/2012
MW-7	Nickel	9/26/2011	**24.2**	15.6	12.669	24.581	100	3/31/2010	NA	4/1/2012
MW-7	Nickel	4/1/2012	**32.6**	15.6	12.817	30.083	100	3/31/2010	NA	4/1/2012
MW-7	Nickel	8/23/2012	**26.8**	15.6	21.561	30.438	100	3/31/2010	NA	4/1/2012
MW-7	Nickel	4/13/2013	**26.9**	15.6	24.555	30.695	100	3/31/2010	NA	4/1/2012
MW-7	Nickel	9/14/2013	**19.6**	15.6	21.863	31.087	100	3/31/2010	NA	4/1/2012
MW-7	Nickel	4/11/2014	**21.8**	15.6	20.603	26.947	100	3/31/2010	NA	4/1/2012
MW-7	Nickel	9/27/2014	**25.3**	15.6	20.534	26.266	100	3/31/2010	NA	4/1/2012
MW-7	Nickel	3/16/2015	**26.4**	15.6	20.557	25.993	100	3/31/2010	NA	4/1/2012
MW-7	Nickel	9/28/2015	**32.9**	15.6	22.586	30.614	100	3/31/2010	NA	4/1/2012
MW-7	Nickel	3/14/2016	**34.4**	15.6	25.795	33.705	100	3/31/2010	NA	4/1/2012
MW-7	Nickel	9/3/2016	**30.0**	15.6	27.871	33.979	100	3/31/2010	NA	4/1/2012
MW-7	Nickel	4/10/2017	**56.3**	15.6	27.945	48.855	100	3/31/2010	NA	4/1/2012
MW-7	Nickel	9/1/2017	**64.8**	15.6	31.802	60.948	100	3/31/2010	NA	4/1/2012
MW-7	Nickel	4/23/2018	**68.7**	15.6	39.863	70.037	100	3/31/2010	NA	4/1/2012
MW-7	Nickel	9/14/2018	**65.6**	15.6	59.254	68.446	100	3/31/2010	NA	4/1/2012
MW-7	Nickel	4/15/2019	**57.2**	15.6	59.847	68.303	100	3/31/2010	NA	4/1/2012
MW-7	Nickel	9/17/2019	**94.9**	15.6	57.505	85.695	100	3/31/2010	NA	4/1/2012
MW-7	Nickel	4/8/2020	**73.4**	15.6	58.775	86.775	100	3/31/2010	NA	4/1/2012
MW-7	Nickel	10/2/2020	**77.6**	15.6	62.361	89.189	100	3/31/2010	NA	4/1/2012
MW-7	Nickel	4/12/2021	**65.5**	15.6	67.090	88.610	100	3/31/2010	NA	4/1/2012
MW-7	Nickel	10/26/2021	**57.5**	15.6	60.806	76.194	100	3/31/2010	NA	4/1/2012
MW-7	Nickel	4/4/2022	**39.1**	15.6	40.921	78.929	100	3/31/2010	NA	4/1/2012
MW-7	Nickel	10/7/2022	**68.3**	15.6	42.126	73.074	100	3/31/2010	NA	4/1/2012
MW-7	Nickel	4/19/2023	**14.2**	15.6	16.919	72.631	100	3/31/2010	NA	4/1/2012
MW-7	Nickel	10/25/2023	**48.8**	15.6	15.272	67.428	100	3/31/2010	NA	4/1/2012
MW-7	Nickel	4/17/2024	**9.1**	15.6	1.390	66.310	100	3/31/2010	NA	4/1/2012
MW-7	Nickel	10/17/2024	**49.6**	15.6	5.084	53.266	100	3/31/2010	NA	4/1/2012
MW-7	Nickel	4/1/2025	**29.3**	15.6	11.721	54.179	100	3/31/2010	NA	4/1/2012
MW-7	Nickel	10/10/2025	**42.6**	15.6	11.694	53.606	100	3/31/2010	NA	4/1/2012

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

Table 7
Summary of Ongoing & Newly Identified SSI
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Ida County Sanitary Landfill
Permit No. 47-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)	SSI Initial Exceedance	Resamples Due	5th Background Sample
PZ-11	1,1-dichloroethane	3/31/2010	<1	1	---	140	4/19/2023	NA	4/1/2012
PZ-11	1,1-dichloroethane	9/16/2010	<1	1	---	140	4/19/2023	NA	4/1/2012
PZ-11	1,1-dichloroethane	4/11/2011	<1	1	---	140	4/19/2023	NA	4/1/2012
PZ-11	1,1-dichloroethane	9/26/2011	<1	1	0.500	140	4/19/2023	NA	4/1/2012
PZ-11	1,1-dichloroethane	4/1/2012	<1	1	0.500	140	4/19/2023	NA	4/1/2012
PZ-11	1,1-dichloroethane	8/23/2012	<1	1	0.500	140	4/19/2023	NA	4/1/2012
PZ-11	1,1-dichloroethane	4/13/2013	<1	1	0.500	140	4/19/2023	NA	4/1/2012
PZ-11	1,1-dichloroethane	9/14/2013	<1	1	0.500	140	4/19/2023	NA	4/1/2012
PZ-11	1,1-dichloroethane	4/11/2014	<1	1	0.500	140	4/19/2023	NA	4/1/2012
PZ-11	1,1-dichloroethane	9/27/2014	<1	1	0.500	140	4/19/2023	NA	4/1/2012
PZ-11	1,1-dichloroethane	3/16/2015	<1	1	0.500	140	4/19/2023	NA	4/1/2012
PZ-11	1,1-dichloroethane	9/28/2015	<1	1	0.500	140	4/19/2023	NA	4/1/2012
PZ-11	1,1-dichloroethane	3/14/2016	<1	1	0.500	140	4/19/2023	NA	4/1/2012
PZ-11	1,1-dichloroethane	9/3/2016	<1	1	0.500	140	4/19/2023	NA	4/1/2012
PZ-11	1,1-dichloroethane	4/10/2017	<1	1	0.500	140	4/19/2023	NA	4/1/2012
PZ-11	1,1-dichloroethane	9/1/2017	<1	1	0.500	140	4/19/2023	NA	4/1/2012
PZ-11	1,1-dichloroethane	4/23/2018	<1	1	0.500	140	4/19/2023	NA	4/1/2012
PZ-11	1,1-dichloroethane	9/14/2018	<1	1	0.500	140	4/19/2023	NA	4/1/2012
PZ-11	1,1-dichloroethane	4/15/2019	<1	1	0.500	140	4/19/2023	NA	4/1/2012
PZ-11	1,1-dichloroethane	9/17/2019	<1	1	0.500	140	4/19/2023	NA	4/1/2012
PZ-11	1,1-dichloroethane	4/8/2020	<1	1	0.500	140	4/19/2023	NA	4/1/2012
PZ-11	1,1-dichloroethane	10/2/2020	<1	1	0.500	140	4/19/2023	NA	4/1/2012
PZ-11	1,1-dichloroethane	4/12/2021	<1	1	0.500	140	4/19/2023	NA	4/1/2012
PZ-11	1,1-dichloroethane	10/26/2021	<1	1	0.500	140	4/19/2023	NA	4/1/2012
PZ-11	1,1-dichloroethane	4/4/2022	<1	1	0.500	140	4/19/2023	NA	4/1/2012
PZ-11	1,1-dichloroethane	10/7/2022	<1	1	0.500	140	4/19/2023	NA	4/1/2012
PZ-11	1,1-dichloroethane	4/19/2023	**1.2**	1	0.263	140	4/19/2023	NA	4/1/2012
PZ-11	1,1-dichloroethane	10/25/2023	**1.2**	1	0.375	140	4/19/2023	NA	4/1/2012
PZ-11	1,1-dichloroethane	4/17/2024	**1.3**	1	0.615	140	4/19/2023	NA	4/1/2012
PZ-11	1,1-dichloroethane	10/17/2024	**1.0**	1	1.027	140	4/19/2023	NA	4/1/2012
PZ-11	1,1-dichloroethane	4/1/2025	**1.6**	1	0.981	140	4/19/2023	NA	4/1/2012
PZ-11	1,1-dichloroethane	10/10/2025	**1.2**	1	0.981	140	4/19/2023	NA	4/1/2012

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Permit No. 47-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)	SSI Initial Exceedance	Resamples Due	5th Background Sample
PZ-11	chloroethane	3/31/2010	<1	1	---	2800	10/25/2023	NA	4/1/2012
PZ-11	chloroethane	9/16/2010	<1	1	---	2800	10/25/2023	NA	4/1/2012
PZ-11	chloroethane	4/11/2011	<1	1	---	2800	10/25/2023	NA	4/1/2012
PZ-11	chloroethane	9/26/2011	<1	1	0.500	2800	10/25/2023	NA	4/1/2012
PZ-11	chloroethane	4/1/2012	<1	1	0.500	2800	10/25/2023	NA	4/1/2012
PZ-11	chloroethane	8/23/2012	<1	1	0.500	2800	10/25/2023	NA	4/1/2012
PZ-11	chloroethane	4/13/2013	<1	1	0.500	2800	10/25/2023	NA	4/1/2012
PZ-11	chloroethane	9/14/2013	<1	1	0.500	2800	10/25/2023	NA	4/1/2012
PZ-11	chloroethane	4/11/2014	<1	1	0.500	2800	10/25/2023	NA	4/1/2012
PZ-11	chloroethane	9/27/2014	<1	1	0.500	2800	10/25/2023	NA	4/1/2012
PZ-11	chloroethane	3/16/2015	<1	1	0.500	2800	10/25/2023	NA	4/1/2012
PZ-11	chloroethane	9/28/2015	<1	1	0.500	2800	10/25/2023	NA	4/1/2012
PZ-11	chloroethane	3/14/2016	<1	1	0.500	2800	10/25/2023	NA	4/1/2012
PZ-11	chloroethane	9/3/2016	<1	1	0.500	2800	10/25/2023	NA	4/1/2012
PZ-11	chloroethane	4/10/2017	<1	1	0.500	2800	10/25/2023	NA	4/1/2012
PZ-11	chloroethane	9/1/2017	<1	1	0.500	2800	10/25/2023	NA	4/1/2012
PZ-11	chloroethane	4/23/2018	<1	1	0.500	2800	10/25/2023	NA	4/1/2012
PZ-11	chloroethane	9/14/2018	<1	1	0.500	2800	10/25/2023	NA	4/1/2012
PZ-11	chloroethane	4/15/2019	<1	1	0.500	2800	10/25/2023	NA	4/1/2012
PZ-11	chloroethane	9/17/2019	<1	1	0.500	2800	10/25/2023	NA	4/1/2012
PZ-11	chloroethane	4/8/2020	<1	1	0.500	2800	10/25/2023	NA	4/1/2012
PZ-11	chloroethane	10/2/2020	<1	1	0.500	2800	10/25/2023	NA	4/1/2012
PZ-11	chloroethane	4/12/2021	<1	1	0.500	2800	10/25/2023	NA	4/1/2012
PZ-11	chloroethane	10/26/2021	<1	1	0.500	2800	10/25/2023	NA	4/1/2012
PZ-11	chloroethane	4/4/2022	<1	1	0.500	2800	10/25/2023	NA	4/1/2012
PZ-11	chloroethane	10/7/2022	<1	1	0.500	2800	10/25/2023	NA	4/1/2012
PZ-11	chloroethane	4/19/2023	<1	1	0.500	2800	10/25/2023	NA	4/1/2012
PZ-11	chloroethane	10/25/2023	**1.6**	1	0.128	2800	10/25/2023	NA	4/1/2012
PZ-11	chloroethane	4/17/2024	<1	1	0.128	2800	10/25/2023	NA	4/1/2012
PZ-11	chloroethane	10/17/2024	<1	1	0.128	2800	10/25/2023	NA	4/1/2012
PZ-11	chloroethane	4/1/2025	<1	1	0.128	2800	10/25/2023	NA	4/1/2012
PZ-11	chloroethane	10/10/2025	<1	1	0.500	2800	10/25/2023	NA	4/1/2012

Table 7
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KEY:	SSI	SSL LCL>GWPS

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

Monitoring Well	Compound	Sample Date	Each Result (ug/L)	Prediction Limit (ug/L)	95% LCL (ug/L)	GWPS Limit (ug/L)	SSI Initial Exceedance	Resamples Due	5th Background Sample
PZ-11	Nickel	3/31/2010	**26.1**	15.6	---	100	3/31/2010	NA	4/1/2012
PZ-11	Nickel	9/16/2010	**23.0**	15.6	---	100	3/31/2010	NA	4/1/2012
PZ-11	Nickel	4/11/2011	**23.2**	15.6	---	100	3/31/2010	NA	4/1/2012
PZ-11	Nickel	9/26/2011	**31.3**	15.6	22.550	100	3/31/2010	NA	4/1/2012
PZ-11	Nickel	4/1/2012	**40.9**	15.6	22.267	100	3/31/2010	NA	4/1/2012
PZ-11	Nickel	8/23/2012	**17.7**	15.6	19.527	100	3/31/2010	NA	4/1/2012
PZ-11	Nickel	4/13/2013	**20.5**	15.6	18.394	100	3/31/2010	NA	4/1/2012
PZ-11	Nickel	9/14/2013	**21.0**	15.6	15.774	100	3/31/2010	NA	4/1/2012
PZ-11	Nickel	4/11/2014	**42.7**	15.6	15.451	100	3/31/2010	NA	4/1/2012
PZ-11	Nickel	9/27/2014	**32.1**	15.6	19.944	100	3/31/2010	NA	4/1/2012
PZ-11	Nickel	3/16/2015	**16.7**	15.6	18.007	100	3/31/2010	NA	4/1/2012
PZ-11	Nickel	9/28/2015	<4	15.6	7.956	100	3/31/2010	NA	4/1/2012
PZ-11	Nickel	3/14/2016	<4	15.6	0.747	100	3/31/2010	NA	4/1/2012
PZ-11	Nickel	9/3/2016	<4	15.6	0.000	100	3/31/2010	NA	4/1/2012
PZ-11	Nickel	4/10/2017	**12.9**	15.6	0.005	100	3/31/2010	NA	4/1/2012
PZ-11	Nickel	9/1/2017	**16.5**	15.6	1.874	100	3/31/2010	NA	4/1/2012
PZ-11	Nickel	11/15/2017	<4	15.6	1.874	100	3/31/2010	NA	4/1/2012
PZ-11	Nickel	4/23/2018	<4	15.6	1.874	100	3/31/2010	NA	4/1/2012
PZ-11	Nickel	9/14/2018	**8.2**	15.6	1.226	100	3/31/2010	NA	4/1/2012
PZ-11	Nickel	4/15/2019	<4	15.6	0.865	100	3/31/2010	NA	4/1/2012
PZ-11	Nickel	9/17/2019	<4	15.6	0.865	100	3/31/2010	NA	4/1/2012
PZ-11	Nickel	4/8/2020	<4	15.6	0.865	100	3/31/2010	NA	4/1/2012
PZ-11	Nickel	10/2/2020	**4.4**	15.6	1.561	100	3/31/2010	NA	4/1/2012
PZ-11	Nickel	4/12/2021	**10.6**	15.6	1.233	100	3/31/2010	NA	4/1/2012
PZ-11	Nickel	10/26/2021	**20.9**	15.6	2.170	100	3/31/2010	NA	4/1/2012
PZ-11	Nickel	4/4/2022	**14.5**	15.6	4.458	100	3/31/2010	NA	4/1/2012
PZ-11	Nickel	10/7/2022	**22.7**	15.6	10.563	100	3/31/2010	NA	4/1/2012
PZ-11	Nickel	4/19/2023	**10.9**	15.6	10.775	100	3/31/2010	NA	4/1/2012
PZ-11	Nickel	10/25/2023	**10.5**	15.6	7.992	100	3/31/2010	NA	4/1/2012
PZ-11	Nickel	4/17/2024	**8.8**	15.6	5.718	100	3/31/2010	NA	4/1/2012
PZ-11	Nickel	10/17/2024	**31.1**	15.6	2.908	100	3/31/2010	NA	4/1/2012
PZ-11	Nickel	4/1/2025	**6.2**	15.6	0.696	100	3/31/2010	NA	4/1/2012
PZ-11	Nickel	10/10/2025	**6.0**	15.6	0.000	100	3/31/2010	NA	4/1/2012

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

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

Table 9 – Analytical Data Summary

Table 9

Analytical Data Summary for MW-10

Constituents	Units	3/31/2010	9/16/2010	4/11/2011	9/26/2011	4/1/2012	8/23/2012	4/13/2013	9/14/2013	4/11/2014
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	<10.0
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	<4.0	<4.0	<4.0	<4.0	5.7	8.3	<4.0	<4.0	<4.0
Barium, total	ug/L	88.6	92.2	102.0	134.0	135.0	97.1	129.0	109.0	120.0
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	<1.0	<1.0	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	ug/L	<10.0	<10.0	<8.0	<8.0	<8.0	8.1	<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	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Copper, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	4.9	5.3	9.1	6.3	8.7	6.3	7.2	<4.0	<4.0
Selenium, total	ug/L	<4.0	<4.0	4.7	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended	mg/L									
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<2.0	<2.0	<2.0	<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	11.3	<10.0	25.8	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<10.0	16.0	<8.0	<8.0	<8.0	18.2	<8.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-10

Constituents	9/27/2014	3/16/2015	9/28/2015	3/14/2016	9/3/2016	9/29/2016	4/10/2017	9/1/2017	11/15/2017
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1		<1	<1	
1,1,1-trichloroethane	<1	<1	<1	<1	<1		<1	<1	
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1		<1	<1	
1,1,2-trichloroethane	<1	<1	<1	<1	<1		<1	<1	
1,1-dichloroethane	<1	<1	<1	<1	<1		<1	<1	
1,1-dichloroethylene	<1	<1	<1	<1	<1		<1	<1	
1,2,3-trichloropropane	<1	<1	<1	<1	<1		<1	<1	
1,2-dibromo-3-chloropropane	<1	<1	<1	<1	<1		<1	<1	
1,2-dibromoethane	<1	<1	<1	<1	<1		<1	<1	
1,2-dichlorobenzene	<1	<1	<1	<1	<1		<1	<1	
1,2-dichloroethane	<1	<1	<1	<1	<1		<1	<1	
1,2-dichloropropane	<1	<1	<1	<1	<1		<1	<1	
1,4-dichlorobenzene	<1	<1	<1	<1	<1		<1	<1	
2-butanone (mek)	<5	<5	<5	<5	<5		<5	<5	
2-hexanone (mbk)	<5	<5	<5	<5	<5		<5	<5	
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5		<5	<5	
Acetone	<10.0	<10.0	<10.0	<10.0	<10.0		<10.0	18.5	<10.0
Acrylonitrile	<5	<5	<5	<5	<5		<5	<5	
Antimony, total	<2	<2	<2	<2	<2		<2	<2	
Arsenic, total	<4.0	<4.0	<4.0	<4.0	<4.0		<4.0	<4.0	
Barium, total	122.0	119.0	106.0	112.0	116.0		106.0	105.0	
Benzene	<1	<1	<1	<1	<1		<1	<1	
Beryllium, total	<4.0	<4.0	<4.0	<4.0	<4.0		<4.0	<4.0	
Bromochloromethane	<1	<1	<1	<1	<1		<1	<1	
Bromodichloromethane	<1	<1	<1	<1	<1		<1	<1	
Bromoform	<1	<1	<1	<1	<1		<1	<1	
Bromomethane	<1	<1	<1	<1	<1		<1	<1	
Cadmium, total	<.8	<.8	<.8	<.8	.9	<.8	<.8	<.8	
Carbon disulfide	<1	<1	<1	<1	<1		<1	<1	
Carbon tetrachloride	<1	<1	<1	<1	<1		<1	<1	
Chlorobenzene	<1	<1	<1	<1	<1		<1	<1	
Chloroethane	<1	<1	<1	<1	<1		<1	<1	
Chloroform	<1	<1	<1	<1	<1		<1	<1	
Chloromethane	<1	<1	<1	<1	<1		<1	<1	
Chromium, total	<8.0	<8.0	<8.0	<8.0	<8.0		<8.0	<8.0	
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1		<1	<1	
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1		<1	<1	
Cobalt, total	<.8	<.8	<.8	<.8	<.8		<.8	<.8	
Copper, total	<4.0	<4.0	<4.0	<4.0	25.1	<4.0	<4.0	<4.0	
Dibromochloromethane	<1	<1	<1	<1	<1		<1	<1	
Dibromomethane	<1	<1	<1	<1	<1		<1	<1	
Ethylbenzene	<1	<1	<1	<1	<1		<1	<1	
Lead, total	<4	<4	<4	<4	<4		<4	<4	
Methyl iodide	<1	<1	<1	<1	<1		<1	<1	
Methylene chloride	<5	<5	<5	<5	<5		<5	<5	
Nickel, total	<4.0	<4.0	<4.0	<4.0	<4.0		<4.0	<4.0	
Selenium, total	<4.0	<4.0	<4.0	<4.0	<4.0		<4.0	<4.0	
Silver, total	<4	<4	<4	<4	<4		<4	<4	
Solids, total suspended	27	8	4	<2	6		55	<2	
Styrene	<1	<1	<1	<1	<1		<1	<1	
Tetrachloroethylene	<1	<1	<1	<1	<1		<1	<1	
Thallium, total	<4.0	<4.0	<1.0	<4.0	<4.0		<4.0	<4.0	
Toluene	<1	<1	<1	<1	<1		<1	<1	
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1		<1	<1	
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1		<1	<1	
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5		<5	<5	
Trichloroethylene	<1	<1	<1	<1	<1		<1	<1	
Trichlorofluoromethane	<1	<1	<1	<1	<1		<1	<1	
Vanadium, total	<20.0	<20.0	<20.0	<20.0	<20.0		<20.0	<20.0	
Vinyl acetate	<5	<5	<5	<5	<5		<5	<5	
Vinyl chloride	<1	<1	<1	<1	<1		<1	<1	
Xylenes, total	<2	<2	<2	<2	<2		<2	<2	
Zinc, total	<8.0	<8.0	<8.0	<20.0	25.2	12.1	<8.0	<8.0	

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

Table 9

Analytical Data Summary for MW-10

Constituents	4/23/2018	9/14/2018	4/15/2019	9/17/2019	4/8/2020	10/2/2020	4/12/2021	10/26/2021	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
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Barium, total	116.0	110.0	113.0	115.0	110.0	111.0	121.0	109.0	110.0
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
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.8	<.8	<.8	<.8	<.4	<.4	<.4	<.4	<.4
Copper, total	<4.0	<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
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	<20.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Selenium, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended	<2	<2	<2	3	4	6			
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
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	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	<8.0	<20.0	10.4	<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-10

Constituents	10/7/2022	4/19/2023	10/25/2023	4/17/2024	10/17/2024	12/10/2024	4/1/2025	10/10/2025
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
Antimony, total	<2	<2	<2	<2	<2		<1	<1
Arsenic, total	<4.0	<4.0	<4.0	<4.0	<4.0		<2.0	<2.0
Barium, total	117.0	131.0	114.0	146.0	141.0		144.0	146.0
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	1.1	.8	2.4	<.8	.3	<.2
Carbon disulfide	<1	<1	<1	<1	<1		<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1		<1	<1
Chlorobenzene	<1	<1	<1	<1	<1		<1	<1
Chloroethane	<1	<1	<1	<1	<1		<1	<1
Chloroform	<1	<1	<1	<1	<1		<1	<1
Chloromethane	<1	<1	<1	<1	<1		<1	<1
Chromium, total	<8.0	<8.0	<8.0	<8.0	<8.0		2.0	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	<2.0	<.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
Methyl iodide	<1	<1	<1	<1	<1		<1	<1
Methylene chloride	<5	<5	<5	<5	<5		<5	<5
Nickel, total	4.2	5.3	5.4	8.4	10.2		9.6	14.5
Selenium, total	<4.0	<4.0	<4.0	<4.0	<4.0		<2.0	<2.0
Silver, total	<4	<4	<4	<4	<4		<5	<5
Solids, total suspended								
Styrene	<1	<1	<1	<1	<1		<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1		<1	<1
Thallium, total	<2.0	<2.0	<2.0	<2.0	<2.0		<.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	<20.0	<20.0	<20.0	<20.0	<20.0		<2.0	<2.0
Vinyl acetate	<5	<5	<5	<5	<5		<5	<5
Vinyl chloride	<1	<1	<1	<1	<1		<1	<1
Xylenes, total	<2	<2	<2	<2	<2		<2	<2
Zinc, total	<20.0	<20.0	<20.0	<20.0	<20.0		<5.0	5.1

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

Table 9

Analytical Data Summary for MW-13

Constituents	Units	3/31/2010	9/16/2010	4/11/2011	9/26/2011	4/1/2012	8/23/2012	4/13/2013	9/14/2013	4/11/2014
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, dissolved	ug/L							<2		
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, dissolved	ug/L							<4		
Arsenic, total	ug/L	<4.0	<4.0	<4.0	<4.0	5.5	8.2	<4.0	4.7	5.8
Barium, dissolved	ug/L							71.2		
Barium, total	ug/L	125.0	120.0	169.0	153.0	238.0	153.0	112.0	87.3	157.0
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, dissolved	ug/L							<4		
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, dissolved	ug/L							<.8		
Cadmium, total	ug/L	<1.0	<1.0	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, dissolved	ug/L							<8		
Chromium, total	ug/L	<10.0	<10.0	<8.0	<8.0	12.1	13.0	<8.0	<8.0	11.3
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, dissolved	ug/L							<4		
Cobalt, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	4.1
Copper, dissolved	ug/L							<4		
Copper, total	ug/L	<4.0	<4.0	5.0	<4.0	10.8	9.7	4.6	9.7	13.5
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, dissolved	ug/L							<2		
Lead, total	ug/L	<4.0	<4.0	<4.0	<4.0	4.1	<4.0	<4.0	5.5	6.8
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, dissolved	ug/L							5.8		
Nickel, total	ug/L	6.6	7.4	14.5	10.6	18.2	14.3	9.2	8.0	12.7
Selenium, dissolved	ug/L							<4		
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, dissolved	ug/L							<4		
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended	mg/L									
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, dissolved	ug/L							<2		
Thallium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<2.0	<2.0	<2.0	<4.0	<4.0
Tin, dissolved	ug/L							<20		
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, dissolved	ug/L							<20		
Vanadium, total	ug/L	13.1	<10.0	24.9	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2

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

Table 9

Analytical Data Summary for MW-13

Constituents	9/27/2014	3/16/2015	9/28/2015	3/14/2016	9/3/2016	4/10/2017	9/1/2017	4/23/2018	9/14/2018
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, dissolved									
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, dissolved									
Arsenic, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Barium, dissolved									
Barium, total	150.0	110.0	72.5	68.4	75.0	82.0	64.8	68.6	68.9
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, dissolved									
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, dissolved									
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, dissolved									
Chromium, total	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, dissolved									
Cobalt, total	1.3	1.0	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Copper, dissolved									
Copper, total	6.2	<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, dissolved									
Lead, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, dissolved									
Nickel, total	5.7	4.1	<4.0	<4.0	<4.0	<4.0	<4.0	<20.0	<4.0
Selenium, dissolved									
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, dissolved									
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended	78	97	9	<2	24	113	2	5	13
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, dissolved									
Thallium, total	<4.0	<4.0	<1.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Tin, dissolved									
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, dissolved									
Vanadium, total	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2

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

Table 9

Analytical Data Summary for MW-13

Constituents	4/15/2019	9/17/2019	4/8/2020	10/2/2020	4/12/2021	10/26/2021	4/4/2022	10/7/2022	4/19/2023
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<1	<1	<5	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, dissolved									
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, dissolved									
Arsenic, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Barium, dissolved									
Barium, total	62.7	81.1	56.7	65.4	74.7	56.8	61.2	50.4	47.0
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Beryllium, dissolved									
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, dissolved									
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, dissolved									
Chromium, total	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, dissolved									
Cobalt, total	<.8	<.8	<.4	<.4	<.4	<.4	<.4	1.6	<.4
Copper, dissolved									
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, dissolved									
Lead, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, dissolved									
Nickel, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Selenium, dissolved									
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, dissolved									
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended	5	28	45	91					
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, dissolved									
Thallium, total	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Tin, dissolved									
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, dissolved									
Vanadium, total	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2

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

Table 9

Analytical Data Summary for MW-13

Constituents	10/25/2023	4/17/2024	10/17/2024	4/1/2025	10/10/2025
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1
2-butanone (mek)	<10	<10	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5
Antimony, dissolved					
Antimony, total	<2	<2	<2	<1	<1
Arsenic, dissolved					
Arsenic, total	<4.0	<4.0	<4.0	<2.0	<2.0
Barium, dissolved					
Barium, total	54.4	64.5	48.2	66.9	52.0
Benzene	<1	<1	<1	<1	<1
Beryllium, dissolved					
Beryllium, total	<4.0	<4.0	<4.0	<.5	<.5
Bromochloromethane	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1
Cadmium, dissolved					
Cadmium, total	<.8	<.8	<.8	.2	<.2
Carbon disulfide	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1
Chromium, dissolved					
Chromium, total	<8.0	<8.0	<8.0	3.0	1.9
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1
Cobalt, dissolved					
Cobalt, total	<.4	<.4	<.4	<.5	<.5
Copper, dissolved					
Copper, total	<4.0	<4.0	<4.0	<5.0	<5.0
Dibromochloromethane	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1
Lead, dissolved					
Lead, total	<4.0	<4.0	<4.0	<1.0	<1.0
Methyl iodide	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5
Nickel, dissolved					
Nickel, total	<4.0	<4.0	<4.0	<5.0	<5.0
Selenium, dissolved					
Selenium, total	<4	<4	<4	<2	<2
Silver, dissolved					
Silver, total	<4	<4	<4	<5	<5
Solids, total suspended					
Styrene	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1
Thallium, dissolved					
Thallium, total	<2.0	<2.0	<2.0	<.5	<.5
Tin, dissolved					
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, dissolved					
Vanadium, total	<20.0	<20.0	<20.0	<2.0	<2.0
Vinyl acetate	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2

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

Table 9

Analytical Data Summary for MW-13

Constituents	Units	3/31/2010	9/16/2010	4/11/2011	9/26/2011	4/1/2012	8/23/2012	4/13/2013	9/14/2013	4/11/2014
Zinc, dissolved	ug/L							<8		
Zinc, total	ug/L	<10.0	<10.0	11.2	10.7	22.1	20.2	<8.0	23.3	29.6

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

Table 9

Analytical Data Summary for MW-13

Constituents	9/27/2014	3/16/2015	9/28/2015	3/14/2016	9/3/2016	4/10/2017	9/1/2017	4/23/2018	9/14/2018
Zinc, dissolved									
Zinc, total	8.2	9.3	<8.0	<20.0	<8.0	<8.0	9.3	<8.0	<20.0

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

Table 9

Analytical Data Summary for MW-13

Constituents	4/15/2019	9/17/2019	4/8/2020	10/2/2020	4/12/2021	10/26/2021	4/4/2022	10/7/2022	4/19/2023
Zinc, dissolved									
Zinc, total	<8.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-13

Constituents	10/25/2023	4/17/2024	10/17/2024	4/1/2025	10/10/2025
Zinc, dissolved					
Zinc, total	<20.0	<20.0	<20.0	<5.0	<5.0

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

Table 9

Analytical Data Summary for MW-3

Constituents	Units	3/31/2010	9/16/2010	4/11/2011	9/26/2011	4/1/2012	8/23/2012	4/13/2013	9/14/2013	4/11/2014
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	4.1	<4.0	<4.0	<4.0
Barium, total	ug/L	459	414	407	336	265	294	395	442	517
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	<1.0	<1.0	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	ug/L	<10.0	<10.0	<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	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Copper, total	ug/L	<4.0	<4.0	<4.0	<4.0	4.5	<4.0	<4.0	<4.0	4.1
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	ug/L	6.4	6.4	10.5	7.8	11.1	6.5	7.3	<4.0	4.2
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended	mg/L									
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<2.0	<2.0	<2.0	<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	10.6	<10.0	21.8	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	<10.0	<10.0	<8.0	11.0	25.0	9.7	9.6	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-3

Constituents	9/27/2014	3/16/2015	9/28/2015	3/14/2016	9/3/2016	4/10/2017	9/1/2017	4/23/2018	9/14/2018
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Barium, total	467	426	336	323	354	321	271	202	170
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	.9
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	.9	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
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
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	<20.0	<4.0
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended	35	44	4	<2	6	42	4	2	9
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4.0	<4.0	<1.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
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	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	8.9	<8.0	8.8	<20.0	<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-3

Constituents	4/15/2019	9/17/2019	4/8/2020	10/2/2020	4/12/2021	10/26/2021	4/4/2022	10/7/2022	4/19/2023
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<1	<1	<5	<5	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arsenic, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Barium, total	191	197	407	157	117	157	269	292	317
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	1.0	<.8	1.5	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chromium, total	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	<.8	<.8	1.6	<.4	.7	3.6	.9	2.4	.6
Copper, total	<4.0	<4.0	5.5	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Nickel, total	<4.0	<4.0	15.6	<4.0	5.6	5.0	<4.0	<4.0	<4.0
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended	3	2	36	39					
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
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	<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	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	14.0	<20.0	30.3	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-3

Constituents	10/25/2023	4/17/2024	10/17/2024	4/1/2025	10/10/2025
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1
1,2,3-trichloropropane	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1
1,4-dichlorobenzene	<1	<1	<1	<1	<1
2-butanone (mek)	<10	<10	<10	<10	<10
2-hexanone (mbk)	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5
Acetone	<10	<10	<10	<10	<10
Acrylonitrile	<5	<5	<5	<5	<5
Antimony, total	<2	<2	<2	<1	<1
Arsenic, total	<4.0	<4.0	<4.0	<2.0	<2.0
Barium, total	269	360	325	341	308
Benzene	<1	<1	<1	<1	<1
Beryllium, total	<4.0	<4.0	<4.0	<.5	<.5
Bromochloromethane	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1
Cadmium, total	<.8	<.8	<.8	.3	.3
Carbon disulfide	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1
Chlorobenzene	<1	<1	<1	<1	<1
Chloroethane	<1	<1	<1	<1	<1
Chloroform	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1
Chromium, total	<8.0	<8.0	<8.0	1.1	1.4
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1
Cobalt, total	.9	.9	<.4	.5	<.5
Copper, total	<4.0	<4.0	<4.0	<5.0	<5.0
Dibromochloromethane	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1
Ethylbenzene	<1	<1	<1	<1	<1
Lead, total	<4	<4	<4	<1	<1
Methyl iodide	<1	<1	<1	<1	<1
Methylene chloride	<5	<5	<5	<5	<5
Nickel, total	<4.0	<4.0	<4.0	<5.0	<5.0
Selenium, total	<4	<4	<4	<2	<2
Silver, total	<4	<4	<4	<5	<5
Solids, total suspended					
Styrene	<1	<1	<1	<1	<1
Tetrachloroethylene	<1	<1	<1	<1	<1
Thallium, total	<2.0	<2.0	<2.0	<.5	<.5
Toluene	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1
Vanadium, total	<20.0	<20.0	<20.0	<2.0	<2.0
Vinyl acetate	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0	5.0	27.3

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

Table 9

Analytical Data Summary for MW-7

Constituents	Units	3/31/2010	9/16/2010	4/11/2011	9/26/2011	4/1/2012	8/23/2012	4/12/2013	9/14/2013	4/11/2014
(3 4)-methylphenol	ug/L			<8		<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				
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene	ug/L			<8		<8				
1,2,4-trichlorobenzene	ug/L			<1		<1				
1,2-dibromo-3-chloropropane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
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		<8				
1,3,5-trinitrobenzene	ug/L			<8		<8				
1,3-dichlorobenzene	ug/L			<1		<1				
1,3-dichloropropane	ug/L			<1		<1				
1,3-dinitrobenzene	ug/L			<8		<8				
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone	ug/L			<8		<8				
1,4-phenylenediamine	ug/L			<8		<8				
1-naphthylamine	ug/L			<8		<8				
2,2-dichloropropane	ug/L			<1		<1				
2,3,4,6-tetrachlorophenol	ug/L			<8		<8				
2,4,5-t	ug/L			<.5		<.5				
2,4,5-tp (silvex)	ug/L			<.5		<.5				
2,4,5-trichlorophenol	ug/L			<8		<8				
2,4,6-trichlorophenol	ug/L			<8		<8				
2,4-d	ug/L			<2		<2				
2,4-dichlorophenol	ug/L			<8		<8				
2,4-dimethylphenol	ug/L			<8		<8				
2,4-dinitrophenol	ug/L			<8		<8				
2,4-dinitrotoluene	ug/L			<8		<8				
2,6-dichlorophenol	ug/L			<8		<8				
2,6-dinitrotoluene	ug/L			<8		<8				
2-acetylaminofluorene	ug/L			<8		<8				
2-butanone (mek)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-chloronaphthalene	ug/L			<8		<8				
2-chlorophenol	ug/L			<8		<8				
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene	ug/L			<8		<8				
2-methylphenol (o-cresol)	ug/L			<8		<8				
2-naphthylamine	ug/L			<8		<8				
2-nitroaniline	ug/L			<8		<8				
2-nitrophenol	ug/L			<8		<8				
3,3´-dichlorobenzidine	ug/L			<8		<8				
3,3'-dimethylbenzidine	ug/L			<8		<8				
3-methylcholanthrene	ug/L			<8		<8				
3-nitroaniline	ug/L			<8		<8				
4,4´-ddd	ug/L			<.05		<.05				
4,4´-dde	ug/L			<.05		<.05				
4,4´-ddt	ug/L			<.05		<.05				
4,6-dinitro-2-methylphenol	ug/L			<8		<8				
4-aminobiphenyl	ug/L			<8		<8				
4-bromophenyl phenyl ether	ug/L			<8		<8				
4-chloro-3-methylphenol	ug/L			<8		<8				
4-chloroaniline	ug/L			<8		<8				
4-chlorophenyl phenyl ether	ug/L			<8		<8				
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline	ug/L			<8		<8				
4-nitrophenol	ug/L			<8		<8				
5-nitro-o-toluidine	ug/L			<8		<8				
7,12-dimethylbenz(a)anthracene	ug/L			<8		<8				
Acenaphthene	ug/L			<8		<8				
Acenaphthylene	ug/L			<8		<8				
Acetone	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
Acetonitrile	ug/L			<10		<10				
Acetophenone	ug/L			<8		<8				
Acrolein	ug/L			<10		<10				
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin	ug/L			<.05		<.05				
Allyl chloride	ug/L			<1		<1				
Alpha-bhc	ug/L			<.05		<.05				
Anthracene	ug/L			<8		<8				

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

Table 9

Analytical Data Summary for MW-7

Constituents	9/27/2014	3/16/2015	9/28/2015	3/14/2016	9/3/2016	4/10/2017	9/1/2017	4/23/2018	9/14/2018
(3 4)-methylphenol						<8			
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene						<1			
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene						<8			
1,2,4-trichlorobenzene						<1			
1,2-dibromo-3-chloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene						<8			
1,3,5-trinitrobenzene						<8			
1,3-dichlorobenzene						<1			
1,3-dichloropropane						<1			
1,3-dinitrobenzene						<8			
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone						<8			
1,4-phenylenediamine						<8			
1-naphthylamine						<8			
2,2-dichloropropane						<1			
2,3,4,6-tetrachlorophenol						<8			
2,4,5-t						<.5			
2,4,5-tp (silvex)						<.5			
2,4,5-trichlorophenol						<8			
2,4,6-trichlorophenol						<8			
2,4-d						<2			
2,4-dichlorophenol						<8			
2,4-dimethylphenol						<8			
2,4-dinitrophenol						<8			
2,4-dinitrotoluene						<8			
2,6-dichlorophenol						<8			
2,6-dinitrotoluene						<8			
2-acetylaminofluorene						<8			
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-chloronaphthalene						<8			
2-chlorophenol						<8			
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene						<8			
2-methylphenol (o-cresol)						<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	14.8	<10.0	<10.0
Acetonitrile						<10			
Acetophenone						<8			
Acrolein						<10			
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin						<.05			
Allyl chloride						<1			
Alpha-bhc						<.05			
Anthracene						<8			

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

Table 9

Analytical Data Summary for MW-7

Constituents	4/15/2019	9/17/2019	4/8/2020	10/2/2020	4/12/2021	10/26/2021	4/4/2022	10/7/2022	4/19/2023
(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	<5	<5	<5	<5	<5	<1	<5
1,2-dibromoethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2-dinitrobenzene								<8	
1,3,5-trinitrobenzene								<8	
1,3-dichlorobenzene								<1	
1,3-dichloropropane								<1	
1,3-dinitrobenzene								<8	
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone								<8	
1,4-phenylenediamine								<8	
1-naphthylamine								<8	
2,2-dichloropropane								<1	
2,3,4,6-tetrachlorophenol								<8	
2,4,5-t								<.5	
2,4,5-tp (silvex)								<.5	
2,4,5-trichlorophenol								<8	
2,4,6-trichlorophenol								<8	
2,4-d								<2	
2,4-dichlorophenol								<8	
2,4-dimethylphenol								<8	
2,4-dinitrophenol								<8	
2,4-dinitrotoluene								<8	
2,6-dichlorophenol								<8	
2,6-dinitrotoluene								<8	
2-acetylaminofluorene								<8	
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<10	<5	<10
2-chloronaphthalene								<8	
2-chlorophenol								<8	
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene								<8	
2-methylphenol (o-cresol)								<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	
Allyl chloride								<1	
Alpha-bhc								<.05	
Anthracene								<8	

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

Table 9

Analytical Data Summary for MW-7

Constituents	10/25/2023	4/17/2024	10/17/2024	4/1/2025	10/10/2025
(3 4)-methylphenol					
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1
1,1-dichloroethane	<1	<1	<1	<1	<1
1,1-dichloroethylene	<1	<1	<1	<1	<1
1,1-dichloropropene					
1,2,3-trichloropropane	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene					
1,2,4-trichlorobenzene					
1,2-dibromo-3-chloropropane	<5	<5	<5	<5	<5
1,2-dibromoethane	<1	<1	<1	<1	<1
1,2-dichlorobenzene	<1	<1	<1	<1	<1
1,2-dichloroethane	<1	<1	<1	<1	<1
1,2-dichloropropane	<1	<1	<1	<1	<1
1,2-dinitrobenzene					
1,3,5-trinitrobenzene					
1,3-dichlorobenzene					
1,3-dichloropropane					
1,3-dinitrobenzene					
1,4-dichlorobenzene	<1	<1	<1	<1	<1
1,4-naphthoquinone					
1,4-phenylenediamine					
1-naphthylamine					
2,2-dichloropropane					
2,3,4,6-tetrachlorophenol					
2,4,5-t					
2,4,5-tp (silvex)					
2,4,5-trichlorophenol					
2,4,6-trichlorophenol					
2,4-d					
2,4-dichlorophenol					
2,4-dimethylphenol					
2,4-dinitrophenol					
2,4-dinitrotoluene					
2,6-dichlorophenol					
2,6-dinitrotoluene					
2-acetylaminofluorene					
2-butanone (mek)	<10	<10	<10	<10	<10
2-chloronaphthalene					
2-chlorophenol					
2-hexanone (mbk)	<5	<5	<5	<5	<5
2-methylnaphthalene					
2-methylphenol (o-cresol)					
2-naphthylamine					
2-nitroaniline					
2-nitrophenol					
3,3´-dichlorobenzidine					
3,3'-dimethylbenzidine					
3-methylcholanthrene					
3-nitroaniline					
4,4´-ddd					
4,4´-dde					
4,4´-ddt					
4,6-dinitro-2-methylphenol					
4-aminobiphenyl					
4-bromophenyl phenyl ether					
4-chloro-3-methylphenol					
4-chloroaniline					
4-chlorophenyl phenyl ether					
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5
4-nitroaniline					
4-nitrophenol					
5-nitro-o-toluidine					
7,12-dimethylbenz(a)anthracene					
Acenaphthene					
Acenaphthylene					
Acetone	<10.0	<10.0	<10.0	<10.0	<10.0
Acetonitrile					
Acetophenone					
Acrolein					
Acrylonitrile	<5	<5	<5	<5	<5
Aldrin					
Allyl chloride					
Alpha-bhc					
Anthracene					

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

Table 9

Analytical Data Summary for MW-7

Constituents	Units	3/31/2010	9/16/2010	4/11/2011	9/26/2011	4/1/2012	8/23/2012	4/12/2013	9/14/2013	4/11/2014
Antimony, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016	ug/L			<.1		<.1				
Arochlor 1221	ug/L			<.2		<.2				
Arochlor 1232	ug/L			<.2		<.2				
Arochlor 1242	ug/L			<.2		<.2				
Arochlor 1248	ug/L			<.2		<.2				
Arochlor 1254	ug/L			<.1		<.1				
Arochlor 1260	ug/L			<.1		<.1				
Arsenic, total	ug/L	<4.0	<4.0	<4.0	<4.0	6.2	7.6	<4.0	<4.0	<4.0
Azobenzene	ug/L			<8		<8				
Barium, total	ug/L	278	132	228	435	324	171	151	125	121
Benzene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(a)anthracene	ug/L			<8		<8				
Benzo(a)pyrene	ug/L			<8		<8				
Benzo(b)fluoranthene	ug/L			<8		<8				
Benzo(g,h,i)perylene	ug/L			<8		<8				
Benzo(k)fluoranthene	ug/L			<8		<8				
Benzyl alcohol	ug/L			<8		<8				
Beryllium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Beta-bhc	ug/L			<.05		<.05				
Bis (2-chloroethoxy) methane	ug/L			<8		<8				
Bis(2-chloroethyl) ether	ug/L			<8		<8				
Bis(2-ethylhexyl) phthalate	ug/L			<8		<8				
Bis[2-chloroisopropyl]ether	ug/L			<8		<8				
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate	ug/L			<8		<8				
Cadmium, total	ug/L	<1.0	<1.0	<.8	.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane	ug/L			<.1		<.1				
Chlorobenzene	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chlorobenzilate	ug/L			<8		<8				
Chloroethane	ug/L	1.5	<1.0	<1.0	1.0	1.6	1.5	1.8	1.3	2.3
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		<1				
Chromium, total	ug/L	<10.0	<10.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0
Chrysene	ug/L			<8		<8				
Cis-1,2-dichloroethylene	ug/L	36.4	1.3	4.8	19.2	69.1	124.0	17.7	95.0	92.3
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Copper, total	ug/L	6.1	<4.0	<4.0	<4.0	5.5	<4.0	<4.0	4.1	<4.0
Cyanide, total	mg/L			<.007		<.007				
Delta-bhc	ug/L			<.05		<.05				
Diallate	ug/L			<8		<8				
Dibenzo(a,h)anthracene	ug/L			<8		<8				
Dibenzofuran	ug/L			<8		<8				
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L			<1.0		1.4	2.3	3.5	3.0	2.1
Dieldrin	ug/L			<.05		<.05				
Diethyl phthalate	ug/L			<8		<8				
Dimethoate	ug/L			<.4		<.4				
Dimethylphthalate	ug/L			<8		<8				
Di-n-butyl phthalate	ug/L			<8		<8				
Di-n-octyl phthalate	ug/L			<8		<8				
Dinoseb	ug/L			<.5		<.5				
Diphenylamine	ug/L			<8		<8				
Disulfoton	ug/L			<.4		<.4				
Endosulfan i	ug/L			<.05		<.05				
Endosulfan ii	ug/L			<.05		<.05				
Endosulfan sulfate	ug/L			<.05		<.05				
Endrin	ug/L			<.05		<.05				
Endrin aldehyde	ug/L			<.05		<.05				
Ethyl methacrylate	ug/L			<10		<10				
Ethyl methanesulfonate	ug/L			<8		<8				
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Famphur	ug/L			<.4		<.4				
Fluoranthene	ug/L			<8		<8				
Fluorene	ug/L			<8		<8				
Gamma-bhc (lindane)	ug/L			<.05		<.05				
Heptachlor	ug/L			<.05		<.05				
Heptachlor epoxide	ug/L			<.05		<.05				
Hexachlorobenzene	ug/L			<4.03 *		<4.03 *				

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

Table 9

Analytical Data Summary for MW-7

Constituents	9/27/2014	3/16/2015	9/28/2015	3/14/2016	9/3/2016	4/10/2017	9/1/2017	4/23/2018	9/14/2018
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016						<.1			
Arochlor 1221						<.2			
Arochlor 1232						<.2			
Arochlor 1242						<.2			
Arochlor 1248						<.2			
Arochlor 1254						<.1			
Arochlor 1260						<.1			
Arsenic, total	<4.0	5.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Azobenzene						<8			
Barium, total	143	202	197	118	163	144	259	138	209
Benzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Benzo(a)anthracene						<8			
Benzo(a)pyrene						<8			
Benzo(b)fluoranthene						<8			
Benzo(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-ethylhexyl) phthalate						<8			
Bis[2-chloroisopropyl]ether						<8			
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	1.1	1.0	.9	1.0	.8	1.0	.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane						<.1			
Chlorobenzene	<1.0	<1.0	1.0	<1.0	<1.0	1.0	1.5	1.7	1.2
Chlorobenzilate						<8			
Chloroethane	2.6	<1.0	1.4	1.6	<1.0	1.2	1.7	1.7	1.2
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	3	<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	24.4	58.2	62.8	20.8	3.4	4.8	18.3	10.2	10.4
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	1.6	2.6	<.8	<.8	<.8	<.8	2.0	1.7	3.6
Copper, total	4.3	8.6	<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	2.6	<1.0	<1.0	<1.0	<1.0	1.4		1.4	1.2
Dieldrin						<.05			
Diethyl phthalate						<8			
Dimethoate						<.4			
Dimethylphthalate						<8			
Di-n-butyl phthalate						<8			
Di-n-octyl phthalate						<8			
Dinoseb						<.5			
Diphenylamine						<8			
Disulfoton						<.4			
Endosulfan i						<.05			
Endosulfan ii						<.05			
Endosulfan sulfate						<.05			
Endrin						<.05			
Endrin aldehyde						<.05			
Ethyl methacrylate						<10			
Ethyl methanesulfonate						<8			
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Famphur						<.4			
Fluoranthene						<8			
Fluorene						<8			
Gamma-bhc (lindane)						<.05			
Heptachlor						<.05			
Heptachlor epoxide						<.05			
Hexachlorobenzene						<.05			

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

Table 9

Analytical Data Summary for MW-7

Constituents	4/15/2019	9/17/2019	4/8/2020	10/2/2020	4/12/2021	10/26/2021	4/4/2022	10/7/2022	4/19/2023
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016								<.1	
Arochlor 1221								<.2	
Arochlor 1232								<.2	
Arochlor 1242								<.2	
Arochlor 1248								<.2	
Arochlor 1254								<.1	
Arochlor 1260								<.1	
Arsenic, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Azobenzene								<8	
Barium, total	126	229	123	203	120	189	107	308	118
Benzene	<1.0	<1.0	<1.0	<1.0	<1.0	1.6	<1.0	<1.0	<1.0
Benzo(a)anthracene								<8	
Benzo(a)pyrene								<8	
Benzo(b)fluoranthene								<8	
Benzo(g,h,i)perylene								<8	
Benzo(k)fluoranthene								<8	
Benzyl alcohol								<8	
Beryllium, total	<4.0	<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-ethylhexyl) phthalate								<6	
Bis[2-chloroisopropyl]ether								<8	
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate								<8	
Cadmium, total	.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane								<.1	
Chlorobenzene	1.6	2.4	2.0	2.8	1.7	2.4	1.1	1.8	<1.0
Chlorobenzilate								<8	
Chloroethane	1.6	1.1	1.5	1.3	<1.0	1.2	1.7	1.9	<1.0
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene								<1	
Chromium, total	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0
Chrysene								<8	
Cis-1,2-dichloroethylene	5.9	7.7	6.6	22.5	14.9	5.9	<1.0	1.0	1.4
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Cobalt, total	2.8	6.1	4.3	8.5	2.7	8.6	1.1	9.4	.7
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	4.7	<4.0	5.1
Cyanide, total								<.005	
Delta-bhc								<.05	
Diallate								<8	
Dibenzo(a,h)anthracene								<8	
Dibenzofuran								<8	
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane	1.4	<1.0	1.6	1.0	<1.0	1.4	<1.0	1.3	<1.0
Dieldrin								<.05	
Diethyl phthalate								<8	
Dimethoate								<.4	
Dimethylphthalate								<8	
Di-n-butyl phthalate								<8	
Di-n-octyl phthalate								<8	
Dinoseb								<.5	
Diphenylamine								<8	
Disulfoton								<.4	
Endosulfan i								<.05	
Endosulfan ii								<.05	
Endosulfan sulfate								<.05	
Endrin								<.05	
Endrin aldehyde								<.05	
Ethyl methacrylate								<10	
Ethyl methanesulfonate								<8	
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Famphur								<.4	
Fluoranthene								<8	
Fluorene								<8	
Gamma-bhc (lindane)								<.05	
Heptachlor								<.05	
Heptachlor epoxide								<.05	
Hexachlorobenzene								<.05	

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

Table 9

Analytical Data Summary for MW-7

Constituents	10/25/2023	4/17/2024	10/17/2024	4/1/2025	10/10/2025
Antimony, total	<2	<2	<2	<1	1
Arochlor 1016					
Arochlor 1221					
Arochlor 1232					
Arochlor 1242					
Arochlor 1248					
Arochlor 1254					
Arochlor 1260					
Arsenic, total	<4.0	<4.0	<4.0	<2.0	<2.0
Azobenzene					
Barium, total	216	139	249	189	229
Benzene	<1.0	<1.0	<1.0	<1.0	1.0
Benzo(a)anthracene					
Benzo(a)pyrene					
Benzo(b)fluoranthene					
Benzo(g,h,i)perylene					
Benzo(k)fluoranthene					
Benzyl alcohol					
Beryllium, total	<4.0	<4.0	<4.0	<.5	<.5
Beta-bhc					
Bis (2-chloroethoxy) methane					
Bis(2-chloroethyl) ether					
Bis(2-ethylhexyl) phthalate					
Bis[2-chloroisopropyl]ether					
Bromochloromethane	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1
Butyl benzyl phthalate					
Cadmium, total	<.8	<.8	<.8	.4	1.7
Carbon disulfide	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1
Chlordane					
Chlorobenzene	<1.0	<1.0	1.2	<1.0	1.2
Chlorobenzilate					
Chloroethane	1.3	<1.0	<1.0	<1.0	1.6
Chloroform	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1
Chloroprene					
Chromium, total	<8.0	<8.0	<8.0	1.5	1.8
Chrysene					
Cis-1,2-dichloroethylene	5.0	2.3	6.1	<1.0	7.2
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1
Cobalt, total	1.9	1.0	2.8	2.4	4.5
Copper, total	5.4	<4.0	6.4	<5.0	16.5
Cyanide, total					
Delta-bhc					
Diallate					
Dibenzo(a,h)anthracene					
Dibenzofuran					
Dibromochloromethane	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1
Dichlorodifluoromethane	1.0	1.0	<1.0	<1.0	1.1
Dieldrin					
Diethyl phthalate					
Dimethoate					
Dimethylphthalate					
Di-n-butyl phthalate					
Di-n-octyl phthalate					
Dinoseb					
Diphenylamine					
Disulfoton					
Endosulfan i					
Endosulfan ii					
Endosulfan sulfate					
Endrin					
Endrin aldehyde					
Ethyl methacrylate					
Ethyl methanesulfonate					
Ethylbenzene	<1	<1	<1	<1	<1
Famphur					
Fluoranthene					
Fluorene					
Gamma-bhc (lindane)					
Heptachlor					
Heptachlor epoxide					
Hexachlorobenzene					

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

Table 9

Analytical Data Summary for MW-7

Constituents	Units	3/31/2010	9/16/2010	4/11/2011	9/26/2011	4/1/2012	8/23/2012	4/12/2013	9/14/2013	4/11/2014
Hexachlorobutadiene	ug/L			<8		<8				
Hexachlorocyclopentadiene	ug/L			<8		<8				
Hexachloroethane	ug/L			<8		<8				
Hexachloropropene	ug/L			<8		<8				
Indeno(1,2,3-cd)pyrene	ug/L			<8		<8				
Isobutanol	mg/L			<1		<1				
Isodrin	ug/L			<8		<8				
Isophorone	ug/L			<8		<8				
Isosafrole	ug/L			<8		<8				
Kepone	ug/L			<8		<8				
Lead, total	ug/L	4.3	<4.0	<4.0	<4.0	4.5	<4.0	<4.0	<4.0	<4.0
Mercury, total	ug/L			<.5		<.5				
Methacrylonitrile	ug/L			<1		<1				
Methapyrilene	ug/L			<8		<8				
Methoxychlor	ug/L			<.05		<.05				
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Methyl methacrylate	ug/L			<1		<1				
Methyl methanesulfonate	ug/L			<8		<8				
Methyl parathion	ug/L			<.4		<.4				
Methylene chloride	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene	ug/L			<8		<8				
Nickel, total	ug/L	21.3	8.6	20.4	24.2	32.6	26.8	26.9	19.6	21.8
Nitrobenzene	ug/L			<8		<8				
N-nitrosodiethylamine	ug/L			<8		<8				
N-nitrosodimethylamine	ug/L			<8		<8				
N-nitrosodi-n-butylamine	ug/L			<8		<8				
N-nitroso-di-n-propylamine	ug/L			<8		<8				
N-nitrosodiphenylamine	ug/L			<8		<8				
N-nitrosomethylethylamine	ug/L									
N-nitrosopiperidine	ug/L			<8		<8				
N-nitrosopyrrolidine	ug/L			<8		<8				
O,o,o-triethyl phosphorothioate	ug/L			<.4		<.4				
O-toluidine	ug/L			<8		<8				
Parathion	ug/L			<.4		<.4				
P-dimethylaminoazobenzene	ug/L			<8		<8				
Pentachlorobenzene	ug/L			<8		<8				
Pentachloronitrobenzene (pcnb)	ug/L			<8		<8				
Pentachlorophenol	ug/L			<8		<8				
Phenacetin	ug/L			<8		<8				
Phenanthrene	ug/L			<8		<8				
Phenol	ug/L			<8		<8				
Phorate	ug/L			<.4		<.4				
Pronamide	ug/L			<8		<8				
Propionitrile	ug/L			<10		<10				
Pyrene	ug/L			<8		<8				
Safrole	ug/L			<8		<8				
Selenium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<4.0	4.6	<4.0	<4.0	<4.0
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended	mg/L									
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total	mg/L			<.1		<.1				
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<2.0	<2.0	<2.0	<4.0	<4.0
Thionazin	ug/L			<.4		<.4				
Tin, total	ug/L			<20		<20				
Toluene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene	ug/L			<.2		<.2				
Trans-1,2-dichloroethylene	ug/L	1.0	<1.0	<1.0	<1.0	1.8	3.6	<1.0	2.8	2.5
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	21.3	<10.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	1.3	<1.0	<1.0	<1.0	2.4	6.2	3.6	6.4	4.4
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	ug/L	16.6	<10.0	<8.0	10.1	20.1	9.0	<8.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-7

Constituents	9/27/2014	3/16/2015	9/28/2015	3/14/2016	9/3/2016	4/10/2017	9/1/2017	4/23/2018	9/14/2018
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	<4.0	4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Mercury, total						<.5			
Methacrylonitrile						<1			
Methapyrilene						<8			
Methoxychlor						<.05			
Methyl iodide	<1	<1	<1	<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	25.3	26.4	32.9	34.4	30.0	56.3	64.8	68.7	65.6
Nitrobenzene						<8			
N-nitrosodiethylamine						<8			
N-nitrosodimethylamine						<8			
N-nitrosodi-n-butylamine						<8			
N-nitroso-di-n-propylamine						<8			
N-nitrosodiphenylamine						<8			
N-nitrosomethylethylamine						<8			
N-nitrosopiperidine						<8			
N-nitrosopyrrolidine						<8			
O,o,o-triethyl phosphorothioate						<.4			
O-toluidine						<8			
Parathion						<.4			
P-dimethylaminoazobenzene						<8			
Pentachlorobenzene						<8			
Pentachloronitrobenzene (pcnb)						<8			
Pentachlorophenol						<8			
Phenacetin						<8			
Phenanthrene						<8			
Phenol						<8			
Phorate						<.4			
Pronamide						<8			
Propionitrile						<10			
Pyrene						<8			
Safrole						<8			
Selenium, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended	154	158	28	12	35	508	34	15	82
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total						<.1			
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<4.0	<4.0	<1.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Thionazin						<.4			
Tin, total						<20			
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene						<.2			
Trans-1,2-dichloroethylene	<1.0	<1.0	2.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	3.1	<1.0	3.0	1.2	<1.0	1.7	3.2	2.1	2.1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	13.8	19.9	8.2	<20.0	8.7	<8.0	10.4	<8.0	<20.0

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

Table 9

Analytical Data Summary for MW-7

Constituents	4/15/2019	9/17/2019	4/8/2020	10/2/2020	4/12/2021	10/26/2021	4/4/2022	10/7/2022	4/19/2023
Hexachlorobutadiene								<8	
Hexachlorocyclopentadiene								<8	
Hexachloroethane								<8	
Hexachloropropene								<8	
Indeno(1,2,3-cd)pyrene								<8	
Isobutanol								<1	
Isodrin								<8	
Isophorone								<8	
Isosafrole								<8	
Kepone								<8	
Lead, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Mercury, total								<.5	
Methacrylonitrile								<1	
Methapyrilene								<8	
Methoxychlor								<.05	
Methyl iodide	<1	<1	<1	<1	<1	<1	<1	<2	<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	57.2	94.9	73.4	77.6	65.5	57.5	39.1	68.3	14.2
Nitrobenzene								<8	
N-nitrosodiethylamine								<8	
N-nitrosodimethylamine								<8	
N-nitrosodi-n-butylamine								<8	
N-nitroso-di-n-propylamine								<8	
N-nitrosodiphenylamine								<8	
N-nitrosomethylethylamine								<8	
N-nitrosopiperidine								<8	
N-nitrosopyrrolidine								<8	
O,o,o-triethyl phosphorothioate								<.4	
O-toluidine								<8	
Parathion								<.4	
P-dimethylaminoazobenzene								<8	
Pentachlorobenzene								<8	
Pentachloronitrobenzene (pcnb)								<8	
Pentachlorophenol								<8	
Phenacetin								<8	
Phenanthrene								<8	
Phenol								<8	
Phorate								<.4	
Pronamide								<8	
Propionitrile								<10	
Pyrene								<8	
Safrole								<8	
Selenium, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended	33	58	62	64					
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total								<.1	
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, total	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Thionazin								<.4	
Tin, total								<20	
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene								<.2	
Trans-1,2-dichloroethylene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium, total	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	1.1	1.0	1.7	2.5	<1.0	<1.0	<1.0	<1.0	<1.0
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, total	9.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for MW-7

Constituents	10/25/2023	4/17/2024	10/17/2024	4/1/2025	10/10/2025
Hexachlorobutadiene					
Hexachlorocyclopentadiene					
Hexachloroethane					
Hexachloropropene					
Indeno(1,2,3-cd)pyrene					
Isobutanol					
Isodrin					
Isophorone					
Isosafrole					
Kepone					
Lead, total	<4.0	<4.0	<4.0	<1.0	<1.0
Mercury, total					
Methacrylonitrile					
Methapyrilene					
Methoxychlor					
Methyl iodide	<1	<1	<1	<1	<1
Methyl methacrylate					
Methyl methanesulfonate					
Methyl parathion					
Methylene chloride	<5	<5	<5	<5	<5
Naphthalene					
Nickel, total	43.8	9.1	49.6	29.3	42.6
Nitrobenzene					
N-nitrosodiethylamine					
N-nitrosodimethylamine					
N-nitrosodi-n-butylamine					
N-nitroso-di-n-propylamine					
N-nitrosodiphenylamine					
N-nitrosomethylethylamine					
N-nitrosopiperidine					
N-nitrosopyrrolidine					
O,o,o-triethyl phosphorothioate					
O-toluidine					
Parathion					
P-dimethylaminoazobenzene					
Pentachlorobenzene					
Pentachloronitrobenzene (pcnb)					
Pentachlorophenol					
Phenacetin					
Phenanthrene					
Phenol					
Phorate					
Pronamide					
Propionitrile					
Pyrene					
Safrole					
Selenium, total	<4.0	<4.0	<4.0	<2.0	<2.0
Silver, total	<4	<4	<4	<5	<5
Solids, total suspended					
Styrene	<1	<1	<1	<1	<1
Sulfide, total					
Tetrachloroethylene	<1	<1	<1	<1	<1
Thallium, total	<2.0	<2.0	<2.0	<.5	<.5
Thionazin					
Tin, total					
Toluene	<1	<1	<1	<1	<1
Toxaphene					
Trans-1,2-dichloroethylene	<1.0	<1.0	<1.0	<1.0	<1.0
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1
Vanadium, total	<20.0	<20.0	<20.0	<2.0	<2.0
Vinyl acetate	<5	<5	<5	<5	<5
Vinyl chloride	<1.0	<1.0	<1.0	<1.0	<1.0
Xylenes, total	<2	<2	<2	<2	<2
Zinc, total	<20.0	<20.0	<20.0	<5.0	18.1

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

Table 9

Analytical Data Summary for PZ-11

Constituents	Units	3/31/2010	9/16/2010	4/11/2011	9/26/2011	4/1/2012	8/23/2012	4/13/2013	9/14/2013	4/11/2014
(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	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-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	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone	ug/L							<8		
1,4-phenylenediamine	ug/L							<8		
1-naphthylamine	ug/L							<8		
2,2-dichloropropane	ug/L							<1		
2,3,4,6-tetrachlorophenol	ug/L							<8		
2,4,5-t	ug/L							<.5		
2,4,5-tp (silvex)	ug/L							<.5		
2,4,5-trichlorophenol	ug/L							<8		
2,4,6-trichlorophenol	ug/L							<8		
2,4-d	ug/L							<2		
2,4-dichlorophenol	ug/L							<8		
2,4-dimethylphenol	ug/L							<8		
2,4-dinitrophenol	ug/L							<8		
2,4-dinitrotoluene	ug/L							<8		
2,6-dichlorophenol	ug/L							<8		
2,6-dinitrotoluene	ug/L							<8		
2-acetylaminofluorene	ug/L							<8		
2-butanone (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 (o-cresol)	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	<10	<10	<10	<10	<10	<10	<10	<10
Acetonitrile	ug/L							<10		
Acetophenone	ug/L							<8		
Acrolein	ug/L							<10		
Acrylonitrile	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin	ug/L							<.05		
Allyl chloride	ug/L							<1		
Alpha-bhc	ug/L							<.05		
Anthracene	ug/L							<8		

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

Table 9

Analytical Data Summary for PZ-11

Constituents	9/27/2014	3/16/2015	9/28/2015	3/14/2016	9/3/2016	4/10/2017	7/14/2017	9/1/2017	11/15/2017
(3 4)-methylphenol									
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1		<1	
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1		<1	
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1		<1	
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1		<1	
1,1-dichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1		<1	
1,1-dichloropropene									
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1		<1	
1,2,4,5-tetrachlorobenzene									
1,2,4-trichlorobenzene									
1,2-dibromo-3-chloropropane	<1	<1	<1	<1	<1	<1		<1	
1,2-dibromoethane	<1	<1	<1	<1	<1	<1		<1	
1,2-dichlorobenzene	<1	<1	<1	<1	<1	<1		<1	
1,2-dichloroethane	<1	<1	<1	<1	<1	<1		<1	
1,2-dichloropropane	<1	<1	<1	<1	<1	<1		<1	
1,2-dinitrobenzene									
1,3,5-trinitrobenzene									
1,3-dichlorobenzene									
1,3-dichloropropane									
1,3-dinitrobenzene									
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1		<1	
1,4-naphthoquinone									
1,4-phenylenediamine									
1-naphthylamine									
2,2-dichloropropane									
2,3,4,6-tetrachlorophenol									
2,4,5-t									
2,4,5-tp (silvex)									
2,4,5-trichlorophenol									
2,4,6-trichlorophenol									
2,4-d									
2,4-dichlorophenol									
2,4-dimethylphenol									
2,4-dinitrophenol									
2,4-dinitrotoluene									
2,6-dichlorophenol									
2,6-dinitrotoluene									
2-acetylaminofluorene									
2-butanone (mek)	<5	<5	<5	<5	<5	<5		<5	
2-chloronaphthalene									
2-chlorophenol									
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5		<5	
2-methylnaphthalene									
2-methylphenol (o-cresol)									
2-naphthylamine									
2-nitroaniline									
2-nitrophenol									
3,3´-dichlorobenzidine									
3,3'-dimethylbenzidine									
3-methylcholanthrene									
3-nitroaniline									
4,4´-ddd									
4,4´-dde									
4,4´-ddt									
4,6-dinitro-2-methylphenol									
4-aminobiphenyl									
4-bromophenyl phenyl ether									
4-chloro-3-methylphenol									
4-chloroaniline									
4-chlorophenyl phenyl ether									
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5		<5	
4-nitroaniline									
4-nitrophenol									
5-nitro-o-toluidine									
7,12-dimethylbenz(a)anthracene									
Acenaphthene									
Acenaphthylene									
Acetone	<10	<10	<10	<10	<10	<10		<10	
Acetonitrile									
Acetophenone									
Acrolein									
Acrylonitrile	<5	<5	<5	<5	<5	<5		<5	
Aldrin									
Allyl chloride									
Alpha-bhc									
Anthracene									

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

Table 9

Analytical Data Summary for PZ-11

Constituents	4/23/2018	9/14/2018	4/15/2019	9/17/2019	4/8/2020	10/2/2020	4/12/2021	10/26/2021	4/4/2022
(3 4)-methylphenol					<8		<8		
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene					<1		<1		
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene					<8		<8		
1,2,4-trichlorobenzene					<1		<1		
1,2-dibromo-3-chloropropane	<1	<1	<1	<1	<1	<5	<1	<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		<8		
1,3,5-trinitrobenzene					<8		<8		
1,3-dichlorobenzene					<1		<1		
1,3-dichloropropane					<1		<1		
1,3-dinitrobenzene					<8		<8		
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone					<8		<8		
1,4-phenylenediamine					<8		<8		
1-naphthylamine					<8		<8		
2,2-dichloropropane					<1		<1		
2,3,4,6-tetrachlorophenol					<8		<8		
2,4,5-t					<.5		<.5		
2,4,5-tp (silvex)					<.5		<.5		
2,4,5-trichlorophenol					<8		<8		
2,4,6-trichlorophenol					<8		<8		
2,4-d					<2		<2		
2,4-dichlorophenol					<8		<8		
2,4-dimethylphenol					<8		<8		
2,4-dinitrophenol					<8		<8		
2,4-dinitrotoluene					<8		<8		
2,6-dichlorophenol					<8		<8		
2,6-dinitrotoluene					<8		<8		
2-acetylaminofluorene					<8		<8		
2-butanone (mek)	<5	<5	<5	<5	<5	<5	<5	<5	<10
2-chloronaphthalene					<8		<8		
2-chlorophenol					<8		<8		
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene					<8		<8		
2-methylphenol (o-cresol)					<8		<8		
2-naphthylamine					<8		<8		
2-nitroaniline					<8		<8		
2-nitrophenol					<8		<8		
3,3´-dichlorobenzidine					<8		<8		
3,3'-dimethylbenzidine					<8		<8		
3-methylcholanthrene					<8		<8		
3-nitroaniline					<8		<8		
4,4´-ddd					<.05		<.05		
4,4´-dde					<.05		<.05		
4,4´-ddt					<.05		<.05		
4,6-dinitro-2-methylphenol					<8		<8		
4-aminobiphenyl					<8		<8		
4-bromophenyl phenyl ether					<8		<8		
4-chloro-3-methylphenol					<8		<8		
4-chloroaniline					<8		<8		
4-chlorophenyl phenyl ether					<8		<8		
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline					<8		<8		
4-nitrophenol					<8		<8		
5-nitro-o-toluidine					<8		<8		
7,12-dimethylbenz(a)anthracene					<8		<8		
Acenaphthene					<8		<8		
Acenaphthylene					<8		<8		
Acetone	<10	<10	<10	<10	<10	<10	<10	<10	<10
Acetonitrile					<10		<10		
Acetophenone					<8		<8		
Acrolein					<10		<10		
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5	<5	<5
Aldrin					<.05		<.05		
Allyl chloride					<1		<1		
Alpha-bhc					<.05		<.05		
Anthracene					<8		<8		

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

Table 9

Analytical Data Summary for PZ-11

Constituents	10/7/2022	4/19/2023	10/25/2023	4/17/2024	10/17/2024	4/1/2025	10/10/2025
(3 4)-methylphenol							
1,1,1,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1
1,1,1-trichloroethane	<1	<1	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	<1	<1	<1	<1	<1	<1	<1
1,1,2-trichloroethane	<1	<1	<1	<1	<1	<1	<1
1,1-dichloroethane	<1.0	1.2	1.2	1.3	1.0	1.6	1.2
1,1-dichloroethylene	<1	<1	<1	<1	<1	<1	<1
1,1-dichloropropene							
1,2,3-trichloropropane	<1	<1	<1	<1	<1	<1	<1
1,2,4,5-tetrachlorobenzene							
1,2,4-trichlorobenzene							
1,2-dibromo-3-chloropropane	<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
1,2-dinitrobenzene							
1,3,5-trinitrobenzene							
1,3-dichlorobenzene							
1,3-dichloropropane							
1,3-dinitrobenzene							
1,4-dichlorobenzene	<1	<1	<1	<1	<1	<1	<1
1,4-naphthoquinone							
1,4-phenylenediamine							
1-naphthylamine							
2,2-dichloropropane							
2,3,4,6-tetrachlorophenol							
2,4,5-t							
2,4,5-tp (silvex)							
2,4,5-trichlorophenol							
2,4,6-trichlorophenol							
2,4-d							
2,4-dichlorophenol							
2,4-dimethylphenol							
2,4-dinitrophenol							
2,4-dinitrotoluene							
2,6-dichlorophenol							
2,6-dinitrotoluene							
2-acetylaminofluorene							
2-butanone (mek)	<10	<10	<10	<10	<10	<10	<10
2-chloronaphthalene							
2-chlorophenol							
2-hexanone (mbk)	<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene							
2-methylphenol (o-cresol)							
2-naphthylamine							
2-nitroaniline							
2-nitrophenol							
3,3´-dichlorobenzidine							
3,3'-dimethylbenzidine							
3-methylcholanthrene							
3-nitroaniline							
4,4´-ddd							
4,4´-dde							
4,4´-ddt							
4,6-dinitro-2-methylphenol							
4-aminobiphenyl							
4-bromophenyl phenyl ether							
4-chloro-3-methylphenol							
4-chloroaniline							
4-chlorophenyl phenyl ether							
4-methyl-2-pentanone (mibk)	<5	<5	<5	<5	<5	<5	<5
4-nitroaniline							
4-nitrophenol							
5-nitro-o-toluidine							
7,12-dimethylbenz(a)anthracene							
Acenaphthene							
Acenaphthylene							
Acetone	<10	<10	<10	<10	<10	<10	<10
Acetonitrile							
Acetophenone							
Acrolein							
Acrylonitrile	<5	<5	<5	<5	<5	<5	<5
Aldrin							
Allyl chloride							
Alpha-bhc							
Anthracene							

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

Table 9

Analytical Data Summary for PZ-11

Constituents	Units	3/31/2010	9/16/2010	4/11/2011	9/26/2011	4/1/2012	8/23/2012	4/13/2013	9/14/2013	4/11/2014
Antimony, dissolved	ug/L							<2.0		1.0
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, dissolved	ug/L							<4		<2
Arsenic, total	ug/L	7.2	7.2	6.9	6.6	12.6	9.8	<4.0	6.0	11.7
Azobenzene	ug/L							<8		
Barium, dissolved	ug/L							123		140
Barium, total	ug/L	280.0	273.0	233.0	318.0	404.0	135.0	203.0	206.0	404.0
Benzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Benzo(a)anthracene	ug/L							<8		
Benzo(a)pyrene	ug/L							<8		
Benzo(b)fluoranthene	ug/L							<8		
Benzo(g,h,i)perylene	ug/L							<8		
Benzo(k)fluoranthene	ug/L							<8		
Benzyl alcohol	ug/L							<8		
Beryllium, dissolved	ug/L							<4		<4
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-ethylhexyl) phthalate	ug/L							<8		
Bis[2-chloroisopropyl]ether	ug/L							<8		
Bromochloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate	ug/L							<8		
Cadmium, dissolved	ug/L							<.8		<.8
Cadmium, total	ug/L	<1.0	<1.0	<.8	1.1	.9	<.8	<.8	<.8	<.8
Carbon disulfide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane	ug/L							<.1		
Chlorobenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate	ug/L							<8		
Chloroethane	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene	ug/L							<1		
Chromium, dissolved	ug/L							<8		<2
Chromium, total	ug/L	<10.0	<10.0	<8.0	<8.0	10.4	<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, dissolved	ug/L							<4		<2
Cobalt, total	ug/L	7.4	6.8	5.9	8.0	16.6	<4.0	<4.0	<4.0	12.0
Copper, dissolved	ug/L							<4		<4
Copper, total	ug/L	7.5	7.0	6.2	5.5	9.2	<4.0	5.3	5.3	12.0
Cyanide, total	mg/L							<.007		
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							<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		

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

Table 9

Analytical Data Summary for PZ-11

Constituents	9/27/2014	3/16/2015	9/28/2015	3/14/2016	9/3/2016	4/10/2017	7/14/2017	9/1/2017	11/15/2017
Antimony, dissolved		<.8							
Antimony, total	<2	<2	<2	<2	<2	<2		<2	
Arochlor 1016									
Arochlor 1221									
Arochlor 1232									
Arochlor 1242									
Arochlor 1248									
Arochlor 1254									
Arochlor 1260									
Arsenic, dissolved		<2							
Arsenic, total	9.2	<4.0	<4.0	<4.0	<4.0	4.6	<4.0	<4.0	
Azobenzene									
Barium, dissolved		124							
Barium, total	312.0	188.0	52.5	65.6	49.1	146.0		32.7	
Benzene	<1	<1	<1	<1	<1	<1		<1	
Benzo(a)anthracene									
Benzo(a)pyrene									
Benzo(b)fluoranthene									
Benzo(g,h,i)perylene									
Benzo(k)fluoranthene									
Benzyl alcohol									
Beryllium, dissolved		<4							
Beryllium, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0		<4.0	
Beta-bhc									
Bis (2-chloroethoxy) methane									
Bis(2-chloroethyl) ether									
Bis(2-ethylhexyl) phthalate									
Bis[2-chloroisopropyl]ether									
Bromochloromethane	<1	<1	<1	<1	<1	<1		<1	
Bromodichloromethane	<1	<1	<1	<1	<1	<1		<1	
Bromoform	<1	<1	<1	<1	<1	<1		<1	
Bromomethane	<1	<1	<1	<1	<1	<1		<1	
Butyl benzyl phthalate									
Cadmium, dissolved		<.8							
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8		<.8	
Carbon disulfide	<1	<1	<1	<1	<1	<1		<1	
Carbon tetrachloride	<1	<1	<1	<1	<1	<1		<1	
Chlordane									
Chlorobenzene	<1	<1	<1	<1	<1	<1		<1	
Chlorobenzilate									
Chloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	
Chloroform	<1	<1	<1	<1	<1	<1		<1	
Chloromethane	<1	<1	<1	<1	<1	<1		<1	
Chloroprene									
Chromium, dissolved		<2							
Chromium, total	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0		<8.0	
Chrysene									
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1		<1	
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1		<1	
Cobalt, dissolved		<2							
Cobalt, total	9.3	8.1	<.8	<.8	<.8	5.2	2.4	<.8	
Copper, dissolved		<4							
Copper, total	8.7	<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	
Dibromomethane	<1	<1	<1	<1	<1	<1		<1	
Dichlorodifluoromethane									
Dieldrin									
Diethyl phthalate									
Dimethoate									
Dimethylphthalate									
Di-n-butyl phthalate									
Di-n-octyl phthalate									
Dinoseb									
Diphenylamine									
Disulfoton									
Endosulfan i									
Endosulfan ii									
Endosulfan sulfate									
Endrin									
Endrin aldehyde									
Ethyl methacrylate									
Ethyl methanesulfonate									

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

Table 9

Analytical Data Summary for PZ-11

Constituents	4/23/2018	9/14/2018	4/15/2019	9/17/2019	4/8/2020	10/2/2020	4/12/2021	10/26/2021	4/4/2022
Antimony, dissolved									
Antimony, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Arochlor 1016					<.1		<.1		
Arochlor 1221					<.2		<.2		
Arochlor 1232					<.2		<.2		
Arochlor 1242					<.2		<.2		
Arochlor 1248					<.2		<.2		
Arochlor 1254					<.1		<.1		
Arochlor 1260					<.1		<.1		
Arsenic, dissolved									
Arsenic, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Azobenzene					<8		<8		
Barium, dissolved									
Barium, total	68.5	70.8	61.8	55.4	59.8	65.9	64.4	70.3	122.0
Benzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Benzo(a)anthracene					<8		<8		
Benzo(a)pyrene					<8		<8		
Benzo(b)fluoranthene					<8		<8		
Benzo(g,h,i)perylene					<8		<8		
Benzo(k)fluoranthene					<8		<8		
Benzyl alcohol					<8		<8		
Beryllium, dissolved									
Beryllium, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Beta-bhc					<.05		<.05		
Bis (2-chloroethoxy) methane					<8		<8		
Bis(2-chloroethyl) ether					<8		<8		
Bis(2-ethylhexyl) phthalate					6		8	7	<6
Bis[2-chloroisopropyl]ether					<8		<8		
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		<8		
Cadmium, dissolved									
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8	<.8
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlordane					<.1		<.1		
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate					<8		<8		
Chloroethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chloroform	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Chloroprene					<1		<1		
Chromium, dissolved									
Chromium, total	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0	<8.0
Chrysene					<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, dissolved									
Cobalt, total	1.6	3.2	1.2	1.3	.7	.4	.9	<.4	1.0
Copper, dissolved									
Copper, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Cyanide, total					<.005		<.005		
Delta-bhc					<.05		<.05		
Diallate					<8		<8		
Dibenzo(a,h)anthracene					<8		<8		
Dibenzofuran					<8		<8		
Dibromochloromethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane					<1		<1		
Dieldrin					<.05		<.05		
Diethyl phthalate					<8		<8		
Dimethoate					<.4		<.4		
Dimethylphthalate					<8		<8		
Di-n-butyl phthalate					<8		<8		
Di-n-octyl phthalate					<8		<8		
Dinoseb					<.5		<.5		
Diphenylamine					<8		<8		
Disulfoton					<.4		<.4		
Endosulfan i					<.05		<.05		
Endosulfan ii					<.05		<.05		
Endosulfan sulfate					<.05		<.05		
Endrin					<.05		<.05		
Endrin aldehyde					<.05		<.05		
Ethyl methacrylate					<10		<10		
Ethyl methanesulfonate					<8		<8		

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

Table 9

Analytical Data Summary for PZ-11

Constituents	10/7/2022	4/19/2023	10/25/2023	4/17/2024	10/17/2024	4/1/2025	10/10/2025
Antimony, dissolved							
Antimony, total	<2	<2	<2	<2	<2	<1	<1
Arochlor 1016							
Arochlor 1221							
Arochlor 1232							
Arochlor 1242							
Arochlor 1248							
Arochlor 1254							
Arochlor 1260							
Arsenic, dissolved							
Arsenic, total	<4.0	<4.0	<4.0	<4.0	<4.0	<2.0	<2.0
Azobenzene							
Barium, dissolved							
Barium, total	87.5	70.7	68.6	77.3	48.0	88.0	71.0
Benzene	<1	<1	<1	<1	<1	<1	<1
Benzo(a)anthracene							
Benzo(a)pyrene							
Benzo(b)fluoranthene							
Benzo(g,h,i)perylene							
Benzo(k)fluoranthene							
Benzyl alcohol							
Beryllium, dissolved							
Beryllium, total	<4.0	<4.0	<4.0	<4.0	<4.0	<.5	<.5
Beta-bhc							
Bis (2-chloroethoxy) methane							
Bis(2-chloroethyl) ether							
Bis(2-ethylhexyl) phthalate	<6	<6					
Bis[2-chloroisopropyl]ether							
Bromochloromethane	<1	<1	<1	<1	<1	<1	<1
Bromodichloromethane	<1	<1	<1	<1	<1	<1	<1
Bromoform	<1	<1	<1	<1	<1	<1	<1
Bromomethane	<1	<1	<1	<1	<1	<1	<1
Butyl benzyl phthalate							
Cadmium, dissolved							
Cadmium, total	<.8	<.8	<.8	<.8	<.8	<.2	<.2
Carbon disulfide	<1	<1	<1	<1	<1	<1	<1
Carbon tetrachloride	<1	<1	<1	<1	<1	<1	<1
Chlordane							
Chlorobenzene	<1	<1	<1	<1	<1	<1	<1
Chlorobenzilate							
Chloroethane	<1.0	<1.0	1.6	<1.0	<1.0	<1.0	<1.0
Chloroform	<1	<1	<1	<1	<1	<1	<1
Chloromethane	<1	<1	<1	<1	<1	<1	<1
Chloroprene							
Chromium, dissolved							
Chromium, total	<8.0	<8.0	<8.0	<8.0	<8.0	1.3	1.0
Chrysene							
Cis-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1
Cobalt, dissolved							
Cobalt, total	2.2	.4	.5	<.4	.5	<.5	<.5
Copper, dissolved							
Copper, total	<4.0	<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	<1
Dibromomethane	<1	<1	<1	<1	<1	<1	<1
Dichlorodifluoromethane							
Dieldrin							
Diethyl phthalate							
Dimethoate							
Dimethylphthalate							
Di-n-butyl phthalate							
Di-n-octyl phthalate							
Dinoseb							
Diphenylamine							
Disulfoton							
Endosulfan i							
Endosulfan ii							
Endosulfan sulfate							
Endrin							
Endrin aldehyde							
Ethyl methacrylate							
Ethyl methanesulfonate							

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

Table 9

Analytical Data Summary for PZ-11

Constituents	Units	3/31/2010	9/16/2010	4/11/2011	9/26/2011	4/1/2012	8/23/2012	4/13/2013	9/14/2013	4/11/2014
Ethylbenzene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Famphur	ug/L							<.4		
Fluoranthene	ug/L							<8		
Fluorene	ug/L							<8		
Gamma-bhc (lindane)	ug/L							<.05		
Heptachlor	ug/L							<.05		
Heptachlor epoxide	ug/L							<.05		
Hexachlorobenzene	ug/L							<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, dissolved	ug/L							<2.0		<.8
Lead, total	ug/L	5.1	4.8	<4.0	4.4	6.3	<4.0	<4.0	<4.0	4.2
Mercury, dissolved	ug/L							<.5		<.5
Mercury, total	ug/L							<.5		
Methacrylonitrile	ug/L							<1		
Methapyrilene	ug/L							<8		
Methoxychlor	ug/L							<.05		
Methyl iodide	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<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, dissolved	ug/L							15.8		11.1
Nickel, total	ug/L	26.1	23.0	23.2	31.3	40.9	17.7	20.5	21.0	42.7
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									
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, dissolved	ug/L							<4		<4
Selenium, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, dissolved	ug/L							<4		<2
Silver, total	ug/L	<4	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended	mg/L									
Styrene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total	mg/L							<.1		
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, dissolved	ug/L							<2.0		<.8
Thallium, total	ug/L	<4.0	<4.0	<4.0	<4.0	<2.0	<2.0	<2.0	<4.0	<4.0
Thionazin	ug/L							<.4		
Tin, dissolved	ug/L							<20		<8
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

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

Table 9

Analytical Data Summary for PZ-11

Constituents	9/27/2014	3/16/2015	9/28/2015	3/14/2016	9/3/2016	4/10/2017	7/14/2017	9/1/2017	11/15/2017
Ethylbenzene	<1	<1	<1	<1	<1	<1		<1	
Famphur									
Fluoranthene									
Fluorene									
Gamma-bhc (lindane)									
Heptachlor									
Heptachlor epoxide									
Hexachlorobenzene									
Hexachlorobutadiene									
Hexachlorocyclopentadiene									
Hexachloroethane									
Hexachloropropene									
Indeno(1,2,3-cd)pyrene									
Isobutanol									
Isodrin									
Isophorone									
Isosafrole									
Kepone									
Lead, dissolved		<.8							
Lead, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0		<4.0	
Mercury, dissolved									
Mercury, total									
Methacrylonitrile									
Methapyrilene									
Methoxychlor									
Methyl iodide	<1	<1	<1	<1	<1	<1		<1	
Methyl methacrylate									
Methyl methanesulfonate									
Methyl parathion									
Methylene chloride	<5	<5	<5	<5	<5	<5		<5	
Naphthalene									
Nickel, dissolved		7.2							
Nickel, total	32.1	16.7	<4.0	<4.0	<4.0	12.9		16.5	<4.0
Nitrobenzene									
N-nitrosodiethylamine									
N-nitrosodimethylamine									
N-nitrosodi-n-butylamine									
N-nitroso-di-n-propylamine									
N-nitrosodiphenylamine									
N-nitrosomethylethylamine									
N-nitrosopiperidine									
N-nitrosopyrrolidine									
O,o,o-triethyl phosphorothioate									
O-toluidine									
Parathion									
P-dimethylaminoazobenzene									
Pentachlorobenzene									
Pentachloronitrobenzene (pcnb)									
Pentachlorophenol									
Phenacetin									
Phenanthrene									
Phenol									
Phorate									
Pronamide									
Propionitrile									
Pyrene									
Safrole									
Selenium, dissolved		<4							
Selenium, total	<4	<4	<4	<4	<4	<4		<4	
Silver, dissolved		<2							
Silver, total	<4	<4	<4	<4	<4	<4		<4	
Solids, total suspended	292	115	9	3	12	86		2	
Styrene	<1	<1	<1	<1	<1	<1		<1	
Sulfide, total									
Tetrachloroethylene	<1	<1	<1	<1	<1	<1		<1	
Thallium, dissolved		<.8							
Thallium, total	<4.0	<4.0	<1.0	<4.0	<4.0	<4.0		<4.0	
Thionazin									
Tin, dissolved		<8							
Tin, total									
Toluene	<1	<1	<1	<1	<1	<1		<1	
Toxaphene									
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1		<1	
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1		<1	
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5		<5	
Trichloroethylene	<1	<1	<1	<1	<1	<1		<1	
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1		<1	

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

Table 9

Analytical Data Summary for PZ-11

Constituents	4/23/2018	9/14/2018	4/15/2019	9/17/2019	4/8/2020	10/2/2020	4/12/2021	10/26/2021	4/4/2022
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Famphur					<.4		<.4		
Fluoranthene					<8		<8		
Fluorene					<8		<8		
Gamma-bhc (lindane)					<.05		<.05		
Heptachlor					<.05		<.05		
Heptachlor epoxide					<.05		<.05		
Hexachlorobenzene					<.05		<.05		
Hexachlorobutadiene					<8		<8		
Hexachlorocyclopentadiene					<8		<8		
Hexachloroethane					<8		<8		
Hexachloropropene					<8		<8		
Indeno(1,2,3-cd)pyrene					<8		<8		
Isobutanol					<1		<1		
Isodrin					<8		<8		
Isophorone					<8		<8		
Isosafrole					<8		<8		
Kepone					<8		<8		
Lead, dissolved									
Lead, total	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0
Mercury, dissolved									
Mercury, total					<.5		<.5		
Methacrylonitrile					<1		<1		
Methapyrilene					<8		<8		
Methoxychlor					<.05		<.05		
Methyl iodide	<1	<1	<1	<1	<2	<1	<2	<1	<1
Methyl methacrylate					<1		<1		
Methyl methanesulfonate					<8		<8		
Methyl parathion					<.4		<.4		
Methylene chloride	<5	<5	<5	<5	<5	<5	<5	<5	<5
Naphthalene					<8		<8		
Nickel, dissolved									
Nickel, total	<20.0	8.2	<4.0	<4.0	<4.0	4.4	10.6	20.9	14.5
Nitrobenzene					<8		<8		
N-nitrosodiethylamine					<8		<8		
N-nitrosodimethylamine					<8		<8		
N-nitrosodi-n-butylamine					<8		<8		
N-nitroso-di-n-propylamine					<8		<8		
N-nitrosodiphenylamine					<8		<8		
N-nitrosomethylethylamine					<8		<8		
N-nitrosopiperidine					<8		<8		
N-nitrosopyrrolidine					<8		<8		
O,o,o-triethyl phosphorothioate					<.4		<.4		
O-toluidine					<8		<8		
Parathion					<.4		<.4		
P-dimethylaminoazobenzene					<8		<8		
Pentachlorobenzene					<8		<8		
Pentachloronitrobenzene (pcnb)					<8		<8		
Pentachlorophenol					<8		<8		
Phenacetin					<8		<8		
Phenanthrene					<8		<8		
Phenol					<8		<8		
Phorate					<.4		<.4		
Pronamide					<8		<8		
Propionitrile					<10		<10		
Pyrene					<8		<8		
Safrole					<8		<8		
Selenium, dissolved									
Selenium, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Silver, dissolved									
Silver, total	<4	<4	<4	<4	<4	<4	<4	<4	<4
Solids, total suspended	6	38	9	11	237	67			
Styrene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulfide, total					<.1		<.1		
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Thallium, dissolved									
Thallium, total	<4.0	<4.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Thionazin					<.4		<.4		
Tin, dissolved									
Tin, total					<20		<20		
Toluene	<1	<1	<1	<1	<1	<1	<1	<1	<1
Toxaphene					<.2		<.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

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

Table 9

Analytical Data Summary for PZ-11

Constituents	10/7/2022	4/19/2023	10/25/2023	4/17/2024	10/17/2024	4/1/2025	10/10/2025
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1
Famphur							
Fluoranthene							
Fluorene							
Gamma-bhc (lindane)							
Heptachlor							
Heptachlor epoxide							
Hexachlorobenzene							
Hexachlorobutadiene							
Hexachlorocyclopentadiene							
Hexachloroethane							
Hexachloropropene							
Indeno(1,2,3-cd)pyrene							
Isobutanol							
Isodrin							
Isophorone							
Isosafrole							
Kepone							
Lead, dissolved							
Lead, total	<4.0	<4.0	<4.0	<4.0	<4.0	<1.0	<1.0
Mercury, dissolved							
Mercury, total							
Methacrylonitrile							
Methapyrilene							
Methoxychlor							
Methyl iodide	<1	<1	<1	<1	<1	<1	<1
Methyl methacrylate							
Methyl methanesulfonate							
Methyl parathion							
Methylene chloride	<5	<5	<5	<5	<5	<5	<5
Naphthalene							
Nickel, dissolved							
Nickel, total	22.7	10.9	10.5	8.8	31.1	6.2	6.0
Nitrobenzene							
N-nitrosodiethylamine							
N-nitrosodimethylamine							
N-nitrosodi-n-butylamine							
N-nitroso-di-n-propylamine							
N-nitrosodiphenylamine							
N-nitrosomethylethylamine							
N-nitrosopiperidine							
N-nitrosopyrrolidine							
O,o,o-triethyl phosphorothioate							
O-toluidine							
Parathion							
P-dimethylaminoazobenzene							
Pentachlorobenzene							
Pentachloronitrobenzene (pcnb)							
Pentachlorophenol							
Phenacetin							
Phenanthrene							
Phenol							
Phorate							
Pronamide							
Propionitrile							
Pyrene							
Safrole							
Selenium, dissolved							
Selenium, total	<4	<4	<4	<4	<4	<2	<2
Silver, dissolved							
Silver, total	<4	<4	<4	<4	<4	<5	<5
Solids, total suspended							
Styrene	<1	<1	<1	<1	<1	<1	<1
Sulfide, total							
Tetrachloroethylene	<1	<1	<1	<1	<1	<1	<1
Thallium, dissolved							
Thallium, total	<2.0	<2.0	<2.0	<2.0	<2.0	<.5	<.5
Thionazin							
Tin, dissolved							
Tin, total							
Toluene	<1	<1	<1	<1	<1	<1	<1
Toxaphene							
Trans-1,2-dichloroethylene	<1	<1	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	<1	<1	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	<5	<5	<5	<5	<5	<5	<5
Trichloroethylene	<1	<1	<1	<1	<1	<1	<1
Trichlorofluoromethane	<1	<1	<1	<1	<1	<1	<1

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

Table 9

Analytical Data Summary for PZ-11

Constituents	Units	3/31/2010	9/16/2010	4/11/2011	9/26/2011	4/1/2012	8/23/2012	4/13/2013	9/14/2013	4/11/2014
Vanadium, dissolved	ug/L							<20		<4
Vanadium, total	ug/L	31.0	14.0	30.1	<20.0	21.8	<20.0	<20.0	<20.0	21.0
Vinyl acetate	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, dissolved	ug/L							<8		<8
Zinc, total	ug/L	24.9	19.5	19.8	22.2	30.1	8.9	15.7	<20.0	37.8

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

Table 9

Analytical Data Summary for PZ-11

Constituents	9/27/2014	3/16/2015	9/28/2015	3/14/2016	9/3/2016	4/10/2017	7/14/2017	9/1/2017	11/15/2017
Vanadium, dissolved		<4							
Vanadium, total	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0		<20.0	
Vinyl acetate	<5	<5	<5	<5	<5	<5		<5	
Vinyl chloride	<1	<1	<1	<1	<1	<1		<1	
Xylenes, total	<2	<2	<2	<2	<2	<2		<2	
Zinc, dissolved		<8							
Zinc, total	22.7	9.5	<8.0	<20.0	<8.0	11.0		10.0	

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

Table 9

Analytical Data Summary for PZ-11

Constituents	4/23/2018	9/14/2018	4/15/2019	9/17/2019	4/8/2020	10/2/2020	4/12/2021	10/26/2021	4/4/2022
Vanadium, dissolved									
Vanadium, total	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2	<2	<2
Zinc, dissolved									
Zinc, total	<8.0	<20.0	<8.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0

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

Table 9

Analytical Data Summary for PZ-11

Constituents	10/7/2022	4/19/2023	10/25/2023	4/17/2024	10/17/2024	4/1/2025	10/10/2025
Vanadium, dissolved							
Vanadium, total	<20.0	<20.0	<20.0	<20.0	<20.0	<2.0	<2.0
Vinyl acetate	<5	<5	<5	<5	<5	<5	<5
Vinyl chloride	<1	<1	<1	<1	<1	<1	<1
Xylenes, total	<2	<2	<2	<2	<2	<2	<2
Zinc, dissolved							
Zinc, total	<20.0	<20.0	<20.0	<20.0	<20.0	<5.0	<5.0

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

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

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

Table 12 – Leachate Levels – Current Year

Table 12

Leachate Elevations

Annual Water Quality Report

Ida County Sanitary Landfill

Permit No. 49-SDP-01-76C

2025

Well #	TOC Elev.	Bottom Elev	4/1/2025	Elev.	Depth of
			Field Reading (ft)		Leachate
LPZ-1	1446.44	1406.06	0.000	1406.06	0.00
LPZ-2	1444.05	1404.13	0.000	1404.13	0.00
LPZ-3	1447.62	1395.86	0.000	1395.86	0.00
LPZ-4	1431.52	1390.89	0.000	1390.89	0.00
LPZ-5	1416.76	1379.78	5.600	1385.38	5.60
LPZ-6	1412.13	1375.77	0.333	1376.10	0.33
LPZ-7	1415.87	1378.74	0.600	1379.34	0.60

10/10/2025	Elev.	Depth of
Field Reading (ft)		Leachate
0.00	1406.06	0.00
0.000	1404.13	0.00
0.000	1395.86	0.00
Destroyed	NA	NA
6.200	1385.98	6.20
broken	NA	NA
0.450	1379.19	0.45

Table 12A – Leachate Levels – Over Time

TABLE 12A
Ida County Landfill
Historical Leachate Head Measurements - 2008 through Present

Date	LPZ-1	LPZ-2	LPZ-3	LPZ-4	LPZ-5	LPZ-6	LPZ-7
9/16/2008	-0.81	0.00	0.00	0.00	14.38	9.44	0.41
1/6/2009	-0.91	0.00	0.00	0.00	14.18	9.38	0.35
3/21/2009	-0.75	0.00	0.00	0.00	23.50	0.00	0.39
6/10/2009	-0.76	0.00	0.00	0.00	13.07	8.98	0.44
9/10/2009	0.16	0.00	0.00	0.00	12.71	8.70	0.44
2/17/2010	na	0.00	0.00	0.00	na	na	0.43
3/31/2010	1.63	0.00	0.00	0.00	12.52	9.31	0.45
7/14/2010	2.03	0.00	0.00	0.00	12.34	8.53	0.00
9/16/2010	2.04	0.00	0.00	0.00	0.00	0.00	0.00
1/6/2011	2.10	0.00	0.00	0.00	0.00	8.29	0.00
4/11/2011	0.99	0.00	0.00	0.00	11.38	8.06	0.44
7/14/2011	2.02	0.00	0.00	0.00	11.33	8.55	0.00
9/23/2011	1.94	0.00	0.00	0.00	11.33	8.55	0.00
1/5/2012	2.12	0.00	0.00	0.00	11.78	8.20	0.40
4/1/2012	1.83	0.00	0.00	0.00	7.50	7.50	0.17
7/11/2012	0.83	0.00	0.00	0.00	10.92	8.33	0.50
8/23/2012	0.92	0.00	0.00	0.00	11.00	8.17	0.17
1/9/2013	0.30	0.00	0.00	0.00	10.15	8.50	0.60
4/13/2013	0.83	0.00	0.00	0.00	9.16	8.83	0.83
7/27/2013	1.00	0.00	0.00	0.00	10.67	9.42	0.83
9/14/2013	0.92	0.00	0.00	0.00	11.00	9.08	0.50
1/12/2014	na	0.00	0.00	0.33	11.16	9.00	0.50
4/11/2014	1.17	0.00	0.00	0.00	10.08	8.17	0.17
7/17/2014	0.67	0.00	0.00	0.00	9.83	9.50	0.25
9/27/2014	1.17	0.00	0.00	0.00	10.00	9.67	0.25
1/16/2015	1.00	0.00	0.00	0.00	10.00	8.30	0.00
3/16/2015	1.25	0.00	0.00	0.00	10.17	8.42	0.00
7/14/2015	1.41	0.00	0.00	0.00	9.83	NA	0.00
9/28/2015	2.33	0.00	0.00	0.00	11.17	10.25	0.25
1/24/2016	2.67	0.00	0.00	0.00	frozen	7.17	0.00
3/14/2016	3.58	0.00	0.00	0.00	11.00	10.67	0.33
6/21/2016	4.33	0.00	0.00	0.00	12.17*	11.67	1.50
9/3/2016	4.25	0.00	0.00	0.00	11.83	11.50	0.58
12/30/2016	4.42	0.00	0.00	0.00	12.33	11.67	0.50
4/10/2017	5.17	0.00	0.00	0.00	11.42	11.42	0.46
7/14/2017	4.67	0.00	0.00	0.00	11.17	11.42	0.33
9/1/2017	4.67	0.00	0.00	0.00	11.17	10.50	0.33

TABLE 12A
Ida County Landfill
Historical Leachate Head Measurements - 2008 through Present

Date	LPZ-1	LPZ-2	LPZ-3	LPZ-4	LPZ-5	LPZ-6	LPZ-7
1/9/2018	5.58	0.00	0.00	0.00	11.67	10.92	0.50
4/23/2018	5.50	0.00	0.00	0.00	11.42	12.83	0.33
7/17/2018	5.33	0.00	0.00	0.00	11.67	11.75	0.67
9/14/2018	5.07	0.00	0.00	0.17	11.50	11.33	0.33
1/8/2019	4.83	0.00	0.00	0.00	11.33	11.08	0.00
4/15/2019	5.83	0.00	0.00	0.00	13.00	13.92	0.83
6/25/2019	7.33	0.00	0.00	0.00	13.00	11.67	1.42
9/17/2019	6.92	0.00	0.00	0.00	13.50	11.58	0.83
4/8/2020	1.92	0.08	0.00	0.00	6.83	1.67	0.50
10/2/2020	1.67	0.00	0.42	0.00	1.42	1.67	0.83
4/12/2021	2.17	0.17	0.00	0.17	2.33	2.08	0.83
10/26/2021	NA	0.00	0.00	0.00	2.00	0.17	0.25
4/4/2022	1.25	0.00	0.00	0.00	2.67	2.25	0.92
10/7/2022	1.67	0.00	0.42	0.25	2.92	1.92	0.83
4/19/2023	1.83	0.00	0.00	0.00	4.83	2.17	0.5
10/25/2023	0.00	0.00	0.00	0.00	3.83	0.50	0.75
4/17/2024	2.25	0.00	0.00	0.00	3.00	2.08	0.58
10/17/2024	0.00	0.00	0.00	0.00	5.33	0.33	0.65
4/1/2025	0.00	0.00	0.00	0.00	5.60	0.33	0.6
10/10/2025	0.00	0.00	0.00	destroyed	6.20	obstructed	0.45

Table 13 – Gas Monitoring Summary

Table 13
Gas Monitoring
Annual Water Quality Report
Ida County Sanitary Landfill
Permit No. 49-SDP-01-76C

4/1/2025

MONITORING POINT	LOCATION	EQUIPMENT READING	STRESSED VEGETATION?	ACTION REQUIRED?
Recycling Building		<1.0 %	NA	None
Office		**18.1**	NA	None
Storage Building		<1.0 %	NA	None
Equipment Building		<1.0 %	NA	None
MW-3	Southwest	<1.0 %	No	None
MW-7	Northeast	<1.0 %	No	None
MW-10	East	<1.0 %	No	None
PZ-11	East	<1.0 %	No	None
MW-13	Southeast	<1.0 %	No	None
Glenn Hunter - Weather: overcast, windy, 40's				

10/10/2025

MONITORING POINT	LOCATION	EQUIPMENT READING	STRESSED VEGETATION?	ACTION REQUIRED?
Recycling Building		<1.0 %	NA	None
Office		<1.0 %	NA	None
Storage Building		<1.0 %	NA	None
Equipment Building		<1.0 %	NA	None
MW-3	Southwest	<1.0 %	No	None
MW-7	Northeast	<1.0 %	No	None
MW-10	East	<1.0 %	No	None
PZ-11	East	<1.0 %	No	None
MW-13	Southeast	<1.0 %	No	None
Glenn Hunter - Weather: sunny, 75 degrees				

COMMENTS: The intermittent detection of methane gas in the office has been previously reported to IDNR and occurs periodically during the winter when the sewer system drains dry out and/or the lift station pump is not operated or vented, resulting in the backup of sewer gas.

NM = Not Monitored

APPENDIX A

Hydraulic Conductivity Data

Groundwater levels were measured in March, 1991, six weeks after installation and one week after development of the new wells and piezometers. Development was delayed due to cold weather which caused the equipment to freeze up. Water levels have been measured in the deeper piezometers since their installation, and they appear to be stabilized. The shallow wells stabilized within a few weeks, so bail or slug tests were then conducted on each well and piezometer. The data was analyzed by the method found in Hvorslev (1951) for unconfined aquifers and in Cooper et al. (1967) for confined aquifers using a computer program by Thompson (1987). Results of these tests can be found in Table 1.

TABLE 1: IN-SITU PERMEABILITY RESULTS

Corrected values

Well No.	Depth (ft.)	Geologic Interval	Aquifer Type	Hydraulic Conductivity (cm/sec)
MW-4	25 - 35	Loess - Till Contact	Unconfined	1×10^{-5}
MW-5	55 - 65	Glacial Till	Confined	7×10^{-5}
PZ-6	40 - 50	Glacial Till	Confined	2×10^{-6}
MW-7	15 - 25	Loess - Sand Seam Contact	Unconfined	3×10^{-4}
MW-8	50 - 60	Glacial Till	Confined	1×10^{-6}
MW-9	87 - 97	Sand Lens in Till	Confined	6×10^{-7}
MW-10	20 - 30	Weathered Till	Unconfined	1×10^{-6}
PZ-11	10 - 20	Loess	Unconfined	1×10^{-4}
PZ-12	50 - 60	Glacial Till	Confined	7×10^{-7}
MW-13	15 - 25	Loess - Till Contact	Unconfined	4×10^{-5}
PZ-14	15 - 25	Loess	Unconfined	Dry
PZ-15	45 - 50	Glacial Till	Confined	3×10^{-7}
PZ-16	70 - 75	Glacial Till	Confined	2×10^{-7}

APPENDIX B

Field Sampling Forms

IDA COUNTY SANITARY LANDFILL
PERMIT # 47-SDP-01-76C

4/1/2025 Sampled by: Glenn Hunter Weather Conditions: Overcast, windy, 40-48 degrees

IDNR Form 542-1322

Monitoring Well: MW-3 (ug)

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

GENERAL INFORMATION

TOC	1419.29
Well Depth	39.10
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

confirm

NO PURGE METHOD

TOC	1419.29
Well Depth	39.10
Top Screen	1385.19
Bottom Screen	1380.19
Bottom Well	1380.19
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	33.00
Top sample	1386.29
Bottom sample	1382.29
Turbidity(NTU)	0.53

Date	Time	Water Level	Water Elevation	Notes
4/1/2025	12:52	30.65	1388.64	

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		0.53
Appendix I	Metals	150	150		0.53
Appendix I	VOC	240	240		0.53
Full Appendix II	10 more containers	5620			
Sulfide	Sulfide	250			
Supplemental	Minerals	750			
Total			400	0	

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

TOC	1419.29	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	39.10	Before purging	4/1/2025	12:52	30.65	1388.64		0.0	
		After purging				1419.29			
		Top of Screen January 1990				1385.19			
						3.45	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				1380.19			
		Bottom of Well	4/1/2025		39.05	1380.24			
						0.05	feet sedimentation		
		Before Sampling				1419.29			
		Recovery				1419.29			
		Recovery				1419.29			
		Recovery				1419.29			
		Recovery				1419.29			

IDNR Form 542-1322

Monitoring Well: MW-90-7 (dg)

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

GENERAL INFORMATION

TOC	1367.8
Well Depth	25.40
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	1367.8
Well Depth	25.40
Top Screen	1352.40
Bottom Screen	1342.40
Bottom Well	1342.40
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	19.00
Top sample	1348.80
Bottom sample	1344.80
Turbidity(NTU)	10.70

Date	Time	Water Level	Water Elevation	Notes
4/1/2025	13:53	8.92	1358.88	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		10.70
Appendix I	Metals	150	150		10.70
Appendix I	VOC	240	240		10.70
Full Appendix II	10 more containers	5620			
Sulfide	Sulfide	250			
Supplemental	Minerals	750			
Total			400	0	

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

TOC	1367.8	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	25.40	Before purging	4/1/2025	13:53	8.92	1358.88		0.0	
		After purging				1367.80			
		Top of Screen January 1990				1352.40			
						6.48	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				1342.40			
		Bottom of Well	4/1/2025		25.40	1342.40			
						0.00	feet sedimentation		
		Before Sampling				1367.80			
		Recovery				1367.80			
		Recovery				1367.80			
		Recovery				1367.80			
		Recovery				1367.80			

IDNR Form 542-1322

Monitoring Well: MW-10 (dg)

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

GENERAL INFORMATION

TOC	1377.05
Well Depth	32.45
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1377.05
Well Depth	32.45
Top Screen	1354.60
Bottom Screen	1344.60
Bottom Well	1344.60
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	26.00
Top sample	1351.05
Bottom sample	1347.05
Turbidity(NTU)	0.91

Date	Time	Water Level	Water Elevation	Notes
4/1/2025	13:33	13.93	1363.12	

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		0.91
Appendix I	Metals	150	150		0.91
Appendix I	VOC	240	240		0.91
Full Appendix II	10 more containers	5620			
Sulfide	Sulfide	250			
Supplemental	Minerals	750			
Total			400	0	

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

TOC	1377.05	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	32.45	Before purging	4/1/2025	13:33	13.93	1363.12		0.0	
		After purging				1377.05			
		Top of Screen January 1990				1354.60			
						8.52	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				1344.60			
		Bottom of Well	4/1/2025		32.45	1344.60			
						0.00	feet sedimentation		
		Before Sampling				1377.05			
		Recovery				1377.05			
		Recovery				1377.05			
		Recovery				1377.05			
		Recovery				1377.05			

IDNR Form 542-1322

Monitoring Well: PZ-11 (dg)

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

GENERAL INFORMATION

TOC	1366.7
Well Depth	22.65
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1366.7
Well Depth	22.65
Top Screen	1354.05
Bottom Screen	1344.05
Bottom Well	1344.05
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	16.00
Top sample	1350.70
Bottom sample	1346.70
Turbidity(NTU)	0.73

Date	Time	Water Level	Water Elevation	Notes
4/1/2025	13:20	6.60	1360.1	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		0.73
Appendix I	Metals	150	150		0.73
Appendix I	VOC	240	240		0.73
Full Appendix II	10 more containers	5620			
Sulfide	Sulfide	250			
Supplemental	Minerals	750			
Total			400	0	

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

TOC	1366.7	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	22.65	Before purging	4/1/2025	13:20	6.60	1360.10		0.0	
		After purging				1366.70			
		Top of Screen January 1990				1354.05			
						6.05	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				1344.05			
		Bottom of Well	4/1/2025		22.65	1344.05			
						0.00	feet sedimentation		
		Before Sampling				1366.70			
		Recovery				1366.70			
		Recovery				1366.70			
		Recovery				1366.70			
		Recovery				1366.70			

IDNR Form 542-1322

Monitoring Well: MW-13 (dg)

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

GENERAL INFORMATION

TOC	1381.39
Well Depth	27.67
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	1381.39
Well Depth	27.67
Top Screen	1363.72
Bottom Screen	1353.72
Bottom Well	1353.72
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	21.00
Top sample	1360.39
Bottom sample	1356.39
Turbidity(NTU)	0.64

Date	Time	Water Level	Water Elevation	Notes
4/1/2025	13:08	14.28	1367.11	

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		0.64
Appendix I	Metals	150	150		0.64
Appendix I	VOC	240	240		0.64
Full Appendix II	10 more containers	5620			
Sulfide	Sulfide	250			
Supplemental	Minerals	750			
Total			400	0	

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

TOC	1381.39	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	27.67	Before purging	4/1/2025	13:08	14.28	1367.11		0.0	
		After purging				1381.39			
		Top of Screen January 1990				1363.72			
						3.39	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				1353.72			
		Bottom of Well	4/1/2025		27.67	1353.72			
						0.00	feet sedimentation		
		Before Sampling				1381.39			
		Recovery				1381.39			
		Recovery				1381.39			
		Recovery				1381.39			
		Recovery				1381.39			

IDNR Form 542-1322

Monitoring Well: PZ-6

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

GENERAL INFORMATION

TOC	1412.45
Well Depth	
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	1412.45
Well Depth	
Top Screen	
Bottom Screen	
Bottom Well	
Sampler Length (ft)	
Sampler Volume (mL)	
Feet cordage	
Top sample	
Bottom sample	
Turbidity(NTU)	

Date	Time	Water Level	Water Elevation	Notes
4/1/2025		24.46	1387.99	Water Level Only

IDA COUNTY SANITARY LANDFILL
PERMIT # 47-SDP-01-76C

4/1/2025 Sampled by: Glenn Hunter Weather Conditions: Overcast, windy, 40-48 degrees

IDNR Form 542-1322

Monitoring Well: MW-3 (ug)

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

GENERAL INFORMATION

TOC	1419.29
Well Depth	39.10
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

confirm

NO PURGE METHOD

TOC	1419.29
Well Depth	39.10
Top Screen	1385.19
Bottom Screen	1380.19
Bottom Well	1380.19
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	33.00
Top sample	1386.29
Bottom sample	1382.29
Turbidity(NTU)	0.53

Date	Time	Water Level	Water Elevation	Notes
4/1/2025	12:52	30.65	1388.64	

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		0.53
Appendix I	Metals	150	150		0.53
Appendix I	VOC	240	240		0.53
Full Appendix II	10 more containers	5620			
Sulfide	Sulfide	250			
Supplemental	Minerals	750			
Total			400	0	

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

TOC	1419.29	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	39.10	Before purging	4/1/2025	12:52	30.65	1388.64		0.0	
		After purging				1419.29			
		Top of Screen January 1990				1385.19			
						3.45	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				1380.19			
		Bottom of Well	4/1/2025		39.05	1380.24			
						0.05	feet sedimentation		
		Before Sampling				1419.29			
		Recovery				1419.29			
		Recovery				1419.29			
		Recovery				1419.29			
		Recovery				1419.29			

IDNR Form 542-1322

Monitoring Well: MW-90-7 (dg)

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

GENERAL INFORMATION

TOC	1367.8
Well Depth	25.40
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	1367.8
Well Depth	25.40
Top Screen	1352.40
Bottom Screen	1342.40
Bottom Well	1342.40
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	19.00
Top sample	1348.80
Bottom sample	1344.80
Turbidity(NTU)	10.70

Date	Time	Water Level	Water Elevation	Notes
4/1/2025	13:53	8.92	1358.88	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		10.70
Appendix I	Metals	150	150		10.70
Appendix I	VOC	240	240		10.70
Full Appendix II	10 more containers	5620			
Sulfide	Sulfide	250			
Supplemental	Minerals	750			
Total			400	0	

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

TOC	1367.8	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	25.40	Before purging	4/1/2025	13:53	8.92	1358.88		0.0	
		After purging				1367.80			
		Top of Screen January 1990				1352.40			
						6.48	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				1342.40			
		Bottom of Well	4/1/2025		25.40	1342.40			
						0.00	feet sedimentation		
		Before Sampling				1367.80			
		Recovery				1367.80			
		Recovery				1367.80			
		Recovery				1367.80			
		Recovery				1367.80			

IDNR Form 542-1322

Monitoring Well: MW-10 (dg)

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

GENERAL INFORMATION

TOC	1377.05
Well Depth	32.45
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1377.05
Well Depth	32.45
Top Screen	1354.60
Bottom Screen	1344.60
Bottom Well	1344.60
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	26.00
Top sample	1351.05
Bottom sample	1347.05
Turbidity(NTU)	0.91

Date	Time	Water Level	Water Elevation	Notes
4/1/2025	13:33	13.93	1363.12	

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		0.91
Appendix I	Metals	150	150		0.91
Appendix I	VOC	240	240		0.91
Full Appendix II	10 more containers	5620			
Sulfide	Sulfide	250			
Supplemental	Minerals	750			
Total			400	0	

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

TOC	1377.05	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	32.45	Before purging	4/1/2025	13:33	13.93	1363.12		0.0	
		After purging				1377.05			
		Top of Screen January 1990				1354.60			
						8.52	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				1344.60			
		Bottom of Well	4/1/2025		32.45	1344.60			
						0.00	feet sedimentation		
		Before Sampling				1377.05			
		Recovery				1377.05			
		Recovery				1377.05			
		Recovery				1377.05			
		Recovery				1377.05			

IDNR Form 542-1322

Monitoring Well: PZ-11 (dg)

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

GENERAL INFORMATION

TOC	1366.7
Well Depth	22.65
Capped	YES
Standing Water	NO
Litter	NO
Level Tape	Solinst 101
NTU Meter	Hach 2100P
No-Purge Equipment -	Solinst 429
Purge Equipment -	Waterra

NO PURGE METHOD

TOC	1366.7
Well Depth	22.65
Top Screen	1354.05
Bottom Screen	1344.05
Bottom Well	1344.05
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	16.00
Top sample	1350.70
Bottom sample	1346.70
Turbidity(NTU)	0.73

Date	Time	Water Level	Water Elevation	Notes
4/1/2025	13:20	6.60	1360.1	

ANALYTES, CONTAINERS, AND VOLUMES

Analyte		Required Volume (mL)	Volume Collected No-Purge (mL)	Volume Collected Purge & Sample (mL)	Turbidity this Container (NTU)
All	Field NTU	10	10		0.73
Appendix I	Metals	150	150		0.73
Appendix I	VOC	240	240		0.73
Full Appendix II	10 more containers	5620			
Sulfide	Sulfide	250			
Supplemental	Minerals	750			
Total			400	0	

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

TOC	1366.7	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	22.65	Before purging	4/1/2025	13:20	6.60	1360.10		0.0	
		After purging				1366.70			
		Top of Screen January 1990				1354.05			
						6.05	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				1344.05			
		Bottom of Well	4/1/2025		22.65	1344.05			
						0.00	feet sedimentation		
		Before Sampling				1366.70			
		Recovery				1366.70			
		Recovery				1366.70			
		Recovery				1366.70			
		Recovery				1366.70			

IDNR Form 542-1322

Monitoring Well: MW-13 (dg)

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

GENERAL INFORMATION

TOC	1381.39
Well Depth	27.67
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	1381.39
Well Depth	27.67
Top Screen	1363.72
Bottom Screen	1353.72
Bottom Well	1353.72
Sampler Length (ft)	4.00
Sampler Volume (mL)	440.00
Feet cordage	21.00
Top sample	1360.39
Bottom sample	1356.39
Turbidity(NTU)	0.64

Date	Time	Water Level	Water Elevation	Notes
4/1/2025	13:08	14.28	1367.11	

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		0.64
Appendix I	Metals	150	150		0.64
Appendix I	VOC	240	240		0.64
Full Appendix II	10 more containers	5620			
Sulfide	Sulfide	250			
Supplemental	Minerals	750			
Total			400	0	

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

TOC	1381.39	2" dia.	Date	Time	Depth	Elevation	Gallons	# of Vol.	Purged Dry?
Well Depth	27.67	Before purging	4/1/2025	13:08	14.28	1367.11		0.0	
		After purging				1381.39			
		Top of Screen January 1990				1363.72			
						3.39	feet above (+) or below (-) top screen		
		Bottom of Well January 1990				1353.72			
		Bottom of Well	4/1/2025		27.67	1353.72			
						0.00	feet sedimentation		
		Before Sampling				1381.39			
		Recovery				1381.39			
		Recovery				1381.39			
		Recovery				1381.39			
		Recovery				1381.39			

IDNR Form 542-1322

Monitoring Well: PZ-6

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

GENERAL INFORMATION

TOC	1412.45
Well Depth	
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	1412.45
Well Depth	
Top Screen	
Bottom Screen	
Bottom Well	
Sampler Length (ft)	
Sampler Volume (mL)	
Feet cordage	
Top sample	
Bottom sample	
Turbidity(NTU)	

Date	Time	Water Level	Water Elevation	Notes
4/1/2025		24.46	1387.99	Water Level Only

APPENDIX C

Laboratory Analytical Data

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1ID0653

Project Description

Appendix 1

For:

Todd Whipple

HLW Engineering

204 West Broad St

Story City, IA 50248

Sue Thompson

Client Services Manager

Thursday, June 19, 2025

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

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

MICROBAC®

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1ID0653

HLW Engineering

Todd Whipple
204 West Broad St
Story City, IA 50248

Project Name: Appendix 1

Project / PO Number: N/A
Received: 04/03/2025
Reported: 06/19/2025

Sample Summary Report

Sample Name	Laboratory ID	Client Matrix	Sample Type	Sample Begin	Sample Taken	Lab Received
MW-3	1ID0653-01	Aqueous	GRAB		04/01/25 12:52	04/03/25 10:18
MW-7	1ID0653-02	Aqueous	GRAB		04/01/25 13:53	04/03/25 10:18
MW-10	1ID0653-03	Aqueous	GRAB		04/01/25 13:33	04/03/25 10:18
PZ-11	1ID0653-04	Aqueous	GRAB		04/01/25 13:20	04/03/25 10:18
MW-13	1ID0653-05	Aqueous	GRAB		04/01/25 13:08	04/03/25 10:18
Duplicate	1ID0653-06	Aqueous	GRAB		04/01/25 13:53	04/03/25 10:18

Analytical Testing Parameters

Client Sample ID:	MW-3		
Sample Matrix:	Aqueous	**Collected By:**	JGH
Lab Sample ID:	1ID0653-01	**Collection Date:**	04/01/2025 12:52

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D							
Chloromethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
Vinyl Chloride	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
Bromomethane	<1.0	1.0	ug/L		04/08/25 0000	04/08/25 1558	CSM
Chloroethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
Trichlorofluoromethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
1,1-Dichloroethylene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
Acetone	<10.0	10.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
Methyl Iodide	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
Carbon Disulfide	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
Methylene Chloride	<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
Acrylonitrile	<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
1,1-Dichloroethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
Vinyl Acetate	<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
2-Butanone (MEK)	<10.0	10.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
Bromochloromethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
Chloroform	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
1,1,1-Trichloroethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
Carbon Tetrachloride	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
Benzene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
1,2-Dichloroethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
Trichloroethylene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
1,2-Dichloropropane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
Dibromomethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
Bromodichloromethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
Toluene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
1,1,2-Trichloroethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
Tetrachloroethylene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
2-Hexanone (MBK)	<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
Dibromochloromethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
1,2-Dibromoethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
Chlorobenzene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
Ethylbenzene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
Xylenes, total	<2.0	2.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
Styrene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1349	RAF

Client Sample ID:	MW-3		
Sample Matrix:	Aqueous	**Collected By:**	JGH
Lab Sample ID:	1ID0653-01	**Collection Date:**	04/01/2025 12:52

Determination of Volatile Organic Compounds		Result	RL	Units	Note	Prepared	Analyzed	Analyst
Bromoform		<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
1,2,3-Trichloropropane		<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
trans-1,4-Dichloro-2-butene		<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
1,1,2,2-Tetrachloroethane		<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
1,4-Dichlorobenzene		<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
1,2-Dichlorobenzene		<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
1,2-Dibromo-3-chloropropane		<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1349	RAF
Surrogate: Dibromofluoromethane	90.1	Limit: 75-136		% Rec		04/08/25 0000	04/08/25 1558	CSM
Surrogate: Dibromofluoromethane	108	Limit: 75-136		% Rec		04/04/25 0000	04/04/25 1349	RAF
Surrogate: Dibromofluoromethane	108	Limit: 57-134		% Rec		04/04/25 0000	04/04/25 1349	RAF
Surrogate: 1,2-Dichloroethane-d4	106	Limit: 53-140		% Rec		04/04/25 0000	04/04/25 1349	RAF
Surrogate: 1,2-Dichloroethane-d4	74.2	Limit: 61-142		% Rec		04/08/25 0000	04/08/25 1558	CSM
Surrogate: 1,2-Dichloroethane-d4	106	Limit: 61-142		% Rec		04/04/25 0000	04/04/25 1349	RAF
Surrogate: Toluene-d8	96.6	Limit: 82-121		% Rec		04/08/25 0000	04/08/25 1558	CSM
Surrogate: Toluene-d8	101	Limit: 86-114		% Rec		04/04/25 0000	04/04/25 1349	RAF
Surrogate: Toluene-d8	101	Limit: 82-121		% Rec		04/04/25 0000	04/04/25 1349	RAF
Surrogate: 4-Bromofluorobenzene	87.7	Limit: 80-116		% Rec		04/08/25 0000	04/08/25 1558	CSM
Surrogate: 4-Bromofluorobenzene	98.7	Limit: 78-121		% Rec		04/04/25 0000	04/04/25 1349	RAF
Surrogate: 4-Bromofluorobenzene	98.7	Limit: 80-116		% Rec		04/04/25 0000	04/04/25 1349	RAF

Determination of Total Metals	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A							
Antimony, total	<0.0010	0.0010	mg/L		04/17/25 1601	06/18/25 1600	RVV
Arsenic, total	<0.0020	0.0020	mg/L		04/17/25 1601	06/18/25 1600	RVV
Barium, total	**0.341**	0.0010	mg/L	**M1**	04/17/25 1601	06/18/25 1600	RVV
Beryllium, total	<0.0005	0.0005	mg/L		04/17/25 1601	06/18/25 1600	RVV
Cadmium, total	**0.0003**	0.0002	mg/L		04/17/25 1601	06/18/25 1600	RVV
Chromium, total	**0.0011**	0.0010	mg/L		04/17/25 1601	06/18/25 1600	RVV
Cobalt, total	**0.0005**	0.0005	mg/L		04/17/25 1601	06/18/25 1600	RVV
Copper, total	<0.0050	0.0050	mg/L		04/17/25 1601	06/18/25 1600	RVV
Lead, total	<0.0010	0.0010	mg/L		04/17/25 1601	06/18/25 1600	RVV
Nickel, total	<0.0050	0.0050	mg/L		04/17/25 1601	06/18/25 1600	RVV
Selenium, total	<0.0020	0.0020	mg/L		04/17/25 1601	06/18/25 1600	RVV
Silver, total	<0.0050	0.0050	mg/L		04/17/25 1601	06/18/25 1600	RVV
Thallium, total	<0.0005	0.0005	mg/L		04/17/25 1601	06/18/25 1600	RVV
Vanadium, total	<0.0020	0.0020	mg/L		04/17/25 1601	06/18/25 1600	RVV
Zinc, total	**0.0050**	0.0050	mg/L		04/17/25 1601	06/18/25 1600	RVV

Client Sample ID:	MW-7		
Sample Matrix:	Aqueous	**Collected By:**	JGH
Lab Sample ID:	1ID0653-02	**Collection Date:**	04/01/2025 13:53

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D							
Dichlorodifluoromethane	<1.0	1.0	ug/L		04/08/25 0000	04/08/25 1620	CSM
Chloromethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
Vinyl Chloride	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
Bromomethane	<1.0	1.0	ug/L		04/08/25 0000	04/08/25 1620	CSM
Chloroethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
Trichlorofluoromethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
1,1-Dichloroethylene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
Acetone	<10.0	10.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
Methyl Iodide	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
Carbon Disulfide	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
Methylene Chloride	<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
Acrylonitrile	<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
1,1-Dichloroethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
Vinyl Acetate	<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
2-Butanone (MEK)	<10.0	10.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
Bromochloromethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
Chloroform	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
1,1,1-Trichloroethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
Carbon Tetrachloride	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
Benzene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
1,2-Dichloroethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
Trichloroethylene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
1,2-Dichloropropane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
Dibromomethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
Bromodichloromethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
Toluene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
1,1,2-Trichloroethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
Tetrachloroethylene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
2-Hexanone (MBK)	<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
Dibromochloromethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
1,2-Dibromoethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
Chlorobenzene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
Ethylbenzene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
Xylenes, total	<2.0	2.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
Styrene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
Bromoform	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1412	RAF

Client Sample ID:	MW-7		
Sample Matrix:	Aqueous	**Collected By:**	JGH
Lab Sample ID:	1ID0653-02	**Collection Date:**	04/01/2025 13:53

Determination of Volatile Organic Compounds		Result	RL	Units	Note	Prepared	Analyzed	Analyst
1,2,3-Trichloropropane		<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
trans-1,4-Dichloro-2-butene		<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
1,1,2,2-Tetrachloroethane		<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
1,4-Dichlorobenzene		<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
1,2-Dichlorobenzene		<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
1,2-Dibromo-3-chloropropane		<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1412	RAF
Surrogate: Dibromofluoromethane	108	Limit: 75-136		% Rec		04/04/25 0000	04/04/25 1412	RAF
Surrogate: Dibromofluoromethane	108	Limit: 57-134		% Rec		04/04/25 0000	04/04/25 1412	RAF
Surrogate: Dibromofluoromethane	99.5	Limit: 75-136		% Rec		04/08/25 0000	04/08/25 1620	CSM
Surrogate: 1,2-Dichloroethane-d4	106	Limit: 53-140		% Rec		04/04/25 0000	04/04/25 1412	RAF
Surrogate: 1,2-Dichloroethane-d4	87.9	Limit: 61-142		% Rec		04/08/25 0000	04/08/25 1620	CSM
Surrogate: 1,2-Dichloroethane-d4	106	Limit: 61-142		% Rec		04/04/25 0000	04/04/25 1412	RAF
Surrogate: Toluene-d8	101	Limit: 86-114		% Rec		04/04/25 0000	04/04/25 1412	RAF
Surrogate: Toluene-d8	101	Limit: 82-121		% Rec		04/04/25 0000	04/04/25 1412	RAF
Surrogate: Toluene-d8	97.1	Limit: 82-121		% Rec		04/08/25 0000	04/08/25 1620	CSM
Surrogate: 4-Bromofluorobenzene	98.5	Limit: 80-116		% Rec		04/04/25 0000	04/04/25 1412	RAF
Surrogate: 4-Bromofluorobenzene	98.5	Limit: 78-121		% Rec		04/04/25 0000	04/04/25 1412	RAF
Surrogate: 4-Bromofluorobenzene	93.3	Limit: 80-116		% Rec		04/08/25 0000	04/08/25 1620	CSM

Determination of Total Metals	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A							
Antimony, total	<0.0010	0.0010	mg/L		04/17/25 1601	06/18/25 1615	RVV
Arsenic, total	<0.0020	0.0020	mg/L		04/17/25 1601	06/18/25 1615	RVV
Barium, total	**0.189**	0.0010	mg/L		04/17/25 1601	06/18/25 1615	RVV
Beryllium, total	<0.0005	0.0005	mg/L		04/17/25 1601	06/18/25 1615	RVV
Cadmium, total	**0.0004**	0.0002	mg/L		04/17/25 1601	06/18/25 1615	RVV
Chromium, total	**0.0015**	0.0010	mg/L		04/17/25 1601	06/18/25 1615	RVV
Cobalt, total	**0.0024**	0.0005	mg/L		04/17/25 1601	06/18/25 1615	RVV
Copper, total	<0.0050	0.0050	mg/L		04/17/25 1601	06/18/25 1615	RVV
Lead, total	<0.0010	0.0010	mg/L		04/17/25 1601	06/18/25 1615	RVV
Nickel, total	**0.0293**	0.0050	mg/L		04/17/25 1601	06/18/25 1615	RVV
Selenium, total	<0.0020	0.0020	mg/L		04/17/25 1601	06/18/25 1615	RVV
Silver, total	<0.0050	0.0050	mg/L		04/17/25 1601	06/18/25 1615	RVV
Thallium, total	<0.0005	0.0005	mg/L		04/17/25 1601	06/18/25 1615	RVV
Vanadium, total	<0.0020	0.0020	mg/L		04/17/25 1601	06/18/25 1615	RVV
Zinc, total	<0.0050	0.0050	mg/L		04/17/25 1601	06/18/25 1615	RVV

Client Sample ID:	MW-10		
Sample Matrix:	Aqueous	**Collected By:**	JGH
Lab Sample ID:	1ID0653-03	**Collection Date:**	04/01/2025 13:33

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D							
Chloromethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
Vinyl Chloride	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
Bromomethane	<1.0	1.0	ug/L		04/08/25 0000	04/08/25 1643	CSM
Chloroethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
Trichlorofluoromethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
1,1-Dichloroethylene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
Acetone	<10.0	10.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
Methyl Iodide	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
Carbon Disulfide	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
Methylene Chloride	<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
Acrylonitrile	<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
1,1-Dichloroethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
Vinyl Acetate	<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
2-Butanone (MEK)	<10.0	10.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
Bromochloromethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
Chloroform	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
1,1,1-Trichloroethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
Carbon Tetrachloride	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
Benzene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
1,2-Dichloroethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
Trichloroethylene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
1,2-Dichloropropane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
Dibromomethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
Bromodichloromethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
Toluene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
1,1,2-Trichloroethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
Tetrachloroethylene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
2-Hexanone (MBK)	<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
Dibromochloromethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
1,2-Dibromoethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
Chlorobenzene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
Ethylbenzene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
Xylenes, total	<2.0	2.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
Styrene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
Bromoform	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
1,2,3-Trichloropropane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1434	RAF

Client Sample ID:	MW-10		
Sample Matrix:	Aqueous	**Collected By:**	JGH
Lab Sample ID:	1ID0653-03	**Collection Date:**	04/01/2025 13:33

Determination of Volatile Organic Compounds		Result	RL	Units	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene		<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
1,1,2,2-Tetrachloroethane		<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
1,4-Dichlorobenzene		<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
1,2-Dichlorobenzene		<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
1,2-Dibromo-3-chloropropane		<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1434	RAF
Surrogate: Dibromofluoromethane	110	Limit: 57-134	% Rec			04/04/25 0000	04/04/25 1434	RAF
Surrogate: Dibromofluoromethane	100	Limit: 75-136	% Rec			04/08/25 0000	04/08/25 1643	CSM
Surrogate: Dibromofluoromethane	110	Limit: 75-136	% Rec			04/04/25 0000	04/04/25 1434	RAF
Surrogate: 1,2-Dichloroethane-d4	107	Limit: 53-140	% Rec			04/04/25 0000	04/04/25 1434	RAF
Surrogate: 1,2-Dichloroethane-d4	107	Limit: 61-142	% Rec			04/04/25 0000	04/04/25 1434	RAF
Surrogate: 1,2-Dichloroethane-d4	86.8	Limit: 61-142	% Rec			04/08/25 0000	04/08/25 1643	CSM
Surrogate: Toluene-d8	101	Limit: 86-114	% Rec			04/04/25 0000	04/04/25 1434	RAF
Surrogate: Toluene-d8	99.8	Limit: 82-121	% Rec			04/08/25 0000	04/08/25 1643	CSM
Surrogate: Toluene-d8	101	Limit: 82-121	% Rec			04/04/25 0000	04/04/25 1434	RAF
Surrogate: 4-Bromofluorobenzene	99.4	Limit: 80-116	% Rec			04/04/25 0000	04/04/25 1434	RAF
Surrogate: 4-Bromofluorobenzene	99.4	Limit: 78-121	% Rec			04/04/25 0000	04/04/25 1434	RAF
Surrogate: 4-Bromofluorobenzene	92.9	Limit: 80-116	% Rec			04/08/25 0000	04/08/25 1643	CSM

Determination of Total Metals	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A							
Antimony, total	<0.0010	0.0010	mg/L		04/17/25 1601	06/18/25 1617	RVV
Arsenic, total	<0.0020	0.0020	mg/L		04/17/25 1601	06/18/25 1617	RVV
Barium, total	**0.144**	0.0010	mg/L		04/17/25 1601	06/18/25 1617	RVV
Beryllium, total	<0.0005	0.0005	mg/L		04/17/25 1601	06/18/25 1617	RVV
Cadmium, total	**0.0003**	0.0002	mg/L		04/17/25 1601	06/18/25 1617	RVV
Chromium, total	**0.0020**	0.0010	mg/L		04/17/25 1601	06/18/25 1617	RVV
Cobalt, total	<0.0005	0.0005	mg/L		04/17/25 1601	06/18/25 1617	RVV
Copper, total	<0.0050	0.0050	mg/L		04/17/25 1601	06/18/25 1617	RVV
Lead, total	<0.0010	0.0010	mg/L		04/17/25 1601	06/18/25 1617	RVV
Nickel, total	**0.0096**	0.0050	mg/L		04/17/25 1601	06/18/25 1617	RVV
Selenium, total	<0.0020	0.0020	mg/L		04/17/25 1601	06/18/25 1617	RVV
Silver, total	<0.0050	0.0050	mg/L		04/17/25 1601	06/18/25 1617	RVV
Thallium, total	<0.0005	0.0005	mg/L		04/17/25 1601	06/18/25 1617	RVV
Vanadium, total	<0.0020	0.0020	mg/L		04/17/25 1601	06/18/25 1617	RVV
Zinc, total	<0.0050	0.0050	mg/L		04/17/25 1601	06/18/25 1617	RVV

Client Sample ID:	PZ-11		
Sample Matrix:	Aqueous	**Collected By:**	JGH
Lab Sample ID:	1ID0653-04	**Collection Date:**	04/01/2025 13:20

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D							
Chloromethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
Vinyl Chloride	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
Bromomethane	<1.0	1.0	ug/L		04/08/25 0000	04/08/25 1705	CSM
Chloroethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
Trichlorofluoromethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
1,1-Dichloroethylene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
Acetone	<10.0	10.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
Methyl Iodide	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
Carbon Disulfide	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
Methylene Chloride	<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
Acrylonitrile	<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
1,1-Dichloroethane	**1.6**	1.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
Vinyl Acetate	<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
2-Butanone (MEK)	<10.0	10.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
Bromochloromethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
Chloroform	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
1,1,1-Trichloroethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
Carbon Tetrachloride	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
Benzene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
1,2-Dichloroethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
Trichloroethylene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
1,2-Dichloropropane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
Dibromomethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
Bromodichloromethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
Toluene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
1,1,2-Trichloroethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
Tetrachloroethylene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
2-Hexanone (MBK)	<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
Dibromochloromethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
1,2-Dibromoethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
Chlorobenzene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
Ethylbenzene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
Xylenes, total	<2.0	2.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
Styrene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
Bromoform	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
1,2,3-Trichloropropane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1457	RAF

Client Sample ID:	PZ-11		
Sample Matrix:	Aqueous	**Collected By:**	JGH
Lab Sample ID:	1ID0653-04	**Collection Date:**	04/01/2025 13:20

Determination of Volatile Organic Compounds		Result	RL	Units	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene		<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
1,1,2,2-Tetrachloroethane		<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
1,4-Dichlorobenzene		<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
1,2-Dichlorobenzene		<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
1,2-Dibromo-3-chloropropane		<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1457	RAF
Surrogate: Dibromofluoromethane	108	Limit: 75-136		% Rec		04/04/25 0000	04/04/25 1457	RAF
Surrogate: Dibromofluoromethane	108	Limit: 57-134		% Rec		04/04/25 0000	04/04/25 1457	RAF
Surrogate: Dibromofluoromethane	105	Limit: 75-136		% Rec		04/08/25 0000	04/08/25 1705	CSM
Surrogate: 1,2-Dichloroethane-d4	106	Limit: 53-140		% Rec		04/04/25 0000	04/04/25 1457	RAF
Surrogate: 1,2-Dichloroethane-d4	93.2	Limit: 61-142		% Rec		04/08/25 0000	04/08/25 1705	CSM
Surrogate: 1,2-Dichloroethane-d4	106	Limit: 61-142		% Rec		04/04/25 0000	04/04/25 1457	RAF
Surrogate: Toluene-d8	100	Limit: 86-114		% Rec		04/04/25 0000	04/04/25 1457	RAF
Surrogate: Toluene-d8	100	Limit: 82-121		% Rec		04/04/25 0000	04/04/25 1457	RAF
Surrogate: Toluene-d8	95.7	Limit: 82-121		% Rec		04/08/25 0000	04/08/25 1705	CSM
Surrogate: 4-Bromofluorobenzene	98.9	Limit: 80-116		% Rec		04/04/25 0000	04/04/25 1457	RAF
Surrogate: 4-Bromofluorobenzene	98.9	Limit: 78-121		% Rec		04/04/25 0000	04/04/25 1457	RAF
Surrogate: 4-Bromofluorobenzene	88.5	Limit: 80-116		% Rec		04/08/25 0000	04/08/25 1705	CSM

Determination of Total Metals	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A							
Antimony, total	<0.0010	0.0010	mg/L		04/17/25 1601	06/18/25 1620	RVV
Arsenic, total	<0.0020	0.0020	mg/L		04/17/25 1601	06/18/25 1620	RVV
Barium, total	**0.0880**	0.0010	mg/L		04/17/25 1601	06/18/25 1620	RVV
Beryllium, total	<0.0005	0.0005	mg/L		04/17/25 1601	06/18/25 1620	RVV
Cadmium, total	<0.0002	0.0002	mg/L		04/17/25 1601	06/18/25 1620	RVV
Chromium, total	**0.0013**	0.0010	mg/L		04/17/25 1601	06/18/25 1620	RVV
Cobalt, total	<0.0005	0.0005	mg/L		04/17/25 1601	06/18/25 1620	RVV
Copper, total	<0.0050	0.0050	mg/L		04/17/25 1601	06/18/25 1620	RVV
Lead, total	<0.0010	0.0010	mg/L		04/17/25 1601	06/18/25 1620	RVV
Nickel, total	**0.0062**	0.0050	mg/L		04/17/25 1601	06/18/25 1620	RVV
Selenium, total	<0.0020	0.0020	mg/L		04/17/25 1601	06/18/25 1620	RVV
Silver, total	<0.0050	0.0050	mg/L		04/17/25 1601	06/18/25 1620	RVV
Thallium, total	<0.0005	0.0005	mg/L		04/17/25 1601	06/18/25 1620	RVV
Vanadium, total	<0.0020	0.0020	mg/L		04/17/25 1601	06/18/25 1620	RVV
Zinc, total	<0.0050	0.0050	mg/L		04/17/25 1601	06/18/25 1620	RVV

Client Sample ID:	MW-13		
Sample Matrix:	Aqueous	**Collected By:**	JGH
Lab Sample ID:	1ID0653-05	**Collection Date:**	04/01/2025 13:08

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D							
Chloromethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
Vinyl Chloride	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
Bromomethane	<1.0	1.0	ug/L		04/08/25 0000	04/08/25 1727	CSM
Chloroethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
Trichlorofluoromethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
1,1-Dichloroethylene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
Acetone	<10.0	10.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
Methyl Iodide	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
Carbon Disulfide	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
Methylene Chloride	<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
Acrylonitrile	<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
1,1-Dichloroethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
Vinyl Acetate	<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
2-Butanone (MEK)	<10.0	10.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
Bromochloromethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
Chloroform	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
1,1,1-Trichloroethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
Carbon Tetrachloride	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
Benzene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
1,2-Dichloroethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
Trichloroethylene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
1,2-Dichloropropane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
Dibromomethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
Bromodichloromethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
Toluene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
1,1,2-Trichloroethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
Tetrachloroethylene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
2-Hexanone (MBK)	<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
Dibromochloromethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
1,2-Dibromoethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
Chlorobenzene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
Ethylbenzene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
Xylenes, total	<2.0	2.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
Styrene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
Bromoform	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
1,2,3-Trichloropropane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1520	RAF

Client Sample ID:	MW-13		
Sample Matrix:	Aqueous	**Collected By:**	JGH
Lab Sample ID:	1ID0653-05	**Collection Date:**	04/01/2025 13:08

Determination of Volatile Organic Compounds		Result	RL	Units	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene		<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
1,1,2,2-Tetrachloroethane		<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
1,4-Dichlorobenzene		<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
1,2-Dichlorobenzene		<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
1,2-Dibromo-3-chloropropane		<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1520	RAF
Surrogate: Dibromofluoromethane	103	Limit: 75-136	% Rec			04/08/25 0000	04/08/25 1727	CSM
Surrogate: Dibromofluoromethane	110	Limit: 57-134	% Rec			04/04/25 0000	04/04/25 1520	RAF
Surrogate: Dibromofluoromethane	110	Limit: 75-136	% Rec			04/04/25 0000	04/04/25 1520	RAF
Surrogate: 1,2-Dichloroethane-d4	107	Limit: 61-142	% Rec			04/04/25 0000	04/04/25 1520	RAF
Surrogate: 1,2-Dichloroethane-d4	91.3	Limit: 61-142	% Rec			04/08/25 0000	04/08/25 1727	CSM
Surrogate: 1,2-Dichloroethane-d4	107	Limit: 53-140	% Rec			04/04/25 0000	04/04/25 1520	RAF
Surrogate: Toluene-d8	100	Limit: 82-121	% Rec			04/04/25 0000	04/04/25 1520	RAF
Surrogate: Toluene-d8	98.9	Limit: 82-121	% Rec			04/08/25 0000	04/08/25 1727	CSM
Surrogate: Toluene-d8	100	Limit: 86-114	% Rec			04/04/25 0000	04/04/25 1520	RAF
Surrogate: 4-Bromofluorobenzene	99.5	Limit: 80-116	% Rec			04/04/25 0000	04/04/25 1520	RAF
Surrogate: 4-Bromofluorobenzene	86.0	Limit: 80-116	% Rec			04/08/25 0000	04/08/25 1727	CSM
Surrogate: 4-Bromofluorobenzene	99.5	Limit: 78-121	% Rec			04/04/25 0000	04/04/25 1520	RAF

Determination of Total Metals	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A							
Antimony, total	<0.0010	0.0010	mg/L		04/17/25 1601	06/18/25 1622	RVV
Arsenic, total	<0.0020	0.0020	mg/L		04/17/25 1601	06/18/25 1622	RVV
Barium, total	**0.0669**	0.0010	mg/L		04/17/25 1601	06/18/25 1622	RVV
Beryllium, total	<0.0005	0.0005	mg/L		04/17/25 1601	06/18/25 1622	RVV
Cadmium, total	**0.0002**	0.0002	mg/L		04/17/25 1601	06/18/25 1622	RVV
Chromium, total	**0.0030**	0.0010	mg/L		04/17/25 1601	06/18/25 1622	RVV
Cobalt, total	<0.0005	0.0005	mg/L		04/17/25 1601	06/18/25 1622	RVV
Copper, total	<0.0050	0.0050	mg/L		04/17/25 1601	06/18/25 1622	RVV
Lead, total	<0.0010	0.0010	mg/L		04/17/25 1601	06/18/25 1622	RVV
Nickel, total	<0.0050	0.0050	mg/L		04/17/25 1601	06/18/25 1622	RVV
Selenium, total	<0.0020	0.0020	mg/L		04/17/25 1601	06/18/25 1622	RVV
Silver, total	<0.0050	0.0050	mg/L		04/17/25 1601	06/18/25 1622	RVV
Thallium, total	<0.0005	0.0005	mg/L		04/17/25 1601	06/18/25 1622	RVV
Vanadium, total	<0.0020	0.0020	mg/L		04/17/25 1601	06/18/25 1622	RVV
Zinc, total	<0.0050	0.0050	mg/L		04/17/25 1601	06/18/25 1622	RVV

Client Sample ID:	Duplicate		
Sample Matrix:	Aqueous	**Collected By:**	JGH
Lab Sample ID:	1ID0653-06	**Collection Date:**	04/01/2025 13:53

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D							
Chloromethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
Vinyl Chloride	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
Bromomethane	<1.0	1.0	ug/L		04/08/25 0000	04/08/25 1749	CSM
Chloroethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
Trichlorofluoromethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
1,1-Dichloroethylene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
Acetone	<10.0	10.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
Methyl Iodide	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
Carbon Disulfide	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
Methylene Chloride	<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
Acrylonitrile	<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
1,1-Dichloroethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
Vinyl Acetate	<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
2-Butanone (MEK)	<10.0	10.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
Bromochloromethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
Chloroform	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
1,1,1-Trichloroethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
Carbon Tetrachloride	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
Benzene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
1,2-Dichloroethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
Trichloroethylene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
1,2-Dichloropropane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
Dibromomethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
Bromodichloromethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
Toluene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
1,1,2-Trichloroethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
Tetrachloroethylene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
2-Hexanone (MBK)	<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
Dibromochloromethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
1,2-Dibromoethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
Chlorobenzene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
Ethylbenzene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
Xylenes, total	<2.0	2.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
Styrene	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
Bromoform	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
1,2,3-Trichloropropane	<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1543	RAF

CERTIFICATE OF ANALYSIS

1ID0653

Client Sample ID:	Duplicate		
Sample Matrix:	Aqueous	**Collected By:**	JGH
Lab Sample ID:	1ID0653-06	**Collection Date:**	04/01/2025 13:53

Determination of Volatile Organic Compounds		Result	RL	Units	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene		<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
1,1,2,2-Tetrachloroethane		<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
1,4-Dichlorobenzene		<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
1,2-Dichlorobenzene		<1.0	1.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
1,2-Dibromo-3-chloropropane		<5.0	5.0	ug/L		04/04/25 0000	04/04/25 1543	RAF
Surrogate: Dibromofluoromethane	102	Limit: 75-136	% Rec			04/08/25 0000	04/08/25 1749	CSM
Surrogate: Dibromofluoromethane	108	Limit: 75-136	% Rec			04/04/25 0000	04/04/25 1543	RAF
Surrogate: Dibromofluoromethane	108	Limit: 57-134	% Rec			04/04/25 0000	04/04/25 1543	RAF
Surrogate: 1,2-Dichloroethane-d4	90.9	Limit: 61-142	% Rec			04/08/25 0000	04/08/25 1749	CSM
Surrogate: 1,2-Dichloroethane-d4	107	Limit: 53-140	% Rec			04/04/25 0000	04/04/25 1543	RAF
Surrogate: 1,2-Dichloroethane-d4	107	Limit: 61-142	% Rec			04/04/25 0000	04/04/25 1543	RAF
Surrogate: Toluene-d8	97.2	Limit: 82-121	% Rec			04/08/25 0000	04/08/25 1749	CSM
Surrogate: Toluene-d8	101	Limit: 82-121	% Rec			04/04/25 0000	04/04/25 1543	RAF
Surrogate: Toluene-d8	101	Limit: 86-114	% Rec			04/04/25 0000	04/04/25 1543	RAF
Surrogate: 4-Bromofluorobenzene	92.4	Limit: 80-116	% Rec			04/08/25 0000	04/08/25 1749	CSM
Surrogate: 4-Bromofluorobenzene	99.1	Limit: 80-116	% Rec			04/04/25 0000	04/04/25 1543	RAF
Surrogate: 4-Bromofluorobenzene	99.1	Limit: 78-121	% Rec			04/04/25 0000	04/04/25 1543	RAF

Determination of Total Metals	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A							
Antimony, total	<0.0010	0.0010	mg/L		04/17/25 1601	06/18/25 1625	RVV
Arsenic, total	<0.0020	0.0020	mg/L		04/17/25 1601	06/18/25 1625	RVV
Barium, total	**0.181**	0.0010	mg/L		04/17/25 1601	06/18/25 1625	RVV
Beryllium, total	<0.0005	0.0005	mg/L		04/17/25 1601	06/18/25 1625	RVV
Cadmium, total	**0.0003**	0.0002	mg/L		04/17/25 1601	06/18/25 1625	RVV
Chromium, total	**0.0013**	0.0010	mg/L		04/17/25 1601	06/18/25 1625	RVV
Cobalt, total	**0.0019**	0.0005	mg/L		04/17/25 1601	06/18/25 1625	RVV
Copper, total	**0.0068**	0.0050	mg/L		04/17/25 1601	06/18/25 1625	RVV
Lead, total	<0.0010	0.0010	mg/L		04/17/25 1601	06/18/25 1625	RVV
Nickel, total	**0.0277**	0.0050	mg/L		04/17/25 1601	06/18/25 1625	RVV
Selenium, total	<0.0020	0.0020	mg/L		04/17/25 1601	06/18/25 1625	RVV
Silver, total	<0.0050	0.0050	mg/L		04/17/25 1601	06/18/25 1625	RVV
Thallium, total	<0.0005	0.0005	mg/L		04/17/25 1601	06/18/25 1625	RVV
Vanadium, total	<0.0020	0.0020	mg/L		04/17/25 1601	06/18/25 1625	RVV
Zinc, total	<0.0050	0.0050	mg/L		04/17/25 1601	06/18/25 1625	RVV

Batch Log Summary

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260D	1ID0258	1ID0258-BS1	
		1ID0258-BSD1	
		1ID0258-BLK1	
		1ID0653-01	MW-3
		1ID0653-02	MW-7
		1ID0653-03	MW-10
		1ID0653-04	PZ-11
		1ID0653-05	MW-13
		1ID0653-06	Duplicate
		1ID0258-MS1	1ID0653-01
		1ID0258-MSD1	1ID0653-01

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260D	1ID0430	1ID0430-BS1	
		1ID0430-BSD1	
		1ID0430-BLK1	
		1ID0653-01RE1	MW-3
		1ID0653-02RE1	MW-7
		1ID0653-02	MW-7
		1ID0653-03RE1	MW-10
		1ID0653-04RE1	PZ-11
		1ID0653-05RE1	MW-13
		1ID0653-06RE1	Duplicate
		1ID0430-MS1	1ID0653-01RE1
		1ID0430-MSD1	1ID0653-01RE1

Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	1ID0488	1ID0488-BLK1	
		1ID0488-BS1	
		1ID0653-01	MW-3
		1ID0488-MS1	1ID0653-01
		1ID0488-MSD1	1ID0653-01
		1ID0653-02	MW-7
		1ID0653-03	MW-10
		1ID0653-04	PZ-11
		1ID0653-05	MW-13
		1ID0653-06	Duplicate
		1ID0488-PS1	1ID0653-01
		1ID0488-BS1	

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

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1ID0258 - EPA 5030B - EPA 8260D										
Blank (1ID0258-BLK1)		Prepared: 04/04/25 00:00 Analyzed: 04/04/25 13:19								
Chloromethane	<1.0	1.0	ug/L							
Vinyl Chloride	<1.0	1.0	ug/L							
Chloroethane	<1.0	1.0	ug/L							
Trichlorofluoromethane	<1.0	1.0	ug/L							
1,1-Dichloroethylene	<1.0	1.0	ug/L							
Acetone	<10.0	10.0	ug/L							
Methyl Iodide	<1.0	1.0	ug/L							
Carbon Disulfide	<1.0	1.0	ug/L							
Methylene Chloride	<5.0	5.0	ug/L							
Acrylonitrile	<5.0	5.0	ug/L							
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L							
1,1-Dichloroethane	<1.0	1.0	ug/L							
Vinyl Acetate	<5.0	5.0	ug/L							
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L							
2-Butanone (MEK)	<10.0	10.0	ug/L							
Bromochloromethane	<1.0	1.0	ug/L							
Chloroform	<1.0	1.0	ug/L							
1,1,1-Trichloroethane	<1.0	1.0	ug/L							
Carbon Tetrachloride	<1.0	1.0	ug/L							
Benzene	<1.0	1.0	ug/L							
1,2-Dichloroethane	<1.0	1.0	ug/L							
Trichloroethylene	<1.0	1.0	ug/L							
1,2-Dichloropropane	<1.0	1.0	ug/L							
Dibromomethane	<1.0	1.0	ug/L							
Bromodichloromethane	<1.0	1.0	ug/L							
cis-1,3-Dichloropropene	<1.0	1.0	ug/L							
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L							
Toluene	<1.0	1.0	ug/L							
trans-1,3-Dichloropropene	<1.0	1.0	ug/L							
1,1,2-Trichloroethane	<1.0	1.0	ug/L							
Tetrachloroethylene	<1.0	1.0	ug/L							
2-Hexanone (MBK)	<5.0	5.0	ug/L							
Dibromochloromethane	<1.0	1.0	ug/L							
1,2-Dibromoethane	<1.0	1.0	ug/L							
Chlorobenzene	<1.0	1.0	ug/L							
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L							
Ethylbenzene	<1.0	1.0	ug/L							
Xylenes, total	<2.0	2.0	ug/L							
Styrene	<1.0	1.0	ug/L							
Bromoform	<1.0	1.0	ug/L							
1,2,3-Trichloropropane	<1.0	1.0	ug/L							

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1ID0258 - EPA 5030B - EPA 8260D										
Blank (1ID0258-BLK1)				Prepared: 04/04/25 00:00 Analyzed: 04/04/25 13:19						
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	*53.7*		ug/L	*50.2*		*107*	*57-134*			
Surrogate: Dibromofluoromethane	*53.7*		ug/L	*50.2*		*107*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*52.6*		ug/L	*50.1*		*105*	*53-140*			
Surrogate: 1,2-Dichloroethane-d4	*52.6*		ug/L	*50.1*		*105*	*61-142*			
Surrogate: Toluene-d8	*50.9*		ug/L	*50.4*		*101*	*86-114*			
Surrogate: Toluene-d8	*50.9*		ug/L	*50.4*		*101*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*49.7*		ug/L	*50.1*		*99.0*	*80-116*			
Surrogate: 4-Bromofluorobenzene	*49.7*		ug/L	*50.1*		*99.0*	*78-121*			
LCS (1ID0258-BS1)				Prepared: 04/04/25 00:00 Analyzed: 04/04/25 12:10						
Chloromethane	33.45	1.0	ug/L	30.3		110	63-155			
Vinyl Chloride	35.98	1.0	ug/L	30.2		119	70-154			
Chloroethane	33.57	1.0	ug/L	30.3		111	72-148			
Trichlorofluoromethane	34.76	1.0	ug/L	30.3		115	70-152			
1,1-Dichloroethylene	56.96	1.0	ug/L	50.1		114	70-148			
Acetone	111.2	10.0	ug/L	100		111	43-172			
Methyl Iodide	108.2	1.0	ug/L	100		108	69-170			
Carbon Disulfide	121.3	1.0	ug/L	100		121	72-162			
Methylene Chloride	53.96	5.0	ug/L	50.1		108	68-142			
Acrylonitrile	47.29	5.0	ug/L	50.2		94.2	56-135			
trans-1,2-Dichloroethylene	56.71	1.0	ug/L	50.1		113	66-148			
1,1-Dichloroethane	58.33	1.0	ug/L	50.1		116	66-143			
Vinyl Acetate	164.0	5.0	ug/L	140		117	43-153			
cis-1,2-Dichloroethylene	55.48	1.0	ug/L	50.4		110	71-149			
2-Butanone (MEK)	98.48	10.0	ug/L	100		98.5	52-159			
Bromochloromethane	53.63	1.0	ug/L	50.4		106	69-143			
Chloroform	56.70	1.0	ug/L	50.1		113	69-144			
1,1,1-Trichloroethane	56.60	1.0	ug/L	50.1		113	62-129			
Carbon Tetrachloride	54.14	1.0	ug/L	50.1		108	63-141			
Benzene	53.02	1.0	ug/L	50.4		105	71-134			
1,2-Dichloroethane	51.88	1.0	ug/L	50.1		104	72-132			
Trichloroethylene	54.96	1.0	ug/L	50.1		110	71-135			
1,2-Dichloropropane	52.66	1.0	ug/L	50.1		105	69-136			
Dibromomethane	52.10	1.0	ug/L	50.4		103	73-147			
Bromodichloromethane	51.10	1.0	ug/L	50.1		102	68-129			
cis-1,3-Dichloropropene	54.46	1.0	ug/L	50.1		109	65-134			
4-Methyl-2-pentanone (MIBK)	97.72	5.0	ug/L	100		97.7	58-147			
Toluene	53.98	1.0	ug/L	50.5		107	72-133			
trans-1,3-Dichloropropene	54.00	1.0	ug/L	50.1		108	67-130			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1ID0258 - EPA 5030B - EPA 8260D										
LCS (1ID0258-BS1)			Prepared: 04/04/25 00:00 Analyzed: 04/04/25 12:10							
1,1,2-Trichloroethane	49.70	1.0	ug/L	50.1		99.2	69-135			
Tetrachloroethylene	54.68	1.0	ug/L	50.1		109	69-130			
2-Hexanone (MBK)	91.56	5.0	ug/L	100		91.6	55-144			
Dibromochloromethane	51.52	1.0	ug/L	50.1		103	73-127			
1,2-Dibromoethane	51.68	1.0	ug/L	50.2		103	67-132			
Chlorobenzene	60.52	1.0	ug/L	50.1		121	72-123			
1,1,1,2-Tetrachloroethane	52.01	1.0	ug/L	50.3		103	73-127			
Ethylbenzene	54.79	1.0	ug/L	50.2		109	71-127			
Xylenes, total	165.8	2.0	ug/L	151		110	74-127			
Styrene	52.56	1.0	ug/L	50.4		104	66-126			
Bromoform	49.38	1.0	ug/L	50.1		98.5	68-130			
1,2,3-Trichloropropane	47.19	1.0	ug/L	50.3		93.7	63-136			
trans-1,4-Dichloro-2-butene	103.6	5.0	ug/L	100		104	54-134			
1,1,2,2-Tetrachloroethane	47.11	1.0	ug/L	50.1		94.0	61-131			
1,4-Dichlorobenzene	58.85	1.0	ug/L	50.1		117	70-129			
1,2-Dichlorobenzene	57.68	1.0	ug/L	50.1		115	69-126			
1,2-Dibromo-3-chloropropane	47.62	5.0	ug/L	50.1		95.0	50-143			
Surrogate: Dibromofluoromethane	*53.1*		ug/L	*50.2*		*106*	*57-134*			
Surrogate: Dibromofluoromethane	*53.1*		ug/L	*50.2*		*106*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*51.5*		ug/L	*50.1*		*103*	*53-140*			
Surrogate: 1,2-Dichloroethane-d4	*51.5*		ug/L	*50.1*		*103*	*61-142*			
Surrogate: Toluene-d8	*50.4*		ug/L	*50.4*		*100*	*86-114*			
Surrogate: Toluene-d8	*50.4*		ug/L	*50.4*		*100*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*50.1*		ug/L	*50.1*		*99.9*	*78-121*			
Surrogate: 4-Bromofluorobenzene	*50.1*		ug/L	*50.1*		*99.9*	*80-116*			
LCS Dup (1ID0258-BSD1)			Prepared: 04/04/25 00:00 Analyzed: 04/04/25 12:33							
Chloromethane	32.00	1.0	ug/L	30.3		106	63-155	4.43	24	
Vinyl Chloride	34.08	1.0	ug/L	30.2		113	70-154	5.42	25	
Chloroethane	32.38	1.0	ug/L	30.3		107	72-148	3.61	25	
Trichlorofluoromethane	33.25	1.0	ug/L	30.3		110	70-152	4.44	26	
1,1-Dichloroethylene	54.66	1.0	ug/L	50.1		109	70-148	4.12	24	
Acetone	106.0	10.0	ug/L	100		106	43-172	4.73	30	
Methyl Iodide	109.1	1.0	ug/L	100		109	69-170	0.819	30	
Carbon Disulfide	115.0	1.0	ug/L	100		115	72-162	5.36	24	
Methylene Chloride	53.34	5.0	ug/L	50.1		106	68-142	1.16	21	
Acrylonitrile	50.49	5.0	ug/L	50.2		101	56-135	6.55	16	
trans-1,2-Dichloroethylene	54.58	1.0	ug/L	50.1		109	66-148	3.83	27	
1,1-Dichloroethane	55.88	1.0	ug/L	50.1		112	66-143	4.29	24	
Vinyl Acetate	166.2	5.0	ug/L	140		119	43-153	1.27	30	
cis-1,2-Dichloroethylene	54.36	1.0	ug/L	50.4		108	71-149	2.04	26	
2-Butanone (MEK)	103.7	10.0	ug/L	100		104	52-159	5.13	27	
Bromochloromethane	52.07	1.0	ug/L	50.4		103	69-143	2.95	23	
Chloroform	54.98	1.0	ug/L	50.1		110	69-144	3.08	23	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1ID0258 - EPA 5030B - EPA 8260D										
LCS Dup (1ID0258-BSD1)			Prepared: 04/04/25 00:00 Analyzed: 04/04/25 12:33							
1,1,1-Trichloroethane	54.19	1.0	ug/L	50.1		108	62-129	4.35	24	
Carbon Tetrachloride	51.35	1.0	ug/L	50.1		103	63-141	5.29	25	
Benzene	51.38	1.0	ug/L	50.4		102	71-134	3.14	24	
1,2-Dichloroethane	52.04	1.0	ug/L	50.1		104	72-132	0.308	24	
Trichloroethylene	52.44	1.0	ug/L	50.1		105	71-135	4.69	24	
1,2-Dichloropropane	51.78	1.0	ug/L	50.1		103	69-136	1.69	24	
Dibromomethane	51.74	1.0	ug/L	50.4		103	73-147	0.693	25	
Bromodichloromethane	49.46	1.0	ug/L	50.1		98.7	68-129	3.26	22	
cis-1,3-Dichloropropene	53.06	1.0	ug/L	50.1		106	65-134	2.60	23	
4-Methyl-2-pentanone (MIBK)	99.87	5.0	ug/L	100		99.9	58-147	2.18	27	
Toluene	52.16	1.0	ug/L	50.5		103	72-133	3.43	24	
trans-1,3-Dichloropropene	52.84	1.0	ug/L	50.1		106	67-130	2.17	24	
1,1,2-Trichloroethane	49.95	1.0	ug/L	50.1		99.7	69-135	0.502	23	
Tetrachloroethylene	53.01	1.0	ug/L	50.1		106	69-130	3.10	25	
2-Hexanone (MBK)	93.16	5.0	ug/L	100		93.2	55-144	1.73	25	
Dibromochloromethane	51.05	1.0	ug/L	50.1		102	73-127	0.916	22	
1,2-Dibromoethane	51.52	1.0	ug/L	50.2		103	67-132	0.310	24	
Chlorobenzene	59.04	1.0	ug/L	50.1		118	72-123	2.48	23	
1,1,1,2-Tetrachloroethane	51.46	1.0	ug/L	50.3		102	73-127	1.06	24	
Ethylbenzene	53.55	1.0	ug/L	50.2		107	71-127	2.29	26	
Xylenes, total	162.6	2.0	ug/L	151		108	74-127	1.90	25	
Styrene	51.32	1.0	ug/L	50.4		102	66-126	2.39	23	
Bromoform	49.97	1.0	ug/L	50.1		99.7	68-130	1.19	23	
1,2,3-Trichloropropane	48.22	1.0	ug/L	50.3		95.8	63-136	2.16	24	
trans-1,4-Dichloro-2-butene	103.5	5.0	ug/L	100		103	54-134	0.106	27	
1,1,2,2-Tetrachloroethane	48.24	1.0	ug/L	50.1		96.3	61-131	2.37	29	
1,4-Dichlorobenzene	57.73	1.0	ug/L	50.1		115	70-129	1.92	24	
1,2-Dichlorobenzene	56.93	1.0	ug/L	50.1		114	69-126	1.31	26	
1,2-Dibromo-3-chloropropane	49.72	5.0	ug/L	50.1		99.2	50-143	4.31	30	
Surrogate: Dibromofluoromethane	*53.1*		ug/L	*50.2*		*106*	*57-134*			
Surrogate: Dibromofluoromethane	*53.1*		ug/L	*50.2*		*106*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*52.0*		ug/L	*50.1*		*104*	*53-140*			
Surrogate: 1,2-Dichloroethane-d4	*52.0*		ug/L	*50.1*		*104*	*61-142*			
Surrogate: Toluene-d8	*50.2*		ug/L	*50.4*		*99.6*	*86-114*			
Surrogate: Toluene-d8	*50.2*		ug/L	*50.4*		*99.6*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*49.6*		ug/L	*50.1*		*99.0*	*78-121*			
Surrogate: 4-Bromofluorobenzene	*49.6*		ug/L	*50.1*		*99.0*	*80-116*			
Matrix Spike (1ID0258-MS1)	**Source: 1ID0653-01**		Prepared: 04/04/25 00:00 Analyzed: 04/04/25 21:26							
Chloromethane	289.4	10.0	ug/L	303	ND	95.4	61-152			
Vinyl Chloride	311.9	10.0	ug/L	302	ND	103	66-149			
Chloroethane	294.5	10.0	ug/L	303	ND	97.1	69-148			
Trichlorofluoromethane	300.4	10.0	ug/L	303	ND	99.1	62-163			
1,1-Dichloroethylene	494.7	10.0	ug/L	501	ND	98.7	70-148			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1ID0258 - EPA 5030B - EPA 8260D										
Matrix Spike (1ID0258-MS1)	**Source: 1ID0653-01**	Prepared: 04/04/25 00:00 Analyzed: 04/04/25 21:26								
Acetone	876.0	100	ug/L	1000	ND	87.6	45-173			
Methyl Iodide	910.6	10.0	ug/L	1000	ND	91.1	62-167			
Carbon Disulfide	1004	10.0	ug/L	1000	ND	100	71-163			
Methylene Chloride	470.1	50.0	ug/L	501	ND	93.8	69-140			
Acrylonitrile	425.6	50.0	ug/L	502	ND	84.8	38-147			
trans-1,2-Dichloroethylene	490.3	10.0	ug/L	501	ND	97.9	69-144			
1,1-Dichloroethane	504.6	10.0	ug/L	501	ND	101	70-138			
Vinyl Acetate	1408	50.0	ug/L	1400	ND	101	58-142			
cis-1,2-Dichloroethylene	468.3	10.0	ug/L	504	ND	93.0	68-151			
2-Butanone (MEK)	862.5	100	ug/L	1000	ND	86.2	50-160			
Bromochloromethane	473.2	10.0	ug/L	504	ND	93.9	65-143			
Chloroform	491.6	10.0	ug/L	501	ND	98.2	71-143			
1,1,1-Trichloroethane	487.5	10.0	ug/L	501	ND	97.3	63-133			
Carbon Tetrachloride	462.0	10.0	ug/L	501	ND	92.2	63-142			
Benzene	497.2	10.0	ug/L	504	ND	98.6	69-133			
1,2-Dichloroethane	489.7	10.0	ug/L	501	ND	97.8	63-138			
Trichloroethylene	513.0	10.0	ug/L	501	ND	102	71-133			
1,2-Dichloropropane	505.9	10.0	ug/L	501	ND	101	69-132			
Dibromomethane	491.5	10.0	ug/L	504	ND	97.6	70-147			
Bromodichloromethane	474.3	10.0	ug/L	501	ND	94.7	67-130			
cis-1,3-Dichloropropene	492.3	10.0	ug/L	501	ND	98.3	61-126			
4-Methyl-2-pentanone (MIBK)	938.7	50.0	ug/L	1000	ND	93.9	55-147			
Toluene	508.0	10.0	ug/L	505	ND	101	71-133			
trans-1,3-Dichloropropene	489.2	10.0	ug/L	501	ND	97.7	63-124			
1,1,2-Trichloroethane	478.9	10.0	ug/L	501	ND	95.6	69-133			
Tetrachloroethylene	521.6	10.0	ug/L	501	ND	104	70-124			
2-Hexanone (MBK)	873.9	50.0	ug/L	1000	ND	87.4	53-141			
Dibromochloromethane	488.4	10.0	ug/L	501	ND	97.5	74-122			
1,2-Dibromoethane	494.3	10.0	ug/L	502	ND	98.4	66-127			
Chlorobenzene	581.7	10.0	ug/L	501	ND	116	76-116			
1,1,1,2-Tetrachloroethane	503.4	10.0	ug/L	503	ND	100	77-121			
Ethylbenzene	527.6	10.0	ug/L	502	ND	105	73-124			
Xylenes, total	1589	20.0	ug/L	1510	ND	105	75-123			
Styrene	505.1	10.0	ug/L	504	ND	100	70-120			
Bromoform	468.2	10.0	ug/L	501	ND	93.4	70-124			
1,2,3-Trichloropropane	458.7	10.0	ug/L	503	ND	91.1	62-135			
trans-1,4-Dichloro-2-butene	906.3	50.0	ug/L	1000	ND	90.6	50-120			
1,1,2,2-Tetrachloroethane	451.9	10.0	ug/L	501	ND	90.2	63-126			
1,4-Dichlorobenzene	564.1	10.0	ug/L	501	ND	113	72-119			
1,2-Dichlorobenzene	552.8	10.0	ug/L	501	ND	110	71-117			
1,2-Dibromo-3-chloropropane	454.2	50.0	ug/L	501	ND	90.6	49-134			
Surrogate: Dibromofluoromethane	*474*		ug/L	*502*		*94.6*	*57-134*			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1ID0258 - EPA 5030B - EPA 8260D										
Matrix Spike (1ID0258-MS1)	**Source: 1ID0653-01**		Prepared: 04/04/25 00:00 Analyzed: 04/04/25 21:26							
Surrogate: Dibromofluoromethane	*474*		ug/L	*502*		*94.6*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*469*		ug/L	*501*		*93.6*	*53-140*			
Surrogate: 1,2-Dichloroethane-d4	*469*		ug/L	*501*		*93.6*	*61-142*			
Surrogate: Toluene-d8	*494*		ug/L	*504*		*98.0*	*86-114*			
Surrogate: Toluene-d8	*494*		ug/L	*504*		*98.0*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*493*		ug/L	*501*		*98.4*	*78-121*			
Surrogate: 4-Bromofluorobenzene	*493*		ug/L	*501*		*98.4*	*80-116*			
Matrix Spike Dup (1ID0258-MSD1)	**Source: 1ID0653-01**		Prepared: 04/04/25 00:00 Analyzed: 04/04/25 21:49							
Chloromethane	281.2	10.0	ug/L	303	ND	92.7	61-152	2.87	26	
Vinyl Chloride	298.8	10.0	ug/L	302	ND	98.8	66-149	4.29	23	
Chloroethane	281.3	10.0	ug/L	303	ND	92.8	69-148	4.58	25	
Trichlorofluoromethane	288.7	10.0	ug/L	303	ND	95.3	62-163	3.97	25	
1,1-Dichloroethylene	476.1	10.0	ug/L	501	ND	95.0	70-148	3.83	22	
Acetone	860.9	100	ug/L	1000	ND	86.1	45-173	1.74	30	
Methyl Iodide	928.5	10.0	ug/L	1000	ND	92.8	62-167	1.95	24	
Carbon Disulfide	972.9	10.0	ug/L	1000	ND	97.3	71-163	3.19	22	
Methylene Chloride	456.3	50.0	ug/L	501	ND	91.1	69-140	2.98	19	
Acrylonitrile	444.6	50.0	ug/L	502	ND	88.6	38-147	4.37	30	
trans-1,2-Dichloroethylene	475.8	10.0	ug/L	501	ND	95.0	69-144	3.00	22	
1,1-Dichloroethane	488.5	10.0	ug/L	501	ND	97.5	70-138	3.24	20	
Vinyl Acetate	1364	50.0	ug/L	1400	ND	97.4	58-142	3.16	24	
cis-1,2-Dichloroethylene	460.5	10.0	ug/L	504	ND	91.5	68-151	1.68	22	
2-Butanone (MEK)	860.4	100	ug/L	1000	ND	86.0	50-160	0.244	23	
Bromochloromethane	461.5	10.0	ug/L	504	ND	91.6	65-143	2.50	22	
Chloroform	475.8	10.0	ug/L	501	ND	95.0	71-143	3.27	21	
1,1,1-Trichloroethane	471.9	10.0	ug/L	501	ND	94.2	63-133	3.25	23	
Carbon Tetrachloride	447.7	10.0	ug/L	501	ND	89.4	63-142	3.14	22	
Benzene	490.8	10.0	ug/L	504	ND	97.3	69-133	1.30	18	
1,2-Dichloroethane	486.8	10.0	ug/L	501	ND	97.2	63-138	0.594	20	
Trichloroethylene	503.8	10.0	ug/L	501	ND	101	71-133	1.81	23	
1,2-Dichloropropane	499.6	10.0	ug/L	501	ND	99.7	69-132	1.25	20	
Dibromomethane	497.1	10.0	ug/L	504	ND	98.7	70-147	1.13	22	
Bromodichloromethane	468.3	10.0	ug/L	501	ND	93.5	67-130	1.27	21	
cis-1,3-Dichloropropene	488.5	10.0	ug/L	501	ND	97.5	61-126	0.775	21	
4-Methyl-2-pentanone (MIBK)	947.3	50.0	ug/L	1000	ND	94.7	55-147	0.912	23	
Toluene	498.4	10.0	ug/L	505	ND	98.7	71-133	1.91	19	
trans-1,3-Dichloropropene	482.4	10.0	ug/L	501	ND	96.3	63-124	1.40	21	
1,1,2-Trichloroethane	475.0	10.0	ug/L	501	ND	94.8	69-133	0.818	19	
Tetrachloroethylene	508.5	10.0	ug/L	501	ND	102	70-124	2.54	24	
2-Hexanone (MBK)	879.7	50.0	ug/L	1000	ND	88.0	53-141	0.661	24	
Dibromochloromethane	482.5	10.0	ug/L	501	ND	96.4	74-122	1.22	21	
1,2-Dibromoethane	498.5	10.0	ug/L	502	ND	99.3	66-127	0.846	23	
Chlorobenzene	573.9	10.0	ug/L	501	ND	115	76-116	1.35	21	

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1ID0258 - EPA 5030B - EPA 8260D										
Matrix Spike Dup (1ID0258-MSD1)	**Source: 1ID0653-01**	Prepared: 04/04/25 00:00 Analyzed: 04/04/25 21:49								
1,1,1,2-Tetrachloroethane	499.0	10.0	ug/L	503	ND	99.1	77-121	0.878	25	
Ethylbenzene	517.0	10.0	ug/L	502	ND	103	73-124	2.03	20	
Xylenes, total	1564	20.0	ug/L	1510	ND	103	75-123	1.62	20	
Styrene	494.9	10.0	ug/L	504	ND	98.3	70-120	2.04	23	
Bromoform	469.1	10.0	ug/L	501	ND	93.6	70-124	0.192	22	
1,2,3-Trichloropropane	451.0	10.0	ug/L	503	ND	89.6	62-135	1.69	28	
trans-1,4-Dichloro-2-butene	914.0	50.0	ug/L	1000	ND	91.4	50-120	0.846	26	
1,1,2,2-Tetrachloroethane	448.2	10.0	ug/L	501	ND	89.5	63-126	0.822	24	
1,4-Dichlorobenzene	553.1	10.0	ug/L	501	ND	110	72-119	1.97	24	
1,2-Dichlorobenzene	549.5	10.0	ug/L	501	ND	110	71-117	0.599	24	
1,2-Dibromo-3-chloropropane	461.5	50.0	ug/L	501	ND	92.1	49-134	1.59	28	
Surrogate: Dibromofluoromethane	*469*		ug/L	*502*		*93.4*	*57-134*			
Surrogate: Dibromofluoromethane	*469*		ug/L	*502*		*93.4*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*461*		ug/L	*501*		*92.0*	*53-140*			
Surrogate: 1,2-Dichloroethane-d4	*461*		ug/L	*501*		*92.0*	*61-142*			
Surrogate: Toluene-d8	*495*		ug/L	*504*		*98.3*	*86-114*			
Surrogate: Toluene-d8	*495*		ug/L	*504*		*98.3*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*498*		ug/L	*501*		*99.2*	*78-121*			
Surrogate: 4-Bromofluorobenzene	*498*		ug/L	*501*		*99.2*	*80-116*			
Batch 1ID0430 - EPA 5030B - EPA 8260D										
Blank (1ID0430-BLK1)		Prepared: 04/08/25 00:00 Analyzed: 04/08/25 14:42								
Dichlorodifluoromethane	<1.0	1.0	ug/L							
Bromomethane	<1.0	1.0	ug/L							
Surrogate: Dibromofluoromethane	*48.1*		ug/L	*50.2*		*95.9*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*43.0*		ug/L	*50.1*		*85.9*	*61-142*			
Surrogate: Toluene-d8	*47.6*		ug/L	*50.4*		*94.4*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*46.5*		ug/L	*50.1*		*92.7*	*80-116*			
LCS (1ID0430-BS1)		Prepared: 04/08/25 00:00 Analyzed: 04/08/25 13:36								
Dichlorodifluoromethane	34.85	1.0	ug/L	30.3		115	49-138			
Bromomethane	31.58	1.0	ug/L	30.1		105	52-176			
Surrogate: Dibromofluoromethane	*48.8*		ug/L	*50.2*		*97.3*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*43.0*		ug/L	*50.1*		*85.8*	*61-142*			
Surrogate: Toluene-d8	*52.3*		ug/L	*50.4*		*104*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*49.7*		ug/L	*50.1*		*99.1*	*80-116*			
LCS Dup (1ID0430-BSD1)		Prepared: 04/08/25 00:00 Analyzed: 04/08/25 13:58								
Dichlorodifluoromethane	30.28	1.0	ug/L	30.3		100	49-138	14.0	22	
Bromomethane	29.48	1.0	ug/L	30.1		97.9	52-176	6.88	27	
Surrogate: Dibromofluoromethane	*52.1*		ug/L	*50.2*		*104*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*48.1*		ug/L	*50.1*		*96.1*	*61-142*			
Surrogate: Toluene-d8	*52.3*		ug/L	*50.4*		*104*	*82-121*			

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1ID0430 - EPA 5030B - EPA 8260D										
LCS Dup (1ID0430-BSD1)			Prepared: 04/08/25 00:00 Analyzed: 04/08/25 13:58							
Surrogate: 4-Bromofluorobenzene	*51.3*		ug/L	*50.1*		*102*	*80-116*			
Matrix Spike (1ID0430-MS1)		**Source: 1ID0653-01RE1**	Prepared: 04/08/25 00:00 Analyzed: 04/08/25 23:23							
Dichlorodifluoromethane	320.3	10.0	ug/L	303	ND	106	37-140			
Bromomethane	281.3	10.0	ug/L	301	ND	93.4	43-171			
Surrogate: Dibromofluoromethane	*565*		ug/L	*502*		*113*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*525*		ug/L	*501*		*105*	*61-142*			
Surrogate: Toluene-d8	*518*		ug/L	*504*		*103*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*525*		ug/L	*501*		*105*	*80-116*			
Matrix Spike Dup (1ID0430-MSD1)		**Source: 1ID0653-01RE1**	Prepared: 04/08/25 00:00 Analyzed: 04/08/25 23:45							
Dichlorodifluoromethane	307.5	10.0	ug/L	303	ND	102	37-140	4.08	18	
Bromomethane	273.1	10.0	ug/L	301	ND	90.7	43-171	2.96	29	
Surrogate: Dibromofluoromethane	*552*		ug/L	*502*		*110*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*521*		ug/L	*501*		*104*	*61-142*			
Surrogate: Toluene-d8	*517*		ug/L	*504*		*103*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*521*		ug/L	*501*		*104*	*80-116*			

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1ID0488 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1ID0488-BLK1)			Prepared: 04/17/25 16:01 Analyzed: 06/18/25 15:55							
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 (1ID0488-BS1)			Prepared: 04/17/25 16:01 Analyzed: 06/18/25 15:57							
Antimony, total	0.108	0.0010	mg/L	0.100		108	80-120			
Arsenic, total	0.0963	0.0020	mg/L	0.100		96.3	80-120			
Barium, total	0.114	0.0010	mg/L	0.100		114	80-120			
Beryllium, total	0.116	0.0005	mg/L	0.100		116	80-120			

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1ID0488 - EPA 3005A Total Recoverable Metals - EPA 6020A										
LCS (1ID0488-BS1)				Prepared: 04/17/25 16:01 Analyzed: 06/18/25 15:57						
Cadmium, total	0.102	0.0002	mg/L	0.100		102	80-120			
Chromium, total	0.116	0.0010	mg/L	0.100		116	80-120			
Cobalt, total	0.116	0.0005	mg/L	0.100		116	80-120			
Copper, total	0.0901	0.0050	mg/L	0.100		90.1	80-120			
Lead, total	0.101	0.0010	mg/L	0.100		101	80-120			
Nickel, total	0.0888	0.0050	mg/L	0.100		88.8	80-120			
Selenium, total	0.0988	0.0020	mg/L	0.100		98.8	80-120			
Silver, total	0.113	0.0050	mg/L	0.100		113	80-120			
Thallium, total	0.108	0.0005	mg/L	0.100		108	80-120			
Vanadium, total	0.116	0.0020	mg/L	0.100		116	80-120			
Zinc, total	0.0941	0.0050	mg/L	0.100		94.1	80-120			
Matrix Spike (1ID0488-MS1)		**Source: 1ID0653-01**		Prepared: 04/17/25 16:01 Analyzed: 06/18/25 16:02						
Antimony, total	0.115	0.0010	mg/L	0.100	ND	115	75-125			
Arsenic, total	0.0966	0.0020	mg/L	0.100	ND	96.6	75-125			
Barium, total	0.487	0.0010	mg/L	0.100	0.341	145	75-125			M1
Beryllium, total	0.119	0.0005	mg/L	0.100	0.0002	119	75-125			
Cadmium, total	0.102	0.0002	mg/L	0.100	0.0003	102	75-125			
Chromium, total	0.115	0.0010	mg/L	0.100	0.0011	114	75-125			
Cobalt, total	0.108	0.0005	mg/L	0.100	0.0005	107	75-125			
Copper, total	0.0841	0.0050	mg/L	0.100	0.0015	82.7	75-125			
Lead, total	0.103	0.0010	mg/L	0.100	0.0002	103	75-125			
Nickel, total	0.0846	0.0050	mg/L	0.100	0.0022	82.4	75-125			
Selenium, total	0.0994	0.0020	mg/L	0.100	ND	99.4	75-125			
Silver, total	0.109	0.0050	mg/L	0.100	ND	109	75-125			
Thallium, total	0.113	0.0005	mg/L	0.100	0.0002	113	75-125			
Vanadium, total	0.120	0.0020	mg/L	0.100	ND	120	75-125			
Zinc, total	0.0927	0.0050	mg/L	0.100	0.0050	87.7	75-125			
Matrix Spike Dup (1ID0488-MSD1)		**Source: 1ID0653-01**		Prepared: 04/17/25 16:01 Analyzed: 06/18/25 16:05						
Antimony, total	0.112	0.0010	mg/L	0.100	ND	112	75-125	2.54	20	
Arsenic, total	0.0932	0.0020	mg/L	0.100	ND	93.2	75-125	3.58	20	
Barium, total	0.471	0.0010	mg/L	0.100	0.341	130	75-125	3.19	20	M1
Beryllium, total	0.117	0.0005	mg/L	0.100	0.0002	117	75-125	1.68	20	
Cadmium, total	0.100	0.0002	mg/L	0.100	0.0003	100	75-125	1.91	20	
Chromium, total	0.109	0.0010	mg/L	0.100	0.0011	108	75-125	5.53	20	
Cobalt, total	0.104	0.0005	mg/L	0.100	0.0005	104	75-125	3.46	20	
Copper, total	0.0826	0.0050	mg/L	0.100	0.0015	81.2	75-125	1.81	20	
Lead, total	0.102	0.0010	mg/L	0.100	0.0002	102	75-125	0.928	20	
Nickel, total	0.0829	0.0050	mg/L	0.100	0.0022	80.7	75-125	1.98	20	
Selenium, total	0.0970	0.0020	mg/L	0.100	ND	97.0	75-125	2.42	20	
Silver, total	0.109	0.0050	mg/L	0.100	ND	109	75-125	0.691	20	
Thallium, total	0.112	0.0005	mg/L	0.100	0.0002	112	75-125	0.898	20	
Vanadium, total	0.113	0.0020	mg/L	0.100	ND	113	75-125	5.80	20	
Zinc, total	0.0909	0.0050	mg/L	0.100	0.0050	85.9	75-125	1.97	20	

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1ID0488 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Post Spike (1ID0488-PS1)		**Source: 1ID0653-01**	Prepared: 04/17/25 16:01 Analyzed: 06/19/25 09:28							
Antimony, total	0.0210		mg/L	0.0200	0.0004	103	80-120			
Arsenic, total	0.0200		mg/L	0.0200	0.0002	99.1	80-120			
Barium, total	0.355		mg/L	0.0200	0.335	103	80-120			
Beryllium, total	0.0223		mg/L	0.0200	0.0002	110	80-120			
Cadmium, total	0.0204		mg/L	0.0200	0.0003	100	80-120			
Chromium, total	0.0221		mg/L	0.0200	0.0011	105	80-120			
Cobalt, total	0.0203		mg/L	0.0200	0.0005	98.9	80-120			
Copper, total	0.0183		mg/L	0.0200	0.0014	84.6	80-120			
Lead, total	0.0195		mg/L	0.0200	0.0002	96.4	80-120			
Nickel, total	0.0187		mg/L	0.0200	0.0021	82.6	80-120			
Selenium, total	0.0203		mg/L	0.0200	0.0003	99.6	80-120			
Silver, total	0.0207		mg/L	0.0200	0.0002	103	80-120			
Thallium, total	0.0204		mg/L	0.0200	0.0002	101	80-120			
Vanadium, total	0.0220		mg/L	0.0200	0.000005	110	80-120			
Zinc, total	0.0231		mg/L	0.0200	0.0049	90.8	80-120			

Definitions

B:	The target analyte was detected in the blank at or above the method acceptance criteria.
M1:	Matrix spike recovery is above acceptance limits.
RL:	Reporting Limit
RPD:	Relative Percent Difference

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 0.8°C

Cooler Inspection Checklist

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

Report Comments

Reviewed and Approved By:

Sue Thompson

Sue Thompson
Client Services Manager
06/19/25 15:58

CHA[illegible] RECORD

MICROBAC®

600 East 17th [illegible]
Newton, IA 50[illegible]
641-792-8451

1 I D 0 6 5 3

HLW Engineering
PM: Heather Murphy

www.keystonelabs.com

SITE INFORMATION

Sampler: JGH

Project: Ida Co. - New Regs
Appendix 1

REPORT TO

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

INVOICE TO

Charlys Folk
Ida County Court House
401 Moorehead
Ida Grove, IA 51445

SPECIAL INSTRUCTIONS

None

Turn Around Time

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

LAB USE ONLY

Work Order 1ID0653
Temperature 0-8
Turn-Cooler: No

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

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	Number of Containers	Analyses	Lab Sample Number
-001	MW-3	Aqueous	GRAB	4/1/25	12:52	7	lndfill-appl-voc-group lndfil-appl-metals-6020	01
-001	MW-7	Aqueous	GRAB	4/1/25	13:53	7	8260@dcdfm lndfil-appl-voc-group lndfil-appl-metals-6020	02
-001	MW-10	Aqueous	GRAB	4/1/25	13:33	7	lndfill-appl-voc-group lndfil-appl-metals-6020	03
-001	PZ-11	Aqueous	GRAB	4/1/25	13:20	7	lndfill-appl-voc-group lndfil-appl-metals-6020	04
-001	MW-13	Aqueous	GRAB	4/1/25	13:08	7	lndfill-appl-voc-group lndfil-appl-metals-6020	05
-001	Duplicate	Aqueous	GRAB	4/1/25	13:53	7	lndfill-appl-voc-group lndfil-appl-metals-6020	06

J. Colbert 4/3/25
Relinquished By Date/Time

Relinquished By Date/Time

Received By Date/Time

Received for Lab By 4/3/25 Date/Time 10:18

Remarks:

Original - Lab Copy Yellow - Sampler Copy

Microbac Laboratories, Inc., Newton

CERTIFICATE OF ANALYSIS

1IJ1228

Project Description

Appendix 1

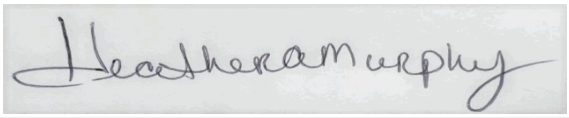
For:

Todd Whipple

HLW Engineering

204 West Broad St

Story City, IA 50248



Heather Murphy

Customer Relationship Specialist

Friday, October 17, 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

1IJ1228

HLW Engineering

Todd Whipple
204 West Broad St
Story City, IA 50248

Project Name: Appendix 1

Project / PO Number: N/A
Received: 10/13/2025
Reported: 10/17/2025

Sample Summary Report

Sample Name	Laboratory ID	Client Matrix	Sample Type	Sample Begin	Sample Taken	Lab Received
MW-3	1IJ1228-01	Aqueous	GRAB		10/10/25 13:11	10/13/25 10:56
MW-7	1IJ1228-02	Aqueous	GRAB		10/10/25 14:18	10/13/25 10:56
MW-10	1IJ1228-03	Aqueous	GRAB		10/10/25 13:59	10/13/25 10:56
PZ-11	1IJ1228-04	Aqueous	GRAB		10/10/25 13:46	10/13/25 10:56
MW-13	1IJ1228-05	Aqueous	GRAB		10/10/25 13:34	10/13/25 10:56
Duplicate	1IJ1228-06	Aqueous	GRAB		10/10/25 13:34	10/13/25 10:56

CERTIFICATE OF ANALYSIS

1IJ1228

Analytical Testing Parameters

Client Sample ID:	MW-3		
Sample Matrix:	Aqueous	**Collected By:**	JGH
Lab Sample ID:	1IJ1228-01	**Collection Date:**	10/10/2025 13:11

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D							
Chloromethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
Vinyl Chloride	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
Bromomethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
Chloroethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
Trichlorofluoromethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
1,1-Dichloroethylene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
Acetone	<10.0	10.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
Methyl Iodide	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
Carbon Disulfide	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
Methylene Chloride	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
Acrylonitrile	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
1,1-Dichloroethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
Vinyl Acetate	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
2-Butanone (MEK)	<10.0	10.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
Bromochloromethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
Chloroform	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
1,1,1-Trichloroethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
Carbon Tetrachloride	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
Benzene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
1,2-Dichloroethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
Trichloroethylene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
1,2-Dichloropropane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
Dibromomethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
Bromodichloromethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
Toluene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
1,1,2-Trichloroethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
Tetrachloroethylene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
2-Hexanone (MBK)	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
Dibromochloromethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
1,2-Dibromoethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
Chlorobenzene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
Ethylbenzene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
Xylenes, total	<2.0	2.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
Styrene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1308	RAF

CERTIFICATE OF ANALYSIS

1IJ1228

Client Sample ID:	MW-3		
Sample Matrix:	Aqueous	**Collected By:**	JGH
Lab Sample ID:	1IJ1228-01	**Collection Date:**	10/10/2025 13:11

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
Bromoform	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
1,2,3-Trichloropropane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
1,4-Dichlorobenzene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
1,2-Dichlorobenzene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1308	RAF
Surrogate: Dibromofluoromethane	98.7	Limit: 57-128	% Rec		10/14/25 0000	10/14/25 1308	RAF
Surrogate: Dibromofluoromethane	98.7	Limit: 75-136	% Rec		10/14/25 0000	10/14/25 1308	RAF
Surrogate: 1,2-Dichloroethane-d4	103	Limit: 61-142	% Rec		10/14/25 0000	10/14/25 1308	RAF
Surrogate: 1,2-Dichloroethane-d4	103	Limit: 49-135	% Rec		10/14/25 0000	10/14/25 1308	RAF
Surrogate: Toluene-d8	97.0	Limit: 82-121	% Rec		10/14/25 0000	10/14/25 1308	RAF
Surrogate: Toluene-d8	97.0	Limit: 82-116	% Rec		10/14/25 0000	10/14/25 1308	RAF
Surrogate: 4-Bromofluorobenzene	106	Limit: 77-114	% Rec		10/14/25 0000	10/14/25 1308	RAF
Surrogate: 4-Bromofluorobenzene	106	Limit: 80-116	% Rec		10/14/25 0000	10/14/25 1308	RAF

Determination of Total Metals	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A							
Antimony, total	<0.0010	0.0010	mg/L		10/14/25 1329	10/15/25 1801	RVV
Arsenic, total	<0.0020	0.0020	mg/L		10/14/25 1329	10/15/25 1801	RVV
Barium, total	**0.308**	0.0010	mg/L		10/14/25 1329	10/15/25 1801	RVV
Beryllium, total	<0.0005	0.0005	mg/L		10/14/25 1329	10/15/25 1801	RVV
Cadmium, total	**0.0003**	0.0002	mg/L		10/14/25 1329	10/15/25 1801	RVV
Chromium, total	**0.0014**	0.0010	mg/L		10/14/25 1329	10/15/25 1801	RVV
Cobalt, total	<0.0005	0.0005	mg/L		10/14/25 1329	10/15/25 1801	RVV
Copper, total	<0.0050	0.0050	mg/L		10/14/25 1329	10/15/25 1801	RVV
Lead, total	<0.0010	0.0010	mg/L		10/14/25 1329	10/15/25 1801	RVV
Nickel, total	<0.0050	0.0050	mg/L		10/14/25 1329	10/15/25 1801	RVV
Selenium, total	<0.0020	0.0020	mg/L		10/14/25 1329	10/15/25 1801	RVV
Silver, total	<0.0050	0.0050	mg/L		10/14/25 1329	10/15/25 1801	RVV
Thallium, total	<0.0005	0.0005	mg/L		10/14/25 1329	10/15/25 1801	RVV
Vanadium, total	<0.0020	0.0020	mg/L		10/14/25 1329	10/15/25 1801	RVV
Zinc, total	**0.0273**	0.0050	mg/L		10/14/25 1329	10/15/25 1801	RVV

CERTIFICATE OF ANALYSIS

1IJ1228

Client Sample ID:	MW-7		
Sample Matrix:	Aqueous	**Collected By:**	JGH
Lab Sample ID:	1IJ1228-02	**Collection Date:**	10/10/2025 14:18

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D							
Dichlorodifluoromethane	**1.1**	1.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
Chloromethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
Vinyl Chloride	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
Bromomethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
Chloroethane	**1.6**	1.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
Trichlorofluoromethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
1,1-Dichloroethylene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
Acetone	<10.0	10.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
Methyl Iodide	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
Carbon Disulfide	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
Methylene Chloride	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
Acrylonitrile	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
1,1-Dichloroethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
Vinyl Acetate	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
cis-1,2-Dichloroethylene	**7.2**	1.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
2-Butanone (MEK)	<10.0	10.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
Bromochloromethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
Chloroform	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
1,1,1-Trichloroethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
Carbon Tetrachloride	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
Benzene	**1.0**	1.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
1,2-Dichloroethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
Trichloroethylene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
1,2-Dichloropropane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
Dibromomethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
Bromodichloromethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
Toluene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
1,1,2-Trichloroethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
Tetrachloroethylene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
2-Hexanone (MBK)	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
Dibromochloromethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
1,2-Dibromoethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
Chlorobenzene	**1.2**	1.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
Ethylbenzene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
Xylenes, total	<2.0	2.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
Styrene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
Bromoform	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1331	RAF

CERTIFICATE OF ANALYSIS

1IJ1228

Client Sample ID:	MW-7		
Sample Matrix:	Aqueous	**Collected By:**	JGH
Lab Sample ID:	1IJ1228-02	**Collection Date:**	10/10/2025 14:18

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
1,2,3-Trichloropropane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
1,4-Dichlorobenzene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
1,2-Dichlorobenzene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1331	RAF
Surrogate: Dibromofluoromethane	96.4	Limit: 75-136	% Rec		10/14/25 0000	10/14/25 1331	RAF
Surrogate: Dibromofluoromethane	96.4	Limit: 57-128	% Rec		10/14/25 0000	10/14/25 1331	RAF
Surrogate: 1,2-Dichloroethane-d4	102	Limit: 49-135	% Rec		10/14/25 0000	10/14/25 1331	RAF
Surrogate: 1,2-Dichloroethane-d4	102	Limit: 61-142	% Rec		10/14/25 0000	10/14/25 1331	RAF
Surrogate: Toluene-d8	96.6	Limit: 82-121	% Rec		10/14/25 0000	10/14/25 1331	RAF
Surrogate: Toluene-d8	96.6	Limit: 82-116	% Rec		10/14/25 0000	10/14/25 1331	RAF
Surrogate: 4-Bromofluorobenzene	107	Limit: 77-114	% Rec		10/14/25 0000	10/14/25 1331	RAF
Surrogate: 4-Bromofluorobenzene	107	Limit: 80-116	% Rec		10/14/25 0000	10/14/25 1331	RAF

Determination of Total Metals	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A							
Antimony, total	**0.0010**	0.0010	mg/L		10/14/25 1329	10/15/25 1804	RVV
Arsenic, total	<0.0020	0.0020	mg/L		10/14/25 1329	10/15/25 1804	RVV
Barium, total	**0.229**	0.0010	mg/L		10/14/25 1329	10/15/25 1804	RVV
Beryllium, total	<0.0005	0.0005	mg/L		10/14/25 1329	10/15/25 1804	RVV
Cadmium, total	**0.0017**	0.0002	mg/L		10/14/25 1329	10/15/25 1804	RVV
Chromium, total	**0.0018**	0.0010	mg/L		10/14/25 1329	10/15/25 1804	RVV
Cobalt, total	**0.0045**	0.0005	mg/L		10/14/25 1329	10/15/25 1804	RVV
Copper, total	**0.0165**	0.0050	mg/L		10/14/25 1329	10/15/25 1804	RVV
Lead, total	<0.0010	0.0010	mg/L		10/14/25 1329	10/15/25 1804	RVV
Nickel, total	**0.0426**	0.0050	mg/L		10/14/25 1329	10/15/25 1804	RVV
Selenium, total	<0.0020	0.0020	mg/L		10/14/25 1329	10/15/25 1804	RVV
Silver, total	<0.0050	0.0050	mg/L		10/14/25 1329	10/15/25 1804	RVV
Thallium, total	<0.0005	0.0005	mg/L		10/14/25 1329	10/15/25 1804	RVV
Vanadium, total	<0.0020	0.0020	mg/L		10/14/25 1329	10/15/25 1804	RVV
Zinc, total	**0.0181**	0.0050	mg/L		10/14/25 1329	10/15/25 1804	RVV

CERTIFICATE OF ANALYSIS

1IJ1228

Client Sample ID:	MW-10		
Sample Matrix:	Aqueous	**Collected By:**	JGH
Lab Sample ID:	1IJ1228-03	**Collection Date:**	10/10/2025 13:59

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D							
Chloromethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
Vinyl Chloride	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
Bromomethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
Chloroethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
Trichlorofluoromethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
1,1-Dichloroethylene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
Acetone	<10.0	10.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
Methyl Iodide	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
Carbon Disulfide	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
Methylene Chloride	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
Acrylonitrile	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
1,1-Dichloroethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
Vinyl Acetate	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
2-Butanone (MEK)	<10.0	10.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
Bromochloromethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
Chloroform	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
1,1,1-Trichloroethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
Carbon Tetrachloride	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
Benzene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
1,2-Dichloroethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
Trichloroethylene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
1,2-Dichloropropane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
Dibromomethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
Bromodichloromethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
Toluene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
1,1,2-Trichloroethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
Tetrachloroethylene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
2-Hexanone (MBK)	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
Dibromochloromethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
1,2-Dibromoethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
Chlorobenzene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
Ethylbenzene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
Xylenes, total	<2.0	2.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
Styrene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
Bromoform	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
1,2,3-Trichloropropane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1354	RAF

CERTIFICATE OF ANALYSIS

1IJ1228

Client Sample ID:	MW-10		
Sample Matrix:	Aqueous	**Collected By:**	JGH
Lab Sample ID:	1IJ1228-03	**Collection Date:**	10/10/2025 13:59

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
1,4-Dichlorobenzene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
1,2-Dichlorobenzene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1354	RAF
Surrogate: Dibromofluoromethane	96.6	Limit: 75-136	% Rec		10/14/25 0000	10/14/25 1354	RAF
Surrogate: Dibromofluoromethane	96.6	Limit: 57-128	% Rec		10/14/25 0000	10/14/25 1354	RAF
Surrogate: 1,2-Dichloroethane-d4	102	Limit: 49-135	% Rec		10/14/25 0000	10/14/25 1354	RAF
Surrogate: 1,2-Dichloroethane-d4	102	Limit: 61-142	% Rec		10/14/25 0000	10/14/25 1354	RAF
Surrogate: Toluene-d8	97.4	Limit: 82-116	% Rec		10/14/25 0000	10/14/25 1354	RAF
Surrogate: Toluene-d8	97.4	Limit: 82-121	% Rec		10/14/25 0000	10/14/25 1354	RAF
Surrogate: 4-Bromofluorobenzene	106	Limit: 77-114	% Rec		10/14/25 0000	10/14/25 1354	RAF
Surrogate: 4-Bromofluorobenzene	106	Limit: 80-116	% Rec		10/14/25 0000	10/14/25 1354	RAF

Determination of Total Metals	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A							
Antimony, total	<0.0010	0.0010	mg/L		10/14/25 1329	10/15/25 1806	RVV
Arsenic, total	<0.0020	0.0020	mg/L		10/14/25 1329	10/15/25 1806	RVV
Barium, total	**0.146**	0.0010	mg/L		10/14/25 1329	10/15/25 1806	RVV
Beryllium, total	<0.0005	0.0005	mg/L		10/14/25 1329	10/15/25 1806	RVV
Cadmium, total	<0.0002	0.0002	mg/L		10/14/25 1329	10/15/25 1806	RVV
Chromium, total	**0.0011**	0.0010	mg/L		10/14/25 1329	10/15/25 1806	RVV
Cobalt, total	<0.0005	0.0005	mg/L		10/14/25 1329	10/15/25 1806	RVV
Copper, total	<0.0050	0.0050	mg/L		10/14/25 1329	10/15/25 1806	RVV
Lead, total	<0.0010	0.0010	mg/L		10/14/25 1329	10/15/25 1806	RVV
Nickel, total	**0.0145**	0.0050	mg/L		10/14/25 1329	10/15/25 1806	RVV
Selenium, total	<0.0020	0.0020	mg/L		10/14/25 1329	10/15/25 1806	RVV
Silver, total	<0.0050	0.0050	mg/L		10/14/25 1329	10/15/25 1806	RVV
Thallium, total	<0.0005	0.0005	mg/L		10/14/25 1329	10/15/25 1806	RVV
Vanadium, total	<0.0020	0.0020	mg/L		10/14/25 1329	10/15/25 1806	RVV
Zinc, total	**0.0051**	0.0050	mg/L		10/14/25 1329	10/15/25 1806	RVV

CERTIFICATE OF ANALYSIS

1IJ1228

Client Sample ID:	PZ-11		
Sample Matrix:	Aqueous	**Collected By:**	JGH
Lab Sample ID:	1IJ1228-04	**Collection Date:**	10/10/2025 13:46

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D							
Chloromethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
Vinyl Chloride	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
Bromomethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
Chloroethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
Trichlorofluoromethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
1,1-Dichloroethylene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
Acetone	<10.0	10.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
Methyl Iodide	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
Carbon Disulfide	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
Methylene Chloride	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
Acrylonitrile	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
1,1-Dichloroethane	**1.2**	1.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
Vinyl Acetate	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
2-Butanone (MEK)	<10.0	10.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
Bromochloromethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
Chloroform	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
1,1,1-Trichloroethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
Carbon Tetrachloride	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
Benzene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
1,2-Dichloroethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
Trichloroethylene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
1,2-Dichloropropane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
Dibromomethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
Bromodichloromethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
Toluene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
1,1,2-Trichloroethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
Tetrachloroethylene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
2-Hexanone (MBK)	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
Dibromochloromethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
1,2-Dibromoethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
Chlorobenzene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
Ethylbenzene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
Xylenes, total	<2.0	2.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
Styrene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
Bromoform	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
1,2,3-Trichloropropane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1417	RAF

CERTIFICATE OF ANALYSIS

1IJ1228

Client Sample ID:	PZ-11		
Sample Matrix:	Aqueous	**Collected By:**	JGH
Lab Sample ID:	1IJ1228-04	**Collection Date:**	10/10/2025 13:46

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
1,4-Dichlorobenzene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
1,2-Dichlorobenzene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1417	RAF
Surrogate: Dibromofluoromethane	97.1	Limit: 57-128	% Rec		10/14/25 0000	10/14/25 1417	RAF
Surrogate: Dibromofluoromethane	97.1	Limit: 75-136	% Rec		10/14/25 0000	10/14/25 1417	RAF
Surrogate: 1,2-Dichloroethane-d4	103	Limit: 49-135	% Rec		10/14/25 0000	10/14/25 1417	RAF
Surrogate: 1,2-Dichloroethane-d4	103	Limit: 61-142	% Rec		10/14/25 0000	10/14/25 1417	RAF
Surrogate: Toluene-d8	98.7	Limit: 82-116	% Rec		10/14/25 0000	10/14/25 1417	RAF
Surrogate: Toluene-d8	98.7	Limit: 82-121	% Rec		10/14/25 0000	10/14/25 1417	RAF
Surrogate: 4-Bromofluorobenzene	106	Limit: 77-114	% Rec		10/14/25 0000	10/14/25 1417	RAF
Surrogate: 4-Bromofluorobenzene	106	Limit: 80-116	% Rec		10/14/25 0000	10/14/25 1417	RAF

Determination of Total Metals	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A							
Antimony, total	<0.0010	0.0010	mg/L		10/14/25 1329	10/15/25 1814	RVV
Arsenic, total	<0.0020	0.0020	mg/L		10/14/25 1329	10/15/25 1814	RVV
Barium, total	**0.0710**	0.0010	mg/L		10/14/25 1329	10/15/25 1814	RVV
Beryllium, total	<0.0005	0.0005	mg/L		10/14/25 1329	10/15/25 1814	RVV
Cadmium, total	<0.0002	0.0002	mg/L		10/14/25 1329	10/15/25 1814	RVV
Chromium, total	**0.0010**	0.0010	mg/L		10/14/25 1329	10/15/25 1814	RVV
Cobalt, total	<0.0005	0.0005	mg/L		10/14/25 1329	10/15/25 1814	RVV
Copper, total	<0.0050	0.0050	mg/L		10/14/25 1329	10/15/25 1814	RVV
Lead, total	<0.0010	0.0010	mg/L		10/14/25 1329	10/15/25 1814	RVV
Nickel, total	**0.0060**	0.0050	mg/L		10/14/25 1329	10/15/25 1814	RVV
Selenium, total	<0.0020	0.0020	mg/L		10/14/25 1329	10/15/25 1814	RVV
Silver, total	<0.0050	0.0050	mg/L		10/14/25 1329	10/15/25 1814	RVV
Thallium, total	<0.0005	0.0005	mg/L		10/14/25 1329	10/15/25 1814	RVV
Vanadium, total	<0.0020	0.0020	mg/L		10/14/25 1329	10/15/25 1814	RVV
Zinc, total	<0.0050	0.0050	mg/L		10/14/25 1329	10/15/25 1814	RVV

CERTIFICATE OF ANALYSIS

1IJ1228

Client Sample ID:	MW-13		
Sample Matrix:	Aqueous	**Collected By:**	JGH
Lab Sample ID:	1IJ1228-05	**Collection Date:**	10/10/2025 13:34

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D							
Chloromethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
Vinyl Chloride	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
Bromomethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
Chloroethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
Trichlorofluoromethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
1,1-Dichloroethylene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
Acetone	<10.0	10.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
Methyl Iodide	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
Carbon Disulfide	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
Methylene Chloride	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
Acrylonitrile	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
1,1-Dichloroethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
Vinyl Acetate	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
2-Butanone (MEK)	<10.0	10.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
Bromochloromethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
Chloroform	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
1,1,1-Trichloroethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
Carbon Tetrachloride	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
Benzene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
1,2-Dichloroethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
Trichloroethylene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
1,2-Dichloropropane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
Dibromomethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
Bromodichloromethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
Toluene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
1,1,2-Trichloroethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
Tetrachloroethylene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
2-Hexanone (MBK)	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
Dibromochloromethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
1,2-Dibromoethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
Chlorobenzene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
Ethylbenzene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
Xylenes, total	<2.0	2.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
Styrene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
Bromoform	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
1,2,3-Trichloropropane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1440	RAF

CERTIFICATE OF ANALYSIS

1IJ1228

Client Sample ID:	MW-13		
Sample Matrix:	Aqueous	**Collected By:**	JGH
Lab Sample ID:	1IJ1228-05	**Collection Date:**	10/10/2025 13:34

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
1,4-Dichlorobenzene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
1,2-Dichlorobenzene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1440	RAF
Surrogate: Dibromofluoromethane	97.5	Limit: 57-128	% Rec		10/14/25 0000	10/14/25 1440	RAF
Surrogate: Dibromofluoromethane	97.5	Limit: 75-136	% Rec		10/14/25 0000	10/14/25 1440	RAF
Surrogate: 1,2-Dichloroethane-d4	102	Limit: 61-142	% Rec		10/14/25 0000	10/14/25 1440	RAF
Surrogate: 1,2-Dichloroethane-d4	102	Limit: 49-135	% Rec		10/14/25 0000	10/14/25 1440	RAF
Surrogate: Toluene-d8	98.3	Limit: 82-116	% Rec		10/14/25 0000	10/14/25 1440	RAF
Surrogate: Toluene-d8	98.3	Limit: 82-121	% Rec		10/14/25 0000	10/14/25 1440	RAF
Surrogate: 4-Bromofluorobenzene	105	Limit: 77-114	% Rec		10/14/25 0000	10/14/25 1440	RAF
Surrogate: 4-Bromofluorobenzene	105	Limit: 80-116	% Rec		10/14/25 0000	10/14/25 1440	RAF

Determination of Total Metals	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A							
Antimony, total	<0.0010	0.0010	mg/L		10/14/25 1329	10/15/25 1816	RVV
Arsenic, total	<0.0020	0.0020	mg/L		10/14/25 1329	10/15/25 1816	RVV
Barium, total	**0.0520**	0.0010	mg/L		10/14/25 1329	10/15/25 1816	RVV
Beryllium, total	<0.0005	0.0005	mg/L		10/14/25 1329	10/15/25 1816	RVV
Cadmium, total	<0.0002	0.0002	mg/L		10/14/25 1329	10/15/25 1816	RVV
Chromium, total	**0.0019**	0.0010	mg/L		10/14/25 1329	10/15/25 1816	RVV
Cobalt, total	<0.0005	0.0005	mg/L		10/14/25 1329	10/15/25 1816	RVV
Copper, total	<0.0050	0.0050	mg/L		10/14/25 1329	10/15/25 1816	RVV
Lead, total	<0.0010	0.0010	mg/L		10/14/25 1329	10/15/25 1816	RVV
Nickel, total	<0.0050	0.0050	mg/L		10/14/25 1329	10/15/25 1816	RVV
Selenium, total	<0.0020	0.0020	mg/L		10/14/25 1329	10/15/25 1816	RVV
Silver, total	<0.0050	0.0050	mg/L		10/14/25 1329	10/15/25 1816	RVV
Thallium, total	<0.0005	0.0005	mg/L		10/14/25 1329	10/15/25 1816	RVV
Vanadium, total	<0.0020	0.0020	mg/L		10/14/25 1329	10/15/25 1816	RVV
Zinc, total	<0.0050	0.0050	mg/L		10/14/25 1329	10/15/25 1816	RVV

CERTIFICATE OF ANALYSIS

1IJ1228

Client Sample ID:	Duplicate		
Sample Matrix:	Aqueous	**Collected By:**	JGH
Lab Sample ID:	1IJ1228-06	**Collection Date:**	10/10/2025 13:34

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 5030B/EPA 8260D							
Chloromethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
Vinyl Chloride	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
Bromomethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
Chloroethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
Trichlorofluoromethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
1,1-Dichloroethylene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
Acetone	<10.0	10.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
Methyl Iodide	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
Carbon Disulfide	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
Methylene Chloride	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
Acrylonitrile	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
trans-1,2-Dichloroethylene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
1,1-Dichloroethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
Vinyl Acetate	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
cis-1,2-Dichloroethylene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
2-Butanone (MEK)	<10.0	10.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
Bromochloromethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
Chloroform	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
1,1,1-Trichloroethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
Carbon Tetrachloride	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
Benzene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
1,2-Dichloroethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
Trichloroethylene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
1,2-Dichloropropane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
Dibromomethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
Bromodichloromethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
cis-1,3-Dichloropropene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
Toluene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
trans-1,3-Dichloropropene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
1,1,2-Trichloroethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
Tetrachloroethylene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
2-Hexanone (MBK)	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
Dibromochloromethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
1,2-Dibromoethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
Chlorobenzene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
Ethylbenzene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
Xylenes, total	<2.0	2.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
Styrene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
Bromoform	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
1,2,3-Trichloropropane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1503	RAF

CERTIFICATE OF ANALYSIS

1IJ1228

Client Sample ID:	Duplicate		
Sample Matrix:	Aqueous	**Collected By:**	JGH
Lab Sample ID:	1IJ1228-06	**Collection Date:**	10/10/2025 13:34

Determination of Volatile Organic Compounds	Result	RL	Units	Note	Prepared	Analyzed	Analyst
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
1,4-Dichlorobenzene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
1,2-Dichlorobenzene	<1.0	1.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L		10/14/25 0000	10/14/25 1503	RAF
Surrogate: Dibromofluoromethane	94.8	Limit: 75-136	% Rec		10/14/25 0000	10/14/25 1503	RAF
Surrogate: Dibromofluoromethane	94.8	Limit: 57-128	% Rec		10/14/25 0000	10/14/25 1503	RAF
Surrogate: 1,2-Dichloroethane-d4	101	Limit: 61-142	% Rec		10/14/25 0000	10/14/25 1503	RAF
Surrogate: 1,2-Dichloroethane-d4	101	Limit: 49-135	% Rec		10/14/25 0000	10/14/25 1503	RAF
Surrogate: Toluene-d8	97.8	Limit: 82-121	% Rec		10/14/25 0000	10/14/25 1503	RAF
Surrogate: Toluene-d8	97.8	Limit: 82-116	% Rec		10/14/25 0000	10/14/25 1503	RAF
Surrogate: 4-Bromofluorobenzene	109	Limit: 80-116	% Rec		10/14/25 0000	10/14/25 1503	RAF
Surrogate: 4-Bromofluorobenzene	109	Limit: 77-114	% Rec		10/14/25 0000	10/14/25 1503	RAF

Determination of Total Metals	Result	RL	Units	Note	Prepared	Analyzed	Analyst
EPA 3005A/EPA 6020A							
Antimony, total	<0.0010	0.0010	mg/L		10/14/25 1329	10/15/25 1819	RVV
Arsenic, total	<0.0020	0.0020	mg/L		10/14/25 1329	10/15/25 1819	RVV
Barium, total	**0.0509**	0.0010	mg/L		10/14/25 1329	10/15/25 1819	RVV
Beryllium, total	<0.0005	0.0005	mg/L		10/14/25 1329	10/15/25 1819	RVV
Cadmium, total	<0.0002	0.0002	mg/L		10/14/25 1329	10/15/25 1819	RVV
Chromium, total	**0.0014**	0.0010	mg/L		10/14/25 1329	10/15/25 1819	RVV
Cobalt, total	<0.0005	0.0005	mg/L		10/14/25 1329	10/15/25 1819	RVV
Copper, total	<0.0050	0.0050	mg/L		10/14/25 1329	10/15/25 1819	RVV
Lead, total	<0.0010	0.0010	mg/L		10/14/25 1329	10/15/25 1819	RVV
Nickel, total	<0.0050	0.0050	mg/L		10/14/25 1329	10/15/25 1819	RVV
Selenium, total	<0.0020	0.0020	mg/L		10/14/25 1329	10/15/25 1819	RVV
Silver, total	<0.0050	0.0050	mg/L		10/14/25 1329	10/15/25 1819	RVV
Thallium, total	<0.0005	0.0005	mg/L		10/14/25 1329	10/15/25 1819	RVV
Vanadium, total	<0.0020	0.0020	mg/L		10/14/25 1329	10/15/25 1819	RVV
Zinc, total	<0.0050	0.0050	mg/L		10/14/25 1329	10/15/25 1819	RVV

CERTIFICATE OF ANALYSIS

1IJ1228

Batch Log Summary

Method	Batch	Laboratory ID	Client / Source ID
EPA 6020A	1IJ0809	1IJ0809-BLK1	
		1IJ0809-BS1	
		1IJ0809-MS1	1IJ1227-01
		1IJ0809-MSD1	1IJ1227-01
		1IJ0809-PS1	1IJ1227-01
		1IJ1228-01	MW-3
		1IJ1228-02	MW-7
		1IJ1228-03	MW-10
		1IJ1228-04	PZ-11
		1IJ1228-05	MW-13
		1IJ1228-06	Duplicate

Method	Batch	Laboratory ID	Client / Source ID
EPA 8260D	1IJ0840	1IJ0840-BS1	
		1IJ0840-BSD1	
		1IJ0840-BLK1	
		1IJ1228-01	MW-3
		1IJ1228-02	MW-7
		1IJ1228-03	MW-10
		1IJ1228-04	PZ-11
		1IJ1228-05	MW-13
		1IJ1228-06	Duplicate
		1IJ0840-MS1	1IJ1227-01
		1IJ0840-MSD1	1IJ1227-01

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

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ0840 - EPA 5030B - EPA 8260D										
Blank (1IJ0840-BLK1)			Prepared: 10/14/25 00:00 Analyzed: 10/14/25 10:29							
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	<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							

CERTIFICATE OF ANALYSIS

1IJ1228

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ0840 - EPA 5030B - EPA 8260D										
Blank (1IJ0840-BLK1)			Prepared: 10/14/25 00:00 Analyzed: 10/14/25 10:29							
2-Butanone (MEK)	<10.0	10.0	ug/L							
Bromochloromethane	<1.0	1.0	ug/L							
Chloroform	<1.0	1.0	ug/L							
1,1,1-Trichloroethane	<1.0	1.0	ug/L							
Carbon Tetrachloride	<1.0	1.0	ug/L							
Benzene	<1.0	1.0	ug/L							
1,2-Dichloroethane	<1.0	1.0	ug/L							
Trichloroethylene	<1.0	1.0	ug/L							
1,2-Dichloropropane	<1.0	1.0	ug/L							
Dibromomethane	<1.0	1.0	ug/L							
Bromodichloromethane	<1.0	1.0	ug/L							
cis-1,3-Dichloropropene	<1.0	1.0	ug/L							
4-Methyl-2-pentanone (MIBK)	<5.0	5.0	ug/L							
Toluene	<1.0	1.0	ug/L							
trans-1,3-Dichloropropene	<1.0	1.0	ug/L							
1,1,2-Trichloroethane	<1.0	1.0	ug/L							
Tetrachloroethylene	<1.0	1.0	ug/L							
2-Hexanone (MBK)	<5.0	5.0	ug/L							
Dibromochloromethane	<1.0	1.0	ug/L							
1,2-Dibromoethane	<1.0	1.0	ug/L							
Chlorobenzene	<1.0	1.0	ug/L							
1,1,1,2-Tetrachloroethane	<1.0	1.0	ug/L							
Ethylbenzene	<1.0	1.0	ug/L							
Xylenes, total	<2.0	2.0	ug/L							
Styrene	<1.0	1.0	ug/L							
Bromoform	<1.0	1.0	ug/L							
1,2,3-Trichloropropane	<1.0	1.0	ug/L							
trans-1,4-Dichloro-2-butene	<5.0	5.0	ug/L							
1,1,2,2-Tetrachloroethane	<1.0	1.0	ug/L							
1,4-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dichlorobenzene	<1.0	1.0	ug/L							
1,2-Dibromo-3-chloropropane	<5.0	5.0	ug/L							
Surrogate: Dibromofluoromethane	*48.3*		ug/L	*50.2*		*96.2*	*57-128*			
Surrogate: Dibromofluoromethane	*48.3*		ug/L	*50.2*		*96.2*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*50.3*		ug/L	*50.4*		*100*	*49-135*			
Surrogate: 1,2-Dichloroethane-d4	*50.3*		ug/L	*50.4*		*100*	*61-142*			
Surrogate: Toluene-d8	*48.7*		ug/L	*50.5*		*96.6*	*82-116*			
Surrogate: Toluene-d8	*48.7*		ug/L	*50.5*		*96.6*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*53.5*		ug/L	*50.2*		*107*	*77-114*			
Surrogate: 4-Bromofluorobenzene	*53.5*		ug/L	*50.2*		*107*	*80-116*			
LCS (1IJ0840-BS1)			Prepared: 10/14/25 00:00 Analyzed: 10/14/25 09:20							
Dichlorodifluoromethane	33.07	1.0	ug/L	30.3		109	55-141			
Chloromethane	26.75	1.0	ug/L	30.3		88.2	63-155			

CERTIFICATE OF ANALYSIS

1IJ1228

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ0840 - EPA 5030B - EPA 8260D										
LCS (1IJ0840-BS1)	Prepared: 10/14/25 00:00 Analyzed: 10/14/25 09:20									
Vinyl Chloride	26.26	1.0	ug/L	30.2		86.8	70-154			
Bromomethane	22.26	1.0	ug/L	30.1		73.9	52-176			
Chloroethane	23.93	1.0	ug/L	30.3		78.9	72-148			
Trichlorofluoromethane	32.12	1.0	ug/L	30.3		106	70-152			
1,1-Dichloroethylene	53.63	1.0	ug/L	50.1		107	70-148			
Acetone	106.1	10.0	ug/L	100		106	43-172			
Methyl Iodide	116.0	1.0	ug/L	100		116	69-170			
Carbon Disulfide	99.10	1.0	ug/L	100		99.1	72-162			
Methylene Chloride	47.43	5.0	ug/L	50.1		94.7	68-142			
Acrylonitrile	56.73	5.0	ug/L	50.4		113	33-163			
trans-1,2-Dichloroethylene	52.67	1.0	ug/L	50.1		105	66-148			
1,1-Dichloroethane	49.43	1.0	ug/L	50.1		98.7	66-143			
Vinyl Acetate	137.5	5.0	ug/L	142		96.5	43-153			
cis-1,2-Dichloroethylene	49.13	1.0	ug/L	50.4		97.6	71-149			
2-Butanone (MEK)	104.7	10.0	ug/L	100		105	52-159			
Bromochloromethane	50.83	1.0	ug/L	50.4		101	69-143			
Chloroform	47.65	1.0	ug/L	50.1		95.1	69-144			
1,1,1-Trichloroethane	50.88	1.0	ug/L	50.1		102	62-129			
Carbon Tetrachloride	54.75	1.0	ug/L	50.1		109	63-141			
Benzene	49.21	1.0	ug/L	50.4		97.6	71-134			
1,2-Dichloroethane	51.42	1.0	ug/L	50.1		103	72-132			
Trichloroethylene	53.28	1.0	ug/L	50.1		106	71-135			
1,2-Dichloropropane	49.63	1.0	ug/L	50.1		99.1	69-136			
Dibromomethane	44.17	1.0	ug/L	50.4		87.7	73-147			
Bromodichloromethane	50.19	1.0	ug/L	50.1		100	68-129			
cis-1,3-Dichloropropene	43.14	1.0	ug/L	50.1		86.1	65-134			
4-Methyl-2-pentanone (MIBK)	105.6	5.0	ug/L	100		106	58-147			
Toluene	48.90	1.0	ug/L	50.5		96.9	72-133			
trans-1,3-Dichloropropene	47.90	1.0	ug/L	50.1		95.7	67-130			
1,1,2-Trichloroethane	50.95	1.0	ug/L	50.1		102	69-135			
Tetrachloroethylene	51.84	1.0	ug/L	50.1		103	69-130			
2-Hexanone (MBK)	103.0	5.0	ug/L	100		103	55-144			
Dibromochloromethane	44.47	1.0	ug/L	50.1		88.8	73-127			
1,2-Dibromoethane	49.94	1.0	ug/L	50.2		99.4	67-132			
Chlorobenzene	48.15	1.0	ug/L	50.1		96.1	72-123			
1,1,1,2-Tetrachloroethane	46.64	1.0	ug/L	50.3		92.6	73-127			
Ethylbenzene	48.44	1.0	ug/L	50.2		96.6	71-127			
Xylenes, total	147.8	2.0	ug/L	151		97.8	74-127			
Styrene	47.42	1.0	ug/L	50.4		94.1	66-126			
Bromoform	48.96	1.0	ug/L	50.1		97.7	68-130			
1,2,3-Trichloropropane	49.82	1.0	ug/L	50.3		99.0	63-136			
trans-1,4-Dichloro-2-butene	88.18	5.0	ug/L	100		88.2	54-134			
1,1,2,2-Tetrachloroethane	45.43	1.0	ug/L	50.1		90.7	61-131			

CERTIFICATE OF ANALYSIS

1IJ1228

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ0840 - EPA 5030B - EPA 8260D										
LCS (1IJ0840-BS1)			Prepared: 10/14/25 00:00 Analyzed: 10/14/25 09:20							
1,4-Dichlorobenzene	49.49	1.0	ug/L	50.1		98.7	70-129			
1,2-Dichlorobenzene	48.16	1.0	ug/L	50.1		96.1	69-126			
1,2-Dibromo-3-chloropropane	47.54	5.0	ug/L	50.1		94.8	50-143			
Surrogate: Dibromofluoromethane	*48.7*		ug/L	*50.2*		*97.0*	*57-128*			
Surrogate: Dibromofluoromethane	*48.7*		ug/L	*50.2*		*97.0*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*49.7*		ug/L	*50.4*		*98.7*	*49-135*			
Surrogate: 1,2-Dichloroethane-d4	*49.7*		ug/L	*50.4*		*98.7*	*61-142*			
Surrogate: Toluene-d8	*48.8*		ug/L	*50.5*		*96.6*	*82-116*			
Surrogate: Toluene-d8	*48.8*		ug/L	*50.5*		*96.6*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*54.1*		ug/L	*50.2*		*108*	*77-114*			
Surrogate: 4-Bromofluorobenzene	*54.1*		ug/L	*50.2*		*108*	*80-116*			
LCS Dup (1IJ0840-BSD1)			Prepared: 10/14/25 00:00 Analyzed: 10/14/25 09:43							
Dichlorodifluoromethane	33.33	1.0	ug/L	30.3		110	55-141	0.783	24	
Chloromethane	27.00	1.0	ug/L	30.3		89.0	63-155	0.930	24	
Vinyl Chloride	26.61	1.0	ug/L	30.2		88.0	70-154	1.32	25	
Bromomethane	22.09	1.0	ug/L	30.1		73.3	52-176	0.767	27	
Chloroethane	24.42	1.0	ug/L	30.3		80.5	72-148	2.03	25	
Trichlorofluoromethane	32.03	1.0	ug/L	30.3		106	70-152	0.281	26	
1,1-Dichloroethylene	54.21	1.0	ug/L	50.1		108	70-148	1.08	24	
Acetone	107.7	10.0	ug/L	100		108	43-172	1.51	30	
Methyl Iodide	117.1	1.0	ug/L	100		117	69-170	0.875	30	
Carbon Disulfide	98.52	1.0	ug/L	100		98.5	72-162	0.587	24	
Methylene Chloride	46.25	5.0	ug/L	50.1		92.3	68-142	2.52	21	
Acrylonitrile	56.69	5.0	ug/L	50.4		113	33-163	0.0705	28	
trans-1,2-Dichloroethylene	52.57	1.0	ug/L	50.1		105	66-148	0.190	27	
1,1-Dichloroethane	49.67	1.0	ug/L	50.1		99.1	66-143	0.484	24	
Vinyl Acetate	137.7	5.0	ug/L	142		96.6	43-153	0.138	30	
cis-1,2-Dichloroethylene	47.82	1.0	ug/L	50.4		95.0	71-149	2.70	26	
2-Butanone (MEK)	101.4	10.0	ug/L	100		101	52-159	3.20	27	
Bromochloromethane	50.85	1.0	ug/L	50.4		101	69-143	0.0393	23	
Chloroform	46.71	1.0	ug/L	50.1		93.3	69-144	1.99	23	
1,1,1-Trichloroethane	50.52	1.0	ug/L	50.1		101	62-129	0.710	24	
Carbon Tetrachloride	56.02	1.0	ug/L	50.1		112	63-141	2.29	25	
Benzene	48.55	1.0	ug/L	50.4		96.3	71-134	1.35	24	
1,2-Dichloroethane	50.28	1.0	ug/L	50.1		100	72-132	2.24	24	
Trichloroethylene	53.80	1.0	ug/L	50.1		107	71-135	0.971	24	
1,2-Dichloropropane	48.74	1.0	ug/L	50.1		97.3	69-136	1.81	24	
Dibromomethane	42.24	1.0	ug/L	50.4		83.9	73-147	4.47	25	
Bromodichloromethane	49.49	1.0	ug/L	50.1		98.8	68-129	1.40	22	
cis-1,3-Dichloropropene	42.21	1.0	ug/L	50.1		84.3	65-134	2.18	23	
4-Methyl-2-pentanone (MIBK)	104.9	5.0	ug/L	100		105	58-147	0.694	27	
Toluene	48.33	1.0	ug/L	50.5		95.8	72-133	1.17	24	
trans-1,3-Dichloropropene	47.33	1.0	ug/L	50.1		94.5	67-130	1.20	24	

CERTIFICATE OF ANALYSIS

1IJ1228

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ0840 - EPA 5030B - EPA 8260D										
LCS Dup (1IJ0840-BSD1)			Prepared: 10/14/25 00:00 Analyzed: 10/14/25 09:43							
1,1,2-Trichloroethane	49.86	1.0	ug/L	50.1		99.5	69-135	2.16	23	
Tetrachloroethylene	52.42	1.0	ug/L	50.1		105	69-130	1.11	25	
2-Hexanone (MBK)	102.9	5.0	ug/L	100		103	55-144	0.0971	25	
Dibromochloromethane	43.71	1.0	ug/L	50.1		87.3	73-127	1.72	22	
1,2-Dibromoethane	48.89	1.0	ug/L	50.2		97.3	67-132	2.12	24	
Chlorobenzene	47.60	1.0	ug/L	50.1		95.0	72-123	1.15	23	
1,1,1,2-Tetrachloroethane	46.48	1.0	ug/L	50.3		92.3	73-127	0.344	24	
Ethylbenzene	48.21	1.0	ug/L	50.2		96.1	71-127	0.476	26	
Xylenes, total	146.1	2.0	ug/L	151		96.7	74-127	1.16	25	
Styrene	46.90	1.0	ug/L	50.4		93.1	66-126	1.10	23	
Bromoform	47.76	1.0	ug/L	50.1		95.3	68-130	2.48	23	
1,2,3-Trichloropropane	48.94	1.0	ug/L	50.3		97.2	63-136	1.78	24	
trans-1,4-Dichloro-2-butene	86.54	5.0	ug/L	100		86.5	54-134	1.88	27	
1,1,2,2-Tetrachloroethane	46.17	1.0	ug/L	50.1		92.2	61-131	1.62	29	
1,4-Dichlorobenzene	49.68	1.0	ug/L	50.1		99.1	70-129	0.383	24	
1,2-Dichlorobenzene	48.25	1.0	ug/L	50.1		96.3	69-126	0.187	26	
1,2-Dibromo-3-chloropropane	48.56	5.0	ug/L	50.1		96.9	50-143	2.12	30	
Surrogate: Dibromofluoromethane	*48.1*		ug/L	*50.2*		*95.9*	*57-128*			
Surrogate: Dibromofluoromethane	*48.1*		ug/L	*50.2*		*95.9*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*48.5*		ug/L	*50.4*		*96.3*	*49-135*			
Surrogate: 1,2-Dichloroethane-d4	*48.5*		ug/L	*50.4*		*96.3*	*61-142*			
Surrogate: Toluene-d8	*48.5*		ug/L	*50.5*		*96.1*	*82-116*			
Surrogate: Toluene-d8	*48.5*		ug/L	*50.5*		*96.1*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*53.7*		ug/L	*50.2*		*107*	*77-114*			
Surrogate: 4-Bromofluorobenzene	*53.7*		ug/L	*50.2*		*107*	*80-116*			
Matrix Spike (1IJ0840-MS1)	**Source: 1IJ1227-01**		Prepared: 10/14/25 00:00 Analyzed: 10/14/25 15:26							
Dichlorodifluoromethane	333.9	10.0	ug/L	303	ND	110	58-130			
Chloromethane	293.1	10.0	ug/L	303	ND	96.7	61-152			
Vinyl Chloride	284.5	10.0	ug/L	302	ND	94.1	66-149			
Bromomethane	228.4	10.0	ug/L	301	ND	75.8	43-171			
Chloroethane	264.1	10.0	ug/L	303	ND	87.1	69-148			
Trichlorofluoromethane	333.1	10.0	ug/L	303	ND	110	62-163			
1,1-Dichloroethylene	571.4	10.0	ug/L	501	ND	114	70-148			
Acetone	1223	100	ug/L	1000	ND	122	45-173			
Methyl Iodide	1079	10.0	ug/L	1000	ND	108	62-167			
Carbon Disulfide	1008	10.0	ug/L	1000	ND	101	71-163			
Methylene Chloride	487.5	50.0	ug/L	501	ND	97.3	69-140			
Acrylonitrile	579.2	50.0	ug/L	504	ND	115	32-159			
trans-1,2-Dichloroethylene	553.2	10.0	ug/L	501	ND	110	69-144			
1,1-Dichloroethane	525.3	10.0	ug/L	501	ND	105	70-138			
Vinyl Acetate	507.0	50.0	ug/L	1420	ND	35.6	58-142			M2
cis-1,2-Dichloroethylene	509.5	10.0	ug/L	504	ND	101	68-151			
2-Butanone (MEK)	1126	100	ug/L	1000	ND	113	50-160			

CERTIFICATE OF ANALYSIS

1IJ1228

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ0840 - EPA 5030B - EPA 8260D										
Matrix Spike (1IJ0840-MS1)	**Source: 1IJ1227-01**	Prepared: 10/14/25 00:00 Analyzed: 10/14/25 15:26								
Bromochloromethane	520.2	10.0	ug/L	504	ND	103	65-143			
Chloroform	501.0	10.0	ug/L	501	ND	100	71-143			
1,1,1-Trichloroethane	535.3	10.0	ug/L	501	ND	107	63-133			
Carbon Tetrachloride	562.8	10.0	ug/L	501	ND	112	63-142			
Benzene	529.4	10.0	ug/L	504	ND	105	69-133			
1,2-Dichloroethane	540.2	10.0	ug/L	501	ND	108	63-138			
Trichloroethylene	569.8	10.0	ug/L	501	ND	114	71-133			
1,2-Dichloropropane	518.7	10.0	ug/L	501	ND	104	69-132			
Dibromomethane	459.8	10.0	ug/L	504	ND	91.3	70-147			
Bromodichloromethane	529.1	10.0	ug/L	501	ND	106	67-130			
cis-1,3-Dichloropropene	444.4	10.0	ug/L	501	ND	88.7	61-126			
4-Methyl-2-pentanone (MIBK)	1141	50.0	ug/L	1000	ND	114	55-147			
Toluene	527.7	10.0	ug/L	505	ND	105	71-133			
trans-1,3-Dichloropropene	489.0	10.0	ug/L	501	ND	97.7	63-124			
1,1,2-Trichloroethane	540.6	10.0	ug/L	501	ND	108	69-133			
Tetrachloroethylene	551.9	10.0	ug/L	501	ND	110	70-124			
2-Hexanone (MBK)	1146	50.0	ug/L	1000	ND	115	53-141			
Dibromochloromethane	452.8	10.0	ug/L	501	ND	90.4	74-122			
1,2-Dibromoethane	518.2	10.0	ug/L	502	ND	103	66-127			
Chlorobenzene	510.7	10.0	ug/L	501	ND	102	76-116			
1,1,1,2-Tetrachloroethane	488.6	10.0	ug/L	503	ND	97.1	77-121			
Ethylbenzene	516.0	10.0	ug/L	502	ND	103	73-124			
Xylenes, total	1554	20.0	ug/L	1510	ND	103	75-123			
Styrene	502.9	10.0	ug/L	504	ND	99.8	70-120			
Bromoform	494.1	10.0	ug/L	501	ND	98.6	70-124			
1,2,3-Trichloropropane	506.3	10.0	ug/L	503	ND	101	62-135			
trans-1,4-Dichloro-2-butene	907.6	50.0	ug/L	1000	ND	90.8	50-120			
1,1,2,2-Tetrachloroethane	493.7	10.0	ug/L	501	ND	98.5	63-126			
1,4-Dichlorobenzene	520.1	10.0	ug/L	501	ND	104	72-119			
1,2-Dichlorobenzene	506.4	10.0	ug/L	501	ND	101	71-117			
1,2-Dibromo-3-chloropropane	497.0	50.0	ug/L	501	ND	99.1	49-134			
Surrogate: Dibromofluoromethane	*475*		ug/L	*502*		*94.6*	*57-128*			
Surrogate: Dibromofluoromethane	*475*		ug/L	*502*		*94.6*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*490*		ug/L	*504*		*97.2*	*49-135*			
Surrogate: 1,2-Dichloroethane-d4	*490*		ug/L	*504*		*97.2*	*61-142*			
Surrogate: Toluene-d8	*491*		ug/L	*505*		*97.3*	*82-116*			
Surrogate: Toluene-d8	*491*		ug/L	*505*		*97.3*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*543*		ug/L	*502*		*108*	*77-114*			
Surrogate: 4-Bromofluorobenzene	*543*		ug/L	*502*		*108*	*80-116*			
Matrix Spike Dup (1IJ0840-MSD1)	**Source: 1IJ1227-01**	Prepared: 10/14/25 00:00 Analyzed: 10/14/25 15:49								
Dichlorodifluoromethane	335.6	10.0	ug/L	303	ND	111	58-130	0.508	30	
Chloromethane	287.8	10.0	ug/L	303	ND	94.9	61-152	1.82	26	
Vinyl Chloride	280.0	10.0	ug/L	302	ND	92.6	66-149	1.59	23	

CERTIFICATE OF ANALYSIS

1IJ1228

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ0840 - EPA 5030B - EPA 8260D										
Matrix Spike Dup (1IJ0840-MSD1)	**Source: 1IJ1227-01**	Prepared: 10/14/25 00:00 Analyzed: 10/14/25 15:49								
Bromomethane	231.5	10.0	ug/L	301	ND	76.9	43-171	1.35	29	
Chloroethane	259.2	10.0	ug/L	303	ND	85.5	69-148	1.87	25	
Trichlorofluoromethane	327.9	10.0	ug/L	303	ND	108	62-163	1.57	25	
1,1-Dichloroethylene	559.1	10.0	ug/L	501	ND	112	70-148	2.18	22	
Acetone	1215	100	ug/L	1000	ND	121	45-173	0.640	30	
Methyl Iodide	1124	10.0	ug/L	1000	ND	112	62-167	4.06	24	
Carbon Disulfide	1018	10.0	ug/L	1000	ND	102	71-163	0.987	22	
Methylene Chloride	481.6	50.0	ug/L	501	ND	96.1	69-140	1.22	19	
Acrylonitrile	589.4	50.0	ug/L	504	ND	117	32-159	1.75	30	
trans-1,2-Dichloroethylene	543.0	10.0	ug/L	501	ND	108	69-144	1.86	22	
1,1-Dichloroethane	511.4	10.0	ug/L	501	ND	102	70-138	2.68	20	
Vinyl Acetate	534.9	50.0	ug/L	1420	ND	37.5	58-142	5.36	24	M2
cis-1,2-Dichloroethylene	504.2	10.0	ug/L	504	ND	100	68-151	1.05	22	
2-Butanone (MEK)	1122	100	ug/L	1000	ND	112	50-160	0.338	23	
Bromochloromethane	521.4	10.0	ug/L	504	ND	103	65-143	0.230	22	
Chloroform	484.8	10.0	ug/L	501	ND	96.8	71-143	3.29	21	
1,1,1-Trichloroethane	514.3	10.0	ug/L	501	ND	103	63-133	4.00	23	
Carbon Tetrachloride	564.8	10.0	ug/L	501	ND	113	63-142	0.355	22	
Benzene	515.7	10.0	ug/L	504	ND	102	69-133	2.62	18	
1,2-Dichloroethane	545.1	10.0	ug/L	501	ND	109	63-138	0.903	20	
Trichloroethylene	562.5	10.0	ug/L	501	ND	112	71-133	1.29	23	
1,2-Dichloropropane	509.9	10.0	ug/L	501	ND	102	69-132	1.71	20	
Dibromomethane	455.7	10.0	ug/L	504	ND	90.5	70-147	0.896	22	
Bromodichloromethane	522.1	10.0	ug/L	501	ND	104	67-130	1.33	21	
cis-1,3-Dichloropropene	438.8	10.0	ug/L	501	ND	87.6	61-126	1.27	21	
4-Methyl-2-pentanone (MIBK)	1108	50.0	ug/L	1000	ND	111	55-147	2.97	23	
Toluene	516.6	10.0	ug/L	505	ND	102	71-133	2.13	19	
trans-1,3-Dichloropropene	489.5	10.0	ug/L	501	ND	97.8	63-124	0.102	21	
1,1,2-Trichloroethane	534.6	10.0	ug/L	501	ND	107	69-133	1.12	19	
Tetrachloroethylene	542.8	10.0	ug/L	501	ND	108	70-124	1.66	24	
2-Hexanone (MBK)	1096	50.0	ug/L	1000	ND	110	53-141	4.51	24	
Dibromochloromethane	456.8	10.0	ug/L	501	ND	91.2	74-122	0.880	21	
1,2-Dibromoethane	514.9	10.0	ug/L	502	ND	103	66-127	0.639	23	
Chlorobenzene	506.0	10.0	ug/L	501	ND	101	76-116	0.925	21	
1,1,1,2-Tetrachloroethane	484.6	10.0	ug/L	503	ND	96.3	77-121	0.822	25	
Ethylbenzene	505.2	10.0	ug/L	502	ND	101	73-124	2.12	20	
Xylenes, total	1552	20.0	ug/L	1510	ND	103	75-123	0.0901	20	
Styrene	498.9	10.0	ug/L	504	ND	99.0	70-120	0.799	23	
Bromoform	503.0	10.0	ug/L	501	ND	100	70-124	1.79	22	
1,2,3-Trichloropropane	511.6	10.0	ug/L	503	ND	102	62-135	1.04	28	
trans-1,4-Dichloro-2-butene	918.8	50.0	ug/L	1000	ND	91.9	50-120	1.23	26	
1,1,2,2-Tetrachloroethane	484.5	10.0	ug/L	501	ND	96.7	63-126	1.88	24	
1,4-Dichlorobenzene	514.2	10.0	ug/L	501	ND	103	72-119	1.14	24	

CERTIFICATE OF ANALYSIS

1IJ1228

Determination of Volatile Organic Compounds	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ0840 - EPA 5030B - EPA 8260D										
Matrix Spike Dup (1IJ0840-MSD1)	**Source: 1IJ1227-01**	Prepared: 10/14/25 00:00 Analyzed: 10/14/25 15:49								
1,2-Dichlorobenzene	502.6	10.0	ug/L	501	ND	100	71-117	0.753	24	
1,2-Dibromo-3-chloropropane	476.4	50.0	ug/L	501	ND	95.0	49-134	4.23	28	
Surrogate: Dibromofluoromethane	*464*		ug/L	*502*		*92.5*	*57-128*			
Surrogate: Dibromofluoromethane	*464*		ug/L	*502*		*92.5*	*75-136*			
Surrogate: 1,2-Dichloroethane-d4	*483*		ug/L	*504*		*95.9*	*49-135*			
Surrogate: 1,2-Dichloroethane-d4	*483*		ug/L	*504*		*95.9*	*61-142*			
Surrogate: Toluene-d8	*483*		ug/L	*505*		*95.7*	*82-116*			
Surrogate: Toluene-d8	*483*		ug/L	*505*		*95.7*	*82-121*			
Surrogate: 4-Bromofluorobenzene	*544*		ug/L	*502*		*108*	*77-114*			
Surrogate: 4-Bromofluorobenzene	*544*		ug/L	*502*		*108*	*80-116*			

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ0809 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Blank (1IJ0809-BLK1)	Prepared: 10/14/25 13:29 Analyzed: 10/15/25 17:28									
Antimony, total	<0.0010	0.0010	mg/L							
Arsenic, total	<0.0020	0.0020	mg/L							
Barium, total	<0.0010	0.0010	mg/L							
Beryllium, total	<0.0005	0.0005	mg/L							
Cadmium, total	<0.0002	0.0002	mg/L							
Chromium, total	<0.0010	0.0010	mg/L							
Cobalt, total	<0.0005	0.0005	mg/L							
Copper, total	<0.0050	0.0050	mg/L							
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 (1IJ0809-BS1)	Prepared: 10/14/25 13:29 Analyzed: 10/15/25 17:31									
Antimony, total	0.0982	0.0040	mg/L	0.100		98.2	80-120			
Arsenic, total	0.0949	0.0080	mg/L	0.100		94.9	80-120			
Barium, total	0.0998	0.0040	mg/L	0.100		99.8	80-120			
Beryllium, total	0.0949	0.0020	mg/L	0.100		94.9	80-120			
Cadmium, total	0.0947	0.0008	mg/L	0.100		94.7	80-120			
Chromium, total	0.0933	0.0040	mg/L	0.100		93.3	80-120			
Cobalt, total	0.0948	0.0020	mg/L	0.100		94.8	80-120			
Copper, total	0.0956	0.0200	mg/L	0.100		95.6	80-120			
Lead, total	0.0934	0.0040	mg/L	0.100		93.4	80-120			
Nickel, total	0.0942	0.0200	mg/L	0.100		94.2	80-120			
Selenium, total	0.0980	0.0080	mg/L	0.100		98.0	80-120			

CERTIFICATE OF ANALYSIS

1IJ1228

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ0809 - EPA 3005A Total Recoverable Metals - EPA 6020A										
LCS (1IJ0809-BS1)				Prepared: 10/14/25 13:29 Analyzed: 10/15/25 17:31						
Silver, total	0.0963	0.0200	mg/L	0.100		96.3	80-120			
Thallium, total	0.0931	0.0020	mg/L	0.100		93.1	80-120			
Vanadium, total	0.0927	0.0080	mg/L	0.100		92.7	80-120			
Zinc, total	0.0957	0.0200	mg/L	0.100		95.7	80-120			
Matrix Spike (1IJ0809-MS1)		**Source: 1IJ1227-01**		Prepared: 10/14/25 13:29 Analyzed: 10/15/25 17:36						
Antimony, total	0.0973	0.0040	mg/L	0.100	ND	97.3	75-125			
Arsenic, total	0.0930	0.0080	mg/L	0.100	ND	93.0	75-125			
Barium, total	0.305	0.0040	mg/L	0.100	0.217	87.7	75-125			
Beryllium, total	0.0975	0.0020	mg/L	0.100	ND	97.5	75-125			
Cadmium, total	0.0931	0.0008	mg/L	0.100	ND	93.1	75-125			
Chromium, total	0.0952	0.0040	mg/L	0.100	ND	95.2	75-125			
Cobalt, total	0.0951	0.0020	mg/L	0.100	0.0003	94.8	75-125			
Copper, total	0.0964	0.0200	mg/L	0.100	ND	96.4	75-125			
Lead, total	0.0943	0.0040	mg/L	0.100	0.0006	94.3	75-125			
Nickel, total	0.0943	0.0200	mg/L	0.100	0.0024	91.9	75-125			
Selenium, total	0.0967	0.0080	mg/L	0.100	ND	96.7	75-125			
Silver, total	0.0955	0.0200	mg/L	0.100	ND	95.5	75-125			
Thallium, total	0.0931	0.0020	mg/L	0.100	ND	93.1	75-125			
Vanadium, total	0.0942	0.0080	mg/L	0.100	ND	94.2	75-125			
Zinc, total	0.100	0.0200	mg/L	0.100	ND	100	75-125			
Matrix Spike Dup (1IJ0809-MSD1)		**Source: 1IJ1227-01**		Prepared: 10/14/25 13:29 Analyzed: 10/15/25 17:44						
Antimony, total	0.0987	0.0040	mg/L	0.100	ND	98.7	75-125	1.46	20	
Arsenic, total	0.0979	0.0080	mg/L	0.100	ND	97.9	75-125	5.05	20	
Barium, total	0.318	0.0040	mg/L	0.100	0.217	101	75-125	4.35	20	
Beryllium, total	0.0977	0.0020	mg/L	0.100	ND	97.7	75-125	0.279	20	
Cadmium, total	0.0957	0.0008	mg/L	0.100	ND	95.7	75-125	2.75	20	
Chromium, total	0.0962	0.0040	mg/L	0.100	ND	96.2	75-125	1.07	20	
Cobalt, total	0.0963	0.0020	mg/L	0.100	0.0003	95.9	75-125	1.20	20	
Copper, total	0.101	0.0200	mg/L	0.100	ND	101	75-125	4.46	20	
Lead, total	0.0983	0.0040	mg/L	0.100	0.0006	98.3	75-125	4.12	20	
Nickel, total	0.0984	0.0200	mg/L	0.100	0.0024	96.0	75-125	4.22	20	
Selenium, total	0.0999	0.0080	mg/L	0.100	ND	99.9	75-125	3.27	20	
Silver, total	0.0982	0.0200	mg/L	0.100	ND	98.2	75-125	2.83	20	
Thallium, total	0.0977	0.0020	mg/L	0.100	ND	97.7	75-125	4.82	20	
Vanadium, total	0.0956	0.0080	mg/L	0.100	ND	95.6	75-125	1.54	20	
Zinc, total	0.106	0.0200	mg/L	0.100	ND	106	75-125	5.36	20	
Post Spike (1IJ0809-PS1)		**Source: 1IJ1227-01**		Prepared: 10/14/25 13:29 Analyzed: 10/15/25 17:46						
Antimony, total	0.0216		mg/L	0.0200	0.0010	103	80-120			
Arsenic, total	0.0206		mg/L	0.0200	0.0004	101	80-120			
Barium, total	0.226		mg/L	0.0200	0.217	47.4	80-120			M2
Beryllium, total	0.0204		mg/L	0.0200	0.00002	102	80-120			
Cadmium, total	0.0195		mg/L	0.0200	0.0002	96.6	80-120			
Chromium, total	0.0209		mg/L	0.0200	0.0015	96.8	80-120			

CERTIFICATE OF ANALYSIS

1IJ1228

Determination of Total Metals	Result	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1IJ0809 - EPA 3005A Total Recoverable Metals - EPA 6020A										
Post Spike (1IJ0809-PS1)		**Source: 1IJ1227-01**	Prepared: 10/14/25 13:29 Analyzed: 10/15/25 17:46							
Cobalt, total	0.0192		mg/L	0.0200	0.0003	94.2	80-120			
Copper, total	0.0228		mg/L	0.0200	0.0036	96.0	80-120			
Lead, total	0.0204		mg/L	0.0200	0.0006	98.9	80-120			
Nickel, total	0.0214		mg/L	0.0200	0.0024	94.8	80-120			
Selenium, total	0.0202		mg/L	0.0200	-0.0002	101	80-120			
Silver, total	0.0202		mg/L	0.0200	0.0003	99.4	80-120			
Thallium, total	0.0202		mg/L	0.0200	0.00004	101	80-120			
Vanadium, total	0.0205		mg/L	0.0200	0.0010	97.7	80-120			
Zinc, total	0.0260		mg/L	0.0200	0.0064	98.2	80-120			

Definitions

M2: Matrix spike recovery is below acceptance limits.
RL: Reporting Limit
RPD: Relative Percent Difference

Cooler Receipt Log

Cooler ID: Default Cooler Temp: 8.2°C

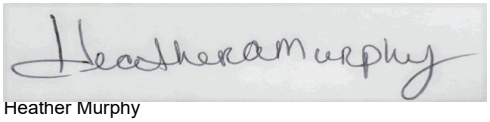
Cooler Inspection Checklist

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
10/17/25 16:54

CHAIN OF CUSTODY RECORD

MICROBAC®
600 East 17th Street South
Newton, IA 50208
Phone: 641-792-8451

SITE INFORMATION

Sampler: JGH

Project: Ida Co. - New Regs
Appendix 1

REPORT TO

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

INVOICE TO

Kristy Gilbert
Ida County Court House
401 Moorehead
Ida Grove, IA 51445

SPECIAL INSTRUCTIONS

None

Turn Around Time
☒ Standard ☐ RUSH, need by ___/___/___

LAB USE ONLY

1 I J 1 2 2 8
HLW Engineering
PM: Heather Murphy

Temperature: 8.2 oC ice

Number	Sample Identification / Client ID	Matrix	Sample Type	Date	Time	# Containers	Analyses	Lab Sample Number
01-001	**MW-3**	Aqueous	GRAB	10/10/25	13:11	7	lndfll-app1-metals-6020ndfill-app1-voc-group	01
02-001	**MW-7**	Aqueous	GRAB	10/10/25	14:18	7	lndfll-app1-metals-6020ndfill-app1-voc-group 8260@dcdfm	02
03-001	**MW-10**	Aqueous	GRAB	10/10/25	13:59	7	lndfll-app1-metals-6020ndfill-app1-voc-group	03
04-001	**PZ-11**	Aqueous	GRAB	10/10/25	13:46	7	lndfll-app1-metals-6020ndfill-app1-voc-group	04
05-001	**MW-13**	Aqueous	GRAB	10/10/25	13:34	7	lndfll-app1-metals-6020ndfill-app1-voc-group	05
06-001	**Duplicate**	Aqueous	GRAB	10/10/25	13:34	7	lndfll-app1-metals-6020ndfill-app1-voc-group	06

JGH 10/13/25
Relinquished By Date/Time

Received By Date/Time

Relinquished By Date/Time

Received for Lab By 10/13/25 10:56 Date/Time

Remarks:

APPENDIX D

Statistical Reports – Spring & Fall

STATISTICAL ANALYSIS

FOR THE

IDA COUNTY SANITARY LANDFILL

First Semi-Annual Monitoring Event in 2025

Prepared for:
Ida County Sanitary Landfill
Ida County, IA

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

June 2025

INTRODUCTION

This report summarizes the statistical analysis plan for evaluating the groundwater quality data at the Ida County Sanitary Landfill in Ida County, Iowa. The plan is designed to detect a release from the facility at the earliest indication so that it is protective of human health and the environment. Both interwell and intrawell methodologies are described and then applied to the Ida County Landfill data. Based on the data available, the most appropriate methodology will be implemented for comparing future ground water 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 Ida County Sanitary Landfill includes upgradient well MW-3 and downgradient detection sample points MW-10, MW-13, MW-7, and PZ-11. Each of the groundwater monitoring wells is to be sampled at least semiannually and analyzed for the detection monitoring parameters listed in 113.10(5), which includes 15 inorganic constituents and 47 organic compounds, summarized in Table 1 below.

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

Organic Compounds:

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

Inorganic constituents:

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

The 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. Both of these methods will be applied to the Ida County Landfill data using the DUMPStat® statistical program (version 3.1 or higher). DUMPStat® (Discerning Systems, Inc., Burnaby, BC) is a program for the statistical analysis of groundwater monitoring data using methods described in "Statistical Methods for Groundwater Monitoring" by Dr. Robert D. Gibbons. The DUMPStat program is completely consistent with all USEPA regulations and guidance and the ASTM D6312-98 guidance.

Ground water statistics are to be done on the inorganic constituents listed. The organic constituents are compared to maximum contaminant levels (MCLs) or practical quantitation limits (PQLs), in lieu of statistical comparisons to historical concentrations.

Interwell Statistics: Upgradient versus Downgradient Comparisons

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

Results of the Interwell Statistics

The background data used in this statistical analysis includes the ground water data collected from ground water well MW-3 during the period from March 2010 through the present data. A summary of the background data from monitoring well MW-3, 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-10, MW-13, MW-7, and PZ-11 compared to the site prediction limits. Prediction limit exceedances are flagged with asterisks. For the most current data, the site prediction limit exceedances detected are summarized in the table below.

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

Well	Trace Metal	Result, µg/L	Prediction Limit, µg/L	Prediction Limit Type	Verified/ Awaiting Verification
MW-7	Nickel	29.3	15.6000	Nonparametric	Verified

The detection frequencies of the parameters in the up and down gradient monitoring wells are summarized in Table 3. Barium is detected at a frequency greater than or equal to 50% in the upgradient well so only this metal will be tested for normality. The remainder of the metals are rarely detected (less than 50%) in the upgradient well so nonparametric prediction limits were used in those cases.

Table 4 summarizes the results of the Shapiro-Wilk test. Table 5 is a summary of the statistics and prediction limits determined for the metals. Time series graphs of each of the parameters at each well with the corresponding prediction limits are attached.

A statistical power curve indicates the expected false assessments for the site as a whole. The false positive rate for interwell analyses is the percentage of failures when the upgradient versus downgradient true mean difference equals zero. False negative rate indicates the chance of missing contamination at a single well for a single constituent. The statistical power is a function of the number of wells included, the number of constituents compared, the detection frequencies, and the data distributions involved. For interwell analysis, the site-wide false positive rate is 2% and the test becomes sensitive to 4 standard deviation unit increases over background.

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

The calculated 95% LCLs for the verified trace metals are all below the respective ground water standards.

Intrawell statistics

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

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

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

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

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

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

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

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

Results of the Intrawell Statistics

The Appendix I trace metals data from wells MW-10, MW-13, MW-3, MW-7, and PZ-11 were evaluated using the combined Shewhart-CUSUM control chart method. The previous background included the groundwater data obtained from March 2010 through 2020. As ground water monitoring at a municipal solid waste facility proceeds, it is recommended to update background data sets periodically with valid detection monitoring results that are representative of background groundwater quality not affected by leakage from a monitored unit. Failure to update background will exclude factors such as natural temporal variation, changes in field or laboratory methodologies, and changes in the water table due to meteorological conditions or other influences. Since there have been no exceedances attributed to the landfill, the background was updated to include data obtained from March 2010 through April 2023.

A summary of the intrawell statistics is included in Attachment D, Table 1 "Summary Statistics and Intermediate Computations for Combined Shewhart-CUSUM Control Charts." The control charts or time series graphs follow the summary table. For the parameters evaluated, the statistical limit exceedances identified are summarized in the table below.

Control Limit Exceedances During the First Semi-Annual Monitoring Event in 2025

Sample Point	Trace Metal	Result	CUSUM Value	Control Limit	Control Limit Type	Verified/ Awaiting Verification
MW-10	Nickel	9.6	15.2031	14.5215	Normal	Awaiting Verification

An increasing trend was detected in the background data for nickel at MW-7.

A control chart factor was selected to provide a balance of the site-wide false positive and false negative rates. A statistical power curve indicates the expected false assessments for the site as a whole. Given an accepted resample verification plan of "pass one of one" resamples, the number of statistical comparisons, and the number of background data points, the optimal factor h = SCL = 6.5 for $N \leq 12$ and $N > 12$. Using this factor for intrawell analysis, the site-wide false positive rate is 5% and the test becomes sensitive to 3 standard deviation units over background.

Volatile Organic Compounds

Volatile Organic Compounds (VOCs) are generally man-made compounds not present in ambient ground water. If VOCs are detected above their statistical limit (i.e., the laboratory PQL or reporting limit), a verification resample will be conducted at the next scheduled sampling event. A statistical exceedance will be indicated if the VOC detection is confirmed by the subsequent monitoring. VOCs detected in the ground water at Ida County Landfill during the first semi-annual monitoring event in 2025 are summarized below.

VOCs Detected during the First Semi-Annual Monitoring Event in 2025

Sample Point	VOC	Result	Reporting Limit	Verified/Awaiting Verification	GWPS
PZ-11	1,1-Dichloroethane	1.6	1	Verified	140[b]

a - USEPA MCL
b – Iowa Statewide Standard

Historical VOC detections are summarized in Attachment E. The verified VOC detections were evaluated against the ground water protection standards (GWPS) using confidence limits. The 95% LCL for each of these VOCs is below the respective USEPA MCL or Iowa Statewide Standard.

Attachment A

Summary of Ground Water Data – First Semi-Annual Monitoring Event in 2025

Table 1

Analytical Data Summary for 4/1/2025

Constituents	Units	MW-10	MW-13	MW-3	MW-7	PZ-11
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1.0	<1.0	<1.0	<1.0	1.6
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<5	<5	<5	<5	<5
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1
2-butanone (mek)	ug/L	<10	<10	<10	<10	<10
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5
Acetone	ug/L	<10	<10	<10	<10	<10
Acrylonitrile	ug/L	<5	<5	<5	<5	<5
Antimony, total	ug/L	<1	<1	<1	<1	<1
Arsenic, total	ug/L	<2	<2	<2	<2	<2
Barium, total	ug/L	144.0	66.9	341.0	189.0	88.0
Benzene	ug/L	<1	<1	<1	<1	<1
Beryllium, total	ug/L	<.5	<.5	<.5	<.5	<.5
Bromochloromethane	ug/L	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1
Cadmium, total	ug/L	.3	.2	.3	.4	<.2
Carbon disulfide	ug/L	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<1	<1	<1	<1	<1
Chloroethane	ug/L	<1	<1	<1	<1	<1
Chloroform	ug/L	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1
Chromium, total	ug/L	2.0	3.0	1.1	1.5	1.3
Cis-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1
Cobalt, total	ug/L	<.5	<.5	.5	2.4	<.5
Copper, total	ug/L	<5	<5	<5	<5	<5
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L				<1	
Ethylbenzene	ug/L	<1	<1	<1	<1	<1
Lead, total	ug/L	<1	<1	<1	<1	<1
Methyl iodide	ug/L	<1	<1	<1	<1	<1
Methylene chloride	ug/L	<5	<5	<5	<5	<5
Nickel, total	ug/L	9.6	<5.0	<5.0	29.3	6.2
Selenium, total	ug/L	<2	<2	<2	<2	<2
Silver, total	ug/L	<5	<5	<5	<5	<5
Styrene	ug/L	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1
Thallium, total	ug/L	<.5	<.5	<.5	<.5	<.5
Toluene	ug/L	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<2	<2	<2	<2	<2
Vinyl acetate	ug/L	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2
Zinc, total	ug/L	<5	<5	5	<5	<5

* - 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-3	03/31/2010	ND	2.0000		
Antimony, total	ug/L	MW-3	09/16/2010	ND	2.0000		
Antimony, total	ug/L	MW-3	04/11/2011	ND	2.0000		
Antimony, total	ug/L	MW-3	09/26/2011	ND	2.0000		
Antimony, total	ug/L	MW-3	04/01/2012	ND	2.0000		
Antimony, total	ug/L	MW-3	08/23/2012	ND	2.0000		
Antimony, total	ug/L	MW-3	04/13/2013	ND	2.0000		
Antimony, total	ug/L	MW-3	09/14/2013	ND	2.0000		
Antimony, total	ug/L	MW-3	04/11/2014	ND	2.0000		
Antimony, total	ug/L	MW-3	09/27/2014	ND	2.0000		
Antimony, total	ug/L	MW-3	03/16/2015	ND	2.0000		
Antimony, total	ug/L	MW-3	09/28/2015	ND	2.0000		
Antimony, total	ug/L	MW-3	03/14/2016	ND	2.0000		
Antimony, total	ug/L	MW-3	09/03/2016	ND	2.0000		
Antimony, total	ug/L	MW-3	04/10/2017	ND	2.0000		
Antimony, total	ug/L	MW-3	09/01/2017	ND	2.0000		
Antimony, total	ug/L	MW-3	04/23/2018	ND	2.0000		
Antimony, total	ug/L	MW-3	09/14/2018	ND	2.0000		
Antimony, total	ug/L	MW-3	04/15/2019	ND	2.0000		
Antimony, total	ug/L	MW-3	09/17/2019	ND	2.0000		
Antimony, total	ug/L	MW-3	04/08/2020	ND	2.0000		
Antimony, total	ug/L	MW-3	10/02/2020	ND	2.0000		
Antimony, total	ug/L	MW-3	04/12/2021	ND	2.0000		
Antimony, total	ug/L	MW-3	10/26/2021	ND	2.0000		
Antimony, total	ug/L	MW-3	04/04/2022	ND	2.0000		
Antimony, total	ug/L	MW-3	10/07/2022	ND	2.0000		
Antimony, total	ug/L	MW-3	04/19/2023	ND	2.0000		
Antimony, total	ug/L	MW-3	10/25/2023	ND	2.0000		
Antimony, total	ug/L	MW-3	04/17/2024	ND	2.0000		
Antimony, total	ug/L	MW-3	10/17/2024	ND	2.0000		
Antimony, total	ug/L	MW-3	04/01/2025	ND	1.0000	2.0000	**
Arsenic, total	ug/L	MW-3	03/31/2010	ND	4.0000		
Arsenic, total	ug/L	MW-3	09/16/2010	ND	4.0000		
Arsenic, total	ug/L	MW-3	04/11/2011	ND	4.0000		
Arsenic, total	ug/L	MW-3	09/26/2011	ND	4.0000		
Arsenic, total	ug/L	MW-3	04/01/2012	ND	4.0000		
Arsenic, total	ug/L	MW-3	08/23/2012		4.1000		
Arsenic, total	ug/L	MW-3	04/13/2013	ND	4.0000		
Arsenic, total	ug/L	MW-3	09/14/2013	ND	4.0000		
Arsenic, total	ug/L	MW-3	04/11/2014	ND	4.0000		
Arsenic, total	ug/L	MW-3	09/27/2014	ND	4.0000		
Arsenic, total	ug/L	MW-3	03/16/2015	ND	4.0000		
Arsenic, total	ug/L	MW-3	09/28/2015	ND	4.0000		
Arsenic, total	ug/L	MW-3	03/14/2016	ND	4.0000		
Arsenic, total	ug/L	MW-3	09/03/2016	ND	4.0000		
Arsenic, total	ug/L	MW-3	04/10/2017	ND	4.0000		
Arsenic, total	ug/L	MW-3	09/01/2017	ND	4.0000		
Arsenic, total	ug/L	MW-3	04/23/2018	ND	4.0000		
Arsenic, total	ug/L	MW-3	09/14/2018	ND	4.0000		
Arsenic, total	ug/L	MW-3	04/15/2019	ND	4.0000		
Arsenic, total	ug/L	MW-3	09/17/2019	ND	4.0000		
Arsenic, total	ug/L	MW-3	04/08/2020	ND	4.0000		
Arsenic, total	ug/L	MW-3	10/02/2020	ND	4.0000		
Arsenic, total	ug/L	MW-3	04/12/2021	ND	4.0000		
Arsenic, total	ug/L	MW-3	10/26/2021	ND	4.0000		
Arsenic, total	ug/L	MW-3	04/04/2022	ND	4.0000		
Arsenic, total	ug/L	MW-3	10/07/2022	ND	4.0000		
Arsenic, total	ug/L	MW-3	04/19/2023	ND	4.0000		
Arsenic, total	ug/L	MW-3	10/25/2023	ND	4.0000		
Arsenic, total	ug/L	MW-3	04/17/2024	ND	4.0000		
Arsenic, total	ug/L	MW-3	10/17/2024	ND	4.0000		
Arsenic, total	ug/L	MW-3	04/01/2025	ND	2.0000	4.0000	**
Barium, total	ug/L	MW-3	03/31/2010		459.0000		
Barium, total	ug/L	MW-3	09/16/2010		414.0000		
Barium, total	ug/L	MW-3	04/11/2011		407.0000		
Barium, total	ug/L	MW-3	09/26/2011		336.0000		
Barium, total	ug/L	MW-3	04/01/2012		265.0000		
Barium, total	ug/L	MW-3	08/23/2012		294.0000		
Barium, total	ug/L	MW-3	04/13/2013		395.0000		
Barium, total	ug/L	MW-3	09/14/2013		442.0000		
Barium, total	ug/L	MW-3	04/11/2014		517.0000		
Barium, total	ug/L	MW-3	09/27/2014		467.0000		
Barium, total	ug/L	MW-3	03/16/2015		426.0000		
Barium, total	ug/L	MW-3	09/28/2015		336.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Barium, total	ug/L	MW-3	03/14/2016		323.0000		
Barium, total	ug/L	MW-3	09/03/2016		354.0000		
Barium, total	ug/L	MW-3	04/10/2017		321.0000		
Barium, total	ug/L	MW-3	09/01/2017		271.0000		
Barium, total	ug/L	MW-3	04/23/2018		202.0000		
Barium, total	ug/L	MW-3	09/14/2018		170.0000		
Barium, total	ug/L	MW-3	04/15/2019		191.0000		
Barium, total	ug/L	MW-3	09/17/2019		197.0000		
Barium, total	ug/L	MW-3	04/08/2020		407.0000		
Barium, total	ug/L	MW-3	10/02/2020		157.0000		
Barium, total	ug/L	MW-3	04/12/2021		117.0000		
Barium, total	ug/L	MW-3	10/26/2021		157.0000		
Barium, total	ug/L	MW-3	04/04/2022		269.0000		
Barium, total	ug/L	MW-3	10/07/2022		292.0000		
Barium, total	ug/L	MW-3	04/19/2023		317.0000		
Barium, total	ug/L	MW-3	10/25/2023		269.0000		
Barium, total	ug/L	MW-3	04/17/2024		360.0000		
Barium, total	ug/L	MW-3	10/17/2024		325.0000		
Barium, total	ug/L	MW-3	04/01/2025		341.0000		
Beryllium, total	ug/L	MW-3	03/31/2010	ND	4.0000		
Beryllium, total	ug/L	MW-3	09/16/2010	ND	4.0000		
Beryllium, total	ug/L	MW-3	04/11/2011	ND	4.0000		
Beryllium, total	ug/L	MW-3	09/26/2011	ND	4.0000		
Beryllium, total	ug/L	MW-3	04/01/2012	ND	4.0000		
Beryllium, total	ug/L	MW-3	08/23/2012	ND	4.0000		
Beryllium, total	ug/L	MW-3	04/13/2013	ND	4.0000		
Beryllium, total	ug/L	MW-3	09/14/2013	ND	4.0000		
Beryllium, total	ug/L	MW-3	04/11/2014	ND	4.0000		
Beryllium, total	ug/L	MW-3	09/27/2014	ND	4.0000		
Beryllium, total	ug/L	MW-3	03/16/2015	ND	4.0000		
Beryllium, total	ug/L	MW-3	09/28/2015	ND	4.0000		
Beryllium, total	ug/L	MW-3	03/14/2016	ND	4.0000		
Beryllium, total	ug/L	MW-3	09/03/2016	ND	4.0000		
Beryllium, total	ug/L	MW-3	04/10/2017	ND	4.0000		
Beryllium, total	ug/L	MW-3	09/01/2017	ND	4.0000		
Beryllium, total	ug/L	MW-3	04/23/2018	ND	4.0000		
Beryllium, total	ug/L	MW-3	09/14/2018	ND	4.0000		
Beryllium, total	ug/L	MW-3	04/15/2019	ND	4.0000		
Beryllium, total	ug/L	MW-3	09/17/2019	ND	4.0000		
Beryllium, total	ug/L	MW-3	04/08/2020	ND	4.0000		
Beryllium, total	ug/L	MW-3	10/02/2020	ND	4.0000		
Beryllium, total	ug/L	MW-3	04/12/2021	ND	4.0000		
Beryllium, total	ug/L	MW-3	10/26/2021	ND	4.0000		
Beryllium, total	ug/L	MW-3	04/04/2022	ND	4.0000		
Beryllium, total	ug/L	MW-3	10/07/2022	ND	4.0000		
Beryllium, total	ug/L	MW-3	04/19/2023	ND	4.0000		
Beryllium, total	ug/L	MW-3	10/25/2023	ND	4.0000		
Beryllium, total	ug/L	MW-3	04/17/2024	ND	4.0000		
Beryllium, total	ug/L	MW-3	10/17/2024	ND	4.0000		
Beryllium, total	ug/L	MW-3	04/01/2025	ND	0.5000		*
Cadmium, total	ug/L	MW-3	03/31/2010	ND	1.0000	0.8000	**
Cadmium, total	ug/L	MW-3	09/16/2010	ND	1.0000	0.8000	**
Cadmium, total	ug/L	MW-3	04/11/2011	ND	0.8000		
Cadmium, total	ug/L	MW-3	09/26/2011	ND	0.8000		
Cadmium, total	ug/L	MW-3	04/01/2012	ND	0.8000		
Cadmium, total	ug/L	MW-3	08/23/2012	ND	0.8000		
Cadmium, total	ug/L	MW-3	04/13/2013	ND	0.8000		
Cadmium, total	ug/L	MW-3	09/14/2013	ND	0.8000		
Cadmium, total	ug/L	MW-3	04/11/2014	ND	0.8000		
Cadmium, total	ug/L	MW-3	09/27/2014	ND	0.8000		
Cadmium, total	ug/L	MW-3	03/16/2015	ND	0.8000		
Cadmium, total	ug/L	MW-3	09/28/2015	ND	0.8000		
Cadmium, total	ug/L	MW-3	03/14/2016		0.8000		
Cadmium, total	ug/L	MW-3	09/03/2016	ND	0.8000		
Cadmium, total	ug/L	MW-3	04/10/2017	ND	0.8000		
Cadmium, total	ug/L	MW-3	09/01/2017	ND	0.8000		
Cadmium, total	ug/L	MW-3	04/23/2018	ND	0.8000		
Cadmium, total	ug/L	MW-3	09/14/2018		0.9000		
Cadmium, total	ug/L	MW-3	04/15/2019		1.0000		
Cadmium, total	ug/L	MW-3	09/17/2019	ND	0.8000		
Cadmium, total	ug/L	MW-3	04/08/2020		1.5000		
Cadmium, total	ug/L	MW-3	10/02/2020	ND	0.8000		
Cadmium, total	ug/L	MW-3	04/12/2021	ND	0.8000		
Cadmium, total	ug/L	MW-3	10/26/2021	ND	0.8000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Cadmium, total	ug/L	MW-3	04/04/2022	ND	0.8000		
Cadmium, total	ug/L	MW-3	10/07/2022	ND	0.8000		
Cadmium, total	ug/L	MW-3	04/19/2023	ND	0.8000		
Cadmium, total	ug/L	MW-3	10/25/2023	ND	0.8000		
Cadmium, total	ug/L	MW-3	04/17/2024	ND	0.8000		
Cadmium, total	ug/L	MW-3	10/17/2024	ND	0.8000		
Cadmium, total	ug/L	MW-3	04/01/2025		0.3000		
Chromium, total	ug/L	MW-3	03/31/2010	ND	10.0000	8.0000	**
Chromium, total	ug/L	MW-3	09/16/2010	ND	10.0000	8.0000	**
Chromium, total	ug/L	MW-3	04/11/2011	ND	8.0000		
Chromium, total	ug/L	MW-3	09/26/2011	ND	8.0000		
Chromium, total	ug/L	MW-3	04/01/2012	ND	8.0000		
Chromium, total	ug/L	MW-3	08/23/2012	ND	8.0000		
Chromium, total	ug/L	MW-3	04/13/2013	ND	8.0000		
Chromium, total	ug/L	MW-3	09/14/2013	ND	8.0000		
Chromium, total	ug/L	MW-3	04/11/2014	ND	8.0000		
Chromium, total	ug/L	MW-3	09/27/2014	ND	8.0000		
Chromium, total	ug/L	MW-3	03/16/2015	ND	8.0000		
Chromium, total	ug/L	MW-3	09/28/2015	ND	8.0000		
Chromium, total	ug/L	MW-3	03/14/2016	ND	8.0000		
Chromium, total	ug/L	MW-3	09/03/2016	ND	8.0000		
Chromium, total	ug/L	MW-3	04/10/2017	ND	8.0000		
Chromium, total	ug/L	MW-3	09/01/2017	ND	8.0000		
Chromium, total	ug/L	MW-3	04/23/2018	ND	8.0000		
Chromium, total	ug/L	MW-3	09/14/2018	ND	8.0000		
Chromium, total	ug/L	MW-3	04/15/2019	ND	8.0000		
Chromium, total	ug/L	MW-3	09/17/2019	ND	8.0000		
Chromium, total	ug/L	MW-3	04/08/2020	ND	8.0000		
Chromium, total	ug/L	MW-3	10/02/2020	ND	8.0000		
Chromium, total	ug/L	MW-3	04/12/2021	ND	8.0000		
Chromium, total	ug/L	MW-3	10/26/2021	ND	8.0000		
Chromium, total	ug/L	MW-3	04/04/2022	ND	8.0000		
Chromium, total	ug/L	MW-3	10/07/2022	ND	8.0000		
Chromium, total	ug/L	MW-3	04/19/2023	ND	8.0000		
Chromium, total	ug/L	MW-3	10/25/2023	ND	8.0000		
Chromium, total	ug/L	MW-3	04/17/2024	ND	8.0000		
Chromium, total	ug/L	MW-3	10/17/2024	ND	8.0000		
Chromium, total	ug/L	MW-3	04/01/2025		1.1000		*
Cobalt, total	ug/L	MW-3	03/31/2010	ND	4.0000	0.8000	**
Cobalt, total	ug/L	MW-3	09/16/2010	ND	4.0000	0.8000	**
Cobalt, total	ug/L	MW-3	04/11/2011	ND	4.0000	0.8000	**
Cobalt, total	ug/L	MW-3	09/26/2011	ND	4.0000	0.8000	**
Cobalt, total	ug/L	MW-3	04/01/2012	ND	4.0000	0.8000	**
Cobalt, total	ug/L	MW-3	08/23/2012	ND	4.0000	0.8000	**
Cobalt, total	ug/L	MW-3	04/13/2013	ND	4.0000	0.8000	**
Cobalt, total	ug/L	MW-3	09/14/2013	ND	4.0000	0.8000	**
Cobalt, total	ug/L	MW-3	04/11/2014	ND	4.0000	0.8000	**
Cobalt, total	ug/L	MW-3	09/27/2014		0.9000		
Cobalt, total	ug/L	MW-3	03/16/2015	ND	0.8000		
Cobalt, total	ug/L	MW-3	09/28/2015	ND	0.8000		
Cobalt, total	ug/L	MW-3	03/14/2016	ND	0.8000		
Cobalt, total	ug/L	MW-3	09/03/2016	ND	0.8000		
Cobalt, total	ug/L	MW-3	04/10/2017	ND	0.8000		
Cobalt, total	ug/L	MW-3	09/01/2017	ND	0.8000		
Cobalt, total	ug/L	MW-3	04/23/2018	ND	0.8000		
Cobalt, total	ug/L	MW-3	09/14/2018	ND	0.8000		
Cobalt, total	ug/L	MW-3	04/15/2019	ND	0.8000		
Cobalt, total	ug/L	MW-3	09/17/2019	ND	0.8000		
Cobalt, total	ug/L	MW-3	04/08/2020		1.6000		
Cobalt, total	ug/L	MW-3	10/02/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-3	04/12/2021		0.7000		
Cobalt, total	ug/L	MW-3	10/26/2021		3.6000		
Cobalt, total	ug/L	MW-3	04/04/2022		0.9000		
Cobalt, total	ug/L	MW-3	10/07/2022		2.4000		
Cobalt, total	ug/L	MW-3	04/19/2023		0.6000		
Cobalt, total	ug/L	MW-3	10/25/2023		0.9000		
Cobalt, total	ug/L	MW-3	04/17/2024		0.9000		
Cobalt, total	ug/L	MW-3	10/17/2024	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-3	04/01/2025		0.5000		
Copper, total	ug/L	MW-3	03/31/2010	ND	4.0000		
Copper, total	ug/L	MW-3	09/16/2010	ND	4.0000		
Copper, total	ug/L	MW-3	04/11/2011	ND	4.0000		
Copper, total	ug/L	MW-3	09/26/2011	ND	4.0000		
Copper, total	ug/L	MW-3	04/01/2012		4.5000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Copper, total	ug/L	MW-3	08/23/2012	ND	4.0000		
Copper, total	ug/L	MW-3	04/13/2013	ND	4.0000		
Copper, total	ug/L	MW-3	09/14/2013	ND	4.0000		
Copper, total	ug/L	MW-3	04/11/2014		4.1000		
Copper, total	ug/L	MW-3	09/27/2014	ND	4.0000		
Copper, total	ug/L	MW-3	03/16/2015	ND	4.0000		
Copper, total	ug/L	MW-3	09/28/2015	ND	4.0000		
Copper, total	ug/L	MW-3	03/14/2016	ND	4.0000		
Copper, total	ug/L	MW-3	09/03/2016	ND	4.0000		
Copper, total	ug/L	MW-3	04/10/2017	ND	4.0000		
Copper, total	ug/L	MW-3	09/01/2017	ND	4.0000		
Copper, total	ug/L	MW-3	04/23/2018	ND	4.0000		
Copper, total	ug/L	MW-3	09/14/2018	ND	4.0000		
Copper, total	ug/L	MW-3	04/15/2019	ND	4.0000		
Copper, total	ug/L	MW-3	09/17/2019	ND	4.0000		
Copper, total	ug/L	MW-3	04/08/2020		5.5000		
Copper, total	ug/L	MW-3	10/02/2020	ND	4.0000		
Copper, total	ug/L	MW-3	04/12/2021	ND	4.0000		
Copper, total	ug/L	MW-3	10/26/2021	ND	4.0000		
Copper, total	ug/L	MW-3	04/04/2022	ND	4.0000		
Copper, total	ug/L	MW-3	10/07/2022	ND	4.0000		
Copper, total	ug/L	MW-3	04/19/2023	ND	4.0000		
Copper, total	ug/L	MW-3	10/25/2023	ND	4.0000		
Copper, total	ug/L	MW-3	04/17/2024	ND	4.0000		
Copper, total	ug/L	MW-3	10/17/2024	ND	4.0000		
Copper, total	ug/L	MW-3	04/01/2025	ND	5.0000	4.0000	**
Lead, total	ug/L	MW-3	03/31/2010	ND	4.0000		
Lead, total	ug/L	MW-3	09/16/2010	ND	4.0000		
Lead, total	ug/L	MW-3	04/11/2011	ND	4.0000		
Lead, total	ug/L	MW-3	09/26/2011	ND	4.0000		
Lead, total	ug/L	MW-3	04/01/2012	ND	4.0000		
Lead, total	ug/L	MW-3	08/23/2012	ND	4.0000		
Lead, total	ug/L	MW-3	04/13/2013	ND	4.0000		
Lead, total	ug/L	MW-3	09/14/2013	ND	4.0000		
Lead, total	ug/L	MW-3	04/11/2014	ND	4.0000		
Lead, total	ug/L	MW-3	09/27/2014	ND	4.0000		
Lead, total	ug/L	MW-3	03/16/2015	ND	4.0000		
Lead, total	ug/L	MW-3	09/28/2015	ND	4.0000		
Lead, total	ug/L	MW-3	03/14/2016	ND	4.0000		
Lead, total	ug/L	MW-3	09/03/2016	ND	4.0000		
Lead, total	ug/L	MW-3	04/10/2017	ND	4.0000		
Lead, total	ug/L	MW-3	09/01/2017	ND	4.0000		
Lead, total	ug/L	MW-3	04/23/2018	ND	4.0000		
Lead, total	ug/L	MW-3	09/14/2018	ND	4.0000		
Lead, total	ug/L	MW-3	04/15/2019	ND	4.0000		
Lead, total	ug/L	MW-3	09/17/2019	ND	4.0000		
Lead, total	ug/L	MW-3	04/08/2020	ND	4.0000		
Lead, total	ug/L	MW-3	10/02/2020	ND	4.0000		
Lead, total	ug/L	MW-3	04/12/2021	ND	4.0000		
Lead, total	ug/L	MW-3	10/26/2021	ND	4.0000		
Lead, total	ug/L	MW-3	04/04/2022	ND	4.0000		
Lead, total	ug/L	MW-3	10/07/2022	ND	4.0000		
Lead, total	ug/L	MW-3	04/19/2023	ND	4.0000		
Lead, total	ug/L	MW-3	10/25/2023	ND	4.0000		
Lead, total	ug/L	MW-3	04/17/2024	ND	4.0000		
Lead, total	ug/L	MW-3	10/17/2024	ND	4.0000		
Lead, total	ug/L	MW-3	04/01/2025	ND	1.0000		*
Nickel, total	ug/L	MW-3	03/31/2010		6.4000		
Nickel, total	ug/L	MW-3	09/16/2010		6.4000		
Nickel, total	ug/L	MW-3	04/11/2011		10.5000		
Nickel, total	ug/L	MW-3	09/26/2011		7.8000		
Nickel, total	ug/L	MW-3	04/01/2012		11.1000		
Nickel, total	ug/L	MW-3	08/23/2012		6.5000		
Nickel, total	ug/L	MW-3	04/13/2013		7.3000		
Nickel, total	ug/L	MW-3	09/14/2013	ND	4.0000		
Nickel, total	ug/L	MW-3	04/11/2014		4.2000		
Nickel, total	ug/L	MW-3	09/27/2014	ND	4.0000		
Nickel, total	ug/L	MW-3	03/16/2015	ND	4.0000		
Nickel, total	ug/L	MW-3	09/28/2015	ND	4.0000		
Nickel, total	ug/L	MW-3	03/14/2016	ND	4.0000		
Nickel, total	ug/L	MW-3	09/03/2016	ND	4.0000		
Nickel, total	ug/L	MW-3	04/10/2017	ND	4.0000		
Nickel, total	ug/L	MW-3	09/01/2017	ND	4.0000		
Nickel, total	ug/L	MW-3	04/23/2018	ND	20.0000	4.0000	**

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Nickel, total	ug/L	MW-3	09/14/2018	ND	4.0000		
Nickel, total	ug/L	MW-3	04/15/2019	ND	4.0000		
Nickel, total	ug/L	MW-3	09/17/2019	ND	4.0000		
Nickel, total	ug/L	MW-3	04/08/2020		15.6000		
Nickel, total	ug/L	MW-3	10/02/2020	ND	4.0000		
Nickel, total	ug/L	MW-3	04/12/2021		5.6000		
Nickel, total	ug/L	MW-3	10/26/2021		5.0000		
Nickel, total	ug/L	MW-3	04/04/2022	ND	4.0000		
Nickel, total	ug/L	MW-3	10/07/2022	ND	4.0000		
Nickel, total	ug/L	MW-3	04/19/2023	ND	4.0000		
Nickel, total	ug/L	MW-3	10/25/2023	ND	4.0000		
Nickel, total	ug/L	MW-3	04/17/2024	ND	4.0000		
Nickel, total	ug/L	MW-3	10/17/2024	ND	4.0000		
Nickel, total	ug/L	MW-3	04/01/2025	ND	5.0000	4.0000	**
Selenium, total	ug/L	MW-3	03/31/2010	ND	4.0000		
Selenium, total	ug/L	MW-3	09/16/2010	ND	4.0000		
Selenium, total	ug/L	MW-3	04/11/2011	ND	4.0000		
Selenium, total	ug/L	MW-3	09/26/2011	ND	4.0000		
Selenium, total	ug/L	MW-3	04/01/2012	ND	4.0000		
Selenium, total	ug/L	MW-3	08/23/2012	ND	4.0000		
Selenium, total	ug/L	MW-3	04/13/2013	ND	4.0000		
Selenium, total	ug/L	MW-3	09/14/2013	ND	4.0000		
Selenium, total	ug/L	MW-3	04/11/2014	ND	4.0000		
Selenium, total	ug/L	MW-3	09/27/2014	ND	4.0000		
Selenium, total	ug/L	MW-3	03/16/2015	ND	4.0000		
Selenium, total	ug/L	MW-3	09/28/2015	ND	4.0000		
Selenium, total	ug/L	MW-3	03/14/2016	ND	4.0000		
Selenium, total	ug/L	MW-3	09/03/2016	ND	4.0000		
Selenium, total	ug/L	MW-3	04/10/2017	ND	4.0000		
Selenium, total	ug/L	MW-3	09/01/2017	ND	4.0000		
Selenium, total	ug/L	MW-3	04/23/2018	ND	4.0000		
Selenium, total	ug/L	MW-3	09/14/2018	ND	4.0000		
Selenium, total	ug/L	MW-3	04/15/2019	ND	4.0000		
Selenium, total	ug/L	MW-3	09/17/2019	ND	4.0000		
Selenium, total	ug/L	MW-3	04/08/2020	ND	4.0000		
Selenium, total	ug/L	MW-3	10/02/2020	ND	4.0000		
Selenium, total	ug/L	MW-3	04/12/2021	ND	4.0000		
Selenium, total	ug/L	MW-3	10/26/2021	ND	4.0000		
Selenium, total	ug/L	MW-3	04/04/2022	ND	4.0000		
Selenium, total	ug/L	MW-3	10/07/2022	ND	4.0000		
Selenium, total	ug/L	MW-3	04/19/2023	ND	4.0000		
Selenium, total	ug/L	MW-3	10/25/2023	ND	4.0000		
Selenium, total	ug/L	MW-3	04/17/2024	ND	4.0000		
Selenium, total	ug/L	MW-3	10/17/2024	ND	4.0000		
Selenium, total	ug/L	MW-3	04/01/2025	ND	2.0000	4.0000	**
Silver, total	ug/L	MW-3	03/31/2010	ND	4.0000		
Silver, total	ug/L	MW-3	09/16/2010	ND	4.0000		
Silver, total	ug/L	MW-3	04/11/2011	ND	4.0000		
Silver, total	ug/L	MW-3	09/26/2011	ND	4.0000		
Silver, total	ug/L	MW-3	04/01/2012	ND	4.0000		
Silver, total	ug/L	MW-3	08/23/2012	ND	4.0000		
Silver, total	ug/L	MW-3	04/13/2013	ND	4.0000		
Silver, total	ug/L	MW-3	09/14/2013	ND	4.0000		
Silver, total	ug/L	MW-3	04/11/2014	ND	4.0000		
Silver, total	ug/L	MW-3	09/27/2014	ND	4.0000		
Silver, total	ug/L	MW-3	03/16/2015	ND	4.0000		
Silver, total	ug/L	MW-3	09/28/2015	ND	4.0000		
Silver, total	ug/L	MW-3	03/14/2016	ND	4.0000		
Silver, total	ug/L	MW-3	09/03/2016	ND	4.0000		
Silver, total	ug/L	MW-3	04/10/2017	ND	4.0000		
Silver, total	ug/L	MW-3	09/01/2017	ND	4.0000		
Silver, total	ug/L	MW-3	04/23/2018	ND	4.0000		
Silver, total	ug/L	MW-3	09/14/2018	ND	4.0000		
Silver, total	ug/L	MW-3	04/15/2019	ND	4.0000		
Silver, total	ug/L	MW-3	09/17/2019	ND	4.0000		
Silver, total	ug/L	MW-3	04/08/2020	ND	4.0000		
Silver, total	ug/L	MW-3	10/02/2020	ND	4.0000		
Silver, total	ug/L	MW-3	04/12/2021	ND	4.0000		
Silver, total	ug/L	MW-3	10/26/2021	ND	4.0000		
Silver, total	ug/L	MW-3	04/04/2022	ND	4.0000		
Silver, total	ug/L	MW-3	10/07/2022	ND	4.0000		
Silver, total	ug/L	MW-3	04/19/2023	ND	4.0000		
Silver, total	ug/L	MW-3	10/25/2023	ND	4.0000		
Silver, total	ug/L	MW-3	04/17/2024	ND	4.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Silver, total	ug/L	MW-3	10/17/2024	ND	4.0000		
Silver, total	ug/L	MW-3	04/01/2025	ND	5.0000	4.0000	**
Thallium, total	ug/L	MW-3	03/31/2010	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-3	09/16/2010	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-3	04/11/2011	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-3	09/26/2011	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-3	04/01/2012	ND	2.0000		
Thallium, total	ug/L	MW-3	08/23/2012	ND	2.0000		
Thallium, total	ug/L	MW-3	04/13/2013	ND	2.0000		
Thallium, total	ug/L	MW-3	09/14/2013	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-3	04/11/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-3	09/27/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-3	03/16/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-3	09/28/2015	ND	1.0000	2.0000	**
Thallium, total	ug/L	MW-3	03/14/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-3	09/03/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-3	04/10/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-3	09/01/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-3	04/23/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-3	09/14/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-3	04/15/2019	ND	2.0000		
Thallium, total	ug/L	MW-3	09/17/2019	ND	2.0000		
Thallium, total	ug/L	MW-3	04/08/2020	ND	2.0000		
Thallium, total	ug/L	MW-3	10/02/2020	ND	2.0000		
Thallium, total	ug/L	MW-3	04/12/2021	ND	2.0000		
Thallium, total	ug/L	MW-3	10/26/2021	ND	2.0000		
Thallium, total	ug/L	MW-3	04/04/2022	ND	2.0000		
Thallium, total	ug/L	MW-3	10/07/2022	ND	2.0000		
Thallium, total	ug/L	MW-3	04/19/2023	ND	2.0000		
Thallium, total	ug/L	MW-3	10/25/2023	ND	2.0000		
Thallium, total	ug/L	MW-3	04/17/2024	ND	2.0000		
Thallium, total	ug/L	MW-3	10/17/2024	ND	2.0000		
Thallium, total	ug/L	MW-3	04/01/2025	ND	0.5000		*
Vanadium, total	ug/L	MW-3	03/31/2010		10.6000		
Vanadium, total	ug/L	MW-3	09/16/2010	ND	10.0000	20.0000	**
Vanadium, total	ug/L	MW-3	04/11/2011		21.8000		
Vanadium, total	ug/L	MW-3	09/26/2011	ND	20.0000		
Vanadium, total	ug/L	MW-3	04/01/2012	ND	20.0000		
Vanadium, total	ug/L	MW-3	08/23/2012	ND	20.0000		
Vanadium, total	ug/L	MW-3	04/13/2013	ND	20.0000		
Vanadium, total	ug/L	MW-3	09/14/2013	ND	20.0000		
Vanadium, total	ug/L	MW-3	04/11/2014	ND	20.0000		
Vanadium, total	ug/L	MW-3	09/27/2014	ND	20.0000		
Vanadium, total	ug/L	MW-3	03/16/2015	ND	20.0000		
Vanadium, total	ug/L	MW-3	09/28/2015	ND	20.0000		
Vanadium, total	ug/L	MW-3	03/14/2016	ND	20.0000		
Vanadium, total	ug/L	MW-3	09/03/2016	ND	20.0000		
Vanadium, total	ug/L	MW-3	04/10/2017	ND	20.0000		
Vanadium, total	ug/L	MW-3	09/01/2017	ND	20.0000		
Vanadium, total	ug/L	MW-3	04/23/2018	ND	20.0000		
Vanadium, total	ug/L	MW-3	09/14/2018	ND	20.0000		
Vanadium, total	ug/L	MW-3	04/15/2019	ND	20.0000		
Vanadium, total	ug/L	MW-3	09/17/2019	ND	20.0000		
Vanadium, total	ug/L	MW-3	04/08/2020	ND	20.0000		
Vanadium, total	ug/L	MW-3	10/02/2020	ND	20.0000		
Vanadium, total	ug/L	MW-3	04/12/2021	ND	20.0000		
Vanadium, total	ug/L	MW-3	10/26/2021	ND	20.0000		
Vanadium, total	ug/L	MW-3	04/04/2022	ND	20.0000		
Vanadium, total	ug/L	MW-3	10/07/2022	ND	20.0000		
Vanadium, total	ug/L	MW-3	04/19/2023	ND	20.0000		
Vanadium, total	ug/L	MW-3	10/25/2023	ND	20.0000		
Vanadium, total	ug/L	MW-3	04/17/2024	ND	20.0000		
Vanadium, total	ug/L	MW-3	10/17/2024	ND	20.0000		
Vanadium, total	ug/L	MW-3	04/01/2025	ND	2.0000		*
Zinc, total	ug/L	MW-3	03/31/2010	ND	10.0000	20.0000	**
Zinc, total	ug/L	MW-3	09/16/2010	ND	10.0000	20.0000	**
Zinc, total	ug/L	MW-3	04/11/2011	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-3	09/26/2011		11.0000		
Zinc, total	ug/L	MW-3	04/01/2012		25.0000		
Zinc, total	ug/L	MW-3	08/23/2012		9.7000		
Zinc, total	ug/L	MW-3	04/13/2013		9.6000		
Zinc, total	ug/L	MW-3	09/14/2013	ND	20.0000		
Zinc, total	ug/L	MW-3	04/11/2014	ND	20.0000		
Zinc, total	ug/L	MW-3	09/27/2014		8.9000		

* - 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 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Zinc, total	ug/L	MW-3	03/16/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-3	09/28/2015		8.8000		
Zinc, total	ug/L	MW-3	03/14/2016	ND	20.0000		
Zinc, total	ug/L	MW-3	09/03/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-3	04/10/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-3	09/01/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-3	04/23/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-3	09/14/2018	ND	20.0000		
Zinc, total	ug/L	MW-3	04/15/2019		14.0000		
Zinc, total	ug/L	MW-3	09/17/2019	ND	20.0000		
Zinc, total	ug/L	MW-3	04/08/2020		30.3000		
Zinc, total	ug/L	MW-3	10/02/2020	ND	20.0000		
Zinc, total	ug/L	MW-3	04/12/2021	ND	20.0000		
Zinc, total	ug/L	MW-3	10/26/2021	ND	20.0000		
Zinc, total	ug/L	MW-3	04/04/2022	ND	20.0000		
Zinc, total	ug/L	MW-3	10/07/2022	ND	20.0000		
Zinc, total	ug/L	MW-3	04/19/2023	ND	20.0000		
Zinc, total	ug/L	MW-3	10/25/2023	ND	20.0000		
Zinc, total	ug/L	MW-3	04/17/2024	ND	20.0000		
Zinc, total	ug/L	MW-3	10/17/2024	ND	20.0000		
Zinc, total	ug/L	MW-3	04/01/2025		5.0000		

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

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Antimony, total	ug/L	MW-10	04/01/2025	ND	1.0000		2.0000
Arsenic, total	ug/L	MW-10	04/01/2025	ND	2.0000		4.1000
Barium, total	ug/L	MW-10	04/01/2025		144.0000		571.1944
Beryllium, total	ug/L	MW-10	04/01/2025	ND	0.5000		4.0000
Cadmium, total	ug/L	MW-10	04/01/2025		0.3000		1.5000
Chromium, total	ug/L	MW-10	04/01/2025		2.0000		8.0000
Cobalt, total	ug/L	MW-10	04/01/2025	ND	0.5000		3.6000
Copper, total	ug/L	MW-10	04/01/2025	ND	5.0000		5.5000
Lead, total	ug/L	MW-10	04/01/2025	ND	1.0000		4.0000
Nickel, total	ug/L	MW-10	04/01/2025		9.6000		15.6000
Selenium, total	ug/L	MW-10	04/01/2025	ND	2.0000		4.0000
Silver, total	ug/L	MW-10	04/01/2025	ND	5.0000		4.0000
Thallium, total	ug/L	MW-10	04/01/2025	ND	0.5000		2.0000
Vanadium, total	ug/L	MW-10	04/01/2025	ND	2.0000		21.8000
Zinc, total	ug/L	MW-10	04/01/2025	ND	5.0000		30.3000
Antimony, total	ug/L	MW-13	04/01/2025	ND	1.0000		2.0000
Arsenic, total	ug/L	MW-13	04/01/2025	ND	2.0000		4.1000
Barium, total	ug/L	MW-13	04/01/2025		66.9000		571.1944
Beryllium, total	ug/L	MW-13	04/01/2025	ND	0.5000		4.0000
Cadmium, total	ug/L	MW-13	04/01/2025		0.2000		1.5000
Chromium, total	ug/L	MW-13	04/01/2025		3.0000		8.0000
Cobalt, total	ug/L	MW-13	04/01/2025	ND	0.5000		3.6000
Copper, total	ug/L	MW-13	04/01/2025	ND	5.0000		5.5000
Lead, total	ug/L	MW-13	04/01/2025	ND	1.0000		4.0000
Nickel, total	ug/L	MW-13	04/01/2025	ND	5.0000		15.6000
Selenium, total	ug/L	MW-13	04/01/2025	ND	2.0000		4.0000
Silver, total	ug/L	MW-13	04/01/2025	ND	5.0000		4.0000
Thallium, total	ug/L	MW-13	04/01/2025	ND	0.5000		2.0000
Vanadium, total	ug/L	MW-13	04/01/2025	ND	2.0000		21.8000
Zinc, total	ug/L	MW-13	04/01/2025	ND	5.0000		30.3000
Antimony, total	ug/L	MW-7	04/01/2025	ND	1.0000		2.0000
Arsenic, total	ug/L	MW-7	04/01/2025	ND	2.0000		4.1000
Barium, total	ug/L	MW-7	04/01/2025		189.0000		571.1944
Beryllium, total	ug/L	MW-7	04/01/2025	ND	0.5000		4.0000
Cadmium, total	ug/L	MW-7	04/01/2025		0.4000		1.5000
Chromium, total	ug/L	MW-7	04/01/2025		1.5000		8.0000
Cobalt, total	ug/L	MW-7	04/01/2025		2.4000		3.6000
Copper, total	ug/L	MW-7	04/01/2025	ND	5.0000	**	5.5000
Lead, total	ug/L	MW-7	04/01/2025	ND	1.0000		4.0000
Nickel, total	ug/L	MW-7	04/01/2025		29.3000	***	15.6000
Selenium, total	ug/L	MW-7	04/01/2025	ND	2.0000		4.0000
Silver, total	ug/L	MW-7	04/01/2025	ND	5.0000		4.0000
Thallium, total	ug/L	MW-7	04/01/2025	ND	0.5000		2.0000
Vanadium, total	ug/L	MW-7	04/01/2025	ND	2.0000		21.8000
Zinc, total	ug/L	MW-7	04/01/2025	ND	5.0000		30.3000
Antimony, total	ug/L	PZ-11	04/01/2025	ND	1.0000		2.0000
Arsenic, total	ug/L	PZ-11	04/01/2025	ND	2.0000		4.1000
Barium, total	ug/L	PZ-11	04/01/2025		88.0000		571.1944
Beryllium, total	ug/L	PZ-11	04/01/2025	ND	0.5000		4.0000
Cadmium, total	ug/L	PZ-11	04/01/2025	ND	0.2000		1.5000
Chromium, total	ug/L	PZ-11	04/01/2025		1.3000		8.0000
Cobalt, total	ug/L	PZ-11	04/01/2025	ND	0.5000		3.6000
Copper, total	ug/L	PZ-11	04/01/2025	ND	5.0000		5.5000
Lead, total	ug/L	PZ-11	04/01/2025	ND	1.0000		4.0000
Nickel, total	ug/L	PZ-11	04/01/2025		6.2000	**	15.6000
Selenium, total	ug/L	PZ-11	04/01/2025	ND	2.0000		4.0000
Silver, total	ug/L	PZ-11	04/01/2025	ND	5.0000		4.0000
Thallium, total	ug/L	PZ-11	04/01/2025	ND	0.5000		2.0000
Vanadium, total	ug/L	PZ-11	04/01/2025	ND	2.0000		21.8000
Zinc, total	ug/L	PZ-11	04/01/2025	ND	5.0000		30.3000

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

Table 3

Detection Frequencies in Upgradient and Downgradient Wells

Constituent	Detect	Upgradient N	Proportion	Detect	Downgradient N	Proportion
Antimony, total	0	31	0.000	0	124	0.000
Arsenic, total	1	31	0.032	19	125	0.152
Barium, total	31	31	1.000	124	124	1.000
Beryllium, total	0	30	0.000	0	124	0.000
Cadmium, total	5	31	0.161	18	126	0.143
Chromium, total	0	30	0.000	9	124	0.073
Cobalt, total	10	31	0.323	44	125	0.352
Copper, total	3	31	0.097	25	124	0.202
Lead, total	0	30	0.000	11	124	0.089
Nickel, total	11	31	0.355	79	125	0.632
Selenium, total	0	31	0.000	2	124	0.016
Silver, total	0	31	0.000	0	124	0.000
Thallium, total	0	30	0.000	0	124	0.000
Vanadium, total	2	30	0.067	10	124	0.081
Zinc, total	9	31	0.290	36	125	0.288

N = Total number of measurements in all wells.
Detect = Total number of detections in all wells.
Proportion = Detect/N.

Table 4

Shapiro-Wilk Multiple Group Test of Normality

Constituent	Detect	N	Detect Freq	G raw	G log	G cbrt	G sqrt	G sqr	G cub	Crit Value	Dist Form	Model Type
Antimony, total	0	31	0.000									nonpar
Arsenic, total	1	31	0.032									nonpar
Barium, total	31	31	1.000	0.380	1.584					2.326	normal	normal
Beryllium, total	0	30	0.000									nonpar
Cadmium, total	5	31	0.161	1.023	0.395					2.326	normal	nonpar
Chromium, total	0	30	0.000									nonpar
Cobalt, total	10	31	0.323	2.592	0.944					2.326	lognor	nonpar
Copper, total	3	31	0.097	0.092	0.255					2.326	normal	nonpar
Lead, total	0	30	0.000									nonpar
Nickel, total	11	31	0.355	1.439	0.444					2.326	normal	nonpar
Selenium, total	0	31	0.000									nonpar
Silver, total	0	31	0.000									nonpar
Thallium, total	0	30	0.000									nonpar
Vanadium, total	2	30	0.067									nonpar
Zinc, total	9	31	0.290	1.954	0.457					2.326	normal	nonpar

* - Distribution override for that constituent.
Fit to distribution is confirmed if G <= critical value.
Model type may not match distributional form when detection frequency < 50%.

Table 5

Summary Statistics and Prediction Limits

Constituent	Units	Detect	N	Mean	SD	alpha	Factor	Pred Limit	Type		Conf
Antimony, total	ug/L	0	31					2.0000	nonpar	***	0.99
Arsenic, total	ug/L	1	31					4.1000	nonpar		0.99
Barium, total	ug/L	31	31	316.0645	102.2024	0.0100	2.4963	571.1944	normal		
Beryllium, total	ug/L	0	30					4.0000	nonpar	***	0.99
Cadmium, total	ug/L	5	31					1.5000	nonpar		0.99
Chromium, total	ug/L	0	30					8.0000	nonpar	***	0.99
Cobalt, total	ug/L	10	31					3.6000	nonpar		0.99
Copper, total	ug/L	3	31					5.5000	nonpar		0.99
Lead, total	ug/L	0	30					4.0000	nonpar	***	0.99
Nickel, total	ug/L	11	31					15.6000	nonpar		0.99
Selenium, total	ug/L	0	31					4.0000	nonpar	***	0.99
Silver, total	ug/L	0	31					4.0000	nonpar	***	0.99
Thallium, total	ug/L	0	30					2.0000	nonpar	***	0.99
Vanadium, total	ug/L	2	30					21.8000	nonpar		0.99
Zinc, total	ug/L	9	31					30.3000	nonpar		0.99

Conf = confidence level for passing initial test or one verification resample at all downgradient wells for a single constituent (nonparametric test only).
* - Insufficient Data.
** - Calculated limit raised to Manual Reporting Limit.
*** - Nonparametric limit based on ND value.
For transformed data, mean and SD in transformed units and prediction limit in original units.
All sample sizes and statistics are based on outlier free data.
For nonparametric limits, median reporting limits are substituted for extreme reporting limit values.

Table 6

Dixon's Test Outliers
1% Significance Level

Constituent	Units	Well	Date	Result	ND Qualifier	Date Range	N	Critical Value
Beryllium, total	ug/L	MW-3	04/01/2025	0.5000	< 0.5000	03/31/2010-04/01/2025	31	0.4502
Chromium, total	ug/L	MW-3	04/01/2025	1.1000		03/31/2010-04/01/2025	31	0.4502
Lead, total	ug/L	MW-3	04/01/2025	1.0000	< 1.0000	03/31/2010-04/01/2025	31	0.4502
Thallium, total	ug/L	MW-3	04/01/2025	0.5000	< 0.5000	03/31/2010-04/01/2025	31	0.4502
Vanadium, total	ug/L	MW-3	04/01/2025	2.0000	< 2.0000	03/31/2010-04/01/2025	31	0.4502

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
Copper, total	ug/L	MW-7	03/31/2010		6.1000	*	5.5000
Copper, total	ug/L	MW-7	09/16/2010	ND	4.0000		5.5000
Copper, total	ug/L	MW-7	04/11/2011	ND	4.0000		5.5000
Copper, total	ug/L	MW-7	09/26/2011	ND	4.0000		5.5000
Copper, total	ug/L	MW-7	04/01/2012		5.5000		5.5000
Copper, total	ug/L	MW-7	08/23/2012	ND	4.0000		5.5000
Copper, total	ug/L	MW-7	04/12/2013	ND	4.0000		5.5000
Copper, total	ug/L	MW-7	09/14/2013		4.1000		5.5000
Copper, total	ug/L	MW-7	04/11/2014	ND	4.0000		5.5000
Copper, total	ug/L	MW-7	09/27/2014		4.3000		5.5000
Copper, total	ug/L	MW-7	03/16/2015		8.6000	*	5.5000
Copper, total	ug/L	MW-7	09/28/2015	ND	4.0000		5.5000
Copper, total	ug/L	MW-7	03/14/2016	ND	4.0000		5.5000
Copper, total	ug/L	MW-7	09/03/2016	ND	4.0000		5.5000
Copper, total	ug/L	MW-7	04/10/2017	ND	4.0000		5.5000
Copper, total	ug/L	MW-7	09/01/2017	ND	4.0000		5.5000
Copper, total	ug/L	MW-7	04/23/2018	ND	4.0000		5.5000
Copper, total	ug/L	MW-7	09/14/2018	ND	4.0000		5.5000
Copper, total	ug/L	MW-7	04/15/2019	ND	4.0000		5.5000
Copper, total	ug/L	MW-7	09/17/2019	ND	4.0000		5.5000
Copper, total	ug/L	MW-7	04/08/2020	ND	4.0000		5.5000
Copper, total	ug/L	MW-7	10/02/2020	ND	4.0000		5.5000
Copper, total	ug/L	MW-7	04/12/2021	ND	4.0000		5.5000
Copper, total	ug/L	MW-7	10/26/2021	ND	4.0000		5.5000
Copper, total	ug/L	MW-7	04/04/2022		4.7000		5.5000
Copper, total	ug/L	MW-7	10/07/2022	ND	4.0000		5.5000
Copper, total	ug/L	MW-7	04/19/2023		5.1000		5.5000
Copper, total	ug/L	MW-7	10/25/2023		5.4000		5.5000
Copper, total	ug/L	MW-7	04/17/2024	ND	4.0000		5.5000
Copper, total	ug/L	MW-7	10/17/2024		6.4000	*	5.5000
Copper, total	ug/L	MW-7	04/01/2025	ND	5.0000		5.5000
Nickel, total	ug/L	MW-7	03/31/2010		21.3000	*	15.6000
Nickel, total	ug/L	MW-7	09/16/2010		8.6000		15.6000
Nickel, total	ug/L	MW-7	04/11/2011		20.4000	*	15.6000
Nickel, total	ug/L	MW-7	09/26/2011		24.2000	*	15.6000
Nickel, total	ug/L	MW-7	04/01/2012		32.6000	*	15.6000
Nickel, total	ug/L	MW-7	08/23/2012		26.8000	*	15.6000
Nickel, total	ug/L	MW-7	04/12/2013		26.9000	*	15.6000
Nickel, total	ug/L	MW-7	09/14/2013		19.6000	*	15.6000
Nickel, total	ug/L	MW-7	04/11/2014		21.8000	*	15.6000
Nickel, total	ug/L	MW-7	09/27/2014		25.3000	*	15.6000
Nickel, total	ug/L	MW-7	03/16/2015		26.4000	*	15.6000
Nickel, total	ug/L	MW-7	09/28/2015		32.9000	*	15.6000
Nickel, total	ug/L	MW-7	03/14/2016		34.4000	*	15.6000
Nickel, total	ug/L	MW-7	09/03/2016		30.0000	*	15.6000
Nickel, total	ug/L	MW-7	04/10/2017		56.3000	*	15.6000
Nickel, total	ug/L	MW-7	09/01/2017		64.8000	*	15.6000
Nickel, total	ug/L	MW-7	04/23/2018		68.7000	*	15.6000
Nickel, total	ug/L	MW-7	09/14/2018		65.6000	*	15.6000
Nickel, total	ug/L	MW-7	04/15/2019		57.2000	*	15.6000
Nickel, total	ug/L	MW-7	09/17/2019		94.9000	*	15.6000
Nickel, total	ug/L	MW-7	04/08/2020		73.4000	*	15.6000
Nickel, total	ug/L	MW-7	10/02/2020		77.6000	*	15.6000
Nickel, total	ug/L	MW-7	04/12/2021		65.5000	*	15.6000
Nickel, total	ug/L	MW-7	10/26/2021		57.5000	*	15.6000
Nickel, total	ug/L	MW-7	04/04/2022		39.1000	*	15.6000
Nickel, total	ug/L	MW-7	10/07/2022		68.3000	*	15.6000
Nickel, total	ug/L	MW-7	04/19/2023		14.2000		15.6000
Nickel, total	ug/L	MW-7	10/25/2023		43.8000	*	15.6000
Nickel, total	ug/L	MW-7	04/17/2024		9.1000		15.6000
Nickel, total	ug/L	MW-7	10/17/2024		49.6000	*	15.6000
Nickel, total	ug/L	MW-7	04/01/2025		29.3000	*	15.6000
Nickel, total	ug/L	PZ-11	03/31/2010		26.1000	*	15.6000
Nickel, total	ug/L	PZ-11	09/16/2010		23.0000	*	15.6000
Nickel, total	ug/L	PZ-11	04/11/2011		23.2000	*	15.6000
Nickel, total	ug/L	PZ-11	09/26/2011		31.3000	*	15.6000
Nickel, total	ug/L	PZ-11	04/01/2012		40.9000	*	15.6000
Nickel, total	ug/L	PZ-11	08/23/2012		17.7000	*	15.6000
Nickel, total	ug/L	PZ-11	04/13/2013		20.5000	*	15.6000
Nickel, total	ug/L	PZ-11	09/14/2013		21.0000	*	15.6000
Nickel, total	ug/L	PZ-11	04/11/2014		42.7000	*	15.6000

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

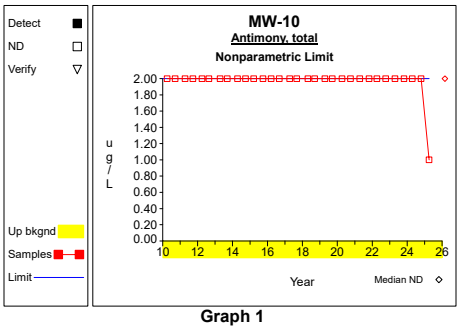
Table 8

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

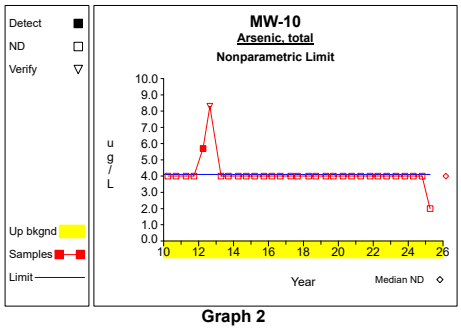
Constituent	Units	Well	Date		Result		Pred. Limit
Nickel, total	ug/L	PZ-11	09/27/2014		32.1000	*	15.6000
Nickel, total	ug/L	PZ-11	03/16/2015		16.7000	*	15.6000
Nickel, total	ug/L	PZ-11	09/28/2015	ND	4.0000		15.6000
Nickel, total	ug/L	PZ-11	03/14/2016	ND	4.0000		15.6000
Nickel, total	ug/L	PZ-11	09/03/2016	ND	4.0000		15.6000
Nickel, total	ug/L	PZ-11	04/10/2017		12.9000		15.6000
Nickel, total	ug/L	PZ-11	09/01/2017		16.5000	*	15.6000
Nickel, total	ug/L	PZ-11	11/15/2017	ND	4.0000		15.6000
Nickel, total	ug/L	PZ-11	04/23/2018	ND	20.0000		15.6000
Nickel, total	ug/L	PZ-11	09/14/2018		8.2000		15.6000
Nickel, total	ug/L	PZ-11	04/15/2019	ND	4.0000		15.6000
Nickel, total	ug/L	PZ-11	09/17/2019	ND	4.0000		15.6000
Nickel, total	ug/L	PZ-11	04/08/2020	ND	4.0000		15.6000
Nickel, total	ug/L	PZ-11	10/02/2020		4.4000		15.6000
Nickel, total	ug/L	PZ-11	04/12/2021		10.6000		15.6000
Nickel, total	ug/L	PZ-11	10/26/2021		20.9000	*	15.6000
Nickel, total	ug/L	PZ-11	04/04/2022		14.5000		15.6000
Nickel, total	ug/L	PZ-11	10/07/2022		22.7000	*	15.6000
Nickel, total	ug/L	PZ-11	04/19/2023		10.9000		15.6000
Nickel, total	ug/L	PZ-11	10/25/2023		10.5000		15.6000
Nickel, total	ug/L	PZ-11	04/17/2024		8.8000		15.6000
Nickel, total	ug/L	PZ-11	10/17/2024		31.1000	*	15.6000
Nickel, total	ug/L	PZ-11	04/01/2025		6.2000		15.6000

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

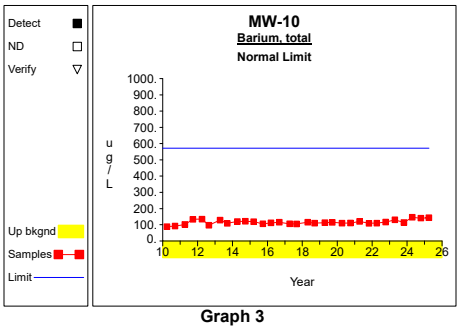
Up vs. Down Prediction Limits



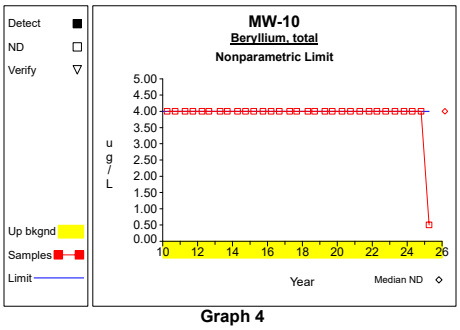
Graph 1



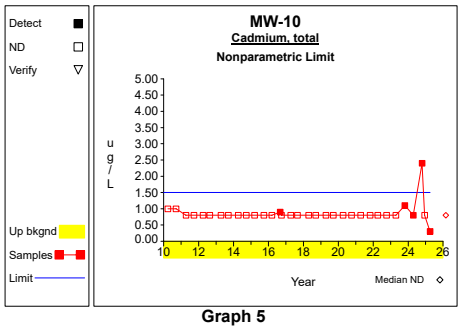
Graph 2



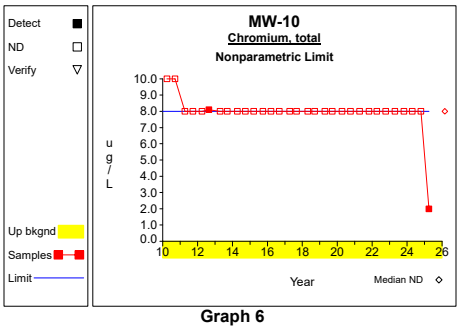
Graph 3



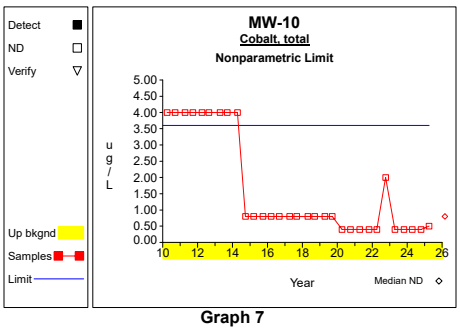
Graph 4



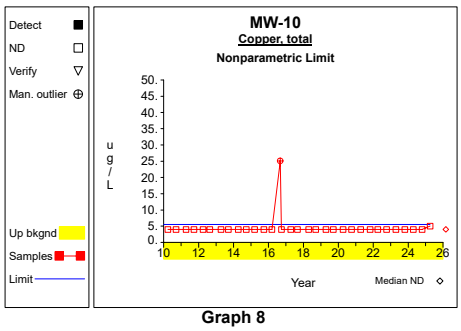
Graph 5



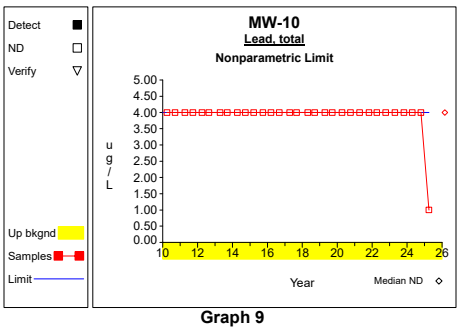
Graph 6



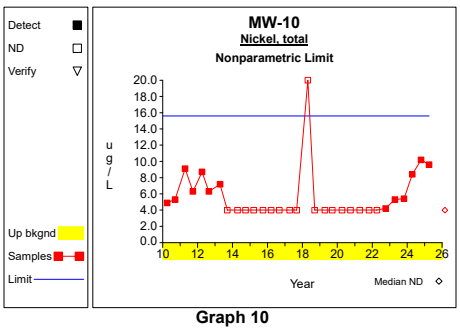
Graph 7



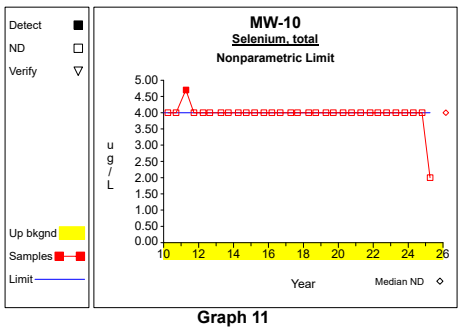
Graph 8



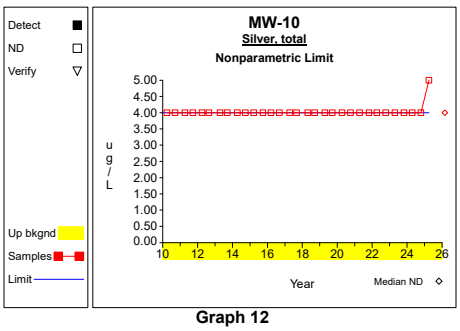
Graph 9



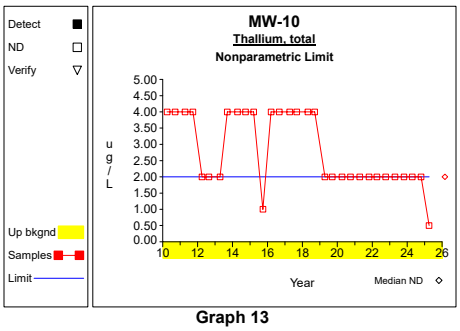
Graph 10



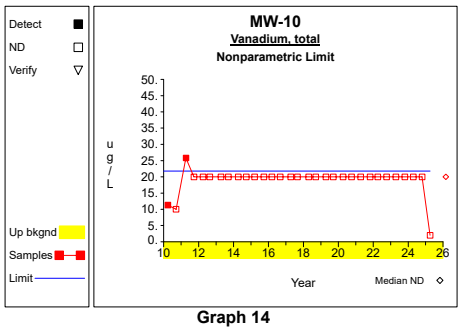
Graph 11



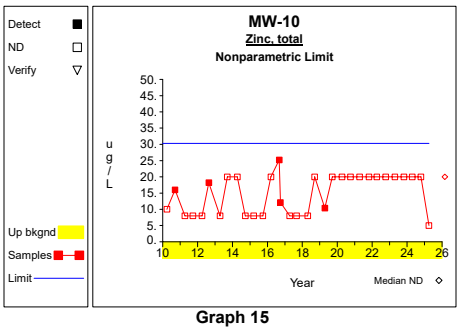
Graph 12



Graph 13



Graph 14



Graph 15

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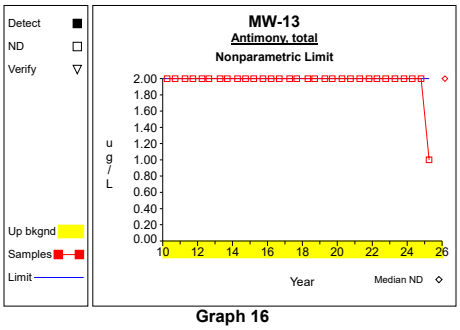
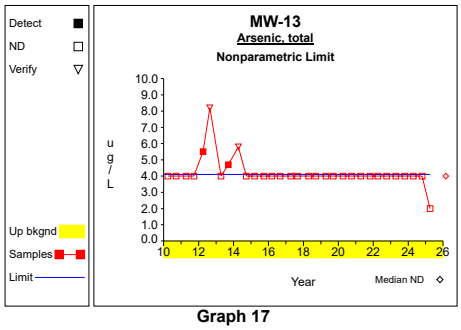
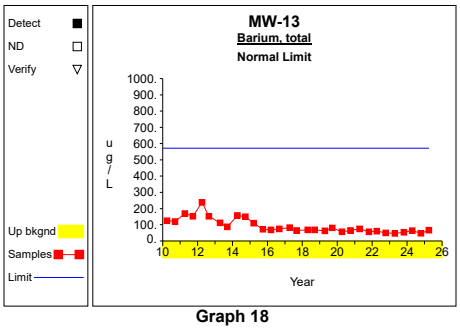
Up vs. Down Prediction Limits



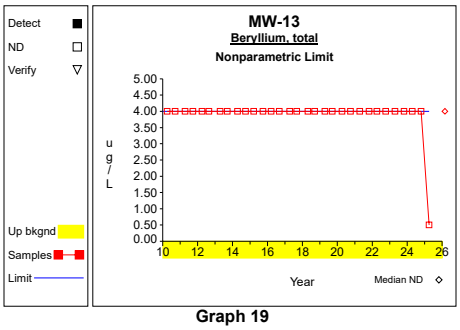
Graph 16



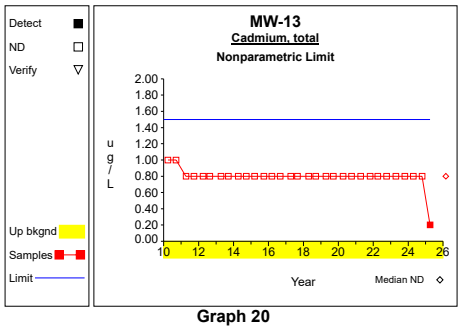
Graph 17



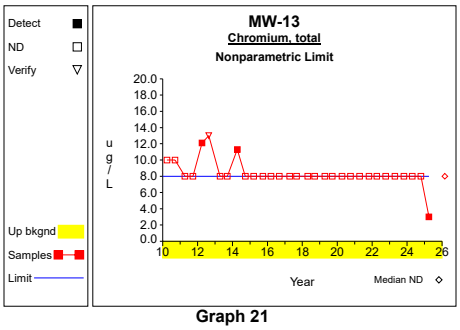
Graph 18



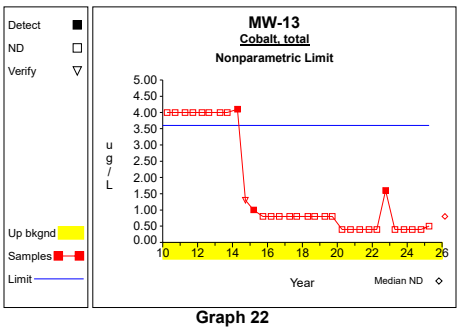
Graph 19



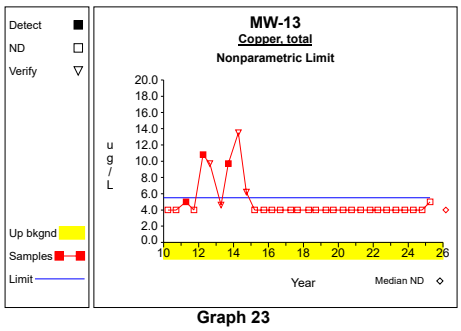
Graph 20



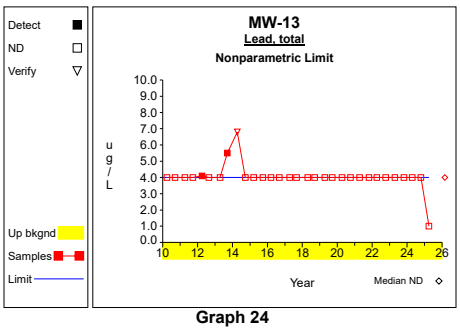
Graph 21



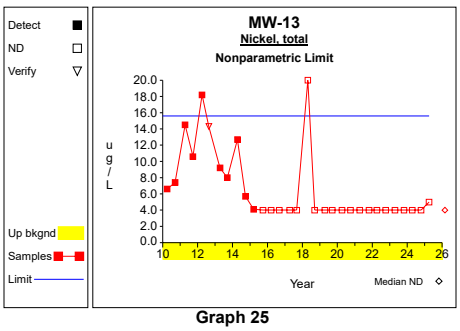
Graph 22



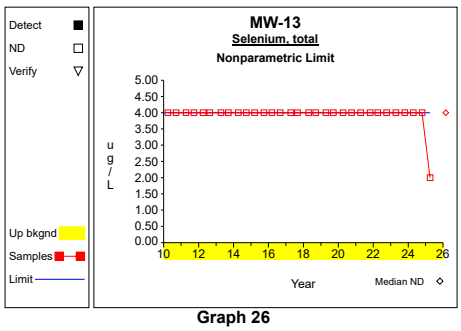
Graph 23



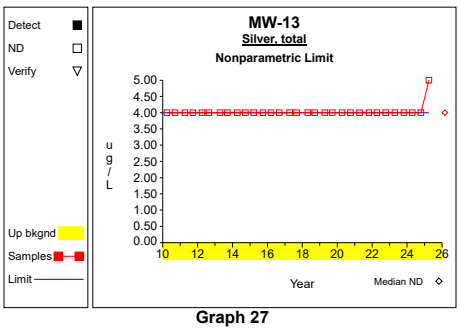
Graph 24



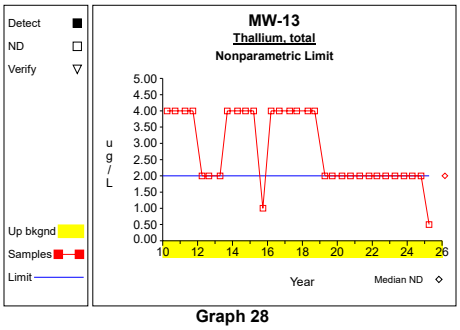
Graph 25



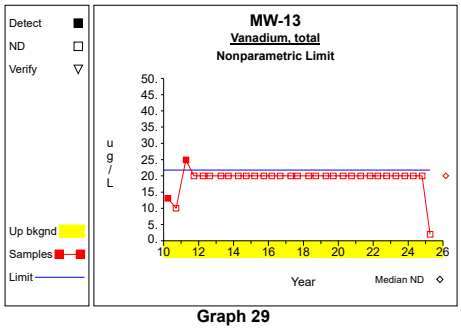
Graph 26



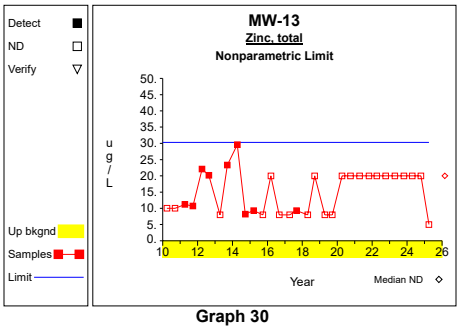
Graph 27



Graph 28



Graph 29



Graph 30

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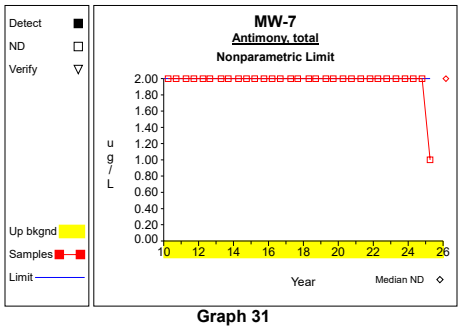
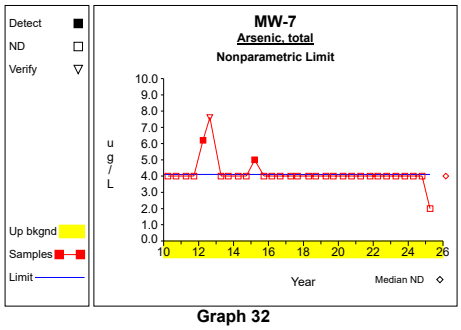
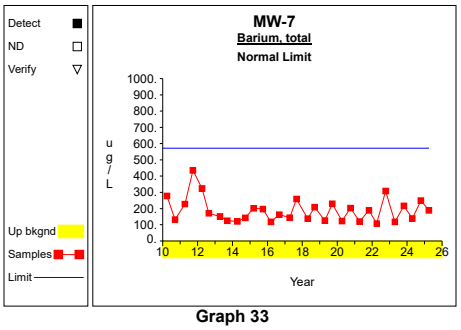
Up vs. Down Prediction Limits



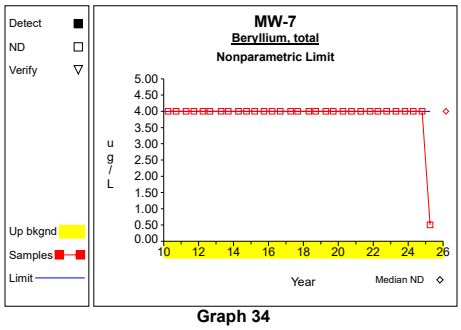
Graph 31



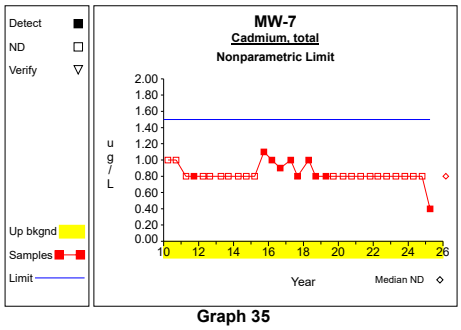
Graph 32



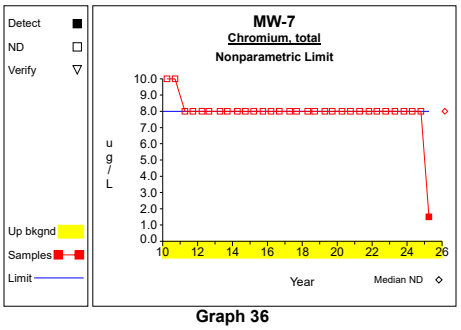
Graph 33



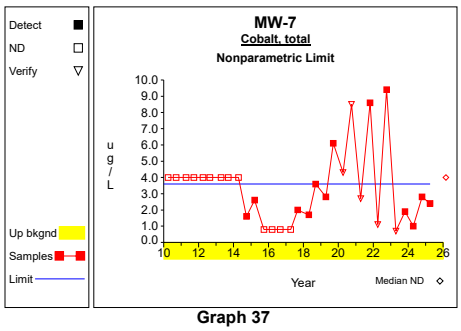
Graph 34



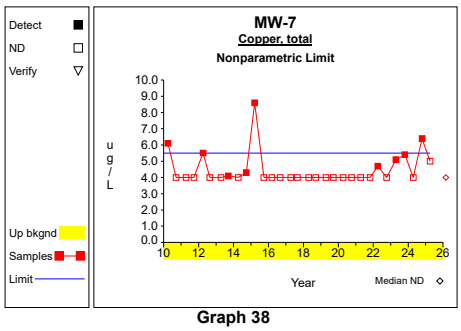
Graph 35



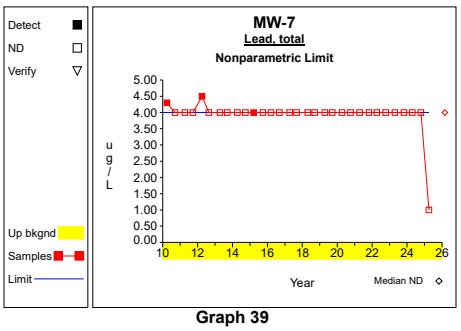
Graph 36



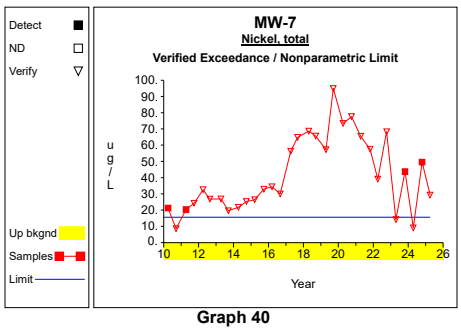
Graph 37



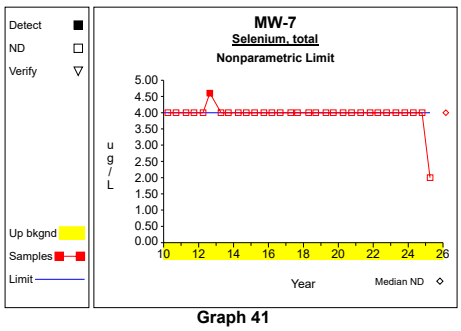
Graph 38



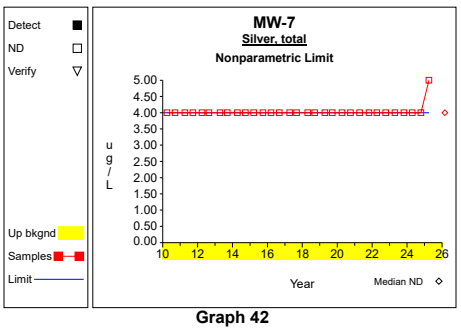
Graph 39



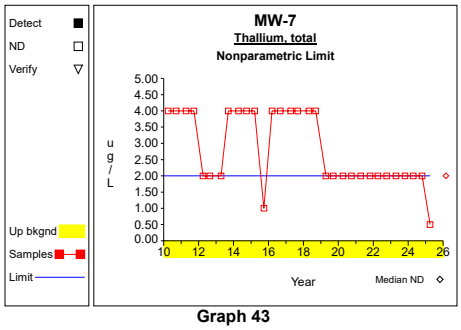
Graph 40



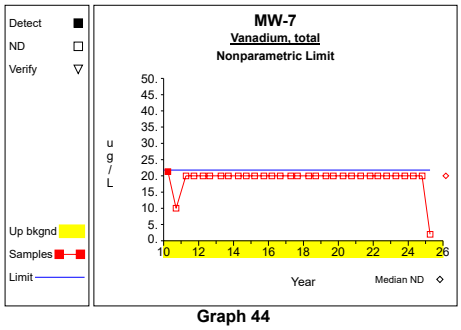
Graph 41



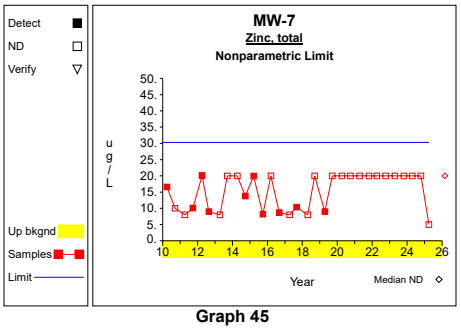
Graph 42



Graph 43



Graph 44



Graph 45

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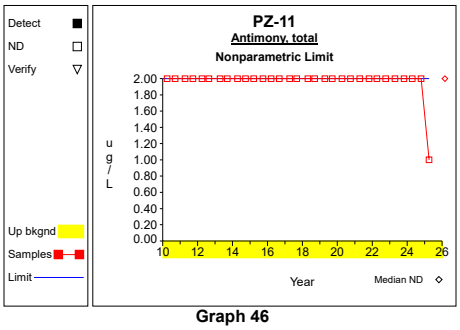
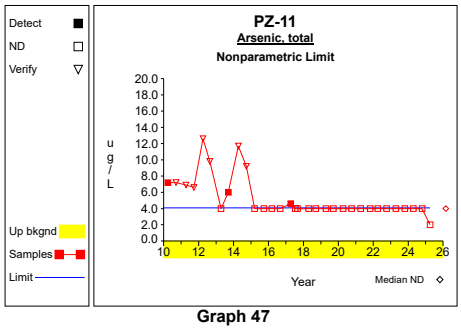
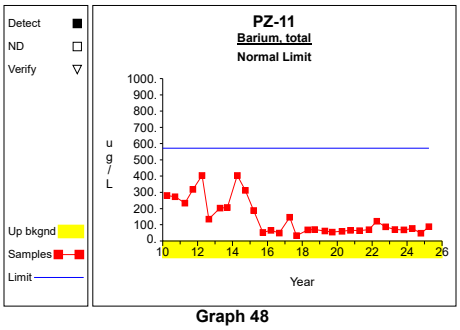
Up vs. Down Prediction Limits



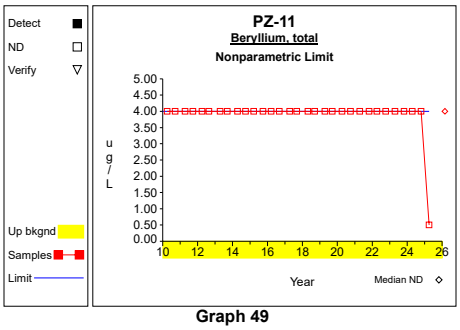
Graph 46



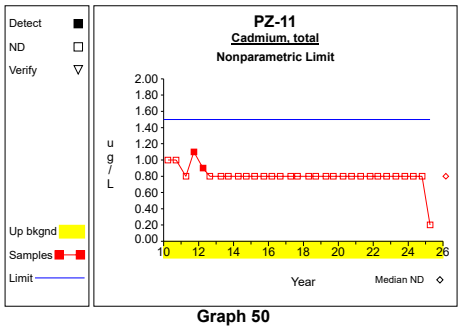
Graph 47



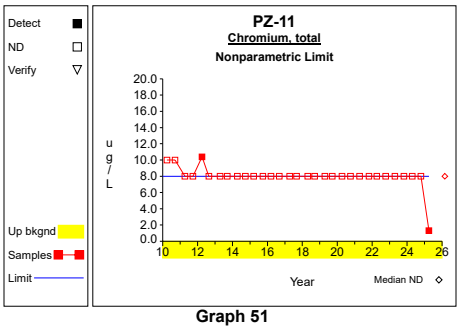
Graph 48



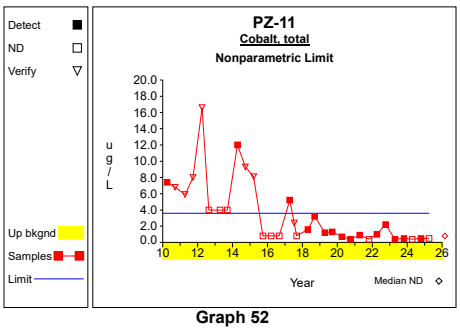
Graph 49



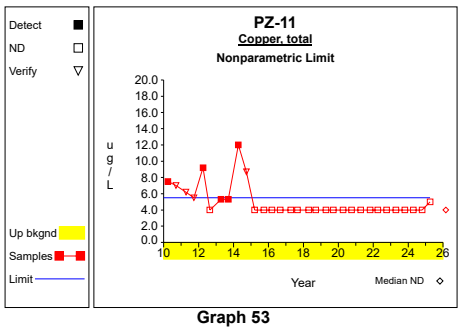
Graph 50



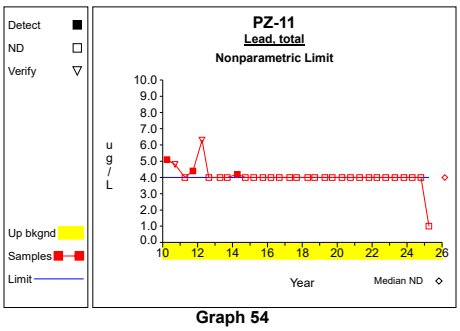
Graph 51



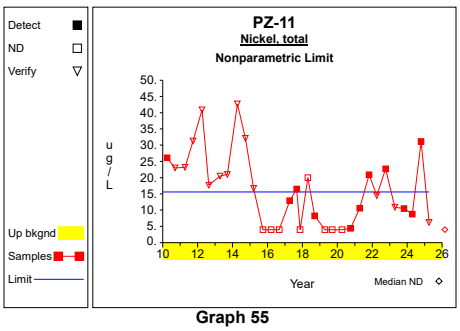
Graph 52



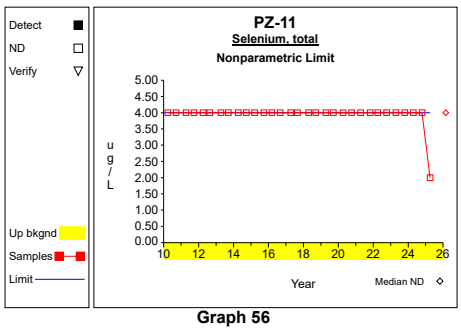
Graph 53



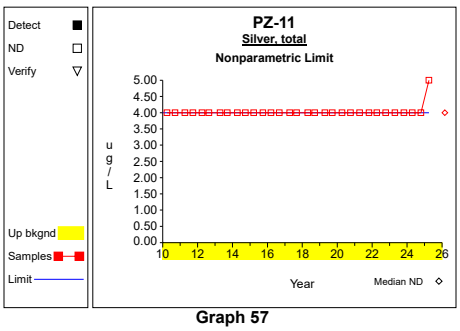
Graph 54



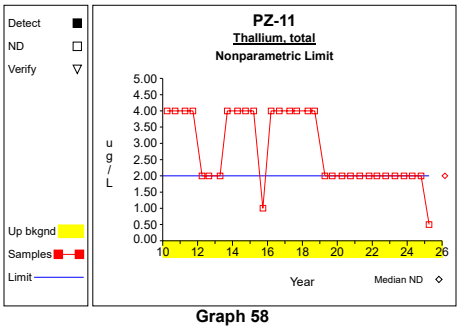
Graph 55



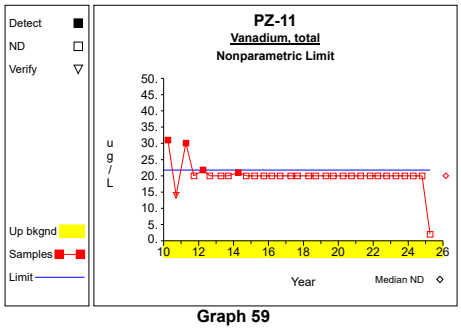
Graph 56



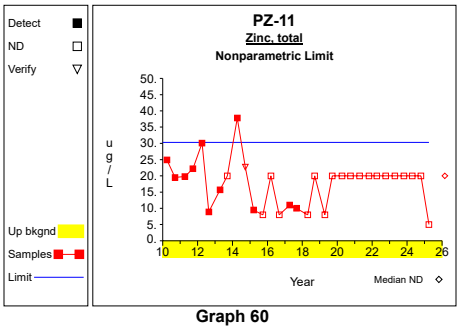
Graph 57



Graph 58



Graph 59



Graph 60

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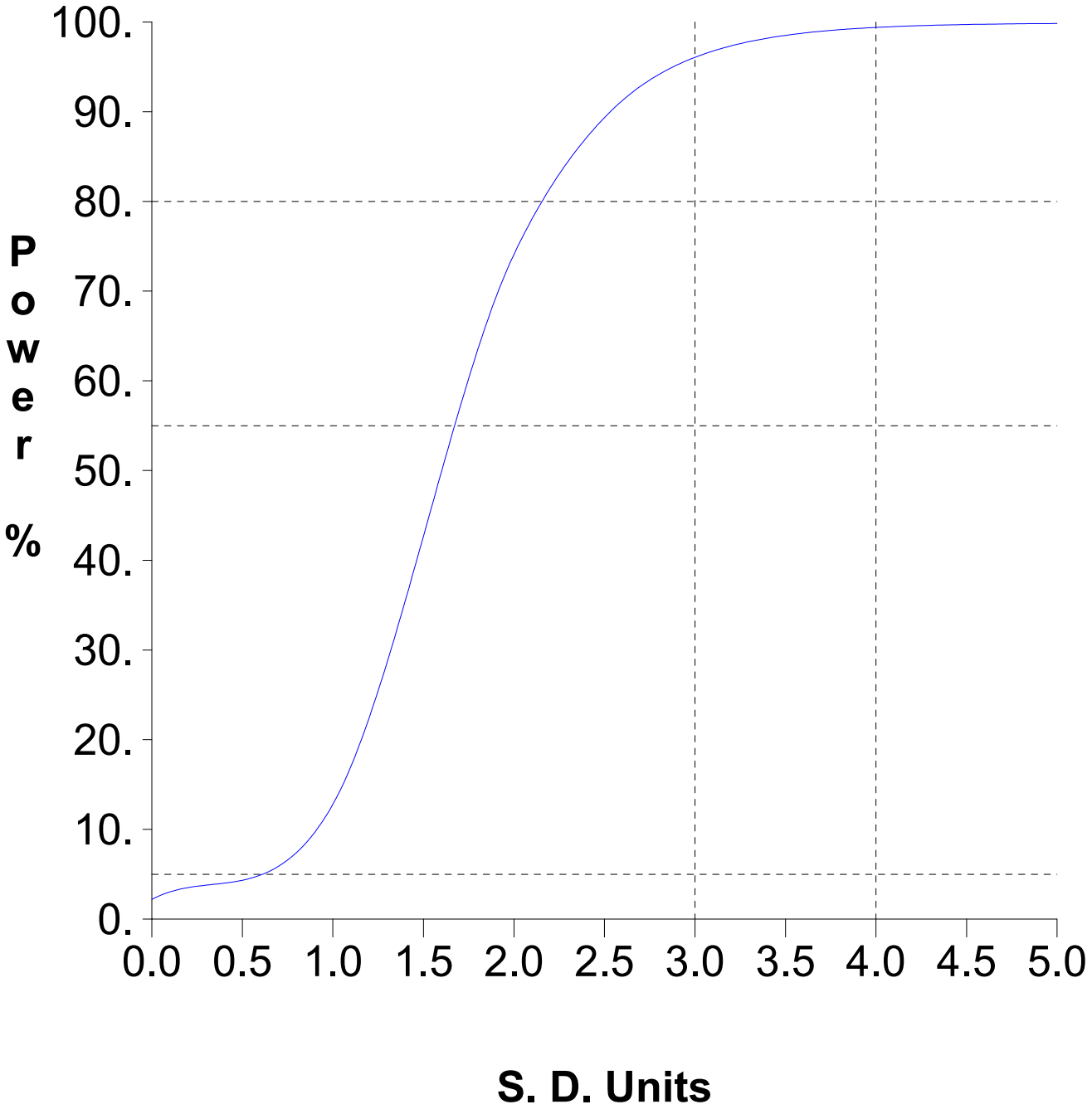
False Positive and False Negative Rates for Current

Upgradient vs. Downgradient Monitoring Program



Attachment C

Assessment Statistics for Trace Metals

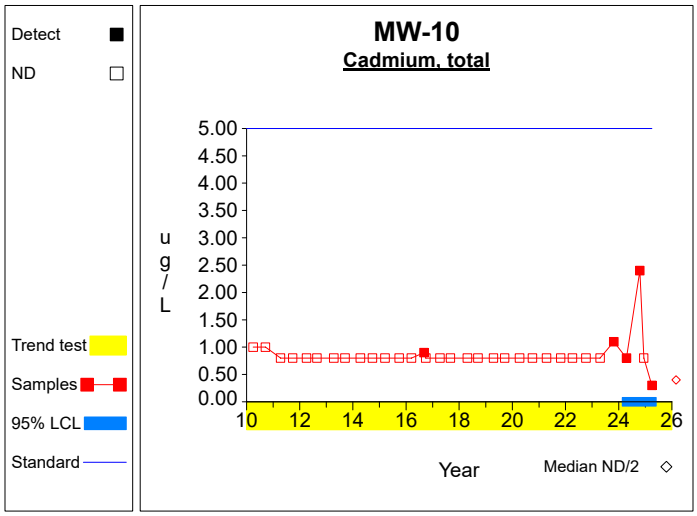
Table 1

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

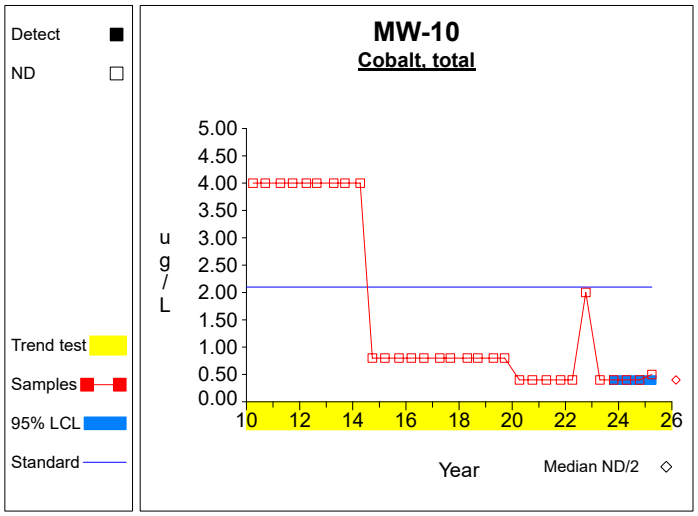
Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend
Cadmium, total	ug/L	MW-10	4	0.975	0.974	1.176	0.000	2.121	5.000	
Cobalt, total	ug/L	MW-10	4	0.400	0.000	1.176	0.400	0.400	2.100	
Copper, total	ug/L	MW-10	4	2.000	0.000	1.176	2.000	2.000	1300.000	
Nickel, total	ug/L	MW-10	4	8.400	2.135	1.176	5.888	10.912	100.000	
Cadmium, total	ug/L	MW-7	4	0.400	0.000	1.176	0.400	0.400	5.000	
Cobalt, total	ug/L	MW-7	4	2.025	0.776	1.176	1.112	2.938	2.100	
Copper, total	ug/L	MW-7	4	3.950	2.288	1.176	1.258	6.642	1300.000	
Nickel, total	ug/L	MW-7	4	32.950	18.047	1.176	11.721	54.179	100.000	inc
Cadmium, total	ug/L	PZ-11	4	0.400	0.000	1.176	0.400	0.400	5.000	
Cobalt, total	ug/L	PZ-11	4	0.450	0.058	1.176	0.382	0.518	2.100	
Copper, total	ug/L	PZ-11	4	2.000	0.000	1.176	2.000	2.000	1300.000	
Nickel, total	ug/L	PZ-11	4	14.150	11.438	1.176	0.696	27.604	100.000	

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

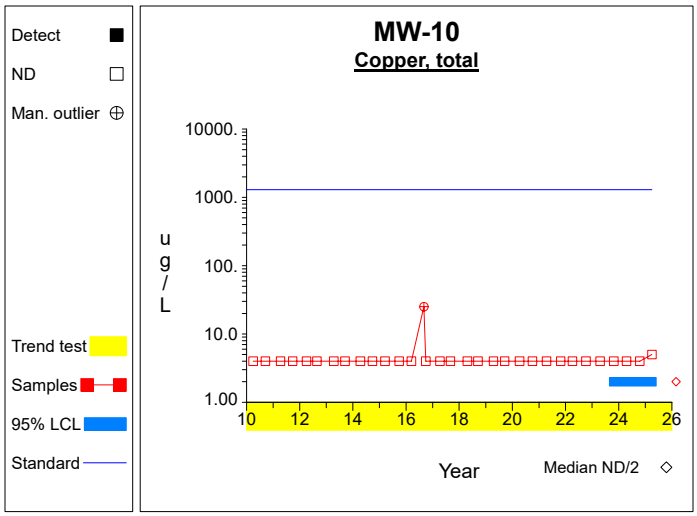
Confidence Limits (Assessment)



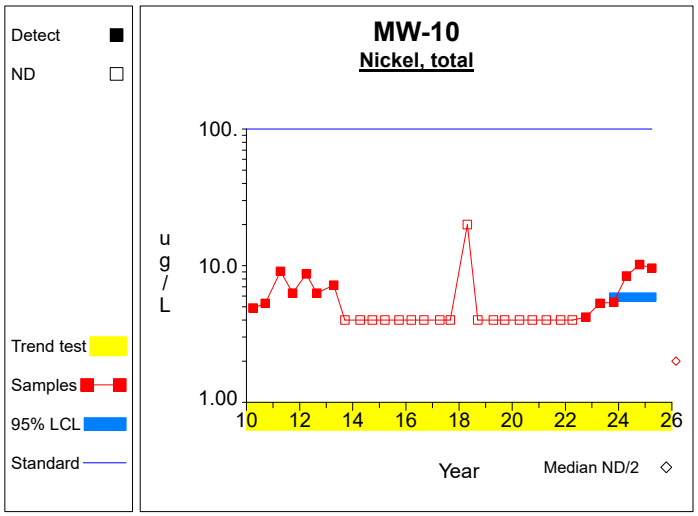
Graph 1



Graph 2

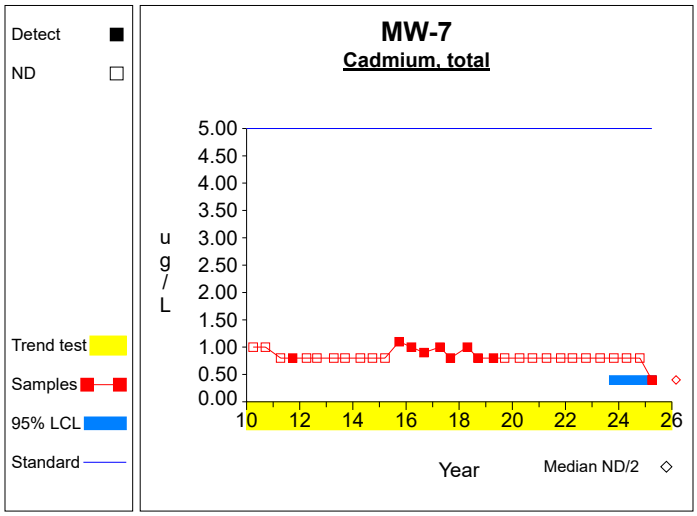


Graph 3

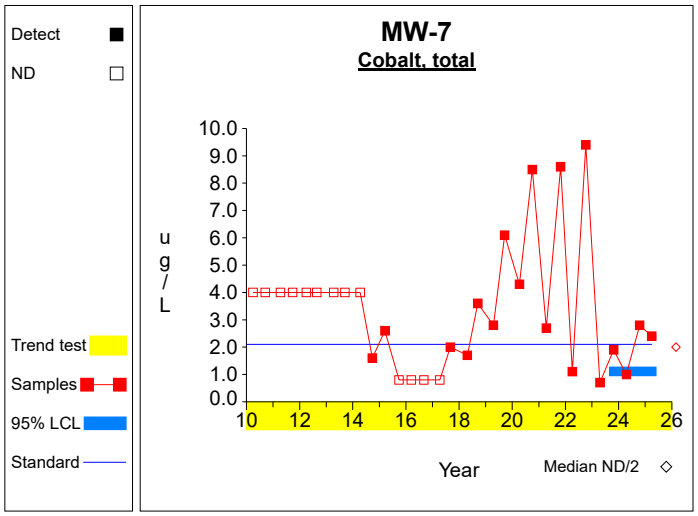


Graph 4

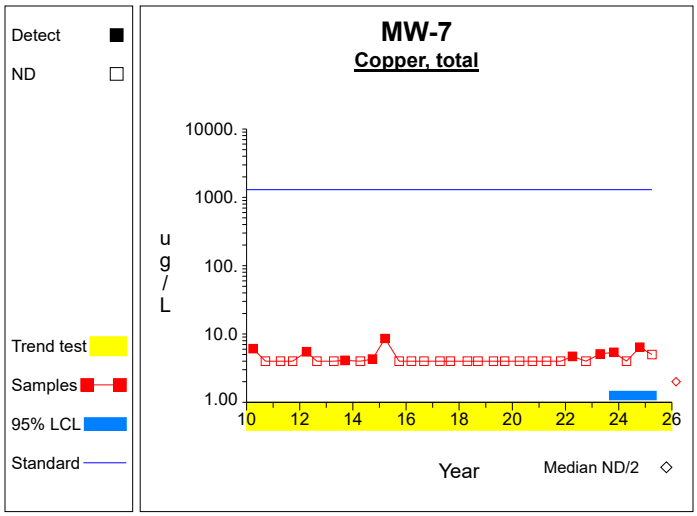
Confidence Limits (Assessment)



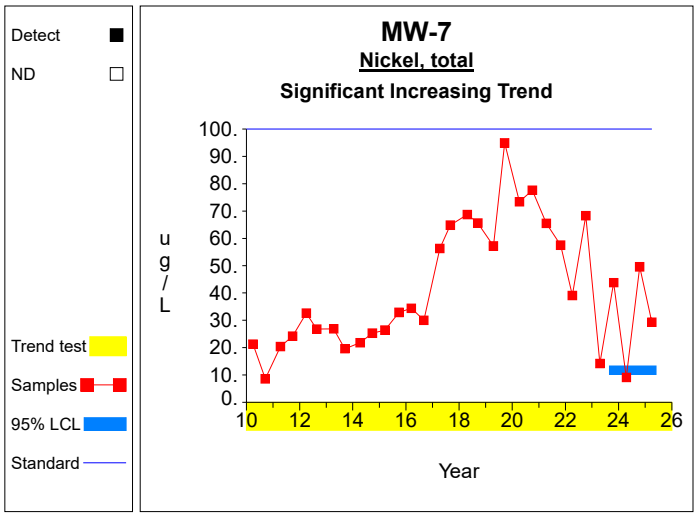
Graph 5



Graph 6

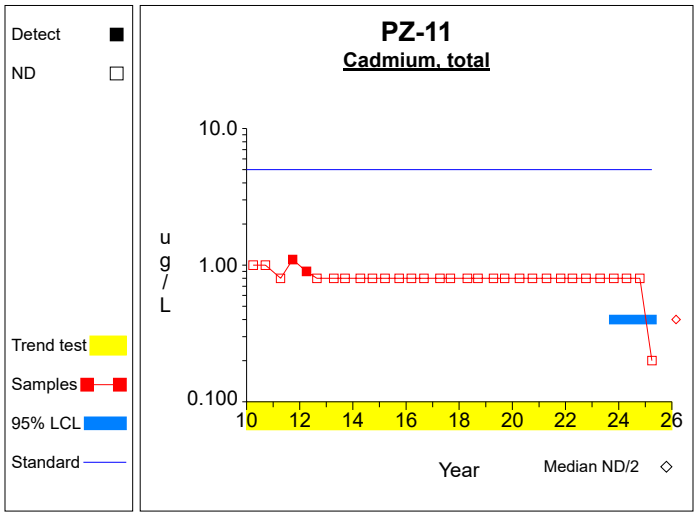


Graph 7

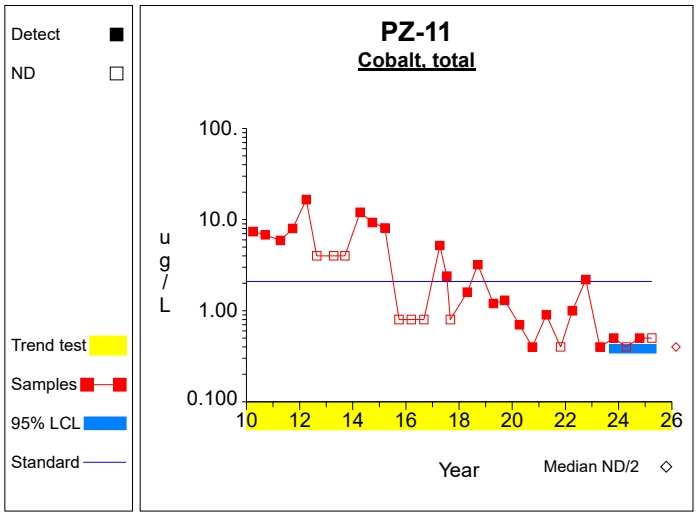


Graph 8

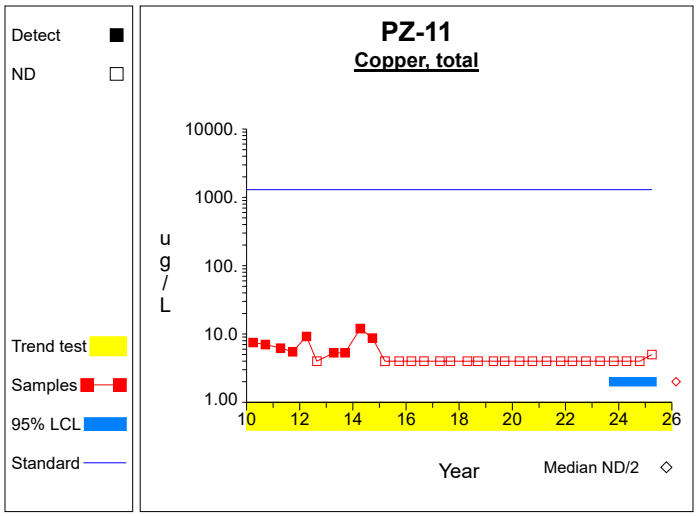
Confidence Limits (Assessment)



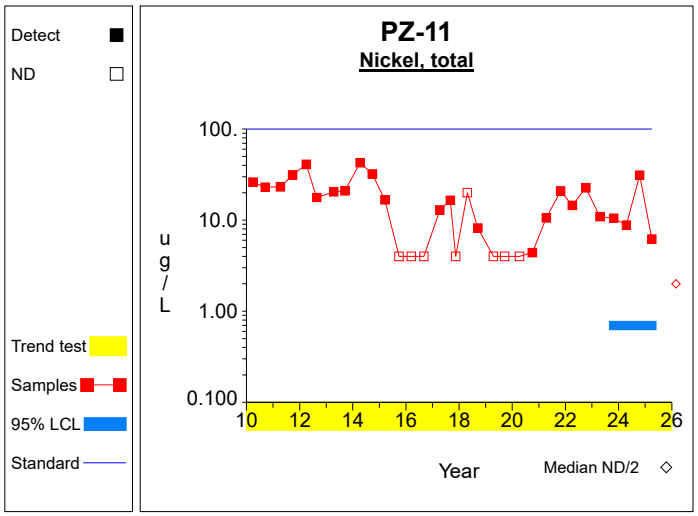
Graph 9



Graph 10



Graph 11



Graph 12

Attachment D

Summary Tables and Graphs for the Intrawell Comparisons

Table 1

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

Constituent	Units	Well	N(back)	N(mon)	N(tot)	Mean	SD	R(i-1)	R(i)	S(i-1)	S(i)	Limit	Type	Conf	
Antimony, total	ug/L	MW-10	27	4	31			2.0000	1.0000			2.0000	nonpar	.99	**
Arsenic, total	ug/L	MW-10	27	4	31			4.0000	2.0000			8.3000	nonpar	.99	**
Barium, total	ug/L	MW-10	27	4	31	113.1815	11.4353	141.0000	144.0000	156.6656	178.9076	187.5110	normal		
Beryllium, total	ug/L	MW-10	27	4	31			4.0000	0.5000			4.0000	nonpar	.99	**
Cadmium, total	ug/L	MW-10	28	5	33			0.8000	0.3000			0.9000	nonpar	.99	**
Chromium, total	ug/L	MW-10	27	4	31			8.0000	2.0000			8.1000	nonpar	.99	**
Cobalt, total	ug/L	MW-10	27	4	31			0.4000	0.5000			0.8000	nonpar	.99	**
Copper, total	ug/L	MW-10	27	4	32			4.0000	5.0000			4.0000	nonpar	.99	**
Lead, total	ug/L	MW-10	27	4	31			4.0000	1.0000			4.0000	nonpar	.99	**
Nickel, total	ug/L	MW-10	26	4	31	4.8192	1.4927	10.2000	9.6000	11.5418	15.2031	14.5215	normal		
Selenium, total	ug/L	MW-10	27	4	31			4.0000	2.0000			4.7000	nonpar	.99	**
Silver, total	ug/L	MW-10	27	4	31			4.0000	5.0000			4.0000	nonpar	.99	**
Thallium, total	ug/L	MW-10	26	4	31			2.0000	0.5000			4.0000	nonpar	.99	**
Vanadium, total	ug/L	MW-10	27	4	31			20.0000	2.0000			25.8000	nonpar	.99	**
Zinc, total	ug/L	MW-10	28	4	32			20.0000	5.0000			25.2000	nonpar	.99	**
Antimony, total	ug/L	MW-13	27	4	31			2.0000	1.0000			2.0000	nonpar	.99	**
Arsenic, total	ug/L	MW-13	27	4	31			4.0000	2.0000			8.2000	nonpar	.99	**
Barium, total	ug/L	MW-13	27	4	31	97.4259	46.5836	48.2000	66.9000	97.4259	97.4259	400.2195	normal		
Beryllium, total	ug/L	MW-13	27	4	31			4.0000	0.5000			4.0000	nonpar	.99	**
Cadmium, total	ug/L	MW-13	27	4	31			0.8000	0.2000			0.8000	nonpar	.99	**
Chromium, total	ug/L	MW-13	27	4	31			8.0000	3.0000			13.0000	nonpar	.99	**
Cobalt, total	ug/L	MW-13	27	4	31			0.4000	0.5000			4.1000	nonpar	.99	**
Copper, total	ug/L	MW-13	27	4	31	5.1667	2.5640	4.0000	5.0000	5.1667	5.1667	21.8323	normal		
Lead, total	ug/L	MW-13	27	4	31			4.0000	1.0000			6.8000	nonpar	.99	**
Nickel, total	ug/L	MW-13	27	4	31	6.4926	4.0844	4.0000	5.0000	6.4926	6.4926	33.0411	normal		
Selenium, total	ug/L	MW-13	27	4	31			4.0000	2.0000			4.0000	nonpar	.99	**
Silver, total	ug/L	MW-13	27	4	31			4.0000	5.0000			4.0000	nonpar	.99	**
Thallium, total	ug/L	MW-13	26	4	31			2.0000	0.5000			4.0000	nonpar	.99	**
Vanadium, total	ug/L	MW-13	27	4	31			20.0000	2.0000			24.9000	nonpar	.99	**
Zinc, total	ug/L	MW-13	27	4	31	11.9963	5.2259	20.0000	5.0000	11.9963	11.9963	45.9644	normal		
Antimony, total	ug/L	MW-3	27	4	31			2.0000	1.0000			2.0000	nonpar	.99	**
Arsenic, total	ug/L	MW-3	27	4	31			4.0000	2.0000			4.1000	nonpar	.99	**
Barium, total	ug/L	MW-3	27	4	31	314.9259	108.9244	325.0000	341.0000	314.9259	314.9259	1022.9348	normal		
Beryllium, total	ug/L	MW-3	27	4	31			4.0000	0.5000			4.0000	nonpar	.99	**
Cadmium, total	ug/L	MW-3	27	4	31			0.8000	0.3000			1.5000	nonpar	.99	**
Chromium, total	ug/L	MW-3	27	4	31			8.0000	1.1000			8.0000	nonpar	.99	**
Cobalt, total	ug/L	MW-3	27	4	31	0.9889	0.6247	0.4000	0.5000	0.9889	0.9889	5.0495	normal		
Copper, total	ug/L	MW-3	27	4	31			4.0000	5.0000			5.5000	nonpar	.99	**
Lead, total	ug/L	MW-3	27	4	31			4.0000	1.0000			4.0000	nonpar	.99	**
Nickel, total	ug/L	MW-3	27	4	31	5.5704	2.8239	4.0000	5.0000	5.5704	5.5704	23.9258	normal		
Selenium, total	ug/L	MW-3	27	4	31			4.0000	2.0000			4.0000	nonpar	.99	**
Silver, total	ug/L	MW-3	27	4	31			4.0000	5.0000			4.0000	nonpar	.99	**
Thallium, total	ug/L	MW-3	26	4	31			2.0000	0.5000			4.0000	nonpar	.99	**
Vanadium, total	ug/L	MW-3	27	4	31			20.0000	2.0000			21.8000	nonpar	.99	**
Zinc, total	ug/L	MW-3	27	4	31	18.4185	4.9748	20.0000	5.0000	18.4185	18.4185	50.7546	normal		
Antimony, total	ug/L	MW-7	27	4	31			2.0000	1.0000			2.0000	nonpar	.99	**

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

Table 1

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

Constituent	Units	Well	N(back)	N(mon)	N(tot)	Mean	SD	R(i-1)	R(i)	S(i-1)	S(i)	Limit	Type	Conf	
Arsenic, total	ug/L	MW-7	27	4	31			4.0000	2.0000			7.6000	nonpar	.99	**
Barium, total	ug/L	MW-7	27	4	31	187.4444	78.6068	249.0000	189.0000	190.0449	187.4444	698.3885	normal		
Beryllium, total	ug/L	MW-7	27	4	31			4.0000	0.5000			4.0000	nonpar	.99	**
Cadmium, total	ug/L	MW-7	27	4	31	0.8370	0.0839	0.8000	0.4000	0.8370	0.8370	1.3823	normal		
Chromium, total	ug/L	MW-7	27	4	31			8.0000	1.5000			8.0000	nonpar	.99	**
Cobalt, total	ug/L	MW-7	27	4	31	3.9889	2.1001	2.8000	2.4000	3.9889	3.9889	17.6393	normal		
Copper, total	ug/L	MW-7	27	4	31	4.3852	0.9926	6.4000	5.0000	5.6556	4.3852	10.8368	normal		
Lead, total	ug/L	MW-7	27	4	31			4.0000	1.0000			4.5000	nonpar	.99	**
Nickel, total	ug/L	MW-7	27	4	31	42.7519	23.3029	49.6000	29.3000	42.7519	42.7519	194.2205	normal		
Selenium, total	ug/L	MW-7	27	4	31			4.0000	2.0000			4.6000	nonpar	.99	**
Silver, total	ug/L	MW-7	27	4	31			4.0000	5.0000			4.0000	nonpar	.99	**
Thallium, total	ug/L	MW-7	26	4	31			2.0000	0.5000			4.0000	nonpar	.99	**
Vanadium, total	ug/L	MW-7	27	4	31			20.0000	2.0000			21.3000	nonpar	.99	**
Zinc, total	ug/L	MW-7	27	4	31	17.2519	4.5792	20.0000	5.0000	17.2519	17.2519	47.0170	normal		
Antimony, total	ug/L	PZ-11	27	4	31			2.0000	1.0000			2.0000	nonpar	.99	**
Arsenic, total	ug/L	PZ-11	28	4	32	5.4929	2.5206	4.0000	2.0000	5.4929	5.4929	21.8766	normal		
Barium, total	ug/L	PZ-11	27	4	31	151.8148	114.3610	48.0000	88.0000	151.8148	151.8148	895.1610	normal		
Beryllium, total	ug/L	PZ-11	27	4	31			4.0000	0.5000			4.0000	nonpar	.99	**
Cadmium, total	ug/L	PZ-11	27	4	31			0.8000	0.2000			1.1000	nonpar	.99	**
Chromium, total	ug/L	PZ-11	27	4	31			8.0000	1.3000			10.4000	nonpar	.99	**
Cobalt, total	ug/L	PZ-11	28	4	32	3.6071	4.1654	0.5000	0.5000	3.6071	3.6071	30.6821	normal		
Copper, total	ug/L	PZ-11	27	4	31	5.1370	2.0564	4.0000	5.0000	5.1370	5.1370	18.5033	normal		
Lead, total	ug/L	PZ-11	27	4	31			4.0000	1.0000			6.3000	nonpar	.99	**
Nickel, total	ug/L	PZ-11	28	4	32	16.0286	11.4847	31.1000	6.2000	22.4865	16.0286	90.6789	normal		
Selenium, total	ug/L	PZ-11	27	4	31			4.0000	2.0000			4.0000	nonpar	.99	**
Silver, total	ug/L	PZ-11	27	4	31			4.0000	5.0000			4.0000	nonpar	.99	**
Thallium, total	ug/L	PZ-11	26	4	31			2.0000	0.5000			4.0000	nonpar	.99	**
Vanadium, total	ug/L	PZ-11	27	4	31			20.0000	2.0000			31.0000	nonpar	.99	**
Zinc, total	ug/L	PZ-11	27	4	31	19.7074	5.8373	20.0000	5.0000	19.7074	19.7074	57.6497	normal		

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

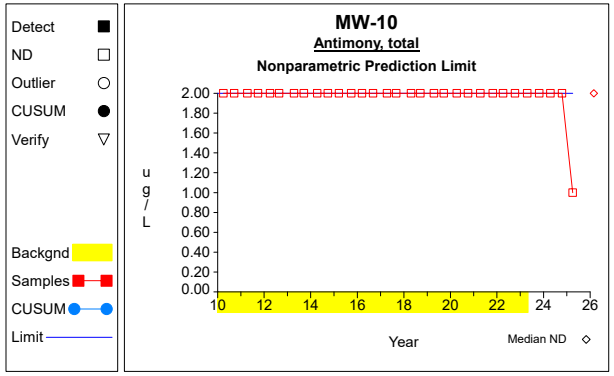
Table 4

Dixon's Test Outliers
1% Significance Level

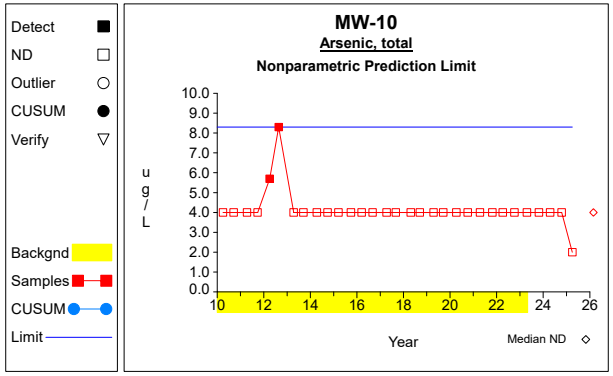
Constituent	Units	Well	Date	Result	ND Qualifier	Date Range	N	Critical Value
Nickel, total	ug/L	MW-10	04/23/2018	20.0000	< 20.0000	03/31/2010-04/19/2023	27	0.4744
Thallium, total	ug/L	MW-10	09/28/2015	1.0000	< 1.0000	03/31/2010-04/19/2023	27	0.4744
Thallium, total	ug/L	MW-13	09/28/2015	1.0000	< 1.0000	03/31/2010-04/19/2023	27	0.4744
Thallium, total	ug/L	MW-3	09/28/2015	1.0000	< 1.0000	03/31/2010-04/19/2023	27	0.4744
Thallium, total	ug/L	MW-7	09/28/2015	1.0000	< 1.0000	03/31/2010-04/19/2023	27	0.4744
Thallium, total	ug/L	PZ-11	09/28/2015	1.0000	< 1.0000	03/31/2010-04/19/2023	27	0.4744

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

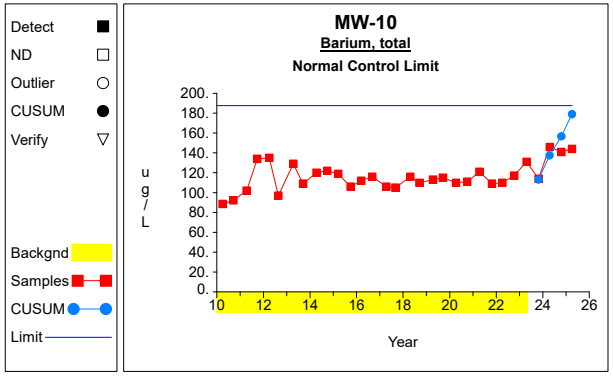
Intra-Well Control Charts / Prediction Limits



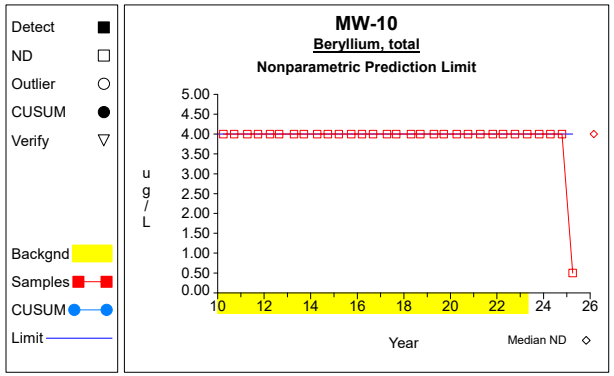
Graph 1



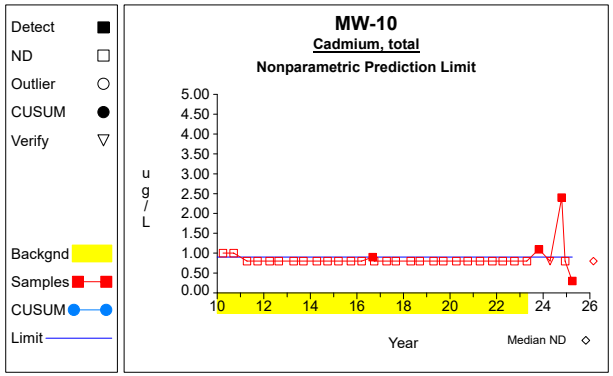
Graph 2



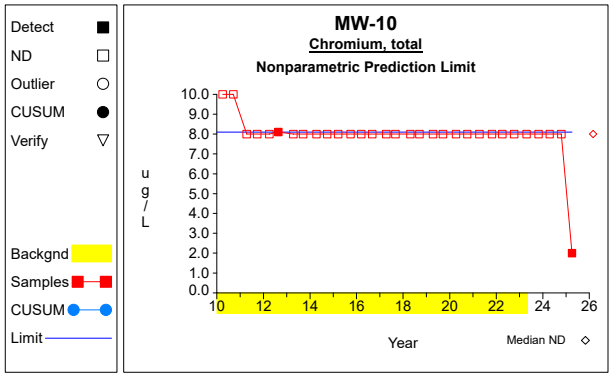
Graph 3



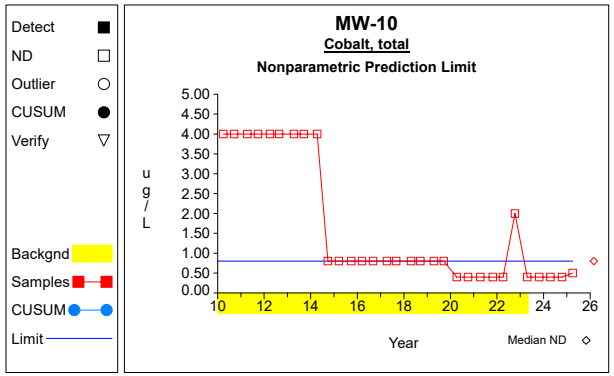
Graph 4



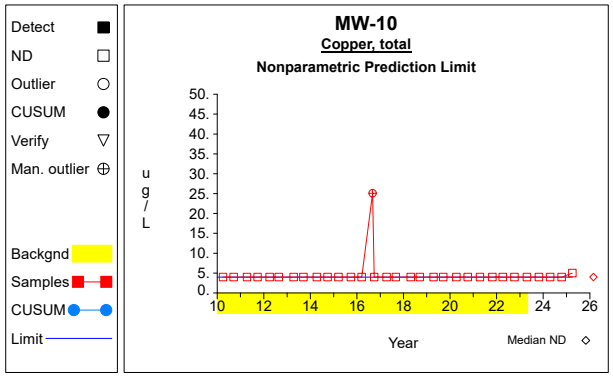
Graph 5



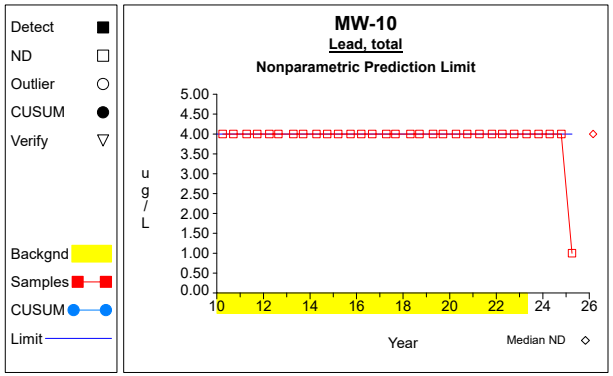
Graph 6



Graph 7



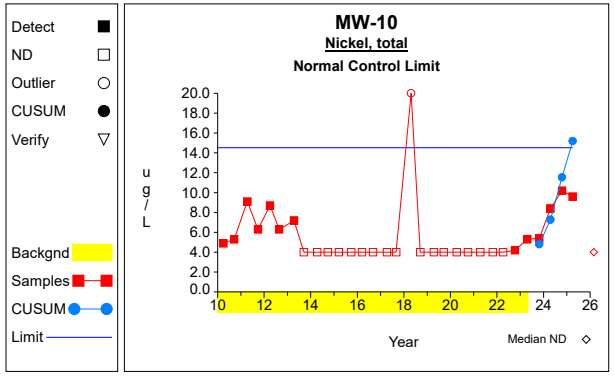
Graph 8



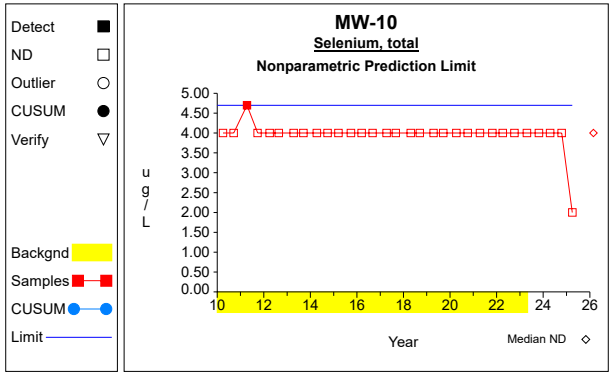
Graph 9

Prepared by: Otter Creek Environmental

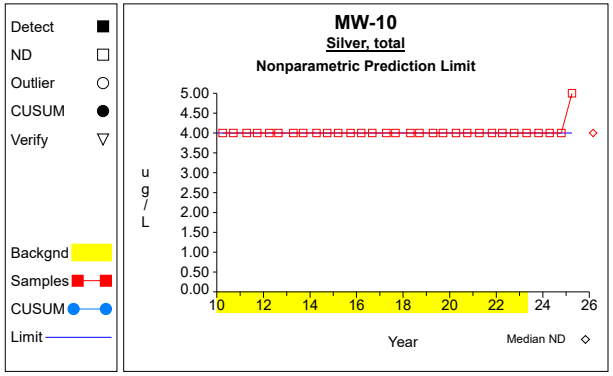
Intra-Well Control Charts / Prediction Limits



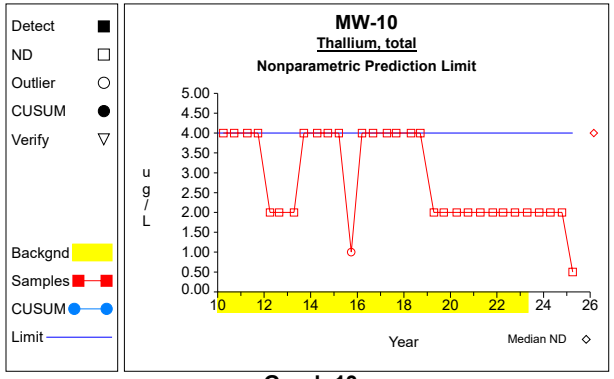
Graph 10



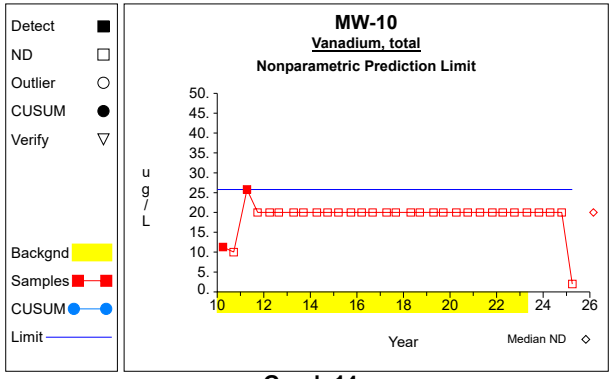
Graph 11



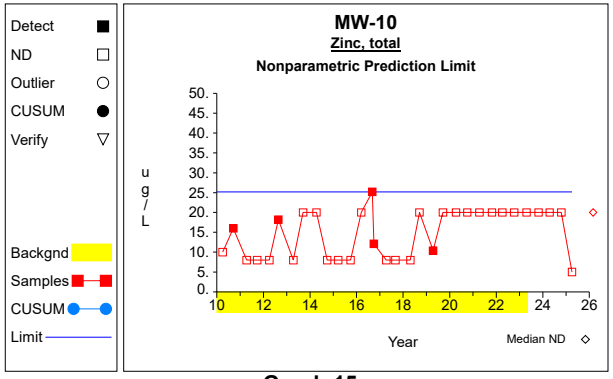
Graph 12



Graph 13

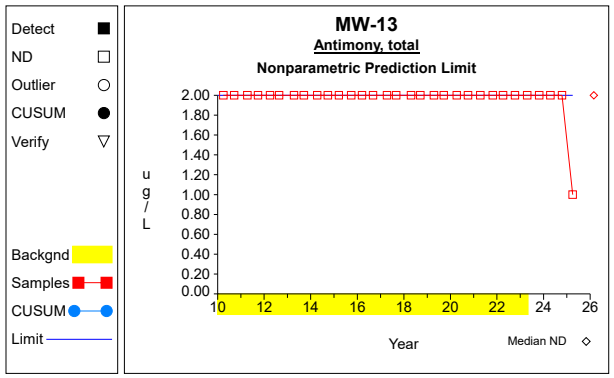


Graph 14

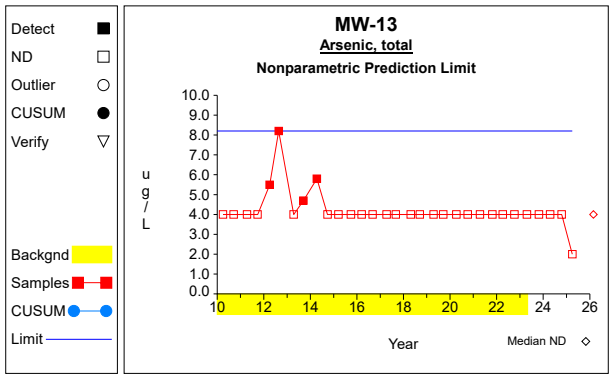


Graph 15

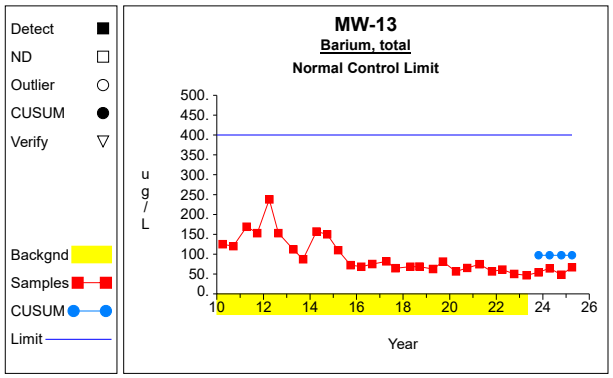
Intra-Well Control Charts / Prediction Limits



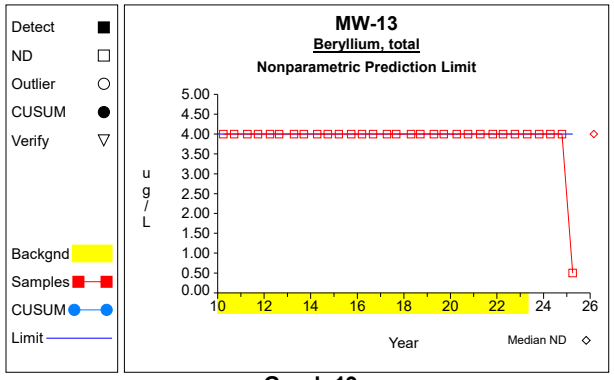
Graph 16



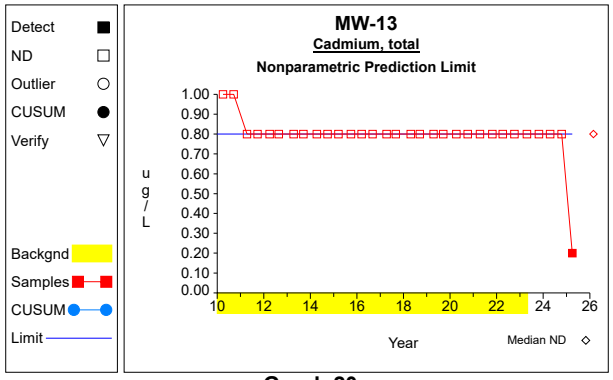
Graph 17



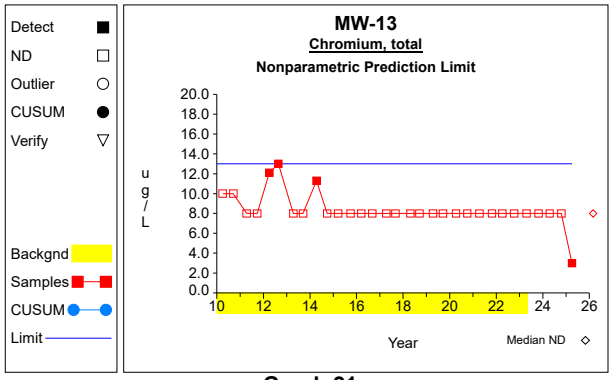
Graph 18



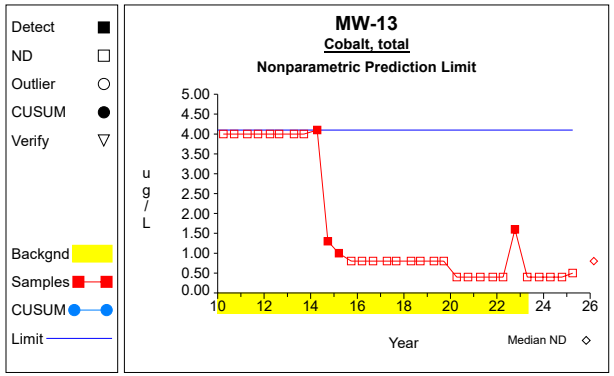
Graph 19



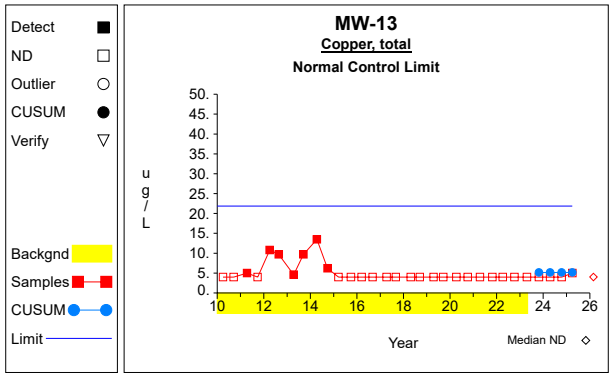
Graph 20



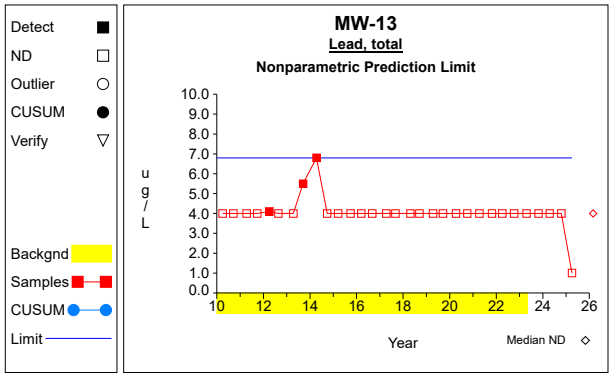
Graph 21



Graph 22

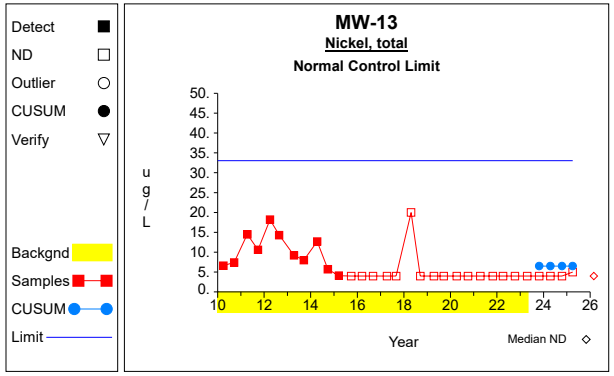


Graph 23

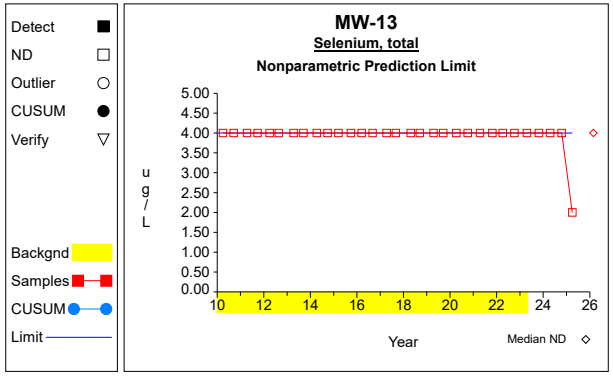


Graph 24

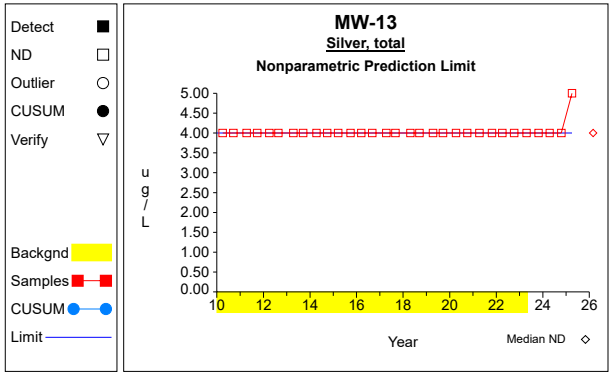
Intra-Well Control Charts / Prediction Limits



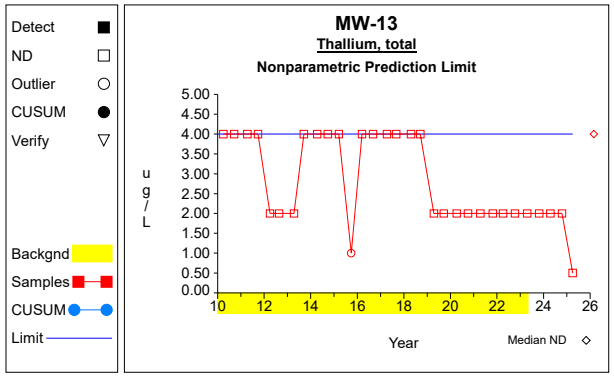
Graph 25



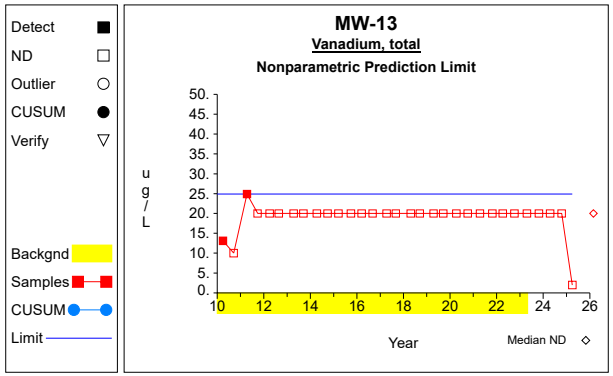
Graph 26



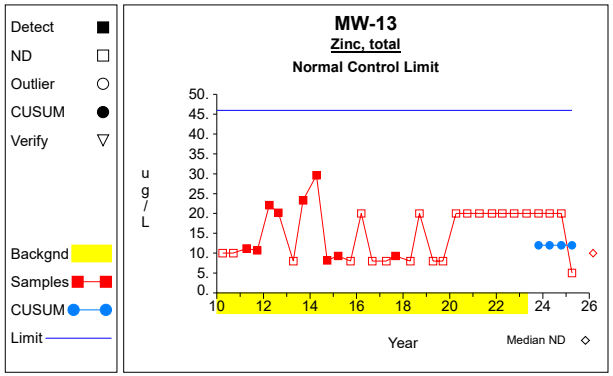
Graph 27



Graph 28

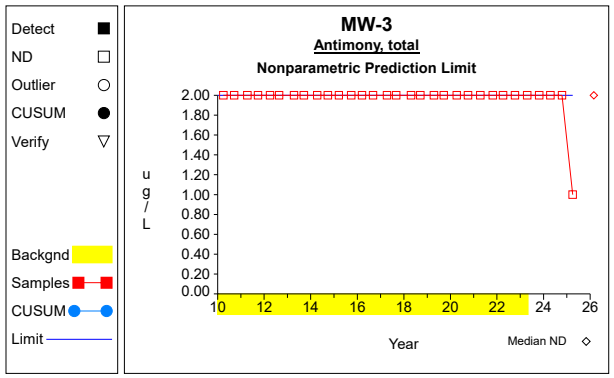


Graph 29

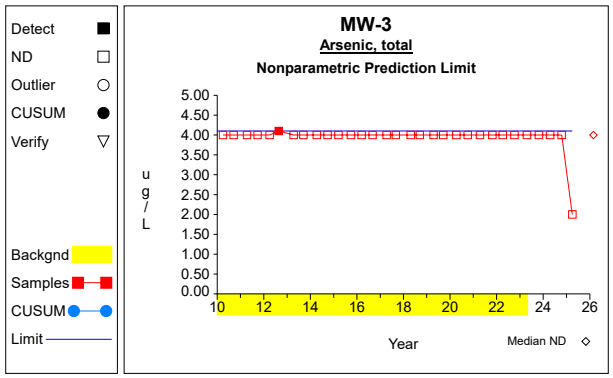


Graph 30

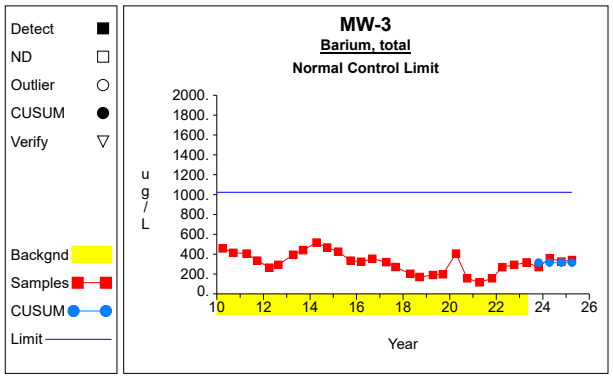
Intra-Well Control Charts / Prediction Limits



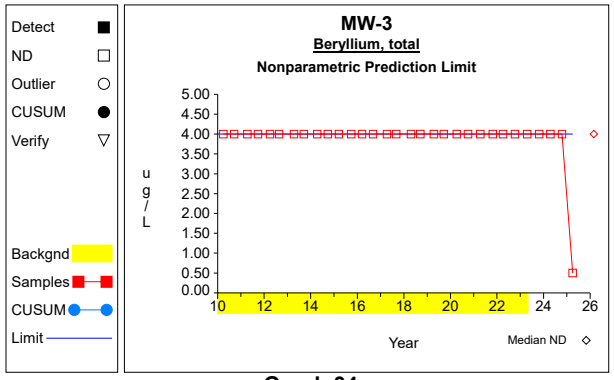
Graph 31



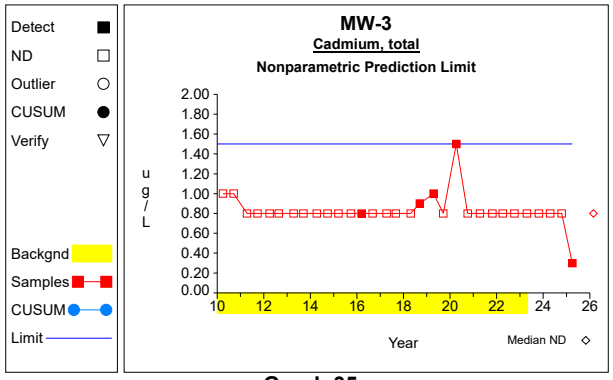
Graph 32



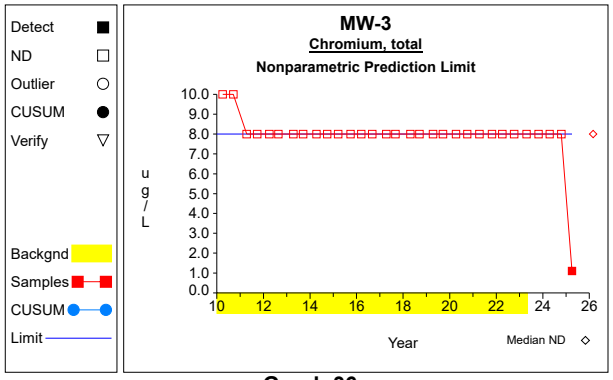
Graph 33



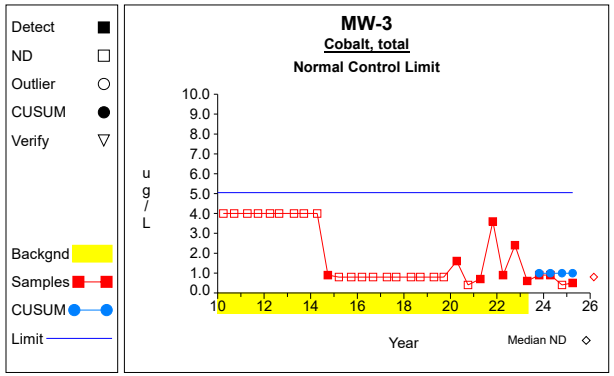
Graph 34



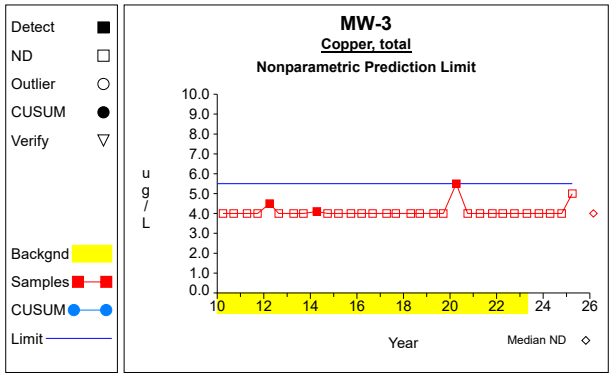
Graph 35



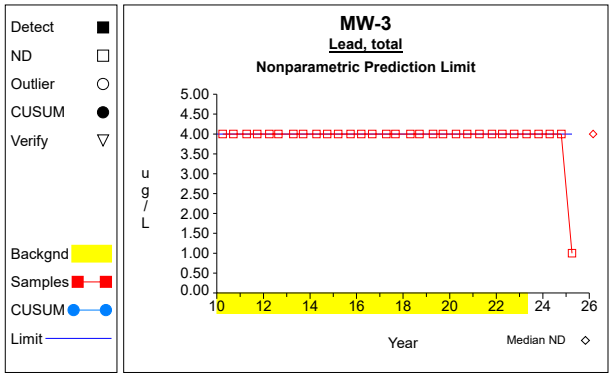
Graph 36



Graph 37

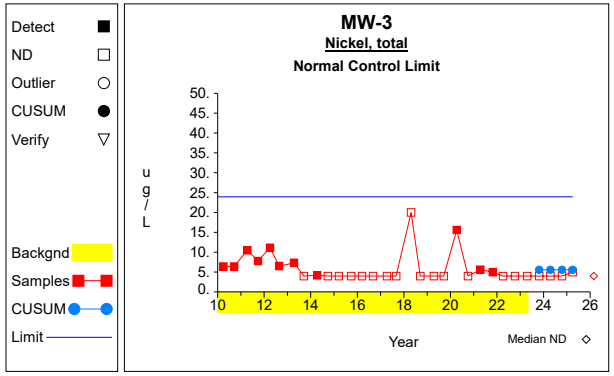


Graph 38

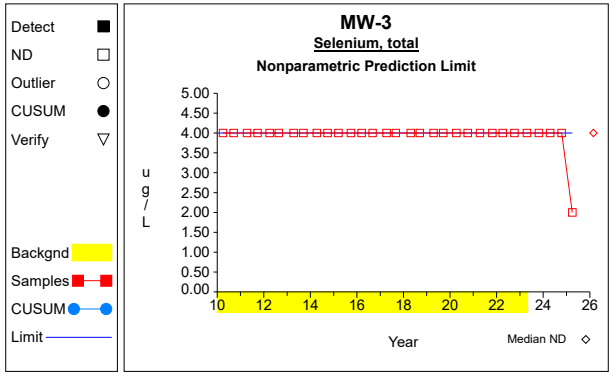


Graph 39

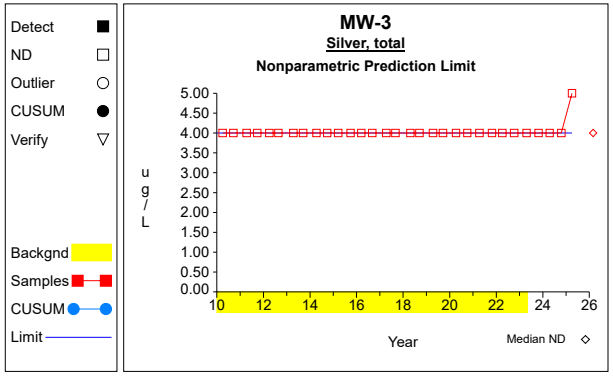
Intra-Well Control Charts / Prediction Limits



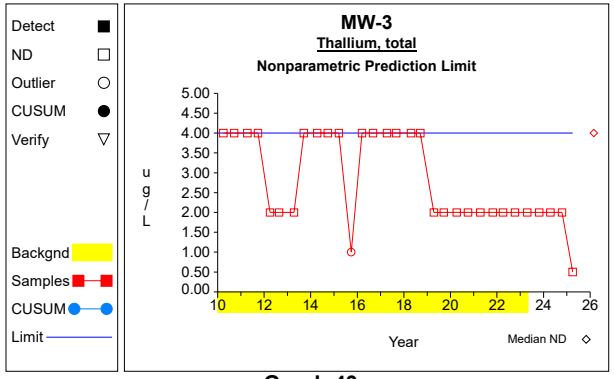
Graph 40



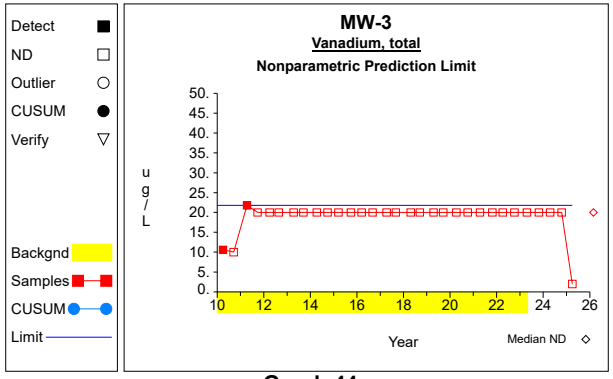
Graph 41



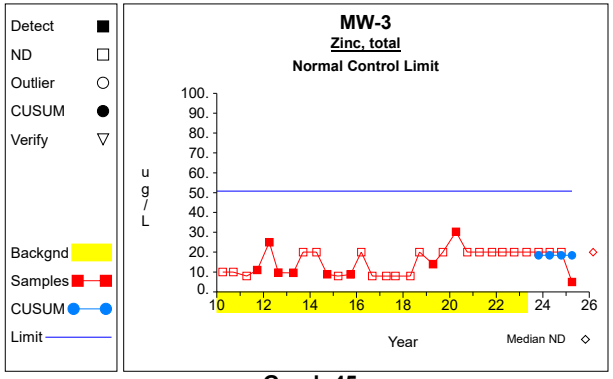
Graph 42



Graph 43

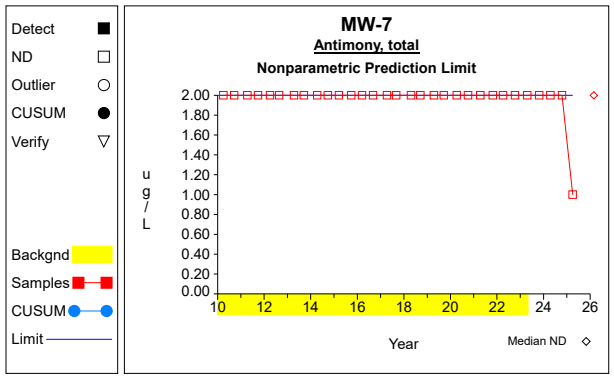


Graph 44

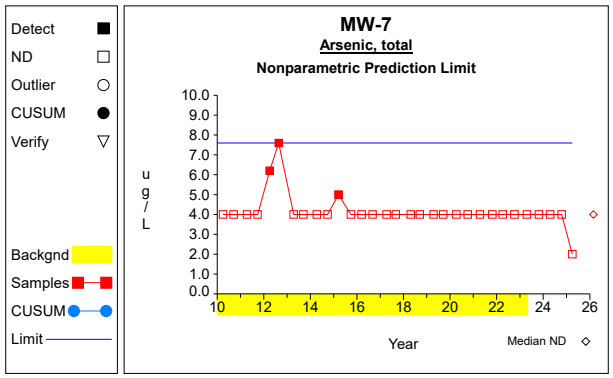


Graph 45

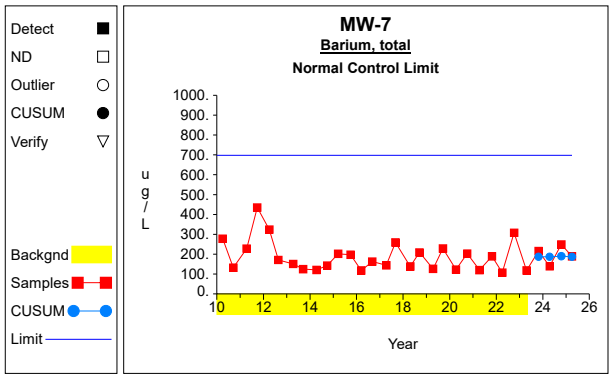
Intra-Well Control Charts / Prediction Limits



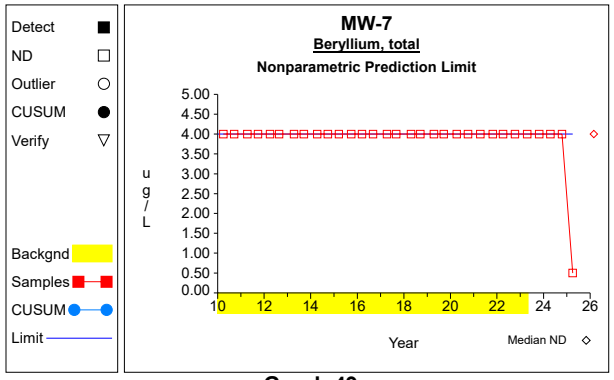
Graph 46



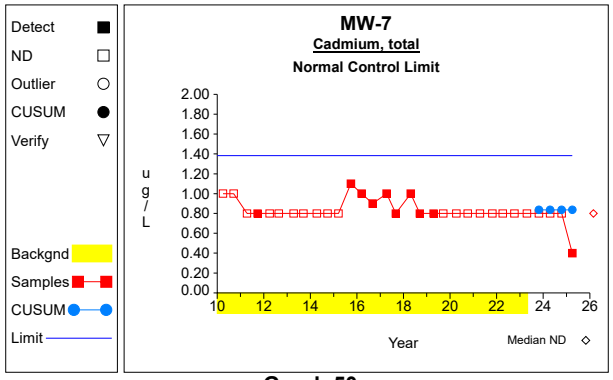
Graph 47



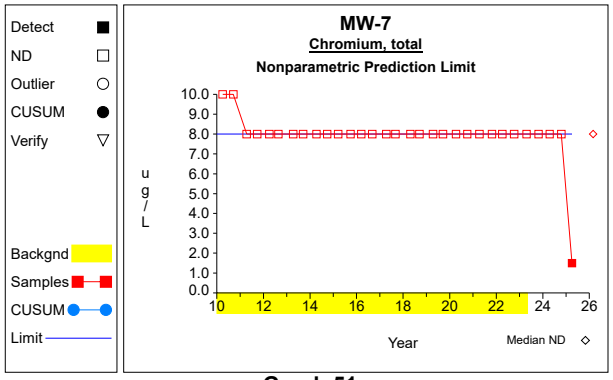
Graph 48



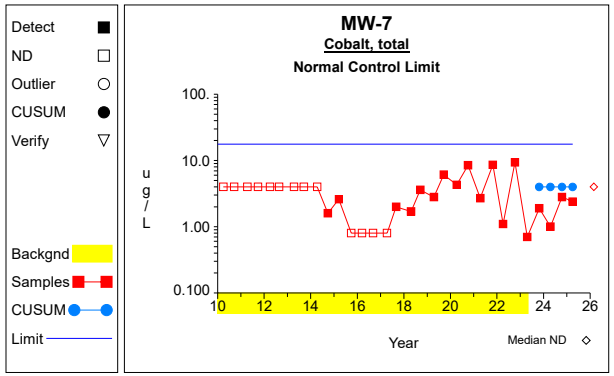
Graph 49



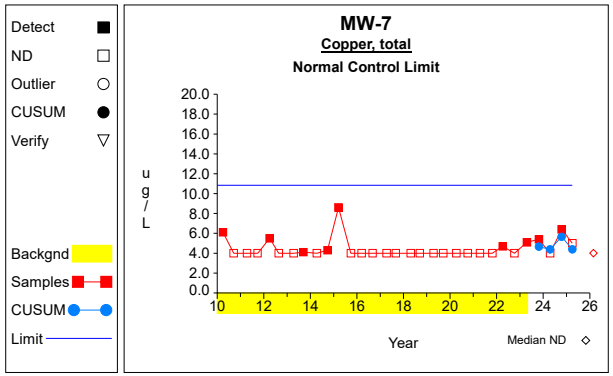
Graph 50



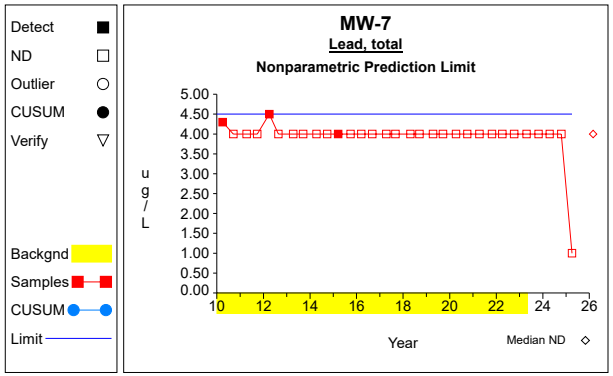
Graph 51



Graph 52



Graph 53



Graph 54

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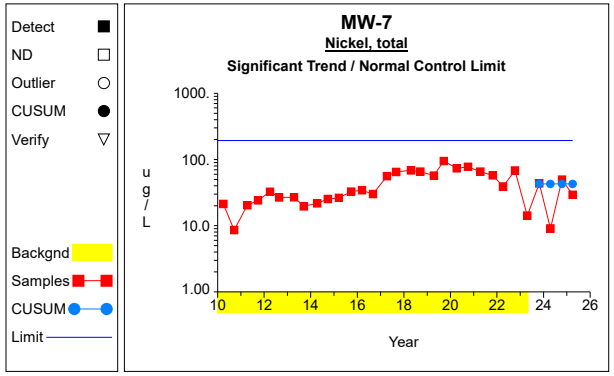
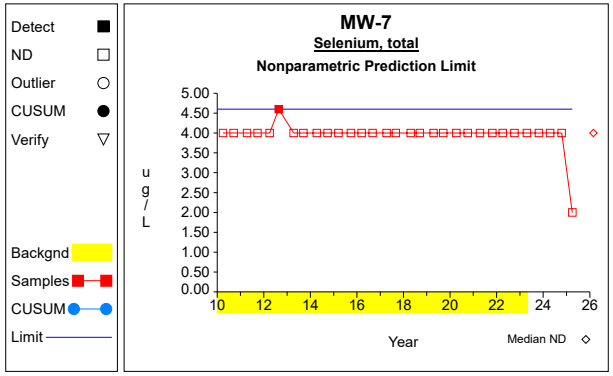
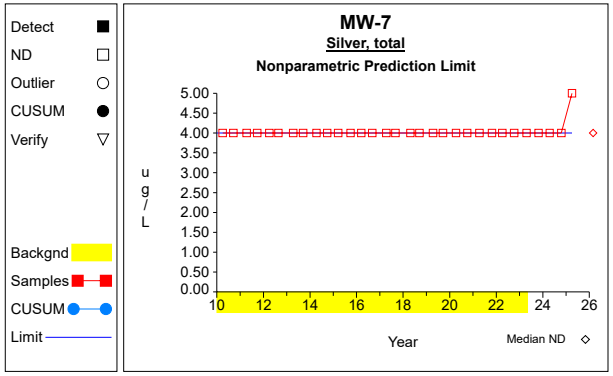
Intra-Well Control Charts / Prediction Limits



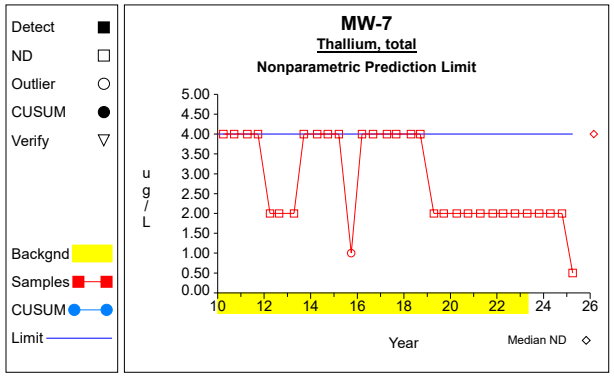
Graph 55



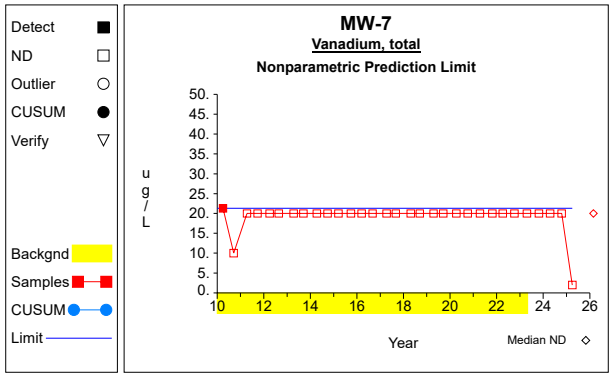
Graph 56



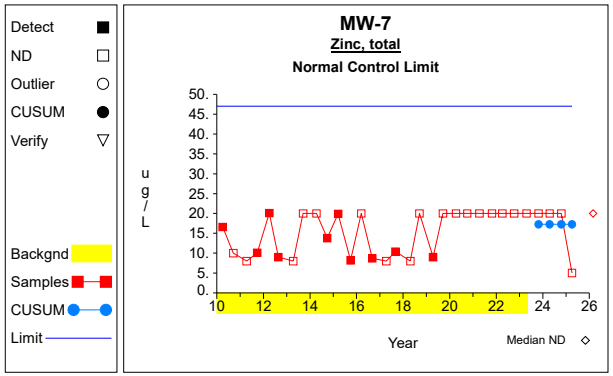
Graph 57



Graph 58

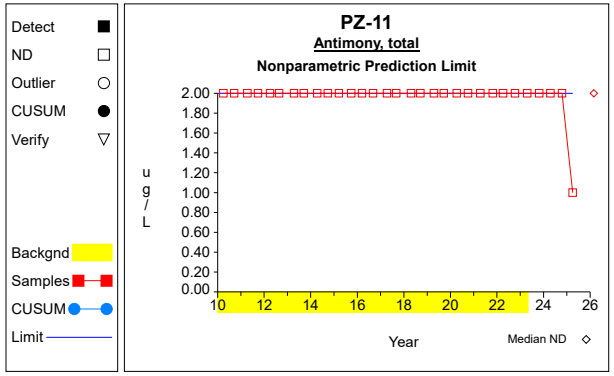


Graph 59

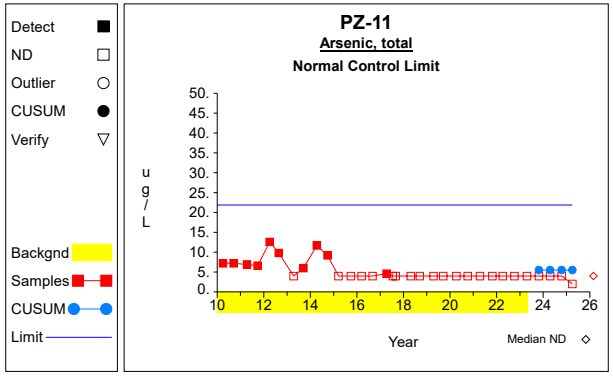


Graph 60

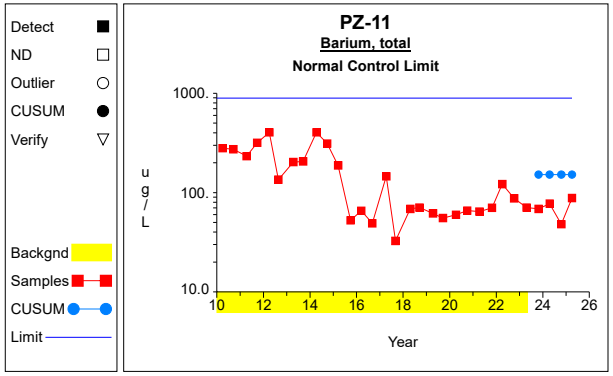
Intra-Well Control Charts / Prediction Limits



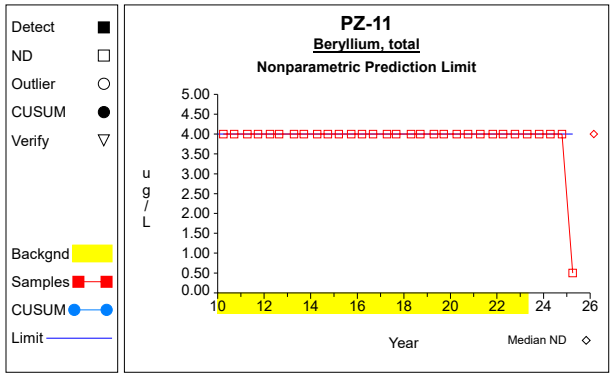
Graph 61



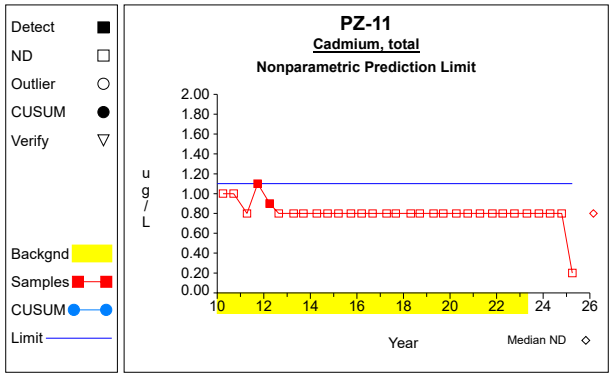
Graph 62



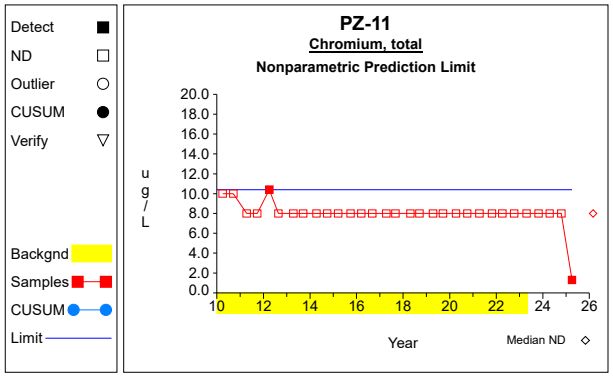
Graph 63



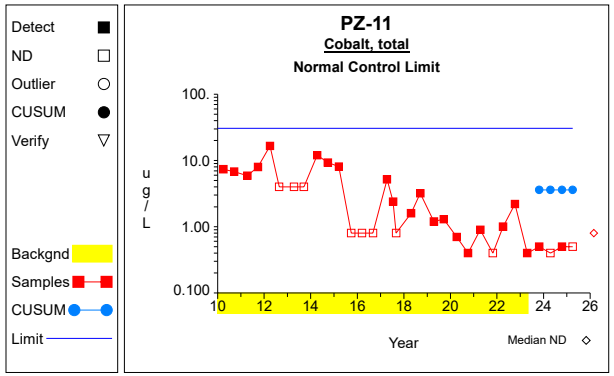
Graph 64



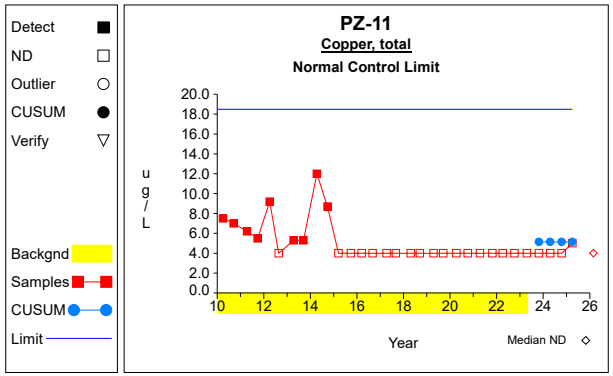
Graph 65



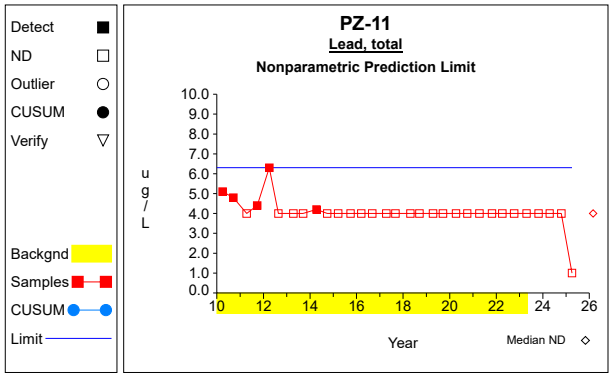
Graph 66



Graph 67



Graph 68



Graph 69

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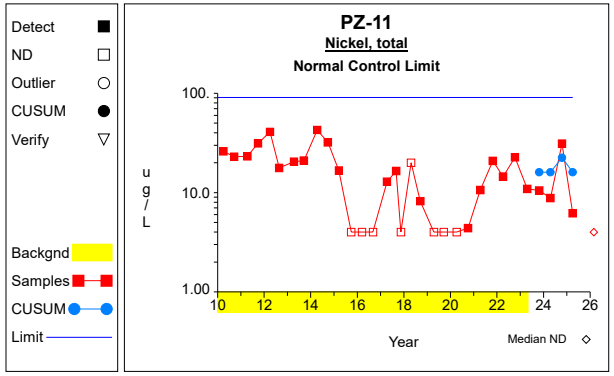
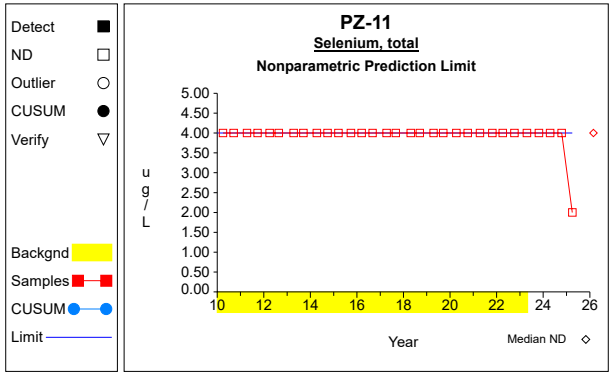
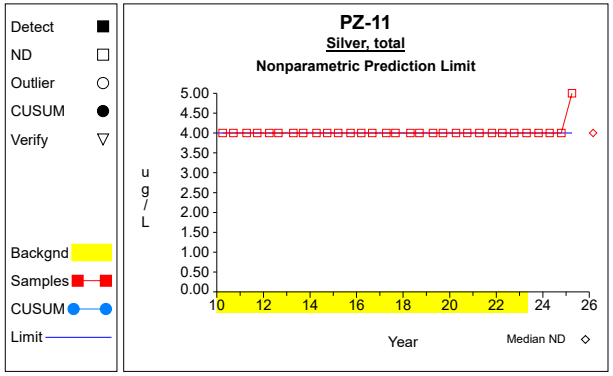
Intra-Well Control Charts / Prediction Limits



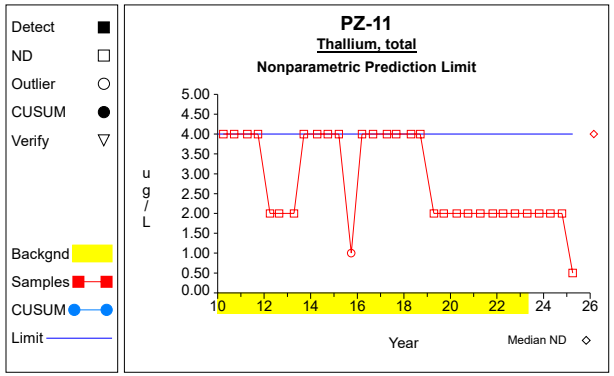
Graph 70



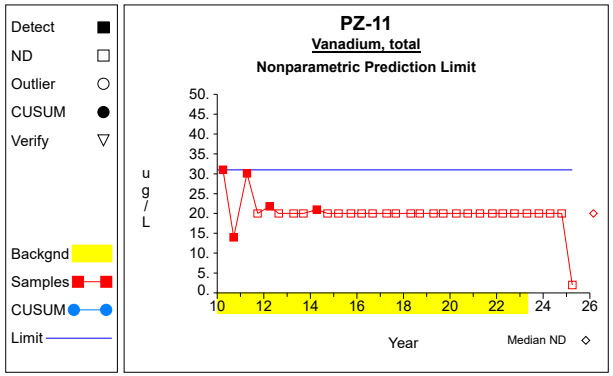
Graph 71



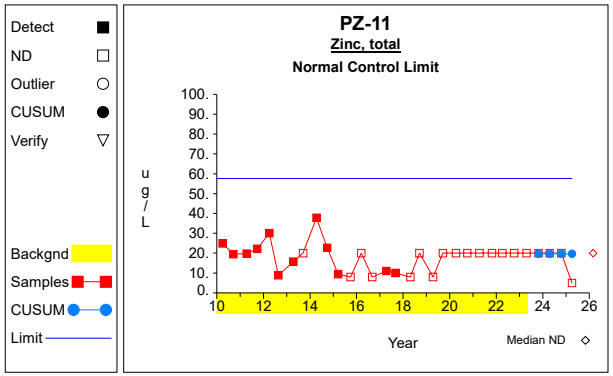
Graph 72



Graph 73

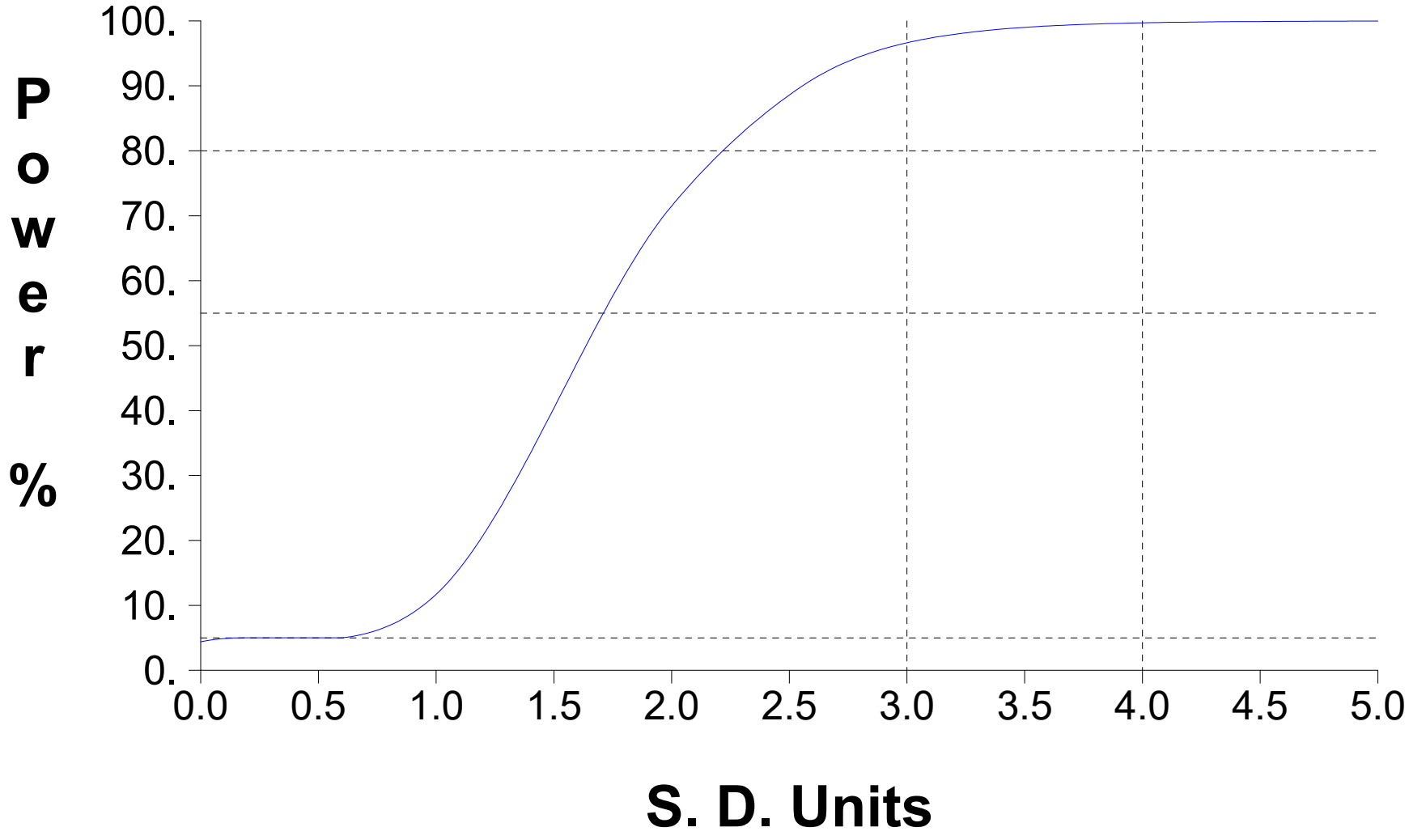


Graph 74



Graph 75

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



Attachment E

Summary Table of Historical VOC Detections

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Acetone	MW-10	9/01/2017		18.5	10.0	ug/L
Acetone	MW-7	9/01/2017		14.8	10.0	ug/L
Benzene	MW-7	10/26/2021		1.6	1.0	ug/L
Chlorobenzene	MW-7	9/28/2015		1.0	1.0	ug/L
Chlorobenzene	MW-7	4/10/2017		1.0	1.0	ug/L
Chlorobenzene	MW-7	9/01/2017		1.5	1.0	ug/L
Chlorobenzene	MW-7	4/23/2018		1.7	1.0	ug/L
Chlorobenzene	MW-7	9/14/2018		1.2	1.0	ug/L
Chlorobenzene	MW-7	4/15/2019		1.6	1.0	ug/L
Chlorobenzene	MW-7	9/17/2019		2.4	1.0	ug/L
Chlorobenzene	MW-7	4/08/2020		2.0	1.0	ug/L
Chlorobenzene	MW-7	10/02/2020		2.8	1.0	ug/L
Chlorobenzene	MW-7	4/12/2021		1.7	1.0	ug/L
Chlorobenzene	MW-7	10/26/2021		2.4	1.0	ug/L
Chlorobenzene	MW-7	4/04/2022		1.1	1.0	ug/L
Chlorobenzene	MW-7	10/07/2022		1.8	1.0	ug/L
Chlorobenzene	MW-7	10/17/2024		1.2	1.0	ug/L
Chloroethane	MW-7	3/31/2010		1.5	1.0	ug/L
Chloroethane	MW-7	9/26/2011		1.0	1.0	ug/L
Chloroethane	MW-7	4/01/2012		1.6	1.0	ug/L
Chloroethane	MW-7	8/23/2012		1.5	1.0	ug/L
Chloroethane	MW-7	4/12/2013		1.8	1.0	ug/L
Chloroethane	MW-7	9/14/2013		1.3	1.0	ug/L
Chloroethane	MW-7	4/11/2014		2.3	1.0	ug/L
Chloroethane	MW-7	9/27/2014		2.6	1.0	ug/L
Chloroethane	MW-7	9/28/2015		1.4	1.0	ug/L
Chloroethane	MW-7	3/14/2016		1.6	1.0	ug/L
Chloroethane	MW-7	4/10/2017		1.2	1.0	ug/L
Chloroethane	MW-7	9/01/2017		1.7	1.0	ug/L
Chloroethane	MW-7	4/23/2018		1.7	1.0	ug/L
Chloroethane	MW-7	9/14/2018		1.2	1.0	ug/L
Chloroethane	MW-7	4/15/2019		1.6	1.0	ug/L
Chloroethane	MW-7	9/17/2019		1.1	1.0	ug/L
Chloroethane	MW-7	4/08/2020		1.5	1.0	ug/L
Chloroethane	MW-7	10/02/2020		1.3	1.0	ug/L
Chloroethane	MW-7	10/26/2021		1.2	1.0	ug/L
Chloroethane	MW-7	4/04/2022		1.7	1.0	ug/L
Chloroethane	MW-7	10/07/2022		1.9	1.0	ug/L
Chloroethane	MW-7	10/25/2023		1.3	1.0	ug/L
Chloromethane	MW-7	3/14/2016		3	1	ug/L
Cis-1,2-dichloroethylene	MW-7	3/31/2010		36.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	9/16/2010		1.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	4/11/2011		4.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	9/26/2011		19.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	4/01/2012		69.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	8/23/2012		124.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	4/12/2013		17.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	9/14/2013		95.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	4/11/2014		92.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	9/27/2014		24.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	3/16/2015		58.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	9/28/2015		62.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	3/14/2016		20.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	9/03/2016		3.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	4/10/2017		4.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	9/01/2017		18.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	4/23/2018		10.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	9/14/2018		10.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	4/15/2019		5.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	9/17/2019		7.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	4/08/2020		6.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	10/02/2020		22.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	4/12/2021		14.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	10/26/2021		5.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	10/07/2022		1.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	4/19/2023		1.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	10/25/2023		5.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	4/17/2024		2.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	10/17/2024		6.1	1.0	ug/L
Dichlorodifluoromethane	MW-7	4/01/2012		1.4	1.0	ug/L
Dichlorodifluoromethane	MW-7	8/23/2012		2.3	1.0	ug/L
Dichlorodifluoromethane	MW-7	4/12/2013		3.5	1.0	ug/L
Dichlorodifluoromethane	MW-7	9/14/2013		3.0	1.0	ug/L
Dichlorodifluoromethane	MW-7	4/11/2014		2.1	1.0	ug/L
Dichlorodifluoromethane	MW-7	9/27/2014		2.6	1.0	ug/L
Dichlorodifluoromethane	MW-7	4/10/2017		1.4	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Dichlorodifluoromethane	MW-7	4/23/2018		1.4	1.0	ug/L
Dichlorodifluoromethane	MW-7	9/14/2018		1.2	1.0	ug/L
Dichlorodifluoromethane	MW-7	4/15/2019		1.4	1.0	ug/L
Dichlorodifluoromethane	MW-7	4/08/2020		1.6	1.0	ug/L
Dichlorodifluoromethane	MW-7	10/02/2020		1.0	1.0	ug/L
Dichlorodifluoromethane	MW-7	10/26/2021		1.4	1.0	ug/L
Dichlorodifluoromethane	MW-7	10/07/2022		1.3	1.0	ug/L
Dichlorodifluoromethane	MW-7	10/25/2023		1.0	1.0	ug/L
Dichlorodifluoromethane	MW-7	4/17/2024		1.0	1.0	ug/L
Trans-1,2-dichloroethylene	MW-7	3/31/2010		1.0	1.0	ug/L
Trans-1,2-dichloroethylene	MW-7	4/01/2012		1.8	1.0	ug/L
Trans-1,2-dichloroethylene	MW-7	8/23/2012		3.6	1.0	ug/L
Trans-1,2-dichloroethylene	MW-7	9/14/2013		2.8	1.0	ug/L
Trans-1,2-dichloroethylene	MW-7	4/11/2014		2.5	1.0	ug/L
Trans-1,2-dichloroethylene	MW-7	9/28/2015		2.1	1.0	ug/L
Vinyl chloride	MW-7	3/31/2010		1.3	1.0	ug/L
Vinyl chloride	MW-7	4/01/2012		2.4	1.0	ug/L
Vinyl chloride	MW-7	8/23/2012		6.2	1.0	ug/L
Vinyl chloride	MW-7	4/12/2013		3.6	1.0	ug/L
Vinyl chloride	MW-7	9/14/2013		6.4	1.0	ug/L
Vinyl chloride	MW-7	4/11/2014		4.4	1.0	ug/L
Vinyl chloride	MW-7	9/27/2014		3.1	1.0	ug/L
Vinyl chloride	MW-7	9/28/2015		3.0	1.0	ug/L
Vinyl chloride	MW-7	3/14/2016		1.2	1.0	ug/L
Vinyl chloride	MW-7	4/10/2017		1.7	1.0	ug/L
Vinyl chloride	MW-7	9/01/2017		3.2	1.0	ug/L
Vinyl chloride	MW-7	4/23/2018		2.1	1.0	ug/L
Vinyl chloride	MW-7	9/14/2018		2.1	1.0	ug/L
Vinyl chloride	MW-7	4/15/2019		1.1	1.0	ug/L
Vinyl chloride	MW-7	9/17/2019		1.0	1.0	ug/L
Vinyl chloride	MW-7	4/08/2020		1.7	1.0	ug/L
Vinyl chloride	MW-7	10/02/2020		2.5	1.0	ug/L
1,1-dichloroethane	PZ-11	4/19/2023		1.2	1.0	ug/L
1,1-dichloroethane	PZ-11	10/25/2023		1.2	1.0	ug/L
1,1-dichloroethane	PZ-11	4/17/2024		1.3	1.0	ug/L
1,1-dichloroethane	PZ-11	10/17/2024		1.0	1.0	ug/L
1,1-dichloroethane	PZ-11	4/01/2025		1.6	1.0	ug/L
Bis(2-ethylhexyl) phthalate	PZ-11	4/08/2020		6	6	ug/L
Bis(2-ethylhexyl) phthalate	PZ-11	4/12/2021		8	6	ug/L
Bis(2-ethylhexyl) phthalate	PZ-11	10/26/2021		7	6	ug/L
Chloroethane	PZ-11	10/25/2023		1.6	1.0	ug/L

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

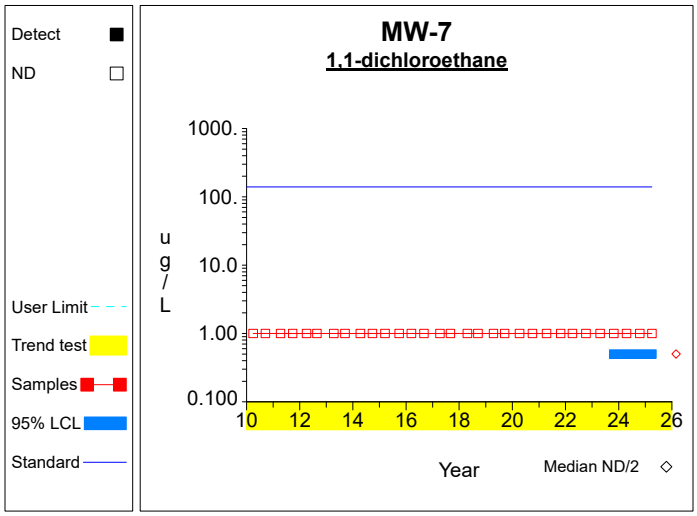
Table 1

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

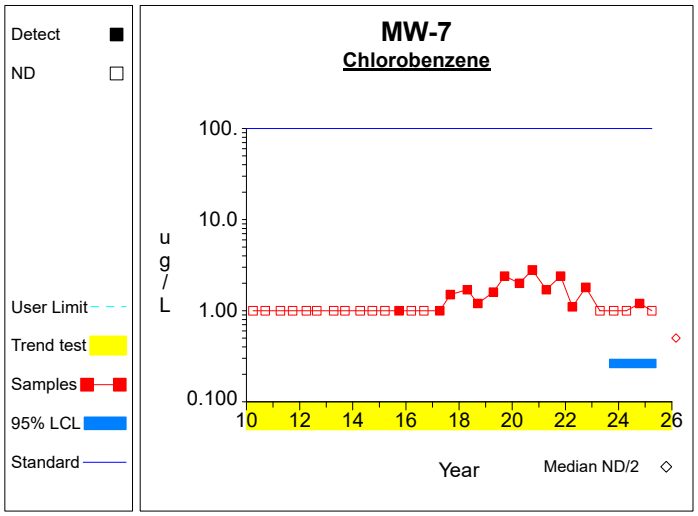
Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend	
1,1-dichloroethane	ug/L	MW-7	4	0.500	0.000	1.176	0.500	0.500	140.000		
Chlorobenzene	ug/L	MW-7	4	0.675	0.350	1.176	0.263	1.087	100.000		
Chloroethane	ug/L	MW-7	4	0.700	0.400	1.176	0.229	1.171	2800.000		
Cis-1,2-dichloroethylene	ug/L	MW-7	4	3.475	2.546	1.176	0.480	6.470	70.000	dec	
Dichlorodifluoromethane	ug/L	MW-7	4	0.750	0.289	1.176	0.410	1.090	1000.000		
Vinyl chloride	ug/L	MW-7	4	0.500	0.000	1.176	0.500	0.500	2.000		
1,1-dichloroethane	ug/L	PZ-11	4	1.275	0.250	1.176	0.981	1.569	140.000		
Chlorobenzene	ug/L	PZ-11	4	0.500	0.000	1.176	0.500	0.500	100.000		
Chloroethane	ug/L	PZ-11	4	0.775	0.550	1.176	0.128	1.422	2800.000		
Cis-1,2-dichloroethylene	ug/L	PZ-11	4	0.500	0.000	1.176	0.500	0.500	70.000		
Dichlorodifluoromethane	ug/L	PZ-11	3								*
Vinyl chloride	ug/L	PZ-11	4	0.500	0.000	1.176	0.500	0.500	2.000		

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

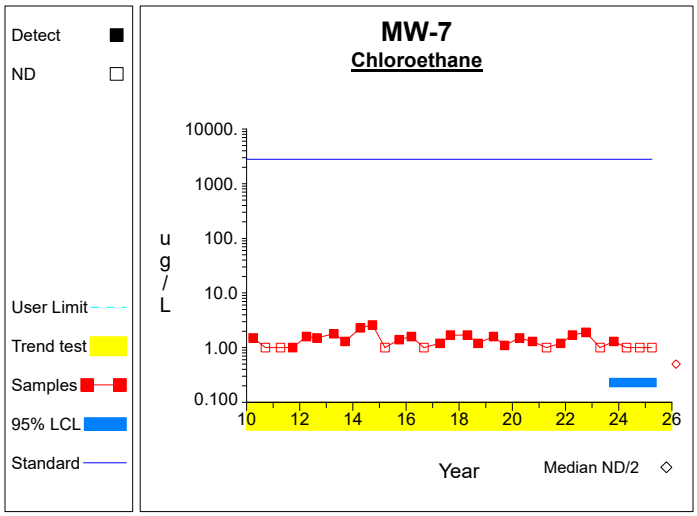
Confidence Limits (Assessment)



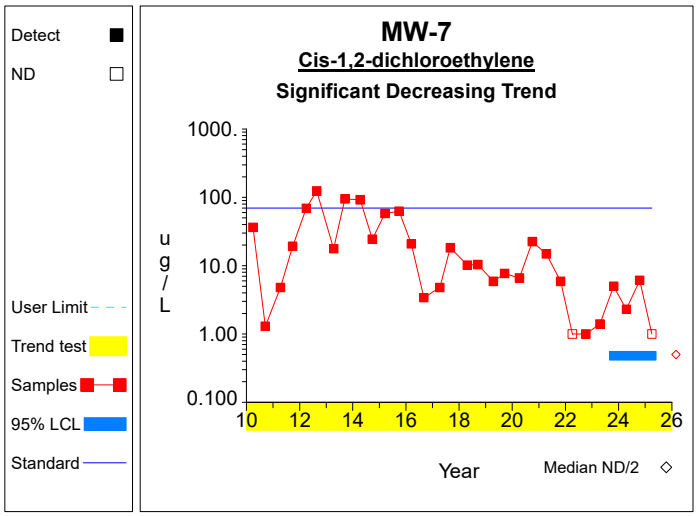
Graph 1



Graph 2



Graph 3



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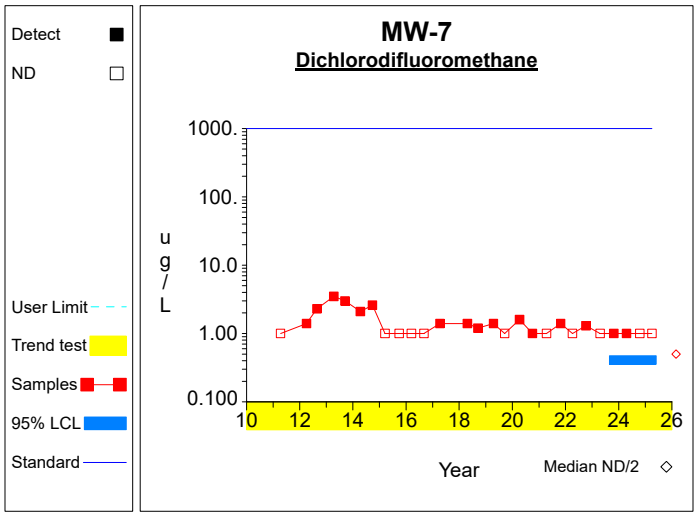

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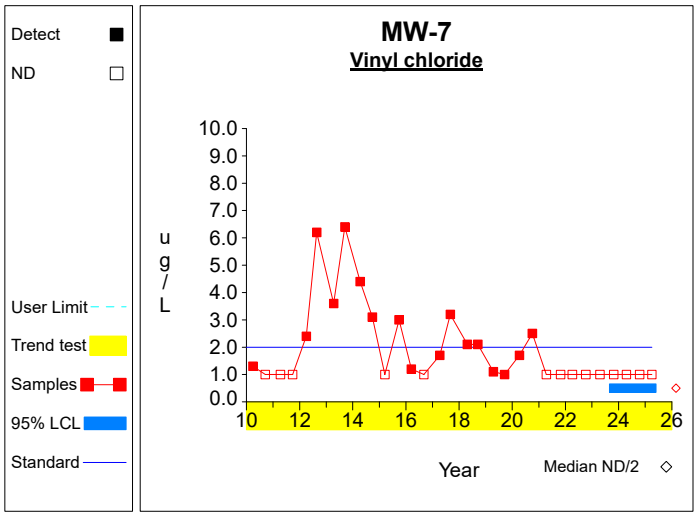

Graph 6

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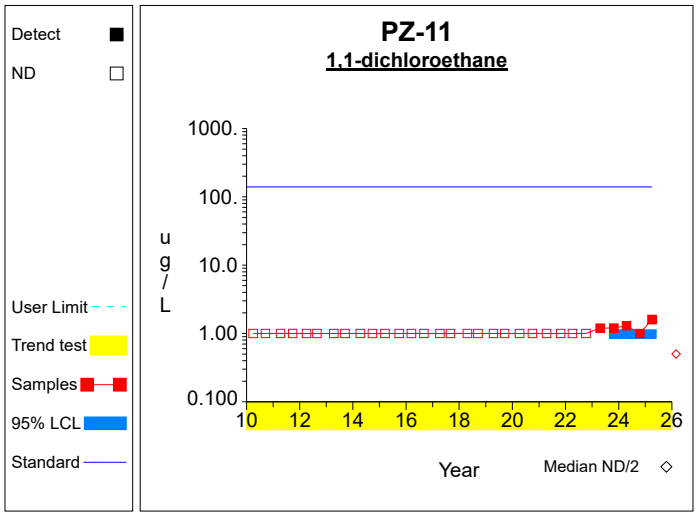
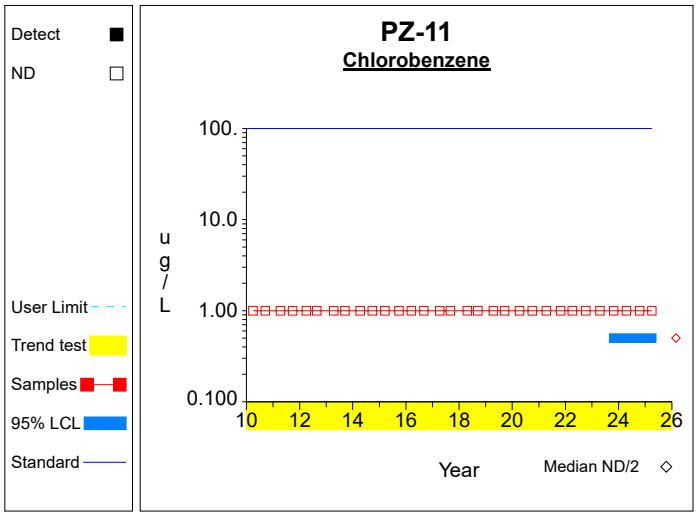
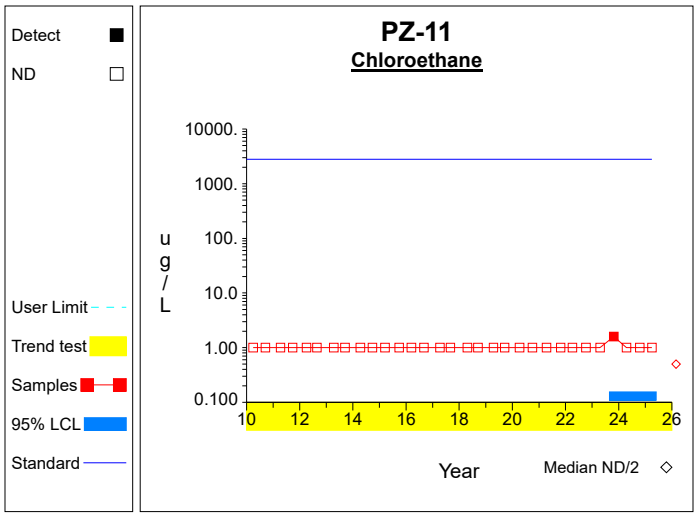
Confidence Limits (Assessment)



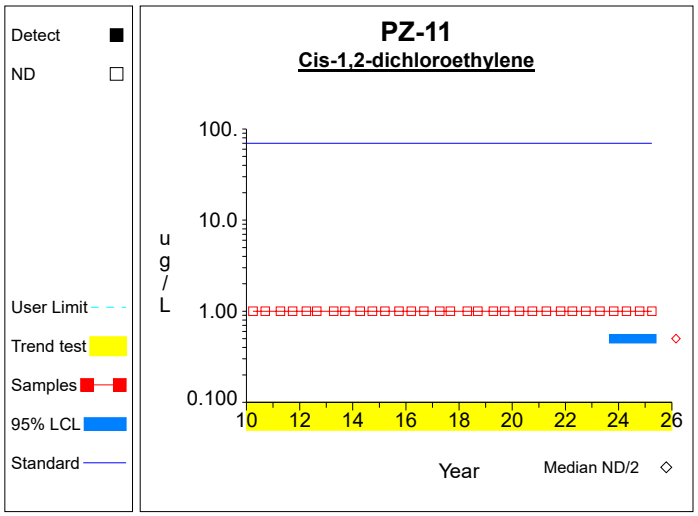
Graph 7



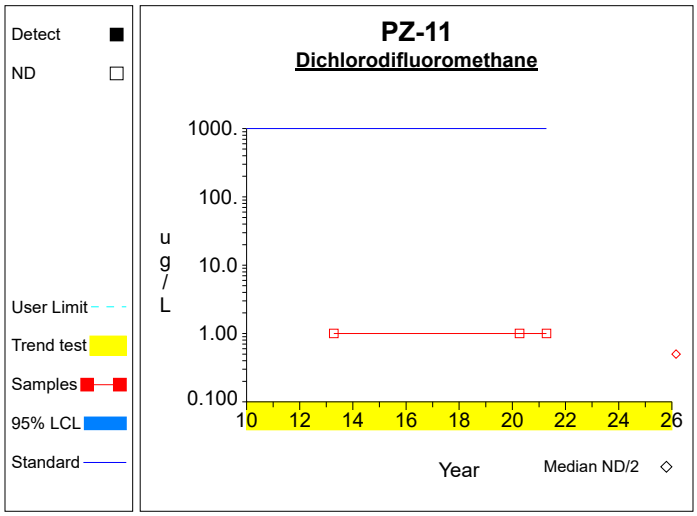
Graph 8



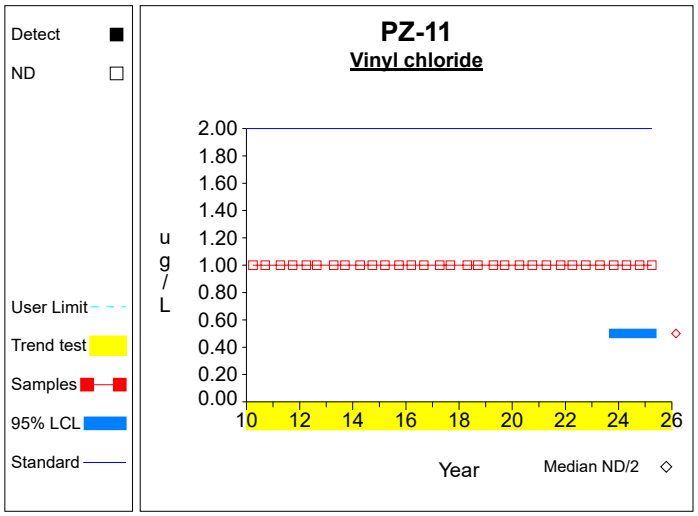
Graph 9



Graph 10



Graph 11



Graph 12

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STATISTICAL ANALYSIS

FOR THE

IDA COUNTY SANITARY LANDFILL

Second Semi-Annual Monitoring Event in 2025

Prepared for:
Ida County Sanitary Landfill
Ida County, IA

Prepared by:
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October 2025

INTRODUCTION

This report summarizes the statistical analysis plan for evaluating the groundwater quality data at the Ida County Sanitary Landfill in Ida County, Iowa. The plan is designed to detect a release from the facility at the earliest indication so that it is protective of human health and the environment. Both interwell and intrawell methodologies are described and then applied to the Ida County Landfill data. Based on the data available, the most appropriate methodology will be implemented for comparing future ground water 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 Ida County Sanitary Landfill includes upgradient well MW-3 and downgradient detection sample points MW-10, MW-13, MW-7, and PZ-11. Each of the groundwater monitoring wells is to be sampled at least semiannually and analyzed for the detection monitoring parameters listed in 113.10(5), which includes 15 inorganic constituents and 47 organic compounds, summarized in Table 1 below.

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

Organic Compounds:

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

Inorganic constituents:

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

The 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. Both of these methods will be applied to the Ida County Landfill data using the DUMPStat® statistical program (version 3.1 or higher). DUMPStat® (Discerning Systems, Inc., Burnaby, BC) is a program for the statistical analysis of groundwater monitoring data using methods described in "Statistical Methods for Groundwater Monitoring" by Dr. Robert D. Gibbons. The DUMPStat program is completely consistent with all USEPA regulations and guidance and the ASTM D6312-98 guidance.

Ground water statistics are to be done on the inorganic constituents listed. The organic constituents are compared to maximum contaminant levels (MCLs) or practical quantitation limits (PQLs), in lieu of statistical comparisons to historical concentrations.

Interwell Statistics: Upgradient versus Downgradient Comparisons

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

Results of the Interwell Statistics

The background data used in this statistical analysis includes the ground water data collected from ground water well MW-3 during the period from March 2010 through the present data. A summary of the background data from monitoring well MW-3, 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-10, MW-13, MW-7, and PZ-11 compared to the site prediction limits. Prediction limit

exceedances are flagged with asterisks. For the most current data, the site prediction limit exceedances detected are summarized in the table below.

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

Well	Trace Metal	Result, µg/L	Prediction Limit, µg/L	Prediction Limit Type	Verified/ Awaiting Verification
MW-7	Cadmium	1.7	1.5000	Nonparametric	Awaiting Verification
	Cobalt	4.5	3.6000	Nonparametric	Awaiting Verification
	Copper	16.5	5.5000	Nonparametric	Awaiting Verification
	Nickel	42.6	15.6000	Nonparametric	Verified

The detection frequencies of the parameters in the up and down gradient monitoring wells are summarized in Table 3. Barium is detected at a frequency greater than or equal to 50% in the upgradient well so only this metal will be tested for normality. The remainder of the metals are rarely detected (less than 50%) in the upgradient well so nonparametric prediction limits were used in those cases.

Table 4 summarizes the results of the Shapiro-Wilk test. Table 5 is a summary of the statistics and prediction limits determined for the metals. Time series graphs of each of the parameters at each well with the corresponding prediction limits are attached.

A statistical power curve indicates the expected false assessments for the site as a whole. The false positive rate for interwell analyses is the percentage of failures when the upgradient versus downgradient true mean difference equals zero. False negative rate indicates the chance of missing contamination at a single well for a single constituent. The statistical power is a function of the number of wells included, the number of constituents compared, the detection frequencies, and the data distributions involved. For interwell analysis, the site-wide false positive rate is 2% and the test becomes sensitive to 4 standard deviation unit increases over background.

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

The calculated 95% LCLs for the verified trace metals are all below the respective ground water standards.

Intrawell statistics

Intrawell statistics are appropriate for facilities where the upgradient wells do not accurately characterize the natural ground water conditions downgradient from the facility. This may be due to different hydrogeological conditions where the wells are screened, having too few upgradient wells to account for

the spatial variability, or the site exhibiting no definable hydraulic gradient. Intrawell statistics compare new measurements to the historical data at each ground water monitoring well independently. It is recommended that at least eight background samples be obtained prior to performing the statistics.

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

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

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

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

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

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

The background data for each well and constituent is tested for existing trends using Sen's nonparametric estimate of trend. If contamination exists prior to completing the background, the control limits could be

potentially high and this control chart method would not be able to detect an increasing trend unless the increase is severe.

Results of the Intrawell Statistics

The Appendix I trace metals data from wells MW-10, MW-13, MW-3, MW-7, and PZ-11 were evaluated using the combined Shewhart-CUSUM control chart method. The previous background included the groundwater data obtained from March 2010 through 2020. As ground water monitoring at a municipal solid waste facility proceeds, it is recommended to update background data sets periodically with valid detection monitoring results that are representative of background groundwater quality not affected by leakage from a monitored unit. Failure to update background will exclude factors such as natural temporal variation, changes in field or laboratory methodologies, and changes in the water table due to meteorological conditions or other influences. Since there have been no exceedances attributed to the landfill, the background was updated to include data obtained from March 2010 through April 2023.

A summary of the intrawell statistics is included in Attachment D, Table 1 "Summary Statistics and Intermediate Computations for Combined Shewhart-CUSUM Control Charts." The control charts or time series graphs follow the summary table. For the parameters evaluated, the statistical limit exceedances identified are summarized in the table below.

Control Limit Exceedances During the Second Semi-Annual Monitoring Event in 2025

Sample Point	Trace Metal	Result	CUSUM Value	Control Limit	Control Limit Type	Verified/ Awaiting Verification
MW-10	Barium	146	203.1496	187.5110	Normal	Awaiting Verification
	Nickel	14.5	20.1031	14.5215	Normal	Verified
MW-7	Cadmium	1.7	1.6371	1.3823	Normal	Awaiting Verification
	Copper	16.5	15.7556	10.8368	Normal	Awaiting Verification

An increasing trend was detected in the background data for nickel at MW-7.

A control chart factor was selected to provide a balance of the site-wide false positive and false negative rates. A statistical power curve indicates the expected false assessments for the site as a whole. Given an accepted resample verification plan of "pass one of one" resamples, the number of statistical comparisons, and the number of background data points, the optimal factor h = SCL = 6.5 for $N \leq 12$ and $N > 12$. Using this factor for intrawell analysis, the site-wide false positive rate is 5% and the test becomes sensitive to 4 standard deviation units over background.

Volatile Organic Compounds

Volatile Organic Compounds (VOCs) are generally man-made compounds not present in ambient ground water. If VOCs are detected above their statistical limit (i.e., the laboratory PQL or reporting limit), a verification resample will be conducted at the next scheduled sampling event. A statistical exceedance will be indicated if the VOC detection is confirmed by the subsequent monitoring. VOCs detected in the ground water at Ida County Landfill during the second semi-annual monitoring event in 2025 are summarized below.

VOCs Detected during the Second Semi-Annual Monitoring Event in 2025

Sample Point	VOC	Result	Reporting Limit	Verified/Awaiting Verification	GWPS
MW-7	Benzene	1.0	1	Awaiting Verification	5[a]
	Chlorobenzene	1.2	1	Awaiting Verification	100[a]
	Chloroethane	1.6	1	Awaiting Verification	2800[b]
	Cis-1,2-Dichloroethene	7.2	1	Awaiting Verification	70[a]
	Dichlorodifluoromethane	1.1	1	Awaiting Verification	1000[b]
PZ-11	1,1-Dichloroethane	1.2	1	Verified	140[b]

a - USEPA MCL
b – Iowa Statewide Standard

Historical VOC detections are summarized in Attachment E. The verified VOC detections were evaluated against the ground water protection standards (GWPS) using confidence limits. The 95% LCL for each of these VOCs is below the respective USEPA MCL or Iowa Statewide Standard.

Attachment A

Summary of Ground Water Data – Second Semi-Annual Monitoring Event in 2025

Table 1

Analytical Data Summary for 10/10/2025

Constituents	Units	MW-10	MW-13	MW-3	MW-7	PZ-11
1,1,1,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1
1,1,1-trichloroethane	ug/L	<1	<1	<1	<1	<1
1,1,2,2-tetrachloroethane	ug/L	<1	<1	<1	<1	<1
1,1,2-trichloroethane	ug/L	<1	<1	<1	<1	<1
1,1-dichloroethane	ug/L	<1.0	<1.0	<1.0	<1.0	1.2
1,1-dichloroethylene	ug/L	<1	<1	<1	<1	<1
1,2,3-trichloropropane	ug/L	<1	<1	<1	<1	<1
1,2-dibromo-3-chloropropane	ug/L	<5	<5	<5	<5	<5
1,2-dibromoethane	ug/L	<1	<1	<1	<1	<1
1,2-dichlorobenzene	ug/L	<1	<1	<1	<1	<1
1,2-dichloroethane	ug/L	<1	<1	<1	<1	<1
1,2-dichloropropane	ug/L	<1	<1	<1	<1	<1
1,4-dichlorobenzene	ug/L	<1	<1	<1	<1	<1
2-butanone (mek)	ug/L	<10	<10	<10	<10	<10
2-hexanone (mbk)	ug/L	<5	<5	<5	<5	<5
4-methyl-2-pentanone (mibk)	ug/L	<5	<5	<5	<5	<5
Acetone	ug/L	<10	<10	<10	<10	<10
Acrylonitrile	ug/L	<5	<5	<5	<5	<5
Antimony, total	ug/L	<1	<1	<1	1	<1
Arsenic, total	ug/L	<2	<2	<2	<2	<2
Barium, total	ug/L	146	52	308	229	71
Benzene	ug/L	<1	<1	<1	1	<1
Beryllium, total	ug/L	<.5	<.5	<.5	<.5	<.5
Bromochloromethane	ug/L	<1	<1	<1	<1	<1
Bromodichloromethane	ug/L	<1	<1	<1	<1	<1
Bromoform	ug/L	<1	<1	<1	<1	<1
Bromomethane	ug/L	<1	<1	<1	<1	<1
Cadmium, total	ug/L	<.2	<.2	.3	1.7	<.2
Carbon disulfide	ug/L	<1	<1	<1	<1	<1
Carbon tetrachloride	ug/L	<1	<1	<1	<1	<1
Chlorobenzene	ug/L	<1.0	<1.0	<1.0	1.2	<1.0
Chloroethane	ug/L	<1.0	<1.0	<1.0	1.6	<1.0
Chloroform	ug/L	<1	<1	<1	<1	<1
Chloromethane	ug/L	<1	<1	<1	<1	<1
Chromium, total	ug/L	1.1	1.9	1.4	1.8	1.0
Cis-1,2-dichloroethylene	ug/L	<1.0	<1.0	<1.0	7.2	<1.0
Cis-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1
Cobalt, total	ug/L	<.5	<.5	<.5	4.5	<.5
Copper, total	ug/L	<5.0	<5.0	<5.0	16.5	<5.0
Dibromochloromethane	ug/L	<1	<1	<1	<1	<1
Dibromomethane	ug/L	<1	<1	<1	<1	<1
Dichlorodifluoromethane	ug/L				1.1	
Ethylbenzene	ug/L	<1	<1	<1	<1	<1
Lead, total	ug/L	<1	<1	<1	<1	<1
Methyl iodide	ug/L	<1	<1	<1	<1	<1
Methylene chloride	ug/L	<5	<5	<5	<5	<5
Nickel, total	ug/L	14.5	<5.0	<5.0	42.6	6.0
Selenium, total	ug/L	<2	<2	<2	<2	<2
Silver, total	ug/L	<5	<5	<5	<5	<5
Styrene	ug/L	<1	<1	<1	<1	<1
Tetrachloroethylene	ug/L	<1	<1	<1	<1	<1
Thallium, total	ug/L	<.5	<.5	<.5	<.5	<.5
Toluene	ug/L	<1	<1	<1	<1	<1
Trans-1,2-dichloroethylene	ug/L	<1	<1	<1	<1	<1
Trans-1,3-dichloropropene	ug/L	<1	<1	<1	<1	<1
Trans-1,4-dichloro-2-butene	ug/L	<5	<5	<5	<5	<5
Trichloroethylene	ug/L	<1	<1	<1	<1	<1
Trichlorofluoromethane	ug/L	<1	<1	<1	<1	<1
Vanadium, total	ug/L	<2	<2	<2	<2	<2
Vinyl acetate	ug/L	<5	<5	<5	<5	<5
Vinyl chloride	ug/L	<1	<1	<1	<1	<1
Xylenes, total	ug/L	<2	<2	<2	<2	<2
Zinc, total	ug/L	5.1	<5.0	27.3	18.1	<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-3	03/31/2010	ND	2.0000		
Antimony, total	ug/L	MW-3	09/16/2010	ND	2.0000		
Antimony, total	ug/L	MW-3	04/11/2011	ND	2.0000		
Antimony, total	ug/L	MW-3	09/26/2011	ND	2.0000		
Antimony, total	ug/L	MW-3	04/01/2012	ND	2.0000		
Antimony, total	ug/L	MW-3	08/23/2012	ND	2.0000		
Antimony, total	ug/L	MW-3	04/13/2013	ND	2.0000		
Antimony, total	ug/L	MW-3	09/14/2013	ND	2.0000		
Antimony, total	ug/L	MW-3	04/11/2014	ND	2.0000		
Antimony, total	ug/L	MW-3	09/27/2014	ND	2.0000		
Antimony, total	ug/L	MW-3	03/16/2015	ND	2.0000		
Antimony, total	ug/L	MW-3	09/28/2015	ND	2.0000		
Antimony, total	ug/L	MW-3	03/14/2016	ND	2.0000		
Antimony, total	ug/L	MW-3	09/03/2016	ND	2.0000		
Antimony, total	ug/L	MW-3	04/10/2017	ND	2.0000		
Antimony, total	ug/L	MW-3	09/01/2017	ND	2.0000		
Antimony, total	ug/L	MW-3	04/23/2018	ND	2.0000		
Antimony, total	ug/L	MW-3	09/14/2018	ND	2.0000		
Antimony, total	ug/L	MW-3	04/15/2019	ND	2.0000		
Antimony, total	ug/L	MW-3	09/17/2019	ND	2.0000		
Antimony, total	ug/L	MW-3	04/08/2020	ND	2.0000		
Antimony, total	ug/L	MW-3	10/02/2020	ND	2.0000		
Antimony, total	ug/L	MW-3	04/12/2021	ND	2.0000		
Antimony, total	ug/L	MW-3	10/26/2021	ND	2.0000		
Antimony, total	ug/L	MW-3	04/04/2022	ND	2.0000		
Antimony, total	ug/L	MW-3	10/07/2022	ND	2.0000		
Antimony, total	ug/L	MW-3	04/19/2023	ND	2.0000		
Antimony, total	ug/L	MW-3	10/25/2023	ND	2.0000		
Antimony, total	ug/L	MW-3	04/17/2024	ND	2.0000		
Antimony, total	ug/L	MW-3	10/17/2024	ND	2.0000		
Antimony, total	ug/L	MW-3	04/01/2025	ND	1.0000	2.0000	**
Antimony, total	ug/L	MW-3	10/10/2025	ND	1.0000	2.0000	**
Arsenic, total	ug/L	MW-3	03/31/2010	ND	4.0000		
Arsenic, total	ug/L	MW-3	09/16/2010	ND	4.0000		
Arsenic, total	ug/L	MW-3	04/11/2011	ND	4.0000		
Arsenic, total	ug/L	MW-3	09/26/2011	ND	4.0000		
Arsenic, total	ug/L	MW-3	04/01/2012	ND	4.0000		
Arsenic, total	ug/L	MW-3	08/23/2012		4.1000		
Arsenic, total	ug/L	MW-3	04/13/2013	ND	4.0000		
Arsenic, total	ug/L	MW-3	09/14/2013	ND	4.0000		
Arsenic, total	ug/L	MW-3	04/11/2014	ND	4.0000		
Arsenic, total	ug/L	MW-3	09/27/2014	ND	4.0000		
Arsenic, total	ug/L	MW-3	03/16/2015	ND	4.0000		
Arsenic, total	ug/L	MW-3	09/28/2015	ND	4.0000		
Arsenic, total	ug/L	MW-3	03/14/2016	ND	4.0000		
Arsenic, total	ug/L	MW-3	09/03/2016	ND	4.0000		
Arsenic, total	ug/L	MW-3	04/10/2017	ND	4.0000		
Arsenic, total	ug/L	MW-3	09/01/2017	ND	4.0000		
Arsenic, total	ug/L	MW-3	04/23/2018	ND	4.0000		
Arsenic, total	ug/L	MW-3	09/14/2018	ND	4.0000		
Arsenic, total	ug/L	MW-3	04/15/2019	ND	4.0000		
Arsenic, total	ug/L	MW-3	09/17/2019	ND	4.0000		
Arsenic, total	ug/L	MW-3	04/08/2020	ND	4.0000		
Arsenic, total	ug/L	MW-3	10/02/2020	ND	4.0000		
Arsenic, total	ug/L	MW-3	04/12/2021	ND	4.0000		
Arsenic, total	ug/L	MW-3	10/26/2021	ND	4.0000		
Arsenic, total	ug/L	MW-3	04/04/2022	ND	4.0000		
Arsenic, total	ug/L	MW-3	10/07/2022	ND	4.0000		
Arsenic, total	ug/L	MW-3	04/19/2023	ND	4.0000		
Arsenic, total	ug/L	MW-3	10/25/2023	ND	4.0000		
Arsenic, total	ug/L	MW-3	04/17/2024	ND	4.0000		
Arsenic, total	ug/L	MW-3	10/17/2024	ND	4.0000		
Arsenic, total	ug/L	MW-3	04/01/2025	ND	2.0000	4.0000	**
Arsenic, total	ug/L	MW-3	10/10/2025	ND	2.0000	4.0000	**
Barium, total	ug/L	MW-3	03/31/2010		459.0000		
Barium, total	ug/L	MW-3	09/16/2010		414.0000		
Barium, total	ug/L	MW-3	04/11/2011		407.0000		
Barium, total	ug/L	MW-3	09/26/2011		336.0000		
Barium, total	ug/L	MW-3	04/01/2012		265.0000		
Barium, total	ug/L	MW-3	08/23/2012		294.0000		
Barium, total	ug/L	MW-3	04/13/2013		395.0000		
Barium, total	ug/L	MW-3	09/14/2013		442.0000		
Barium, total	ug/L	MW-3	04/11/2014		517.0000		
Barium, total	ug/L	MW-3	09/27/2014		467.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Barium, total	ug/L	MW-3	03/16/2015		426.0000		
Barium, total	ug/L	MW-3	09/28/2015		336.0000		
Barium, total	ug/L	MW-3	03/14/2016		323.0000		
Barium, total	ug/L	MW-3	09/03/2016		354.0000		
Barium, total	ug/L	MW-3	04/10/2017		321.0000		
Barium, total	ug/L	MW-3	09/01/2017		271.0000		
Barium, total	ug/L	MW-3	04/23/2018		202.0000		
Barium, total	ug/L	MW-3	09/14/2018		170.0000		
Barium, total	ug/L	MW-3	04/15/2019		191.0000		
Barium, total	ug/L	MW-3	09/17/2019		197.0000		
Barium, total	ug/L	MW-3	04/08/2020		407.0000		
Barium, total	ug/L	MW-3	10/02/2020		157.0000		
Barium, total	ug/L	MW-3	04/12/2021		117.0000		
Barium, total	ug/L	MW-3	10/26/2021		157.0000		
Barium, total	ug/L	MW-3	04/04/2022		269.0000		
Barium, total	ug/L	MW-3	10/07/2022		292.0000		
Barium, total	ug/L	MW-3	04/19/2023		317.0000		
Barium, total	ug/L	MW-3	10/25/2023		269.0000		
Barium, total	ug/L	MW-3	04/17/2024		360.0000		
Barium, total	ug/L	MW-3	10/17/2024		325.0000		
Barium, total	ug/L	MW-3	04/01/2025		341.0000		
Barium, total	ug/L	MW-3	10/10/2025		308.0000		
Beryllium, total	ug/L	MW-3	03/31/2010	ND	4.0000		
Beryllium, total	ug/L	MW-3	09/16/2010	ND	4.0000		
Beryllium, total	ug/L	MW-3	04/11/2011	ND	4.0000		
Beryllium, total	ug/L	MW-3	09/26/2011	ND	4.0000		
Beryllium, total	ug/L	MW-3	04/01/2012	ND	4.0000		
Beryllium, total	ug/L	MW-3	08/23/2012	ND	4.0000		
Beryllium, total	ug/L	MW-3	04/13/2013	ND	4.0000		
Beryllium, total	ug/L	MW-3	09/14/2013	ND	4.0000		
Beryllium, total	ug/L	MW-3	04/11/2014	ND	4.0000		
Beryllium, total	ug/L	MW-3	09/27/2014	ND	4.0000		
Beryllium, total	ug/L	MW-3	03/16/2015	ND	4.0000		
Beryllium, total	ug/L	MW-3	09/28/2015	ND	4.0000		
Beryllium, total	ug/L	MW-3	03/14/2016	ND	4.0000		
Beryllium, total	ug/L	MW-3	09/03/2016	ND	4.0000		
Beryllium, total	ug/L	MW-3	04/10/2017	ND	4.0000		
Beryllium, total	ug/L	MW-3	09/01/2017	ND	4.0000		
Beryllium, total	ug/L	MW-3	04/23/2018	ND	4.0000		
Beryllium, total	ug/L	MW-3	09/14/2018	ND	4.0000		
Beryllium, total	ug/L	MW-3	04/15/2019	ND	4.0000		
Beryllium, total	ug/L	MW-3	09/17/2019	ND	4.0000		
Beryllium, total	ug/L	MW-3	04/08/2020	ND	4.0000		
Beryllium, total	ug/L	MW-3	10/02/2020	ND	4.0000		
Beryllium, total	ug/L	MW-3	04/12/2021	ND	4.0000		
Beryllium, total	ug/L	MW-3	10/26/2021	ND	4.0000		
Beryllium, total	ug/L	MW-3	04/04/2022	ND	4.0000		
Beryllium, total	ug/L	MW-3	10/07/2022	ND	4.0000		
Beryllium, total	ug/L	MW-3	04/19/2023	ND	4.0000		
Beryllium, total	ug/L	MW-3	10/25/2023	ND	4.0000		
Beryllium, total	ug/L	MW-3	04/17/2024	ND	4.0000		
Beryllium, total	ug/L	MW-3	10/17/2024	ND	4.0000		
Beryllium, total	ug/L	MW-3	04/01/2025	ND	0.5000		*
Beryllium, total	ug/L	MW-3	10/10/2025	ND	0.5000		*
Cadmium, total	ug/L	MW-3	03/31/2010	ND	1.0000	0.8000	**
Cadmium, total	ug/L	MW-3	09/16/2010	ND	1.0000	0.8000	**
Cadmium, total	ug/L	MW-3	04/11/2011	ND	0.8000		
Cadmium, total	ug/L	MW-3	09/26/2011	ND	0.8000		
Cadmium, total	ug/L	MW-3	04/01/2012	ND	0.8000		
Cadmium, total	ug/L	MW-3	08/23/2012	ND	0.8000		
Cadmium, total	ug/L	MW-3	04/13/2013	ND	0.8000		
Cadmium, total	ug/L	MW-3	09/14/2013	ND	0.8000		
Cadmium, total	ug/L	MW-3	04/11/2014	ND	0.8000		
Cadmium, total	ug/L	MW-3	09/27/2014	ND	0.8000		
Cadmium, total	ug/L	MW-3	03/16/2015	ND	0.8000		
Cadmium, total	ug/L	MW-3	09/28/2015	ND	0.8000		
Cadmium, total	ug/L	MW-3	03/14/2016		0.8000		
Cadmium, total	ug/L	MW-3	09/03/2016	ND	0.8000		
Cadmium, total	ug/L	MW-3	04/10/2017	ND	0.8000		
Cadmium, total	ug/L	MW-3	09/01/2017	ND	0.8000		
Cadmium, total	ug/L	MW-3	04/23/2018	ND	0.8000		
Cadmium, total	ug/L	MW-3	09/14/2018		0.9000		
Cadmium, total	ug/L	MW-3	04/15/2019		1.0000		
Cadmium, total	ug/L	MW-3	09/17/2019	ND	0.8000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Cadmium, total	ug/L	MW-3	04/08/2020		1.5000		
Cadmium, total	ug/L	MW-3	10/02/2020	ND	0.8000		
Cadmium, total	ug/L	MW-3	04/12/2021	ND	0.8000		
Cadmium, total	ug/L	MW-3	10/26/2021	ND	0.8000		
Cadmium, total	ug/L	MW-3	04/04/2022	ND	0.8000		
Cadmium, total	ug/L	MW-3	10/07/2022	ND	0.8000		
Cadmium, total	ug/L	MW-3	04/19/2023	ND	0.8000		
Cadmium, total	ug/L	MW-3	10/25/2023	ND	0.8000		
Cadmium, total	ug/L	MW-3	04/17/2024	ND	0.8000		
Cadmium, total	ug/L	MW-3	10/17/2024	ND	0.8000		
Cadmium, total	ug/L	MW-3	04/01/2025		0.3000		
Cadmium, total	ug/L	MW-3	10/10/2025		0.3000		
Chromium, total	ug/L	MW-3	03/31/2010	ND	10.0000	8.0000	**
Chromium, total	ug/L	MW-3	09/16/2010	ND	10.0000	8.0000	**
Chromium, total	ug/L	MW-3	04/11/2011	ND	8.0000		
Chromium, total	ug/L	MW-3	09/26/2011	ND	8.0000		
Chromium, total	ug/L	MW-3	04/01/2012	ND	8.0000		
Chromium, total	ug/L	MW-3	08/23/2012	ND	8.0000		
Chromium, total	ug/L	MW-3	04/13/2013	ND	8.0000		
Chromium, total	ug/L	MW-3	09/14/2013	ND	8.0000		
Chromium, total	ug/L	MW-3	04/11/2014	ND	8.0000		
Chromium, total	ug/L	MW-3	09/27/2014	ND	8.0000		
Chromium, total	ug/L	MW-3	03/16/2015	ND	8.0000		
Chromium, total	ug/L	MW-3	09/28/2015	ND	8.0000		
Chromium, total	ug/L	MW-3	03/14/2016	ND	8.0000		
Chromium, total	ug/L	MW-3	09/03/2016	ND	8.0000		
Chromium, total	ug/L	MW-3	04/10/2017	ND	8.0000		
Chromium, total	ug/L	MW-3	09/01/2017	ND	8.0000		
Chromium, total	ug/L	MW-3	04/23/2018	ND	8.0000		
Chromium, total	ug/L	MW-3	09/14/2018	ND	8.0000		
Chromium, total	ug/L	MW-3	04/15/2019	ND	8.0000		
Chromium, total	ug/L	MW-3	09/17/2019	ND	8.0000		
Chromium, total	ug/L	MW-3	04/08/2020	ND	8.0000		
Chromium, total	ug/L	MW-3	10/02/2020	ND	8.0000		
Chromium, total	ug/L	MW-3	04/12/2021	ND	8.0000		
Chromium, total	ug/L	MW-3	10/26/2021	ND	8.0000		
Chromium, total	ug/L	MW-3	04/04/2022	ND	8.0000		
Chromium, total	ug/L	MW-3	10/07/2022	ND	8.0000		
Chromium, total	ug/L	MW-3	04/19/2023	ND	8.0000		
Chromium, total	ug/L	MW-3	10/25/2023	ND	8.0000		
Chromium, total	ug/L	MW-3	04/17/2024	ND	8.0000		
Chromium, total	ug/L	MW-3	10/17/2024	ND	8.0000		
Chromium, total	ug/L	MW-3	04/01/2025		1.1000		*
Chromium, total	ug/L	MW-3	10/10/2025		1.4000		*
Cobalt, total	ug/L	MW-3	03/31/2010	ND	4.0000	0.8000	**
Cobalt, total	ug/L	MW-3	09/16/2010	ND	4.0000	0.8000	**
Cobalt, total	ug/L	MW-3	04/11/2011	ND	4.0000	0.8000	**
Cobalt, total	ug/L	MW-3	09/26/2011	ND	4.0000	0.8000	**
Cobalt, total	ug/L	MW-3	04/01/2012	ND	4.0000	0.8000	**
Cobalt, total	ug/L	MW-3	08/23/2012	ND	4.0000	0.8000	**
Cobalt, total	ug/L	MW-3	04/13/2013	ND	4.0000	0.8000	**
Cobalt, total	ug/L	MW-3	09/14/2013	ND	4.0000	0.8000	**
Cobalt, total	ug/L	MW-3	04/11/2014	ND	4.0000	0.8000	**
Cobalt, total	ug/L	MW-3	09/27/2014		0.9000		
Cobalt, total	ug/L	MW-3	03/16/2015	ND	0.8000		
Cobalt, total	ug/L	MW-3	09/28/2015	ND	0.8000		
Cobalt, total	ug/L	MW-3	03/14/2016	ND	0.8000		
Cobalt, total	ug/L	MW-3	09/03/2016	ND	0.8000		
Cobalt, total	ug/L	MW-3	04/10/2017	ND	0.8000		
Cobalt, total	ug/L	MW-3	09/01/2017	ND	0.8000		
Cobalt, total	ug/L	MW-3	04/23/2018	ND	0.8000		
Cobalt, total	ug/L	MW-3	09/14/2018	ND	0.8000		
Cobalt, total	ug/L	MW-3	04/15/2019	ND	0.8000		
Cobalt, total	ug/L	MW-3	09/17/2019	ND	0.8000		
Cobalt, total	ug/L	MW-3	04/08/2020		1.6000		
Cobalt, total	ug/L	MW-3	10/02/2020	ND	0.4000	0.8000	**
Cobalt, total	ug/L	MW-3	04/12/2021		0.7000		
Cobalt, total	ug/L	MW-3	10/26/2021		3.6000		
Cobalt, total	ug/L	MW-3	04/04/2022		0.9000		
Cobalt, total	ug/L	MW-3	10/07/2022		2.4000		
Cobalt, total	ug/L	MW-3	04/19/2023		0.6000		
Cobalt, total	ug/L	MW-3	10/25/2023		0.9000		
Cobalt, total	ug/L	MW-3	04/17/2024		0.9000		
Cobalt, total	ug/L	MW-3	10/17/2024	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-3	04/01/2025		0.5000		
Cobalt, total	ug/L	MW-3	10/10/2025	ND	0.5000	0.8000	**
Copper, total	ug/L	MW-3	03/31/2010	ND	4.0000		
Copper, total	ug/L	MW-3	09/16/2010	ND	4.0000		
Copper, total	ug/L	MW-3	04/11/2011	ND	4.0000		
Copper, total	ug/L	MW-3	09/26/2011	ND	4.0000		
Copper, total	ug/L	MW-3	04/01/2012		4.5000		
Copper, total	ug/L	MW-3	08/23/2012	ND	4.0000		
Copper, total	ug/L	MW-3	04/13/2013	ND	4.0000		
Copper, total	ug/L	MW-3	09/14/2013	ND	4.0000		
Copper, total	ug/L	MW-3	04/11/2014		4.1000		
Copper, total	ug/L	MW-3	09/27/2014	ND	4.0000		
Copper, total	ug/L	MW-3	03/16/2015	ND	4.0000		
Copper, total	ug/L	MW-3	09/28/2015	ND	4.0000		
Copper, total	ug/L	MW-3	03/14/2016	ND	4.0000		
Copper, total	ug/L	MW-3	09/03/2016	ND	4.0000		
Copper, total	ug/L	MW-3	04/10/2017	ND	4.0000		
Copper, total	ug/L	MW-3	09/01/2017	ND	4.0000		
Copper, total	ug/L	MW-3	04/23/2018	ND	4.0000		
Copper, total	ug/L	MW-3	09/14/2018	ND	4.0000		
Copper, total	ug/L	MW-3	04/15/2019	ND	4.0000		
Copper, total	ug/L	MW-3	09/17/2019	ND	4.0000		
Copper, total	ug/L	MW-3	04/08/2020		5.5000		
Copper, total	ug/L	MW-3	10/02/2020	ND	4.0000		
Copper, total	ug/L	MW-3	04/12/2021	ND	4.0000		
Copper, total	ug/L	MW-3	10/26/2021	ND	4.0000		
Copper, total	ug/L	MW-3	04/04/2022	ND	4.0000		
Copper, total	ug/L	MW-3	10/07/2022	ND	4.0000		
Copper, total	ug/L	MW-3	04/19/2023	ND	4.0000		
Copper, total	ug/L	MW-3	10/25/2023	ND	4.0000		
Copper, total	ug/L	MW-3	04/17/2024	ND	4.0000		
Copper, total	ug/L	MW-3	10/17/2024	ND	4.0000		
Copper, total	ug/L	MW-3	04/01/2025	ND	5.0000	4.0000	**
Copper, total	ug/L	MW-3	10/10/2025	ND	5.0000	4.0000	**
Lead, total	ug/L	MW-3	03/31/2010	ND	4.0000		
Lead, total	ug/L	MW-3	09/16/2010	ND	4.0000		
Lead, total	ug/L	MW-3	04/11/2011	ND	4.0000		
Lead, total	ug/L	MW-3	09/26/2011	ND	4.0000		
Lead, total	ug/L	MW-3	04/01/2012	ND	4.0000		
Lead, total	ug/L	MW-3	08/23/2012	ND	4.0000		
Lead, total	ug/L	MW-3	04/13/2013	ND	4.0000		
Lead, total	ug/L	MW-3	09/14/2013	ND	4.0000		
Lead, total	ug/L	MW-3	04/11/2014	ND	4.0000		
Lead, total	ug/L	MW-3	09/27/2014	ND	4.0000		
Lead, total	ug/L	MW-3	03/16/2015	ND	4.0000		
Lead, total	ug/L	MW-3	09/28/2015	ND	4.0000		
Lead, total	ug/L	MW-3	03/14/2016	ND	4.0000		
Lead, total	ug/L	MW-3	09/03/2016	ND	4.0000		
Lead, total	ug/L	MW-3	04/10/2017	ND	4.0000		
Lead, total	ug/L	MW-3	09/01/2017	ND	4.0000		
Lead, total	ug/L	MW-3	04/23/2018	ND	4.0000		
Lead, total	ug/L	MW-3	09/14/2018	ND	4.0000		
Lead, total	ug/L	MW-3	04/15/2019	ND	4.0000		
Lead, total	ug/L	MW-3	09/17/2019	ND	4.0000		
Lead, total	ug/L	MW-3	04/08/2020	ND	4.0000		
Lead, total	ug/L	MW-3	10/02/2020	ND	4.0000		
Lead, total	ug/L	MW-3	04/12/2021	ND	4.0000		
Lead, total	ug/L	MW-3	10/26/2021	ND	4.0000		
Lead, total	ug/L	MW-3	04/04/2022	ND	4.0000		
Lead, total	ug/L	MW-3	10/07/2022	ND	4.0000		
Lead, total	ug/L	MW-3	04/19/2023	ND	4.0000		
Lead, total	ug/L	MW-3	10/25/2023	ND	4.0000		
Lead, total	ug/L	MW-3	04/17/2024	ND	4.0000		
Lead, total	ug/L	MW-3	10/17/2024	ND	4.0000		
Lead, total	ug/L	MW-3	04/01/2025	ND	1.0000		*
Lead, total	ug/L	MW-3	10/10/2025	ND	1.0000		*
Nickel, total	ug/L	MW-3	03/31/2010		6.4000		
Nickel, total	ug/L	MW-3	09/16/2010		6.4000		
Nickel, total	ug/L	MW-3	04/11/2011		10.5000		
Nickel, total	ug/L	MW-3	09/26/2011		7.8000		
Nickel, total	ug/L	MW-3	04/01/2012		11.1000		
Nickel, total	ug/L	MW-3	08/23/2012		6.5000		
Nickel, total	ug/L	MW-3	04/13/2013		7.3000		
Nickel, total	ug/L	MW-3	09/14/2013	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-3	04/11/2014		4.2000		
Nickel, total	ug/L	MW-3	09/27/2014	ND	4.0000		
Nickel, total	ug/L	MW-3	03/16/2015	ND	4.0000		
Nickel, total	ug/L	MW-3	09/28/2015	ND	4.0000		
Nickel, total	ug/L	MW-3	03/14/2016	ND	4.0000		
Nickel, total	ug/L	MW-3	09/03/2016	ND	4.0000		
Nickel, total	ug/L	MW-3	04/10/2017	ND	4.0000		
Nickel, total	ug/L	MW-3	09/01/2017	ND	4.0000		
Nickel, total	ug/L	MW-3	04/23/2018	ND	20.0000	4.0000	**
Nickel, total	ug/L	MW-3	09/14/2018	ND	4.0000		
Nickel, total	ug/L	MW-3	04/15/2019	ND	4.0000		
Nickel, total	ug/L	MW-3	09/17/2019	ND	4.0000		
Nickel, total	ug/L	MW-3	04/08/2020		15.6000		
Nickel, total	ug/L	MW-3	10/02/2020	ND	4.0000		
Nickel, total	ug/L	MW-3	04/12/2021		5.6000		
Nickel, total	ug/L	MW-3	10/26/2021		5.0000		
Nickel, total	ug/L	MW-3	04/04/2022	ND	4.0000		
Nickel, total	ug/L	MW-3	10/07/2022	ND	4.0000		
Nickel, total	ug/L	MW-3	04/19/2023	ND	4.0000		
Nickel, total	ug/L	MW-3	10/25/2023	ND	4.0000		
Nickel, total	ug/L	MW-3	04/17/2024	ND	4.0000		
Nickel, total	ug/L	MW-3	10/17/2024	ND	4.0000		
Nickel, total	ug/L	MW-3	04/01/2025	ND	5.0000	4.0000	**
Nickel, total	ug/L	MW-3	10/10/2025	ND	5.0000	4.0000	**
Selenium, total	ug/L	MW-3	03/31/2010	ND	4.0000		
Selenium, total	ug/L	MW-3	09/16/2010	ND	4.0000		
Selenium, total	ug/L	MW-3	04/11/2011	ND	4.0000		
Selenium, total	ug/L	MW-3	09/26/2011	ND	4.0000		
Selenium, total	ug/L	MW-3	04/01/2012	ND	4.0000		
Selenium, total	ug/L	MW-3	08/23/2012	ND	4.0000		
Selenium, total	ug/L	MW-3	04/13/2013	ND	4.0000		
Selenium, total	ug/L	MW-3	09/14/2013	ND	4.0000		
Selenium, total	ug/L	MW-3	04/11/2014	ND	4.0000		
Selenium, total	ug/L	MW-3	09/27/2014	ND	4.0000		
Selenium, total	ug/L	MW-3	03/16/2015	ND	4.0000		
Selenium, total	ug/L	MW-3	09/28/2015	ND	4.0000		
Selenium, total	ug/L	MW-3	03/14/2016	ND	4.0000		
Selenium, total	ug/L	MW-3	09/03/2016	ND	4.0000		
Selenium, total	ug/L	MW-3	04/10/2017	ND	4.0000		
Selenium, total	ug/L	MW-3	09/01/2017	ND	4.0000		
Selenium, total	ug/L	MW-3	04/23/2018	ND	4.0000		
Selenium, total	ug/L	MW-3	09/14/2018	ND	4.0000		
Selenium, total	ug/L	MW-3	04/15/2019	ND	4.0000		
Selenium, total	ug/L	MW-3	09/17/2019	ND	4.0000		
Selenium, total	ug/L	MW-3	04/08/2020	ND	4.0000		
Selenium, total	ug/L	MW-3	10/02/2020	ND	4.0000		
Selenium, total	ug/L	MW-3	04/12/2021	ND	4.0000		
Selenium, total	ug/L	MW-3	10/26/2021	ND	4.0000		
Selenium, total	ug/L	MW-3	04/04/2022	ND	4.0000		
Selenium, total	ug/L	MW-3	10/07/2022	ND	4.0000		
Selenium, total	ug/L	MW-3	04/19/2023	ND	4.0000		
Selenium, total	ug/L	MW-3	10/25/2023	ND	4.0000		
Selenium, total	ug/L	MW-3	04/17/2024	ND	4.0000		
Selenium, total	ug/L	MW-3	10/17/2024	ND	4.0000		
Selenium, total	ug/L	MW-3	04/01/2025	ND	2.0000	4.0000	**
Selenium, total	ug/L	MW-3	10/10/2025	ND	2.0000	4.0000	**
Silver, total	ug/L	MW-3	03/31/2010	ND	4.0000		
Silver, total	ug/L	MW-3	09/16/2010	ND	4.0000		
Silver, total	ug/L	MW-3	04/11/2011	ND	4.0000		
Silver, total	ug/L	MW-3	09/26/2011	ND	4.0000		
Silver, total	ug/L	MW-3	04/01/2012	ND	4.0000		
Silver, total	ug/L	MW-3	08/23/2012	ND	4.0000		
Silver, total	ug/L	MW-3	04/13/2013	ND	4.0000		
Silver, total	ug/L	MW-3	09/14/2013	ND	4.0000		
Silver, total	ug/L	MW-3	04/11/2014	ND	4.0000		
Silver, total	ug/L	MW-3	09/27/2014	ND	4.0000		
Silver, total	ug/L	MW-3	03/16/2015	ND	4.0000		
Silver, total	ug/L	MW-3	09/28/2015	ND	4.0000		
Silver, total	ug/L	MW-3	03/14/2016	ND	4.0000		
Silver, total	ug/L	MW-3	09/03/2016	ND	4.0000		
Silver, total	ug/L	MW-3	04/10/2017	ND	4.0000		
Silver, total	ug/L	MW-3	09/01/2017	ND	4.0000		
Silver, total	ug/L	MW-3	04/23/2018	ND	4.0000		
Silver, total	ug/L	MW-3	09/14/2018	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	
Silver, total	ug/L	MW-3	04/15/2019	ND	4.0000		
Silver, total	ug/L	MW-3	09/17/2019	ND	4.0000		
Silver, total	ug/L	MW-3	04/08/2020	ND	4.0000		
Silver, total	ug/L	MW-3	10/02/2020	ND	4.0000		
Silver, total	ug/L	MW-3	04/12/2021	ND	4.0000		
Silver, total	ug/L	MW-3	10/26/2021	ND	4.0000		
Silver, total	ug/L	MW-3	04/04/2022	ND	4.0000		
Silver, total	ug/L	MW-3	10/07/2022	ND	4.0000		
Silver, total	ug/L	MW-3	04/19/2023	ND	4.0000		
Silver, total	ug/L	MW-3	10/25/2023	ND	4.0000		
Silver, total	ug/L	MW-3	04/17/2024	ND	4.0000		
Silver, total	ug/L	MW-3	10/17/2024	ND	4.0000		
Silver, total	ug/L	MW-3	04/01/2025	ND	5.0000	4.0000	**
Silver, total	ug/L	MW-3	10/10/2025	ND	5.0000	4.0000	**
Thallium, total	ug/L	MW-3	03/31/2010	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-3	09/16/2010	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-3	04/11/2011	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-3	09/26/2011	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-3	04/01/2012	ND	2.0000		
Thallium, total	ug/L	MW-3	08/23/2012	ND	2.0000		
Thallium, total	ug/L	MW-3	04/13/2013	ND	2.0000		
Thallium, total	ug/L	MW-3	09/14/2013	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-3	04/11/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-3	09/27/2014	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-3	03/16/2015	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-3	09/28/2015	ND	1.0000	2.0000	**
Thallium, total	ug/L	MW-3	03/14/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-3	09/03/2016	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-3	04/10/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-3	09/01/2017	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-3	04/23/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-3	09/14/2018	ND	4.0000	2.0000	**
Thallium, total	ug/L	MW-3	04/15/2019	ND	2.0000		
Thallium, total	ug/L	MW-3	09/17/2019	ND	2.0000		
Thallium, total	ug/L	MW-3	04/08/2020	ND	2.0000		
Thallium, total	ug/L	MW-3	10/02/2020	ND	2.0000		
Thallium, total	ug/L	MW-3	04/12/2021	ND	2.0000		
Thallium, total	ug/L	MW-3	10/26/2021	ND	2.0000		
Thallium, total	ug/L	MW-3	04/04/2022	ND	2.0000		
Thallium, total	ug/L	MW-3	10/07/2022	ND	2.0000		
Thallium, total	ug/L	MW-3	04/19/2023	ND	2.0000		
Thallium, total	ug/L	MW-3	10/25/2023	ND	2.0000		
Thallium, total	ug/L	MW-3	04/17/2024	ND	2.0000		
Thallium, total	ug/L	MW-3	10/17/2024	ND	2.0000		
Thallium, total	ug/L	MW-3	04/01/2025	ND	0.5000		*
Thallium, total	ug/L	MW-3	10/10/2025	ND	0.5000		*
Vanadium, total	ug/L	MW-3	03/31/2010		10.6000		
Vanadium, total	ug/L	MW-3	09/16/2010	ND	10.0000	20.0000	**
Vanadium, total	ug/L	MW-3	04/11/2011		21.8000		
Vanadium, total	ug/L	MW-3	09/26/2011	ND	20.0000		
Vanadium, total	ug/L	MW-3	04/01/2012	ND	20.0000		
Vanadium, total	ug/L	MW-3	08/23/2012	ND	20.0000		
Vanadium, total	ug/L	MW-3	04/13/2013	ND	20.0000		
Vanadium, total	ug/L	MW-3	09/14/2013	ND	20.0000		
Vanadium, total	ug/L	MW-3	04/11/2014	ND	20.0000		
Vanadium, total	ug/L	MW-3	09/27/2014	ND	20.0000		
Vanadium, total	ug/L	MW-3	03/16/2015	ND	20.0000		
Vanadium, total	ug/L	MW-3	09/28/2015	ND	20.0000		
Vanadium, total	ug/L	MW-3	03/14/2016	ND	20.0000		
Vanadium, total	ug/L	MW-3	09/03/2016	ND	20.0000		
Vanadium, total	ug/L	MW-3	04/10/2017	ND	20.0000		
Vanadium, total	ug/L	MW-3	09/01/2017	ND	20.0000		
Vanadium, total	ug/L	MW-3	04/23/2018	ND	20.0000		
Vanadium, total	ug/L	MW-3	09/14/2018	ND	20.0000		
Vanadium, total	ug/L	MW-3	04/15/2019	ND	20.0000		
Vanadium, total	ug/L	MW-3	09/17/2019	ND	20.0000		
Vanadium, total	ug/L	MW-3	04/08/2020	ND	20.0000		
Vanadium, total	ug/L	MW-3	10/02/2020	ND	20.0000		
Vanadium, total	ug/L	MW-3	04/12/2021	ND	20.0000		
Vanadium, total	ug/L	MW-3	10/26/2021	ND	20.0000		
Vanadium, total	ug/L	MW-3	04/04/2022	ND	20.0000		
Vanadium, total	ug/L	MW-3	10/07/2022	ND	20.0000		
Vanadium, total	ug/L	MW-3	04/19/2023	ND	20.0000		
Vanadium, total	ug/L	MW-3	10/25/2023	ND	20.0000		

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

Table 1

Upgradient Data

Constituent	Units	Well	Date		Result	Adjusted	
Vanadium, total	ug/L	MW-3	04/17/2024	ND	20.0000		
Vanadium, total	ug/L	MW-3	10/17/2024	ND	20.0000		
Vanadium, total	ug/L	MW-3	04/01/2025	ND	2.0000		*
Vanadium, total	ug/L	MW-3	10/10/2025	ND	2.0000		*
Zinc, total	ug/L	MW-3	03/31/2010	ND	10.0000	20.0000	**
Zinc, total	ug/L	MW-3	09/16/2010	ND	10.0000	20.0000	**
Zinc, total	ug/L	MW-3	04/11/2011	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-3	09/26/2011		11.0000		
Zinc, total	ug/L	MW-3	04/01/2012		25.0000		
Zinc, total	ug/L	MW-3	08/23/2012		9.7000		
Zinc, total	ug/L	MW-3	04/13/2013		9.6000		
Zinc, total	ug/L	MW-3	09/14/2013	ND	20.0000		
Zinc, total	ug/L	MW-3	04/11/2014	ND	20.0000		
Zinc, total	ug/L	MW-3	09/27/2014		8.9000		
Zinc, total	ug/L	MW-3	03/16/2015	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-3	09/28/2015		8.8000		
Zinc, total	ug/L	MW-3	03/14/2016	ND	20.0000		
Zinc, total	ug/L	MW-3	09/03/2016	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-3	04/10/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-3	09/01/2017	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-3	04/23/2018	ND	8.0000	20.0000	**
Zinc, total	ug/L	MW-3	09/14/2018	ND	20.0000		
Zinc, total	ug/L	MW-3	04/15/2019		14.0000		
Zinc, total	ug/L	MW-3	09/17/2019	ND	20.0000		
Zinc, total	ug/L	MW-3	04/08/2020		30.3000		
Zinc, total	ug/L	MW-3	10/02/2020	ND	20.0000		
Zinc, total	ug/L	MW-3	04/12/2021	ND	20.0000		
Zinc, total	ug/L	MW-3	10/26/2021	ND	20.0000		
Zinc, total	ug/L	MW-3	04/04/2022	ND	20.0000		
Zinc, total	ug/L	MW-3	10/07/2022	ND	20.0000		
Zinc, total	ug/L	MW-3	04/19/2023	ND	20.0000		
Zinc, total	ug/L	MW-3	10/25/2023	ND	20.0000		
Zinc, total	ug/L	MW-3	04/17/2024	ND	20.0000		
Zinc, total	ug/L	MW-3	10/17/2024	ND	20.0000		
Zinc, total	ug/L	MW-3	04/01/2025		5.0000		
Zinc, total	ug/L	MW-3	10/10/2025		27.3000		

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

Table 2

Most Current Downgradient Monitoring Data

Constituent	Units	Well	Date		Result		Pred. Limit
Antimony, total	ug/L	MW-10	10/10/2025	ND	1.0000		2.0000
Arsenic, total	ug/L	MW-10	10/10/2025	ND	2.0000		4.1000
Barium, total	ug/L	MW-10	10/10/2025		146.0000		566.2457
Beryllium, total	ug/L	MW-10	10/10/2025	ND	0.5000		4.0000
Cadmium, total	ug/L	MW-10	10/10/2025	ND	0.2000		1.5000
Chromium, total	ug/L	MW-10	10/10/2025		1.1000		8.0000
Cobalt, total	ug/L	MW-10	10/10/2025	ND	0.5000		3.6000
Copper, total	ug/L	MW-10	10/10/2025	ND	5.0000		5.5000
Lead, total	ug/L	MW-10	10/10/2025	ND	1.0000		4.0000
Nickel, total	ug/L	MW-10	10/10/2025		14.5000		15.6000
Selenium, total	ug/L	MW-10	10/10/2025	ND	2.0000		4.0000
Silver, total	ug/L	MW-10	10/10/2025	ND	5.0000		4.0000
Thallium, total	ug/L	MW-10	10/10/2025	ND	0.5000		2.0000
Vanadium, total	ug/L	MW-10	10/10/2025	ND	2.0000		21.8000
Zinc, total	ug/L	MW-10	10/10/2025		5.1000		30.3000
Antimony, total	ug/L	MW-13	10/10/2025	ND	1.0000		2.0000
Arsenic, total	ug/L	MW-13	10/10/2025	ND	2.0000		4.1000
Barium, total	ug/L	MW-13	10/10/2025		52.0000		566.2457
Beryllium, total	ug/L	MW-13	10/10/2025	ND	0.5000		4.0000
Cadmium, total	ug/L	MW-13	10/10/2025	ND	0.2000		1.5000
Chromium, total	ug/L	MW-13	10/10/2025		1.9000		8.0000
Cobalt, total	ug/L	MW-13	10/10/2025	ND	0.5000		3.6000
Copper, total	ug/L	MW-13	10/10/2025	ND	5.0000		5.5000
Lead, total	ug/L	MW-13	10/10/2025	ND	1.0000		4.0000
Nickel, total	ug/L	MW-13	10/10/2025	ND	5.0000		15.6000
Selenium, total	ug/L	MW-13	10/10/2025	ND	2.0000		4.0000
Silver, total	ug/L	MW-13	10/10/2025	ND	5.0000		4.0000
Thallium, total	ug/L	MW-13	10/10/2025	ND	0.5000		2.0000
Vanadium, total	ug/L	MW-13	10/10/2025	ND	2.0000		21.8000
Zinc, total	ug/L	MW-13	10/10/2025	ND	5.0000		30.3000
Antimony, total	ug/L	MW-7	10/10/2025		1.0000		2.0000
Arsenic, total	ug/L	MW-7	10/10/2025	ND	2.0000		4.1000
Barium, total	ug/L	MW-7	10/10/2025		229.0000		566.2457
Beryllium, total	ug/L	MW-7	10/10/2025	ND	0.5000		4.0000
Cadmium, total	ug/L	MW-7	10/10/2025		1.7000	*	1.5000
Chromium, total	ug/L	MW-7	10/10/2025		1.8000		8.0000
Cobalt, total	ug/L	MW-7	10/10/2025		4.5000	*	3.6000
Copper, total	ug/L	MW-7	10/10/2025		16.5000	*	5.5000
Lead, total	ug/L	MW-7	10/10/2025	ND	1.0000		4.0000
Nickel, total	ug/L	MW-7	10/10/2025		42.6000	***	15.6000
Selenium, total	ug/L	MW-7	10/10/2025	ND	2.0000		4.0000
Silver, total	ug/L	MW-7	10/10/2025	ND	5.0000		4.0000
Thallium, total	ug/L	MW-7	10/10/2025	ND	0.5000		2.0000
Vanadium, total	ug/L	MW-7	10/10/2025	ND	2.0000		21.8000
Zinc, total	ug/L	MW-7	10/10/2025		18.1000		30.3000
Antimony, total	ug/L	PZ-11	10/10/2025	ND	1.0000		2.0000
Arsenic, total	ug/L	PZ-11	10/10/2025	ND	2.0000		4.1000
Barium, total	ug/L	PZ-11	10/10/2025		71.0000		566.2457
Beryllium, total	ug/L	PZ-11	10/10/2025	ND	0.5000		4.0000
Cadmium, total	ug/L	PZ-11	10/10/2025	ND	0.2000		1.5000
Chromium, total	ug/L	PZ-11	10/10/2025		1.0000		8.0000
Cobalt, total	ug/L	PZ-11	10/10/2025	ND	0.5000		3.6000
Copper, total	ug/L	PZ-11	10/10/2025	ND	5.0000		5.5000
Lead, total	ug/L	PZ-11	10/10/2025	ND	1.0000		4.0000
Nickel, total	ug/L	PZ-11	10/10/2025		6.0000		15.6000
Selenium, total	ug/L	PZ-11	10/10/2025	ND	2.0000		4.0000
Silver, total	ug/L	PZ-11	10/10/2025	ND	5.0000		4.0000
Thallium, total	ug/L	PZ-11	10/10/2025	ND	0.5000		2.0000
Vanadium, total	ug/L	PZ-11	10/10/2025	ND	2.0000		21.8000
Zinc, total	ug/L	PZ-11	10/10/2025	ND	5.0000		30.3000

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

Table 3

Detection Frequencies in Upgradient and Downgradient Wells

Constituent	Detect	Upgradient N	Proportion	Detect	Downgradient N	Proportion
Antimony, total	0	32	0.000	1	128	0.008
Arsenic, total	1	32	0.031	19	129	0.147
Barium, total	32	32	1.000	128	128	1.000
Beryllium, total	0	30	0.000	0	128	0.000
Cadmium, total	6	32	0.188	19	130	0.146
Chromium, total	0	30	0.000	13	128	0.102
Cobalt, total	10	32	0.313	45	129	0.349
Copper, total	3	32	0.094	26	128	0.203
Lead, total	0	30	0.000	11	128	0.086
Nickel, total	11	32	0.344	82	129	0.636
Selenium, total	0	32	0.000	2	128	0.016
Silver, total	0	32	0.000	0	128	0.000
Thallium, total	0	30	0.000	0	128	0.000
Vanadium, total	2	30	0.067	10	128	0.078
Zinc, total	10	32	0.313	38	129	0.295

N = Total number of measurements in all wells.
Detect = Total number of detections in all wells.
Proportion = Detect/N.

Table 4

Shapiro-Wilk Multiple Group Test of Normality

Constituent	Detect	N	Detect Freq	G raw	G log	G cbrt	G sqrt	G sqr	G cub	Crit Value	Dist Form	Model Type
Antimony, total	0	32	0.000									nonpar
Arsenic, total	1	32	0.031									nonpar
Barium, total	32	32	1.000	0.440	1.628					2.326	normal	normal
Beryllium, total	0	30	0.000									nonpar
Cadmium, total	6	32	0.188	0.034	0.871					2.326	normal	nonpar
Chromium, total	0	30	0.000									nonpar
Cobalt, total	10	32	0.313	2.592	0.944					2.326	lognor	nonpar
Copper, total	3	32	0.094	0.092	0.255					2.326	normal	nonpar
Lead, total	0	30	0.000									nonpar
Nickel, total	11	32	0.344	1.439	0.444					2.326	normal	nonpar
Selenium, total	0	32	0.000									nonpar
Silver, total	0	32	0.000									nonpar
Thallium, total	0	30	0.000									nonpar
Vanadium, total	2	30	0.067									nonpar
Zinc, total	10	32	0.313	1.831	0.690					2.326	normal	nonpar

* - Distribution override for that constituent.
Fit to distribution is confirmed if G <= critical value.
Model type may not match distributional form when detection frequency < 50%.

Table 5

Summary Statistics and Prediction Limits

Constituent	Units	Detect	N	Mean	SD	alpha	Factor	Pred Limit	Type		Conf
Antimony, total	ug/L	0	32					2.0000	nonpar	***	0.99
Arsenic, total	ug/L	1	32					4.1000	nonpar		0.99
Barium, total	ug/L	32	32	315.8125	100.5506	0.0100	2.4906	566.2457	normal		
Beryllium, total	ug/L	0	30					4.0000	nonpar	***	0.99
Cadmium, total	ug/L	6	32					1.5000	nonpar		0.99
Chromium, total	ug/L	0	30					8.0000	nonpar	***	0.99
Cobalt, total	ug/L	10	32					3.6000	nonpar		0.99
Copper, total	ug/L	3	32					5.5000	nonpar		0.99
Lead, total	ug/L	0	30					4.0000	nonpar	***	0.99
Nickel, total	ug/L	11	32					15.6000	nonpar		0.99
Selenium, total	ug/L	0	32					4.0000	nonpar	***	0.99
Silver, total	ug/L	0	32					4.0000	nonpar	***	0.99
Thallium, total	ug/L	0	30					2.0000	nonpar	***	0.99
Vanadium, total	ug/L	2	30					21.8000	nonpar		0.99
Zinc, total	ug/L	10	32					30.3000	nonpar		0.99

Conf = confidence level for passing initial test or one verification resample at all downgradient wells for a single constituent (nonparametric test only).
* - Insufficient Data.
** - Calculated limit raised to Manual Reporting Limit.
*** - Nonparametric limit based on ND value.
For transformed data, mean and SD in transformed units and prediction limit in original units.
All sample sizes and statistics are based on outlier free data.
For nonparametric limits, median reporting limits are substituted for extreme reporting limit values.

Table 6

Dixon's Test Outliers
1% Significance Level

Constituent	Units	Well	Date	Result	ND Qualifier	Date Range	N	Critical Value
Beryllium, total	ug/L	MW-3	04/01/2025	0.5000	< 0.5000	03/31/2010-10/10/2025	32	0.4502
Beryllium, total	ug/L	MW-3	10/10/2025	0.5000	< 0.5000	03/31/2010-10/10/2025	32	0.4502
Chromium, total	ug/L	MW-3	04/01/2025	1.1000		03/31/2010-10/10/2025	32	0.4502
Chromium, total	ug/L	MW-3	10/10/2025	1.4000		03/31/2010-10/10/2025	32	0.4502
Lead, total	ug/L	MW-3	04/01/2025	1.0000	< 1.0000	03/31/2010-10/10/2025	32	0.4502
Lead, total	ug/L	MW-3	10/10/2025	1.0000	< 1.0000	03/31/2010-10/10/2025	32	0.4502
Thallium, total	ug/L	MW-3	04/01/2025	0.5000	< 0.5000	03/31/2010-10/10/2025	32	0.4502
Thallium, total	ug/L	MW-3	10/10/2025	0.5000	< 0.5000	03/31/2010-10/10/2025	32	0.4502
Vanadium, total	ug/L	MW-3	04/01/2025	2.0000	< 2.0000	03/31/2010-10/10/2025	32	0.4502
Vanadium, total	ug/L	MW-3	10/10/2025	2.0000	< 2.0000	03/31/2010-10/10/2025	32	0.4502

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
Cadmium, total	ug/L	MW-7	03/31/2010	ND	1.0000		1.5000
Cadmium, total	ug/L	MW-7	09/16/2010	ND	1.0000		1.5000
Cadmium, total	ug/L	MW-7	04/11/2011	ND	0.8000		1.5000
Cadmium, total	ug/L	MW-7	09/26/2011		0.8000		1.5000
Cadmium, total	ug/L	MW-7	04/01/2012	ND	0.8000		1.5000
Cadmium, total	ug/L	MW-7	08/23/2012	ND	0.8000		1.5000
Cadmium, total	ug/L	MW-7	04/12/2013	ND	0.8000		1.5000
Cadmium, total	ug/L	MW-7	09/14/2013	ND	0.8000		1.5000
Cadmium, total	ug/L	MW-7	04/11/2014	ND	0.8000		1.5000
Cadmium, total	ug/L	MW-7	09/27/2014	ND	0.8000		1.5000
Cadmium, total	ug/L	MW-7	03/16/2015	ND	0.8000		1.5000
Cadmium, total	ug/L	MW-7	09/28/2015		1.1000		1.5000
Cadmium, total	ug/L	MW-7	03/14/2016		1.0000		1.5000
Cadmium, total	ug/L	MW-7	09/03/2016		0.9000		1.5000
Cadmium, total	ug/L	MW-7	04/10/2017		1.0000		1.5000
Cadmium, total	ug/L	MW-7	09/01/2017		0.8000		1.5000
Cadmium, total	ug/L	MW-7	04/23/2018		1.0000		1.5000
Cadmium, total	ug/L	MW-7	09/14/2018		0.8000		1.5000
Cadmium, total	ug/L	MW-7	04/15/2019		0.8000		1.5000
Cadmium, total	ug/L	MW-7	09/17/2019	ND	0.8000		1.5000
Cadmium, total	ug/L	MW-7	04/08/2020	ND	0.8000		1.5000
Cadmium, total	ug/L	MW-7	10/02/2020	ND	0.8000		1.5000
Cadmium, total	ug/L	MW-7	04/12/2021	ND	0.8000		1.5000
Cadmium, total	ug/L	MW-7	10/26/2021	ND	0.8000		1.5000
Cadmium, total	ug/L	MW-7	04/04/2022	ND	0.8000		1.5000
Cadmium, total	ug/L	MW-7	10/07/2022	ND	0.8000		1.5000
Cadmium, total	ug/L	MW-7	04/19/2023	ND	0.8000		1.5000
Cadmium, total	ug/L	MW-7	10/25/2023	ND	0.8000		1.5000
Cadmium, total	ug/L	MW-7	04/17/2024	ND	0.8000		1.5000
Cadmium, total	ug/L	MW-7	10/17/2024	ND	0.8000		1.5000
Cadmium, total	ug/L	MW-7	04/01/2025		0.4000		1.5000
Cadmium, total	ug/L	MW-7	10/10/2025		1.7000	*	1.5000
Cobalt, total	ug/L	MW-7	03/31/2010	ND	4.0000		3.6000
Cobalt, total	ug/L	MW-7	09/16/2010	ND	4.0000		3.6000
Cobalt, total	ug/L	MW-7	04/11/2011	ND	4.0000		3.6000
Cobalt, total	ug/L	MW-7	09/26/2011	ND	4.0000		3.6000
Cobalt, total	ug/L	MW-7	04/01/2012	ND	4.0000		3.6000
Cobalt, total	ug/L	MW-7	08/23/2012	ND	4.0000		3.6000
Cobalt, total	ug/L	MW-7	04/12/2013	ND	4.0000		3.6000
Cobalt, total	ug/L	MW-7	09/14/2013	ND	4.0000		3.6000
Cobalt, total	ug/L	MW-7	04/11/2014	ND	4.0000		3.6000
Cobalt, total	ug/L	MW-7	09/27/2014		1.6000		3.6000
Cobalt, total	ug/L	MW-7	03/16/2015		2.6000		3.6000
Cobalt, total	ug/L	MW-7	09/28/2015	ND	0.8000		3.6000
Cobalt, total	ug/L	MW-7	03/14/2016	ND	0.8000		3.6000
Cobalt, total	ug/L	MW-7	09/03/2016	ND	0.8000		3.6000
Cobalt, total	ug/L	MW-7	04/10/2017	ND	0.8000		3.6000
Cobalt, total	ug/L	MW-7	09/01/2017		2.0000		3.6000
Cobalt, total	ug/L	MW-7	04/23/2018		1.7000		3.6000
Cobalt, total	ug/L	MW-7	09/14/2018		3.6000		3.6000
Cobalt, total	ug/L	MW-7	04/15/2019		2.8000		3.6000
Cobalt, total	ug/L	MW-7	09/17/2019		6.1000	*	3.6000
Cobalt, total	ug/L	MW-7	04/08/2020		4.3000	*	3.6000
Cobalt, total	ug/L	MW-7	10/02/2020		8.5000	*	3.6000
Cobalt, total	ug/L	MW-7	04/12/2021		2.7000		3.6000
Cobalt, total	ug/L	MW-7	10/26/2021		8.6000	*	3.6000
Cobalt, total	ug/L	MW-7	04/04/2022		1.1000		3.6000
Cobalt, total	ug/L	MW-7	10/07/2022		9.4000	*	3.6000
Cobalt, total	ug/L	MW-7	04/19/2023		0.7000		3.6000
Cobalt, total	ug/L	MW-7	10/25/2023		1.9000		3.6000
Cobalt, total	ug/L	MW-7	04/17/2024		1.0000		3.6000
Cobalt, total	ug/L	MW-7	10/17/2024		2.8000		3.6000
Cobalt, total	ug/L	MW-7	04/01/2025		2.4000		3.6000
Cobalt, total	ug/L	MW-7	10/10/2025		4.5000	*	3.6000
Copper, total	ug/L	MW-7	03/31/2010		6.1000	*	5.5000
Copper, total	ug/L	MW-7	09/16/2010	ND	4.0000		5.5000
Copper, total	ug/L	MW-7	04/11/2011	ND	4.0000		5.5000
Copper, total	ug/L	MW-7	09/26/2011	ND	4.0000		5.5000
Copper, total	ug/L	MW-7	04/01/2012		5.5000		5.5000
Copper, total	ug/L	MW-7	08/23/2012	ND	4.0000		5.5000
Copper, total	ug/L	MW-7	04/12/2013	ND	4.0000		5.5000

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

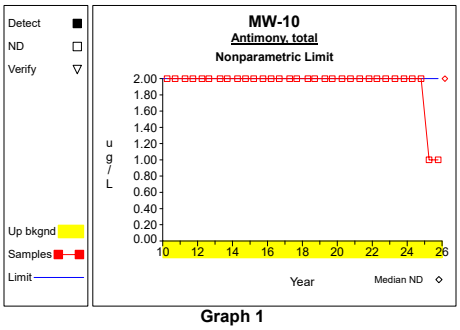
Table 8

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

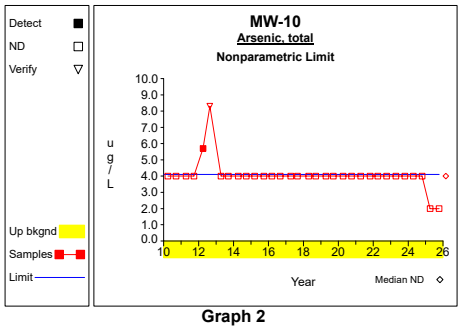
Constituent	Units	Well	Date		Result		Pred. Limit
Copper, total	ug/L	MW-7	09/14/2013		4.1000		5.5000
Copper, total	ug/L	MW-7	04/11/2014	ND	4.0000		5.5000
Copper, total	ug/L	MW-7	09/27/2014		4.3000		5.5000
Copper, total	ug/L	MW-7	03/16/2015		8.6000	*	5.5000
Copper, total	ug/L	MW-7	09/28/2015	ND	4.0000		5.5000
Copper, total	ug/L	MW-7	03/14/2016	ND	4.0000		5.5000
Copper, total	ug/L	MW-7	09/03/2016	ND	4.0000		5.5000
Copper, total	ug/L	MW-7	04/10/2017	ND	4.0000		5.5000
Copper, total	ug/L	MW-7	09/01/2017	ND	4.0000		5.5000
Copper, total	ug/L	MW-7	04/23/2018	ND	4.0000		5.5000
Copper, total	ug/L	MW-7	09/14/2018	ND	4.0000		5.5000
Copper, total	ug/L	MW-7	04/15/2019	ND	4.0000		5.5000
Copper, total	ug/L	MW-7	09/17/2019	ND	4.0000		5.5000
Copper, total	ug/L	MW-7	04/08/2020	ND	4.0000		5.5000
Copper, total	ug/L	MW-7	10/02/2020	ND	4.0000		5.5000
Copper, total	ug/L	MW-7	04/12/2021	ND	4.0000		5.5000
Copper, total	ug/L	MW-7	10/26/2021	ND	4.0000		5.5000
Copper, total	ug/L	MW-7	04/04/2022		4.7000		5.5000
Copper, total	ug/L	MW-7	10/07/2022	ND	4.0000		5.5000
Copper, total	ug/L	MW-7	04/19/2023		5.1000		5.5000
Copper, total	ug/L	MW-7	10/25/2023		5.4000		5.5000
Copper, total	ug/L	MW-7	04/17/2024	ND	4.0000		5.5000
Copper, total	ug/L	MW-7	10/17/2024		6.4000	*	5.5000
Copper, total	ug/L	MW-7	04/01/2025	ND	5.0000		5.5000
Copper, total	ug/L	MW-7	10/10/2025		16.5000	*	5.5000
Nickel, total	ug/L	MW-7	03/31/2010		21.3000	*	15.6000
Nickel, total	ug/L	MW-7	09/16/2010		8.6000		15.6000
Nickel, total	ug/L	MW-7	04/11/2011		20.4000	*	15.6000
Nickel, total	ug/L	MW-7	09/26/2011		24.2000	*	15.6000
Nickel, total	ug/L	MW-7	04/01/2012		32.6000	*	15.6000
Nickel, total	ug/L	MW-7	08/23/2012		26.8000	*	15.6000
Nickel, total	ug/L	MW-7	04/12/2013		26.9000	*	15.6000
Nickel, total	ug/L	MW-7	09/14/2013		19.6000	*	15.6000
Nickel, total	ug/L	MW-7	04/11/2014		21.8000	*	15.6000
Nickel, total	ug/L	MW-7	09/27/2014		25.3000	*	15.6000
Nickel, total	ug/L	MW-7	03/16/2015		26.4000	*	15.6000
Nickel, total	ug/L	MW-7	09/28/2015		32.9000	*	15.6000
Nickel, total	ug/L	MW-7	03/14/2016		34.4000	*	15.6000
Nickel, total	ug/L	MW-7	09/03/2016		30.0000	*	15.6000
Nickel, total	ug/L	MW-7	04/10/2017		56.3000	*	15.6000
Nickel, total	ug/L	MW-7	09/01/2017		64.8000	*	15.6000
Nickel, total	ug/L	MW-7	04/23/2018		68.7000	*	15.6000
Nickel, total	ug/L	MW-7	09/14/2018		65.6000	*	15.6000
Nickel, total	ug/L	MW-7	04/15/2019		57.2000	*	15.6000
Nickel, total	ug/L	MW-7	09/17/2019		94.9000	*	15.6000
Nickel, total	ug/L	MW-7	04/08/2020		73.4000	*	15.6000
Nickel, total	ug/L	MW-7	10/02/2020		77.6000	*	15.6000
Nickel, total	ug/L	MW-7	04/12/2021		65.5000	*	15.6000
Nickel, total	ug/L	MW-7	10/26/2021		57.5000	*	15.6000
Nickel, total	ug/L	MW-7	04/04/2022		39.1000	*	15.6000
Nickel, total	ug/L	MW-7	10/07/2022		68.3000	*	15.6000
Nickel, total	ug/L	MW-7	04/19/2023		14.2000		15.6000
Nickel, total	ug/L	MW-7	10/25/2023		43.8000	*	15.6000
Nickel, total	ug/L	MW-7	04/17/2024		9.1000		15.6000
Nickel, total	ug/L	MW-7	10/17/2024		49.6000	*	15.6000
Nickel, total	ug/L	MW-7	04/01/2025		29.3000	*	15.6000
Nickel, total	ug/L	MW-7	10/10/2025		42.6000	*	15.6000

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

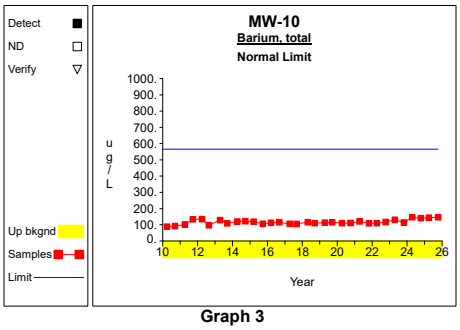
Up vs. Down Prediction Limits



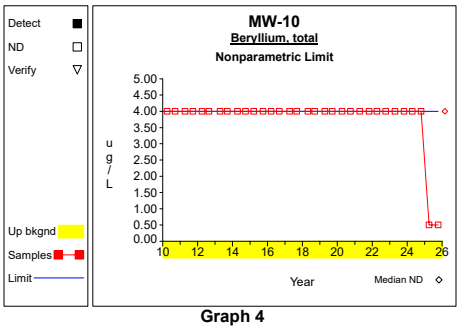
Graph 1



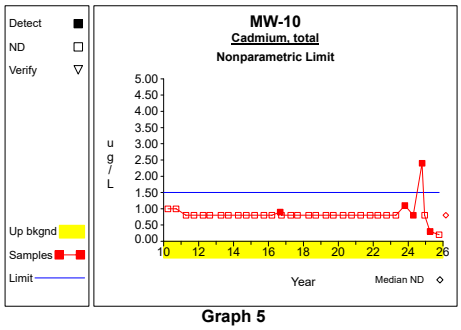
Graph 2



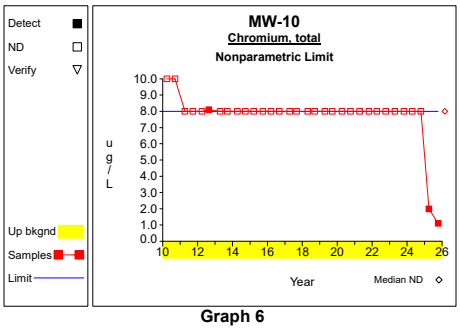
Graph 3



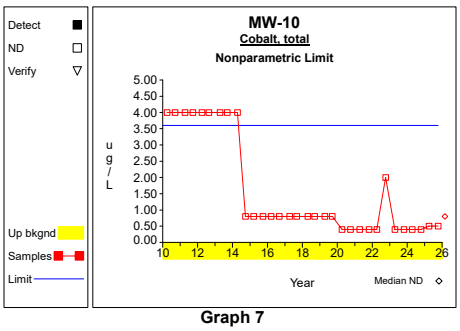
Graph 4



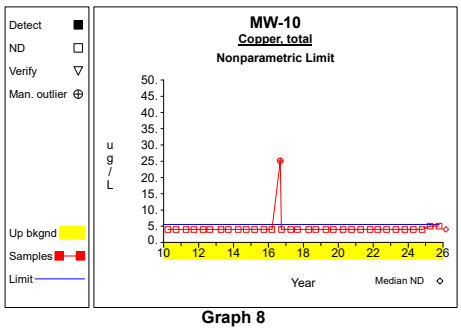
Graph 5



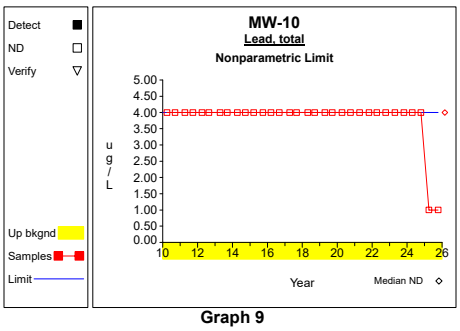
Graph 6



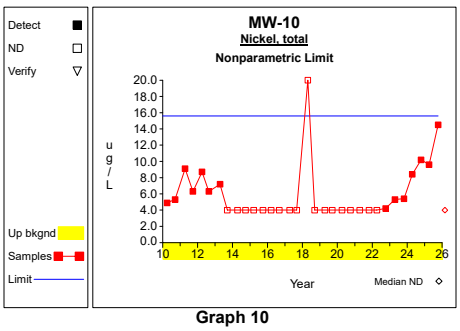
Graph 7



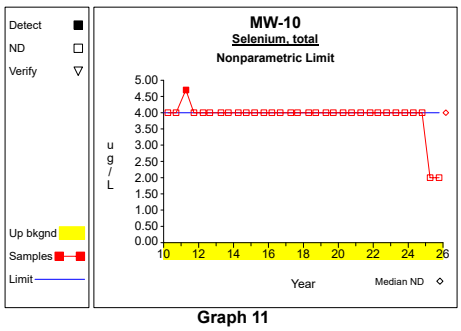
Graph 8



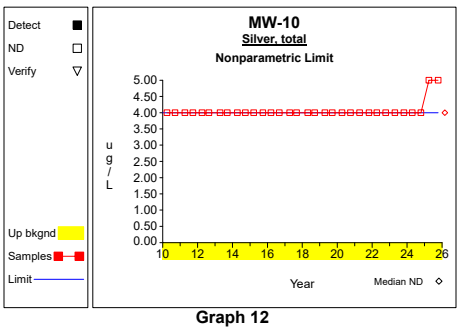
Graph 9



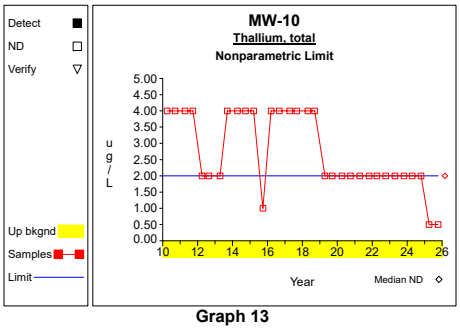
Graph 10



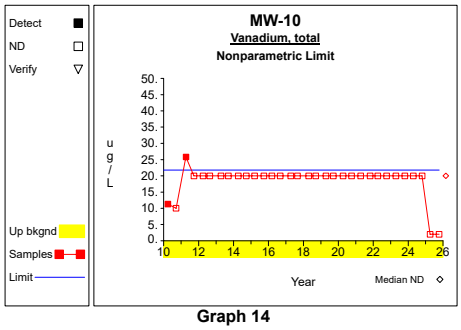
Graph 11



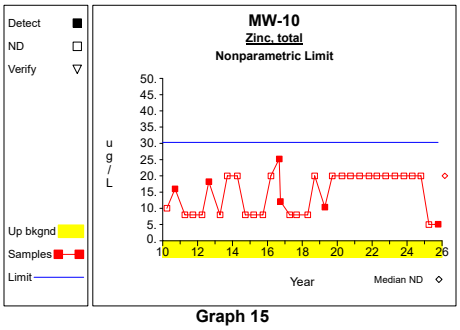
Graph 12



Graph 13



Graph 14



Graph 15

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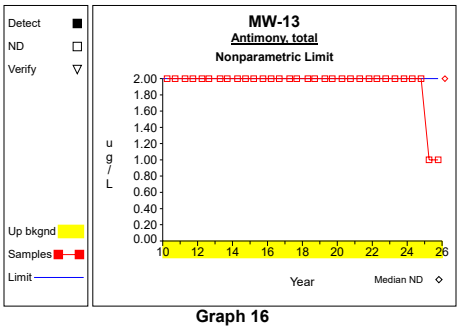
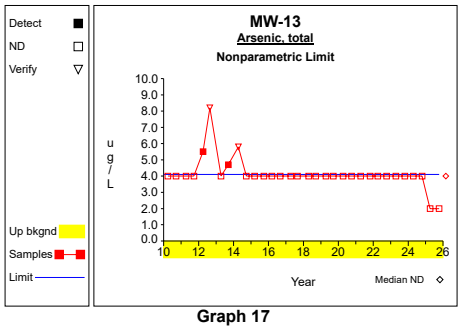
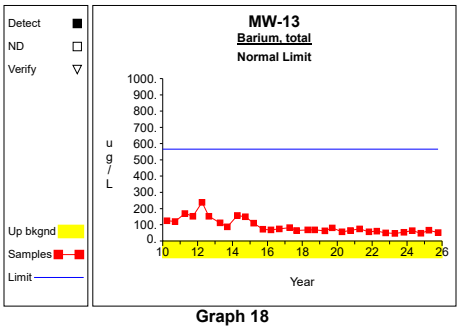
Up vs. Down Prediction Limits



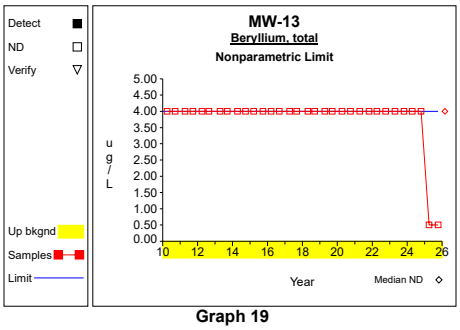
Graph 16



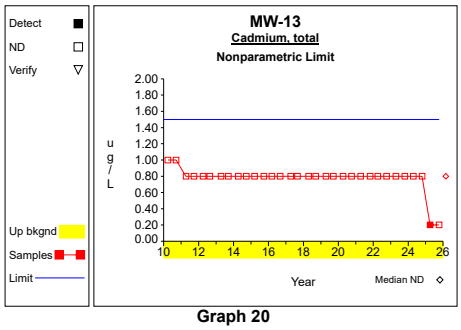
Graph 17



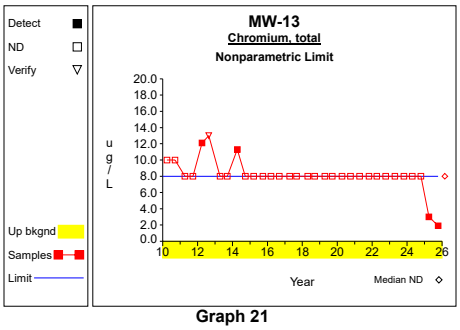
Graph 18



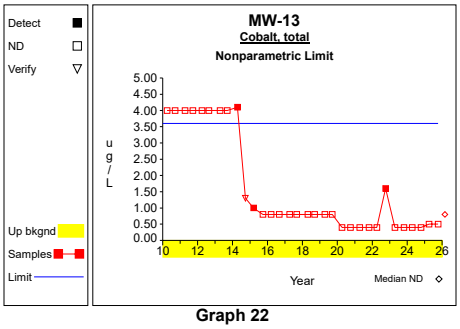
Graph 19



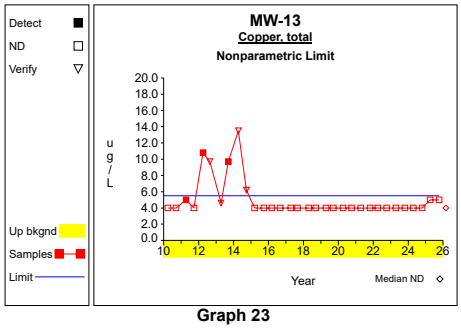
Graph 20



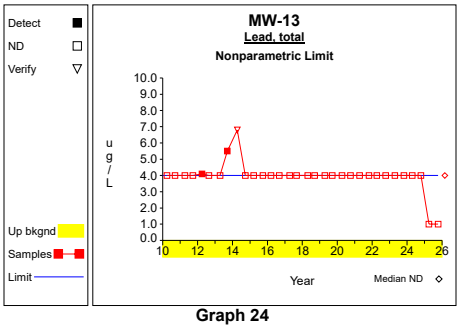
Graph 21



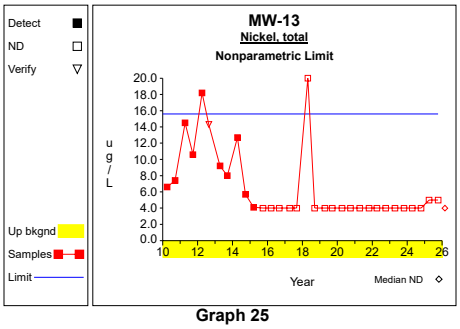
Graph 22



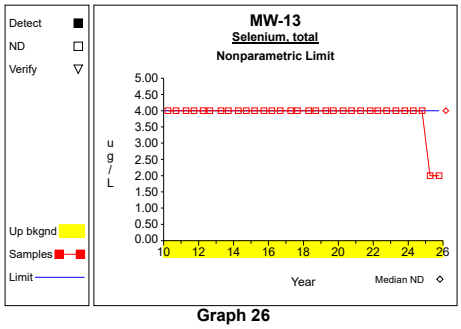
Graph 23



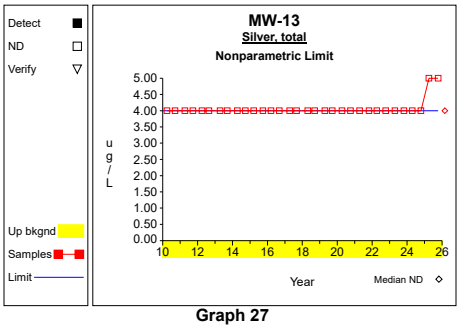
Graph 24



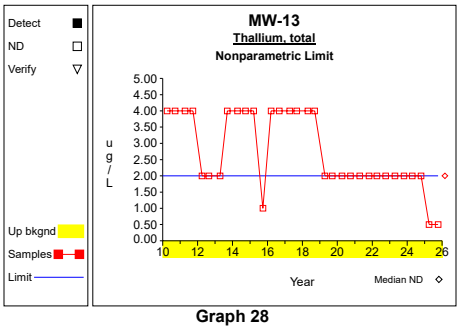
Graph 25



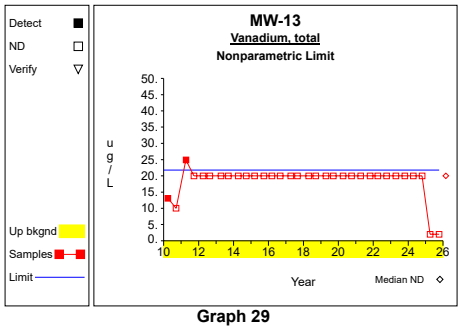
Graph 26



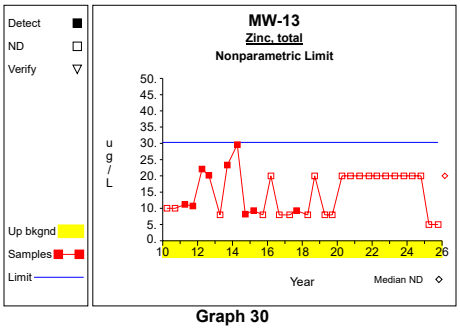
Graph 27



Graph 28



Graph 29



Graph 30

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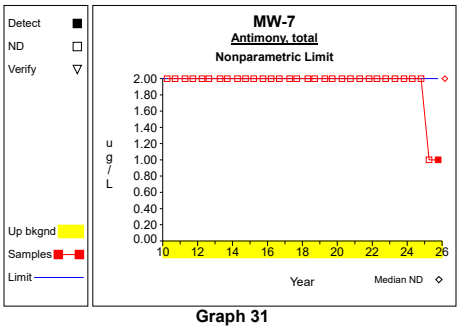
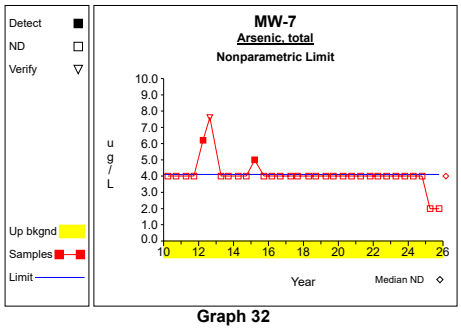
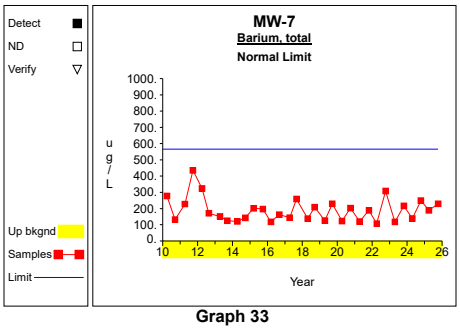
Up vs. Down Prediction Limits



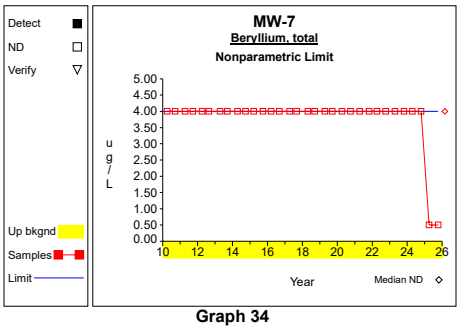
Graph 31



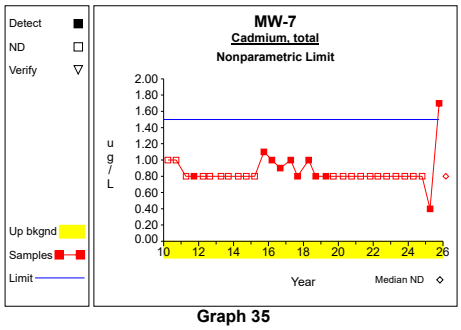
Graph 32



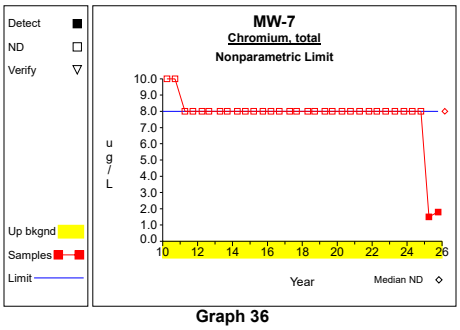
Graph 33



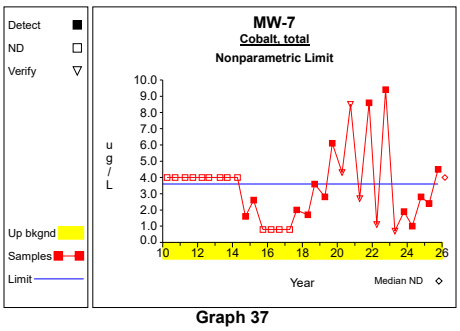
Graph 34



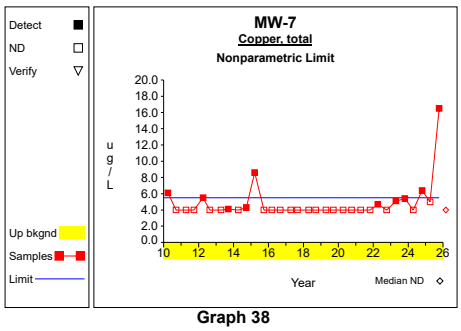
Graph 35



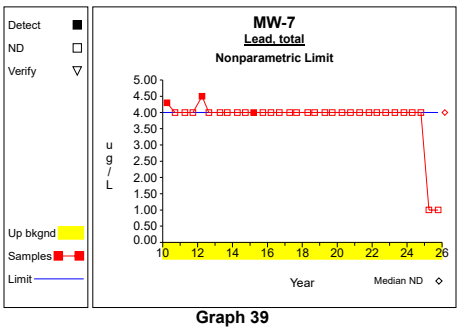
Graph 36



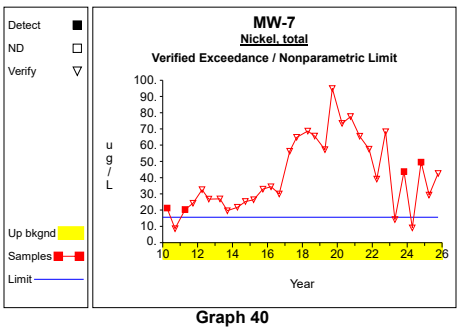
Graph 37



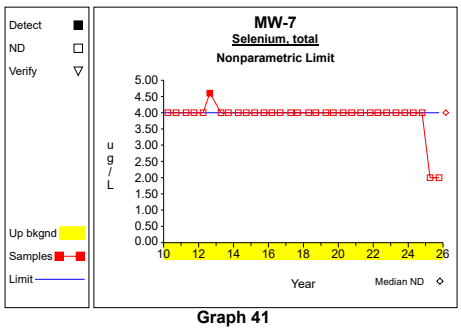
Graph 38



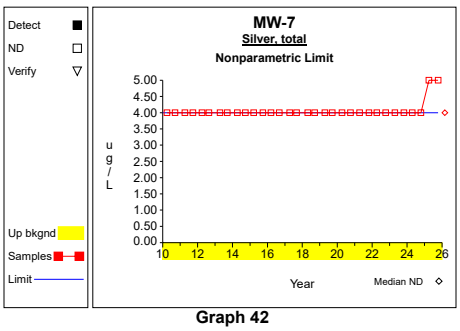
Graph 39



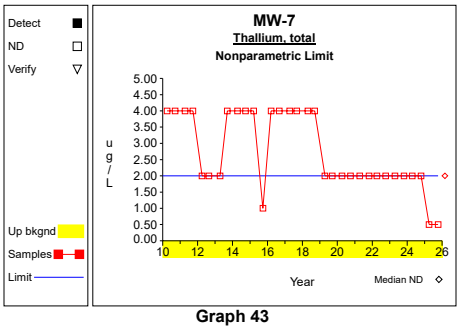
Graph 40



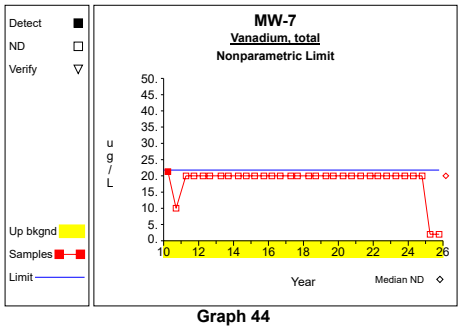
Graph 41



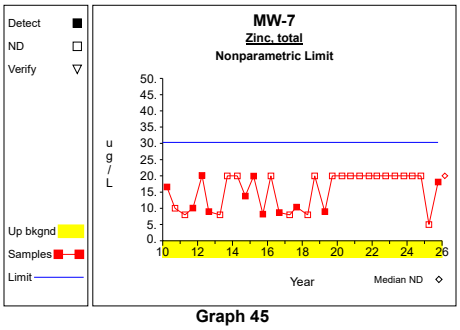
Graph 42



Graph 43



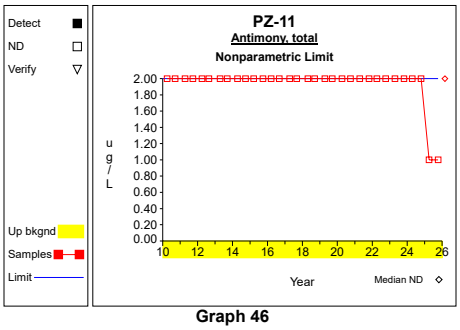
Graph 44



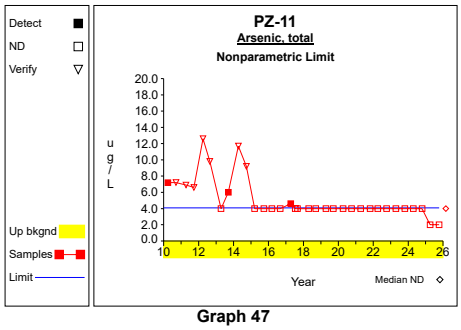
Graph 45

Prepared by: Otter Creek Environmental

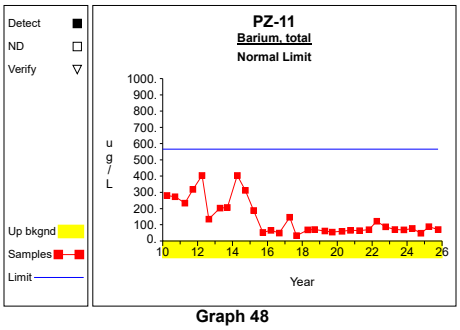
Up vs. Down Prediction Limits



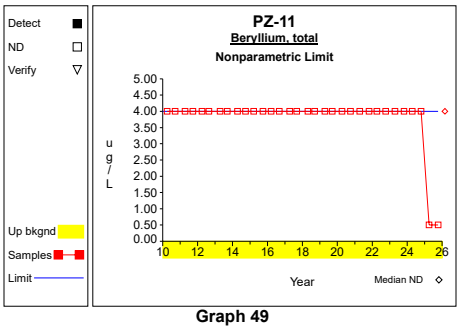
Graph 46



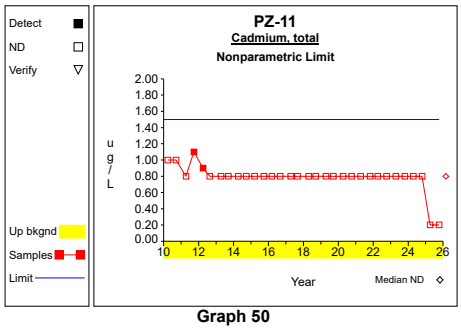
Graph 47



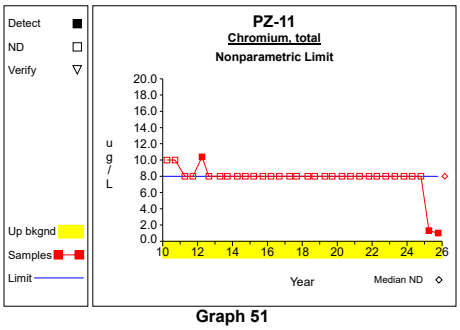
Graph 48



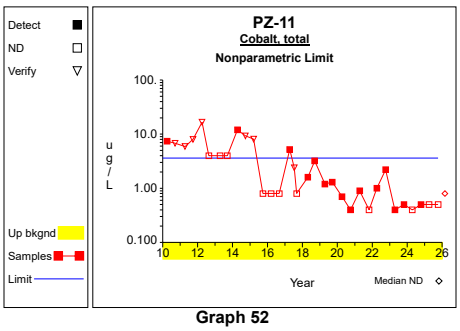
Graph 49



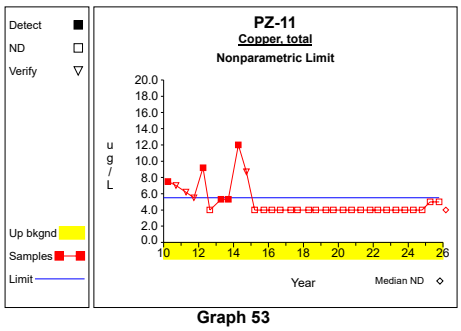
Graph 50



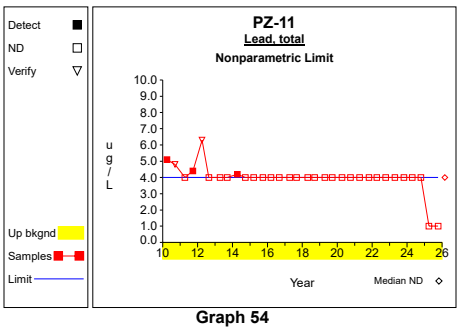
Graph 51



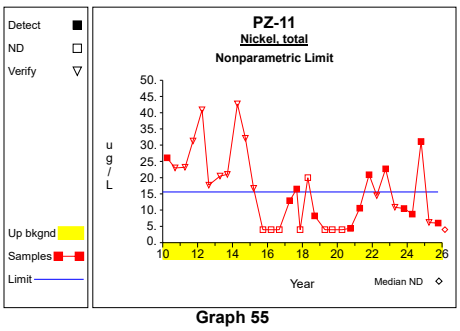
Graph 52



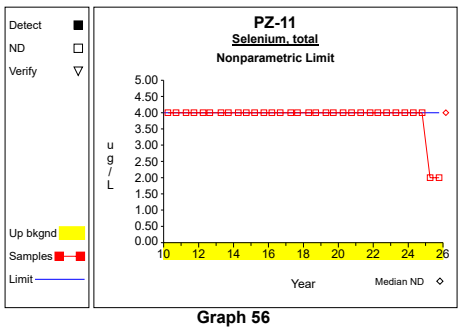
Graph 53



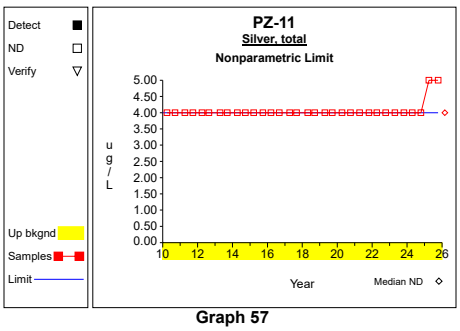
Graph 54



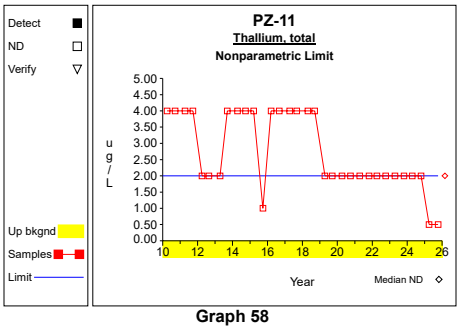
Graph 55



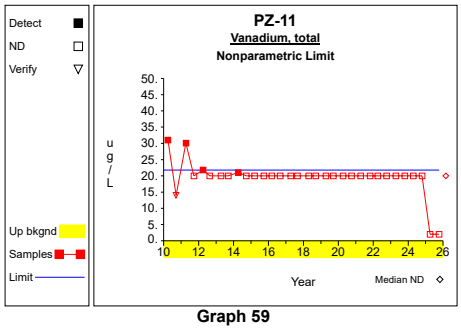
Graph 56



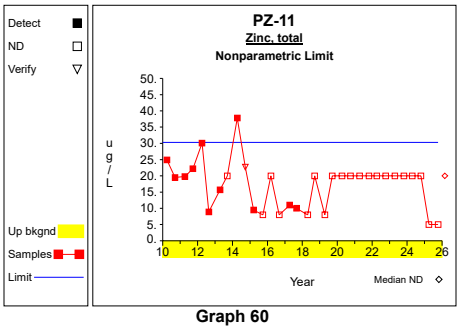
Graph 57



Graph 58



Graph 59

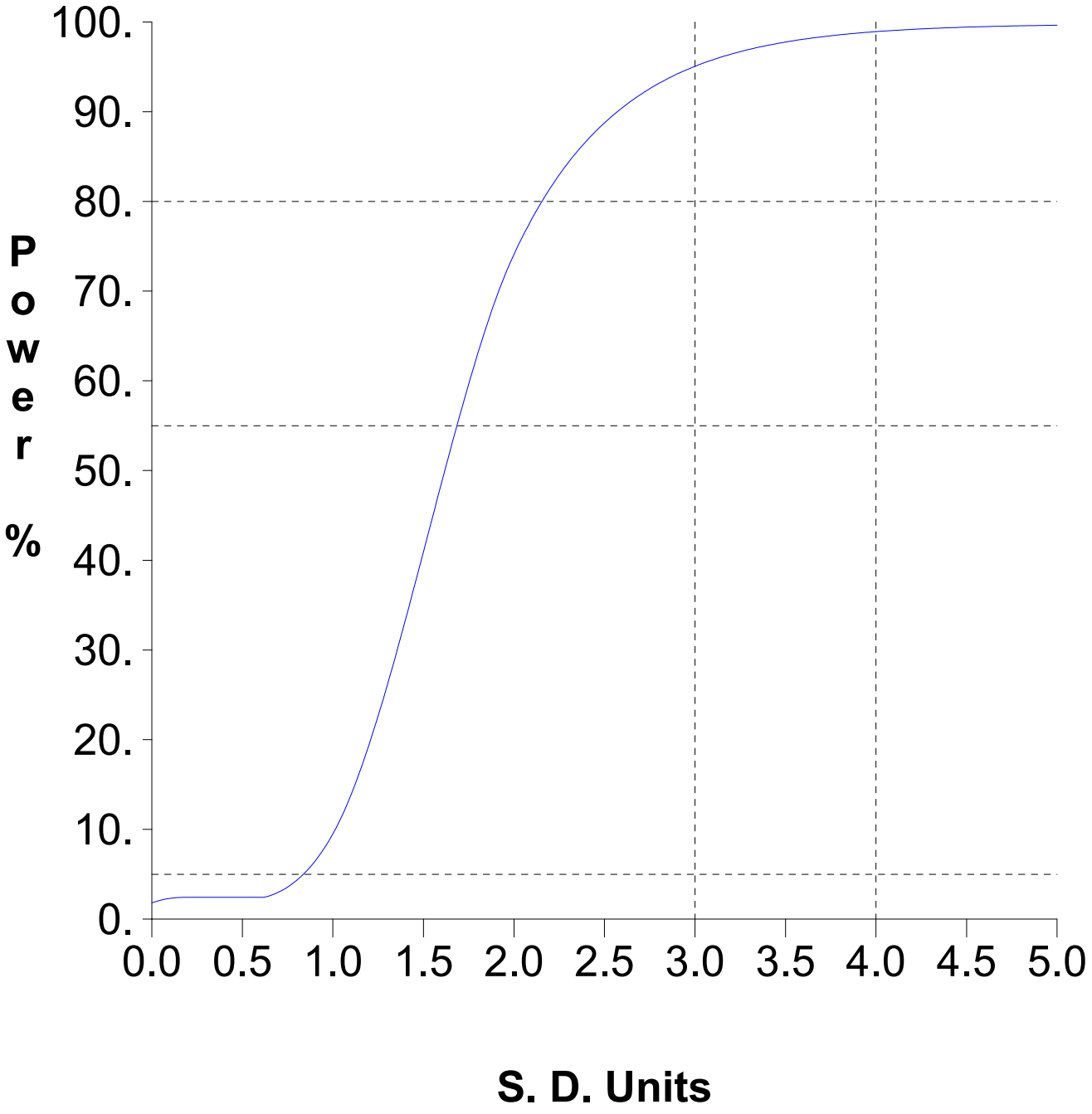


Graph 60

Prepared by: Otter Creek Environmental

False Positive and False Negative Rates for Current

Upgradient vs. Downgradient Monitoring Program



Attachment C

Assessment Statistics for Trace Metals

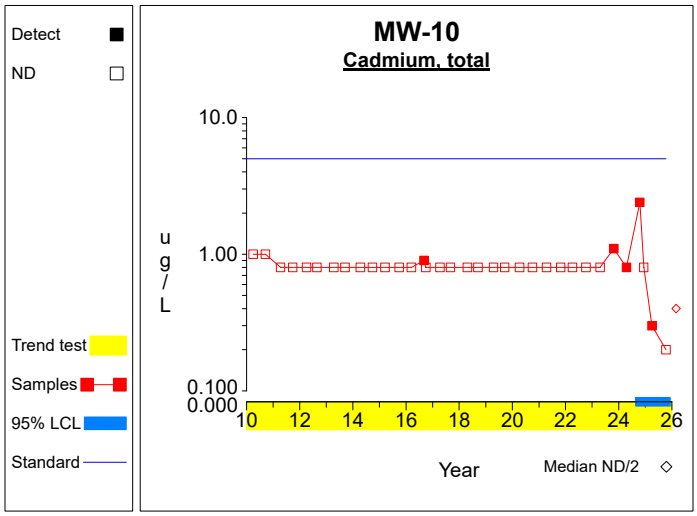
Table 1

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

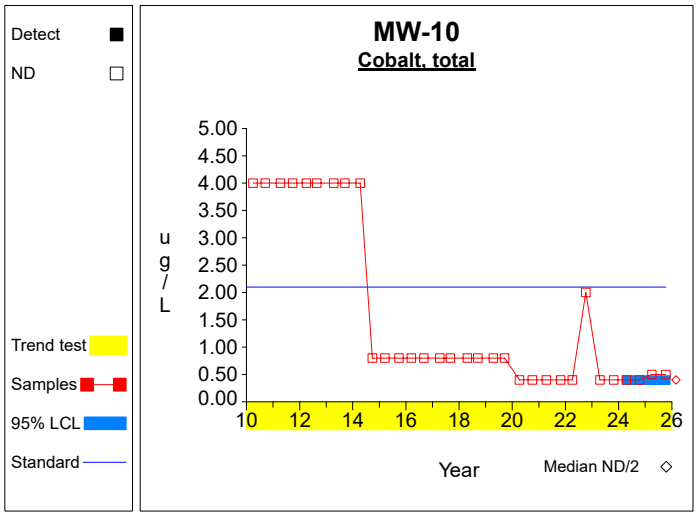
Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend
Cadmium, total	ug/L	MW-10	4	0.875	1.018	1.176	0.000	2.072	5.000	
Cobalt, total	ug/L	MW-10	4	0.400	0.000	1.176	0.400	0.400	2.100	
Copper, total	ug/L	MW-10	4	2.000	0.000	1.176	2.000	2.000	1300.000	
Nickel, total	ug/L	MW-10	4	10.675	2.658	1.176	7.549	13.801	100.000	
Cadmium, total	ug/L	MW-7	4	0.725	0.650	1.176	0.000	1.490	5.000	
Cobalt, total	ug/L	MW-7	4	2.675	1.441	1.176	0.980	4.370	2.100	
Copper, total	ug/L	MW-7	4	6.725	6.839	1.176	0.000	14.769	1300.000	
Nickel, total	ug/L	MW-7	4	32.650	17.815	1.176	11.694	53.606	100.000	inc
Cadmium, total	ug/L	PZ-11	4	0.400	0.000	1.176	0.400	0.400	5.000	
Cobalt, total	ug/L	PZ-11	4	0.425	0.050	1.176	0.366	0.484	2.100	
Copper, total	ug/L	PZ-11	4	2.000	0.000	1.176	2.000	2.000	1300.000	
Nickel, total	ug/L	PZ-11	4	13.025	12.117	1.176	0.000	27.278	100.000	

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

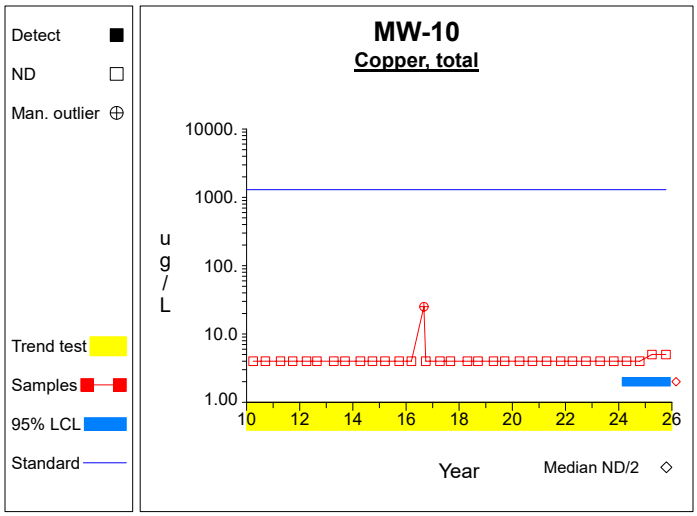
Confidence Limits (Assessment)



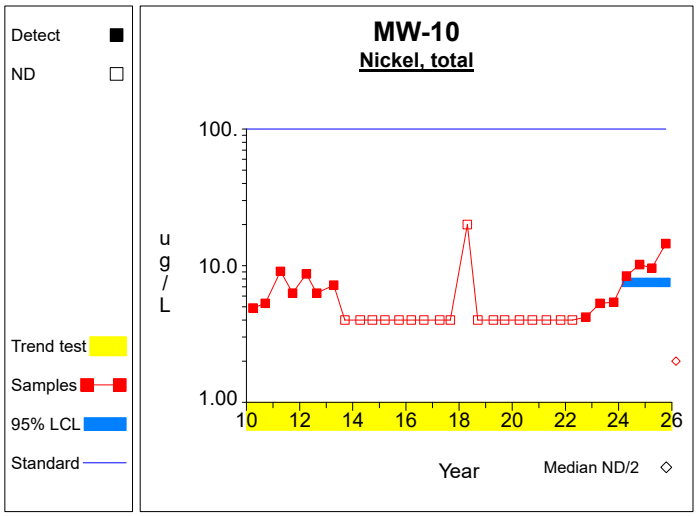
Graph 1



Graph 2

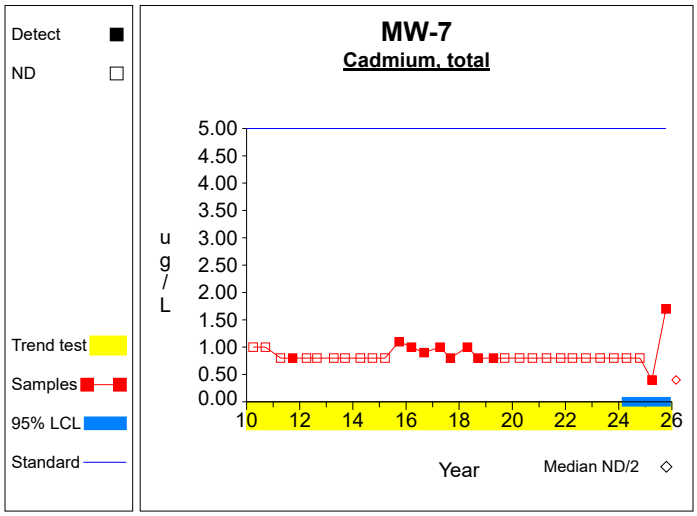


Graph 3

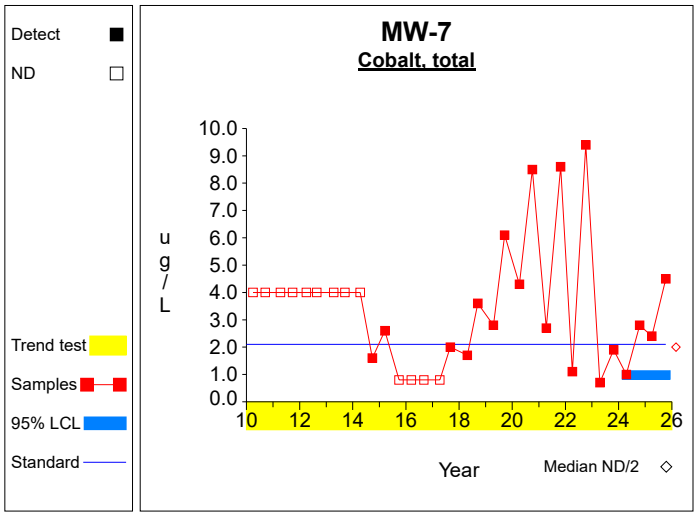


Graph 4

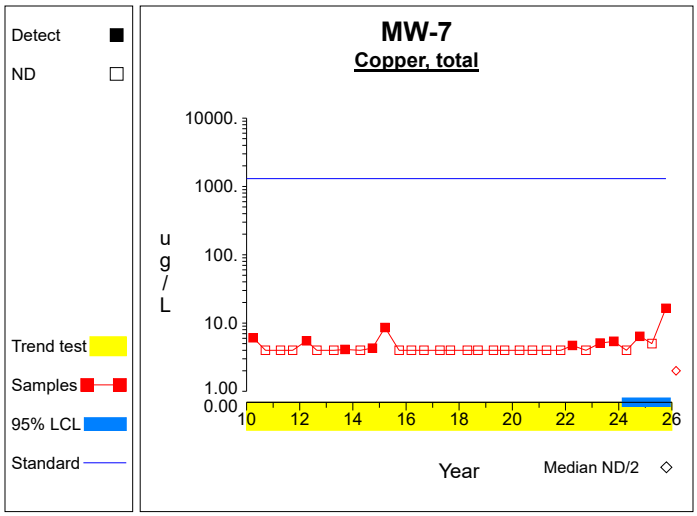
Confidence Limits (Assessment)



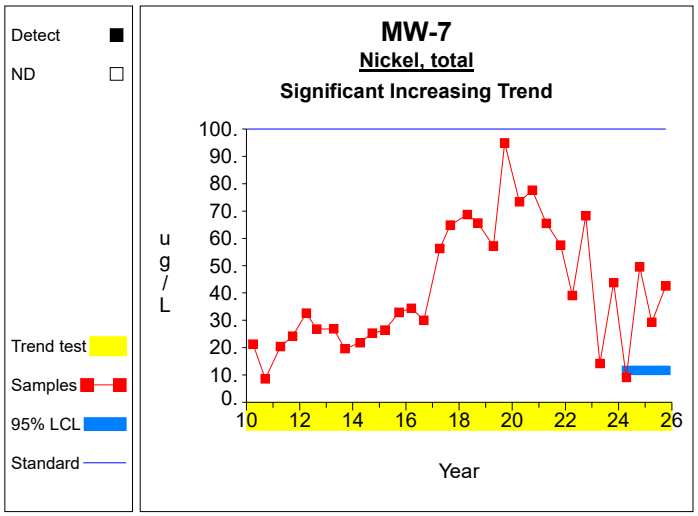
Graph 5



Graph 6

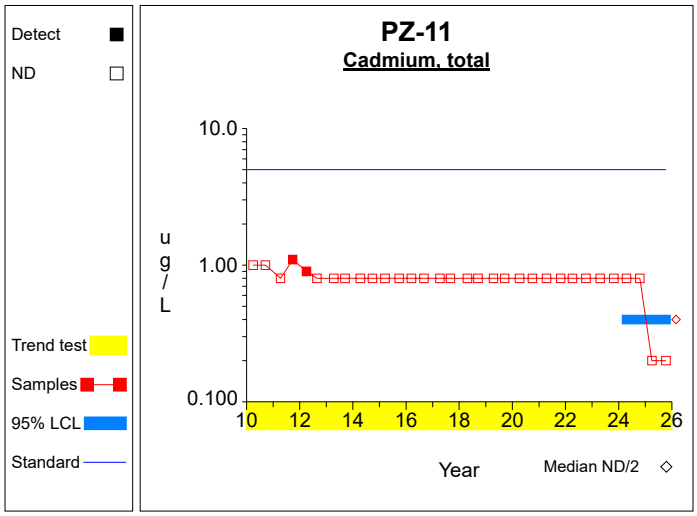


Graph 7

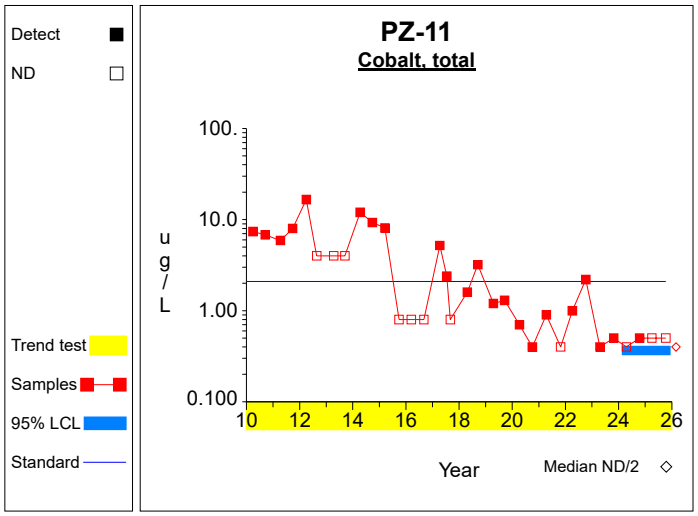


Graph 8

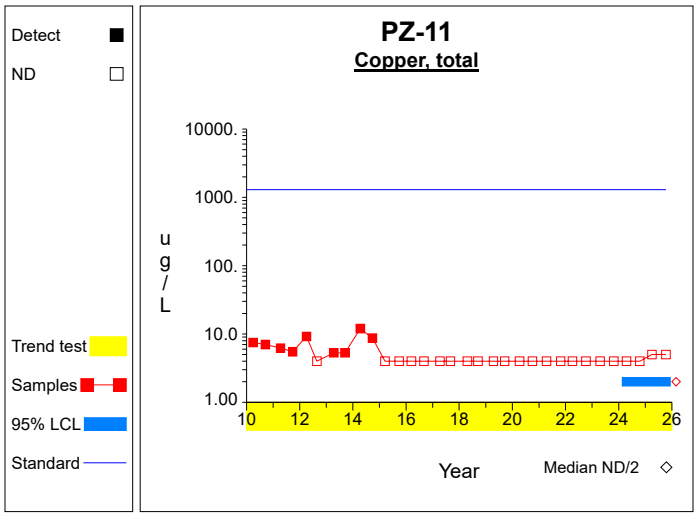
Confidence Limits (Assessment)



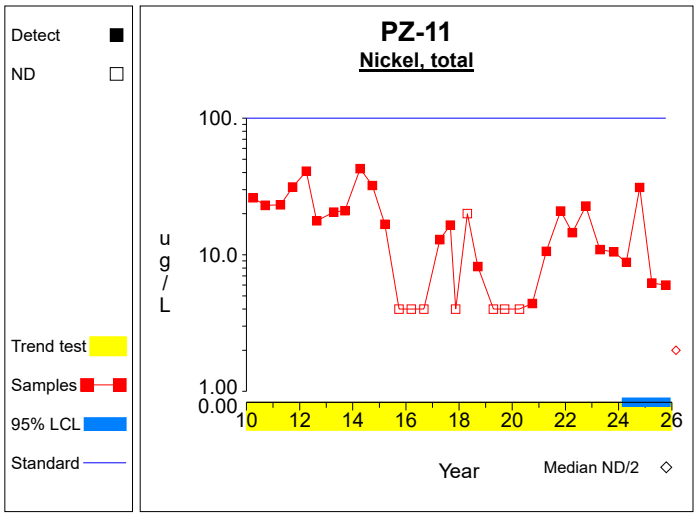
Graph 9



Graph 10



Graph 11



Graph 12

Attachment D

Summary Tables and Graphs for the Intrawell Comparisons

Table 1

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

Constituent	Units	Well	N(back)	N(mon)	N(tot)	Mean	SD	R(i-1)	R(i)	S(i-1)	S(i)	Limit	Type	Conf	
Antimony, total	ug/L	MW-10	27	5	32			1.0000	1.0000			2.0000	nonpar	.99	**
Arsenic, total	ug/L	MW-10	27	5	32			2.0000	2.0000			8.3000	nonpar	.99	**
Barium, total	ug/L	MW-10	27	5	32	113.1815	11.4353	144.0000	146.0000	178.9076	203.1496	187.5110	normal		
Beryllium, total	ug/L	MW-10	27	5	32			0.5000	0.5000			4.0000	nonpar	.99	**
Cadmium, total	ug/L	MW-10	28	6	34			0.3000	0.2000			0.9000	nonpar	.99	**
Chromium, total	ug/L	MW-10	27	5	32			2.0000	1.1000			8.1000	nonpar	.99	**
Cobalt, total	ug/L	MW-10	27	5	32			0.5000	0.5000			0.8000	nonpar	.99	**
Copper, total	ug/L	MW-10	27	5	33			5.0000	5.0000			4.0000	nonpar	.99	**
Lead, total	ug/L	MW-10	27	5	32			1.0000	1.0000			4.0000	nonpar	.99	**
Nickel, total	ug/L	MW-10	26	5	32	4.8192	1.4927	9.6000	14.5000	15.2031	20.1031	14.5215	normal		
Selenium, total	ug/L	MW-10	27	5	32			2.0000	2.0000			4.7000	nonpar	.99	**
Silver, total	ug/L	MW-10	27	5	32			5.0000	5.0000			4.0000	nonpar	.99	**
Thallium, total	ug/L	MW-10	26	5	32			0.5000	0.5000			4.0000	nonpar	.99	**
Vanadium, total	ug/L	MW-10	27	5	32			2.0000	2.0000			25.8000	nonpar	.99	**
Zinc, total	ug/L	MW-10	28	5	33			5.0000	5.1000			25.2000	nonpar	.99	**
Antimony, total	ug/L	MW-13	27	5	32			1.0000	1.0000			2.0000	nonpar	.99	**
Arsenic, total	ug/L	MW-13	27	5	32			2.0000	2.0000			8.2000	nonpar	.99	**
Barium, total	ug/L	MW-13	27	5	32	97.4259	46.5836	66.9000	52.0000	97.4259	97.4259	400.2195	normal		
Beryllium, total	ug/L	MW-13	27	5	32			0.5000	0.5000			4.0000	nonpar	.99	**
Cadmium, total	ug/L	MW-13	27	5	32			0.2000	0.2000			0.8000	nonpar	.99	**
Chromium, total	ug/L	MW-13	27	5	32			3.0000	1.9000			13.0000	nonpar	.99	**
Cobalt, total	ug/L	MW-13	27	5	32			0.5000	0.5000			4.1000	nonpar	.99	**
Copper, total	ug/L	MW-13	27	5	32	5.1667	2.5640	5.0000	5.0000	5.1667	5.1667	21.8323	normal		
Lead, total	ug/L	MW-13	27	5	32			1.0000	1.0000			6.8000	nonpar	.99	**
Nickel, total	ug/L	MW-13	27	5	32	6.4926	4.0844	5.0000	5.0000	6.4926	6.4926	33.0411	normal		
Selenium, total	ug/L	MW-13	27	5	32			2.0000	2.0000			4.0000	nonpar	.99	**
Silver, total	ug/L	MW-13	27	5	32			5.0000	5.0000			4.0000	nonpar	.99	**
Thallium, total	ug/L	MW-13	26	5	32			0.5000	0.5000			4.0000	nonpar	.99	**
Vanadium, total	ug/L	MW-13	27	5	32			2.0000	2.0000			24.9000	nonpar	.99	**
Zinc, total	ug/L	MW-13	27	5	32	11.9963	5.2259	5.0000	5.0000	11.9963	11.9963	45.9644	normal		
Antimony, total	ug/L	MW-3	27	5	32			1.0000	1.0000			2.0000	nonpar	.99	**
Arsenic, total	ug/L	MW-3	27	5	32			2.0000	2.0000			4.1000	nonpar	.99	**
Barium, total	ug/L	MW-3	27	5	32	314.9259	108.9244	341.0000	308.0000	314.9259	314.9259	1022.9348	normal		
Beryllium, total	ug/L	MW-3	27	5	32			0.5000	0.5000			4.0000	nonpar	.99	**
Cadmium, total	ug/L	MW-3	27	5	32			0.3000	0.3000			1.5000	nonpar	.99	**
Chromium, total	ug/L	MW-3	27	5	32			1.1000	1.4000			8.0000	nonpar	.99	**
Cobalt, total	ug/L	MW-3	27	5	32	0.9889	0.6247	0.5000	0.5000	0.9889	0.9889	5.0495	normal		
Copper, total	ug/L	MW-3	27	5	32			5.0000	5.0000			5.5000	nonpar	.99	**
Lead, total	ug/L	MW-3	27	5	32			1.0000	1.0000			4.0000	nonpar	.99	**
Nickel, total	ug/L	MW-3	27	5	32	5.5704	2.8239	5.0000	5.0000	5.5704	5.5704	23.9258	normal		
Selenium, total	ug/L	MW-3	27	5	32			2.0000	2.0000			4.0000	nonpar	.99	**
Silver, total	ug/L	MW-3	27	5	32			5.0000	5.0000			4.0000	nonpar	.99	**
Thallium, total	ug/L	MW-3	26	5	32			0.5000	0.5000			4.0000	nonpar	.99	**
Vanadium, total	ug/L	MW-3	27	5	32			2.0000	2.0000			21.8000	nonpar	.99	**
Zinc, total	ug/L	MW-3	27	5	32	18.4185	4.9748	5.0000	27.3000	18.4185	23.5689	50.7546	normal		
Antimony, total	ug/L	MW-7	27	5	32			1.0000	1.0000			2.0000	nonpar	.99	**

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

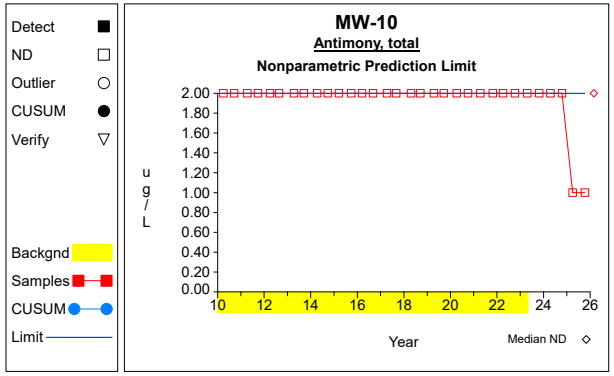
Table 1

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

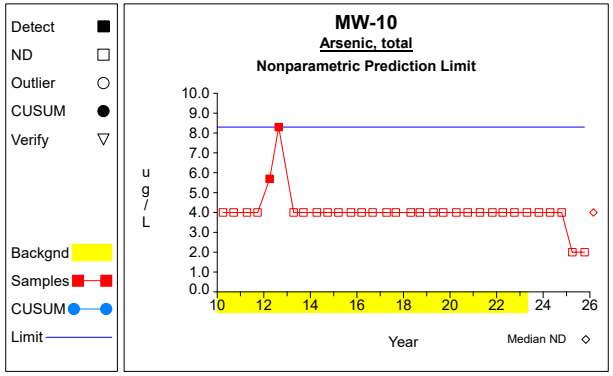
Constituent	Units	Well	N(back)	N(mon)	N(tot)	Mean	SD	R(i-1)	R(i)	S(i-1)	S(i)	Limit	Type	Conf	
Arsenic, total	ug/L	MW-7	27	5	32			2.0000	2.0000			7.6000	nonpar	.99	**
Barium, total	ug/L	MW-7	27	5	32	187.4444	78.6068	189.0000	229.0000	187.4444	187.4444	698.3885	normal		
Beryllium, total	ug/L	MW-7	27	5	32			0.5000	0.5000			4.0000	nonpar	.99	**
Cadmium, total	ug/L	MW-7	27	5	32	0.8370	0.0839	0.4000	1.7000	0.8370	1.6371	1.3823	normal		
Chromium, total	ug/L	MW-7	27	5	32			1.5000	1.8000			8.0000	nonpar	.99	**
Cobalt, total	ug/L	MW-7	27	5	32	3.9889	2.1001	2.4000	4.5000	3.9889	3.9889	17.6393	normal		
Copper, total	ug/L	MW-7	27	5	32	4.3852	0.9926	5.0000	16.5000	4.3852	15.7556	10.8368	normal		
Lead, total	ug/L	MW-7	27	5	32			1.0000	1.0000			4.5000	nonpar	.99	**
Nickel, total	ug/L	MW-7	27	5	32	42.7519	23.3029	29.3000	42.6000	42.7519	42.7519	194.2205	normal		
Selenium, total	ug/L	MW-7	27	5	32			2.0000	2.0000			4.6000	nonpar	.99	**
Silver, total	ug/L	MW-7	27	5	32			5.0000	5.0000			4.0000	nonpar	.99	**
Thallium, total	ug/L	MW-7	26	5	32			0.5000	0.5000			4.0000	nonpar	.99	**
Vanadium, total	ug/L	MW-7	27	5	32			2.0000	2.0000			21.3000	nonpar	.99	**
Zinc, total	ug/L	MW-7	27	5	32	17.2519	4.5792	5.0000	18.1000	17.2519	17.2519	47.0170	normal		
Antimony, total	ug/L	PZ-11	27	5	32			1.0000	1.0000			2.0000	nonpar	.99	**
Arsenic, total	ug/L	PZ-11	28	5	33	5.4929	2.5206	2.0000	2.0000	5.4929	5.4929	21.8766	normal		
Barium, total	ug/L	PZ-11	27	5	32	151.8148	114.3610	88.0000	71.0000	151.8148	151.8148	895.1610	normal		
Beryllium, total	ug/L	PZ-11	27	5	32			0.5000	0.5000			4.0000	nonpar	.99	**
Cadmium, total	ug/L	PZ-11	27	5	32			0.2000	0.2000			1.1000	nonpar	.99	**
Chromium, total	ug/L	PZ-11	27	5	32			1.3000	1.0000			10.4000	nonpar	.99	**
Cobalt, total	ug/L	PZ-11	28	5	33	3.6071	4.1654	0.5000	0.5000	3.6071	3.6071	30.6821	normal		
Copper, total	ug/L	PZ-11	27	5	32	5.1370	2.0564	5.0000	5.0000	5.1370	5.1370	18.5033	normal		
Lead, total	ug/L	PZ-11	27	5	32			1.0000	1.0000			6.3000	nonpar	.99	**
Nickel, total	ug/L	PZ-11	28	5	33	16.0286	11.4847	6.2000	6.0000	16.0286	16.0286	90.6789	normal		
Selenium, total	ug/L	PZ-11	27	5	32			2.0000	2.0000			4.0000	nonpar	.99	**
Silver, total	ug/L	PZ-11	27	5	32			5.0000	5.0000			4.0000	nonpar	.99	**
Thallium, total	ug/L	PZ-11	26	5	32			0.5000	0.5000			4.0000	nonpar	.99	**
Vanadium, total	ug/L	PZ-11	27	5	32			2.0000	2.0000			31.0000	nonpar	.99	**
Zinc, total	ug/L	PZ-11	27	5	32	19.7074	5.8373	5.0000	5.0000	19.7074	19.7074	57.6497	normal		

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

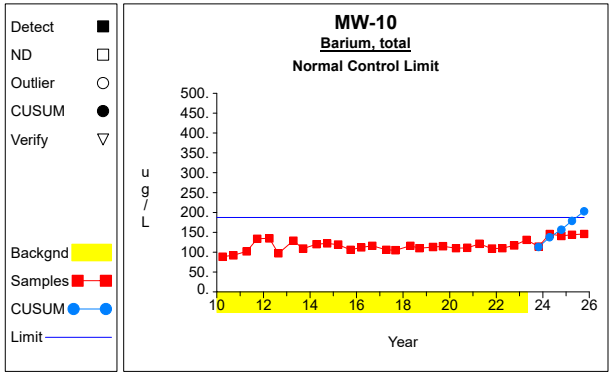
Intra-Well Control Charts / Prediction Limits



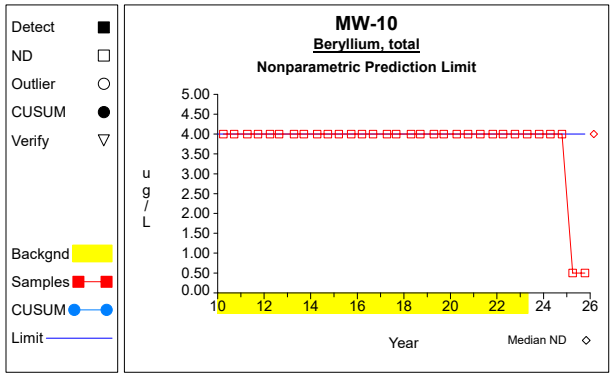
Graph 1



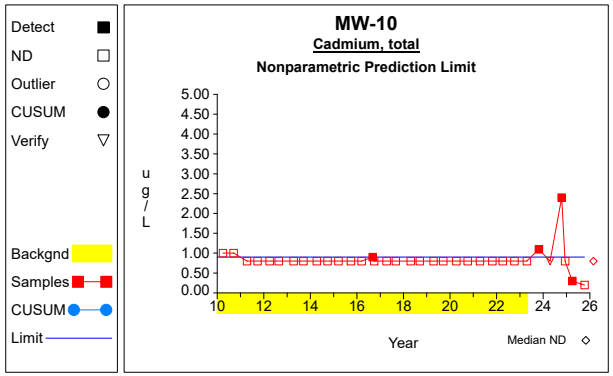
Graph 2



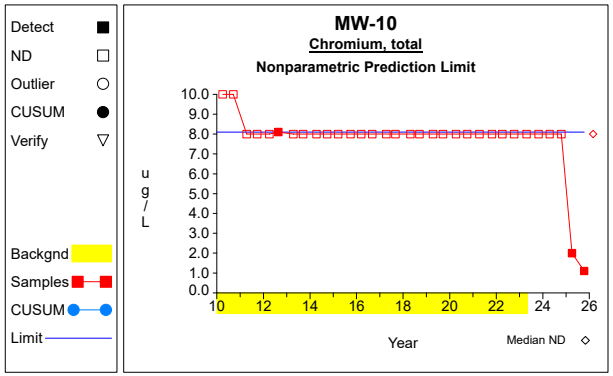
Graph 3



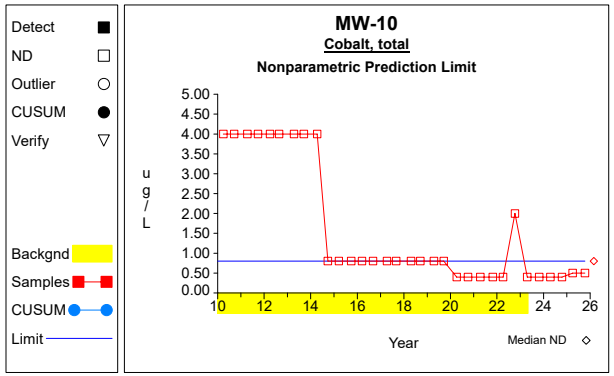
Graph 4



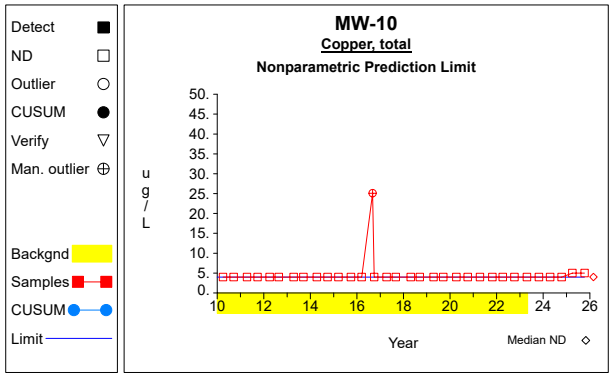
Graph 5



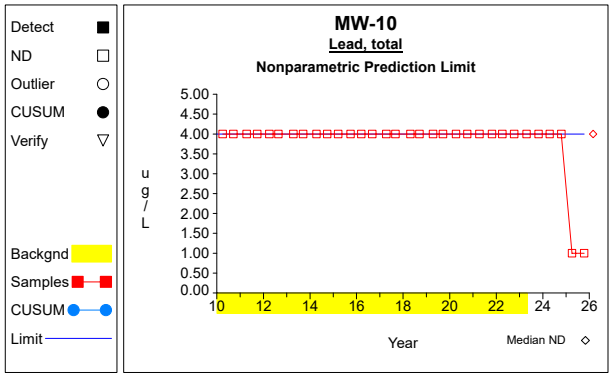
Graph 6



Graph 7



Graph 8



Graph 9

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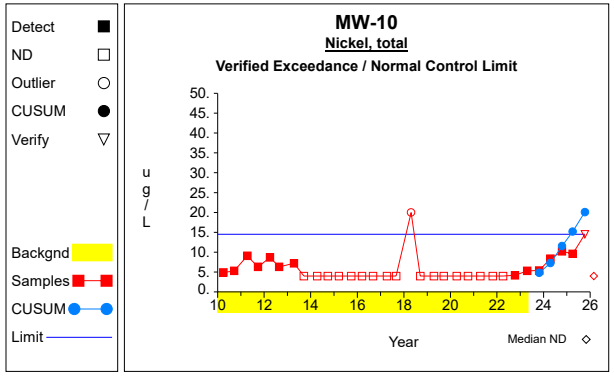
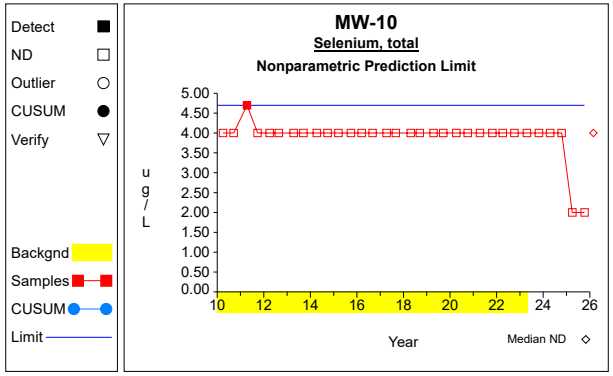
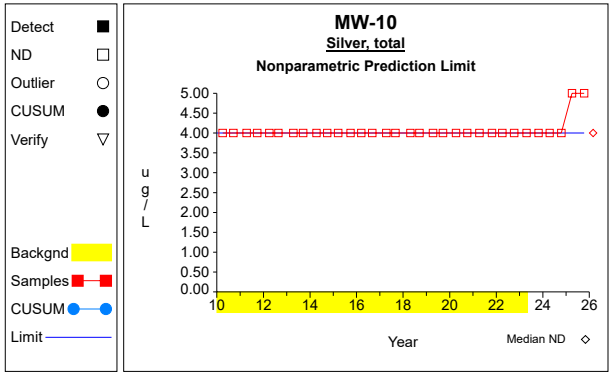
Intra-Well Control Charts / Prediction Limits



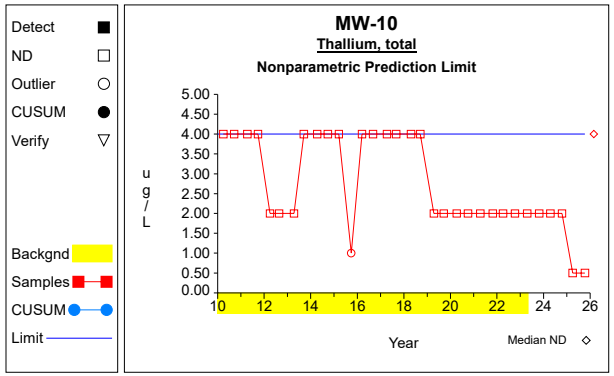
Graph 10



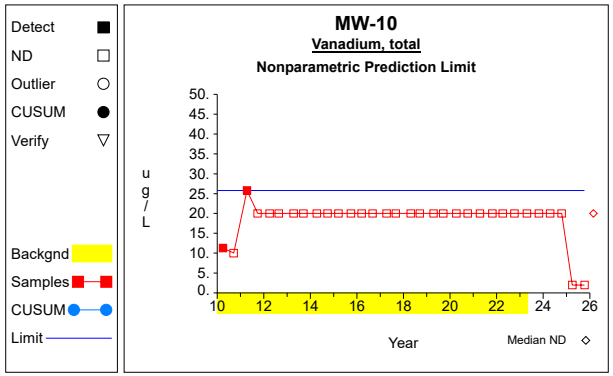
Graph 11



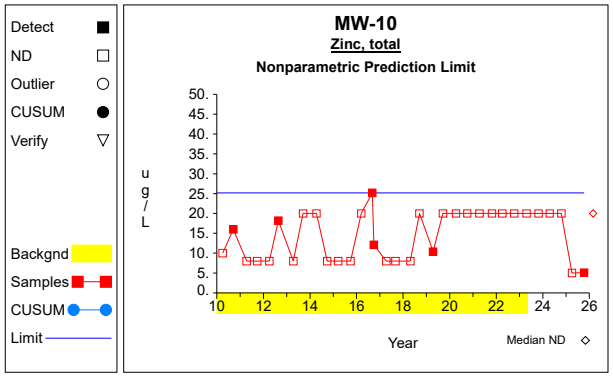
Graph 12



Graph 13

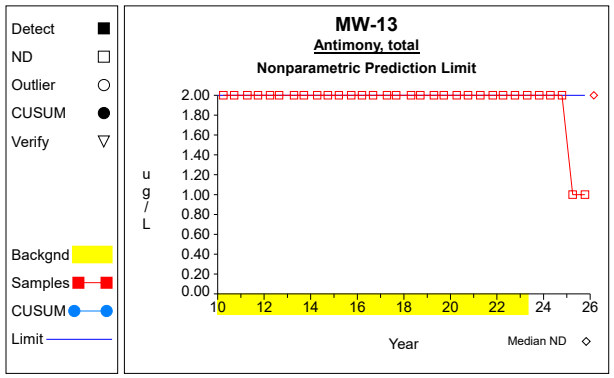


Graph 14

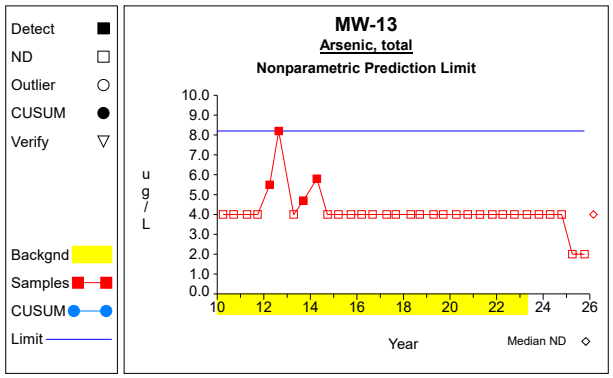


Graph 15

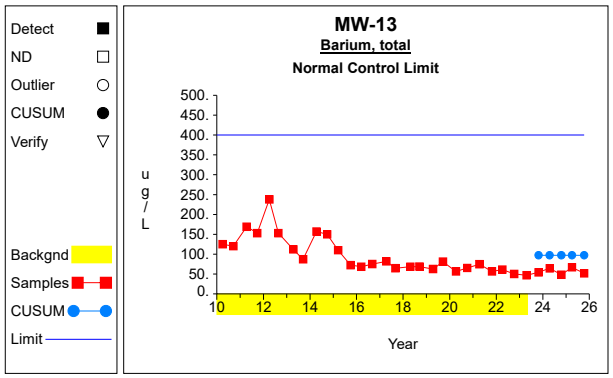
Intra-Well Control Charts / Prediction Limits



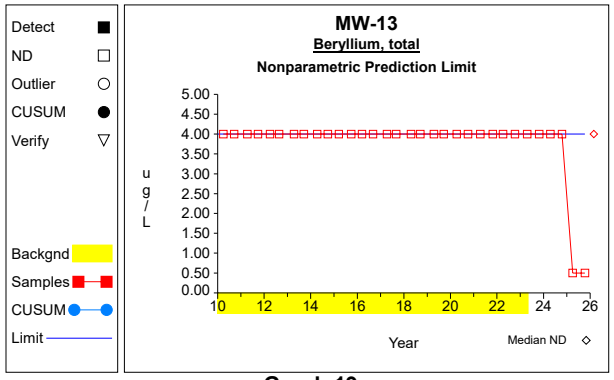
Graph 16



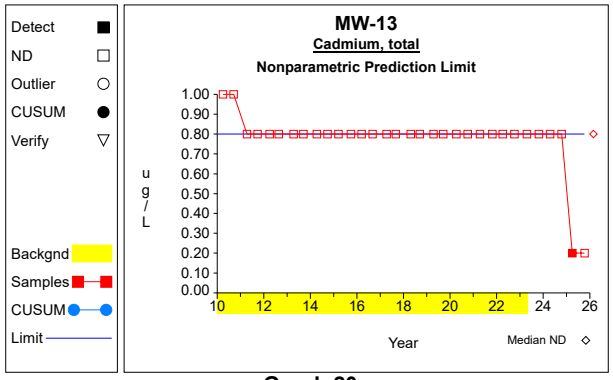
Graph 17



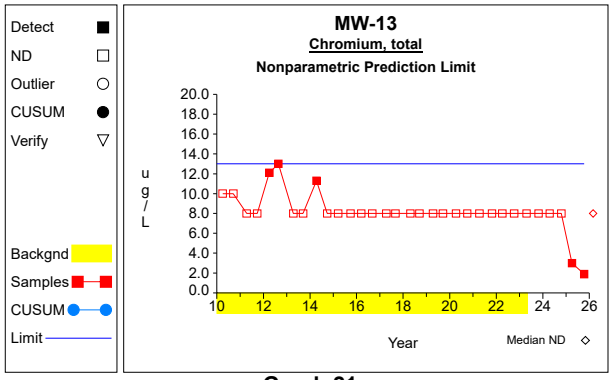
Graph 18



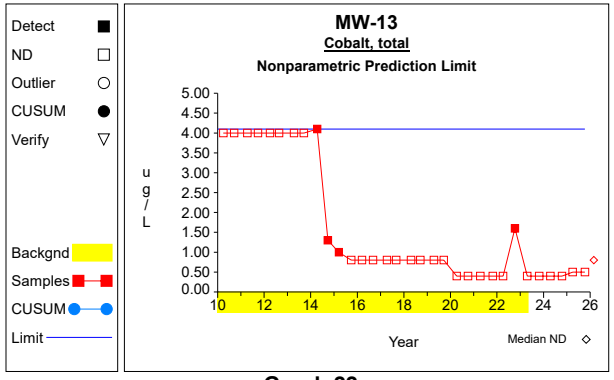
Graph 19



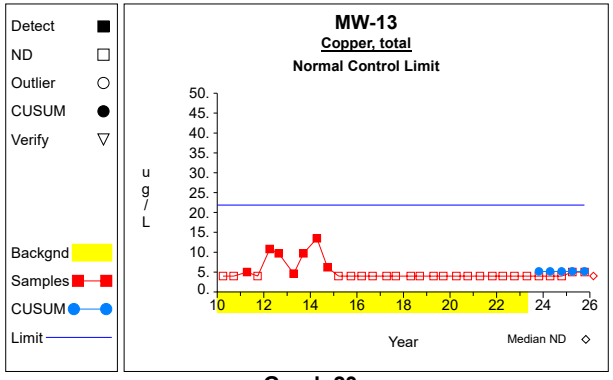
Graph 20



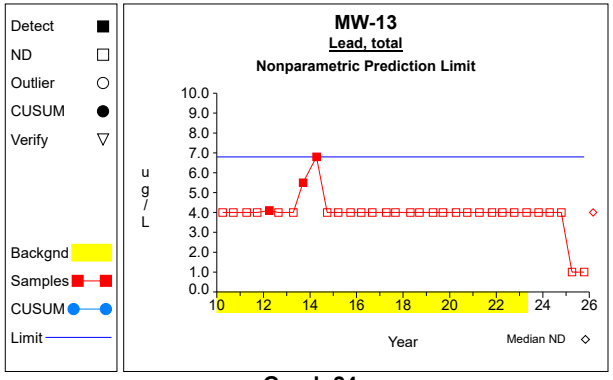
Graph 21



Graph 22



Graph 23



Graph 24

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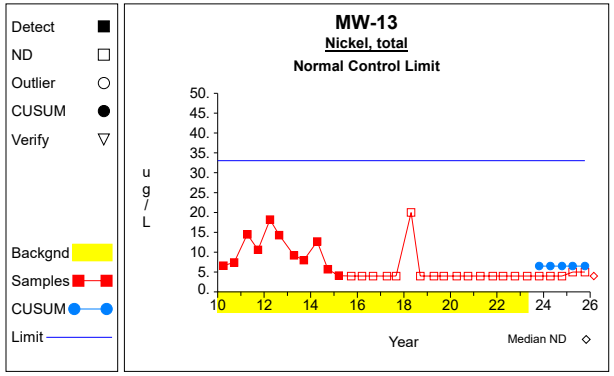
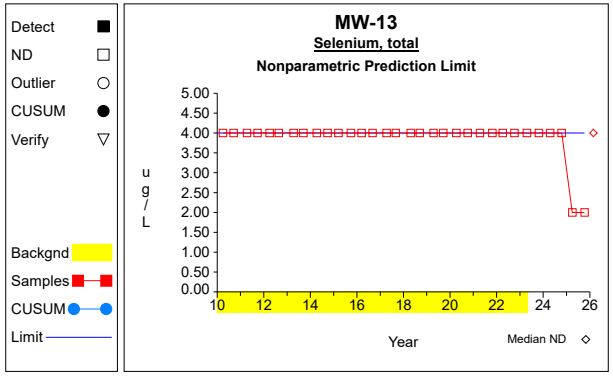
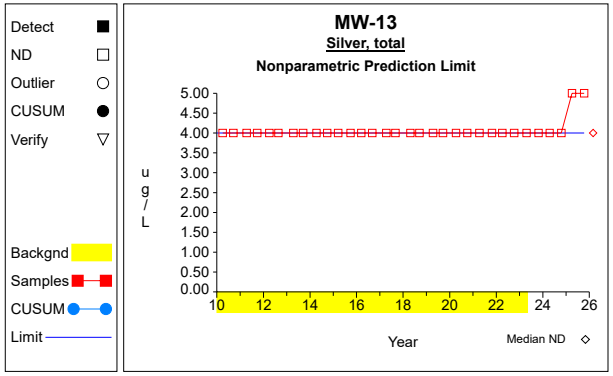
Intra-Well Control Charts / Prediction Limits



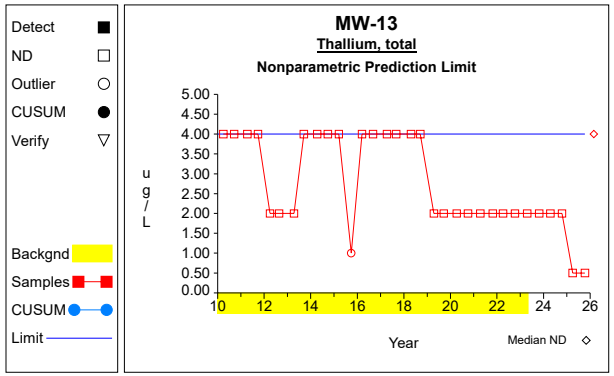
Graph 25



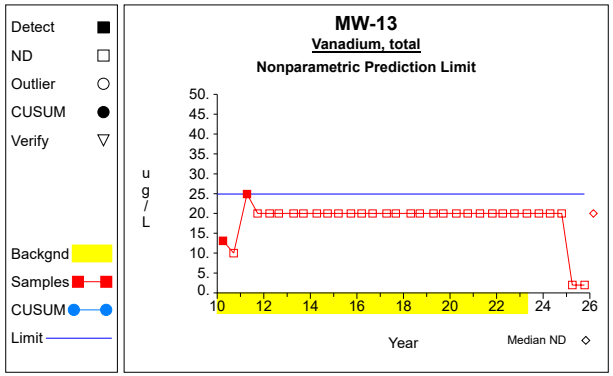
Graph 26



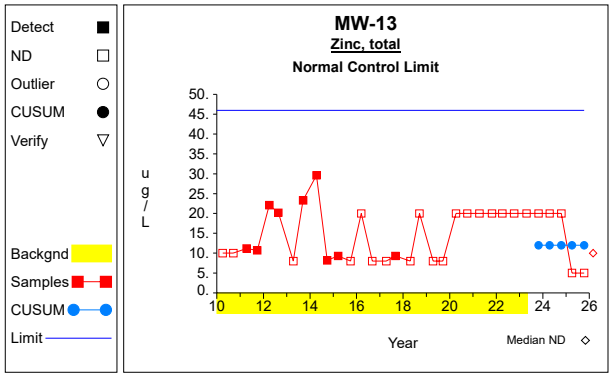
Graph 27



Graph 28

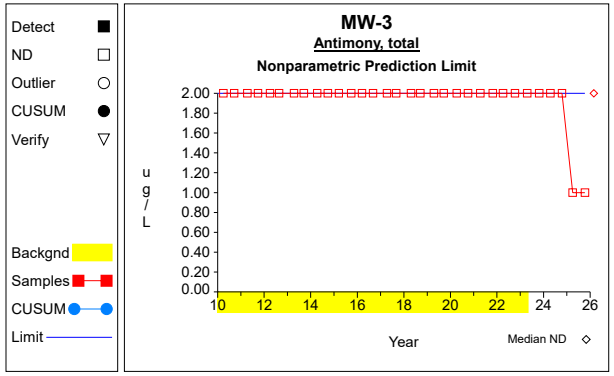


Graph 29

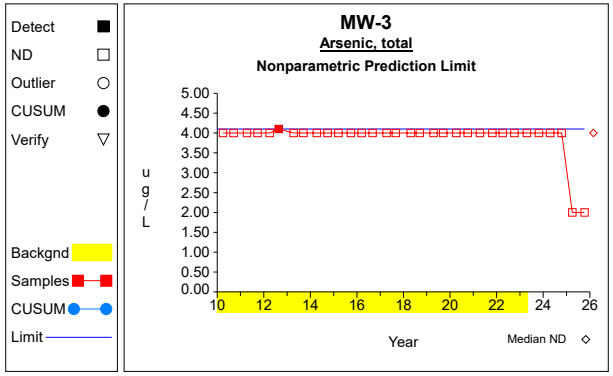


Graph 30

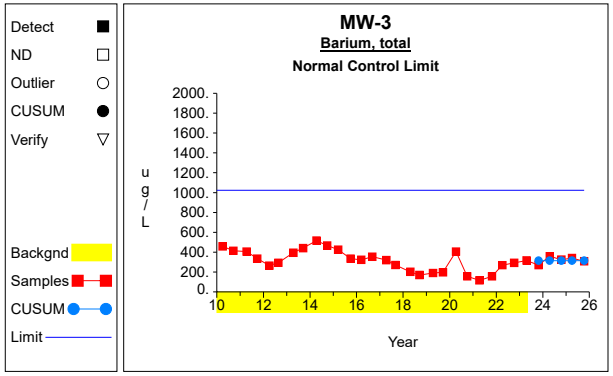
Intra-Well Control Charts / Prediction Limits



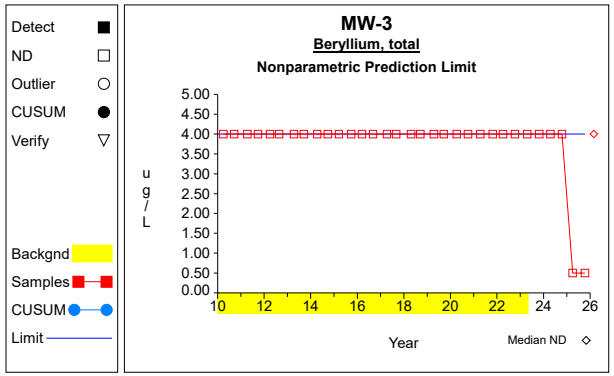
Graph 31



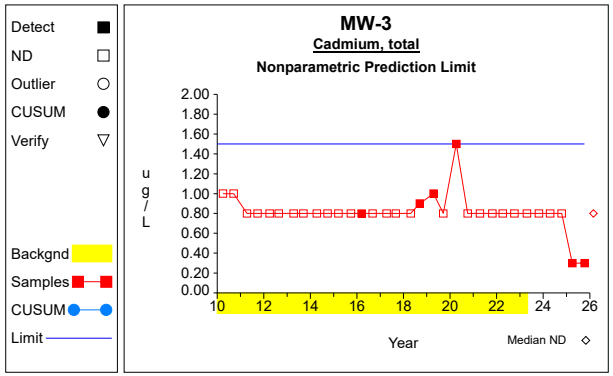
Graph 32



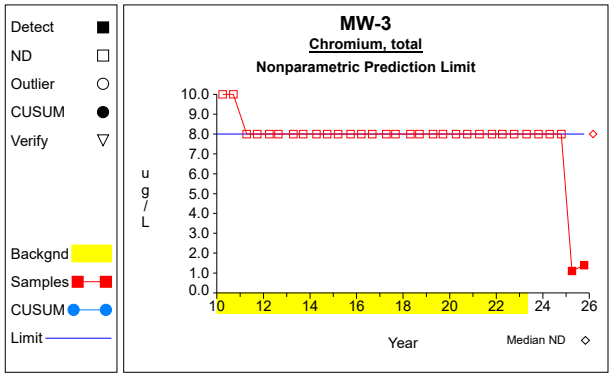
Graph 33



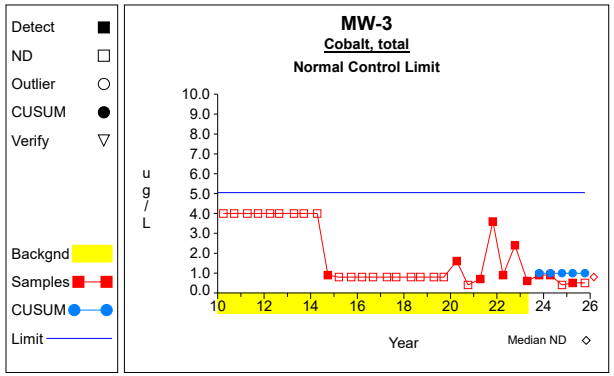
Graph 34



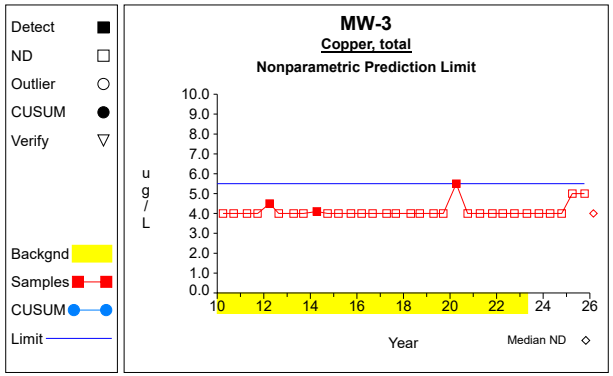
Graph 35



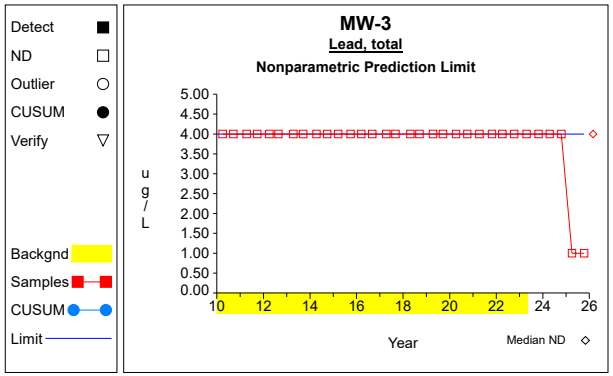
Graph 36



Graph 37



Graph 38



Graph 39

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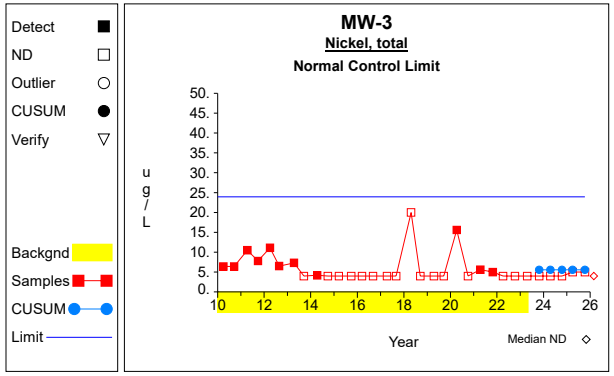
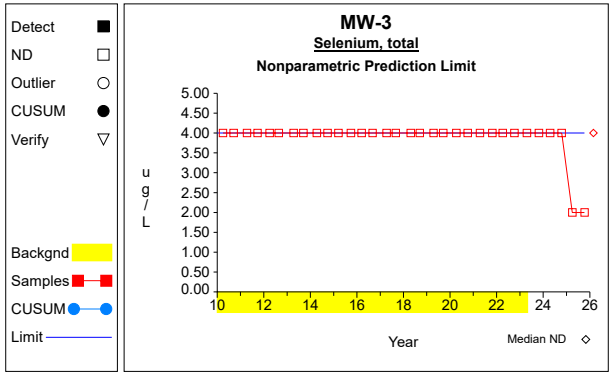
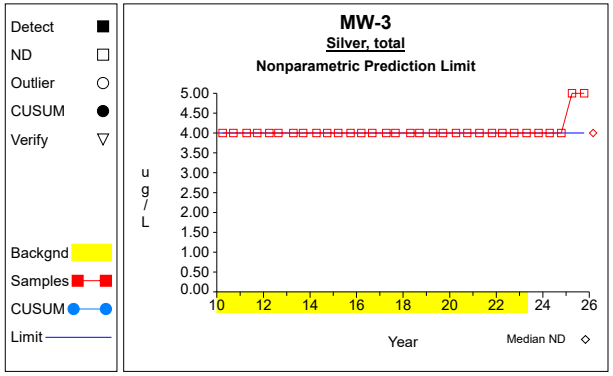
Intra-Well Control Charts / Prediction Limits



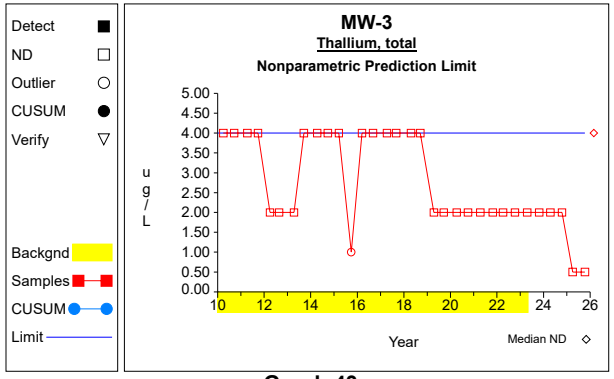
Graph 40



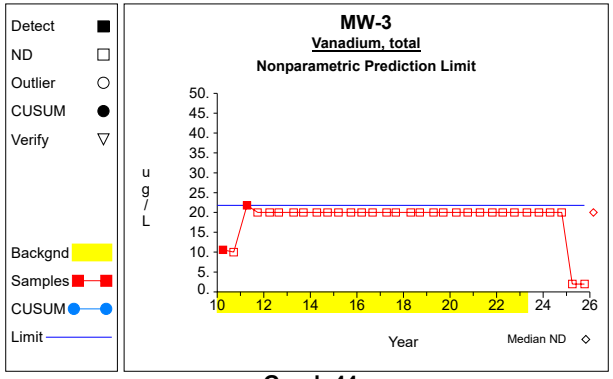
Graph 41



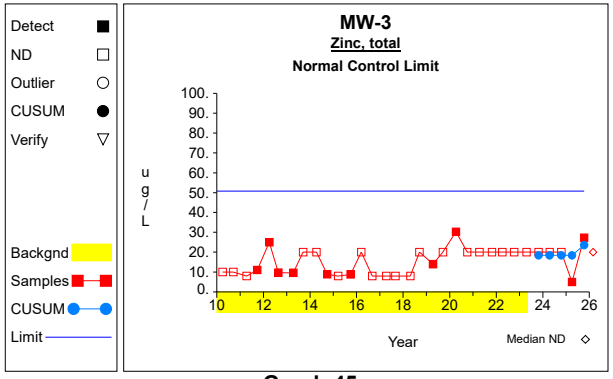
Graph 42



Graph 43

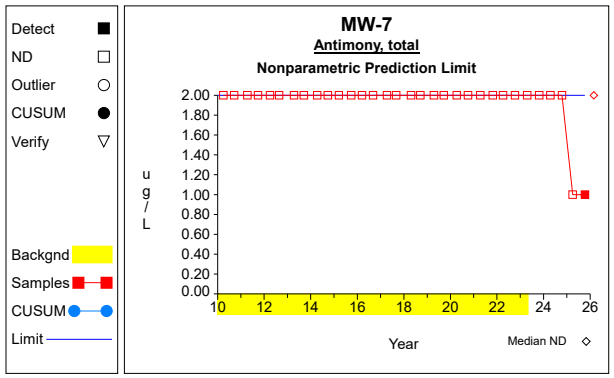


Graph 44

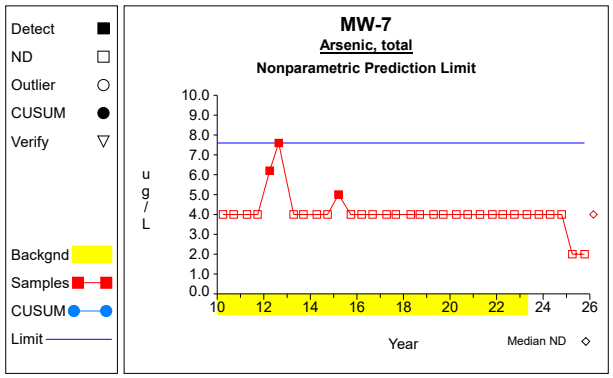


Graph 45

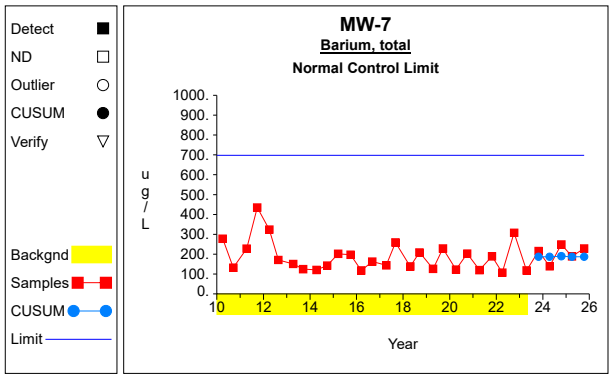
Intra-Well Control Charts / Prediction Limits



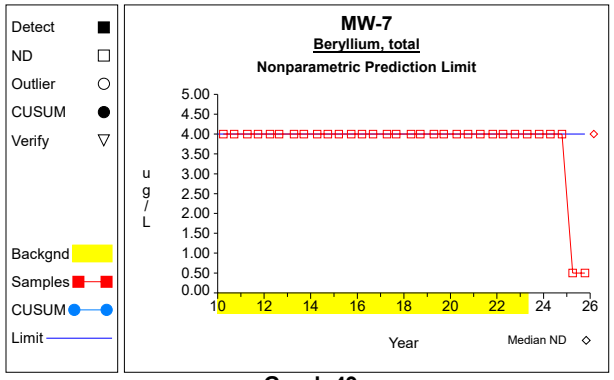
Graph 46



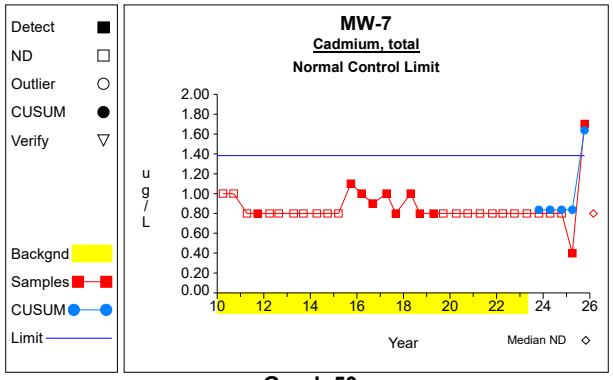
Graph 47



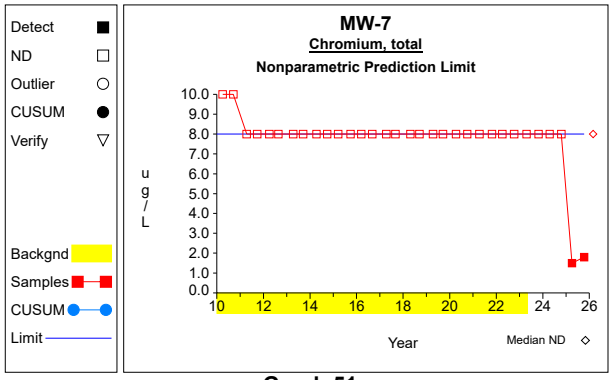
Graph 48



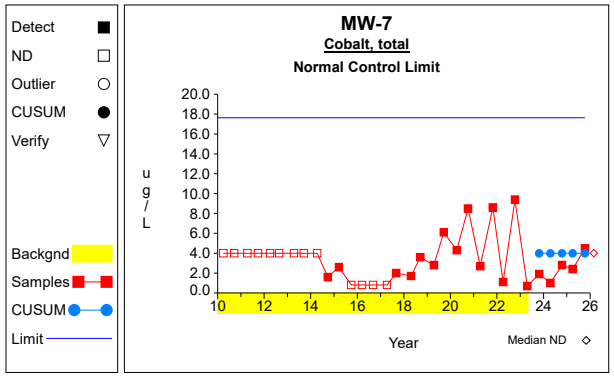
Graph 49



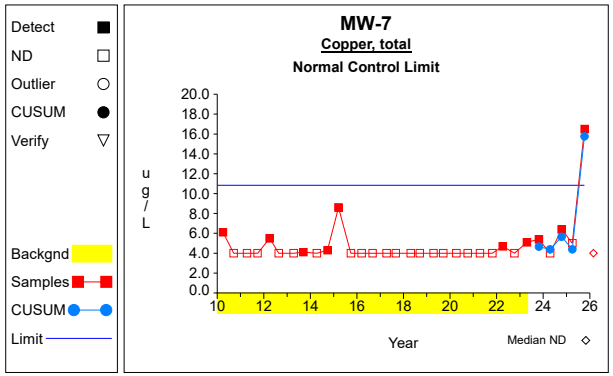
Graph 50



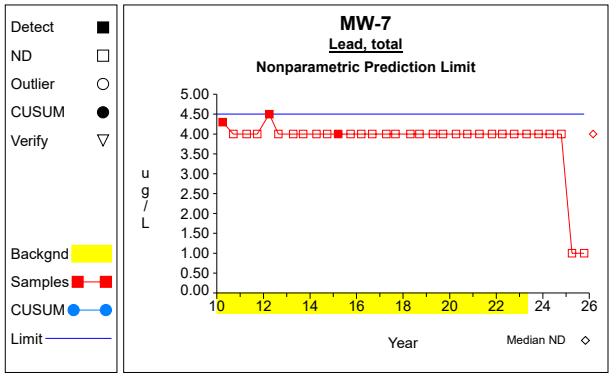
Graph 51



Graph 52



Graph 53



Graph 54

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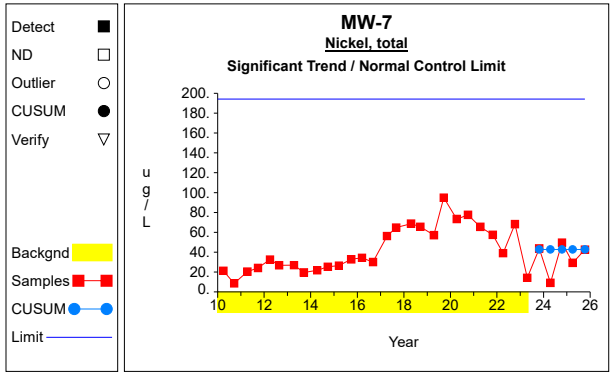
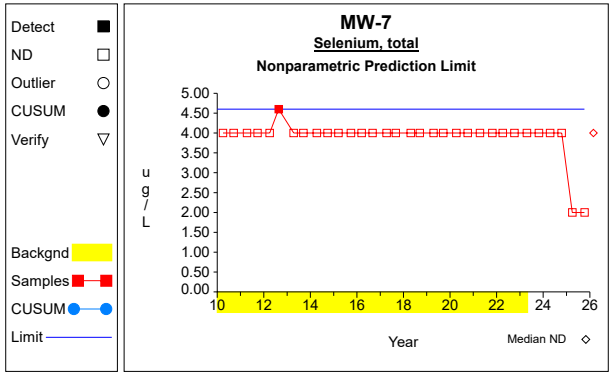
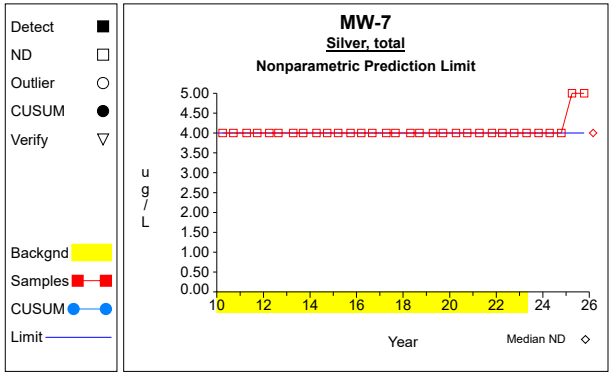
Intra-Well Control Charts / Prediction Limits



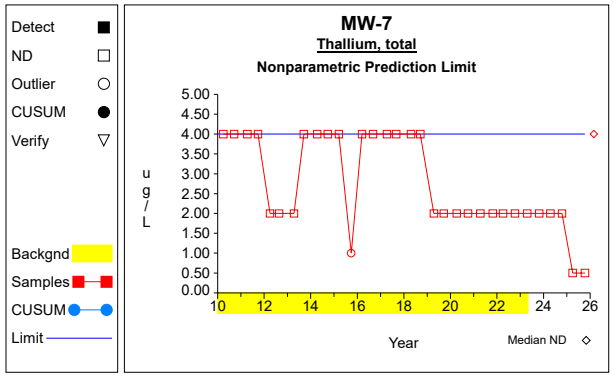
Graph 55



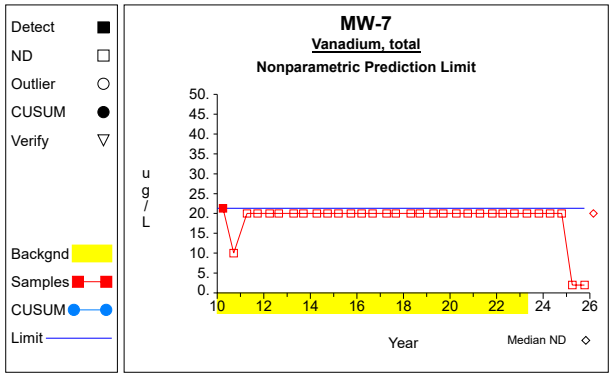
Graph 56



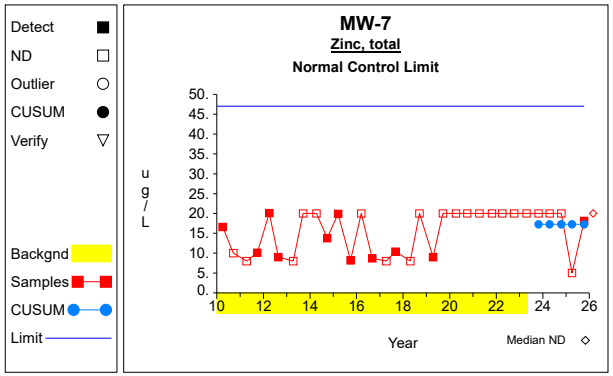
Graph 57



Graph 58

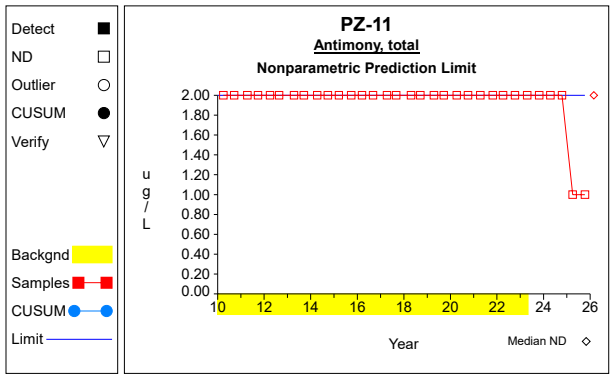


Graph 59

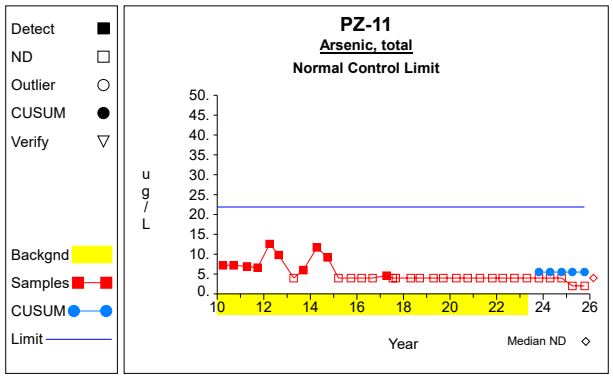


Graph 60

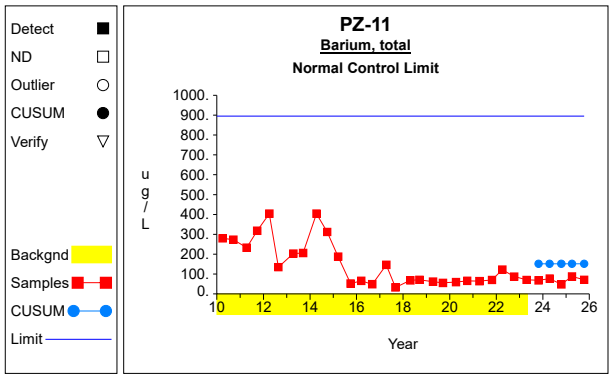
Intra-Well Control Charts / Prediction Limits



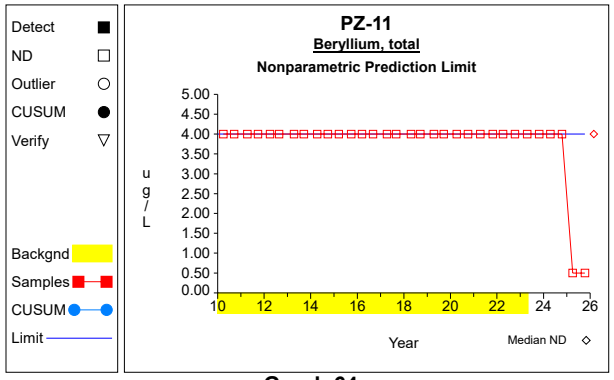
Graph 61



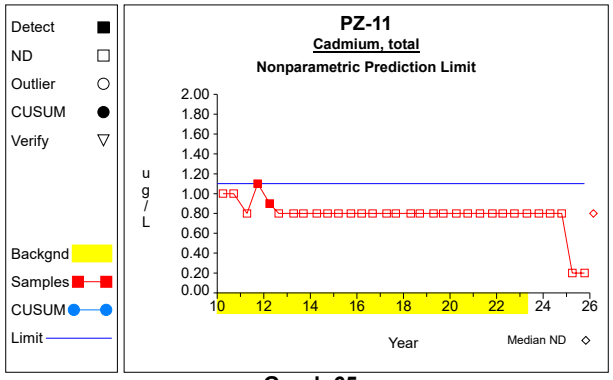
Graph 62



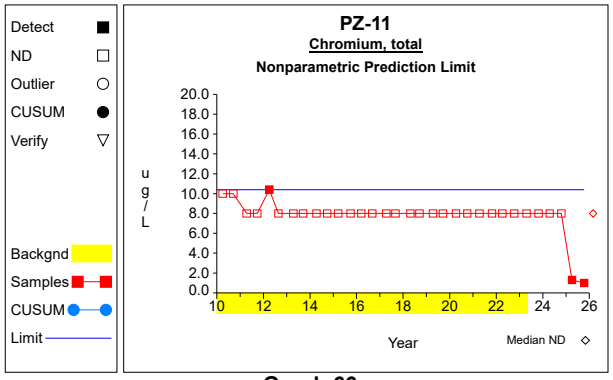
Graph 63



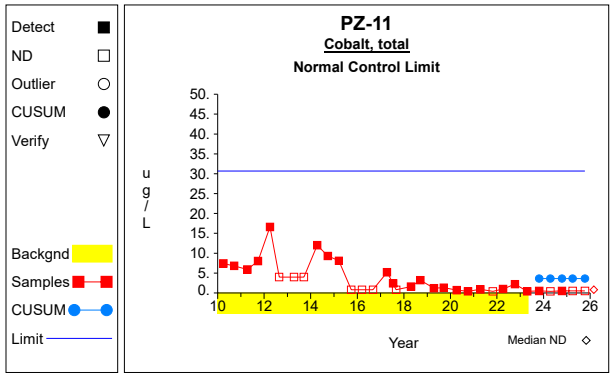
Graph 64



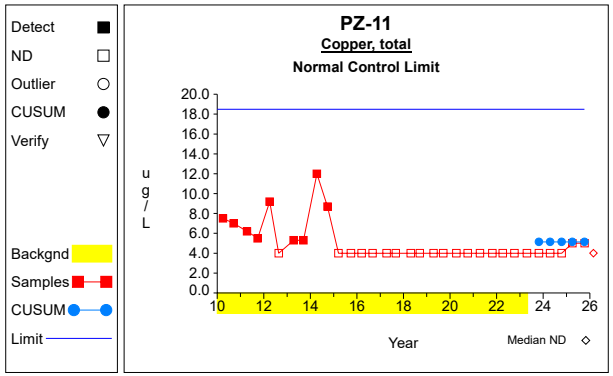
Graph 65



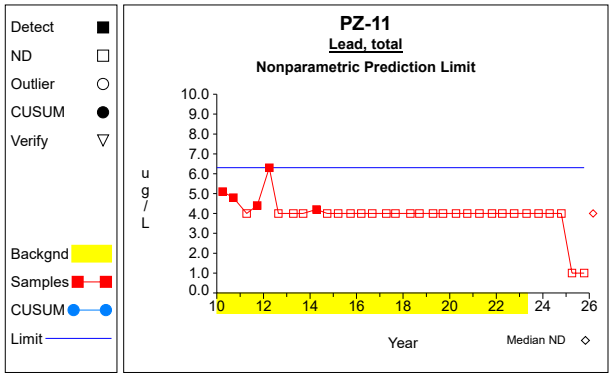
Graph 66



Graph 67



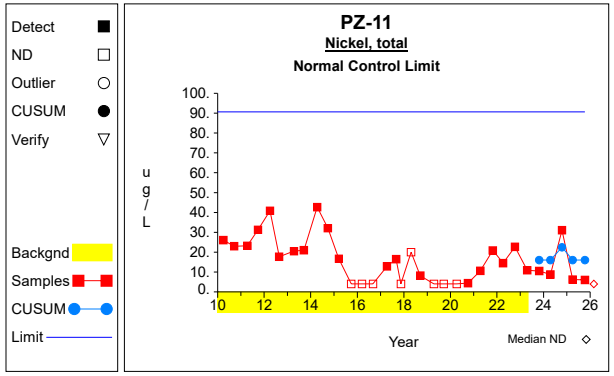
Graph 68



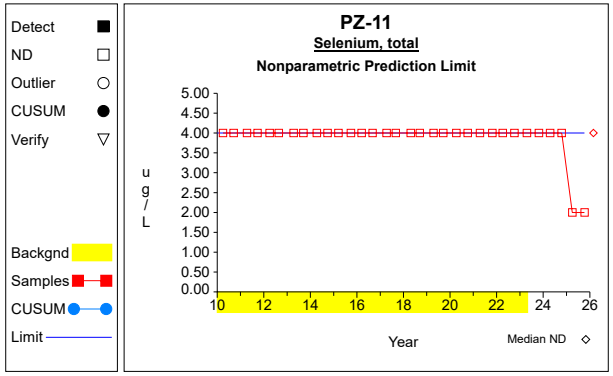
Graph 69

Prepared by: Otter Creek Environmental

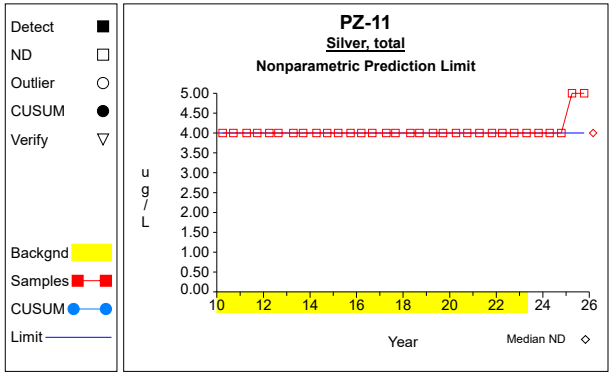
Intra-Well Control Charts / Prediction Limits



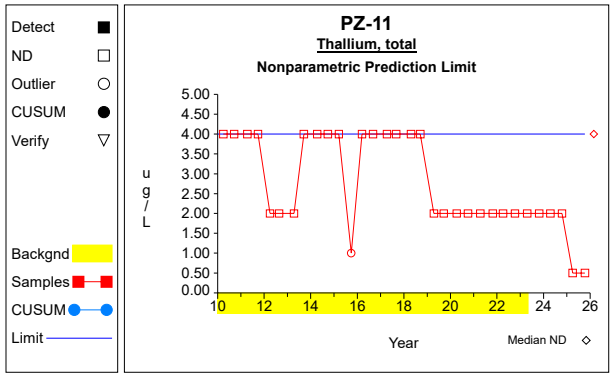
Graph 70



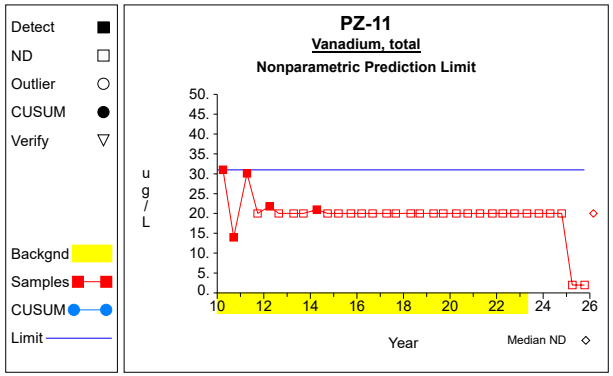
Graph 71



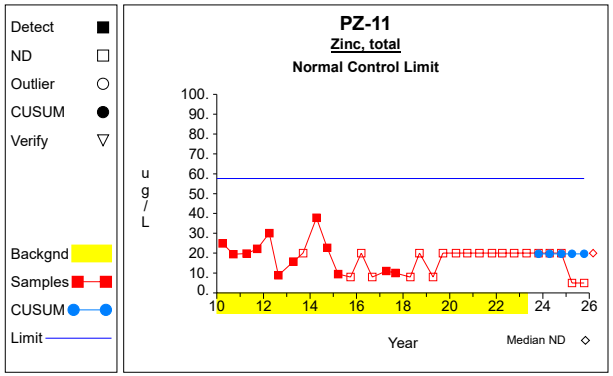
Graph 72



Graph 73



Graph 74



Graph 75

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

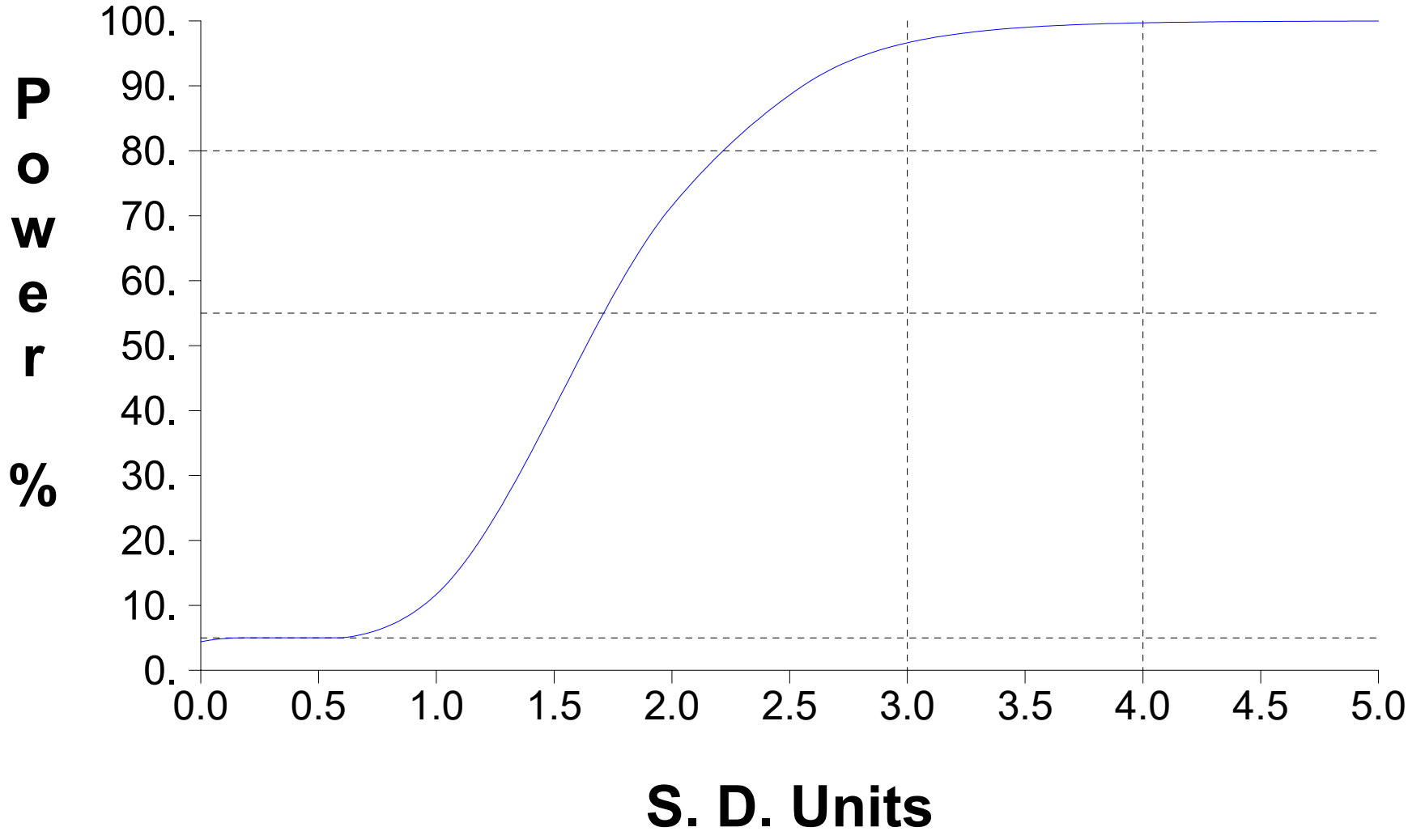


Table 4

Dixon's Test Outliers
1% Significance Level

Constituent	Units	Well	Date	Result	ND Qualifier	Date Range	N	Critical Value
Nickel, total	ug/L	MW-10	04/23/2018	20.0000	< 20.0000	03/31/2010-04/19/2023	27	0.4744
Thallium, total	ug/L	MW-10	09/28/2015	1.0000	< 1.0000	03/31/2010-04/19/2023	27	0.4744
Thallium, total	ug/L	MW-13	09/28/2015	1.0000	< 1.0000	03/31/2010-04/19/2023	27	0.4744
Thallium, total	ug/L	MW-3	09/28/2015	1.0000	< 1.0000	03/31/2010-04/19/2023	27	0.4744
Thallium, total	ug/L	MW-7	09/28/2015	1.0000	< 1.0000	03/31/2010-04/19/2023	27	0.4744
Thallium, total	ug/L	PZ-11	09/28/2015	1.0000	< 1.0000	03/31/2010-04/19/2023	27	0.4744

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

Attachment E

Summary Table of Historical VOC Detections

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Acetone	MW-10	9/01/2017		18.5	10.0	ug/L
Acetone	MW-7	9/01/2017		14.8	10.0	ug/L
Benzene	MW-7	10/26/2021		1.6	1.0	ug/L
Benzene	MW-7	10/10/2025		1.0	1.0	ug/L
Chlorobenzene	MW-7	9/28/2015		1.0	1.0	ug/L
Chlorobenzene	MW-7	4/10/2017		1.0	1.0	ug/L
Chlorobenzene	MW-7	9/01/2017		1.5	1.0	ug/L
Chlorobenzene	MW-7	4/23/2018		1.7	1.0	ug/L
Chlorobenzene	MW-7	9/14/2018		1.2	1.0	ug/L
Chlorobenzene	MW-7	4/15/2019		1.6	1.0	ug/L
Chlorobenzene	MW-7	9/17/2019		2.4	1.0	ug/L
Chlorobenzene	MW-7	4/08/2020		2.0	1.0	ug/L
Chlorobenzene	MW-7	10/02/2020		2.8	1.0	ug/L
Chlorobenzene	MW-7	4/12/2021		1.7	1.0	ug/L
Chlorobenzene	MW-7	10/26/2021		2.4	1.0	ug/L
Chlorobenzene	MW-7	4/04/2022		1.1	1.0	ug/L
Chlorobenzene	MW-7	10/07/2022		1.8	1.0	ug/L
Chlorobenzene	MW-7	10/17/2024		1.2	1.0	ug/L
Chlorobenzene	MW-7	10/10/2025		1.2	1.0	ug/L
Chloroethane	MW-7	3/31/2010		1.5	1.0	ug/L
Chloroethane	MW-7	9/26/2011		1.0	1.0	ug/L
Chloroethane	MW-7	4/01/2012		1.6	1.0	ug/L
Chloroethane	MW-7	8/23/2012		1.5	1.0	ug/L
Chloroethane	MW-7	4/12/2013		1.8	1.0	ug/L
Chloroethane	MW-7	9/14/2013		1.3	1.0	ug/L
Chloroethane	MW-7	4/11/2014		2.3	1.0	ug/L
Chloroethane	MW-7	9/27/2014		2.6	1.0	ug/L
Chloroethane	MW-7	9/28/2015		1.4	1.0	ug/L
Chloroethane	MW-7	3/14/2016		1.6	1.0	ug/L
Chloroethane	MW-7	4/10/2017		1.2	1.0	ug/L
Chloroethane	MW-7	9/01/2017		1.7	1.0	ug/L
Chloroethane	MW-7	4/23/2018		1.7	1.0	ug/L
Chloroethane	MW-7	9/14/2018		1.2	1.0	ug/L
Chloroethane	MW-7	4/15/2019		1.6	1.0	ug/L
Chloroethane	MW-7	9/17/2019		1.1	1.0	ug/L
Chloroethane	MW-7	4/08/2020		1.5	1.0	ug/L
Chloroethane	MW-7	10/02/2020		1.3	1.0	ug/L
Chloroethane	MW-7	10/26/2021		1.2	1.0	ug/L
Chloroethane	MW-7	4/04/2022		1.7	1.0	ug/L
Chloroethane	MW-7	10/07/2022		1.9	1.0	ug/L
Chloroethane	MW-7	10/25/2023		1.3	1.0	ug/L
Chloroethane	MW-7	10/10/2025		1.6	1.0	ug/L
Chloromethane	MW-7	3/14/2016		3	1	ug/L
Cis-1,2-dichloroethylene	MW-7	3/31/2010		36.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	9/16/2010		1.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	4/11/2011		4.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	9/26/2011		19.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	4/01/2012		69.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	8/23/2012		124.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	4/12/2013		17.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	9/14/2013		95.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	4/11/2014		92.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	9/27/2014		24.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	3/16/2015		58.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	9/28/2015		62.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	3/14/2016		20.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	9/03/2016		3.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	4/10/2017		4.8	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	9/01/2017		18.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	4/23/2018		10.2	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	9/14/2018		10.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	4/15/2019		5.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	9/17/2019		7.7	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	4/08/2020		6.6	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	10/02/2020		22.5	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	4/12/2021		14.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	10/26/2021		5.9	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	10/07/2022		1.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	4/19/2023		1.4	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	10/25/2023		5.0	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	4/17/2024		2.3	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	10/17/2024		6.1	1.0	ug/L
Cis-1,2-dichloroethylene	MW-7	10/10/2025		7.2	1.0	ug/L
Dichlorodifluoromethane	MW-7	4/01/2012		1.4	1.0	ug/L
Dichlorodifluoromethane	MW-7	8/23/2012		2.3	1.0	ug/L
Dichlorodifluoromethane	MW-7	4/12/2013		3.5	1.0	ug/L

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

Table 1

Historical Volatile Organic Compound Detections

Constituent	Well	Date	Identifier	Result	Limit	Units
Dichlorodifluoromethane	MW-7	9/14/2013		3.0	1.0	ug/L
Dichlorodifluoromethane	MW-7	4/11/2014		2.1	1.0	ug/L
Dichlorodifluoromethane	MW-7	9/27/2014		2.6	1.0	ug/L
Dichlorodifluoromethane	MW-7	4/10/2017		1.4	1.0	ug/L
Dichlorodifluoromethane	MW-7	4/23/2018		1.4	1.0	ug/L
Dichlorodifluoromethane	MW-7	9/14/2018		1.2	1.0	ug/L
Dichlorodifluoromethane	MW-7	4/15/2019		1.4	1.0	ug/L
Dichlorodifluoromethane	MW-7	4/08/2020		1.6	1.0	ug/L
Dichlorodifluoromethane	MW-7	10/02/2020		1.0	1.0	ug/L
Dichlorodifluoromethane	MW-7	10/26/2021		1.4	1.0	ug/L
Dichlorodifluoromethane	MW-7	10/07/2022		1.3	1.0	ug/L
Dichlorodifluoromethane	MW-7	10/25/2023		1.0	1.0	ug/L
Dichlorodifluoromethane	MW-7	4/17/2024		1.0	1.0	ug/L
Dichlorodifluoromethane	MW-7	10/10/2025		1.1	1.0	ug/L
Trans-1,2-dichloroethylene	MW-7	3/31/2010		1.0	1.0	ug/L
Trans-1,2-dichloroethylene	MW-7	4/01/2012		1.8	1.0	ug/L
Trans-1,2-dichloroethylene	MW-7	8/23/2012		3.6	1.0	ug/L
Trans-1,2-dichloroethylene	MW-7	9/14/2013		2.8	1.0	ug/L
Trans-1,2-dichloroethylene	MW-7	4/11/2014		2.5	1.0	ug/L
Trans-1,2-dichloroethylene	MW-7	9/28/2015		2.1	1.0	ug/L
Vinyl chloride	MW-7	3/31/2010		1.3	1.0	ug/L
Vinyl chloride	MW-7	4/01/2012		2.4	1.0	ug/L
Vinyl chloride	MW-7	8/23/2012		6.2	1.0	ug/L
Vinyl chloride	MW-7	4/12/2013		3.6	1.0	ug/L
Vinyl chloride	MW-7	9/14/2013		6.4	1.0	ug/L
Vinyl chloride	MW-7	4/11/2014		4.4	1.0	ug/L
Vinyl chloride	MW-7	9/27/2014		3.1	1.0	ug/L
Vinyl chloride	MW-7	9/28/2015		3.0	1.0	ug/L
Vinyl chloride	MW-7	3/14/2016		1.2	1.0	ug/L
Vinyl chloride	MW-7	4/10/2017		1.7	1.0	ug/L
Vinyl chloride	MW-7	9/01/2017		3.2	1.0	ug/L
Vinyl chloride	MW-7	4/23/2018		2.1	1.0	ug/L
Vinyl chloride	MW-7	9/14/2018		2.1	1.0	ug/L
Vinyl chloride	MW-7	4/15/2019		1.1	1.0	ug/L
Vinyl chloride	MW-7	9/17/2019		1.0	1.0	ug/L
Vinyl chloride	MW-7	4/08/2020		1.7	1.0	ug/L
Vinyl chloride	MW-7	10/02/2020		2.5	1.0	ug/L
1,1-dichloroethane	PZ-11	4/19/2023		1.2	1.0	ug/L
1,1-dichloroethane	PZ-11	10/25/2023		1.2	1.0	ug/L
1,1-dichloroethane	PZ-11	4/17/2024		1.3	1.0	ug/L
1,1-dichloroethane	PZ-11	10/17/2024		1.0	1.0	ug/L
1,1-dichloroethane	PZ-11	4/01/2025		1.6	1.0	ug/L
1,1-dichloroethane	PZ-11	10/10/2025		1.2	1.0	ug/L
Bis(2-ethylhexyl) phthalate	PZ-11	4/08/2020		6	6	ug/L
Bis(2-ethylhexyl) phthalate	PZ-11	4/12/2021		8	6	ug/L
Bis(2-ethylhexyl) phthalate	PZ-11	10/26/2021		7	6	ug/L
Chloroethane	PZ-11	10/25/2023		1.6	1.0	ug/L

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

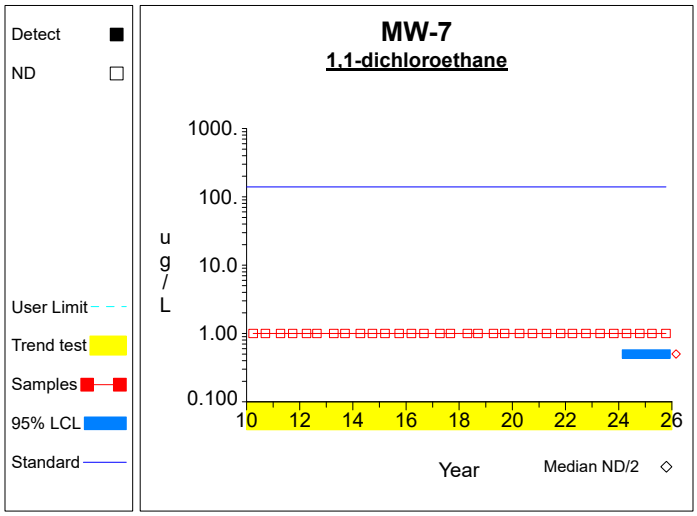
Table 1

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

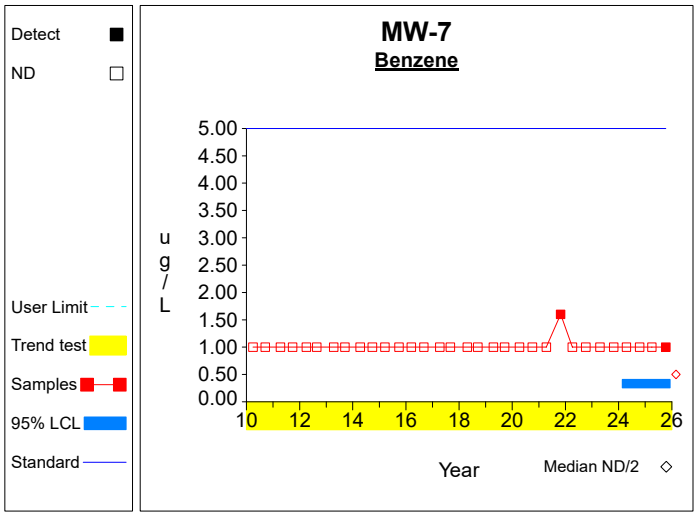
Constituent	Units	Well	N	Mean	SD	Factor	95% LCL	95% UCL	Standard	Trend	
1,1-dichloroethane	ug/L	MW-7	4	0.500	0.000	1.176	0.500	0.500	140.000		
Benzene	ug/L	MW-7	4	0.625	0.250	1.176	0.331	0.919	5.000		
Chlorobenzene	ug/L	MW-7	4	0.850	0.404	1.176	0.375	1.325	100.000		
Chloroethane	ug/L	MW-7	4	0.775	0.550	1.176	0.128	1.422	2800.000		
Cis-1,2-dichloroethylene	ug/L	MW-7	4	4.025	3.151	1.176	0.318	7.732	70.000	dec	
Dichlorodifluoromethane	ug/L	MW-7	4	0.775	0.320	1.176	0.398	1.152	1000.000		
1,1-dichloroethane	ug/L	PZ-11	4	1.275	0.250	1.176	0.981	1.569	140.000		
Benzene	ug/L	PZ-11	4	0.500	0.000	1.176	0.500	0.500	5.000		
Chlorobenzene	ug/L	PZ-11	4	0.500	0.000	1.176	0.500	0.500	100.000		
Chloroethane	ug/L	PZ-11	4	0.500	0.000	1.176	0.500	0.500	2800.000		
Cis-1,2-dichloroethylene	ug/L	PZ-11	4	0.500	0.000	1.176	0.500	0.500	70.000		
Dichlorodifluoromethane	ug/L	PZ-11	3								*

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

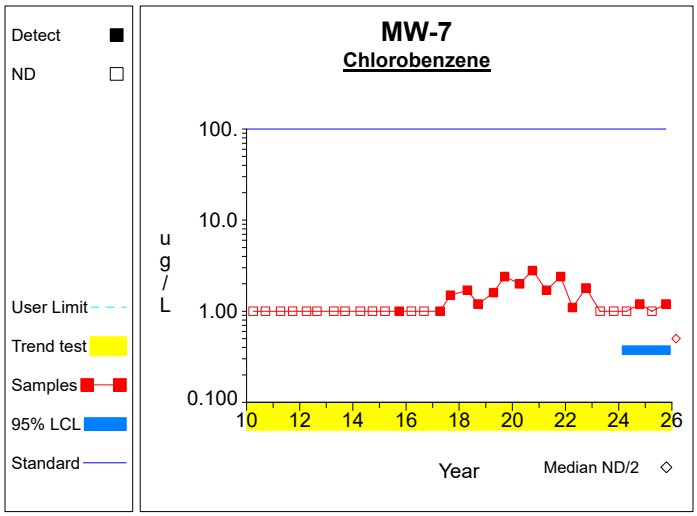
Confidence Limits (Assessment)



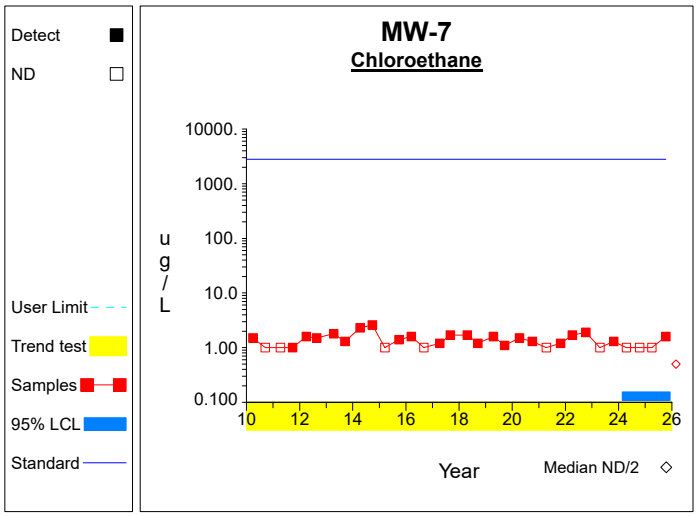
Graph 1



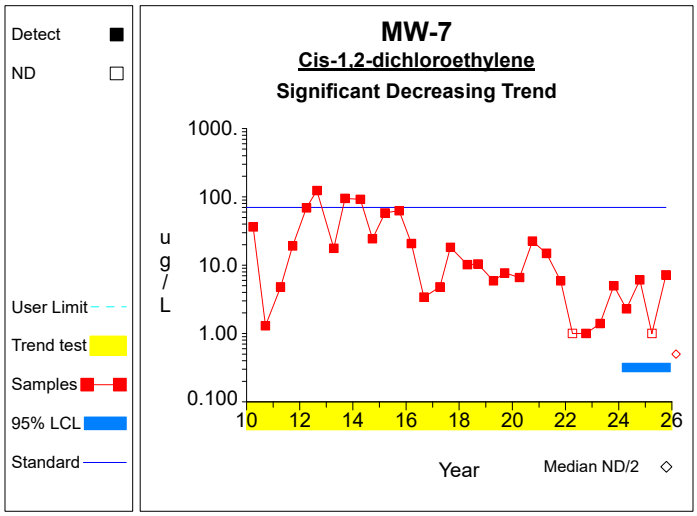
Graph 2



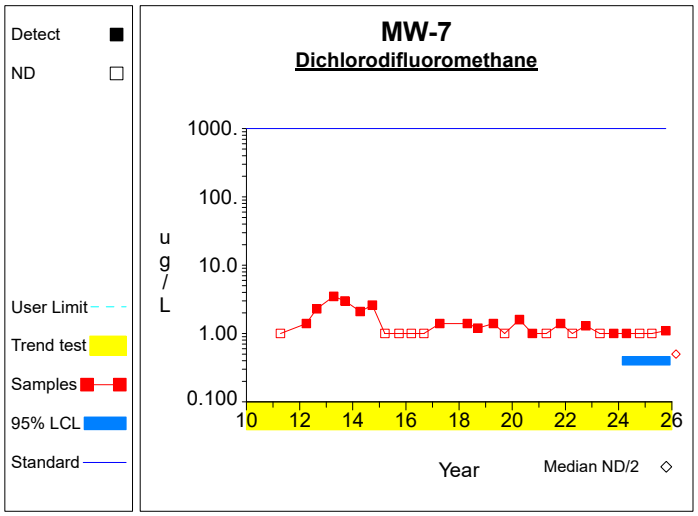
Graph 3



Graph 4



Graph 5



Graph 6

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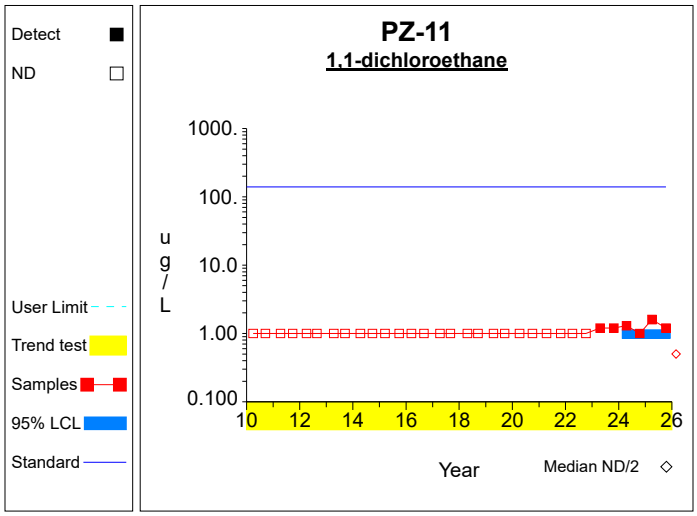
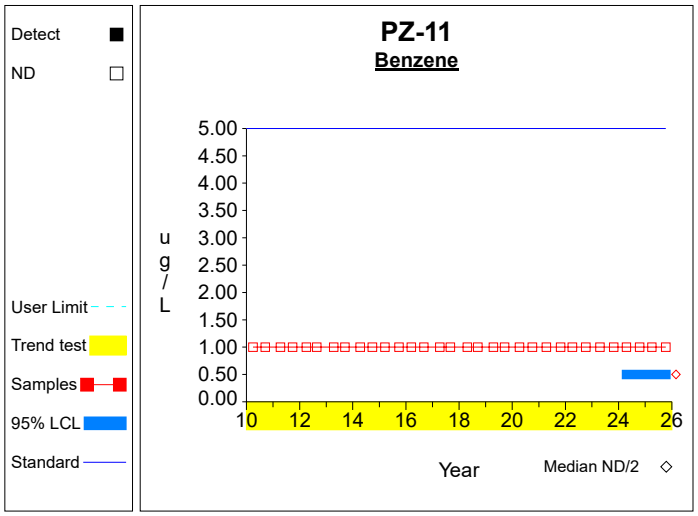
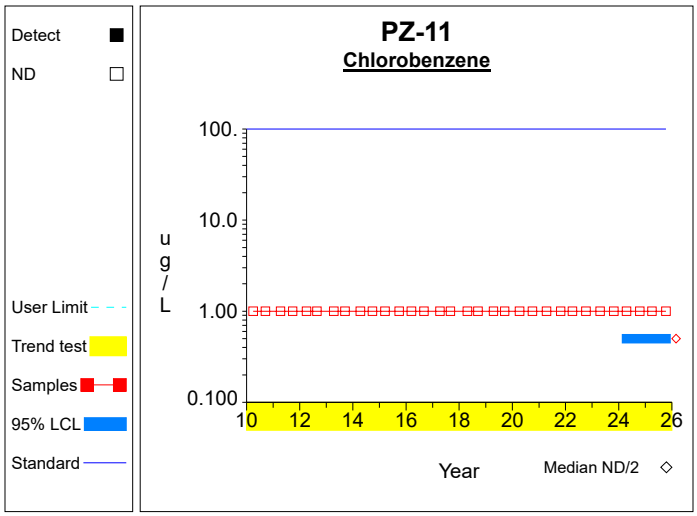
Confidence Limits (Assessment)



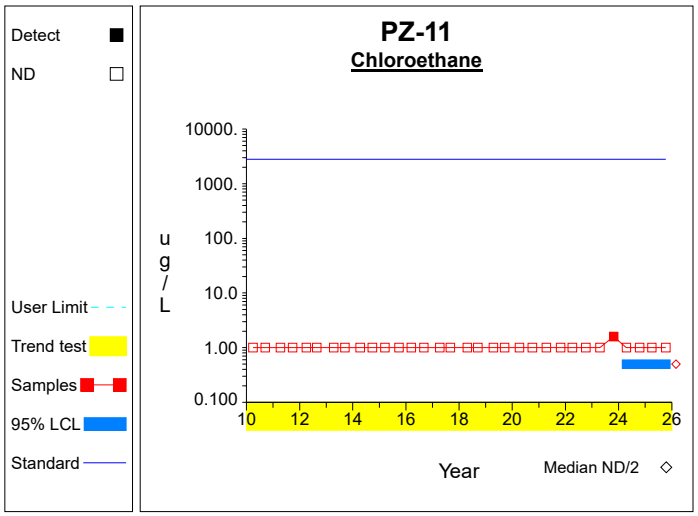
Graph 7



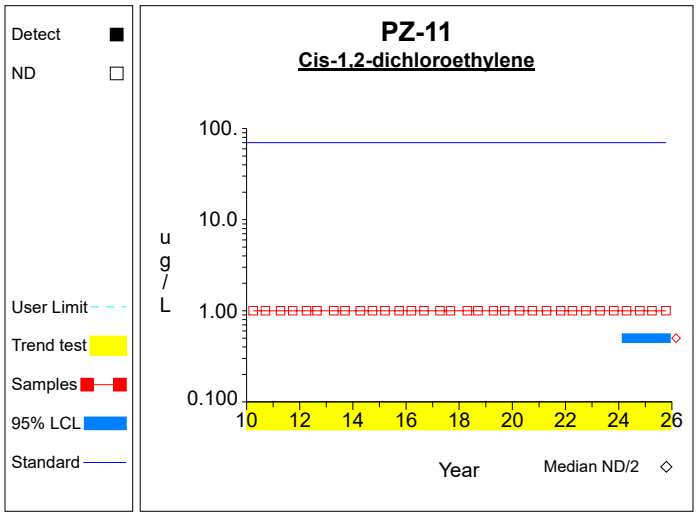
Graph 8



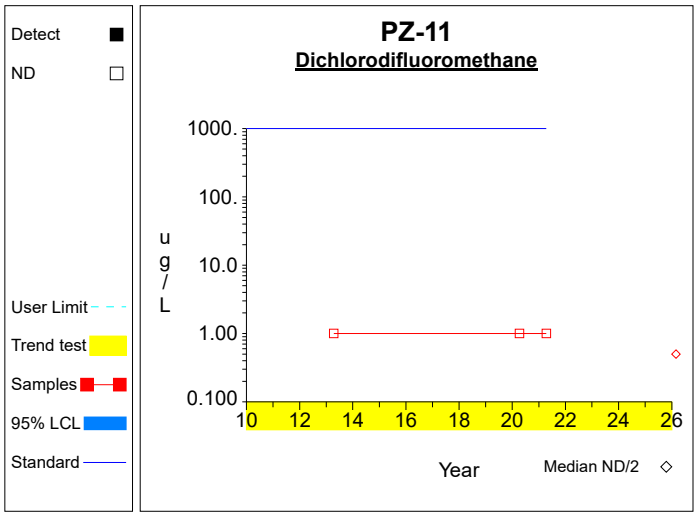
Graph 9



Graph 10



Graph 11



Graph 12

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APPENDIX E

Summary of Appendix II Events & Compound Detections (over time)

Assessment Monitoring Compound Detections

Date	bis(2-ethylhexyl)phthalate (ug/L)		Dichlorofluoromethane (ug/L)	
	MW-7	PZ-11	MW-7	PZ-11
4/11/2011	<8	NT	<1.0	NT
9/26/2011	NT	NT	NT	NT
4/1/2012	<8	NT	**1.4**	NT
8/23/2012	NT	NT	**2.3**	NT
4/12/2013	NT	<8	**3.5**	<1.0
9/14/2013	NT	NT	**3.0**	NT
4/11/2014	NT	NT	**2.1**	NT
9/27/2014	NT	NT	**2.6**	NT
3/16/2015	NT	NT	<1.0	NT
9/28/2015	NT	NT	<1.0	NT
3/14/2016	NT	NT	<1.0	NT
9/3/2016	NT	NT	<1.0	NT
4/10/2017	<8	NT	**1.4**	NT
9/1/2017	NT	NT	NT	NT
4/23/2018	NT	NT	**1.4**	NT
9/14/2018	NT	NT	**1.2**	NT
4/15/2019	NT	NT	**1.4**	NT
9/17/2019	NT	NT	<1.0	NT
4/8/2020	NT	**6.0**	**1.6**	<1.0
10/2/2020	NT	NT	**1.0**	NT
4/12/2021	NT	**8.0**	<1.0	<1.0
10/26/2021	NT	**7.0**	**1.4**	NT
4/4/2022	NT	<6	<1.0	NT
10/7/2022	<6	<6	**1.3**	NT
4/19/2023	NT	<6	<1.0	NT
10/25/2023	NT	NT	**1.0**	NT
4/17/2024	NT	NT	**1.0**	NT
10/17/2024	NT	NT	<1.0	NT
4/1/2025	NT	NT	<1.0	NT
10/10/2025	NT	NT	**1.1**	NT